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### Replies to initial written questions raised by Finance Committee Members in examining the Estimates of Expenditure 2018-19

Director of Bureau : Secretary for the Environment

Session No. : 7

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<a href="#">ENB247</a>	5698	CHAN, Tanya	44	(2) Air
<a href="#">ENB248</a>	5699	CHAN, Tanya	44	(2) Air
<a href="#">ENB249</a>	5700	CHAN, Tanya	44	(2) Air
<a href="#">ENB250</a>	5701	CHAN, Tanya	44	(3) Noise
<a href="#">ENB251</a>	5702	CHAN, Tanya	44	(5) Environmental Assessment and Planning
<a href="#">ENB252</a>	5703	CHAN, Tanya	44	(5) Environmental Assessment and Planning
<a href="#">ENB253</a>	5704	CHAN, Tanya	44	(5) Environmental Assessment and Planning
<a href="#">ENB254</a>	5705	CHAN, Tanya	44	(6) Nature Conservation
<a href="#">ENB255</a>	5706	CHAN, Tanya	44	(6) Nature Conservation
<a href="#">ENB256</a>	3949	CHEUNG Chiu-hung, Fernando	44	(2) Air
<a href="#">ENB257</a>	4407	CHEUNG Chiu-hung, Fernando	44	(0) -
<a href="#">ENB258</a>	4863	CHEUNG Chiu-hung, Fernando	44	(1) Waste
<a href="#">ENB259</a>	5105	CHU Hoi-dick	44	(1) Waste
<a href="#">ENB260</a>	5109	CHU Hoi-dick	44	(1) Waste
<a href="#">ENB261</a>	6357	CHU Hoi-dick	44	(1) Waste
<a href="#">ENB262</a>	4195	KWOK Ka-ki	44	(1) Waste
<a href="#">ENB263</a>	4198	KWOK Ka-ki	44	(1) Waste
<a href="#">ENB264</a>	4199	KWOK Ka-ki	44	(1) Waste
<a href="#">ENB265</a>	4200	KWOK Ka-ki	44	(1) Waste
<a href="#">ENB266</a>	4201	KWOK Ka-ki	44	(1) Waste
<a href="#">ENB267</a>	4283	KWOK Ka-ki	44	(1) Waste
<a href="#">ENB268</a>	4301	KWOK Ka-ki	44	(1) Waste
<a href="#">ENB269</a>	4338	KWOK Ka-ki	44	(1) Waste
<a href="#">ENB270</a>	4339	KWOK Ka-ki	44	(1) Waste
<a href="#">ENB271</a>	4340	KWOK Ka-ki	44	(1) Waste
<a href="#">ENB272</a>	4341	KWOK Ka-ki	44	(1) Waste
<a href="#">ENB273</a>	4342	KWOK Ka-ki	44	(1) Waste
<a href="#">ENB274</a>	4343	KWOK Ka-ki	44	(2) Air
<a href="#">ENB275</a>	4344	KWOK Ka-ki	44	(2) Air
<a href="#">ENB276</a>	4345	KWOK Ka-ki	44	(2) Air
<a href="#">ENB277</a>	4346	KWOK Ka-ki	44	(2) Air
<a href="#">ENB278</a>	4347	KWOK Ka-ki	44	(2) Air
<a href="#">ENB279</a>	4348	KWOK Ka-ki	44	(2) Air
<a href="#">ENB280</a>	5526	KWOK Wai-keung	44	(1) Waste
<a href="#">ENB281</a>	5528	KWOK Wai-keung	44	(1) Waste

<b>Reply Serial No.</b>	<b>Question Serial No.</b>	<b>Name of Member</b>	<b>Head</b>	<b>Programme</b>
<a href="#">ENB282</a>	5530	KWOK Wai-keung	44	(1) Waste
<a href="#">ENB283</a>	5953	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB284</a>	5958	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB285</a>	5959	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB286</a>	5962	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB287</a>	5963	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB288</a>	5965	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB289</a>	5966	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB290</a>	5967	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB291</a>	5969	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB292</a>	6018	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB293</a>	6019	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB294</a>	6020	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB295</a>	6025	KWOK Wing-hang, Dennis	44	(1) Waste
<a href="#">ENB296</a>	6031	KWOK Wing-hang, Dennis	44	(2) Air
<a href="#">ENB297</a>	5925	LEUNG Kenneth	44	(1) Waste
<a href="#">ENB298</a>	5364	LEUNG Mei-fun, Priscilla	44	(1) Waste
<a href="#">ENB299</a>	5871	MO, Claudia	44	(2) Air
<a href="#">ENB300</a>	6095	MO, Claudia	44	(2) Air
<a href="#">ENB301</a>	6109	MO, Claudia	44	(2) Air
<a href="#">ENB302</a>	6137	MO, Claudia	44	(1) Waste
<a href="#">ENB303</a>	6139	MO, Claudia	44	(6) Nature Conservation
<a href="#">ENB304</a>	6144	MO, Claudia	44	(3) Noise
<a href="#">ENB305</a>	6378	MO, Claudia	44	(5) Environmental Assessment and Planning
<a href="#">ENB306</a>	5309	NG Wing-ka, Jimmy	44	(2) Air
<a href="#">ENB307</a>	5881	OR Chong-shing, Wilson	44	(2) Air
<a href="#">ENB308</a>	4972	SHIU Ka-chun	44	(1) Waste
<a href="#">ENB309</a>	4973	SHIU Ka-chun	44	(1) Waste

<b>Reply Serial No.</b>	<b>Question Serial No.</b>	<b>Name of Member</b>	<b>Head</b>	<b>Programme</b>
<a href="#">ENB310</a>	5194	TAM Man-ho, Jeremy	44	(6) Nature Conservation
<a href="#">ENB311</a>	3605	WU Chi-wai	44	(1) Waste
<a href="#">ENB312</a>	3607	WU Chi-wai	44	(1) Waste
<a href="#">ENB313</a>	3608	WU Chi-wai	44	(6) Nature Conservation
<a href="#">ENB314</a>	3609	WU Chi-wai	44	(1) Waste
<a href="#">ENB315</a>	3610	WU Chi-wai	44	(1) Waste
<a href="#">ENB316</a>	5142	TAM Man-ho, Jeremy	48	(2) Advisory and Investigative Services
<a href="#">ENB317</a>	5674	CHAN, Tanya	137	(2) Power
<a href="#">ENB318</a>	5676	CHAN, Tanya	137	(2) Power
<a href="#">ENB319</a>	5677	CHAN, Tanya	137	(3) Sustainable Development
<a href="#">ENB320</a>	5679	CHAN, Tanya	137	(1) Director of Bureau's Office
<a href="#">ENB321</a>	5680	CHAN, Tanya	137	(2) Power
<a href="#">ENB322</a>	5683	CHAN, Tanya	137	(1) Director of Bureau's Office
<a href="#">ENB323</a>	5684	CHAN, Tanya	137	(2) Power
<a href="#">ENB324</a>	4869	CHEUNG Chiu-hung, Fernando	137	(2) Power
<a href="#">ENB325</a>	4870	CHEUNG Chiu-hung, Fernando	137	(1) Director of Bureau's Office
<a href="#">ENB326</a>	4871	CHEUNG Chiu-hung, Fernando	137	(1) Director of Bureau's Office
<a href="#">ENB327</a>	4872	CHEUNG Chiu-hung, Fernando	137	(1) Director of Bureau's Office
<a href="#">ENB328</a>	4873	CHEUNG Chiu-hung, Fernando	137	(2) Power
<a href="#">ENB329</a>	4897	CHEUNG Chiu-hung, Fernando	137	(3) Sustainable Development
<a href="#">ENB330</a>	5338	HUI Chi-fung	137	(2) Power
<a href="#">ENB331</a>	5339	HUI Chi-fung	137	(2) Power
<a href="#">ENB332</a>	5340	HUI Chi-fung	137	(2) Power
<a href="#">ENB333</a>	4302	KWOK Ka-ki	137	(2) Power
<a href="#">ENB334</a>	4303	KWOK Ka-ki	137	(2) Power
<a href="#">ENB335</a>	5912	LEUNG Kenneth	137	(2) Power
<a href="#">ENB336</a>	5924	LEUNG Kenneth	137	(2) Power
<a href="#">ENB337</a>	5928	LEUNG Kenneth	137	(2) Power
<a href="#">ENB338</a>	5930	LEUNG Kenneth	137	(2) Power
<a href="#">ENB339</a>	5440	MA Fung-kwok	137	(1) Director of Bureau's

<b>Reply Serial No.</b>	<b>Question Serial No.</b>	<b>Name of Member</b>	<b>Head</b>	<b>Programme</b>
				Office
<a href="#"><u>ENB340</u></a>	6082	SHIU Ka-fai	137	(2) Power
<a href="#"><u>ENB341</u></a>	6097	SHIU Ka-fai	137	(2) Power

**CONTROLLING OFFICER'S REPLY**

**ENB001**

**(Question Serial No. 1583)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Would the Government advise on the respective numbers of plastic refuse bags used by the Government and contractors in managing country parks and the related expenditure in 2017-2018, as well as the respective estimated numbers of refuse bags to be used and the related expenditure in 2018-2019? What were the quantities of leaf and tree litter collected within country parks and disposed of at landfills in the last year?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 7)

Reply:

The refuse collected in country parks is mostly dirty wastes such as tissue papers, containers or packaging bags which contain leftover or drink, and food residue, etc. The Agriculture, Fisheries and Conservation Department (AFCD) or its contractors normally lay litter containers with plastic refuse bags to facilitate the collection and transportation of wastes to the appropriate location for handling.

In managing country parks, the number of plastic refuse bags used in 2017-18 by AFCD is about 141 000, while the number of plastic refuse bags used by AFCD's contractors is about 339 000. It is estimated that the number of plastic refuse bags used for such purposes will slightly decrease to about 136 000 by AFCD and 335 000 by AFCD's contractors in 2018-19. The estimated expenditure of AFCD on plastic refuse bags in 2017-18 and 2018-19 is \$170,000 and \$140,000 respectively. Since the contractors are responsible for the provision of plastic refuse bags when they carry out litter collection and related duties in country parks, the cost of refuse bags is unknown to AFCD.

Most of the yard wastes (e.g. tree branches, leaves) generated from vegetation maintenance in country parks are stockpiled in nearby natural habitats to provide niches for wildlife. When they decompose, nutrients will be released back to the nature. Some tree logs are recycled to make furniture or decorative materials for the recreational facilities in country parks such as animated features, waymarks, and benches, etc. In 2017, no yard wastes arising from vegetation maintenance in country parks were disposed of at landfill sites.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB002**

**(Question Serial No. 1947)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (000) Operational expenses

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding endangered species in Hong Kong, would the Government inform this Committee of the following:

- (a) What is the number of prosecutions instituted under the Protection of Endangered Species of Animals and Plants Ordinance? What are the penalties imposed?
- (b) What is the number of illegal trading on the internet?
- (c) How many endangered animals were seized in each year over the past 3 years? What were their types?
- (d) What is the number of animals confiscated and handed to non-profit making organisations in Hong Kong for conservation?

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 37)

Reply:

- (a) In 2017, the Government instituted 189 prosecutions under the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586), with 186 successful cases. The penalties imposed ranged from a fine of \$400 to \$100,000 and/or an imprisonment of 6 days to 3 months.
- (b) In 2017, the Agriculture, Fisheries and Conservation Department (AFCD) detected 19 cases involving illegal selling of endangered species through internet platforms. A total of 45 live endangered animal species were seized.



- (c) The number of live endangered animals seized over the past 3 years is provided in the table below:

<b>Calendar year</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Number of individuals	5 984	2 336	2 812

The most commonly seized animals include turtles and tortoises, lizards, birds, fish and stony corals.

- (d) The number of seized live endangered animals donated by AFCD to local institutes/organisations for conservation purposes and/or for temporary keeping over the past 3 years is 523, 172 and 733 respectively.

-End-

**CONTROLLING OFFICER'S REPLY**

**ENB003**

**(Question Serial No. 1640)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

“Carrying out licensing control of international trade in endangered species and curbing of illegal trade in endangered species in Hong Kong” is one of the duties of the Agriculture, Fisheries and Conservation Department.

What were the expenditures and manpower involved in the above work over the past 5 years?

Over the past 5 years, has the Government increased the expenditure and manpower involved, or taken any other new measures in order to curb smuggling and illegal trade of ivory in Hong Kong?

Asked by: Hon CHAN Han-pan (Member Question No. (LegCo use): 38)

Reply:

The Government is committed to protect endangered species and strictly regulates the trade in endangered species through enforcing the Protection of Endangered Species of Animals and Plants Ordinance (the Ordinance) which gives effect to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in Hong Kong. The legal trade in endangered species in Hong Kong is authorised and closely monitored through a permit/certificate system in accordance with the provisions of CITES. The Agriculture, Fisheries and Conservation Department (AFCD) conducts inspections of consignments, registered stock and retail outlets to ensure relevant requirements are complied with. On combating illegal import and re-export of endangered species, AFCD has been working closely with the Customs and Excise Department (C&ED) at import and export control points. An inter-departmental Wildlife Crime Task Force, comprising representatives of AFCD, the Environment Bureau, C&ED and the Hong Kong Police Force, has also been established to develop strategies on intelligence exchange and co-ordinate joint enforcement operations. AFCD and C&ED also cooperate with overseas law enforcement agencies through international joint operations and intelligence exchange to combat endangered species smuggling. Joint and targeted operations, both local and international, would be

undertaken to strengthen the frontline enforcement against endangered species smuggling. The expenditures and manpower involved in the licensing control of international trade in endangered species and curbing of illegal trade in endangered species in Hong Kong over the past 5 years are tabulated below:

<b>Financial year</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18 (Revised estimate)</b>
Expenditure (\$ million)	27.8	29.7	33.2	36.2	40.0
Manpower	48	51	50	51	55

To strengthen the control of the local trade in ivory, a series of measures are in place including deploying sniffer dogs to detect ivory at import and export control points to assist detecting and preventing smuggling of ivory, conducting a comprehensive check of all local ivory stocks, using tamper-proof holograms to mark ivory, using radiocarbon dating analysis to determine the age and hence the legality of ivory, as well as raising public awareness on the protection of elephants and relevant control. An additional provision of \$3.7 million and 3 staff were allocated for the above enhancement works in 2016-17 while an additional provision of \$1 million and 3 staff have been allocated for the above work in 2017-18.

Besides, the Legislative Council enacted the Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 (the Amendment Ordinance) on 31 January this year in order to phase out the local trade in ivory in 3 phases by 31 December 2021, and also to increase the penalties related to the smuggling and illegal trade of endangered species, i.e. the maximum penalty for offences convicted on indictment is a fine of \$10 million and imprisonment for 10 years. The Amendment Ordinance will take effect on 1 May 2018. After the Amendment Ordinance has taken effect for 3 months (i.e. starting from 1 August 2018), all import and export of ivory (save for antique ivory) for commercial purposes will be banned. C&ED and AFCD will strengthen enforcement at import and export control points, and combat the smuggling of endangered species (including ivory). Possession of pre-Convention (i.e. CITES) ivory for commercial purposes is currently exempted from licensing requirement provided that the ivory can be proved pre-Convention. Nevertheless, starting from 1 August 2018, such ivory will be subject to the licensing requirement. Current holders of pre-Convention ivory will be required to apply to AFCD for a license to possess the ivory concerned for commercial purposes. When processing the applications, AFCD staff will inspect the pre-Convention ivory concerned (including measuring weight, taking photos and sticking tamper-proof holograms for the ivory). Regarding the new measures, AFCD has compiled guidelines for the staff members concerned, and also regularly assesses the measures to ensure that the enhanced control of ivory can be effectively implemented. Apart from licensing and enforcement, AFCD will continue its publicity and education efforts to promote public awareness of the relevant control under the Ordinance and the need to protect endangered species.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB004**

**(Question Serial No. 1641)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

The number of participants of education activities in 2017 was as high as 579 400. Why does the estimated number of participants in 2018 drop to 350 000? Does it involve a cut in the expenditure on education activities?

Does the Government have any statistics on the number of persons who have participated in 2 or more education activities? Will the Government allocate additional resources to increase or improve the existing education activities with a view to encouraging and attracting those participants who have participated in the aforementioned activities to participate again?

Asked by: Hon CHAN Han-pan (Member Question No. (LegCo use): 39)

Reply:

To commemorate the 40th Anniversary of the Country Parks, the Agriculture, Fisheries and Conservation Department (AFCD) organised a series of special events which attracted overwhelming response in 2017, resulting in an increase in the number of participants in educational activities to 579 400. The estimated number of participants in educational activities in 2018 is expected to return to the level of 350 000 as at 2016. AFCD does not have information on the number of participants joining educational activities on more than 1 occasion.

AFCD will review the educational activities from time to time to enhance the quality and attractiveness of the programmes. We will also make use of the social media as a promotional platform to connect to people who are interested in our educational activities. In 2018-19, an additional provision of \$7.6 million has been earmarked to strengthen the education and publicity efforts on nature conservation in country parks, including the development of nature appreciation programme, review and enhancement of country parks education programme and improvement of the thematic website and mobile application.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB005**

**(Question Serial No. 2648)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding strengthening the control of trade in endangered species:

- (a) The Legislative Council has earlier enacted the Protection of Endangered Species of Animals and Plants (Amendment) Bill 2017, which bans all imports and re-exports of pre-Convention ivory and subjects pre-Convention ivory to licensing control (with the exception of antique ivory) 3 months after the implementation of the legislation. In this regard, will the Department and relevant law enforcement departments allocate additional resources for the implementation of the abovementioned measures and develop law enforcement guidelines/measures for the relevant staff? If yes, what are the details as well as manpower and expenditure involved? Will the Department review the effectiveness of the ban in the next 3 years?
- (b) What measures will the Department and relevant law enforcement departments implement to strengthen the law enforcement efforts in relation to the illegal trade of wild fauna and flora?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 40)

Reply:

- (a) The Legislative Council enacted the Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 (the Amendment Ordinance) on 31 January this year in order to phase out the local trade in ivory in 3 phases by 31 December 2021 and to increase the penalties related to the smuggling and illegal trade of endangered species. After the Amendment Ordinance has taken effect for 3 months, all imports and exports of ivory (save for antique ivory) for commercial purposes will be banned. The Customs and Excise Department (C&ED) and the Agriculture, Fisheries and Conservation Department (AFCD) will strengthen enforcement at import and export control points, and combat the smuggling of endangered species (including ivory). Possession of pre-Convention (i.e. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)) ivory for commercial purposes is currently

exempted from licensing requirement provided that the ivory can be proved pre-Convention. After the Amendment Ordinance has taken effect for 3 months, however, such ivory will be subject to licensing requirement. Current holders of pre-Convention ivory will be required to apply to AFCD for a license to possess the ivory concerned for commercial purposes. When processing the applications, AFCD staff will inspect the pre-Convention ivory concerned (including measuring weight, taking photos and sticking tamper-proof holograms for the ivory). The expenditure incurred in enhancing the control of ivory will be absorbed by the existing resources and manpower of AFCD. AFCD has compiled guidelines for the staff members concerned, and also regularly assesses the measures to ensure that the enhanced control of ivory can be effectively implemented.

- (b) The Government is committed to protect endangered species and strictly regulates the trade in endangered species through enforcing the Protection of Endangered Species of Animals and Plants Ordinance (the Ordinance) which gives effect to CITES in Hong Kong. The legal trade in endangered species in Hong Kong is authorised and closely monitored through a permit/certificate system in accordance with the provisions of CITES. AFCD conducts inspections of consignments, registered stock and retail outlets to ensure relevant requirements are complied with. On combating illegal import and re-export of endangered species, AFCD has been working closely with C&ED at import and export control points. An Inter-departmental Task Force on Wildlife Crime, comprising representatives of AFCD, the Environment Bureau, C&ED and the Hong Kong Police Force, has also been established to develop strategies on intelligence exchange and co-ordinate joint enforcement operations. AFCD and C&ED also cooperate with overseas law enforcement agencies through international joint operations and intelligence exchange to combat endangered species smuggling. Joint and targeted operations, both local and international, would be undertaken to strengthen the frontline enforcement against endangered species smuggling. In order to provide a sufficiently strong deterrent against illicit wildlife trade, and to send a clear signal to the international and local communities that the Government is committed to the protection of endangered species and to combating endangered species smuggling, the penalties have been significantly increased subsequent to the amendment of the Ordinance, with the maximum penalty of a fine of \$10 million and an imprisonment of 10 years for offences convicted on indictment. Apart from licensing and enforcement, AFCD will continue its publicity and education efforts to promote public awareness of the relevant control under the Ordinance and the need to protect endangered species.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB006**

**(Question Serial No. 2068)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

The Agriculture, Fisheries and Conservation Department is committed to conserve biological diversity. The related work includes the implementation of a territory-wide biodiversity survey programme.

- (a) What are the manpower and expenditure involved in the programme?
- (b) Does the scope of the programme cover non-conservation areas or urban areas?
- (c) What is the progress of the programme?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 51)

Reply:

- (a) The Agriculture, Fisheries and Conservation Department (AFCD) has been implementing the long-term territory-wide biodiversity survey programme since 2002-03. The estimated expenditure and manpower involved in implementing the programme in 2017-18 are \$8.23 million and 15 staff respectively.
- (b) The survey programme covers the entire territory of Hong Kong, including localities within and outside areas protected for nature conservation purposes. Various types of habitats including wetlands, woodlands, grasslands and streams are surveyed.
- (c) Since the launch of the programme in 2002-03, we have been collecting data on the distribution and abundance of major taxa groups including amphibians, reptiles, birds, mammals, beetles, butterflies, dragonflies and freshwater fish. The data collected are computerised and incorporated in a Geographic Information System for storage and to facilitate analysis. In 2017-18 (as at 28 February 2018), 606 surveys have been conducted under the programme. The database currently contains over 270 000 records. Information collected from the survey has been disseminated through the following websites maintained by AFCD: [www.hkbiodiversity.net](http://www.hkbiodiversity.net) and [www.hkecomap.net](http://www.hkecomap.net). Monitoring and surveys will be conducted continuously by AFCD to update and enrich the database.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB007**

**(Question Serial No. 2069)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Under Programme (2), the Department will carry out the preparation for the designation of the proposed Robin's Nest Country Park in 2018-19.

- (a) What are the manpower and expenditures for this project?
- (b) Please set out the timetable of this project.

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 52)

Reply:

- (a) Preparation for the designation of the Robin's Nest Country Park would involve an estimated expenditure of \$1.1 million in 2018-19, to be carried out by existing staff of the Agriculture, Fisheries and Conservation Department (AFCD).
- (b) To prepare for the designation of Robin's Nest as a country park, AFCD has commissioned an 18-month consultancy study in 2017 to formulate a detailed management plan for the proposed country park. Upon completion of the study, AFCD will seek the views of stakeholders including the local villagers, relevant Rural Committees, District Council and other concerned groups on the designation proposal, and take forward the statutory procedures as stipulated under the Country Parks Ordinance (Cap. 208) with a view to completing the designation procedures by 2020.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB008**

**(Question Serial No. 2070)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the 3 country park enclaves incorporated into the respective country parks in 2017:

- (a) What are the initiatives, manpower and expenditure involved in the management of country park enclaves?
- (b) What are the Department's initiatives and timetable to incorporate other country park enclaves that are not covered by town plans into country parks?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 53)

Reply:

- (a) After the inclusion of the 3 enclaves, namely Fan Kei Tok, Sai Lau Kong and a site near Nam Shan, into their respective country parks in 2017, the Agriculture, Fisheries and Conservation Department (AFCD) has carried out management work such as hill-fire prevention, patrol and law enforcement, afforestation and vegetation maintenance, habitat enhancement, provision of recreational facilities and litter collection, etc. to enhance protection and conservation of the areas and improve the environment. Moreover, AFCD has already commenced the construction of a footpath at Sai Lau Kong with a view to connecting it with the hiking trail network in the north-eastern part of the territory, facilitating the access of villagers and hikers.

The manpower and expenditure involved in the management of the 3 enclaves are absorbed by the existing staff establishment and resources for managing the respective country parks, therefore separate breakdown of the manpower and expenditure specifically for the management of these enclaves is not available.

- (b) For the remaining enclaves not yet covered by any statutory plans, AFCD will continue to assess whether they are suitable for incorporation into country parks in accordance with the established principles and criteria, and put forward incorporation proposals for the suitable enclaves in accordance with the statutory procedures

stipulated in the Country Parks Ordinance (Cap. 208). AFCD will also continue to conduct regular patrols in country parks and country park enclaves. If suspected unauthorised development is detected in the enclaves, AFCD will refer such cases to relevant departments for follow-up actions.

- End -

**CONTROLLING OFFICER'S REPLY****ENB009****(Question Serial No. 2078)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

- (a) The block vote for minor recreational facilities and roadworks in country parks decreased year by year to the revised estimate of \$9.99 million in 2017-18 in the past. Why is there a surge to \$20.95 million this year?
- (b) Please set out details of the improvement works carried out in country parks, the manpower and the expenditures involved over the past 5 years, as well as the planned works, the manpower and the estimate in the future. (Please set out in tabular form by the construction of fire lookouts, shelters, drinking fountains, roads, maintenance of hiking trails and others in reply.)

	2013	2014	2015	2016	2017
Fire lookouts					
Shelters					
Drinking fountains					
Roads					
Maintenance of hiking trails					
Others					

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 48)Reply:

- (a) A total of 8 minor projects will be implemented under the block vote for minor recreational facilities and roadworks in country parks (subhead 610) in 2018-19. These include the installation of water dispensers in various country parks, construction of a star gazing site at Sai Wan in the Sai Kung East Country Park, and reconstruction of the water pipeline connecting to the Rotary Park Public Toilet at Tai Mo Shan Country Park etc. Since more minor works projects will be carried out in 2018-19, the estimate for 2018-19 under subhead 610 has increased accordingly.

- (b) The expenditure for the improvement works carried out by the Agriculture, Fisheries and Conservation Department (AFCD) in country parks over the past 5 years and the estimated expenditure for 2018-19 are tabulated below. The manpower involved is deployed from the existing establishment of AFCD, and there is no separate breakdown.

Financial year	Expenditure (\$ million)					
	2013-14	2014-15	2015-16	2016-17	2017-18 (revised estimate)	2018-19 (estimate)
Upgrading of hiking trails and related facilities (e.g. fencing, waymarks, etc)	3.9	3.2	3.3	3.7	3.4	3.0
Construction of mountain bike trails	1.9	1.5	0.7	1.3	0.7	1.3
Reconstruction of forest tracks	0.3	1.1	0.9	3.3	3.7	3.2
Improvement of visitor centres and interpretation panels	3.1	2.5	3.3	4.5	2.7	1.8
Reconstruction of rain shelters	-	1.5	0.7	3.2	1.9	1.9
Provision of a star gazing site near Sai Wan	-	-	-	0.2	0.1	2.0
Installation of water dispensers	-	-	-	-	-	2.6
Reconstruction of the water pipelines to public toilets	-	-	-	-	-	2.6
Improvement of septic tank system	-	-	-	1.8	-	0.7
Others (e.g. minor structures, outdoor furniture, minor slope works, etc)	1.8	1.4	1.5	1.5	1.6	1.9
Total (\$ million)*	11.0	11.2	10.4	19.5	14.1	21.0

\* Note: Figures from 2013-14 to 2017-18 (revised estimate) include expenditures recorded under both the votes for Minor Recreational Facilities and Roadworks (subhead 610) as well as Works (subhead 600) which was also used for minor improvement works carried out by AFCD in country parks.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB010**

**(Question Serial No. 0769)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding marine parks and marine reserves, please advise on the following:

- (a) Please set out the names, locations, sizes and dates of establishment of the marine parks and marine reserves currently established or to be established. Please also provide the boundary maps of these marine parks and marine reserves (including the core areas).
- (b) Please set out the numbers of fishing permits issued to various types of fishing vessels in each marine park and marine reserve, in the first year after the establishment of the marine parks and marine reserves and over the past 3 years (2015-16 to 2017-18).
- (c) What were the numbers of operations and the effectiveness of the enforcement operations against illegal fishing activities in marine parks over the past 3 years (2015-16 to 2017-18)? What were the penalties and fines imposed?
- (d) What were the expenditures and manpower involved in the enforcement operations against illegal fishing activities in marine parks over the past 3 years (2015-16 to 2017-18)?
- (e) What were the numbers of patrol vessels deployed by the Government to combat illegal fishing activities in marine parks, the area(s) patrolled, and the numbers of patrols conducted, over the past 3 years (2015-16 to 2017-18)?
- (f) Many fishermen reflect that marine parks and marine reserves have become ineffective and even deprived them of fishing spaces owing to the Government's improper management and insufficient enforcement efforts against illegal fishing activities. In this regard, what is the progress of the Government's work in reviewing and enhancing fisheries management in marine parks and marine reserves?

- (g) What is the progress of the Government's work in reviewing and enhancing fisheries management in marine parks and marine reserves?

Asked by: Hon HO Chun-yin, Steven (Member Question No. (LegCo use): 12)

Reply:

- (a) The names, locations, sizes and dates of designation of existing marine parks and marine reserve are as follows:

<b>Name of existing marine park / marine reserve</b>	<b>Location</b>	<b>Size (hectares)</b>	<b>Designation date</b>
Cape D'Aguilar Marine Reserve	Waters at the southeastern tip of Hong Kong Island	20	July 1996
Hoi Ha Wan Marine Park	Sheltered bay located north of the Sai Kung West Country Park	260	July 1996
Yan Chau Tong Marine Park	Northeast coast of Plover Cove Country Park	680	July 1996
Sha Chau and Lung Kwu Chau Marine Park	Waters enclosing the islands of Sha Chau and Lung Kwu Chau on the western side of Hong Kong	1 200	November 1996
Tung Ping Chau Marine Park	Waters enclosing the small island Ping Chau northeastern waters of Hong Kong	270	November 2001
The Brothers Marine Park	Waters in vicinity of The Brothers in northern Lantau	970	December 2016

The names, locations, sizes and tentative designation times of the proposed marine parks are as follows:

<b>Name of proposed marine park</b>	<b>Location</b>	<b>Size (hectares)</b>	<b>Tentative designation time</b>
Southwest Lantau Marine Park	Waters in vicinity of Fan Lau in southwest Lantau	~ 650	2018
South Lantau Marine Park (combining the proposed Soko Islands Marine Park and the proposed marine park for Integrated Waste Management Facilities as a single marine	Waters in vicinity of Soko Islands in southern Lantau	~ 2 067	2019



park)			
Proposed Marine Park for the Three-Runway System	Waters around the airport in northern Lantau	~ 2 400	2023-24

The boundaries (and core areas) of the existing and proposed marine parks and marine reserve are shown in the map at the Annex.

- (b) The numbers of fishing permits issued by the Agriculture, Fisheries and Conservation Department (AFCD) to various types of fishing vessels in each marine park in the first year after the establishment of the marine parks and over the past 3 years (2015-16 to 2017-18) are tabulated below. No fishing permit was issued to fishing vessels in the Cape D'Aguilar Marine Reserve.

Name of marine park	Number of permits issued for the respective marine parks			
	1 <sup>st</sup> year	2015-16	2016-17	2017-18
Hoi Ha Wan (HHW) and Yan Chau Tong (YCT) <sup>1</sup>	409	256 (73)	251 (68)	243 (66)
Sha Chau and Lung Kwu Chau (SCLKC)	208	80	80	81
Tung Ping Chau (TPC) <sup>2</sup>	280	202	202	197
The Brothers (BROS)	472	-	-	472
<b>Total</b> <sup>3</sup>	---	<b>355</b>	<b>350</b>	<b>737</b>

Notes:

- Some fishing permits previously issued by AFCD cover TPC, YCT and/or HHW (see Note 2 below). The figures in brackets show the numbers of fishing permits issued solely for HHW/YCT.
  - Some fishing permits issued for TPC also cover YCT/HHW.
  - The row "Total" gives the total number of fishing permits issued for the marine parks in a particular year. As some permits cover more than 1 marine park, the figure for a particular year in the row "Total" does not equal to the sum of the numbers of fishing permits issued for the marine parks each year.
- (c) The number of prosecutions against illegal fishing activities in marine parks over the past 3 years (2015-16 to 2017-18) and the penalties imposed are as follows:

Financial year	Number of cases	Total fine (\$)
2015-16	18	22,800
2016-17	5	9,500
2017-18 (up to February)	8 (5 cases are still in progress of prosecution)	3,800

- (d) The expenditures and manpower involved in the management of marine parks and marine reserve, including enforcement against illegal fishing, over the past 3 years (2015-16 to 2017-18) are as follows:

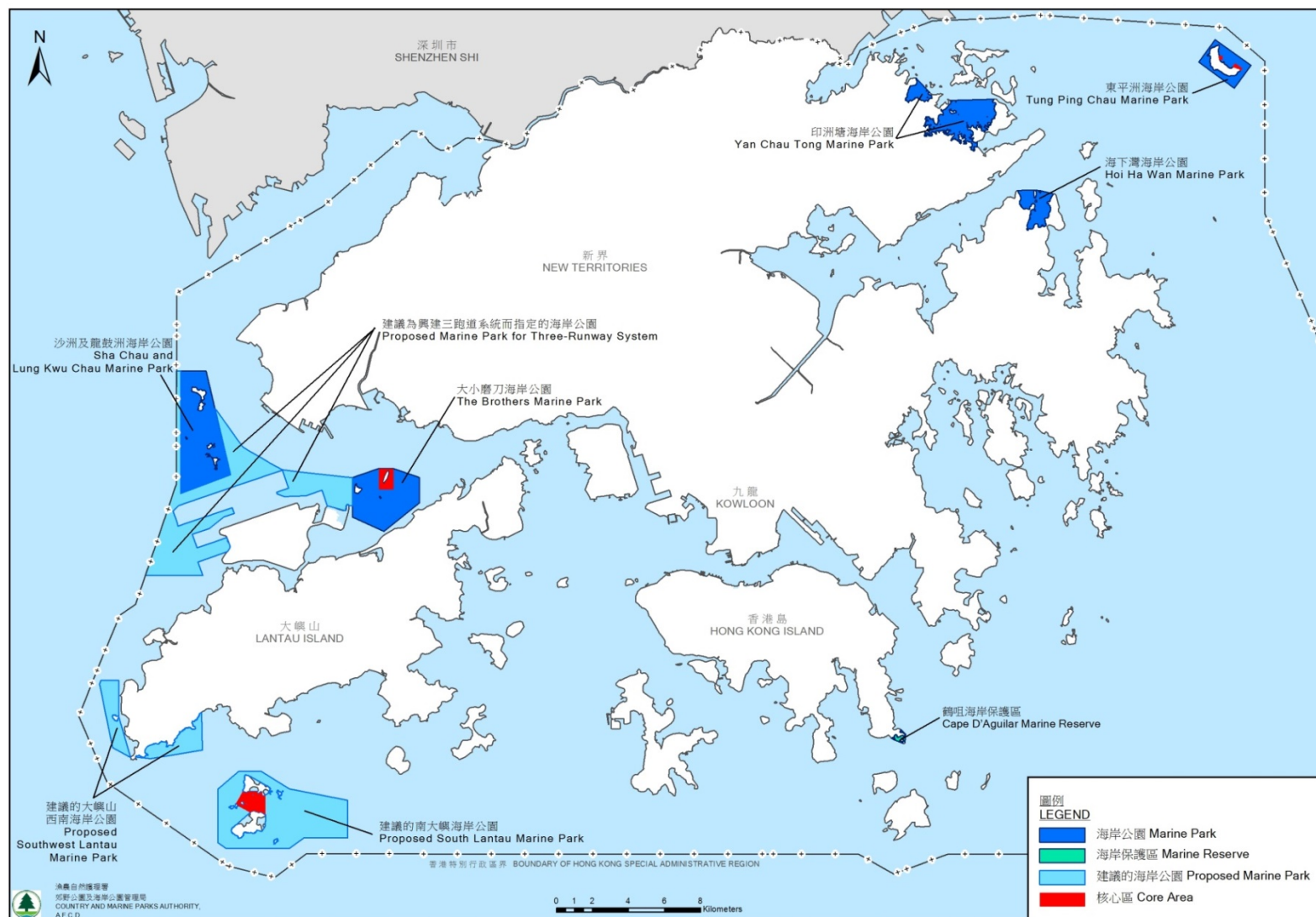
<b>Financial year</b>	<b>Expenditure (\$ million)</b>	<b>Manpower (Number of staff)</b>
2015-16	16.8	37
2016-17	21.3	39
2017-18 (revised estimate)	23.8	44

- (e) Over the past 3 years, 11 patrol vessels have been deployed by AFCD to conduct patrols in the marine parks and marine reserve and surrounding waters to combat illegal fishing activities. Marine Police and their patrol vessels also rendered assistance in law enforcement within marine parks and marine reserve upon our request.

The areas patrolled included all existing marine parks and marine reserve and the proposed Southwest Lantau Marine Park and South Lantau Marine Park. The numbers of patrols conducted over the past 3 years (2015-16 to 2017-18) are as follows:

<b>Financial year</b>	<b>Number of patrols</b>
2015-16	3 200
2016-17	3 204
2017-18 (up to February)	3 742

- (f) & (g) AFCD has commissioned a consultancy study in March 2017 to review the fisheries management measures for marine parks with a view to addressing fishermen's concerns and promoting the sustainable development of the fisheries industry in Hong Kong without compromising the conservation objectives of marine parks. AFCD has preliminarily proposed possible measures earlier with respect to the study on further enhancing fisheries management in marine parks and consulted relevant stakeholders. The study is expected to be completed by the end of 2018.



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- End -

**CONTROLLING OFFICER'S REPLY**

**ENB011**

**(Question Serial No. 0778)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the nuisances caused by wild monkeys to nearby residents or visitors, please advise on the following:

- (a) What were the manpower and expenditures involved in public education and promotion of the feeding ban over the past 3 years (2015-16 to 2017-18)?
- (b) What were the numbers of complaints received by the Department about nuisances of or attacks by wild monkeys over the past 3 years (2015-16 to 2017-18)?
- (c) What were the manpower and expenditures involved in the investigation and study on the control of wild monkeys, as well as the administration of contraceptive and neutering treatment to wild monkeys over the past 3 years (2015-16 to 2017-18)?
- (d) What are the manpower and estimated expenditure involved in the above work in 2018-19?
- (e) It is said that wild monkeys cause nuisances to the public from time to time, would the Government examine the existing mechanism as soon as possible in order to resolve the problem?
- (f) Has the Government developed a more comprehensive management plan for monkeys? What are the details?

Asked by: Hon HO Chun-yin, Steven (Member Question No. (LegCo use): 21)

Reply:

The Agriculture, Fisheries and Conservation Department (AFCD) is highly concerned about the nuisance caused by monkeys in residential areas. Upon receiving relevant reports, AFCD will deploy staff to the scene as soon as possible to chase away or capture the

monkeys, and offer advice and education leaflets to the concerned public or management offices after investigating the situation and causes of monkey occurrence. Moreover, AFCD will set up traps to capture the lingering monkeys in residential areas to address the persistent nuisance caused by them. AFCD would also contact other government departments to follow up the problems arising from monkey nuisance, such as environmental hygiene problems. If necessary, AFCD would arrange talks for the concerned residents or management offices on the handling of monkey nuisance and the drawbacks of feeding monkeys and not handling refuse properly. Furthermore, AFCD has been carrying out contraceptive/neutering operations for monkeys in Kam Shan, Lion Rock and Shing Mun Country Parks since 2007. Regular surveys are also conducted to monitor the changes in the monkey populations.

Over the past 3 years, 12 staff members of AFCD were involved in works such as handling complaints about monkey nuisance, conducting neutering operations and carrying out public education, etc. The number of complaints about monkey nuisance/attack received by AFCD and the expenditure involved in addressing the issues related to monkeys each year are tabulated below:

<b>Financial year</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
<b>Number of complaints about monkey nuisance/attack</b>	513	527	317 (up to January 2018)
<b>Expenditure involved (\$ million)</b>	5.0	4.2	4.8 (revised estimate)

In 2018-19, AFCD will continue to earmark 12 staff members and a provision of \$5 million for on-going implementation of the above measures, and will also continue to review the work of handling monkey nuisance and consult wildlife conservation experts from various places with a view to developing a more comprehensive management plan for monkeys. AFCD will also commission a consultancy study to enhance the designs of refuse/recycling bins and refuse collection points to prevent wild animals, including monkeys, from getting food from refuse/recyclables, so as to discourage them from straying into residential areas in search for food.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB012**

**(Question Serial No. 3207)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the conservation and management of the wetland, please advise on the following:

- (a) Over each of the past 3 years (2015-16 to 2017-18), what were the respective expenditures incurred by the Government on protecting birds, promoting the development of aquaculture fisheries and agriculture, and assisting such industries in preventing birds from foraging for cultured fish products and crops, together with the details and effectiveness of such efforts?
- (b) Over the past 3 years (2015-16 to 2017-18), what were the numbers of complaints received by the Government about alleged unlawful bird-proof measures taken by fish farmers and farmers, the average and longest time taken to handle such cases, the numbers of prosecutions instituted for violation of Cap. 170 of the Laws of Hong Kong, and the numbers of convictions thereof?
- (c) Over the past 3 years (2015-16 to 2017-18), has the Government made any assessment on the expenditures incurred by fish farmers and farmers on taking bird-proof measures, and their financial losses due to birds foraging for their cultured fish products and crops?
- (d) Further to the above question, over the past 3 years (2015-16 to 2017-18), how did the Government compensate fish farmers and farmers for their expenditures and financial losses as mentioned in item (c)? What measures have been put in place by the Government to assist them in reducing such expenditures and financial losses?
- (e) The Biodiversity Strategy and Action Plan 2016-2021 put forward by the Environment Bureau in December 2016 mentioned that a study would be conducted to explore measures to prevent cormorant predation on commercial pond fish in the Deep Bay area. What are the latest details, the progress, the timetable, the expenditure and manpower?

- (f) Under the conservation and management of the Mai Po Inner Deep Bay Ramsar Site, what are the differences between the regulation imposed by the Government on fish ponds and those outside the Mai Po Inner Deep Bay Ramsar Site? Does the Government know whether the Ramsar Sites in other countries or regions also comprise of both government land and private land?

Asked by: Hon HO Chun-yin, Steven (Member Question No. (LegCo use): 54)

Reply:

- (a) to (d) The Agriculture, Fisheries and Conservation Department (AFCD) actively works to protect wild animals by different means, including conservation management of habitats in the Ramsar Site and other areas, territory-wide law enforcement, public education, as well as animal rescue, studies and research, etc., while bird conservation is also included in all these aspects of work. According to the Wild Animals Protection Ordinance (Cap. 170) (the Ordinance), no person shall, except in accordance with a special permit, wilfully disturb or hunt any protected wild animal, including all wild birds. Over the past 3 years, AFCD has prosecuted over 300 cases for contravening the Ordinance and a total of 262 cases were convicted, including 2 cases involving the use of illegal bird prevention measures in farmland or fish ponds, subjected to a fine of \$1,000 and \$2,500 respectively. During the same period, AFCD received 21 complaints about suspected use of illegal bird prevention measures by farmers or fish pond operators. It usually takes 3 to 6 months to process these cases.

AFCD understands the concern of farmers and fish pond operators over their loss due to bird predation in farmland and fish ponds. AFCD aims to strike a balance between supporting the agriculture and fisheries industries as well as bird conservation, and assists farmers and fish pond operators in taking appropriate measures to reduce bird predation in farmland and fish ponds without causing harm to birds. AFCD provides technical advice to farmers on bird prevention, while farmers who are interested in installing bird preventive netting or other measures can apply for low-interest loans from loan funds administered by AFCD, or purchase the necessary materials for self-installation with the Farm Improvement Scheme grants under the Sustainable Agricultural Development Fund (SADF). AFCD also regularly organises talks and workshops on general fish farming guidelines and good aquaculture practice, including methods of prevention of bird predation, for example, pond wiring, hanging of reflective materials, etc., to reduce loss of fish produce. Fish pond operators can also apply for low-interest loans should they need any financial assistance. The Sustainable Fisheries Development Fund (SFDF) may also provide financial support to fish pond operators for purchasing necessary materials under its Equipment Improvement Project.

AFCD has published 2 pamphlets on the methods of preventing bird predation in farmland and fish ponds for the reference of farmers and fish pond operators respectively. According to AFCD's observations, many farmers and fish pond operators have adopted AFCD's recommendations to reduce the risk of bird



predation in farmland and fish ponds. Nonetheless, AFCD does not have the information about the cost of bird prevention measures used by farmers and fish pond operators. On the other hand, the loss due to bird predation is subject to many factors, including crops farmed/species of fish, locality of the farmland/fish pond, and the bird prevention measures implemented on the site, and hence cannot be deduced conclusively. AFCD will continue to carry out the above work to facilitate farmers and fish pond operators to reduce their loss due to bird predation in farmland and fish ponds.

In addition, AFCD has been supporting and promoting the overall development of the agriculture and fisheries industries through various measures, including providing technical support to the industries, promoting local agricultural and fishery produces, implementing SFDF and SADP with a view to promoting the sustainable development of industries, as well as implementing various supportive measures under the New Agriculture Policy. The breakdown of the expenditure on promoting aquaculture fisheries and agricultural development on the wetland is not available.

- (e) According to the Hong Kong Biodiversity Strategy and Action Plan 2016-2021, AFCD has commissioned a specialist consultant to collect updated information on the issue of cormorant predation in commercial fish ponds, review the effectiveness of the existing preventive measures, and explore measures to prevent cormorant predation in fish ponds in late 2016. Prior to the commencement of the study, AFCD had communicated with representatives of the aquaculture industry and they welcomed the study. A field trial on the use of the recommended measure was commenced in late 2017 and completed in early 2018, with the final report of the study to be completed in the second half of 2018.

AFCD's work on bird protection covers a wide spectrum of activities, from habitat conservation, law enforcement, public education, to bird rescue, studies and research. AFCD also assists farmers and fishermen with respect to bird feeding/predation issues. Since the above work forms part of the wild animal protection work of AFCD, there is no separate breakdown of the expenditure in this regard.

- (f) According to the Ramsar Site Management Plan implemented by AFCD, it is recommended that fishponds within the Mai Po Inner Deep Bay Ramsar Site be maintained and operated in an ecologically sustainable manner. One of the measures implemented to achieve this management objective is the Management Agreement projects funded by the Environment and Conservation Fund, under which participating fishpond operators would conduct eco-friendly practices such as draining down their fish ponds after harvesting to facilitate bird feeding. Currently, the majority of fishponds at and around the Ramsar Site are engaged in the Management Agreement projects. According to the information from the Ramsar Convention ([www.ramsar.org](http://www.ramsar.org)), many Ramsar Sites around the world comprise both Government land and private land.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB013**

**(Question Serial No. 2001)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the conservation of Green Turtles and the Sham Wan Restricted Area on Lamma Island, relevant questions are as follows:

- (a) Would the Government advise on (1) the details of the management of the Sham Wan Restricted Area on Lamma Island and the conservation of green turtles, (2) the expenditure and manpower involved in the forthcoming year, and (3) the expenditures and manpower involved over the past 5 years?
- (b) What is the number of turtles having been affixed with metal tags by the Government? For what purpose(s) will the Government utilise the data obtained from the tags? Please advise on the expenditure and the details involved in this regard.
- (c) Please advise on the details and expenditures involved in the relevant scientific/academic research project(s) conducted on Sham Wan/green turtles by the Department or other institutions over the past 5 years. What is the expenditure earmarked by the Department on the researches of Sham Wan/green turtles in the forthcoming year?
- (d) As it was the typhoon season in the summer when Sham Wan Beach was designated as a Restricted Area, a large amount of rubbish was washed up on the shore, posing hazards to the green turtles laying eggs there. Please advise on the cleaning operations conducted between June and October, the responsible department, the weights of rubbish collected every month as well as the expenditures and manpower involved in this regard in each of the past 5 years.
- (e) Turtles are highly sensitive to sound and light while summer is the peak season when yachts sail on the sea, during which waters off the beaches are always packed with yachts, threatening the turtles. What measure(s) does the Government impose to reduce the number of yachts moored off the waters and/or prevent tourists from going

up the shores unknowingly? Does the Government plan to expand the Restricted Area to the waters off the beach in the long run?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 49)

Reply:

- (a) The sandy beach at Sham Wan, Lamma Island is the only regular nesting site of green turtles in Hong Kong. In order to minimise disturbance to green turtles including their nests and eggs, the sandy beach at Sham Wan was gazetted as a Restricted Area under the Wild Animals Protection Ordinance (Cap. 170) in 1999. Access to the area is restricted during the period from 1 June to 31 October each year.

During the restricted period, patrols will be conducted to control unauthorised access or activities and to monitor any nesting activities of green turtles. Before the onset of the nesting season each year, the Agriculture, Fisheries and Conservation Department (AFCD) will carry out conservation management on the nesting site including removal of climbing plants and refuse. AFCD will also arrange for contractors to survey and remove ghost nets in Sham Wan bay as necessary. As these activities form part of the nature conservation work of AFCD, there is no separate breakdown on the expenditure involved.

- (b) Since 2000, AFCD has attached metal tags engraved with a unique serial number to 73 sea turtles. The metal tags will help identify individual sea turtles when they are encountered in the future. As these activities form part of the nature conservation work of AFCD, there is no separate breakdown on the expenditure involved.
- (c) Over the past 5 years, AFCD has conducted satellite tracking of sea turtles to study their migratory routes so as to better conserve sea turtles and their habitats. AFCD also conducts population genetic analysis on sea turtles to better understand their genetic diversity. The expenditure involved in the above studies over the past 5 years and the estimated expenditure in 2018-19 are tabulated below.

<b>Financial year</b>	<b>Expenditure (\$)</b>
2013-14	102,000
2014-15	103,000
2015-16	13,000
2016-17	153,000
2017-18 (revised estimate)	158,000
2018-19 (estimate)	100,000

AFCD does not have information on the scientific researches conducted by other institutions on sea turtles in Hong Kong.

- (d) The Food and Environmental Hygiene Department (FEHD) is responsible for regular cleaning of the Sham Wan beach. According to FEHD, regular cleaning at Sham Wan is conducted 1 to 2 times per week under normal conditions during the restricted period. The Government does not have records of the amount of refuse collected at the relevant location. In case of emergency, AFCD will arrange both contractors and

its staff to support FEHD's cleaning operations. As such activities form part of the routine duties of the relevant department, we do not have the separate breakdown on the expenditure and manpower involved.

- (e) Sham Wan is one of the Speed Restricted Zones for vessels set by the Marine Department to ensure safe navigation in the Hong Kong waters. The boundary of the Speed Restricted Zone at Sham Wan covers the entire bay area. The speed limit within Speed Restricted Zone is 5 knots between 8:00am and midnight on any Saturday or public holiday, or on any day during the period from 1 July to 15 September each year. It precludes the towing of water skiers within the zone. If any water sport activity (e.g. speed boating, banana boat riding or water skiing) is found to have exceeded the speed limit, AFCD will report it to the Marine Police or the Marine Department for follow-up action.

Besides, to prevent inadvertent entry to the Restricted Area and to reduce the risk of collision with green turtles, letters will be sent to local marina clubs and boat rental companies to remind them of the arrangements during the restriction periods of the Sham Wan Restricted Area and the Speed Restricted Zone before the commencement of the periods each year.

The Government has no plan to expand the Restricted Area to the waters off the beach at present. AFCD will continue to monitor the occurrence and nesting activities of green turtles in Sham Wan and review the adequacy of the current conservation measures for the protection of green turtles.

- End -

**CONTROLLING OFFICER'S REPLY****ENB014****(Question Serial No. 3007)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

- (a) Please provide in tabular form the numbers of cases related to the felling of Incense trees and smuggling of the Aquilaria species, the numbers of persons arrested and prosecutions, the ordinance(s) contravened, the maximum and minimum penalties, the total amounts of fines, as well as the weights and numbers of Incense Trees or the Aquilaria species involved over the past 5 years.
- (b) The Government stated last year that trials on using camera traps to deter illegal felling activities were still being conducted. Could the Government now advise on the effectiveness of the camera traps? Does the Government have any plans to extend the trials to other areas? If yes, what is the estimated expenditure involved in this regard? What are the details of the other work by the Government on the conservation of Incense trees? What are the expenditure and manpower involved in this regard in the forthcoming year?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 48)Reply:

- (a) Over the past 5 years, all criminal cases involving illegal felling of Incense Trees were handled by the Hong Kong Police Force (the Police) under the Theft Ordinance (Cap. 210), the Summary Offences Ordinance (Cap. 228) or the Crimes Ordinance (Cap. 200). The relevant statistics are tabulated below:

Year	Number of cases	Number of persons arrested	Number of prosecutions	Maximum penalty (imprisonment)	Minimum penalty (imprisonment)	Estimated number of trees involved
2013	96	41	21	45 months	24 months	168
2014	134	65	26	55 months	3 months	240
2015	120	16	5	35 months	30 months	249
2016	54	22	8*	30 months	2 months	172
2017	53	9	1	30 months	Not applicable	102

\* The figure was revised according to the information provided by the Police.

Moreover, all species of *Aquilaria* including Incense Tree are listed in Appendix II to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Under the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586), all imports and exports of agarwood specimens must be accompanied with a valid CITES licence. Any person who plans to import and export agarwood specimens must hold the relevant licence. The numbers of illegal imports and exports of agarwood over the past 5 years are tabulated below:

Year	Number of cases	Number of prosecutions	Maximum penalty	Minimum penalty	Quantity of seizure
2013	9	0	Not applicable	Not applicable	331 kg
2014	29	2	Imprisonment of 10 months	Not applicable	1 035 kg
2015	13	1	A fine of \$40,000	Not applicable	184 kg
2016	11	2	A fine of \$21,000	A fine of \$5,000	134 kg
2017	12*	4	Imprisonment of 6 weeks	Imprisonment of 3 weeks	414 kg

\* Including 3 cases in which the exhibits were identified to be *Aquilaria sinensis*.

- (b) The Agriculture, Fisheries and Conservation Department (AFCD) is conducting a trial using infrared sensor camera traps (ISCT) to monitor illegal felling of Incense Trees. The trial is still in progress and AFCD is extending the trial to cover more strategic locations. AFCD will review the effectiveness upon completion of the trial.

AFCD has strengthened its efforts on various fronts to protect Incense Trees from illegal felling. Such measures include:

- (i) establishing a special task force to conduct targeted patrol of sites at which important populations of Incense Tree are present, in addition to conducting regular patrols in country parks and special areas;
- (ii) working closely with the Police in gathering and exchange of intelligence, conducting joint law-enforcement operations at black spots and investigation of illegal tree felling cases, and enhancing the awareness and vigilance of the public about such offences through the Police Magazine television programme as well as other education and publicity programmes;
- (iii) enhancing liaison and cooperation with concern groups and the villagers living near Incense Trees for intelligence gathering and reporting of any illegal felling activities;
- (iv) installing tree guards to prevent felling or vandalism of important individuals of Incense Tree;
- (v) dressing the wounds of damaged trees with anti-fungal paint to suppress the formation of agarwood in order to discourage illegal harvesting;

- (vi) organising training sessions to help frontline staff of the Police and the Customs and Excise Department to identify Incense Trees/agarwood and detect illegal activities; and
- (vii) launching a pilot scheme to deploy quarantine detector dogs to facilitate detection of agarwood smuggling at land boundary control points.

In addition, AFCD has stepped up the extensive planting of Incense Trees in country parks over the past few years. Since 2009, about 10 000 seedlings of Incense Trees have been produced and planted every year to assist in the re-stocking of Incense Trees in Hong Kong. A species-specific action plan for Incense Tree is also being formulated for the long-term conservation of the species. The action plan will include various studies and activities to conserve this native species and enhance public awareness in this aspect.

In 2018-19, AFCD will continue to implement the measures mentioned above. The resources involved will be absorbed in the allocation for nature conservation and the management of country parks, which includes an additional provision of \$8.3 million for strengthening the conservation of Incense Trees, including an estimated expenditure of \$1.2 million for the extension of the ISCT trial.

- End -

**CONTROLLING OFFICER'S REPLY****ENB015****(Question Serial No. 3009)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding smuggling activities of ivory, please advise on the followings:

- (a) the details of the detected cases of ivory smuggling, including the numbers of cases, the quantities of ivory, the value of items, the numbers of persons arrested, the numbers of persons convicted, the maximum and minimum penalties and the total amount of fines imposed over the past 3 years;
- (b) the weight of ivory destroyed, the estimated value and expenditures involved in each of the past 3 years; and
- (c) the details of the work on strengthening the trade control of endangered species (in particular ivory) in the forthcoming year as mentioned by the Government. Will adjustments be made to the Department's work, as well as the expenditure and manpower involved in the light of the trade ban? If yes, what are the details?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 50)Reply:

- (a) Details of the detected ivory smuggling cases over the past 3 years are tabulated below:

Calendar year	2015	2016	2017
Number of cases	105	41	64
Quantity of ivory seized (kg)	1 600	530	7 300
Market value (\$ million)	15	5	80
Number of persons arrested	57	30	60
Number of persons convicted	30	25	47
Maximum penalty (Imprisonment / months)	6	8	3
Minimum penalty (Fine / \$)	30,000	2,000	2,000
Total fine (\$ million)	1.5	1.2	0.2



- (b) The quantity of confiscated ivory disposed of by incineration, the estimated value of the incinerated ivory and the relevant expenditure over the past 3 years are tabulated below:

Calendar year	2015	2016	2017
Quantity of confiscated ivory disposed of (tonne)	10	6	0
Estimated value (\$ million)	100	60	0
Expenditure (\$)	70,000	27,000	0

- (c) The Legislative Council enacted the Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 (the Amendment Ordinance) on 31 January this year in order to phase out the local trade in ivory in 3 phases by 31 December 2021, and also to increase the penalties related to the smuggling and illegal trade of endangered species, i.e. the maximum penalty for offences convicted on indictment is a fine of \$10 million and imprisonment for 10 years. The Amendment Ordinance will take effect on 1 May 2018. After the Amendment Ordinance has taken effect for 3 months (i.e. starting from 1 August 2018), all import and export of ivory (save for antique ivory) for commercial purposes will be banned. The Customs and Excise Department and the Agriculture, Fisheries and Conservation Department (AFCD) will strengthen enforcement at import and export control points, and combat the smuggling of endangered species (including ivory). Possession of pre-Convention (i.e. Convention on International Trade in Endangered Species of Wild Fauna and Flora) ivory for commercial purposes is currently exempted from licensing requirement provided that the ivory can be proved pre-Convention. Nevertheless, starting from 1 August 2018, such ivory will be subject to the licensing requirement. Current holders of pre-Convention ivory will be required to apply to AFCD for a license to possess the ivory concerned for commercial purposes. When processing the applications, AFCD staff will inspect the pre-Convention ivory concerned (including measuring weight, taking photos and sticking tamper-proof holograms for the ivory). Regarding the new measures, AFCD has compiled guidelines for the staff members concerned, and also regularly assesses the measures to ensure that the enhanced control of ivory can be effectively implemented. Apart from licensing and enforcement, AFCD will continue its publicity and education efforts to promote public awareness of the relevant control and the need to protect endangered species. The manpower and expenditure involved in the above work for the enhanced control of ivory will be absorbed by the existing resources of AFCD.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB016**

**(Question Serial No. 3010)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the international trade in endangered species, the questions are as follows:

- (a) Please set out in tabular form the applications for issue of licence received under the licensing control of the international trade in endangered species, the numbers of licences/certificates issued, the numbers of unsuccessful licensing applications and the reasons over the past 5 years.
- (b) What were the numbers of cases on illegal trade in endangered species handled by the Government, the quantities of items, the numbers of persons arrested, the numbers of persons convicted, the ordinance(s) contravened, the maximum and minimum penalties and the total amount of fine over the past 5 years? Please also advise on the species most commonly involved and the whereabouts of the species seized.
- (c) What were the expenditures involved in combating illegal trade in endangered species over the past 5 years? If there was an increase in the expenditures, what were the main reasons?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 51)

Reply:

- (a) The numbers of applications for licences / certificates received and licences / certificates issued by the Agriculture, Fisheries and Conservation Department (AFCD) with respect to the imports, exports, re-exports and possession of scheduled species under the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) (the Ordinance) over the past 5 years are tabulated below:

<b>Calendar year</b>	<b>Number of applications received</b>	<b>Number of licences / certificates issued*</b>
2013	27 153	26 935
2014	25 700	25 894
2015	23 089	23 475
2016	20 042	19 935
2017	18 938	19 043

\* The number of licences / certificates issued may differ from the number of applications received within the same calendar year as some licences and certificates were issued in respect of the applications submitted at the end of the previous year.

Some applications were unsuccessful mainly because the supporting documents submitted in respect of the applications were invalid. We do not retain statistics on the number of unsuccessful applications.

- (b) Various types of endangered species were involved in the enforcement actions taken to combat their illegal trade. Commonly encountered species included leather products of reptiles, pangolin scales or carcasses, ivory, timber and orchid. The statistics on cases involving illegal imports and exports in contravention of the Ordinance over the past 5 years are tabulated as follows:

<b>Calendar Year</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017*</b>
Number of cases	412	461	395	309	433
Quantity of products	28 800 kg and 3 746 pieces	137 260 kg and 6 696 pieces	1 074 800 kg and 25 218 pieces	148 820 kg and 2 594 pieces	63 130 kg and 4 272 pieces
Number of persons arrested	271	355	251	181	257
Number of convictions	134	222	153	126	170
Maximum penalty (Imprisonment/ months)	4	10	6	8	3
Minimum penalty (Fine / \$)	100	100	100	100	400
Total fine (\$ million)	1.2	2.9	2.0	1.8	0.3

\* Some cases are still under investigation.

- (c) The expenditures incurred by AFCD to combat the illegal trade in endangered species over the past 5 years are tabulated as follows:

<b>Financial year</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18 (revised estimate)</b>
Expenditure (\$ million)	19.6	20.6	26.0	28.3	31.6

The increased expenditure was for strengthening inspection and enforcement against illegal trade in endangered species and coping with the workload arising from the growing number of scheduled species.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB017**

**(Question Serial No. 3172)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

- (a) In response to the Department's removal of litter bins in all country parks at the end of last year, will there be adjustments to cleaning and management services in country parks accordingly? Please provide the details, including the expenditure and manpower involved in this regard.
- (b) In addition, has the Department evaluated whether the number of littering cases will increase as a result? What countermeasures will the Department implement? Please provide the details, including the expenditure and manpower involved in this regard.

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 52)

Reply:

- (a) The Agriculture, Fisheries and Conservation Department (AFCD) is committed to keeping and promoting a clean environment in country parks. To step up the promotion efforts, we launched the "Take Your Litter Home" public education programme in September 2015 to encourage the public to take away their own waste after their visits to country parks with a view to nurturing among them a sense of responsibility towards nature. To tie in with the publicity and education activities, all litter containers and recycling bins along the hiking trails within country parks were removed by phases by the end of 2017. AFCD will maintain cleaning services to upkeep the cleanliness of country parks and flexibly deploy manpower for various country park management work, including cleaning, facility maintenance and tree management, etc. Since the staff responsible for cleaning is also responsible for other country park management work, we do not have separate breakdown on the resources and manpower allocated to specific aspects of the work.

- (b) The litter containers and recycling bins were removed with the aim of nurturing among visitors the habit of keeping country parks clean. We do not anticipate an increase in the number of prosecutions related to littering in country parks. AFCD will upkeep the education and publicity efforts for the public to internalise the green concepts of waste reduction and taking their own waste away after visiting country parks. AFCD will also step up patrol and cleaning, and take law enforcement action when necessary. The expenditure of AFCD earmarked for 2018-19 for education, publicity and law enforcement in country parks (including littering cases) is \$79.8 million.

- End -

**CONTROLLING OFFICER'S REPLY****ENB018****(Question Serial No. 0331)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

**Question:**

As shown in the indicators under Programme (2): Nature Conservation and Country Parks, the Agriculture, Fisheries and Conservation Department produced and planted some 400 000 seedlings over the past financial year. However, the Department has not provided the indicator on the maintenance of the existing trees in country parks. In this connection, would the Government please inform this Committee of the following:

- (a) What is the number of trees in country parks for which the Department carries out inspections and maintenance every year? If the number is not available, would the Department provide other indicators?
- (b) What were the manpower and estimated expenditures allocated on the inspections and maintenance of trees each year over the past 5 years?

Asked by: Hon IP LAU Suk-ye, Regina (Member Question No. (LegCo use): 4)

**Reply:**

- (a) The Agriculture, Fisheries and Conservation Department (AFCD) is responsible for tree planting and maintenance in country parks to meet various objectives including enhancement of biodiversity, improvement of countryside landscape, rehabilitation of damaged areas and control of soil erosion. AFCD conducts various tree tending works for the woodlands in country parks including fertilising, weeding, pruning and thinning which are conducive to the health and sustainability of the woodland habitats in the long term.

On top of the overall role in habitat and tree maintenance in country parks, AFCD also conducts detailed tree risk assessments of about 37 000 trees in about 1 000 country park recreation sites and country park areas adjacent to the public roads every year. AFCD also conducts regular patrols and inspections in the country parks and special areas. All potential hazardous trees identified during the patrols will be followed up with remedial measures (e.g. tree pruning, crown reduction, tree removal, etc.).

- (b) The inspections and maintenance of trees are part of the country park management work of AFCD. There is no separate breakdown on the manpower and expenditure involved.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB019**

**(Question Serial No. 1314)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment

Question:

Over the past 5 years, what were the number of wild pigs caught by the Agriculture, Fisheries and Conservation Department, the total number of wild pig hunting operations carried out, the number of wild pigs caught in each operation, and the respective reasons for carrying out each operation?

Asked by: Hon KWONG Chun-yu (Member Question No. (LegCo use): 20)

Reply:

In general, upon receipt of reports about wild pigs that were injured, trapped in urban areas or causing nuisances by straying into residential areas, the Agriculture, Fisheries and Conservation Department (AFCD) will deploy staff to attend to the scene. AFCD's veterinary officers will also be deployed to the scene to assist in catching the wild pigs with tranquiliser dart guns as necessary. The wild pigs caught will be released in remote and suitable locations in the countryside, including country parks, if circumstances warrant.

In addition, there are 2 wild pig hunting teams (the hunting teams) formed by civilian volunteers, which are responsible for wild pig hunting operations. Only when there are confirmed public reports of damage caused by wild pigs or they are threatening human safety and property on a frequent basis, and that the preventive and other kinds of measures are not effective will AFCD notify the hunting teams to conduct hunting operations. AFCD is conducting a comprehensive review of the strategies and measures for the management of wild pigs. As a result, hunting operations have been suspended since early 2017 until completion of the review, and all cases in relation to wild pigs are currently attended to by AFCD officers on the scene.

The number of wild pigs caught by AFCD, the number of operations conducted by the hunting teams and the number of wild pigs caught by the hunting teams over the past 5 years are tabulated as follows:

<b>Financial Year</b>	<b>Number of wild pigs caught by AFCD</b>	<b>Number of operations conducted by hunting teams</b>	<b>Number of wild pigs caught by hunting teams</b>
2013-14	10	73	38
2014-15	13	31	21
2015-16	37	53	48
2016-17	62	49	34
2017-18*	107	0	0

\* up to 31 January 2018

- End -

**CONTROLLING OFFICER'S REPLY****ENB020****(Question Serial No. 0874)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

Please inform this Committee of the following:

- (a) Please set out the respective areas of country parks, special areas, marine parks and marine reserves at present.
- (b) Please advise on the numbers and areas of the selected country park enclaves that were incorporated into country parks over the past 3 years.
- (c) In the Matters Requiring Special Attention in 2018-19, the Government mentioned "the inclusion of selected country park enclaves into country parks". Will the Government earmark provisions for research to conduct timely review on the coverage of country parks, so that areas that have been included in country parks can be released to make available more land resources if their conservation value or quality has dropped? If yes, what are the details? If not, what are the reasons?

Asked by: Hon LAM Kin-fung, Jeffrey (Member Question No. (LegCo use): 17)Reply:

- (a) The areas of country parks, special areas, marine parks and marine reserve are tabulated below:

<b>Protected Areas</b>	<b>Area (hectares)</b>
Country Parks	43 467
Special Areas (outside country parks)	845
Marine Parks	3 380
Marine Reserves	20

- (b) 3 country park enclaves, namely Fan Kei Tok, Sai Lau Kong and a site near Nam Shan, were incorporated into the area of their respective country parks over the past 3 years. The total area of these country park enclaves is about 12 hectares.
- (c) Country parks are designated under the Country Parks Ordinance (Cap. 208) for conservation, education and recreational purposes. The Agriculture, Fisheries and Conservation Department (AFCD) will continue to manage and protect the country parks and identify potential sites for designation as /incorporation into country parks. AFCD is carrying out the preparatory work for designation of an area of about 500 hectares at Robin's Nest as a country park. In addition, AFCD aims at further enhancing the conservation level and recreational value of country parks through the implementation of various management measures, including plantation enrichment, additional provision of campsites and facilities and improvement of the existing trail networks, etc.

AFCD has not earmarked any provision for the research mentioned in item (c) of the Question.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB021**

**(Question Serial No. 2411)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Upon enactment of the Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 (the Amendment Ordinance) on 31 January 2018, the Secretary for the Environment has appointed 1 May 2018 as the commencement date of the Amendment Ordinance, which gives effect to the three-step plan to phase out local ivory trade. In this connection, please advise on the following:

What were the numbers of cases of smuggled ivory seized by the Customs and Excise Department (C&ED) in each year over the past 5 years, including: (i) the total value of the products involved; (ii) the types of ivory products; (iii) the weight seized; (iv) the mode of trade (i.e. import, export or re-export); (v) countries which the trade involved (i.e. places of origin of the seized ivory products or destinations of the ivory products); (vi) means of transport; (vii) penalties; and (viii) the stakeholders being prosecuted in each case. If such information is not available, what are the reasons?

What were the numbers of random checks conducted by C&ED on ivory products imported, exported and re-exported in each year over the past 5 years?

Regarding the three-step plan to phase out local ivory trade, what are the details of work, estimated expenditure and manpower involved in 2018-19?

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.18)

Reply:

The enforcement figures regarding smuggling of ivory over the past 5 years are tabulated below:

Calendar year	2013	2014	2015	2016	2017
Number of cases	107	106	105	41	64
Estimated value of seized items (\$ million)	84	21	15	5	80
Seizure quantity	7 900 kg & 269 pieces	2 200 kg & 35 pieces	1 600 kg	530 kg	7 300 kg
Number of import cases	84	93	102	39	61
Major Loading Countries (Number of cases)	South Africa (17) Ethiopia (14) Ivory Coast (9)	Nigeria (27) South Africa (22) Cote d'Ivoire (i.e. formerly Ivory Coast) (14)	Nigeria (33) Zimbabwe (23) South Africa (12)	Nigeria (11) Zimbabwe (9) South Africa (6)	Zimbabwe (15) Nigeria (10) Portugal (5) South Africa (5)
Mode of Transport (Number of cases)	Air (74) Land (3) Sea (7)	Air (88) Land (4) Sea (1)	Air (102)	Air (36) Land (1) Sea (2)	Air (59) Land (1) Sea (1)
Number of export cases	3	2	1	1	3
Destination Country (Number of cases)	Mainland China (3)	Mainland China (2)	Mainland China (1)	Mainland China (1)	Mainland China (3)
Mode of Transport (Number of cases)	Land (1) Sea (2)	Land (2)	Land (1)	Land (1)	Land (1) Sea (2)
Transit / Transshipment	12	11	2	-	-
Major Loading Country (Number of cases)	Nigeria (2) South Africa (2)	South Africa (3) Angola (2)	Greece (1) Namibia (1)	-	-
Major Destination Country (Number of cases)	Mainland China (8)	Mainland China (3) Vietnam (3)	Mainland China (1) Malaysia (1)	-	-
Mode of Transport (Number of cases)	Air (12)	Air (11)	Air (2)	-	-
Others (e.g. abandoned case)	8	-	-	1	-
Number of persons convicted	24	65	30	25	47
Maximum penalty (Imprisonment / months)	4	8	6	8	3
Minimum penalty (Fine / \$)	10,000	10,000	30,000	2,000	2,000

Offenders of the convicted cases mainly entered Hong Kong as visitors or transit passengers via the airport. The ivory seized from these passengers was mostly worked ivory or semi-processed worked ivory while ivory seized from sea consignments was mostly raw tusks and large cut pieces.

By employing the risk management and intelligence-led approach, the Customs and Excise Department (C&ED) conducts checks on passengers, cargoes, postal parcels and conveyances at various seaports to effectively fight against the smuggling offences including wildlife crimes. Throughout the years, C&ED and the Agriculture, Fisheries and Conservation Department (AFCD) have been working closely through mounting joint operations against smuggling of the endangered species (including ivory) scheduled under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) at import and export control points.

The Legislative Council enacted the Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 (the Amendment Ordinance) on 31 January this year in order to phase out the local trade in ivory in 3 phases by 31 December 2021, and also to increase the penalties related to the smuggling and illegal trade of endangered species, i.e. the maximum penalty for offences convicted on indictment is a fine of \$10 million and imprisonment for 10 years. To implement the phase-out plan of the local ivory trade in phases, AFCD will carry out a series of measures in 2018-19. Relevant measures include sending notifications regarding the ivory phase-out plan to relevant stakeholders (including traders) and all Parties to CITES through the CITES Secretariat and the World Trade Organization. The Amendment Ordinance will take effect on 1 May 2018. After the Amendment Ordinance has taken effect for 3 months (i.e. starting from 1 August 2018), all import and export of ivory (save for antique ivory) for commercial purposes will be banned. At the same time, pre-Convention ivory will be subject to licensing requirement. Current holders of pre-Convention ivory will be required to apply to AFCD for a license to possess the ivory concerned for commercial purposes. Applications for the possession of pre-Convention ivory for commercial purposes will be scrutinised under a licensing system. Registration and inspection of the existing stock of pre-Convention ivory will also be arranged (including recording weight, taking photo and putting on tamper-proof hologram stickers). Publicity activities to promote public awareness of the ivory phase-out plan will also be arranged. Besides, AFCD will continue to implement measures that aim at curbing smuggling and strengthening the control of local trade in ivory. The measures include enhancing inter-departmental collaboration and stepping up joint operations and intelligence exchange with C&ED and overseas law enforcement agencies such as Interpol, deploying sniffer dogs to detect ivory at import and export control points to assist detecting and preventing smuggling of ivory, using hi-tech radiocarbon dating analysis to determine the age and hence the legality of ivory. The implementation of the above works and measures will be absorbed by the existing resources and manpower of AFCD.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB022**

**(Question Serial No. 0450)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Commerce and Economic Development, Secretary  
for the Environment

Question:

Under Matters Requiring Special Attention in 2018-19, it is stated that the Department will implement the Biodiversity Strategy. However, the proliferation of *Mikania micrantha* still persists, which has damaged and invaded part of the countryside. Would the Government please advise on the following:

- (a) Whether the Department has regularly monitored and removed *Mikania micrantha* over the past 3 years. If yes, please advise on the numbers of annual inspection and removal, the manpower and expenditures allocated, and how do they compare with that in 2017-18;
- (b) Whether there is a record of the districts where *Mikania micrantha* has proliferated and the total areas of the land involved. If yes, please provide the specific figures;
- (c) The country park(s) affected by the proliferation of *Mikania micrantha*, and the loss resulted from its proliferation;
- (d) Whether interdepartmental efforts have been made to curb the proliferation of *Mikania micrantha*. If yes, how effective are they? If not, what are the reasons?
- (e) Whether the Department has devised new methods to curb the proliferation of *Mikania micrantha*. If yes, please provide the details.

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 29)

Reply:

- (a) *Mikania (Mikania micrantha)* is a common weed mainly found on abandoned fields, roadside and hillside, and woodland fringes where there is ample sunlight.



Government departments conduct regular vegetation maintenance work, including prevention of the proliferation of Mikania, on government land under their management. The Agriculture, Fisheries and Conservation Department (AFCD) conducts regular patrols and inspections in country parks, special areas and sites of special scientific interest and removes Mikania once it is found. As Mikania clearance is part of the routine vegetation management work of AFCD, there is no breakdown on the manpower and expenditure involved specifically in this aspect of work.

- (b) Statistics on the total area of land affected by Mikania are not available.
- (c) According to AFCD's record, only a few areas on the fringes or on the roadside of country parks (e.g. Pat Sin Leng, Tai Lam and Kiu Tsui Country Parks) have been affected by Mikania. The proliferation of Mikania in these areas is under control and there is no ecological damage to country parks observed.
- (d) Government departments carry out regular inspections and vegetation maintenance work, including removal of Mikania, within the facilities and the slopes under their management. Vegetation maintenance on unallocated and unleased Government land not maintained by other government departments is under the jurisdiction of the respective District Land Offices. This arrangement is considered the most effective measure to control the proliferation of Mikania.
- (e) Various methods have been employed to control Mikania, including physical, chemical and biological control. Removing Mikania manually is considered the most feasible and effective measure to control the proliferation of Mikania. Other methods (such as using herbicide, etc.) may not only have undesirable impacts on the environment, but may also pose hazard to other plants nearby.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB023**

**(Question Serial No. 0452)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the management and operation of the Hong Kong UNESCO Global Geopark (HKUGGp),

- (a) What were the manpower and expenditure involved in the management and operation of HKUGGp in 2018-19, and how do they compare with that in 2017-18?
- (b) In view of inaccessibility to HKUGGp and insufficient promotion of the relevant guided tour services, would the Government conduct reviews on these issues, and is there any improvement measure?
- (c) What measures has the Department taken to publicise and promote HKUGGp, and how to strengthen the work in the coming year?
- (d) What is the existing number of Recommended Geopark Guides (R2Gs), and how does it compare with that of last year? What measures would the Department take to encourage more tourism industry members to become R2Gs?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 33)

Reply:

- (a) In 2018-19, the manpower and estimated expenditure involved in the management and operation of the Hong Kong UNESCO Global Geopark (HKUGGp) are 24 staff and \$29.2 million. It is approximately the same as the provision in 2017-18.
- (b) Over the past years, the Agriculture, Fisheries and Conservation Department (AFCD) has continued its efforts in enhancing the accessibility of HKUGGp and the promotion of its guided tour services. Major enhancements made recently include: (i) the introduction and promotion of guided shuttle bus tour to East Dam of the High Island Reservoir; (ii) the launch of a kaito ferry service running between Ma Liu Shui and Lai

Chi Wo; (iii) setting up a new information kiosk at East Dam and enhancing the visitor information at Tai Po Geoheritage Centre for the promotion of HKUGGp and local guided tours; and (iv) production and distribution of a new geo-tourism magazine covering HKUGGp's major attractions and geo-tour packages. AFCD will continue to enhance the accessibility and visibility of HKUGGp in cooperation with different government departments, relevant community groups and other stakeholders.

- (c) In 2018-19, AFCD will continue to endeavour to promote and publicise HKUGGp through a variety of publicity and engagement activities. Major activities include: (i) production of multilingual promotion materials for local and overseas tourists; (ii) overseas promotion through the internet and international platform of the Global Geoparks Network and in collaboration with the Hong Kong Tourism Board; (iii) upgrading the skills of the geopark guides through the Geopark Guide System in conjunction with non-governmental organisations (NGOs) and the Travel Industry Council of Hong Kong (HKTIC); (iv) training of tour operators, local communities and other stakeholders of HKUGGp; (v) organising science popularisation programmes for students through the Geopark School Programme; and (vi) collaboration with NGOs and local communities in the setting up and operation of education and visitor centres.
- (d) Currently, there are in total 48 R2Gs, which is the same as that of 2017. AFCD will continue to work with HKTIC and NGOs to promote the Geopark Guide System to tourism practitioners through talks, workshops and seminars.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB024**

**(Question Serial No. 2704)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

- (a) Please provide, **by year**, and with **an exhaustive breakdown** the Department's total expenditures involved in dealing with the wild pig issue, as well as the expenditures under the grand total (including the handling of public complaints, administrative expenses and manpower, etc.) over the past 5 years.
- (b) What are the Department's total estimated expenditure involved in dealing with wild pigs, as well as the estimated expenditures under the grand total in the financial year 2018-19?
- (c) Please set out the outcomes of operations conducted by the wild pig hunting teams (including the number of operations, operation areas and number of wild pigs caught) over the past 5 years.
- (d) The Department announced last year that the wild pig hunting teams would stop conducting hunting operations. Has the Department decided on the way forward of the hunting teams and the way to handle the issues concerning the special permits held by the hunting team members and the renewal of arms license. If yes, what are the details? If not, when are the details of handling the said issues expected to be finalised?
- (e) What are the details of the work, the total expenditure and the breakdown of the expenditure (including procurement of the contraceptive "GonaCon<sup>TM</sup>", manpower and operations conducted) involved in the wild pig contraceptive trial scheme launched last year? What is the Department's estimated expenditure on this scheme in the financial year 2018-19?
- (f) Please set out the latest numbers of wild pigs injected with the contraceptive under the said scheme by districts. Is there any wild pig having side effects or other adverse

reactions after being injected with the contraceptive? If yes, what are the number and details?

- (g) The Department has mentioned that they are setting up a working group on the enhancement of design of litter containers and refuse collection points in order to prevent wild pigs from being attracted by the outdoor refuse storage area to go downhill to search for food, reducing the conflicts between human beings and wild pigs. In this connection, what are the details of work and progress of the working group, as well as the details of the enhanced design?

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 35)

Reply:

- (a) The expenditure involved in dealing with the wild pig issues by the Agriculture, Fisheries and Conservation Department (AFCD) is tabulated as follows:

<b>Financial Year</b>	<b>Expenditure (\$ million)</b>
2013-14	1.54
2014-15	1.46
2015-16	1.82
2016-17	2.36
2017-18 (revised estimate)	6.10

There is no separate breakdown on the expenditure involved in handling public complaints, administrative expenses and manpower, etc.

- (b) A provision of \$11.7 million has been earmarked for dealing with wild pig issues in 2018-19.
- (c) The number of hunting operations carried out and the number of wild pigs caught by the hunting teams over the past 5 years are tabulated as follows:

<b>Financial year</b>	<b>Number of hunting operations/wild pigs caught</b>		
	<b>New Territories</b>	<b>Hong Kong Island and other outlying islands</b>	<b>Total number</b>
2013-14	63/28	10/10	73/38
2014-15	27/15	4/6	31/21
2015-16	48/30	5/18	53/48
2016-17	39/19	10/15	49/34
2017-18 (up to February 2018)	0/0	0/0	0/0

- (d) AFCD is conducting a comprehensive review on the current strategies and measures for the management of wild pigs. Hunting operations have been suspended since early 2017 until completion of the review.
- (e) In the late 2017, AFCD launched a two-year pilot scheme for the contraception of wild pigs with a view to evaluating the suitability of an immuno-contraceptive vaccine,

namely GonaCon<sup>TM</sup>, for controlling the population of wild pigs habituated to feeding and causing nuisance to the public. Under the pilot scheme, AFCD's contractor will deploy veterinarians to capture wild pigs by using tranquiliser dart guns and administer the contraceptive vaccine to and implant microchips in suitable wild pigs in good health condition before releasing them back to the countryside. Suitable wild pigs will also be installed with GPS transmitters. AFCD will monitor the wild pig populations covered by the pilot scheme to evaluate the effectiveness of the pilot scheme. The expenditure involved in the said pilot scheme in 2017-18 is \$1.79 million. A provision of \$3.5 million has been earmarked for the pilot scheme in 2018-2019.

- (f) So far, 14 wild pigs, all of which were caught on Hong Kong Island, have been treated with GonaCon<sup>TM</sup>, with no side effects or other adverse reactions observed. AFCD is planning to extend the pilot scheme to other districts of Hong Kong.
- (g) AFCD has been working closely with the Food and Environmental Hygiene Department (FEHD) on the improvement of refuse collection facilities that are prone to wildlife raids. Improvement works carried out include the installation of metal swing doors at village-type refuse collection and recycling points and erecting bollards or parapets at bin sites to prevent the knocking down of refuse and recycling bins by wildlife such as wild pigs. In addition, AFCD is setting up a working group for conducting a consultancy study on prevention of wildlife raids of the refuse collection and recycling points, refuse bins, litter bins and recycling bins, and also the enhancement of their design.

The most effective way to reduce the appearance of wild pigs in residential areas is to stop feeding them. The public's feeding will wrongly impress the wild animals that there is stable food supply and attract them to appear regularly near urban or residential areas. To this end, AFCD is conducting a series of publicity and education programmes, including promotion on TV and radio, fun day, roving exhibitions, public lectures and visits, etc. to publicise the negative impacts of feeding wild animals. AFCD has also recently set up a YouTube Channel and a Facebook fan page, and launched Announcements in the Public Interest together with a series of micro-movies titled "Don't Feed Wild Animals and Feral Pigeons", to inform the public about the negative consequences of feeding wild pigs, monkeys and feral pigeons, etc.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB025**

**(Question Serial No. 2706)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

- (a) Please set out **by year** and **with an exhaustive breakdown** the total numbers of import cases of products containing ingredients from bear gall bladders in contravention of the Protection of Endangered Species of Animals and Plants Ordinance (the Ordinance), the numbers of cases detected and the details of the items involved in the cases (including the names, places of origin, ingredients in contravention of the Ordinance and the import quantities of the items involved in the cases, the numbers of persons arrested, the number of persons convicted and their respective penalties, etc.) over the past 5 years.
- (b) Would the Department consider conducting random inspections on products claiming to contain ingredients from bear gall bladders? If yes, what are the details? If not, would the Department consider conducting random inspections in order to deter illegal import of animal products regulated under the Ordinance into Hong Kong?
- (c) Though the Convention on International Trade in Endangered Species of Wild Fauna and Flora and the Ordinance do not impose regulation on the methods of collecting specimens of endangered species, would the Government prohibit the sale or import into Hong Kong of products claimed to contain ingredients from bear gall bladders on humanitarian grounds?

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 37)

Reply:

- (a) Over the past 5 years, there was 1 case of suspected illegal import of bear bile. The case involved importing 10g of powder claimed to be made from bear bile from Mainland China in 2017. It is still under investigation and no persons have been arrested so far.

- (b) & (c) Hong Kong implements the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) through enforcing the Protection of Endangered Species of Animal and Plant Ordinance (the Ordinance). Officers of the Agriculture, Fisheries and Conservation Department regularly conduct inspections at border control points and shops to deter smuggling of and trade in endangered species, including products containing or claiming to contain bear bile. The objective of CITES is to strengthen trade controls through the adoption of effective measures among governments of the contracting parties in order to effectively protect the endangered species of wild fauna and flora and to ensure that the sustainable use of wild fauna and flora will not be affected by international trade. CITES and the Ordinance do not impose regulation on the methods of collecting specimens of endangered species. We will continue to follow international practices in the regulation of international trade in endangered species.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB026**

**(Question Serial No. 2707)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

- (a) What were the details of the Department's work and the total expenditures involved in the conservation of the Chinese White Dolphins (CWDs), as well as the expenditures under the grand total (including all expenditures on Sha Chau and Lung Kwu Chau Marine Park, The Brothers Marine Park, the proposed Southwest Lantau Marine Park, the Soko Islands Marine Park and the designation of a new marine park for Integrated Waste Management Facilities at Shek Kwu Chau, etc.) over the past 5 years? What are the Department's total estimated expenditure and the expenditures under the grand total involved in the abovementioned initiatives in the financial year 2018-19?
- (b) Please set out the populations of CWDs within the territory by their major habitats (including the North Lantau waters near Castle Peak, the Sha Chau and Lung Kwu Chau Marine Park, and waters around Chek Lap Kok and Tai O) over the past 5 years.
- (c) Please set out the numbers of stranding cases of CWDs, Indo-Pacific finless porpoises and other cetaceans within the territory by their major habitats (including the North Lantau waters near Castle Peak, the Sha Chau and Lung Kwu Chau Marine Park, and waters around Chek Lap Kok and Tai O) over the past 5 years.
- (d) What is the Department's evaluation on the 21 water quality parameters of the respective marine parks and marine reserve? Please set out the name(s) and the figure(s) recorded of the parameter(s) which did not meet the standard(s) of the Environmental Protection Department (EPD) in each of the past 5 years, as well as the standard figure(s) of the respective parameter(s) as specified by EPD.
- (e) What is the Department's evaluation on the effectiveness of marine parks in the conservation of CWDs? Does the Department have any other measure(s) to enhance the habitats of local cetaceans apart from establishing additional marine parks? If yes, what are the details and estimated expenditure of the relevant measures?

- (f) Has the Department estimated the future populations of cetaceans in Hong Kong? If yes, what are the details?

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 38)

Reply:

- (a) The Agriculture, Fisheries and Conservation Department (AFCD) has put in place a variety of measures that are conducive to the conservation and the continued survival of the Chinese White Dolphins (CWDs) in the Hong Kong waters. They include (i) close monitoring of the occurrence and distribution of CWDs in local waters; (ii) designation of important dolphin habitats as marine parks and subject them to proper conservation and management; (iii) stipulating stringent requirements in Environmental Impact Assessments of nearby coastal development projects to ensure that the potential impacts to dolphins are adequately addressed; (iv) implementation of fisheries management measures which would benefit CWDs whose prey food species are dependent on sustainable and healthy fish stocks; and (v) organising education and publicity programmes to raise public awareness of and solicit their support for the conservation of CWDs.

Among the established marine parks, 2 of them, i.e. Sha Chau and Lung Kwu Chau Marine Park (SCLKCMP) and The Brothers Marine Park (BMP), incur recurrent expenditures related to the conservation of CWDs. The recurrent expenditures involved in the CWD conservation measures over the past 5 years and that earmarked for 2018-19 are as follows:

<b>Financial year</b>	<b>Expenditure (\$ million)</b>
2013-14	6.5
2014-15	6.7
2015-16	6.3
2016-17	6.2
2017-18 (revised estimate)	9.9 <sup>#</sup>
2018-19 (estimate)	11.0 <sup>#</sup>

<sup>#</sup> The increase in recurrent expenditure was due to the establishment of BMP in December 2016.

- (b) AFCD's monitoring of CWDs provides the estimated abundance of dolphins in 4 areas, i.e. Southwest Lantau, West Lantau, Northwest Lantau and Northeast Lantau, which are the major habitats of CWDs in Hong Kong. Further breakdown of the abundance estimates for specific locations such as SCLKCMP is not available. The estimated abundance of CWDs in the 4 survey areas is as follows:

<b>Calendar year</b>	<b>Abundance</b>				
	<b>Southwest Lantau</b>	<b>West Lantau</b>	<b>Northwest Lantau</b>	<b>Northeast Lantau</b>	<b>Total</b>
2013	11	23	36	3	73
2014	26	36	24	1	87

Calendar year	Abundance				
	Southwest Lantau	West Lantau	Northwest Lantau	Northeast Lantau	Total
2015	24	31	10	0	65
2016	9	27	11	0	47
2017	(Data being analysed)				

Apart from CWDs, the Department does not have the estimated abundance of finless porpoises and other cetaceans in Hong Kong waters.

- (c) The numbers of stranded CWDs recorded over the past 5 years in North Lantau waters near Castle Peak, SCLKCMP, waters around Chek Lap Kok and Tai O are as follows:

Calendar year	Number of CWDs stranded				
	North Lantau waters near Castle Peak	SCLKCMP	Waters around Chek Lap Kok	Tai O	Other areas
2013	3	1	2	2	1
2014	2	0	1	2	7
2015	2	2	1	2	8
2016	1	0	0	0	3
2017	0	1	1	0	3

The numbers of stranded finless porpoises recorded over the past 5 years in North Lantau waters near Castle Peak, SCLKCMP, waters around Chek Lap Kok and Tai O are as follows:

Calendar year	Number of finless porpoises stranded				
	North Lantau waters near Castle Peak	SCLKCMP	Waters around Chek Lap Kok	Tai O	Other areas
2013	0	0	0	0	19
2014	0	0	0	1	32
2015	0	0	0	0	21
2016	0	0	0	0	17
2017	0	0	0	0	18

The numbers of other stranded cetaceans recorded over the past 5 years in North Lantau waters near Castle Peak, SCLKCMP, waters around Chek Lap Kok and Tai O are as follows:

Calendar year	Number of other cetaceans stranded				
	North Lantau waters near Castle Peak	SCLKCMP	Waters around Chek Lap Kok	Tai O	Other areas
2013	0	0	0	0	0
2014	0	0	0	0	5
2015	0	0	0	0	1
2016	0	0	0	0	2
2017	0	0	0	0	3

- (d) AFCD conducts regular water quality monitoring at various marine parks and marine reserve and measures and analyses 21 parameters, which are air temperature, water temperature, salinity, dissolved oxygen, pH, Secchi disc depth, 5-day biochemical oxygen demand, total suspended solid, turbidity, ammoniacal nitrogen, unionized ammonia, nitrite nitrogen, nitrate nitrogen, total inorganic nitrogen, total Kjeldahl nitrogen, total nitrogen, orthophosphate phosphorus, total phosphorus, chlorophyll-*a*, *Escherichia coli* and faecal coliforms. The water quality of the marine parks and marine reserve was good and complied with the corresponding Water Quality Objectives (WQO) set by the Environmental Protection Department (EPD), except for total inorganic nitrogen (TIN) which is an indicator of nutrient enrichment.

Subject to the influence of water current, the discharge from the river on the periphery of SCLKCMP is rich in nutrients, resulting in TIN concentrations at the aforementioned location being in excess of the WQO over the past 5 years, and that in BMP also exceeded the WQO in 2017. The TIN in Cape D'Aguilar Marine Reserve (CDMR) showed fluctuations. Measured TIN concentrations (in mg/L) in the aforementioned marine parks and in CDMR are tabulated as follows:

<b>Calendar year</b>	<b>SCLKCMP (0.3mg/L)</b>	<b>BMP (0.3mg/L)</b>	<b>CDMR (0.1mg/L)</b>
2013	0.92	/	0.18
2014	0.84	/	0.30
2015	1.23	/	0.20
2016	0.95	/	0.12
2017	1.09	0.73	0.10

Note:

1. The Water Quality Objective for annual depth-averaged TIN in the respective water control zones are shown in brackets.
  2. Water quality monitoring in BMP commenced only after its designation in 2017.
- (e) Based on the findings of the long-term dolphin monitoring by AFCD, the waters of Lung Kwu Chau within SCLKCMP remain an important habitat of CWDs. The monitoring results of the Passive Acoustic Monitoring initiated in 2017 on the spatial, seasonal and diurnal patterns of CWDs in SCLKCMP and BMP indicated that the designation of marine parks had positive effects on the conservation of CWDs. Please refer to item (a) above regarding the recurrent expenditures involved in the CWD conservation measures.
- (f) AFCD will continue to monitor the occurrence of cetaceans in Hong Kong waters. The Department does not have any estimate on the future abundance of cetaceans.

- End -

**CONTROLLING OFFICER'S REPLY****ENB027****(Question Serial No. 2709)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

- (a) Please set out the details of illegal felling of Agarwood over the past 5 years, including the total number of cases, numbers of cases detected, numbers of persons arrested, numbers of persons convicted, the lowest and highest penalties, the total number of trees involved, etc.
- (b) What were the details of the Department's work on combating the illegal felling as well as the conservation of Agarwood in the past year? How would the Department evaluate the effectiveness of the relevant work?
- (c) What are the details and estimated expenditure involved in the conservation of Agarwood in the financial year of 2018-19?

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 40)Reply:

- (a) Statistics on cases involving illegal felling of Incense Trees over the past 5 years are as follows:

Calendar year	Number of cases	Number of persons arrested	Number of prosecutions	Maximum penalty (imprisonment)	Minimum penalty (imprisonment)	Estimated number of trees involved
2013	96	41	21	45 months	24 months	168
2014	134	65	26	55 months	3 months	240
2015	120	16	5	35 months	30 months	249
2016	54	22	8*	30 months	2 months	172
2017	53	9	1	30 months	-	102

\* The figure was revised according to information provided by the Hong Kong Police Force (the Police).

- (b) The Agriculture, Fisheries and Conservation Department (AFCD) has implemented a series of measures to protect Incense Trees against illegal felling. AFCD has established a special task force to step up patrols in the countryside against illegal felling of Incense Trees. An Inter-departmental Task Force on Wildlife Crime, comprising representatives of AFCD, the Environment Bureau, the Customs and Excise Department (C&ED) and the Police, has been established to develop strategies on intelligence exchange and co-ordinate joint enforcement operations to combat wildlife crime, including the illegal felling of Incense Trees. For example, joint operations by AFCD and the Police have been increased, and both parties have strengthened collaboration with the residents living in the vicinity of Incense Trees to enhance intelligence exchange and facilitate early detection of illegal activities. Metallic tree guards and mesh fences have been installed to provide a secured barrier against felling or vandalism of some selected large and mature specimens of Incense Tree. AFCD also performs wound-dressing for the damaged trees with anti-fungal paint to suppress the formation of agarwood in order to discourage illegal harvesting. In addition, AFCD has been conducting training sessions from time to time to help frontline staff of the Police and C&ED to identify Incense Tree/agarwood and detect illegal activities, and has launched a pilot scheme to deploy quarantine detector dogs to facilitate the detection of agarwood smuggling at boundary control points. AFCD is also conducting a pilot scheme using the Infrared Sensor Camera Trap to monitor Incense Trees at several strategic locations. Other protective measures include restocking of Incense Trees in the countryside, supporting relevant research studies that could enhance the conservation of Incense Trees, as well as promulgating tree protection through education and publicity programmes. Long-term monitoring of important populations of Incense Trees is in place to check on the effectiveness of the protection measures and conservation status of Incense Trees.
- (c) A provision of \$8.3 million has been earmarked for 2018-19 to implement the measures detailed in item (b) above.

- End -

**CONTROLLING OFFICER'S REPLY****ENB028****(Question Serial No. 3208)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

- (a) What were the expenditures and manpower involved in various marine parks and country parks over the past 5 years?
- (b) Would the Department consider establishing additional marine parks and country parks in the future? What are details of the plan and manpower involved?

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 60)Reply:

- (a) The manpower and expenditure of the Agriculture, Fisheries and Conservation Department (AFCD) involved in the planning, management and protection of country parks, special areas, marine parks and marine reserve, as well as organising the related education and publicity activities over the past 5 years are tabulated as follows:

<b>Financial year</b>	<b>Manpower (as at the end of the financial year)</b>	<b>Expenditure (\$ million)</b>
2013-14	897	316
2014-15	848	333
2015-16	809	337
2016-17	810	344
2017-18 (revised estimate)	769	362

- (b) To prepare for the designation of the Robin's Nest as a country park, AFCD has commissioned an 18-month consultancy study in 2017 to formulate a detailed management plan for the proposed country park. Upon completion of the study, AFCD will seek the views of stakeholders including the local villagers, relevant Rural

Committees, District Council and other concerned groups on the designation proposal, and take forward the statutory procedures as stipulated under the Country Parks Ordinance (Cap. 208) with a view to completing the designation procedures by 2020.

Regarding marine parks, we have designated The Brothers Marine Park in December 2016. We are now going through the statutory procedures with an aim to designating the proposed Southwest Lantau Marine Park (SWLMP) by the end of 2018. In addition, we plan to combine the proposed Soko Islands Marine Park and the proposed marine park for the Integrated Waste Management Facilities Phase 1 project into one single marine park to enhance the effectiveness of conservation, management and enforcement of the marine park. AFCD and the Environmental Protection Department are working on the preparation work, with an aim to designating the proposed marine park by 2019. Another proposed marine park in the pipeline, planned to be designated by 2024, is the mitigation measure for the Expansion of Hong Kong International Airport into a Three-Runway System project.

AFCD will redeploy existing staff for the management and operation of SWLMP. The manpower required for the other proposed country park and marine parks mentioned above will be reviewed at a later stage.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB029**

**(Question Serial No. 1963)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the conservation of biodiversity and promotion of compatible use of country and marine parks, what is the expenditure involved in 2018-19? What are the specific measures?

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 1)

Reply:

Country and marine parks are designated and managed for the purposes of nature conservation, recreation and education. Biodiversity conservation measures implemented by the Agriculture, Fisheries and Conservation Department (AFCD) in country and marine parks include vegetation and habitat management, hill fire prevention and fighting, development control, patrolling and law enforcement, and biodiversity and water quality monitoring. AFCD also provides and maintains various facilities to facilitate and promote compatible uses of country and marine parks, including hiking, camping, mountain biking, photo taking, barbecuing, boating, swimming, snorkeling, scuba diving, canoeing and dolphin watching. Relevant education and publicity programmes are conducted for students and the general public. These include school visits, eco-tours, guided tours at visitor or education centres, hiking and tree planting, family days, exhibitions, educational and public engagement workshops and volunteer schemes. To publicise these programmes and promote nature appreciation, AFCD disseminates the information through leaflets, posters, thematic websites, mobile applications and social media.

In 2018-19, the estimated expenditure of AFCD on biodiversity conservation in country and marine parks and promotion of the compatible use of country and marine parks is \$53.7 million.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB030**

**(Question Serial No. 1964)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

What specific measures will the Government take to carry out licensing control of international trade in endangered species (especially ivory) and to curb illegal trade in endangered species in Hong Kong in 2018-19? What are the manpower and expenditure involved?

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 2)

Reply:

The Government is committed to protect endangered species and strictly regulates the trade in endangered species through enforcing the Protection of Endangered Species of Animals and Plants Ordinance (the Ordinance) which gives effect to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in Hong Kong. The legal trade in endangered species in Hong Kong is authorised and closely monitored through a permit/certificate system in accordance with the provisions of CITES. The Agriculture, Fisheries and Conservation Department (AFCD) conducts inspections of consignments, registered stock and retail outlets to ensure relevant requirements are complied with. On combating illegal import and re-export of endangered species, AFCD has been working closely with the Customs and Excise Department (C&ED) at import and export control points. An Inter-departmental Task Force on Wildlife Crime, comprising representatives of AFCD, the Environment Bureau, C&ED and the Hong Kong Police Force, has also been established to develop strategies on intelligence exchange and co-ordinate joint enforcement operations. AFCD and C&ED also cooperate with overseas law enforcement agencies through international joint operations and intelligence exchange to combat endangered species smuggling. Joint and targeted operations, both local and international, would be undertaken to strengthen the frontline enforcement against endangered species smuggling.

In addition, the Legislative Council enacted the Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 (the Amendment Ordinance) on 31 January this year in order to phase out the local trade in ivory in 3 phases by 31 December

2021, and also to increase the penalties related to the smuggling and illegal trade of endangered species, i.e. the maximum penalty for offences convicted on indictment is a fine of \$10 million and imprisonment for 10 years. The Amendment Ordinance will take effect on 1 May 2018. After the Amendment Ordinance has taken effect for 3 months (i.e. starting from 1 August 2018), all import and export of ivory (save for antique ivory) for commercial purposes will be banned. C&ED and AFCD will strengthen enforcement at import and export control points, and combat the smuggling of endangered species (including ivory). Possession of pre-Convention (i.e. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)) ivory for commercial purposes is currently exempted from licensing requirement provided that the ivory can be proved pre-Convention. Nevertheless, starting from 1 August 2018, such ivory will be subject to the licensing requirement. Current holders of pre-Convention ivory will be required to apply to AFCD for a license to possess the ivory concerned for commercial purposes. When processing the applications, AFCD staff will inspect the pre-Convention ivory concerned (including measuring weight, taking photos and sticking tamper-proof holograms for the ivory). Regarding the new measures, AFCD has compiled guidelines for the staff members concerned, and also regularly assesses the measures to ensure that the enhanced control of ivory can be effectively implemented. Apart from licensing and enforcement, AFCD will continue its publicity and education efforts to promote public awareness of the relevant control under the Ordinance and the need to protect endangered species.

The estimated expenditure and manpower involved in the protection of endangered species in 2018-19 are \$43.3 million and 55 staff respectively, of which \$31.6 million and 39 staff are for enforcing the Ordinance. There is no breakdown on the manpower and expenditure involved in ivory control.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB031**

**(Question Serial No. 3157)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the issues concerning marine parks and marine reserves under this Programme, please inform this Committee of the following:

- (a) The work progress of and expected time required for setting up the proposed Southwest Lantau Marine Park and Soko Islands Marine Park.
- (b) The numbers, sizes and locations of sites resumed under Section 17 of the Marine Parks Ordinance (Cap. 476 of the Laws of Hong Kong) over the past 5 years.
- (c) The numbers of fishing permits issued to various types of fishing vessels in each marine park and marine reserve over the past 3 years.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 56)

Reply:

- (a) Regarding the proposed Southwest Lantau Marine Park (SWLMP), the Government has prepared the draft map and published the required notice in the gazette on 23 June 2017 for public inspection, with an aim of designating SWLMP by the end of 2018. In addition, the Government plans to combine the proposed Soko Islands Marine Park and the proposed marine park for the Integrated Waste Management Facilities Phase 1 into one single marine park of approximately 2 000 hectares. This approach will facilitate the effective management and operation of the marine park in the future. We aim to designate the said proposed marine park in 2019.
- (b) Over the past 5 years, no land was resumed by the Government under Section 17 of the Marine Parks Ordinance (Cap. 476).

- (c) The numbers of fishing permits issued by the Agriculture, Fisheries and Conservation Department (AFCD) to various types of fishing vessels in each marine park over the past 3 years (2015-16 to 2017-18) are tabulated below. No fishing permits have been issued for fishing in the Cape D'Aguilar Marine Reserve.

Name of marine park	Number of permits issued for fishing in the respective marine parks		
	2015-16	2016-17	2017-18
Hoi Ha Wan (HHW) and Yan Chau Tong (YCT) <sup>1</sup>	256 (73)	251 (68)	243 (66)
Sha Chau and Lung Kwu Chau	80	80	81
Tung Ping Chau (TPC) <sup>2</sup>	202	202	197
The Brothers	-	-	472
<b>Total</b> <sup>3</sup>	<b>355</b>	<b>350</b>	<b>737</b>

Remarks:

1. Some of the fishing permits issued by AFCD in the past cover TPC, YCT and/or HHW (see Note 2 below). The figures in brackets show the numbers of fishing permits issued solely for HHW/YCT.
2. Some fishing permits issued for TPC also cover YCT/HHW.
3. The row "Total" gives the total number of permits for fishing in marine parks in a particular year. As some permits issued cover more than 1 marine park, the figure shown in the row "Total" for a particular year does not equal to the sum of the respective numbers of fishing permits issued for each marine park in that particular year.

- End -

**CONTROLLING OFFICER'S REPLY****ENB032****(Question Serial No. 3206)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding actions against illegal fishing activities in marine parks and marine reserve, please advise this Committee on the following:

- (a) What were the numbers involved in and the effectiveness of the enforcement against illegal fishing activities in marine parks over the past 3 years? What were the penalties and fines imposed?
- (b) What were the expenditures and manpower deployed by the Government to combat illegal fishing activities in marine parks over the past 3 years?
- (c) What were the number of patrol vessels deployed by the Government to combat illegal fishing activities in marine parks, the area(s) patrolled, and the number of patrols conducted over the past 3 years?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 58)Reply:

- (a) The number of prosecutions targeted at illegal fishing activities in marine parks over the past 3 years (2015-16 to 2017-18) and the penalties and fines imposed are tabulated as follows:

Financial year	Number of cases	Total fine (\$)
2015-16	18	22,800
2016-17	5	9,500
2017-18 (up to February)	8 (5 cases are still in progress of prosecution)	3,800

- (b) The expenditure and manpower involved in the management of marine parks and marine reserve, including enforcement against illegal fishing, by the Agriculture, Fisheries and Conservation Department (AFCD) over the past 3 years (2015-16 to 2017-18) are tabulated as follows:

<b>Financial year</b>	<b>Expenditure (\$ million)</b>	<b>Manpower (Number of staff)</b>
2015-16	16.8	37
2016-17	21.3	39
2017-18 (revised estimate)	23.8	44

- (c) Over the past 3 years, 11 patrol vessels were deployed by AFCD to conduct patrols in the marine parks and marine reserve and surrounding waters to combat illegal fishing activities. Marine Police and their patrol vessels also rendered assistance in law enforcement within marine parks and marine reserve upon our request.

The areas patrolled included Hoi Ha Wan, Yan Chau Tong, Tung Ping Chau, Sha Chau and Lung Kwu Chau and The Brothers Marine Parks, Cape D'Aguilar Marine Reserve and the proposed Southwest Lantau and South Lantau Marine Parks. The numbers of patrols conducted over the past 3 years (2015-16 to 2017-18) are tabulated as follows:

<b>Financial year</b>	<b>Number of patrols</b>
2015-16	3 200
2016-17	3 204
2017-18 (up to February)	3 742

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB033**

**(Question Serial No. 3246)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding matters on country park enclaves (enclaves), please inform this Committee of the following:

- (a) In determining whether enclaves are regulated by means of statutory plans or inclusion into country parks, has the Country and Marine Parks Authority consulted the Country and Marine Parks Board for each enclave? Please provide the details of all the enclaves involved and of the meetings concerned since 2014 up to now.
- (b) What were the respective manpower and expenditures involved in processing, assessing and implementing the incorporation of enclaves into country parks in each of the past 3 years?
- (c) Please provide the information on the enclaves which are not covered by statutory plans or incorporated into country parks, but will be sorted out in 2018-19, including the locations, areas, and respective country parks involved, etc.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 61)

Reply:

- (a) The Country and Marine Parks Authority (the Authority) (i.e. the Director of Agriculture, Fisheries and Conservation) assesses whether an enclave is suitable for incorporation into a country park based on a set of established principles and criteria agreed by the Country and Marine Parks Board (CMPB) for designating new country parks or extending existing country parks, which include conservation value, landscape and aesthetic value, recreation potential, size, proximity to existing country parks, land status and land use compatibility of the area, as well as other relevant considerations. Whenever suitable enclaves are identified, the Agriculture, Fisheries and Conservation Department (AFCD) will consult CMPB and the relevant



stakeholders on the incorporation proposals as appropriate, and then invoke the relevant statutory procedures set out in the Country Parks Ordinance (Cap. 208) (the Ordinance) for the designation of country parks.

Since 2014, the Authority has consulted CMPB on 3 enclaves assessed to be suitable for incorporation into country parks, namely Fan Kei Tok, Sai Lau Kong, and the site near Nam Shan. Details of the relevant CMPB meetings are tabulated below:

<b>Dates of CMPB meetings</b>	<b>Purposes</b>
24 February 2014	To seek members' views on the proposals to incorporate Fan Kei Tok, Sai Lau Kong and the site near Nam Shan into the respective country parks.
13 June 2014 and 9 October 2014	To report the progress on the proposals to incorporate Fan Kei Tok, Sai Lau Kong and the site near Nam Shan into the respective country parks.
2 June 2015	To update the findings of the ecological survey on the proposals to incorporate Fan Kei Tok, Sai Lau Kong and the site near Nam Shan into the respective country parks.
30 October 2015	To update the progress of the statutory procedures on the proposals to incorporate Fan Kei Tok, Sai Lau Kong and the site near Nam Shan into the respective country parks.
22 March 2016	To seek members' views on the draft maps and the respective explanatory statements of the Plover Cove Country Park and Lantau South Country Park.
26 August 2016 and 6 December 2016	To update the progress of the statutory procedures on the proposals to incorporate Fan Kei Tok, Sai Lau Kong and the site near Nam Shan into the respective country parks.
13 February 2017	To hear an objection to the draft map of the Plover Cove Country Park.
11 April 2017, 15 August 2017 and 24 November 2017	To update the progress of the statutory procedures on the proposals to incorporate Fan Kei Tok, Sai Lau Kong and the site near Nam Shan into the respective country parks.

- (b) The assessment on the suitability of enclaves for incorporation into country parks and the designation form part of the regular country park work of AFCD. There is no separate breakdown on the manpower and expenditure involved.

- (c) Currently, there are still 19 enclaves that have not been incorporated into country parks or got their proper uses determined through statutory planning. AFCD is conducting assessments on the suitability of these enclaves for incorporation into country parks. As mentioned in part (a) above, when suitable enclaves have been identified, AFCD will consult CMPB and the relevant stakeholders on the incorporation proposals in accordance with established procedures as appropriate.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB034**

**(Question Serial No. 3247)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the enforcement of the Country Parks Ordinance (Cap. 208) and the Marine Parks Ordinance (Cap. 476), please inform this Committee of the following:

- (a) What were the numbers of prosecutions and convictions initiated, and the maximum penalties imposed upon conviction under the said Ordinances over the past 3 years?
- (b) Will the Department conduct any review in 2018-19 to see if the penalties of the said Ordinances have sufficient deterrent effect for the purposes of nature conservation, recreation, nature based tourism and education?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 63)

Reply:

- (a) The number of prosecutions and convicted cases under the Country Parks and Special Areas Regulations (Cap. 208A) and the Marine Parks and Marine Reserves Regulation (Cap. 476A) over the past 3 years is tabulated below:

Calendar year	Cap. 208A		Cap. 476A	
	Number of prosecutions	Number of convicted cases	Number of prosecutions	Number of convicted cases
2015	800	790	21	20
2016	757	601	27	20
2017	757	882 <sup>*</sup>	8	5

<sup>\*</sup> The number of convicted cases is higher than the number of prosecutions in 2017 because some prosecutions made in 2016 were convicted in 2017.

Over the past 3 years, the maximum penalties imposed under Cap. 208A and Cap. 476A were a fine of \$3,500 and \$8,000 respectively.

- (b) The maximum penalty upon conviction under Cap. 208A is a fine of \$5,000 and imprisonment for 1 year while that under Cap. 476A is a fine of \$25,000 and imprisonment for 1 year. We consider that the level of penalty of the 2 regulations provides sufficient deterrent effect for protecting the country and marine parks for the purposes of nature conservation, recreation and education. The actual sentence of each convicted case is determined by the court having regard to the nature and severity of individual cases.

- End -

**CONTROLLING OFFICER'S REPLY****ENB035****(Question Serial No. 3248)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the enforcement of the Country Parks Ordinance (Cap. 208) and the Marine Parks Ordinance (Cap. 476) as well as the management of country parks, marine marks and marine reserve, please advise this Committee on the following:

- (a) What were the number of complaints received in relation to unlawful occupation of land within country parks, marine parks and marine reserve, as well as the locations and sizes involved in each case and the Government's follow-up actions (including but not limited to prosecutions and requirement for reinstatement) over the past 2 years?
- (b) Please set out in the following table the details of the cases involving occupation of government land within country parks, marine parks and marine reserve for over 6 months, the reason for such cases yet to be handled by the Government as well as the follow-up actions:

Period of land occupation	Country park, marine park or marine reserve involved	Size of land involved	Reason(s) for the case yet to be handled	Follow-up action(s)

- (c) Section 16 of the Country Parks Ordinance provides that, in any case where the Authority is of the opinion that any use or proposed use of leased land within a country park substantially reduces the enjoyment and amenities of the country park as such, he may request the Land Authority to, by notice in writing, require discontinuance/modification of or prohibit the use. How many notices were issued in accordance with the Section, and what was the compliance information, over the past 3 years?

Reply:

- (a) Over the past 2 years, the Agriculture, Fisheries and Conservation Department (AFCD) has received 7 complaints related to the unlawful occupation of government land within country parks. 5 country parks were involved, including the Sai Kung East, Sai Kung West, Ma On Shan, Pat Sin Leng and Lion Rock Country Parks. In general, upon receipt of such complaints, AFCD will conduct follow-up investigations and initiate prosecutions under the legislation administered by it when there is sufficient evidence, and/or refer the cases to relevant departments for their actions. Depending on individual circumstances, AFCD may also erect warning notices, remove unauthorised items and reinstate the site as appropriate. AFCD does not have information on the size of the affected areas in these complaints.

There was no such complaint concerning marine parks and marine reserve over the past 2 years.

- (b) 2 of the above cases involved occupation of government land for more than 6 months. Details of these cases are tabulated as follows:

<b>Time of complaint received</b>	<b>Country park involved</b>	<b>Occupation of government land in country park</b>	<b>Follow-up action(s)</b>
January 2016	Sai Kung West	Erection of metal hoarding	The complaint was also lodged to the Lands Department (LandsD) for follow-up actions. In October 2016, the metal hoarding was found to have been partly removed. AFCD will continue to monitor the situation and follow up with LandsD for removal of the remaining metal hoarding.
June 2017	Pat Sin Leng	Development of an orchard on private land affecting the adjacent Government land in country park	The case was referred to LandsD for follow-up actions. AFCD will continue to monitor the situation.

- (c) There has been no request made by the Country and Marine Parks Authority to the Lands Authority under Section 16 of the Country Parks Ordinance (Cap. 208) over the past 3 years.

- End -

**CONTROLLING OFFICER'S REPLY****ENB036****(Question Serial No. 3249)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

With regard to illegal structures and graves in country parks and marine parks, please inform this Committee of the following:

- (a) What were the number of reports received on, and the numbers and distributions of illegal structures and graves found in country parks, marine parks and marine reserve respectively in each of the past 3 years?
- (b) What were the details of the enforcement actions taken by the Department against illegal structures and graves found over the past 3 years?
- (c) Is the problem of illegal structures and graves in country parks, marine parks and marine reserve showing any signs of deterioration? What measures will be taken by the Department in the coming 12 months to deal with illegal structures and graves? What are the manpower and expenditure involved?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 66)Reply:

- (a) Over the past 3 years, the number of cases of suspected illegal structures and graves in country parks reported to or detected by the Agriculture, Fisheries and Conservation Department (AFCD) is tabulated as follows:

Calendar year	Number of cases of suspected illegal structures and graves	Country park involved
2015	9	Lantau, Ma On Shan, Plover Cove, Tai Lam, Tai Tam and Sai Kung West



<b>Calendar year</b>	<b>Number of cases of suspected illegal structures and graves</b>	<b>Country park involved</b>
2016	10	Kam Shan, Lantau, Ma On Shan, Pat Sin Leng, Tai Mo Shan, Sai Kung West and Shek O
2017	10	Tai Lam, Sai Kung West, Sai Kung East, Pat Sin Leng, Lantau North (Extension), Lantau South, Ma On Shan and Lion Rock

Over the past 3 years, AFCD did not detect or receive any report of such case in the marine parks and marine reserve.

- (b) Upon receipt of reports or detection of suspected cases of irregularities, AFCD will conduct follow-up investigations and initiate prosecutions under the legislation administered by it if there is sufficient evidence, and/or refer the cases to the relevant departments for their actions. Depending on individual circumstances, AFCD may also erect warning notices, remove the unauthorised items and reinstate the sites as appropriate.

Over the past 3 years, the number of prosecutions related to illegal structures and graves in country parks is tabulated as follows:

<b>Calendar year</b>	<b>Number of prosecutions*</b>
2015	4
2016	17
2017	1

\* The number of prosecutions in each calendar year does not correspond with the number of cases given in part (a) as (i) some cases did not result in prosecutions due to insufficient evidence; (ii) there was a time lag between the detection of a case and the prosecution made; and (iii) there may be more than 1 offender in a case.

- (c) The number of cases of illegal structures and graves detected in country parks over the past 3 years remained at a similar level. AFCD conducts regular patrols in country parks to deter irregularities including the construction of illegal structures and graves. In 2018-19, we will continue our enforcement efforts and work closely with the relevant departments including the Lands Department, the Home Affairs Department and the Food and Environmental Hygiene Department in tackling cases of illegal structures and graves in country parks. As patrols and our actions against illegal structures and graves in country parks are part of AFCD's law enforcement duties, information on the resources specifically deployed for this area of work is not available. In 2018-19, the overall provision earmarked for AFCD to carry out law enforcement duties in country parks is \$52.5 million, involving 133 staff.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB037**

**(Question Serial No. 3535)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the protection of and enforcement in country parks and enclaves, please advise this Committee on the following:

- (a) What were the numbers of cases involving excavation, felling of trees and landfill in enclaves which degraded the local natural landscape over each of the past 3 years? What were the locations, sizes involved and the follow-up actions taken by the Government in each case?
- (b) Currently, the details of various pieces of private land (including the lot numbers, locations and sizes) within country parks are kept in the database of the Cartographic Unit under the Agriculture, Fisheries and Conservation Department (AFCD). When did AFCD last update the database? What arrangement will be made for updating in the future?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 68)

Reply:

- (a) The Agriculture, Fisheries and Conservation Department (AFCD) conducts regular patrols in country parks including country park enclaves. Over the past 3 years, AFCD has not received or detected any unauthorised excavation, felling of trees or landfilling in the enclaves that have been incorporated into country parks.

For other enclaves that have not been incorporated into country parks, AFCD will take enforcement action under the Forests and Countryside Ordinance (Cap. 96) if there is unauthorised felling of trees on government land, and/or refer the cases to the relevant government departments for follow-up action under their respective ambit. Over the past 3 years, there were 12 cases of unauthorised felling of trees on government land in these enclaves. The details are tabulated below:

Name of enclave	Location (District)	Area or number of trees affected	Follow-up action
<b>2015</b>			
Tai Tan, Uk Tau, Ko Tong, Ko Tong Ha Yeung	Uk Tau (Tai Po)	About 40 stems of bamboos	Offender prosecuted and fined \$10,000.
Chau Mei, Tai Tong, Chau Tau and Sha Tau	Tai Tong (Tai Po)	14 trees	No enforcement action could be taken as the responsible party could not be identified.
Kuk Po San Uk Ha, Kuk Po Lo Wai, Yi To, Sam To, Sze To and Ng To	Kuk Po (North)	76 trees	No enforcement action could be taken as the responsible party could not be identified.
<b>2016</b>			
Ngong Ping	Ngong Ping (Islands)	2 trees	No enforcement action could be taken as the responsible party could not be identified.
Wong Keng Tei and Tsam Chuk Wan	Tsam Chuk Wan (Sai Kung)	About 50 stems of bamboos	Offender prosecuted and fined \$2 000.
Sha Lo Tung	Lo Wai (Tai Po)	0.26 hectares	No enforcement action could be taken as the responsible party could not be identified.
Chau Mei, Tai Tong, Chau Tau and Sha Tau	Chau Mei (Tai Po)	23 trees	No enforcement action could be taken as the responsible party could not be identified.
Sha Lo Tung	Lei Uk (Tai Po)	10 trees	No enforcement action could be taken as the responsible party could not be identified.
Kuk Po San Uk Ha, Kuk Po Lo Wai, Yi To, Sam To, Sze To and Ng To	Kuk Po (North)	24 trees	No enforcement action could be considered as the responsible party could not be identified.
Fung Hang	Fung Hang (North)	446 trees	No enforcement action could be taken as the responsible party could not be identified.
<b>2017</b>			
To Kwa Ping	To Kwa Ping (Tai Po)	1 tree	No enforcement action could be taken as the responsible party could not be identified.
Kuk Po San Uk Ha, Kuk Po Lo Wai, Yi To, Sam To, Sze To and Ng To	Kuk Po (North)	1 tree	No enforcement action could be taken as the responsible party could not be identified.

Over the past 3 years, the number of cases with warning letters and statutory notices issued by the Planning Department, and prosecutions and convictions in respect of unauthorised land filling / excavation in enclaves covered by Development Permission Area plans is as follows:

<b>Year Enclaves involved</b>	<b>Number of cases with warning letters issued</b>	<b>Number of cases with statutory notices issued</b>	<b>Number of prosecutions</b>	<b>Number of convictions</b>
2015 - Sha Lo Tung - Ho Pui, Tin Sam, Sam Ka Tsuen, San Uk Tsuen, San Uk Ha, Lo Wai, Leng Pui and Kau Tam Tso - Wong Chuk Yeung - Tai Tan, Uk Tau, Ko Tong and Ko Tong Ha Yeung	3	5	0	0
2016 - Tai Ho, Site near Wong Kung Tin - So Lo Pun - Sha Lo Tung - Tai Tan, Uk Tau, Ko Tong and Ko Tong Ha Yeung	3	10	2	1
2017 - Pak Lap	0	2	0	0

- (b) Information concerning the location, size and lot number of private land within country parks is compiled by the Lands Department (LandsD). The last update of AFCD's cartographic database with such information was conducted in early March 2018. We will continue to liaise with LandsD to update the information in the database from time to time.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB038**

**(Question Serial No. 3536)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the management of country parks, special areas, marine parks and marine reserve mentioned in this Programme, would the Government advise this Committee on the following:

- (a) According to the departmental record, what was the number of hiking trails or country trails closed by private land owners due to disputes over the interface of various types of hiking trails or country trails with their private land in the past year? Please set out the trail sections and locations involved in such cases, as well as the suggested alternative routes for hikers.
- (b) Has any request been made to the land owners concerned for the reopening of the said sections? If yes, what are the details of the reopening? If not, what are the reasons?
- (c) Has assistance been sought from other government departments, e.g. the Lands Department, the Department of Justice, etc. to see if the land owners' practice is legal or an encroachment on government land? If yes, what are the details? If not, what are the reasons? Has the Lands Department carried out any investigations into encroachments on government land?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 70)

Reply:

- (a) In 2017, there were a total of 2 cases of blockage of footpath on private land within or adjacent to country parks resulting in temporary closure of hiking trails. The affected footpaths included Lantau Trail Section 7 near Yi O Village and the Ping Chau Country Trail on Tung Ping Chau.

- (b) The Agriculture, Fisheries and Conservation Department (AFCD) has liaised with the land owners with a view to resolving the blockage of footpaths. In the aforementioned 2 cases, alternative footpaths bypassing the affected sections have been provided for country park visitors. Relevant information on alternative routes has been posted on-site as well as on AFCD's website ([www.hiking.gov.hk/pathinfo/announcement\\_eng.php](http://www.hiking.gov.hk/pathinfo/announcement_eng.php)).
- (c) We will maintain communication with relevant government departments and stakeholders having regard to the specific circumstances of each case in a bid to provide clarification and settle disputes as soon as practicable.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB039**

**(Question Serial No. 0860)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

In view of numerous cases of cruel killing of wild animals which occurred one after another in Hong Kong in recent years,

- (a) how much manpower has the Department deployed to carry out the work on protecting wild animals in 2017-18? What were the specific projects involved, the expenditure and effectiveness of each project respectively?
- (b) what measures will the Department implement to enhance the protection of wild animals and natural ecology in 2018-19? What are the specific details and objectives of various measures, the manpower and estimated expenditure involved, and the implementation timetable respectively?
- (c) has the Department studied and made reference to the experience in protecting wild animals from the Mainland and overseas countries, including through the utilisation of innovative technology to enhance the protection of local wild animals? If yes, what are the results and any plan to introduce the new measures in the future? If the Department has not studied the overseas experience, will it do so in the future?

Asked by: Hon YUNG Hoi-yan (Member Question No. (LegCo use): 32)

Reply:

- (a) & (b) The Wild Animals Protection Ordinance (Cap. 170) stipulates that without permission, no person shall have in his possession of hunting appliance, or hunt any wild animals by means of hunting appliance. Upon conviction, the maximum penalty is a fine of \$50,000. If any person hunts or has in his possession of any "protected wild animals" scheduled under Cap. 170, the maximum penalty upon conviction is a fine of \$100,000 and an imprisonment for one year. In addition, the Prevention of Cruelty to Animals (Cap. 169)

stipulates that any person who cruelly treats any animal or causes any unnecessary suffering to any animal is liable, upon conviction, to a fine of \$200,000 and 3 years imprisonment.

The Agriculture, Fisheries and Conservation Department (AFCD) spares no effort in combating illegal hunting of wild animals, and patrols the countryside regularly. AFCD will remove any traps found immediately, and will display notices to remind the public that using hunting appliance is unlawful. If there is sufficient evidence, AFCD will prosecute the offenders. AFCD will also arrange joint operations with the Hong Kong Police Force (the Police) and the Society for the Prevention of Cruelty to Animals (SPCA) to step up patrols at sites where animal traps are regularly discovered, and to dispatch education leaflets to the nearby public.

Besides, an inter-departmental task force on wildlife crime has been established to further strengthen collaboration and intelligence exchange. Regular meetings between the enforcement agencies, including the Police and the Customs and Excise Department, and green groups have been held.

The number of patrols conducted by AFCD, the number of animal traps seized, the number of prosecuted cases and the penalty imposed in 2017-18 are tabulated below. As these activities form part of the nature conservation work of AFCD, there is no separate breakdown on the expenditure involved.

	<b>2017-18 (up to January 2018)</b>
Patrols arranged	1 590 times
Animal traps seized	137 units
Prosecuted case	1 case
Fine imposed	\$800

In 2018-19, AFCD will continue to maintain vigilance against illegal hunting activities, and to raise public awareness towards better protection of wild animals in Hong Kong.

- (c) AFCD has been keeping in view experience of other places and innovative technology emerging in the market, with a view to devising more effective strategies to protect wild animals in Hong Kong. AFCD will also conduct trials on the use of new technology, e.g. unmanned aerial vehicles, camera traps and microchips, for search, surveillance and enforcement purposes.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB040**

**(Question Serial No. 2768)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding numerous nuisance cases caused by wild monkeys affecting residents of Shatin and they even broke into residential premises to cause disturbances in recent years, please advise on the following:

- (a) What were the total numbers of complaints or help-seeking cases received by the Agriculture, Fisheries and Conservation Department (the Department) in relation to nuisance caused by wild monkeys affecting residents in 2017-18?
- (b) What is the current manpower dedicated by the Department to address the issue mentioned in item (a)? Is the relevant manpower expected to increase in 2018-19? What is the expenditure involved?
- (c) Would the Department allocate resources and manpower in 2018-19 to implement targeted measures, including the introduction of innovative technology to prevent recurrence of similar incidents and to strengthen the protection for residents' lives and properties? If yes, what are the details of the respective measures as well as the manpower and expenditures involved? If resources and manpower will not be allocated or that targeted measures will not be implemented, how would the Department strengthen the protection for residents?

Asked by: Hon YUNG Hoi-yan (Member Question No. (LegCo use): 65)

Reply:

The Agriculture, Fisheries and Conservation Department (AFCD) is highly concerned about the nuisance caused by monkeys in residential areas. Upon receiving relevant reports, AFCD will deploy staff to the scene as soon as possible to chase away or capture the monkeys, and offer advice and education leaflets to the concerned public or management offices after investigating the situation and causes of monkey occurrence. Moreover, AFCD will set up traps to capture the lingering monkeys in residential areas to address the

persistent nuisance caused by them. AFCD would also contact other government departments to follow up the problems arising from monkey nuisance, such as environmental hygiene problems. If necessary, AFCD would arrange talks for the concerned residents or management offices on the handling of monkey nuisance and the drawbacks of feeding monkeys and not handling refuse properly. Furthermore, AFCD has been carrying out contraceptive/neutering operations on monkeys in Kam Shan, Lion Rock and Shing Mun Country Parks since 2007. Regular surveys are conducted to monitor the changes in monkey populations.

In 2017-18 (up to January 2018), a total of 317 complaints or cases requesting assistance in relation to monkey nuisance have been received. In 2017-18, 12 AFCD officers were involved in handling the complaints and conducting neutering operations and public education with respect to monkey nuisance, incurring an expenditure of about \$4.8 million. In 2018-19, AFCD will continue to earmark 12 officers and allocate \$5 million to implement the aforementioned measures, review the work of handling monkey nuisance and consult wildlife conservation experts from various places with a view to developing a more comprehensive monkey management plan. AFCD will also commission a consultancy study to enhance the designs of refuse/recycling bins and refuse collection points to prevent wild animals, including monkeys, from getting food from refuse/recyclables, so as to discourage them from straying into residential areas in search of food.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB041**

**(Question Serial No. 2076)**

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): ( )

Programme: (7) Management of Construction and Demolition Materials

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for the Environment

Question:

Despite the increasing number of infrastructure works projects in recent years, the estimated amount of public fill to be received at public fill reception facilities is 13.7 million tonnes in 2018, representing a reduction from the actual amount of 15 million tonnes received in 2016. What is the estimated expenditure to be involved in public fill management in the coming year?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 46)

Reply:

The Civil Engineering and Development Department's estimated expenditure on public fill management for 2018-19 is \$1.37 billion.

– End –

**CONTROLLING OFFICER'S REPLY**

**ENB042**

**(Question Serial No. 1854)**

Head: (39) Drainage Services Department

Subhead (No. & title): (603) Plant, vehicles and equipment

Programme: Not specified

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for the Environment

Question:

In the coming financial year, what are the estimated expenditure and works programme of the new item "Replacement of control system for main pumps at Tseung Kwan O Pumping Station"? Why is the funding sought in the context of the Appropriation Bill 2018, instead of independently from the Finance Committee of the Legislative Council?

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 1116)

Reply:

In 2018-19, the estimated expenditure for the new item "Replacement of control system for main pumps at Tseung Kwan O Pumping Station" is \$100,000 and the works are expected to be completed in three years. The existing control system has been operating for over 18 years, but the manufacturer no longer produces such model and related spare parts; therefore, continued repair and maintenance is not feasible and this would affect the overall performance of the pumping station. The item is for replacement of the high voltage variable frequency converters and relevant electronic control devices of the three main pumps in the pumping station, which falls within the ambit of Subhead 603 "Plant, vehicles and equipment". It is not a new arrangement for expenditure funding proposals, including proposals for creating and increasing the expenditure ceiling for commitment items, under the General Revenue Account to be included in the draft Estimates for approval by the Legislative Council in the context of the Appropriation Bill. The Government explained the relevant arrangements to the Finance Committee in early 2015. The Drainage Services Department has also specified the necessary provision for the proposal under the relevant head and subhead of expenditure for members' consideration.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB043**

**(Question Serial No. 0104)**

Head: (39) Drainage Services Department

Subhead (No. & title): Not specified

Programme: (2) Sewage Services

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for the Environment

Question:

How many appeal cases of sewage charge and trade effluent surcharge were there in 2015-16, 2016-17 and 2017-18? Of these, how many were from the restaurant trade? How many appeal cases were approved? Of these, how many were from the restaurant trade? What is the average time needed to complete the processing of an appeal case?

Asked by: Hon CHEUNG Yu-yan, Tommy (Member Question No. (LegCo use): 36)

Reply:

The number of applications and approved cases for reassessment of (i) trade effluent surcharge (TES) rate and (ii) discharge factor (DF) for sewage charge and TES in 2015-16, 2016-17 and 2017-18 are as follows:

		2015-16	2016-17	2017-18 (for the first 11 months only)
Reassessment of TES rate	Number of applications received			
	<i>All trades</i>	167	159	194
	<i>Restaurant trade</i>	155	147	131
	Number of applications approved <sup>Note</sup>			
	<i>All trades</i>	143	116	82
	<i>Restaurant trade</i>	93	107	74
Reassessment of DF	Number of applications received			
	<i>All trades</i>	24	23	26
	<i>Restaurant trade</i>	0	2	0
	Number of applications approved <sup>Note</sup>			
	<i>All trades</i>	22	15	17
	<i>Restaurant trade</i>	0	0	0

Note: As there is a time lag for processing the applications, the number of applications approved does not correspond to the number of applications received within the same financial year.

It normally takes 3 to 4 months to process a case.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB044**

**(Question Serial No. 1572)**

Head: (39) Drainage Services Department

Subhead (No. & title): Not specified

Programme: (2) Sewage Services

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for the Environment

Question:

The duties of the Drainage Services Department include checking of sewerage submissions and connections in Hong Kong. In the past few years, there were a number of cases in which the foul water pipes of some private buildings have been misconnected to the stormwater drainage system (foul water pipe misconnection) in Hong Kong. In this regard, please advise this Committee:

1. of the number of complaints regarding foul water pipe misconnection cases in the territory, including Hung Hom, over the past three years; of these, the number of resolved cases and unresolved cases;
2. of the Government's expenditure on the maintenance cases of ageing, blocked and damaged foul water pipes of buildings over the past three years;
3. how the Government ensures that the number of foul water pipe misconnection will be minimized;
4. of the number of unsewered areas and villages in Hong Kong at present; and the progress of provision of sewerage facilities or dry weather flow interceptors for the related areas.

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use): 41)

Reply:

1. Over the past three years, the Drainage Services Department (DSD) received a total of 32 complaints referred by the Environmental Protection Department (EPD) and Buildings Department (BD) concerning foul water pipe misconnection in which the foul water pipes of some private buildings have been misconnected to the stormwater drainage system. Of these, 16 cases have been resolved and DSD is following up on the remaining cases with related departments.
2. Maintenance works of foul water pipes within private buildings have to be arranged by building owners while rectification of the foul water pipe misconnection outside private buildings and rehabilitation of public sewers are undertaken by DSD. The expenditure in this area over the past three years was \$400 million.

3. Unauthorised alteration to the drainage systems within private buildings with foul water discharging into the buildings' stormwater pipes contravenes the Buildings Ordinance (Cap. 123) and may be subject to enforcement actions by BD including the issue of statutory removal orders under section 24 of the Ordinance. Rectification works within private buildings are to be carried out by the owners in question. Besides, if pollution problems, such as existing pipe misconnection, are found, EPD and BD will take measures jointly under the Water Pollution Control Ordinance and Buildings Ordinance to tackle the illegal connection and discharge cases as soon as possible.
4. The Government is implementing a village sewerage programme. As at December 2017, sewerage works at 221 villages were completed under this programme while those at about 315 villages are being implemented or have been included in the public works. Sewerage works at about 170 villages have not been included in this programme but are still under preliminary planning while works at about 335 villages have not been planned. Besides, the Government has installed 84 dry weather flow interceptors in each district in the New Territories.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB045**

**(Question Serial No. 1975)**

Head: (39) Drainage Services Department

Subhead (No. & title): Not specified

Programme: (2) Sewage Services

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for the Environment

Question:

It is stated under Matters Requiring Special Attention in 2018-19 that the Drainage Services Department will commence construction works for rehabilitation of trunk sewers in Sha Tin and Sai Kung. What are the details of the anticipated projects and works programme? Besides, what is the expenditure involved?

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 13)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill. Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.

The rehabilitation of trunk sewers in Sha Tin and Sai Kung is part of 393DS of public works, which was commenced in January 2018 and is anticipated to be completed in the first quarter of 2022. The estimated expenditure is \$678.5 million while that for 2018-19 is \$34 million.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB046**

**(Question Serial No. 2111)**

Head: (39) Drainage Services Department

Subhead (No. & title): Not specified

Programme: (2) Sewage Services

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for the Environment

Question:

Apart from the joint regulation of the Shenzhen River by Shenzhen and Hong Kong, what other works of the Drainage Services Department require cross-boundary infrastructure cooperation? Is there any specific guidance or cooperation memorandum on those works for mutual understanding on the costs of works shared by the Governments in two places? What are the specific details?

Asked by: Hon WONG Pik-wan, Helena (Member Question No. (LegCo use): 68)

Reply:

Other than the joint regulation of the Shenzhen River by Shenzhen and Hong Kong (including the completed Stages I, II and III, as well as Stage IV whose main works have been substantially completed), the Drainage Services Department and the Shenzhen Municipal Government do not have any other cross-boundary drainage infrastructure cooperation project. In September 1992, the Hong Kong Special Administrative Region Government and the Shenzhen Municipal Government established a joint working group to oversee matters relating to the implementation of the Shenzhen River Regulation Project. In January 2011, the joint working group reached an agreement whereby the Governments of the two places shall equally share the costs of works of the Project in line with the arrangement for Stages I, II and III of the Project. Such an equal cost-sharing arrangement is also adopted for Stage IV of the Project. Besides, the Governments of the two places signed the agreement on the river training works, specifying the equal cost-sharing arrangement.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB047**

**(Question Serial No. 3174)**

Head: (39) Drainage Services Department

Subhead (No. & title): Not specified

Programme: (2) Sewage Services

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for the Environment

Question:

In 2018-19, the Drainage Services Department will commence construction works for rehabilitation of trunk sewers in Kowloon, Sha Tin, Sai Kung and Tuen Mun. In this connection, please advise:

1. regarding the works to be conducted in the above four areas for the rehabilitation of trunk sewers, the respective key locations and road sections, length of sewers, numbers of nearby housing estates and residents that may be affected, expected commencement and completion dates as well as cost of the works;
2. the measures to be taken by the Department to reduce the potential impacts on the nearby residents caused by the works, as well as the details and cost of each measure.

Asked by: Hon YUNG Hoi-yan (Member Question No. (LegCo use): 69)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill. Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.

The information sought is provided as follows:

1. In 2018-19, the Drainage Services Department (DSD) will commence construction works for rehabilitation of trunk sewers in Kowloon, Sha Tin, Sai Kung and Tuen Mun, the details of which are as follows:

Works projects	Rehabilitation of trunk sewers in Kowloon, Sha Tin and Sai Kung				Rehabilitation of trunk sewers in Tuen Mun
Locations involved	Ngau Chi Wan	To Kwa Wan	Sha Tin	Sai Kung	Tuen Mun
Road sections involved	Lung Cheung Road	Kwei Chow Street, Yuk Yat Street, Sung On Street, Bailey Street and Sung Ping Street	Yuen Wo Road	Underwater outside Sai Kung Hoi Pong Street	Lung Mun Road, Tin Hau Road and underneath Tuen Mun River
Lengths of sewers	About 400 metres	About 1 kilometre	About 50 metres	About 200 metres	About 4.5 kilometres
Nearby housing estates	Choi Hung Estate and Ping Shek Estate, etc.	Wyer Gardens, Sunrise Villa and Bailey Garden, etc.	Wo Che Estate, etc.	Tui Min Hoi Chuen and Lakeside Garden, etc.	Lung Mun Oasis, Glorious Garden, Sun Tuen Mun Centre, Siu Shan Court, Butterfly Estate and Melody Garden, etc.
Commencement	January 2018				Fourth quarter of 2018
Expected completion dates	First quarter of 2022				First quarter of 2023
Costs of works	\$678.5 million				\$806.6 million

2. During the course of these works, the daily sewerage services will not be affected while trenchless techniques will be used in the rehabilitation works when appropriate to reduce the inconvenience caused to the public. Traffic mitigation measures (including temporary traffic management) and environmental mitigation measures (including the use of silenced construction equipment and temporary noise barriers to reduce noise impact as well as water-spraying on sites to minimise emission of fugitive dust, etc.) will also be implemented. These mitigation measures are construction requirements of the works contract, but not additional measures. Therefore, DSD is unable to provide a breakdown of the expenditure.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB048**

**(Question Serial No. 0160 )**

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (-) Not specified

Programme: (3) Energy Efficiency and Conservation, and Alternative Energy

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for the Environment

Question:

As stated in the Indicators of Programme (3), the Electrical and Mechanical Services Department completed 3 studies on the application of innovative energy efficiency technologies in 2017 and planned to carry out 3 studies in 2018. In this connection, would the Government advise:

1. What were/are the manpower and expenditure involved of the studies in 2017 and 2018 respectively; and
2. What were the specific contents of the 3 studies in 2017? Was there any collaboration with the universities and the trade on the development of application of the technologies? If yes, what were the details? If no, what were the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 5)

Reply:

The expenditure of the 3 applied researches completed in 2017-18 was about \$0.3 million and the estimated expenditure of the 3 applied researches to be conducted in 2018-19 is \$0.4 million. The workload will be absorbed by existing manpower.

The 3 studies in 2017-18 include (i) cogeneration and trigeneration; (ii) variable speed window-type room air conditioners; and (iii) passive drivers for light-emitting-diode (LED) lighting. During the study process of projects (i) and (ii), we consulted the trade on the application of the relevant energy efficiency technologies. The results of the researches show that both types of generation are suitable for applications with high demand for heating, cooling and electricity supply, while the variable speed window-type room air conditioners have demonstrated good energy saving performance and may be further promoted. As for project (iii), the installation of passive drivers for LED lighting in the trial site was completed and the three-year on-site tests on their energy saving performance and durability have commenced. The passive drivers for LED lighting is devised by a research of The University of Hong Kong. We have been carrying out tests on the drivers in collaboration with the innovative technology company concerned with a view to promoting the application of local innovative technologies.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB049**

**(Question Serial No. 3122)**

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (-) Not specified

Programme: (1) Energy Supply; Electrical, Gas and Nuclear Safety

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for the Environment

Question:

Regarding the part on the Programme “Energy Supply; Electrical; Gas and Nuclear Safety”, will the Government inform this Committee of the following:

- (a) What is the specific work of the Government in monitoring the power companies and ensuring electrical safety? What are the estimated provision and staffing arrangement of the associated work for this year?
- (b) Please list in table form the number of inspections of the electrical safety of old buildings, the number of cases requiring follow-up actions/investigation and the number of prosecution cases in the past 3 years, as well as the expenditure and manpower involved in such work; and
- (c) How many electrical incidents happened at their generation and electricity supply facilities were reported to the Electrical and Mechanical Services Department by the power companies last year? Did these incidents involve casualties and fatalities? If yes, what are the respective numbers of cases?

Asked by: Hon LUK Chung-hung (Member Question No. (LegCo use): 48)

Reply:

- (a) The Electrical and Mechanical Services Department (EMSD) is responsible for the administration and enforcement of the Electricity Ordinance (Cap. 406), including regulatory work on registration of electrical workers, electrical contractors, competent persons, recognised certification bodies and recognised manufacturers; inspection of electrical installations and products; monitoring of safety performance of the power companies, investigation of electrical incidents; initiating prosecution and taking disciplinary actions; and promotion of electrical safety, etc. Besides, the EMSD also provides technical support to the Environment Bureau on the Scheme of Control Agreements signed between the two power companies and the Government. The above-mentioned work is undertaken by around 87 EMSD staff including professional

engineers, inspectors, etc. The total estimated staff expenditure in terms of notional annual mid-point salary value is about \$61.5 million.

(b) The number of inspections relating to old buildings is not available because the inspection of fixed electrical installations (FEIs) in buildings or premises by the EMSD is not categorised under new or old buildings. Nevertheless, the EMSD has the overall numbers of inspections of FEIs in buildings or premises which are provided as follows for reference:

Year	Number of Inspections of FEIs in Buildings or Premises @	Number of Cases Requiring Follow-up Actions/ Investigation		Number of Cases with Prosecution Actions Completed #	
		Cases Involving Periodic Test Certificate	Cases Involving Reports, Incident Investigation and Others	Cases of Non-compliance with the Statutory Requirements on Submission of Periodic Test Certificate	Cases Involving Reports, Incident Investigation and Others
2017	8 325	1 961	763	756	91
2016	8 102	1 737	764	619	51
2015	8 487	2 115	673	587	70

@Note : The relatively greater numbers of inspections in 2015 and 2017 were mainly due to the increased special inspection operation for premises requiring special attention, e.g. sub-divided units, hawker stalls, squatter houses and mini-stores, etc.

#Note : The number of prosecution cases is based on the number of summonses issued by courts, therefore, a case requiring follow-up action/investigation may involve several summonses.

As the staff participating in such work were also handling other duties at the same time, we do not have a breakdown on the expenditure and manpower involved.

(c) The respective numbers of electrical incidents happened at their generation and electricity supply facilities and injured persons reported to the EMSD by the power companies last year are given below:

Year	Number of Electrical Incidents*	Number of Injured Persons
2017	15	2

\*Remark: The incidents were mainly related to power interruption/voltage dip or minor fire. Incidents of third-party damage to electricity supply lines of the power companies are not included in the figures above.

The above-mentioned incidents did not involve any fatal case.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB050**

**(Question Serial No. 0737)**

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (-) Not specified

Programme: (3) Energy Efficiency and Conservation, and Alternative Energy

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for the Environment

Question:

During 2018-19, the Electrical and Mechanical Services Department will continue to implement the voluntary Energy Efficiency Labelling Scheme, and conduct studies on the expansion of the scope to cover more appliances. Would the Government advise on the effectiveness of the scheme, the proposed expansion of the scope and the expenditure involved?

Asked by: Hon SHIU Ka-fai (Member Question No. (LegCo use): 12)

Reply:

To raise consumers' awareness of energy-efficient products, the Electrical and Mechanical Services Department (EMSD) has implemented the Voluntary Energy Efficiency Labelling Scheme (VEELS) since 1995. VEELS aims to promote energy saving by informing consumers of the energy efficiency performance of relevant products, and encourage suppliers to offer consumers more energy-efficient products. It currently has a broad coverage, including 22 types of commonly used household appliances, gas appliances and office equipment.

In 2018-19, we will continue to implement VEELS, explore how the scheme may be expanded, and review its coverage (e.g. considering inclusion of new technology products) taking into account such factors as overseas practices, latest test standards, testing laboratories and energy consumption of products. We aim to attract more suppliers to participate in the scheme and include more energy-efficient products. In addition, the implementation of VEELS can help us identify products with high energy saving potential from our practical experience for consideration for inclusion in the Mandatory Efficiency Labelling Scheme (MEELS). The workload will be absorbed by existing manpower of the EMSD.

We will continue to review VEELS and step up publicity and public education activities to encourage more suppliers to participate in the scheme and enhance consumers' awareness of the scheme.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB051**

**(Question Serial No. 0738)**

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (-) Not specified

Programme: (3) Energy Efficiency and Conservation, and Alternative Energy

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for the Environment

Question:

The Electrical and Mechanical Services Department plans to provide professional support to encourage the development of renewable energy in the private and public sectors in 2018-19. Would the Government advise on the details, effectiveness, objectives and expenditure of the work involved?

Asked by: Hon SHIU Ka-fai (Member Question No. (LegCo use): 13)

Reply:

The professional support on the development of renewable energy (RE) that the Electrical and Mechanical Services Department (EMSD) plans to provide for the private sector in 2018-19 includes sharing relevant information and issuing guidance notes and technical guidelines on RE through the "HK RE Net" (re.emsd.gov.hk), and setting up a hotline to handle enquires about RE from the private sector and the general public and offer technical advice to them. These aim to promote the development of RE installations.

For the public sector, the EMSD will work proactively with the Environment Bureau, and provide technical support in promoting the provision of RE installations in government buildings, venues and community facilities, so as to set an example for the community and raise public awareness of adopting RE.

As the staff members responsible for the above work also undertake other duties, the expenditure involved cannot be separately identified.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB052**

**(Question Serial No. 1788)**

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (-) Not specified

Programme: (1) Energy Supply; Electrical, Gas and Nuclear Safety

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for the Environment

Question:

Regarding the filling stations for liquefied petroleum gas (LPG) vehicles, please inform this Committee of the following:

1. Up to 2017-18, the number of LPG filling stations and the number of filling nozzles across the 18 districts in Hong Kong;
2. Details of the 2 petrol-cum-LPG filling stations to be added in 2018 (including their locations and number of filling nozzles);
3. The average utilisation rate at dedicated and non-dedicated LPG filling stations in 2017;
4. The Electrical and Mechanical Services Department has been monitoring the daily operation of the LPG filling stations through routine and surprise inspections. Is it sufficient to monitor the daily operation of the LPG filling stations with only 34 related inspections in 2018? What are the associated manpower and estimated expenditure involved?

Asked by: Hon YICK Chi-ming, Frankie (Member Question No. (LegCo use): 48)

Reply:

1. The distribution of LPG filling stations and the number of filling nozzles across the 18 districts in Hong Kong up to 2017-18 are listed in the Annex.
2. The 2 non-dedicated LPG filling stations to be added in 2018 are located at Clear Water Bay Road (near Tseng Lan Shue) in Sai Kung and at Princess Margaret Road in Ho Man Tin, with 8 LPG filling nozzles in each station.
3. Based on the operational records provided by the operators of the 12 dedicated LPG filling stations, the average monthly utilisation rate of each LPG filling station ranges

from 35 198 to 117 243 vehicles in 2017. The Government does not collect any information on the number of vehicles refilled at non-dedicated LPG filling stations.

4. The estimated number of 34 inspections to be conducted in 2018 refers to the inspections of LPG vehicles and LPG filling stations before grant of approval. In order to monitor the daily operation of the LPG filling stations, the Electrical and Mechanical Services Department (EMSD) has been carrying out routine and surprise inspections. The work mainly involves safety checking of the LPG storage and dispensing facilities, LPG replenishing arrangements, and operation and repair of the LPG dispensing facilities, etc. The number of such related inspections is estimated to be 240 in 2018.

Law enforcement work in connection with LPG vehicles and filling stations is undertaken by a team of engineers and inspectors in the EMSD. Their responsibilities cover a wide range of duties related to LPG vehicles and filling stations including the overseeing of LPG filling network, supporting infrastructure for LPG vehicles, and conducting law enforcement work related to the revalidation of LPG vehicle fuel tanks, etc. We do not have a breakdown of the estimated expenditure of the above work.

**LPG Filling Stations and Number of Filling Nozzles**

<b>District</b>	<b>Address</b>	<b>Number of Filling Nozzles</b>	<b>Dedicated Filling Station</b>
<b>Hong Kong</b>			
Eastern	Fung Yip Street, Chai Wan	24	Yes
	Java Road, North Point	16	
	23 Fung Yip Street, Chai Wan	4	
	Chong Fu Road, Chai Wan	4	
	Sheung Mau Road, Chai Wan	8	
Central and Western	Fung Mat Road, Sheung Wan	12	Yes
	Pokfulam Road (near Mount Davis Road)	4	
Southern	66 Wong Chuk Hang Road, Aberdeen	4	
	34 Stanley Village Road, Stanley	2	
	South Bay Road, Repulse Bay	2	
Wan Chai	Marsh Street, Wan Chai	10	Yes
<b>Kowloon</b>			
Kwun Tong	Wai Lok Street, Kwun Tong	24	Yes
Kowloon Bay	Cheung Yip Street, Kowloon Bay	10	Yes
	Wang Chin Street, Kowloon Bay	4	
	7 Kai Fuk Road, Kowloon Bay (East Bound)	4	
	4 Kai Fuk Road, Kowloon Bay (West Bound)	4	
	5 Kai Fuk Road, Kowloon Bay (East Bound)	4	
	8 Kai Fuk Road, Kowloon Bay (West Bound)	4	
West Kowloon	Ngo Cheung Street, West Kowloon	24	Yes
Mei Foo	Sham Mong Road, Mei Foo	14	Yes
Wong Tai Sin	5 Fung Shing Street, Po Kong Village	8	
Sham Shui Po	332 Tai Po Road, Sham Shui Po	4	
Kowloon Tong	Cornwall Street, Kowloon Tong	4	
<b>New Territories (NT)</b>			
Tsing Yi (NT West)	53-67 Tsing Yi Road, Tsing Yi	4	
	183 Tsing Yi Road West, Tsing Yi	8	
	171 Tsing Yi Road West, Tsing Yi	4	
	173 Tsing Yi Road West, Tsing Yi, NT	4	

<b>District</b>	<b>Address</b>	<b>Number of Filling Nozzles</b>	<b>Dedicated Filling Station</b>
Tsuen Wan (NT West)	739 Castle Peak Road, Tsuen Wan	4	
	690 Castle Peak Road, Tsuen Wan	4	
Kwai Chung (NT West)	Kwai On Road, Kwai Chung	14	Yes
	99 Castle Peak Road, Kwai Chung	4	
	698 Castle Peak Road, Kwai Chung	4	
	682-688 Castle Peak Road, Kwai Chung	4	
	101 Castle Peak Road, Kwai Chung	4	
Yuen Long (NT West)	Kam Tin Road, Shek Kong (near Shek Kong)	4	
	Tak Yip Street, Yuen Long	12	Yes
	9 Tong Yan San Tsuen Road, Ping Shan, Yuen Long	4	
	123 Ping Ha Road, Tin Shui Wai	4	
	Kam Tin Road, Yuen Long (near Au Tau)	12	
	Castle Peak Road, Yuen Long (near Fui Sha Wai)	6	
	Kam Tin Road, Yuen Long (near Shek Kong)	4	
	Junction of Kam Sheung Road and Pat Heung Road, Yuen Long	4	
Tuen Mun (NT West)	Yip Wong Road, Tuen Mun	10	Yes
	Fuk Hang Tsuen Road, Lam Tei, Tuen Mun	4	
	38 Hoi Wah Road, Tuen Mun	6	
Lantau Island (NT West)	6 Cheong King Road, Chek Lap Kok	4	
	Junction of Yu Tung Road and Chung Yan Road, Tung Chung	6	
	9 Hei Tung Street, Tung Chung	6	
	23 Hei Tung Street, Tung Chung	4	
	Hong Kong International Airport Airside Filling Station No. 2 (for internal use by airport vehicles)	2	
Tai Po (NT East)	Yuen Chau Tsai, Tai Po	24	Yes
	Tai Po Road, Tai Po (near Tai Po Kau)	8	
Fanling (NT East)	Junction of Pak Wo Road and Yat Ming Road, Fanling	8	
	339 Jockey Club Road, Fanling	4	
	Sha Tau Kok Road, Fanling (near Lung Yeuk Tau)	6	

<b>District</b>	<b>Address</b>	<b>Number of Filling Nozzles</b>	<b>Dedicated Filling Station</b>
Ma On Shan (NT East)	Hang Yiu Street, Ma On Shan	12	Yes
	21 On Shan Lane, Ma On Shan	4	
Sai Kung (NT East)	Clear Water Bay Road, Sai Kung (near entrance to TVB City)	4	
	Lot No. 1141, Hiram's Highway, Sai Kung (near Sai Kung Tuk)	2	
	DD 217, Lot No. 1201, Tai Chung Hau, Sai Kung	4	
	Clear Water Bay Road (near Anderson Road)	2	
Sha Tin (NT East)	12 Yuen On Street, Siu Lek Yuen	8	
	11 On Ping Street, Shek Mun, Sha Tin	6	
Tseung Kwan O (NT East)	21 Po Lam Road, Tseung Kwan O	6	
	100 Po Hong Road, Tseung Kwan O	6	

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB053**

**(Question Serial No. 1789)**

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (-) Not specified

Programme: (1) Energy Supply; Electrical, Gas and Nuclear Safety

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for the Environment

Question:

In 2018-19, the Electrical and Mechanical Services Department will continue the stepped-up inspection of vehicle maintenance workshops in relation to liquefied petroleum gas vehicles and education for the trades on gas safety measures. What are the details about the associated work, and the manpower and estimated expenditure involved?

Asked by: Hon YICK Chi-ming, Frankie (Member Question No. (LegCo use): 49)

Reply:

In 2018-19, the Electrical and Mechanical Services Department will continue the stepped-up monitoring of vehicle maintenance workshops, including the following major work:

- To conduct targeted inspections of vehicle maintenance workshops that provide maintenance services for liquefied petroleum gas (LPG) vehicles, and monitor whether maintenance work on LPG vehicle fuel systems are carried out in other vehicle maintenance workshops;
- To implement the “Code of Practice on Security Label System for LPG Vehicle Fuel Tanks” launched in 2017, in order to ensure that the work processes involving revalidation or replacement of internal and external components of fuel tanks are carried out at approved workshops by competent persons so as to further enhance the regulatory control over the maintenance of LPG vehicle fuel tanks, and to safeguard the safety of the public and trade practitioners. In addition, the integrity of security labels for LPG vehicle fuel tanks will be checked randomly in different locations, and corresponding actions will be instituted where necessary;
- To promote the adoption of the identification signage scheme for workshops that provide maintenance services for LPG vehicle fuel systems so as to facilitate easy identification of these workshops by LPG vehicle owners, drivers and the public; and
- To continue publicising and educating LPG vehicle owners/drivers and the relevant trades on matters related to the repair and maintenance of LPG vehicles through various



channels, such as talks, seminars, issuance of circulars, and distribution of leaflets, etc., and to exchange views with LPG vehicle agents through meetings on safety-related issues.

The wide range of work in connection with LPG vehicles, including approvals, inspections of workshops, random checking of security labels, investigations, public education and publicity, etc., is undertaken by a team of engineers and inspectors. We do not have a breakdown of the estimated expenditure of the above work.

- End -

**CONTROLLING OFFICER'S REPLY****ENB054****(Question Serial No. 3275)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Under this Programme, there is a net increase of 155 posts in 2018-19. Would the Administration tell this Committee the names of the additional posts and the salaries? In the Matters Requiring Special Attention in 2018-19 under this Programme, the Administration states that it will introduce a new pilot district collection service for waste plastic bottles. Would the Administration tell this Committee the details of this new service and the manpower establishment, as well as the full-year salary expenditure involved in 2018-19?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 57)Reply:

There will be a net increase of 155 posts in the Environmental Protection Department (EPD) under "Programme (1) Waste" in 2018-19 and the notional annual salary cost at mid-point is about \$87 million. The details are as follows:

Post	Pay scale	Net increase of posts
Principal Environmental Protection Officer	Directorate Pay Scale Point 1	+ 2
Senior Environmental Protection Officer	Master Pay Scale Point 45-49	+ 12
Environmental Protection Officer/ Assistant Environmental Protection Officer	Master Pay Scale Point 27-44 (Environmental Protection Officer) Master Pay Scale Point 16-21 (Assistant Environmental Protection Officer)	+ 29

Post	Pay scale	Net increase of posts
Chief Environmental Protection Inspector	Master Pay Scale Point 29-33	+ 6
Senior Environmental Protection Inspector	Master Pay Scale Point 22-28	+ 22
Environmental Protection Inspector	Master Pay Scale Point 8-21	+ 62
Senior Treasury Accountant	Master Pay Scale Point 45-49	+ 1
Treasury Accountant	Master Pay Scale Point 30-44	+ 1
Engineer/Assistant Engineer	Master Pay Scale Point 32-44 (Engineer) Master Pay Scale Point 19-27 (Assistant Engineer)	+ 2
Senior Executive Officer	Master Pay Scale Point 34-44	+ 1
Executive Officer II	Master Pay Scale Point 15-27	+ 1
Clerical Officer	Master Pay Scale Point 16-21	+ 1
Assistant Clerical Officer	Master Pay Scale Point 3-15	+ 8
Clerical Assistant	Master Pay Scale Point 1-10	+ 4
Assistant Supplies Officer	Master Pay Scale Point 8-26	+ 1
Motor Driver	Master Pay Scale Point 5-8	+ 2
Total		+ 155

Regarding the new collection service for waste plastic bottles, the EPD is making preparation for the implementation of a pilot scheme on district central collection of waste plastic bottles, including drafting the collection arrangements, budget, etc. It is anticipated that the tender exercise could be conducted at the end of 2018 and the scheme could be implemented progressively in 2018-19 at the earliest. The pilot scheme will involve 9 staff in the Environmental Protection Officer grade and the Environmental Protection Inspector grade. The notional annual salary cost at mid-point is about \$5.3 million. Apart from manpower expenditure, the estimated expenditure of the pilot scheme incurred is about \$7.1 million.

The pilot scheme will mainly accept waste plastic bottles collected by the Community Green Stations as well as the Community Recycling Centres supported by the Environment and Conservation Fund in the district, and will collect waste plastic bottles directly from public and private housing estates and public bodies such as schools, etc. as necessary. As the pilot scheme is still at its preparatory stage, the districts to be covered under the scheme are yet to be decided.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB055**

**(Question Serial No. 3277)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (297) Fees for operation of waste facilities

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The provision under Subhead 297 Fees for operation of waste facilities for 2018-19 is \$2,380,756,000, which is \$443,361,000 (22.9%) higher than the revised estimate for 2017-18. The Administration states that the increase in estimated provision is due to increased contract payments for the operation of waste facilities and the commencement of operation of Phase 1 of Organic Resources Recovery Centres (ORRCs) as well as the full-year operation of WEEE·PARK. Would the Administration set out the estimated full-year contract payments for the operation of the South East New Territories (SENT) Landfill, the West New Territories (WENT) Landfill, the North East New Territories (NENT) Landfill, the Chemical Waste Treatment Centre, the T·PARK, the WEEE·PARK and Phase 1 of ORRCs in 2018-19 respectively? What were the contract payments for the operation of the SENT Landfill, the WENT Landfill and the NENT Landfill in 2017-18 respectively?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 58)

Reply:

The estimated operation costs of the 3 strategic landfills, the Chemical Waste Treatment Centre, the T·PARK, the WEEE·PARK and Phase 1 of Organic Resources Recovery Centres (ORRCs) in 2018-19 are tabulated below:

	<b>2018-19 Estimate (\$ million)</b>
South East New Territories (SENT) Landfill	209
North East New Territories (NENT) Landfill	224
West New Territories (WENT) Landfill	350
Chemical Waste Treatment Centre	227
T·PARK	253
WEEE·PARK	155
Phase 1 of ORRCs	39

The operation costs (revised estimate) of the 3 strategic landfills in 2017-18 are tabulated below:

	<b>2017-18 Revised estimate (\$ million)</b>
SENT Landfill	196
NENT Landfill	222
WENT Landfill	341

- End -

**CONTROLLING OFFICER'S REPLY****ENB056****(Question Serial No. 1911)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

With regard to the three strategic landfills in operation, please reply on the following:

(a) Please tabulate the quantity (tonnes) of various types of waste received by the three strategic landfills in 2017-18.

	NENT Landfill			SENT Landfill			WENT Landfill	
	Municipal Waste (Food waste)	Construction Waste	Special Waste	Municipal Waste (Food waste)	Construction Waste	Special Waste	Municipal Waste (Food waste)	Construction Waste
2017-18								

(b) Please tabulate the quantity (tonnes) and proportion of waste delivered by land and by sea (if any) to the three strategic landfills, and the number of refuse collection vehicle trips entering the three strategic landfills per day in 2017-18.

	NENT Landfill		SENT Landfill		WENT Landfill	
	By land (no. of vehicle trips per day)	By sea	By land (no. of vehicle trips per day)	By sea	By land (no. of vehicle trips per day)	By sea
2017-18						

(c) Please set out the number of complaints against various kinds of pollution (including odour, noise, wastewater, hygiene, etc.) received in 2017-18 relating to the three strategic landfills, investigation and follow-up actions, as well as whether any prosecutions have been made against the complaints.

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 1)

Reply:

- (a) The quantities of various types of waste received by the three strategic landfills in 2017 are tabulated below. The relevant statistics for 2018 are still being compiled.

Year	NENT Landfill (tonnes per day on average)			SENT Landfill (tonnes per day on average)			WENT Landfill (tonnes per day on average)		
	Municipal Waste	Overall Construction Waste	Special Waste	Municipal Waste	Overall Construction Waste	Special Waste	Municipal Waste	Overall Construction Waste	Special Waste
2017	3,117	1,160	213	0 <sup>(3)</sup>	2,300	0 <sup>(3)</sup>	7,616	747	363

Notes:

- (1) The figures in the table above have been rounded off.  
(2) The Environmental Protection Department (EPD) does not compile statistics on food waste by landfill.  
(3) Since 6 January 2016, the SENT Landfill has only received construction waste.

- (b) The quantity and proportion of waste delivered by land and by sea to the three strategic landfills, and the number of refuse collection vehicle trips entering the three strategic landfills per day in 2017 are tabulated below. The relevant statistics for 2018 are still being compiled.

Year	NENT Landfill		SENT Landfill		WENT Landfill <sup>(2)</sup>			
	By land		By land		By land		By sea	Total
	(tonnes per day on average)	(no. of vehicle trips per day on average)	(tonnes per day on average)	(no. of vehicle trips per day on average)	(tonnes per day on average) (%)	(no. of vehicle trips per day on average)	(tonnes per day on average) (%)	(tonnes per day on average)
2017	4,490	664	2,300	551	2,942 (34%)	317	5,784 (66%)	8,726

Notes:

- (1) The figures in the table above have been rounded off.  
(2) Only the WENT Landfill received waste delivered by sea.

- (c) The number and types of complaints related to the three strategic landfills received by the EPD from January 2017 to February 2018 are set out below:

#### NENT Landfill

Year	Number of complaints by type				
	Air	Noise	Water	Waste	Miscellaneous
2017	0	0	1	0	0
2018 (As at end of February)	0	0	0	0	0



SENT Landfill

Year	Number of complaints by type				
	Air	Noise	Water	Waste	Miscellaneous
2017	49 (10)	0	0	1	0
2018 (As at end of February)	0	0	0	0	0

Note: The figure in bracket is the number of repeated complaints by three complainants.

WENT Landfill

Year	Number of complaints by type				
	Air	Noise	Water	Waste	Miscellaneous
2017	25	1	0	0	0
2018 (As at end of February)	0	0	0	0	0

The EPD has investigated each of the above complaints received, and has not found any violations of environmental legislation or contractual clauses of the landfills concerned.

- End -

**CONTROLLING OFFICER'S REPLY****ENB057****(Question Serial No. 1912)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the 7 refuse transfer stations (RTSs) being in operation, please reply on the following:

(a) Please list in table form the average amount (tonnes) of waste received by the 7 RTSs in 2017-18.

	2017-18
Island East	
Island West	
Shatin	
North Lantau	
Outlying Islands	
West Kowloon	
North West New Territories	

(b) Please list in table form the number of vehicular trips of refuse collection vehicles and waste-loaded container trucks to/from the 7 RTSs in 2017-18.

	2017-18	
	Refuse collection vehicles	Container trucks
Island East		
Island West		
Shatin		
North Lantau		
Outlying Islands		
West Kowloon		
North West New Territories		

(c) Has the Administration received any complaints against the RTSs in 2017-18? If yes, what are the number and types of complaints? Has the Administration conducted investigations, taken follow-up actions and instituted prosecutions in respect of these complaints?

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 2)

Reply:

- (a) The amount of municipal solid waste (MSW) received by the refuse transfer stations (RTSs) in 2017 is tabulated below. The relevant statistics for 2018 are still being compiled.

RTSs	Daily average of MSW received (tonnes)
Island East	1 194
Island West	1 161
Shatin	1 503
North Lantau	636
Outlying Islands <sup>(1)</sup>	87
West Kowloon <sup>(1)</sup>	2 681
North West New Territories	1 211

Note: (1) Apart from MSW, the West Kowloon Transfer Station also received on average about 471 tonnes per day of grease trap waste in 2017. Besides, the Outlying Islands Transfer Facilities also received on average about 45 tonnes per day of construction waste.

(2) Figures are rounded to the nearest whole number.

- (b) The daily average numbers of vehicular trips of refuse collection vehicles (RCVs) and container trucks delivering MSW to the RTSs in 2017 are tabulated below. The relevant statistics for 2018 are still being compiled.

<b>RTSs</b>	<b>Daily average number of vehicular trips of RCVs delivering MSW to RTSs</b>	<b>Daily average number of vehicular trips of container trucks delivering MSW from RTSs to landfills by land<sup>(1)</sup></b>
Island East	281	Not applicable
Island West	276	
Shatin	354	67
North Lantau	125	Not applicable
Outlying Islands	143	
West Kowloon	670	
North West New Territories	263	59

Note: (1) Only the Shatin Transfer Station and the North West New Territories Transfer Station delivered waste to landfills by land using container trucks. Other RTSs delivered waste to landfills by sea.

(2) Figures are rounded to the nearest whole number.

- (c) The numbers and types of complaints on the RTSs received by the Environmental Protection Department (EPD) from January 2017 to February 2018 are set out below:

<b>Year</b>	<b>Numbers and types of complaints on the RTSs</b>				
	<b>Air</b>	<b>Noise</b>	<b>Water</b>	<b>Waste</b>	<b>Miscellaneous</b>
2017	10	10	1	0	0
2018 (At as end of February)	2	1	0	0	0

The EPD has investigated each of the above complaints received, and has not found any violations of environmental legislation or provisions on operation in the relevant contracts.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB058**

**(Question Serial No. 1913)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Government's efforts to promote environmental protection, please give a brief account of the Government's work and the relevant data in the following areas, as well as the expenditure involved, in 2017-18:

- (a) waste reduction, separation and recycling;
- (b) green procurement;
- (c) energy saving and green building;
- (d) reduction of emissions from government vehicles or vessels;
- (e) promotion of the development of renewable energy.

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 3)

Reply:

a)

In 2017-18, the Environmental Protection Department (EPD) has continued to actively prepare for the legislative work for implementing the Municipal Solid Waste (MSW) charging, take forward various producer responsibility schemes (PRSs), develop the Community Green Stations (CGSs) projects and implement the Food Wise Hong Kong Campaign, etc. We have also strived to extend the Source Separation of Waste Programme in the community to encourage members of the public to practise source separation of waste at home or at workplace. The EPD has been supported by the Environmental Campaign Committee to provide the relevant housing estates or commercial and industrial development projects with more free recycling bins (RBs) which are placed in public places such as car parks, podium gardens or rest spaces. The Government has now placed about 16 000 sets of waste separation bins in public places, schools, office buildings, country parks and buildings participating in the Source Separation of Waste Programme to

facilitate source separation of waste by the public. The provision of RBs covers over 80% of the places where Hong Kong people live and work. We also expanded the scope of service of the Community Recycling Network (CRN) in early 2018 to receive waste plastic bottles delivered from the private housing estates participating in the Source Separation of Waste Programme on a need basis for delivery to suitable recyclers for recycling. The additional transportation expenditure involved is absorbed by the EPD and the Environment and Conservation Fund (ECF).

The EPD has launched a new round of clean recycling campaigns in December 2017, with focus on encouraging the public to mainly recover 3 types of paper (i.e. newspapers, office papers and paperboards), recycle two types of plastic bottles first (plastic containers of beverages or personal care products) and practise clean separation and recycling. The EPD also collects clean non-bottle waste plastics through the CGSs and CRN and send them to suitable recyclers for processing where there are viable outlets. The additional transportation expenditure involved is absorbed by the EPD or the ECF.

The Government launched the \$1 billion Recycling Fund in October 2015 to facilitate the upgrading of the operational capabilities and efficiencies of the recycling industry. As at 28 February 2018, the Advisory Committee on Recycling Fund has received 382 applications and approved 163 applications. Excluding the projects which have been withdrawn by some applicant organisations after their applications were approved, a total of 128 funded projects have been or will soon be commenced, involving a total funding of about \$94 million. To assist the recycling industry to address the Mainland's progressive tightening requirements on imports of recyclables, the Recycling Fund announced in September 2017 that \$20 million had been earmarked to expand the list of fundable items under "Standard Projects" to help upgrade the recyclers' ability in turning waste plastics into plastic products or raw materials as well as processing waste paper. The Recycling Fund also earmarked \$50 million for encouraging recyclers to use compactor trucks for more effective and efficient transportation of waste plastics and waste paper and hence reducing the collection and transportation costs of recyclables.

(b) The Government has taken the lead to adopt green procurement to promote environmental protection and set a role model for the community to follow suit. The Government expenditure on green procurement in 2016 was over \$1.1 billion with the current Government's green procurement list covering 150 products and the relevant green specifications. To enhance the overall performance of green procurement in the Government, we have commissioned a consultancy study to further expand the Government's green procurement list to cover more products and services and update the relevant green specifications. Meanwhile, we are stepping up efforts to promote green procurement in the community and actively encourage the commercial sector, organisations and bodies to purchase and use green products and services in their daily operations to promote the development of the whole environmental protection industry.

(c) The Government has set a target to reduce electricity consumption by 5% for government buildings from 2015-16 to 2019-20, using the comparable operating conditions in 2013-14 as the base. In this connection, we have completed energy audits for about 350 major government buildings and earmarked at least \$600 million to implement the energy-saving programmes progressively. In 2017-18, the Architectural Services Department and the Electrical and Mechanical Services Department (EMSD) have been

granted a funding of \$40 million and \$150 million respectively to carry out the relevant energy saving works.

In addition, to enhance building energy saving, the Government will tighten the statutory requirements on building energy efficiency. The EMSD has started to review the Building Energy Code. We will also continue to promote retro-commissioning and other energy saving measures to promote green buildings. The relevant work will be undertaken by existing staff.

To encourage the public to use energy saving electrical appliances, we started to amend the legislation in 2017-18 to include televisions, electric storage water heaters, induction cookers, washing machines (with a rated washing capacity exceeding 7 kilograms (kg) but not exceeding 10 kg), and room air conditioners of reverse cycle type (i.e. air conditioners with both heating and cooling functions) under the third phase of the Mandatory Energy Efficiency Labelling Scheme (MEELS). The Government introduced the Energy Efficiency (Labelling of Products) Ordinance (Amendment of Schedules) Order 2018 to the Legislative Council (LegCo) following the negative vetting procedure on 24 January 2018. The relevant amendment procedures have been completed. We will publish in the Gazette the commencement notices of the relevant amendment orders and table the commencement notices to LegCo for scrutiny and passage. Taking into account the relevant procedures involved, we envisage that the third phase of the Mandatory Energy Efficiency Labelling Scheme (MEELS) would commence in mid-2018 at the earliest. We estimate that the total amount of energy saved from the expanded MEELS is around 600 million kilowatt-hours per annum. The relevant work has been absorbed by existing resources. There is no need to reserve additional funds.

(d) The Government gives priority to environment-friendly vehicles (including vehicles meeting the EPD's qualifying standards under the Tax Incentives for Environment-friendly Commercial Vehicles scheme or electric vehicles) when procuring vehicles, subject to the availability of suitable models on the market and operational and resource considerations. In 2017-18, the Government procured a total of 98 environment-friendly vehicles (7 of which were electric vehicles) and the expenditure involved was about \$29 million.

The Government has capped the sulphur content of locally supplied marine diesel at 0.05% since 1 April 2014. However, the Government has led by example by powering Government fleet with Euro IV (0.005% sulphur limit) diesel since 2001, and further down to Euro V diesel (0.001% sulphur limit) since 2008 to reduce emissions from the Government's vessels. The fuel expense is absorbed by the resources of the relevant departments.

(e) In "Hong Kong's Climate Action Plan 2030+" published by the Government in January last year, the Government pointed out that it would take the lead in further promoting the development of renewable energy (RE) where technically and financially feasible in order to achieve the policy objective of addressing climate change. We will apply RE on a wider and larger scale in the coming years based on mature and commercially available technologies with the public sector taking the lead. We are also working to create the conditions to facilitate the private sector adopting RE. The Government earmarked \$200 million in the financial year 2017-18 for the provision of RE installations in government buildings and venues as well as community facilities. Funding of \$88 million has been

granted from the \$200 million earmarked in 2017-18 for the provision of RE installations, including the combined heat and power generation system as well as the biogas and solar power generation systems in various government venues.

The Government, in April 2017, signed with the two power companies the Scheme of Control Agreements (SCAs) which will take effect in October 2018 and January 2019 respectively. We will introduce Feed-in Tariff and Renewable Energy Certificates Schemes under the said SCAs to promote the development of distributed renewable energy.

- End -



**CONTROLLING OFFICER'S REPLY****ENB059****(Question Serial No. 1914)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the work to improve emissions from franchised buses, please reply on the following:

- (a) Please tabulate by type the number of buses owned by various franchised bus companies in 2017/18.

	Euro II or before	Euro III	Euro II or III retrofitted with SCRs	Euro IV	Euro V	Euro VI
KMB						
CTB						
NWFB						
LWB						
NLB						

- (b) The number of buses retrofitted with selective catalytic reduction devices (SCRs) and the number of buses not yet retrofitted with SCRs in 2017/18.
- (c) The manpower and expenditure involved in subsidising the retrofitting of SCRs for Euro II or III buses in 2017/18.
- (d) The anticipated number of additional Euro VI buses and light buses in Hong Kong in 2018/19.

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 4)

Reply:

- (a) Franchised bus companies are required to provide their franchised bus services with buses under the age of 18. Currently all pre-Euro and Euro I franchised buses have already been phased out. To improve roadside air quality, the Government has fully subsidised the franchised bus companies to retrofit eligible Euro II and III franchised buses with selective catalytic reduction devices (SCRs) to upgrade their emission performance to Euro IV or above level. The distribution of different types of licensed buses of various franchised bus companies as at the end of December 2017 is as follows:

	Without SCR		Euro II or III retrofitted with SCR	Euro IV	Euro V	Euro VI (including hybrid bus)	Electric bus
	Euro II	Euro III					
The Kowloon Motor Bus Company (1933) Limited	341	471	675	93	2 369	4	14
Citybus Limited	0	1	9	23	903	2	6
New World First Bus Services Limited	24	0	134	38	496	6	4
Long Win Bus Company Limited	0	10	8	31	192	0	4
New Lantao Bus Company (1973) Limited	0	31	0	23	70	0	0
Total	878		826	208	4 030	12	28

- (b) and (c)

The Government has fully subsidised the franchised bus companies to retrofit on a large scale Euro II and III franchised buses with SCRs to upgrade their emission performance to Euro IV or above level. To be cost-effective, the retrofit programme only covered bus models with a remaining service life not less than 2 years and bus models that were technically feasible (such as the availability of sufficient room for retrofitting on the bus) and with a relatively large number (i.e. bus model with not less than 100 buses). The retrofit programme was completed at the end of 2017 with a total of 1 030 eligible Euro II and III franchised buses retrofitted with SCRs under the programme. As at the end of December 2017, 204 buses retrofitted with SCRs at an earlier stage have been retired or out of service due to traffic accidents, while a total of 878 Euro II and III franchised buses were not eligible for retrofitting.

The total expenditure of the retrofit programme was about \$197 million while the expenditure in 2017-18 was about \$109 million. This area of work is undertaken with existing manpower and resources. As the relevant manpower is also responsible for the work in other areas, a separate breakdown is not available.

- (d) The Air Pollution Control (Vehicle Design Standards) (Emission) (Amendment) Regulation 2017 and its amendment were passed by the Legislative Council in April 2017. The emission standards for newly registered vehicles have been tightened in phases by vehicle type from Euro V to Euro VI starting from 1 July 2017. Since the supply of Euro VI light bus models in the local market is still insufficient, the emission standards for newly registered light buses with a design weight of more than 3.5 tonnes remain to be Euro V. EPD will continue to keep in view the supply condition of Euro VI light buses and tighten the relevant emission standards in due course. Generally speaking, vehicle owners will decide to choose a vehicle model based on factors such as their economic situation, operational mode and personal consideration, etc. Therefore, we are unable to estimate the number of additional Euro VI light buses in Hong Kong in 2018-19.

As regards Euro VI buses, the above-mentioned Amendment Regulation and its amendment require that the emission standards for newly registered buses with a design weight of more than 9 tonnes will be tightened from Euro V to Euro VI starting from 1 October 2018. We anticipate that the number of Euro VI buses will increase. According to the information provided by various franchised bus companies, the anticipated number of Euro VI buses due for delivery to Hong Kong in 2018-19 is as follows:

Franchised bus company	Anticipated accumulated number up to March 2019		Anticipated accumulated number up to December 2019	
	Euro VI Single-deck bus	Euro VI Double-deck bus	Euro VI Single-deck bus	Euro VI Double-deck bus
<b>The Kowloon Motor Bus Company (1933) Limited</b>	0	0	6	184
<b>Citybus Limited</b>	0	38	0	38
<b>New World First Bus Services Limited</b>	0	102	0	102
<b>Long Win Bus Company Limited</b>	0	0	0	0
<b>New Lantao Bus Company (1973) Limited</b>	0	0	0	0
<b>Total</b>	0	140	6	324

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB060**

**(Question Serial No. 1915)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the ban against idling of motor vehicle engines, would the Government please reply on the following:

(a) Please list in table form the numbers of complaints received by the Government about contravention of the idling engine prohibition in the past 3 years, as well as the manpower and expenditure involved;

(b) Please list in table form the numbers of Penalty Notices issued by the Government to drivers breaching the idling engine prohibition in the past 3 years, as well as the manpower and expenditure involved;

(c) The details of the promotion of “switching off idling engines” in the past 3 years, as well as the manpower and expenditure involved.

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 5)

Reply:

The Motor Vehicle Idling (Fixed Penalty) Ordinance (the Ordinance), which came into operation on 15 December 2011, prohibits drivers from idling a vehicle engine for more than 3 minutes in any 60-minute period. It empowers traffic wardens (TWs) of the Hong Kong Police Force and Environmental Protection Inspectors (EPIs) of the Environmental Protection Department (EPD) to issue fixed penalty notices (FPNs) to offending drivers. The TWs enforce the ban in their daily patrol duties and enforcement-cum-publicity activities are also conducted by the EPD with TWs. The EPD is responsible for co-ordinating publicity activities to help drivers foster a green driving habit of switching off idling engines.

(a) & (b)

The numbers of complaints received by the Government involving breach of the Ordinance and FPNs issued against vehicles with idling engines in the past 3 years are as follows:

<b>Year</b>	<b>Number of complaints</b>	<b>Number of FPNs issued</b>
2015	1 580	53
2016	1 193	45
2017	1 025	45
Total:	3 798	143

This area of work is undertaken with existing resources and manpower. As the relevant manpower is also responsible for the work in other areas, a separate breakdown of the expenditure is not available.

(c) The details of the promotion and publicity work conducted for the Ordinance in the past 3 years are as follows:

<b>Financial Year</b>	<b>Approximate Expenditure Involved (\$)</b>	<b>Promotion and Publicity Work</b>
2015-16	360,000	Posters, leaflets, banners, APIs on radio, displaying messages on parking meters, etc.
2016-17	330,000	
2017-18	230,000	

This area of work is undertaken with existing resources and manpower. As the relevant manpower is also responsible for the work in other areas, a separate breakdown of the expenditure is not available.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB061**

**(Question Serial No. 1916)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste (2) Air (3) Noise (4) Water (5) Environmental Assessment and Planning (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the public consultation on environmental policies, would the Government please reply on the following:

Please set out in table form the number of public consultations conducted by the Government in the 6 areas of air, conservation, environmental assessment and planning, noise, waste and water quality in the past 3 years, as well as the details and the manpower and expenditure involved.

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 6)

Reply:

Details of the public consultation exercises carried out by the Environmental Protection Department (EPD) in the past 3 years are as follows:

<b>Year</b>	<b>Public Consultation Exercise (Commenced during the year)</b>	<b>Programme</b>	<b>Manpower Resources</b>	<b>Expenditure (e.g. publicity, printing, event organisation, etc.) (Approximately)</b>	<b>Number of submissions/ community suggestions received (Approximately)</b>
2015-16	Legislative Proposals on Regulation of Edible Fats and Oils and Recycling of “Waste Cooking Oils”	Waste	The work was absorbed by existing manpower and there is no breakdown on the manpower resources and expenditure involved in individual work items.	Printing: \$100,000	110
	Legislative Proposal to Control Volatile Organic Compounds in Fountain Solutions and Printing Machine Cleansing Agents	Air		Organising briefings and publicity events: \$13,000	No objection was received
2016-17	No public consultation was carried out				
2017-18	Public Engagement Exercise on Review of Air Quality Objectives (AQOs)	Air	The work was mainly carried out by the consultant commissioned by the EPD, who assisted with the review of the AQOs.	Organising briefings and publicity events, printing posters and leaflets, setting up an online consultation platform: \$650,000	370
	Legislative Proposal to Mandate Vessels to Use Compliant Fuel within Hong Kong Waters	Air	The work was absorbed by existing manpower and there is no breakdown on the manpower resources and expenditure involved in individual work items.	Organising briefings and publicity events: \$13,000	15

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB062**

**(Question Serial No. 1917)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Municipal Solid Waste Charging Scheme, would the Government please advise on:

(a) the details of the Government's efforts on promoting recycling in the community in the past 3 years, as well as the manpower and expenditure involved;

(b) the details of the Government's efforts on designing and implementing the Municipal Solid Waste Charging Pilot Scheme in the past 3 years, as well as the manpower and expenditure involved.

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 7)

Reply:

(a) At the community level, we have extended the Source Separation of Waste Programme (the Programme) to encourage the public to practise source separation of waste at home or at workplace. As at early 2018, over 2 000 housing estates, some 700 rural villages and over 1 000 industrial and commercial buildings have participated in the Programme. At present, over 80% of Hong Kong residents now have recycling bins close to where they live and work. The Government has now placed about 16 000 sets of waste separation bins in public places, schools, office buildings, country parks and buildings participating in the Source Separation of Waste Programme to facilitate source separation of waste by the public.

Moreover, recycling bins (RBs) are being provided by the Government in public places to provide recycling support to buildings which have space constraints in placing such facilities (e.g. single block buildings) and to promote public awareness of waste separation and recycling. To complement the implementation of municipal solid waste (MSW) charging and to enhance the support for recycling, the Steering Group on the



Modification of Recycling and Refuse Collection Facilities in Public Places (the Steering Group), chaired by Secretary for the Environment, was set up in February 2016 to review the number, distribution and design of the RBs and litter containers (LCs) in public places. The Steering Group has recently completed the first stage of its work on the review of number and distribution of the RBs and LCs and recommended that the current RBs to LCs ratio of 1:14 in public places be increased to 1:6 to encourage waste reduction and recycling.

On the other hand, recycling support for residential buildings without property management is being provided through a Community Recycling Network (CRN) funded by the Environment and Conservation Fund (ECF), which comprises 18 Community Recycling Centres set up and manned by non-governmental organisations and 1 community recycling project. They serve as collection outlets for recyclable waste at the community level. The ECF provided funding support totalling about \$97.8 million to finance the relevant projects in the past 3 years.

Meanwhile, we are continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level. The total cost for capital works is estimated to be about \$400 million. The operating expenditure of individual projects may vary, depending on the financial proposals submitted by individual operators in their open tender submissions. As at the end of 2017, 5 CGSs have progressively been in operation, namely the Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS. The total operating expenditure of the CGSs was about \$29.26 million in the past 3 years.

The Environmental Protection Department (EPD) has collaborated with the Environmental Campaign Committee (ECC) to launch a Clean Recycling Campaign since mid-2015 to drive home the significance of keeping recyclables clean which has an important bearing on their recycling value and recyclability. A new round of the clean recycling publicity and public education campaign was launched in December 2017 with focus on encouraging the public to mainly recover 3 types of paper (i.e. newspapers, office papers and paperboards), recycle plastic bottles first (particularly plastic containers of beverages or personal care products) and practise clean separation and recycling. The EPD also collects clean non-bottle waste plastics through the CGSs and CRN and send them to suitable recyclers for processing.

For cooperation with the District Councils (DCs), the EPD, the ECC and the Home Affairs Department have worked with the 18 DCs on the Community Participation Programme in Environmental Protection in Collaboration with District Councils since 2012 to jointly promote environmental education, waste reduction at source and recycling programmes and further cultivate the “use less, waste less” culture in the community. For the past three years, the total estimated expenditure of the above activities is \$10.7 million.

For the above projects, apart from allocation of fund by the ECF to DCs for promotional activities, other relevant preparation and promotion work is part of the work of the EPD. The manpower and expenditure involved are absorbed by the existing establishment and

resources. There is no breakdown of manpower and expenditure involved in this aspect.

- (b) The ECF has provided funding support of about \$55 million to non-profit-making organisations and bodies since 2015 for organising community involvement projects in different types of premises to try out MSW charging in actual settings. The relevant experiences can provide useful references for us to develop the best practice guides on the implementation of MSW charging. As at March 2018, more than 50 community involvement projects on MSW charging have been funded. As the work involved in the community involvement projects is absorbed by the existing resources of the EPD, there is no breakdown on the manpower involved.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB063**

**(Question Serial No. 1918)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding monitoring and improving the water quality of public beaches, would the Government reply on the following:

- (a) Please list by month the water quality gradings of the 41 gazetted public beaches in the past 3 years;
- (b) The Government's work details in monitoring and improving the water quality of public beaches, as well as the manpower and expenditure involved, in the past 3 years.

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 8)

Reply:

- (a) Please see Annex for details of the water quality gradings of the 41 gazetted public beaches in the territory in the past 3 years.
- (b) The Environmental Protection Department (EPD) has been monitoring the water quality of the 41 gazetted beaches and the 3 non-gazetted beaches in the territory. During the period when the gazetted beaches are open for swimming, water quality monitoring is conducted once a week on average. As for the 3 gazetted beaches that are not open for swimming (including Hairpin Beach, Rocky Bay Beach and Gemini Beaches), water quality monitoring is conducted at least 3 times per month. During the non-bathing season, for all the beaches that are temporarily closed, water quality monitoring is conducted at least once a month. As for the 3 non-gazetted beaches (including Discovery Bay, Lung Mei and New Kiu Tsui), the EPD will conduct water quality monitoring at least 3 times a month during the bathing season and at least once a month during non-bathing season.

To improve the water quality of the beaches, government departments have been implementing various pollution abatement measures for years, including enforcement of environmental laws and construction of sewage collection and treatment facilities. The water quality of the 41 gazetted beaches in the territory has met the Water Quality Objective

for 8 consecutive years since 2010, indicating continuous improvement in the water quality of local beaches.

Regarding the Beach Water Quality Monitoring Programme, measures for improving the water quality of public beaches and enforcement of environmental laws are part of the routine work of the EPD and the Drainage Services Department, and no separate breakdown on the staff establishment and expenditure involved is available.

**The range of water quality gradings of the 41 gazetted beaches in the territory each month during the past 3 years (2015-2017)**

The grade of beach water quality is determined on the basis of the geometric mean of the *E. coli* counts in the 5 most recent sampling occasions. Beaches are categorised into 4 grades, namely 1. “Good”, 2. “Fair”, 3. “Poor” and 4. “Very Poor”. Beach gradings are released to the public weekly during the bathing season.

**Beaches in Southern District, Hong Kong Island (1):**

Year	Month	The range of beach water quality gradings for the month					
		Chung Hom Kok	South Bay	St. Stephen's Beach	Middle Bay	Repulse Bay	Deep Water Bay
2015	1	*	*	*	*	*	1
	2	*	*	*	*	*	1
	3	*	*	*	1	1	1
	4	1	1	1	1	1	1
	5	1	1	1	1-2	1-2	1
	6	1-2	1-2	1	1-2	2	2
	7	1-4	1	1	1	1-2	1-2
	8	1-2	1	1	1	1	1-2
	9	1	1	1-2	1	1	1-2
	10	1	1	1	1-2	1-2	1-2
	11	*	*	*	1	1	1
	12	*	*	*	*	*	1
2016	1	*	*	*	*	*	1
	2	*	*	*	*	*	1
	3	*	*	*	1	1	1
	4	1	1	1	1	1	1
	5	1	1	1	1-2	1	1
	6	1	1	1-2	1-2	1	1-2
	7	1	1-2	1-2	2-4	1-2	2
	8	1	1	1	1-2	1	1-2
	9	1-2	1	1	1-2	1	2-4
	10	1	1	1	2	1-2	1-2
	11	*	*	*	1	1	1
	12	*	*	*	*	*	1
2017	1	*	*	*	*	*	1
	2	*	*	*	*	*	1
	3	*	*	*	1	1	1
	4	1	1	1	1	1	1
	5	1	1	1	1-2	1	1-4

Year	Month	The range of beach water quality gradings for the month					
		Chung Hom Kok	South Bay	St. Stephen's Beach	Middle Bay	Repulse Bay	Deep Water Bay
2017	6	1	1	1	1-2	1	1
	7	1-2	1	1	2	1	1-2
	8	1-2	1	1	1-2	1	1-2
	9	1	1	1	1	1	1
	10	1	1	1	1-2	1	1
	11	*	*	*	1-2	1	1
	12	*	*	*	*	*	1-2

Remarks:

\* The beach was temporarily closed during non-bathing season.

Beaches in Southern District, Hong Kong Island (2):

Year	Month	The range of beach water quality gradings for the month					
		Big Wave Bay	Stanley Main Beach	Shek O	Turtle Cove	Hairpin Beach	Rocky Bay
2015	1	*	*	*	*	#	#
	2	*	*	*	*	#	#
	3	1	1	*	*	#	#
	4	1	1-2	2	1	#	#
	5	1-2	1	1-2	1-2	#	#
	6	2	1-2	1-2	1-2	#	#
	7	1-2	1-2	2	1-2	#	#
	8	1-2	1-2	1-2	1	#	#
	9	2	1-2	1-2	1	#	#
	10	1-2	1-2	1	1	#	#
	11	1	1	*	*	#	#
	12	*	*	*	*	#	#
2016	1	*	*	*	*	#	#
	2	*	*	*	*	#	#
	3	1-2	1	*	*	#	#
	4	2	1-2	2	1-2	#	#
	5	2	1-2	1-2	1-2	#	#
	6	2-4	1	1-2	1-2	#	#
	7	2	1-2	2	1-2	#	#
	8	2	1-2	2	1	#	#
	9	2	1-2	2	1	#	#
	10	2	1	1	1	#	#
	11	1-2	1-2	*	*	#	#
	12	*	*	*	*	#	#

Year	Month	The range of beach water quality gradings for the month					
		Big Wave Bay	Stanley Main Beach	Shek O	Turtle Cove	Hairpin Beach	Rocky Bay
2017	1	*	*	*	*	#	#
	2	*	*	*	*	#	#
	3	1	1	*	*	#	#
	4	1	1	1	1	#	#
	5	1-2	1-2	1-2	1	#	#
	6	2	1	1	1	#	#
	7	2-4	1-2	2	1-2	#	#
	8	2-3	1-2	1-2	1-2	#	#
	9	2	1	1	1	#	#
	10	1-2	1	1	1	#	#
	11	1-2	1	*	*	#	#
	12	*	*	*	*	#	#

Remarks:

\* The beach was temporarily closed during non-bathing season.

# The beach did not provide lifeguard services and was not open for swimming.

Beaches in Tsuen Wan District:

Year	Month	The range of beach water quality gradings for the month							
		Anglers' Beach	Approach Beach	Casam Beach	Hoi Mei Wan	Lido Beach	Ting Kau Beach	Ma Wan Tung Wan	Gemini Beaches
2015	1	*	*	*	*	*	*	*	#
	2	*	*	*	*	*	*	*	#
	3	*	*	*	*	*	*	*	#
	4	2	2	1	1-2	1-2	2	1	#
	5	2-3	2-4	2	2-3	2	2-4	1-2	#
	6	2-3	3-4	2-3	2-3	2-3	2-4	2	#
	7	2-3	3	2	2-4	2-3	2-4	1	#
	8	2	2-3	2	2	2	2-3	1	#
	9	2	2	2	2	2	2	1-2	#
	10	2	2	1-2	2	1-2	2	1-2	#
	11	*	*	*	*	*	*	*	#
	12	*	*	*	*	*	*	*	#
2016	1	*	*	*	*	*	*	*	#
	2	*	*	*	*	*	*	*	#
	3	*	*	*	*	*	*	*	#
	4	2	2-3	1-2	2	1-2	2-3	2	#
	5	2	3	2	2	2	2-3	1-2	#
	6	2	2-3	2	2	2	2-3	2	#
	7	2	2	2	2	2	3	2	#

Year	Month	The range of beach water quality gradings for the month							
		Anglers' Beach	Approach Beach	Casam Beach	Hoi Mei Wan	Lido Beach	Ting Kau Beach	Ma Wan Tung Wan	Gemini Beaches
2016	8	2	2	2	2	2	2-4	1-2	#
	9	2	2	1-2	2	1-2	2-3	1-2	#
	10	2	2	1	1-2	1-2	2	1-2	#
	11	*	*	*	*	*	*	*	#
	12	*	*	*	*	*	*	*	#
2017	1	*	*	*	*	*	*	*	#
	2	*	*	*	*	*	*	*	#
	3	*	*	*	*	*	*	*	#
	4	1	1-2	1-2	2	1	1-2	1	#
	5	1-2	2	1	2	1	2	1-2	#
	6	2	2	2	2	2	2-4	1	#
	7	2	2-4	2-3	2-3	2-3	3-4	1-2	#
	8	2	2-3	2	2-3	2	2-3	1-2	#
	9	2	2-4	2	2-4	2	2-4	2	#
	10	2	2-3	2	1-2	2	1-2	2	#
	11	*	*	*	*	*	*	*	#
	12	*	*	*	*	*	*	*	#

Remarks:

\* The beach was temporarily closed during non-bathing season.

# The beach did not provide lifeguard services and was not open for swimming.

Beaches in Tuen Mun District:

Year	Month	The range of beach water quality gradings for the month					
		Butterfly Beach	Cafeteria New Beach	Cafeteria Old Beach	Castle Peak Beach	Kadoorie Beach	Golden Beach
2015	1	*	*	*	*	*	1
	2	*	*	*	*	*	1
	3	*	*	*	*	*	1-2
	4	1-2	1	1-2	1-2	1	1
	5	2	1-2	1-2	1-2	2	1-2
	6	2-3	2	2	2-3	2	2
	7	2	2	2	2	1-2	2
	8	2-3	2	2	2-4	2	2
	9	2-3	2	2-4	2-3	1-2	2
	10	2-3	1-2	2-4	2-3	1-2	1-2
	11	*	*	*	*	*	1
	12	*	*	*	*	*	1
2016	1	*	*	*	*	*	1-2
	2	*	*	*	*	*	2
	3	*	*	*	*	*	1-2



Year	Month	The range of beach water quality gradings for the month					
		Butterfly Beach	Cafeteria New Beach	Cafeteria Old Beach	Castle Peak Beach	Kadoorie Beach	Golden Beach
2016	4	2-3	1-2	2	2-3	2	2
	5	2-3	2	2	2-3	2	2
	6	2	2	2	2	2	2
	7	3-4	2	2	2	2	2
	8	2-3	1-2	2	2	1-2	1-2
	9	2	2	2	2	2	2
	10	2	1-2	2	2	1-2	1-2
	11	*	*	*	*	*	1
	12	*	*	*	*	*	1
2017	1	*	*	*	*	*	1
	2	*	*	*	*	*	1-2
	3	*	*	*	*	*	2
	4	2	1-2	1-2	1-4	1	2
	5	2-4	1-2	1-2	2-3	1-4	1-2
	6	2-3	2	2-4	2	2	1-2
	7	2-3	2	2-3	2-3	2	2-3
	8	2	1-2	2	2	1-2	1-2
	9	2	2	2	2-3	2	2
	10	1-2	1-2	1-2	2	1-2	1
	11	*	*	*	*	*	1
	12	*	*	*	*	*	1-2

Remarks:

\* The beach was temporarily closed during non-bathing season.

Beaches in Sai Kung District:

Year	Month	The range of beach water quality gradings for the month					
		Hap Mun Bay	Kiu Tsui	Trio Beach	Clear Water Bay First Beach	Clear Water Bay Second Beach	Silverstrand Beach
2015	1	*	*	*	*	1	2
	2	*	*	*	*	1	1-2
	3	*	*	*	*	1	1-2
	4	1	1	1	1-2	1	1
	5	1	1-2	1	1	1	1
	6	1	1-2	1	1-2	1-2	1-2
	7	1	1	1	1	2	1-2
	8	1	1	1	1	1-2	1
	9	1	1	1	1	2	1-2

Year	Month	The range of beach water quality gradings for the month					
		Hap Mun Bay	Kiu Tsui	Trio Beach	Clear Water Bay First Beach	Clear Water Bay Second Beach	Silverstrand Beach
2015	10	1	1	1	1	1-2	1-2
	11	*	*	*	*	1	1
	12	*	*	*	*	1	1-2
2016	1	*	*	*	*	1	2
	2	*	*	*	*	1-4	2
	3	*	*	*	*	1	2
	4	1	1-2	1-2	1-2	1-2	2
	5	1	1-2	1-2	2	2	2-3
	6	1	1	1	2	1-4	2-4
	7	1	1	1-2	2	2-3	2-4
	8	1	1-2	1-2	1-4	2-3	2-4
	9	1	1	1-2	1-2	1-2	2
	10	1	1	1	1-2	1-2	2
	11	*	*	*	*	1-2	1-4
	12	*	*	*	*	1-2	1-3
2017	1	*	*	*	*	1	1
	2	*	*	*	*	1	1-2
	3	*	*	*	*	1	1-4
	4	1	1	1	1	1	1-2
	5	1	1	1	1-2	1	1-2
	6	1	1	1-2	2	1-2	2-4
	7	1	1	1-2	2	2-3	2
	8	1	1	1-2	2	1-2	2-4
	9	1	1	1	1	1	1-2
	10	1	1	1	1	1	1-4
	11	*	*	*	*	1	1-2
	12	*	*	*	*	1	1

Remarks:

\* The beach was temporarily closed during non-bathing season.

Beaches in Islands District (Lantau Island):

Year	Month	The range of beach water quality gradings for the month				
		Lower Cheung Sha	Pui O	Silver Mine Bay	Tong Fuk	Upper Cheung Sha
2015	1	*	*	*	*	*
	2	*	*	*	*	*
	3	*	*	*	*	*

Year	Month	The range of beach water quality gradings for the month				
		Lower Cheung Sha	Pui O	Silver Mine Bay	Tong Fuk	Upper Cheung Sha
2015	4	1	1	1-2	1	1
	5	1-2	1-2	2	1	1
	6	2	2	2	1	1
	7	1-2	2	2	1	1
	8	1	1-2	2	1	1
	9	1-2	1	1-2	1	1
	10	1	1-2	2-4	1	1
	11	*	*	*	*	*
	12	*	*	*	*	*
2016	1	*	*	*	*	*
	2	*	*	*	*	*
	3	*	*	*	*	*
	4	1-2	1-2	3-4	1	1
	5	2-4	2	2-3	1	1
	6	1-2	2	2-3	1	1
	7	2	2	2	1	1
	8	2-4	1-2	2-4	1-2	1
	9	2	2	2	1	1
	10	1-2	1-2	1-2	1	1
	11	*	*	*	*	*
	12	*	*	*	*	*
2017	1	*	*	@	*	*
	2	*	*	@	*	*
	3	*	*	@	*	*
	4	1	1	@	1	1
	5	1-4	1	@	1	1
	6	2-3	1-2	@	1	1
	7	2	2-3	@	1-2	1
	8	1	2	@	1	1
	9	1	2	@	1	1
	10	1-2	1-2	@	1	1
	11	*	*	@	*	*
	12	*	*	@	*	*

Remarks:

\* The beach was temporarily closed during non-bathing season.

@ Due to improvement works at the beach and was not open for swimming.

Beaches in Islands District (Lamma Island):

Year	Month	The range of beach water quality gradings for the month	
		Hung Shing Yeh Beach	Lo So Shing
2015	1	*	*
	2	*	*
	3	*	*
	4	1	1
	5	1	1
	6	1	1
	7	1	1
	8	1	1
	9	1	1-2
	10	1	1
	11	*	*
	12	*	*
2016	1	*	*
	2	*	*
	3	*	*
	4	1	1
	5	1	1
	6	1	1
	7	1	1
	8	1	1
	9	1	1
	10	1	1-2
	11	*	*
	12	*	*
2017	1	*	*
	2	*	*
	3	*	*
	4	1	1
	5	1	1
	6	1	1
	7	1-2	1
	8	1-2	1
	9	1	1
	10	1	1
	11	*	*
	12	*	*

Remarks:

\* The beach was temporarily closed during non-bathing season.

Beaches in Islands District (Cheung Chau):

Year	Month	The range of beach water quality gradings for the month	
		Cheung Chau Tung Wan	Kwun Yam Beach
2015	1	*	*
	2	*	*
	3	*	*
	4	1	1
	5	1	1
	6	1-2	1
	7	1-4	1-4
	8	1-2	1-2
	9	2	1
	10	1-2	1-4
	11	*	*
	12	*	*
2016	1	*	*
	2	*	*
	3	*	*
	4	1	1
	5	1-2	1-2
	6	1	1
	7	1	1
	8	1	1
	9	1	1-2
	10	1	1
	11	*	*
	12	*	*
2017	1	*	*
	2	*	*
	3	*	*
	4	1-2	1
	5	1	1
	6	2	1
	7	2	1-2
	8	1-2	1
	9	1	1
	10	1	1
	11	*	*
	12	*	*

Remarks:

\* The beach was temporarily closed during non-bathing season.

- End -

**CONTROLLING OFFICER'S REPLY****ENB064****(Question Serial No. 1919)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (114) Transport and TrafficProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

On promoting the use of electric vehicles (EVs), would the Government please advise on the following:

- (a) Please set out in table form the number of newly registered EVs by the total sum of the published retail price and first registration tax (FRT) of EVs after the announcement of the 2017/18 Budget:

	Total sum of the published retail price and FRT of EVs		
	Below HK\$300,000	HK\$310,000 to \$500,000	HK\$510,000 or above
No.			

- (b) Currently, what is the number of vehicles owned by various government departments? Among them, how many are EVs?
- (c) What was the number of EVs procured by the government departments in the past 3 years?
- (d) How many EV charging facilities were constructed by the Government in each of the past 3 years? What was the expenditure?
- (e) What plan does the Government have to construct and enhance the existing EV charging facilities?

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 9)

Reply:

(a) From 22 February 2017 (the announcement date of the 2017/18 Budget) to 28 February 2018 (the announcement date of the 2018/19 Budget), the number of first registered electric vehicles (EVs) by the total sum of their taxable value and first registration tax (FRT) paid is as follows:

	<b>Total sum of taxable value and FRT paid</b>		
	<b>HK\$300,000 or below</b>	<b>Above HK\$300,000 to \$500,000</b>	<b>Above HK\$500,000</b>
No. of first registered EVs from 22 February 2017 to 28 February 2018	19	102	3 236

Note: Not including government vehicles.

(b) The numbers of vehicles and EVs owned by various government departments as at the end of December 2017 are as follows:

<b>Policy bureaux/departments</b>	<b>No. of EVs</b>	<b>No. of vehicles</b>
Hong Kong Police Force	122	2 488
Water Supplies Department	17	253
Electrical and Mechanical Services Department (EMSD)	12	214
Agriculture, Fisheries and Conservation Department	10	214
Post Office	9	278
Buildings Department	8	36
Food and Environmental Hygiene Department	7	728
Lands Department	7	166
Drainage Services Department	6	48
Fire Services Department	6	717
Customs and Excise Department	5	189
Leisure and Cultural Services Department	5	156
Transport Department	5	162
Civil Aviation Department	4	15
Housing Department	4	51
Social Welfare Department	3	29
Environmental Protection Department (EPD)	3	47
Administration Wing	2	27
Civil Engineering and Development Department	2	44
Independent Commission Against Corruption	2	35
Labour Department	2	27
Working Family and Student Financial Assistance Agency	2	2

<b>Policy bureaux/departments</b>	<b>No. of EVs</b>	<b>No. of vehicles</b>
Architectural Services Department	1	10
Chief Executive's Office	1	8
Correctional Services Department	1	126
Department of Health	1	56
Environment Bureau	1	1
Government Logistics Department	1	62
Highways Department	1	38
Home Affairs Bureau	1	7
Office for Film, Newspaper and Article Administration	1	21
Planning Department	1	12
Radio Television Hong Kong	1	23
Other policy bureaux/departments	-	263
<b>Total</b>	<b>254</b>	<b>6 553</b>

(c) 43 EVs were procured by the government departments in the past 3 years, details of which are as follows:

<b>Policy bureaux/departments</b>	<b>No. of EVs procured *</b>		
	<b>2015</b>	<b>2016</b>	<b>2017</b>
Agriculture, Fisheries and Conservation Department	-	1	1
Customs and Excise Department	2	2	-
Commerce and Economic Development Bureau	-	-	1
Administration Wing	1	-	-
Drainage Services Department	7	-	-
EMSD	1	7	1
Environment Bureau	1	-	-
Food and Environmental Hygiene Department	2	-	-
Fire Services Department	2	1	-
Government Logistics Department	-	1	1
Post Office	-	1	-
Immigration Department	-	-	1
Labour Department	-	1	-
Lands Department	1	-	-
Leisure and Cultural Services Department	2	-	-
Office for Film, Newspaper and Article Administration	-	-	1
Working Family and Student Financial Assistance Agency	1	-	-



<b>Policy bureaux/departments</b>	<b>No. of EVs procured *</b>		
	<b>2015</b>	<b>2016</b>	<b>2017</b>
Transport Department	-	1	-
Water Supplies Department	1	-	1
<b>Total</b>	<b>21</b>	<b>15</b>	<b>7</b>

\*Including vehicles to be delivered

(d) and (e) On the development of public charging networks as supplementary facilities, the Government not only takes the lead in providing and enhancing its public charging facilities in government car parks but also supports private establishments to set up and enhance non-governmental public charging networks. Regarding the government public charging networks, the Government took the lead in 2012 to install 500 public chargers in government public car parks managed by the Transport Department (TD) and government car parks managed by the Government Property Agency (GPA) which are open for public use. To improve the charging efficiency, EPD has progressively upgraded standard chargers to medium chargers in the past few years (as compared with standard chargers, medium chargers can reduce the charging time by up to 60%). As at the end of 2017, EPD has installed 519 chargers, among which 268 are medium chargers, in 425 parking spaces (representing 7% of the relevant parking spaces) in the government car parks managed by the TD and GPA which are open for public use. Moreover, EPD is conducting a pilot scheme at four government outdoor car parks (located at the EMSD Headquarters, Hong Kong Wetland Park, Wai Tsuen Sports Centre and Shek Kip Mei Park) managed by contractors, where a total of 11 outdoor medium chargers have been installed to assess their reliability. The Government's expenditure involved in the above enhancement of public charging facilities at government car parks in the past 3 financial years is as follows:

<b>Year</b>	<b>No. of additional public EV charging facilities provided at government car parks</b>	<b>Expenditure involved (\$ million)</b>
2015-16	6 medium charging posts at outdoor car parks *	0.23
2016-17	174 medium chargers upgrading and 5 medium charging posts at outdoor car parks	2.94
2017-18	96 medium chargers upgrading	1.32

\* The expenditure on 6 medium charging posts at outdoor car parks spanned over two financial years of 2014-15 and 2015-16.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs and retrofitting existing car parks with charging facilities.

- End -

**CONTROLLING OFFICER'S REPLY****ENB065****(Question Serial No. 1920)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) Waste (4) WaterControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the handling of marine refuse, would the Government please reply on the following:

(a) the amount of marine refuse (tonnes) collected by the Government in Hong Kong waters in the past 3 years, listed by government departments;

(b) the amount of marine refuse (tonnes) collected by the Government at the 14 typhoon shelters in the past 3 years:

	<b>Amount of marine refuse collected by the Government (tonnes)</b>
Aberdeen South Typhoon Shelter	
Aberdeen West Typhoon Shelter	
Causeway Bay Typhoon Shelter	
Cheung Chau Typhoon Shelter	
Hei Ling Chau Typhoon Shelter	
Kwun Tong Typhoon Shelter	
New Yau Ma Tei Typhoon Shelter	
Rambler Channel Typhoon Shelter	
Sam Ka Tsuen Typhoon Shelter	
Shau Kei Wan Typhoon Shelter	
Shuen Wan Typhoon Shelter	
To Kwa Wan Typhoon Shelter	
Tuen Mun Typhoon Shelter	
Yim Tin Tsai Typhoon Shelter	

(c) the numbers of operations carried out by the government fleet to clean up marine refuse in the past 3 years, listed by government departments, as well as the manpower and

expenditure involved.

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 10)

Reply:

(a) The Marine Department (MD), the Leisure and Cultural Services Department (LCSD), the Agriculture, Fisheries and Conservation Department (AFCD) and the Food and Environmental Hygiene Department (FEHD) are responsible for collecting and cleaning up marine refuse (including floating refuse and shoreline refuse washed ashore) at the respective locations they are in charge of. The amount of marine refuse collected by the above departments in each of the past 3 years is tabulated below:

	<b>Amount of marine refuse collected (tonnes)</b>				
	<b>MD</b>	<b>LCSD</b>	<b>AFCD</b>	<b>FEHD</b>	<b>Total</b>
2015-16	11 632	3 338	358	393	15 722
2016-17	11 735	3 556	398	695	16 386
2017-18 (the first 10 months)	10 082	2 366	290	707	13 444

Note: figures may not add up to total due to rounding off.

(b) The MD does not have separate statistics on the amount of marine refuse collected in individual typhoon shelters. The amount of marine refuse routinely collected by the contractor of MD in various water areas with typhoon shelters in the past 3 years is set out as follows:

<b>Water Areas</b>	<b>Amount of marine refuse collected (tonnes)</b>		
	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18 (the first 10 months)</b>
Aberdeen and Tin Wan (including Aberdeen South Typhoon Shelter and Aberdeen West Typhoon Shelter)	2 925	3 032	2 566
Causeway Bay (including Causeway Bay Typhoon Shelter)	162	169	147
Cheung Chau (including Cheung Chau Typhoon Shelter and Hei Ling Chau Typhoon Shelter)	451	458	376
Kwun Tong (including Kwun Tong Typhoon Shelter)	124	117	95
Yau Ma Tei (including New Yau Ma Tei Typhoon Shelter)	893	967	779
Rambler Channel (including Rambler Channel Typhoon Shelter)	59	64	57

Water Areas	Amount of marine refuse collected (tonnes)		
	2015-16	2016-17	2017-18 (the first 10 months)
Sam Ka Tsuen (including Sam Ka Tsuen Typhoon Shelter)	219	233	197
Shau Kei Wan (including Shau Kei Wan Typhoon Shelter)	742	739	609
Tolo Harbour, West (including Shuen Wan Typhoon Shelter)	46	55	45
To Kwa Wan (including To Kwa Wan Typhoon Shelter)	143	155	148
Tuen Mun (including Tuen Mun Typhoon Shelter)	347	387	336
Sai Kung Hoi (including Yim Tin Tsai Typhoon Shelter)	95	106	91

(c) Since the commencement of the contract for marine refuse cleansing services of the MD on 1 October 2017, the contractor has been providing about 80 vessels of various types to clean up refuse in Hong Kong waters on a daily basis (including Sundays and public holidays). Among these vessels, about 13 refuse collection boats provide domestic refuse collection service to vessels (including fishing, locally-licensed and river-trade vessels) in anchorages, typhoon shelters and small boat anchorage areas. A refuse collection boat is normally operated by 2 persons, 1 for steering the boat and the other for collecting refuse. The contract cost for the marine refuse cleansing services, which include cleaning up floating refuse, collecting refuse from vessels, managing refuse collection points and transporting refuse to landfills for disposal, etc., is about \$6.69 million a month. In addition, contractors of other departments will engage contract vessels to help clean up marine refuse on a need basis (such as geographical locations, tidal conditions, etc.). No separate breakdown on the manpower and the expenditure involved is available.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB066**

**(Question Serial No. 1951)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding reduction of food waste, would the Government advise this Committee on the following:

1. the quantities of commercial and industrial as well as domestic food waste generated and their recovery rate in the past 5 years;
2. the quantities of food waste disposed of at landfills in the past 5 years;
3. The Government has launched 4 schemes, including the Food Waste Recycling Partnership Scheme, the Food Waste Reduction Activities, the Food Waste Recycling Projects in Housing Estates, and the food waste reduction and recycling projects under the Environment and Conservation Fund. What were the annual expenditures of the above schemes? What were the respective quantities of food waste recovered?

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 41)

Reply:

(1) and (2)

The respective quantities of food waste (including domestic and commercial & industrial food waste) disposed of at landfills, generated and recovered from 2012 to 2016 are tabulated below. The Environmental Protection Department (EPD) does not have a breakdown of domestic and commercial & industrial food waste generated and recovered. The relevant statistics for 2017 are still under compilation.

Year	Domestic food waste	Commercial & industrial food waste	Overall municipal food waste		
	Daily quantity of disposal (tonnes) (a)	Daily quantity of disposal (tonnes) (b)	Daily quantity of disposal (tonnes) (c)=(a)+(b)	Daily quantity generated (tonnes)	Recovery rate
2012	2 528	809	3 337	3 355	0.5%
2013	2 645	1 003	3 648	3 726	2.1%
2014	2 608	1 033	3 640	3 659	0.5%
2015	2 397	985	3 382	3 420	1.1%
2016	2 326	1 274	3 600	3 643	1.2%

Note: The above figures may not add up to total due to rounding off.

(3) Since 2010, the EPD has been taking forward the “Food Waste Recycling Partnership Scheme” (the Partnership Scheme) with relevant commercial and industrial (C&I) organisations to promote good food waste management to the C&I sectors. Under the Partnership Scheme, the EPD collaborates with District Councils and non-profit-making organisations to hold “Food Waste Reduction Activities” which would last for 3 to 6 months in various shopping malls in different districts on a roving basis, so as to enhance public participation and promote food waste reduction at source to the C&I sectors.

The annual quantities of C&I food waste recovered under the Partnership Scheme and “Food Waste Reduction Activities” and the expenditures involved in the past 5 years are as follows:

Year	Expenditure (\$million)	Quantity of food waste recovered (tonnes)
2013-14	0.44	336
2014-15	0.63	293
2015-16	0.44	324
2016-17	0.56	431
2017-18	0.56	247 <sup>(Note 1)</sup>

Note 1: The quantity of food waste recovered as at end February 2018

Since 2011, EPD has earmarked \$60 million through the Environment and Conservation Fund (ECF) to implement the “Food Waste Recycling Projects in Housing Estates” to support private housing estates to install food waste composters and organise educational and promotion activities to encourage public participation in food waste recycling, with a view to enhancing their awareness of food waste reduction and recycling. To date, most of the interested housing estates with suitable venues have been supported by the ECF to install food waste composters. Up to February 2018, 33 housing estates were supported with total amount of approved funding of \$36 million. The annual funding approved and quantity of food waste recycled in the past five years are as follows:

**“Food Waste Recycling Projects in Housing Estates”:**

Year	Funding approved (\$million)	Quantity of food waste recovered <sup>(Note 3)</sup> (tonnes)
2013-14	23.50	201
2014-15	2.25	204
2015-16	1.97	292
2016-17	2.20	469
2017-18	1.17	365 <sup>(Note 2)</sup>

Note 2: The quantity of food waste recovered as at end December 2017

Note 3: The figures do not necessarily represent the amount of food waste collected in the approved projects for that year. Since the housing estates had to make preparations, such as recruiting staff, arranging tenders for the rental of composters, after approval of the projects, food waste recovery activities might not be commenced in the same year. Moreover, the recipient housing estates had to carry on food waste recovery activities for 24 months, and the projects approved in earlier years would continue to recover food waste after commissioning. Hence, the relevant figures include those projects approved in earlier years and were still in operation.

In addition, the EPD also implemented food waste reduction and recycling projects under the “Community Waste Reduction Projects” funded by the ECF. The annual funding approved and quantities of domestic food waste recovered under the food waste reduction and recycling projects in the past 5 years are as follows:

**Food waste reduction and recycling projects:**

Year	Funding approved (\$million)	Quantity of food waste recovered (tonnes)
2013-14	7.69	334
2014-15	3.59	194
2015-16	5.51	208
2016-17	0.86	170
2017-18	8.23	231 <sup>(Note 2)</sup>

Note 2: The quantity of food waste recovered as at end December 2017

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB067**

**(Question Serial No. 1952)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding local recycling, would the Government advise this Committee on the following over the past 3 years:

1. What was the amount of import/export of various types of recyclables including waste electrical and electronic equipment, plastics and paper?
2. What was the local recovery rate of various types of recyclables?
3. What were the enforcement and prosecution actions taken against waste import/export offences?
4. How many projects have been funded by the Recycling Fund so far? What are the processed quantities involved for various types of recyclables?

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 42)



Reply:

1 and 2. The import and export statistics and recovery rate of various major types of recyclables<sup>(1)</sup> over the past 3 years (i.e. 2015-2017) were as follows: -

Major types of recyclables <sup>(2)</sup>	Amount of import (million tonnes)	Amount of export (million tonnes) <sup>(3)</sup>	Recovery rate
<b>Ferrous metal</b>			
2015	0.26	1.23	93%
2016	0.24	1.35	92%
2017	0.31	1.38	Note <sup>(4)</sup>
<b>Nonferrous metal</b>			
2015	0.19	0.17	77%
2016	0.16	0.21	76%
2017	0.19	0.21	Note <sup>(4)</sup>
<b>Paper</b>			
2015	0.01	0.90	52%
2016	0.01	0.82	50%
2017	0.02	0.79	Note <sup>(4)</sup>
<b>Plastics</b>			
2015	2.86	2.82	11%
2016	2.88	2.82	14%
2017	1.89	1.79	Note <sup>(4)</sup>

Notes: (1) Data source: The external merchandise trade statistics compiled by the Census and Statistics Department.

(2) Since waste electrical and electronic equipment (WEEE) does not have a corresponding commodity classification code under the Hong Kong Harmonised System, the import and export statistics on WEEE are not available.

(3) Amount of export includes re-exports and domestic exports.

(4) The disposal quantity and recovery rate of the main types of waste in 2017 are still being compiled.

3. Over the past three years, the Environment Protection Department inspected some 2 000 container shipments at the port and intercepted 133 illegal waste shipments, with 115 prosecutions completed so far. The total fine meted out by the Court amounts to some \$1.8 million. The types of illegal waste involved were mainly waste flat panel display units, waste cathode ray tubes, disassembled printed circuit boards and waste batteries of notebook computers.

4. The Recycling Fund was launched and opened for applications in October 2015. As at 28 February 2018, approval has been granted by the Advisory Committee on Recycling Fund to 163 projects. Excluding the projects which have been withdrawn by some applicant organisations after their applications were approved, a total of 128 funded projects have been or will soon be commenced, of which 24 are under the Enterprise Support Programme (ESP), 97 are for Standard Projects and 7 are under the Industry Support

Programme (ISP). The processed quantities of recyclables involved in these projects are set out in the table below.

<b>Types of recyclables</b>	<b>Processed quantities of approved projects (tonnes) <sup>(1)</sup></b>
Construction waste	55 300
Food waste/Waste cooking oil	21 700
Waste Electrical and Electronic Equipment	9 600
Waste plastics	8 700
Waste metals	3 700
Waste tyres	2 800
Waste paper	2 800
Used furniture	1 000
Waste expanded polystyrene	300
Others (including used clothes, compact discs, toner cartridges, beverage cartons and spent lubrication oil)	1 600
<b>Total</b>	<b>107 500</b>

Note: (1) The figures are rounded to the nearest hundred.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB068**

**(Question Serial No. 1437)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Government encourages franchised bus companies to deploy environment-friendly buses at busy corridors and supports the Environmental Protection Department (EPD) to carry out the trial of electric buses. In this regard, please advise on the following:

1. What are the specific circumstances of the deployment of environment-friendly buses at busy corridors by the franchised bus companies currently? Please list in table form.
2. What is the trial of electric buses carried out by the franchised bus companies? Has the Government provided relevant subsidies? If yes, what is the respective amount of grants?

Asked by: Hon CHAN Han-pan (Member Question No. (LegCo use): 3)

Reply:

(1) The Government set up a total of 3 franchised bus low emission zones (FBLEZs) in Central, Causeway Bay and Mong Kok at the end of 2015. These FBLEZs are located in areas with busy traffic and high pedestrian flow, where franchised buses accounting for up to 40% of the traffic volume. Requesting franchised bus companies to deploy low emission buses (including buses of Euro IV or above, or Euro II and III buses retrofitted with selective catalytic reduction devices and diesel particulate filters) to ply the routes passing these FBLEZs can improve the roadside air quality.

Locations and details of FBLEZs are tabulated below:

Location of FBLEZs	Number of bus routes operating in FBLEZs in December 2017 <sup>(1)</sup>	Average monthly number of bus trips passing the 3 FBLEZs in 2017	Average monthly number of bus trips served by temporarily deployed non-low emission buses in FBLEZs in 2017 <sup>(2)</sup>	Average monthly percentage of bus trips served by low emission buses in FBLEZs in 2017
Central (junction of Des Voeux Road Central and Pedder Street)	91	620 282	1 857	99.7%
Causeway Bay (Yee Wo Street)	69			
Mong Kok (junction of Nathan Road and Lai Chi Kok Road)	93			

Note:

- (1) Some bus routes operate in more than 1 FBLEZ.
- (2) In case of situations such as traffic congestion, vehicle breakdown, traffic accidents and provision of extra services on an ad hoc basis, franchised bus companies may need to deploy non-low emission buses to operate in FBLEZs occasionally in order to maintain normal bus service.

(2) Electric buses do not have tailpipe emissions, and replacing conventional franchised buses with electric buses can help improve the roadside air quality, particularly the air quality along busy corridors. In this regard, the Government has allocated \$180 million to fully subsidise the franchised bus companies to purchase 36 single-deck electric buses (including 8 supercapacitor buses and 28 battery-electric buses and related charging facilities) to conduct 2-year trials on different routes to assess their operational performance under local conditions.

Currently, 24 battery-electric buses and 2 supercapacitor buses have come into operation, and it is anticipated that most of the remaining electric buses will be put into service progressively in 2018. The average price of each single-deck electric bus with provision and installation of related charging facilities is about \$5 million. Details of the trial scheme are as follows:

<b>Franchised bus company</b>	<b>No. of single-deck electric bus</b>	<b>Manufacturer and model</b>	<b>Service route</b>	<b>Current status</b>
The Kowloon Motor Bus Company (1933) Limited (KMB)	8 supercapacitor buses	China Youngman Automobile Group Company Limited Model: JNP6122UC	284 [Sha Tin Central - Ravana Garden (Circular)]  5M [Kai Tak (Tak Long Estate) - Kowloon Bay Railway Station (Circular)]	2 supercapacitor buses commenced the trial on Route No. 284 in late March 2017. Two more supercapacitor buses will commence services in the first half of 2018.  The remaining 4 supercapacitor buses will commence services in phases in the first half of 2018, subject to the progress of testing of the charging facilities.
	10 battery-electric buses	BYD Auto Industry Company Limited Model: K9R	5C [Star Ferry Pier - Tsz Wan Shan (Central)]  6C [Mei Foo - Kowloon City Ferry Pier]  35A [Tsim Sha Tsui East - On Yam]  42A [Jordan (To Wah Road) - Cheung Hang]  603 [Ping Tin - Central (Central Ferry Piers)]	10 battery-electric buses have commenced services in phases from July 2017 to January 2018.

<b>Franchised bus company</b>	<b>No. of single-deck electric bus</b>	<b>Manufacturer and model</b>	<b>Service route</b>	<b>Current status</b>
Long Win Bus Company Limited (LWB)	4 battery-electric buses	BYD Auto Industry Company Limited Model: K9R	E31 [Tung Chung (Yat Tung Estate Public Transport Terminus) - Tsuen Wan (Discovery Park Bus Terminus)]  S64 [Tung Chung (Yat Tung Estate Public Transport Terminus) - Airport (Passenger Terminal Building) (Circular)]	2 battery-electric buses commenced services in July 2017.  2 battery-electric buses commenced services in February 2018.
Citybus Limited (CTB)	6 battery-electric buses	BYD Auto Industry Company Limited Model: K9R  Great Dragon International Corporation Limited Model: LS-130-116  3 buses for each model	11 [Central (Central Ferry Piers) - Jardine's Lookout (Circular)]  12 [Central (Central Ferry Piers) - Robinson Road (Circular)]  25A [Wan Chai (Hong Kong Convention & Exhibition Centre Extension) - Braemar Hill (Circular)]	The first batch of 5 battery-electric buses from BYD commenced services on five routes on Hong Kong Island in December 2015.  5 battery-electric buses from Great Dragon also commenced services in June 2017.

<b>Franchised bus company</b>	<b>No. of single-deck electric bus</b>	<b>Manufacturer and model</b>	<b>Service route</b>	<b>Current status</b>
New World First Bus Services Limited (NWFB)	4 battery-electric buses	BYD Auto Industry Company Limited Model: K9R  Great Dragon International Corporation Limited Model: LS-130-116  2 buses for each model	78 [Wong Chuk Hang Station - Wah Kwai Estate (Circular)]  81 [Lai Tak Tsuen - Chai Wan (Hing Wah Estate)]	
New Lantao Bus Company (1973) Limited (NLB)	4 battery-electric buses	BYD Auto Industry Company Limited Model: K9R (2 buses)  The other 2 battery-electric buses have to be re-tendered.	38 [Tung Chung (Yat Tung Estate Public Transport Interchange) - Tung Chung Station Bus Terminus (Circular)]  B2 [Yuen Long Station - Shenzhen Bay Port]	2 battery-electric buses will commence services in the first half of 2018, subject to the progress of testing of the charging facilities.  It is anticipated that 2 battery-electric buses will commence services in 2019, subject to the progress of re-tendering.

To monitor the trial of electric franchised buses, the Government has set up a task force, comprising experts from the academia and representatives from participating franchised bus companies, the Environmental Protection Department and the Transport Department. If the trial results are satisfactory, the Government will encourage franchised bus companies to use electric buses on a larger scale, taking into account the affordability of the franchised bus companies and passengers.

- End -

**CONTROLLING OFFICER'S REPLY****ENB069****(Question Serial No. 1443)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Ex-gratia Payment Scheme for Phasing Out Pre-Euro IV Diesel Commercial Vehicles and the Tax Incentives for Environment-friendly Commercial Vehicles currently implemented by the Government, please advise on the following:

1. What are the numbers of applications respectively under the above two schemes? What are the amounts respectively involved?
2. Will the Administration conduct a review after completion of the schemes? If yes, what is the time of review?

Asked by: Hon CHAN Han-pan (Member Question No. (LegCo use): 9)

Reply:

Diesel commercial vehicles (DCVs) are a major source of roadside air pollution in Hong Kong. To improve roadside air quality and better protect public health, the Environmental Protection Department (EPD) launched an incentive-cum-regulatory scheme in March 2014 to phase out by end of 2019 progressively some 82 000 pre-Euro IV DCVs with a funding of \$11.4 billion for offering ex-gratia payment to the affected vehicle owners. The ex-gratia payment applications for pre-Euro, Euro I and II DCVs closed at the end of 2015, end of 2016 and end of 2017 respectively. The ex-gratia payment applications for Euro III DCVs will close at the end of 2019. Up to end of February 2018, about 60 500 DCVs have been granted ex-gratia payment, which represent about 74% of the eligible vehicles, involving a subsidy amount of about \$8.2 billion. The Government will closely monitor the overall implementation of the scheme and conduct a timely review of its effectiveness.

As for the Tax Incentives Scheme for Environment-friendly Commercial Vehicles, it is a recurrent scheme to encourage buyers of commercial vehicles to choose environment-friendly (EF) models with exhaust emissions that outperform the statutory air pollutant emission standards through offering first registration tax (FRT) concession. EPD has reviewed annually the qualifying standards for EF commercial vehicles under the



scheme in the light of vehicle technological advancement and the prevailing statutory emission standards for newly registered vehicles such that the tax incentive is available only to commercial vehicles with an outstanding environmental performance. From implementation of the Tax Incentives Scheme for EF Commercial Vehicles in April 2008 to the end of February 2018, the number of newly registered EF commercial vehicles was about 51 000 and the amount of FRT concession was about \$1.4 billion.

- End -

**CONTROLLING OFFICER'S REPLY****ENB070****(Question Serial No. 2641)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Hong Kong Blueprint for Sustainable Use of Resources 2013–2022 (the Blueprint) sets out the government targets of “reducing the current per capita municipal solid waste (MSW) disposal rate of 1.27 kg per day to 0.8 kg per day by 2022”, including reducing the per capita MSW disposal rate to 1.0 kg in 2017. From 2013 to 2016, the per capita MSW disposal rate increased to 1.41 kg from 1.33 kg. At the same time, the MSW recovery rate fell to 34% from 37%, which was the lowest since 2000. In this connection, would the Department:

1. Please set out in table form details of various policies or measures for reducing MSW implemented in each year since 2013:

- a) the names of the policies or measures;
- b) the details and implementation schedules;
- c) the personnel establishment and manpower resources involved;
- d) the expenditure;
- e) the effectiveness (i.e. the amount and percentage of solid waste reduced by the measures, the percentage of the amount of solid waste reduced in the overall amount of MSW, etc.)

2. Please set out in table form details of various planned policies or measures for reducing MSW to be implemented in each year from 2018-2022:

- a) the names of the planned policies or measures;
- b) the planned details and implementation schedules;
- c) the estimated personnel establishment and manpower resources involved;
- d) the estimated expenditure;
- e) the estimated effectiveness (i.e. the amount and percentage of solid waste reduced by the measures, the percentage of the amount of solid waste reduced in the overall amount of MSW, etc.);

3. Has the Environment Bureau earmarked manpower and provision for reviewing and

updating the Blueprint and the relevant policy objectives in the next 3 years? If yes, what are the details of the review, the schedules, as well as the relevant departments, manpower and expenditure involved? If not, what are the reasons?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 33)

Reply:

1. and 2.

The Environment Bureau published the Hong Kong Blueprint for Sustainable Use of Resources 2013-2022 (the Blueprint) in 2013, setting out the target to reduce the Municipal Solid Waste (MSW) disposal rate by 40% on a per capita basis by 2022. To achieve this target, the Environmental Protection Department (EPD) has been actively taking forward various waste management measures set out in the Blueprint to reduce waste at source and encourage reuse and recycling. The key measures and the details are as follows:

### **Municipal Solid Waste charging**

In October 2017, the Government announced the proposed modifications to the implementation arrangements for MSW charging. The community and various stakeholders responded positively in general to the modified arrangements. We have been proactively undertaking relevant preparatory work, including drafting of the relevant bill, maintaining close communication with the stakeholders of various sectors to formulate specific implementation details, planning the production and sales arrangements of the designated garbage bags, implementing a waste reduction and recycling promotional campaign under the central theme of “Dump Less, Save More”, etc. We are proactively taking forward the above preparatory work and seeking to introduce the relevant bill to the Legislative Council as soon as possible.

Meanwhile, the Environment and Conservation Fund has since 2015 provided funding support of about \$55 million to non-profit-making organisations and bodies for organising community involvement projects in different types of premises to try out MSW charging in actual settings. The relevant experiences can provide useful references for us to develop the best practice guides on the implementation of MSW charging. As at March 2018, more than 50 community involvement projects on MSW charging have been funded.

There are 49 posts responsible for undertaking various preparatory work in 2018-19. We have earmarked about \$32 million in 2018-19 for the preparatory work. Experience of other cities shows that the implementation of quantity-based waste charging can effectively reduce the overall waste disposal by more than 30%.

### **Producer Responsibility Scheme**

As regards promoting the producer responsibility scheme (PRS), we are actively undertaking the preparatory work for the PRS on glass beverage containers for its full implementation targeted in 2018-19. Among other things, the Government awarded two glass management contracts for Hong Kong Island (including Islands district) and the New Territories regions through open tender in November 2017 to provide glass container collection and treatment services for the two regions. Regarding the contract for the Kowloon region, the tendering exercise is underway and is expected to be completed with

the contract awarded in the second quarter of 2018. Besides, we are drafting the relevant subsidiary legislation to provide for the operational details for the implementation of the scheme. We aim to submit the subsidiary legislation to the Legislative Council for scrutiny later this year. Moreover, the PRS on waste electrical and electronic equipment will be fully implemented in 2018. From 1 August 2018 onwards, suppliers who distribute regulated electrical equipment (REE) are required to register with the EPD as registered suppliers and pay a recycling levy for REE distributed in Hong Kong, whilst sellers of REE are required to arrange free statutory removal service for consumers to dispose of an equipment of the same class that they intend to abandon. The disposal licensing control, import and export permit control and landfill disposal ban in respect of e-waste will come into effect from 31 December 2018 onwards.

The EPD has also appointed a consultant through open tender in October 2017 to conduct a feasibility study on how to implement a PRS targeting suitable plastic containers, mainly those carrying beverages or personal care products. The consultant will review and analyse the experience of other jurisdictions and the actual situation of Hong Kong, as well as the implication of the introduction of the PRS on different stakeholders. In the process, the consultant will engage with the relevant trade associations and seek their views. The EPD expects to complete the whole study in 18 months.

### **Waste Management Infrastructure**

The EPD has actively allocated resources to perfect waste management infrastructure, including the T·PARK, the Organic Resources Recovery Centres (ORRCs) Phase 1, various landfill extension schemes, the Integrated Waste Management Facilities Phase 1 and development of the WEEE·PARK. Among these, the T·PARK was commissioned in 2015, the WEEE·PARK commenced initial operation in October 2017 and fully operated in March 2018, and the ORRC Phase 1 will commence operation within 2018.

### **EcoPark**

The development of the EcoPark is one of the Government's important initiatives to promote the local recycling industry. The lots in the EcoPark installed with basic utilities (including power supply, sewerage system and telecommunication etc.) are leased at affordable rent to recycling industry. The tenants can also use the common infrastructure in the EcoPark (including internal road network, barging facilities and various common ancillary facilities in the multi-functional Administration Building). These arrangements could reduce tenants' capital investment, thereby encouraging investment in advanced technology and value-added recycling processes. At present, a total of 11 lots in the EcoPark have been leased to private recyclers. Among them, 9 tenants engaged in the recycling of waste cooking oil, waste metals, waste wood, waste electrical and electronic equipment (WEEE), waste plastics, waste construction materials, waste glass, food waste and waste rubber tyres have progressively commenced plant operation since 2010, and there is one lot on which demolition works of the existing plant and site reinstatement works are being carried out owing to the expiry of the lease. The EPD is examining how to incubate a local manufacturing industry using recycled materials leveraging on the fully-serviced land and ancillary facilities in the EcoPark. As waste paper makes up the largest proportion of local recyclables, the development of a recycling industry capable of processing local waste paper on about 2 hectares of land in the EcoPark is currently accorded priority.

### **On-going recycling work**

Through various measures such as implementing the territory-wide Programmes on Source Separation of Domestic Waste and Commercial & Industrial Waste, establishing a Community Recycling Network, launching various specific recycling programmes and offering funding support to community recycling centres, over 80% of Hong Kong people have now been provided with convenient recovery facilities near where they live and work such that they may participate in source separation of waste in order to reduce waste disposal and supply recyclable materials to the recycling industry. The types of recyclable materials have also been progressively expanded to cover waste paper, metal, plastics, rechargeable batteries, glass bottles, electric and electronic equipment, etc.. Meanwhile, we have been promoting the “use less, waste less” and “clean recycling” messages to the public through various channels and publicity and education efforts, and enhancing recovery and recycling in the community. We will take forward the following measures in the coming year:

- (i) Another round of publicity and public education programme on clean recycling has been launched to enhance public awareness on waste recycling so as to increase the recyclability and economic value of recyclables, with focus on encouraging the public to practise clean separation and recycling on three types of paper (i.e. newspapers, office papers and paperboards) and plastic bottles (including plastic containers of beverages or personal care products) to be recovered first. Such programme was launched in December 2017.
- (ii) The first stage pilot outreaching service will be launched in 2018 to help step up on-site education and render on-site assistance and support to the property management companies and residents to practise proper waste source separation and clean recycling. The outreaching service will 32 staff in the Environmental Protection Officer grade and the Environmental Protection Inspector grade. The manpower expenditure involved is about \$16,000,000.
- (iii) A pilot district central collection service for waste plastic bottles is expected to be introduced in 2018 to centralise the collection service to mainly receive waste plastic bottles collected at the Community Recycling Centre and the Community Green Station in the local district. These waste plastic bottles will be handled and cleaned properly and turned into plastic raw materials for export to the Mainland or other markets. The pilot scheme will involve 9 staff in the Environmental Protection Officer grade and the Environmental Protection Inspector grade. The manpower expenditure involved is about \$5,300,000. Apart from manpower expenditure, the estimated expenditure of the pilot scheme is about \$7,100,000.

### **Community Green Stations:**

The EPD is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2017, 5 CGSs have progressively been in operation, namely the Sha Tin CGS and the Eastern CGS which commenced operation in 2015 and the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS which commenced operation in 2017. The latest development of individual CGSs is tabulated below:

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Sha Tin CGS	10 On Ping Street, Shek Mun	The CGS commenced operation in May 2015. In 2017, the CGS collected about 415 tonnes of recyclables.
Eastern CGS	30 Oi Shun Road, Shau Kei Wan	The CGS commenced operation in August 2015. In 2017, the CGS collected about 395 tonnes of recyclables.
Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables.
Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables.
Sham Shui Po CGS	339 Tung Chau Street	The CGS commenced operation in October 2017. As at the end of 2017, the CGS collected about 17 tonnes of recyclables.
Tuen Mun CGS	9 Tuen Yee Street	The tendering for the operation contract is underway. The CGSs are expected to commence operation in the second half of 2018.
Kwai Tsing CGS	12 Tam Kon Shan Road, Tsing Yi	
Tai Po CGS	Between Ting Kok Road and Dai Wah Street	Construction works are underway, which are expected to be completed in the second half of 2018.
Islands CGS	Junction of Yu Tung Road and Chung Mun Road, Tung Chung, Lantau	
Sai Kung CGS	Po Lam Lane, near Po Hong Road and Po Lam Road North, Tseung Kwan O	Design and construction works are in progress.
Wan Chai CGS	Junction of Wan Shing Street and Hung Hing Road	A design idea competition is underway. The design and construction works are expected to commence in the second half of 2018.
Tsuen Wan CGS	Hoi Shing Road, near Hoi Kok Street	Sites have been confirmed and planning of construction works is in progress.
Wong Tai Sin CGS	Junction of Yuk Wah Street and Po Leung Lane, Tsz Wan Shan	

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Kowloon City CGS, Southern CGS, Yau Tsim Mong CGS, Central and Western CGS and North CGS	Site to be confirmed	We have been following up the views from District Councils. Taking into account the actual operating experience in other projects, we are continuing with site search and other associated preparation work.

Since inception the CGSs have been running smoothly. We will take into account their operation statistics to evaluate the effectiveness of each of the CGSs. Besides, we will continue to take into account views from various stakeholders and make suitable adjustment to the work of the CGSs on environmental education and recycling support as and when necessary.

3. We will continue to actively implement the waste management measures stated in the Blueprint to reduce the per capita MSW disposal rate in Hong Kong.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB071**

**(Question Serial No. 2642)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

On promoting the use of electric vehicles (EVs):

- a) It is learnt that the Government is now conducting reviews on various policies and measures for promoting the use of EVs, including provision of more charging facilities, relevant guidelines and planning standards, provision of charging facilities in roadside parking spaces, etc. Please set out a summary of various research projects being conducted by the Government to review the policy of promoting EVs, participating departments, specific discussion details and their timetables.
- b) What were the work details of the Steering Committee on the Promotion of Electric Vehicles last year? How many meetings were convened last year? What was the attendance rate of the members?
- c) The first registration tax (FRT) concessions for EVs have not been increased in the Budget this year. Has the Administration reviewed the effectiveness of providing \$97,500 FRT concessions for electric private cars last year? If yes, what is the review outcome? If not, what are the reasons?
- d) The Government issued the Hong Kong's Climate Change Strategy and Action Agenda in 2010, setting the target of 30 per cent of the private cars in Hong Kong being electric or hybrid vehicles by 2020. Is this "30 per cent" still the work target of the Government? If yes, how will it promote and achieve this target in future? If not, what are the reasons? Will the Government consider setting relevant targets, for instance, requiring a certain percentage of private cars to be electric private cars or the total number of electric private cars to reach a certain level in Hong Kong by a certain year?
- e) Currently, timetables are set to phase out fuel-driven vehicles in a number of countries and regions around the world. Has the Government planned to catch up with the



general international trend of progressively phasing out fuel-driven vehicles? If yes, what is the specific timetable? If not, what are the reasons?

- f) Has the Government estimated the proportion between the number of electric private cars and the number of charging facilities? If yes, on what basis did the Government do the estimation? What proportion does the Government consider appropriate? If not, on what basis does the Government judge whether the charging facilities are sufficient? In addition, for contrast purpose, on what basis does the Government determine an appropriate proportion between the number of fuel-driven private cars and the number of petrol filling stations? How does the Government estimate? What proportion does the Government consider appropriate?
- g) Please set out the numbers of EVs and non-EVs currently used by various government departments. Will the Government study the establishment of procurement rules for procurement of EVs by government departments and the public sector in 2018-19? If yes, what are the details? What are the relevant manpower and expenditure?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 34)

Reply:

- a) The Government is reviewing the various policies and measures on promoting the use of electric vehicles (EVs). To encourage installation of charging facilities to tie in with the usage of EVs, our efforts will include enhancing the public EV charging facilities provided at government car parks and establishing a publishing platform for their real time usage, encouraging installation of EV charging facilities in car parks of private and commercial buildings, and reviewing the relevant technical and planning guidelines, etc. for installation of EV charging facilities in new buildings. The review is led by the Environment Bureau (ENB), and the policy bureaux and departments involved include the ENB, Home Affairs Bureau, Innovation and Technology Bureau, Transport and Housing Bureau, Development Bureau, Buildings Department, Electrical and Mechanical Services Department (EMSD), Environmental Protection Department (EPD), Government Property Agency, Housing Department, Lands Department, Planning Department, Transport Department, Leisure and Cultural Services Department and Home Affairs Department. As the review is still in progress, there is no completion schedule at the moment.
- b) The Steering Committee on the Promotion of Electric Vehicles (the Steering Committee) was established in 2009 and chaired by the Financial Secretary. The Steering Committee convened two meetings last year to provide views on the strategies and measures to promote the use of EVs in Hong Kong for careful consideration by the Government. The overall attendance of the two Committee meetings exceeded 70%.
- c) The Government's standing policy is to encourage the public to use public transport as far as possible, and should they need to acquire private cars (PCs), choose electric private cars (e-PCs). After capping the FRT concessions for e-PCs at \$97,500 in 2017-18, the Government has been closely monitoring the latest situation. Taking into account factors such as the technological development and market situation of EVs, road traffic conditions and views of stakeholders, the Government considers that on one hand, it has to control the growth of PCs to avoid causing traffic congestion and aggravating roadside air pollution, and on the other hand, it also hopes to encourage car owners to go for EVs as far as possible

when purchasing PCs. As such, apart from continuing with the current FRT concession up to \$97,500 from 28 February 2018 to 31 March 2021, the Government has introduced the new “One-for-One Replacement” Scheme (Scheme) in the above period to allow eligible existing car owners who buy a new e-PC and scrap their own eligible old PC to enjoy a higher FRT concession of up to \$250,000. The Government believes that the new Scheme will provide greater economic incentives to encourage eligible existing PC owners to purchase e-PCs when replacing their cars.

d) The Government has not set targets for each type of vehicles. Hong Kong is a free market. The Government’s policy on promoting EVs is to establish measures to encourage and assist market development. The sales of EVs can be affected by various factors such as local conditions, development of EVs and the related technologies, economic situations, EV prices, vehicle owners’ preferences and availability of suitable EV models and their supply, etc. Therefore, we are unable to estimate the future sales of EVs.

e) To mitigate tailpipe emissions and climate change, developing clean energy vehicles (CEVs) has become a global trend. Individual places have set out timetables or targets for a total ban on the sales of PCs solely using petrol or diesel. The Government is collating relevant information, including the specific plans and measures to be taken by these places, and the latest development of various manufacturers in producing CEVs, with a view to exploring the availability of CEVs suitable for use in Hong Kong and their conditions of use, for considering our next step.

f) Regarding the charging arrangements for e-PCs, it has always been the Government’s policy direction that e-PC owners should perform daily charging of their e-PCs by using charging facilities at their home, workplace or other suitable places (including charging facilities provided by e-PC suppliers). Public charging facilities in Hong Kong are supplementary in nature, set up for EVs to top up their batteries at times of occasional needs. They do not serve as daily charging facilities or their alternatives. Potential buyers of e-PCs should fully consider the daily charging arrangements required and should not rely on public charging facilities for daily charging of their e-PCs.

The change in the number of public charging facilities is related to a number of factors, including the technological development and market situation of e-PCs and their charging facilities, etc., which does not necessarily require the setting of a proportion with the number of e-PCs. The International Council on Clean Transportation published a report in October 2017, indicating that there was no standard for the proportion of EVs to public chargers. The proportion in different places may vary from several times to 25 times, and the figure can only reflect the distribution of EV chargers caused by the actual situation in different countries.

In early 2010s, the driving range of general e-PCs was only around 100 kilometres, thus requiring adequate public charging facilities. Nowadays, the driving range of e-PCs is at least around 150 kilometres, while the daily mileage of most PCs in Hong Kong is a few tens of kilometres. As such, an e-PC should be able to sustain a whole day’s journey after a full charging at its owner’s home or workplace. The need for e-PCs to top up their batteries by public chargers should be minimal. Meanwhile, utilisation of public chargers in government car parks remains low. From January 2016 to September 2017, the average utilisation rate of standard/medium chargers in government car parks was about 13 times per

month per charger, which was less than half a time per day. Over the same period, the average utilisation rate of standard/medium chargers installed by the two power companies in public car parks was around 38 times per month per charger, amounting to slightly more than once per day, which was also rather low. When considering the provision of more public chargers, the Government has to take account of not only the parking needs of drivers but also the utilisation rate of existing public chargers to ensure cost effectiveness.

As to making a decision whether to allocate a site for construction of a petrol filling station (PFS), the Government will refer to the Hong Kong Planning Standards and Guidelines as the general guidelines, and decide whether a site should be allocated for construction of a PFS according to anticipated development and traffic flow of the respective district. When considering a new PFS site, consideration should be given to all relevant factors, including land use compatibility, traffic flow, safety of road design, environmental considerations and fire safety, as well as whether there are other uses of the development sites, etc. Each case would be considered on its individual merits. When reserving a PFS site in new development areas, the Administration will consult relevant departments to ascertain the anticipated demand for such facilities. The ENB will work with other relevant government departments to ensure that the number of PFSs can meet the demand for vehicle fuels.

g) The use of EVs and non-EVs by various government departments as at the end of December 2017 is as follows:

<b>Policy bureaux/departments</b>	<b>No. of EVs</b>	<b>No. of non-EVs</b>
Hong Kong Police Force	122	2 366
Water Supplies Department	17	236
EMSD	12	202
Agriculture, Fisheries and Conservation Department	10	204
Post Office	9	269
Buildings Department	8	28
Food and Environmental Hygiene Department	7	721
Lands Department	7	159
Drainage Services Department	6	42
Fire Services Department	6	711
Customs and Excise Department	5	184
Leisure and Cultural Services Department	5	151
Transport Department	5	157
Civil Aviation Department	4	11
Housing Department	4	47
Social Welfare Department	3	26
EPD	3	44
Administration Wing	2	25
Civil Engineering and Development Department	2	42
Independent Commission Against Corruption	2	33
Labour Department	2	25
Working Family and Student Financial Assistance Agency	2	0

<b>Policy bureaux/departments</b>	<b>No. of EVs</b>	<b>No. of non-EVs</b>
Architectural Services Department	1	9
Chief Executive's Office	1	7
Correctional Services Department	1	125
Department of Health	1	55
Environment Bureau	1	0
Government Logistics Department	1	61
Highways Department	1	37
Home Affairs Bureau	1	6
Office for Film, Newspaper and Article Administration	1	20
Planning Department	1	11
Radio Television Hong Kong	1	22
Other policy bureaux/departments	-	263
<b>Total</b>	<b>254</b>	<b>6 299</b>

The adoption of EVs by the Government is part of its measures to promote EVs. When procuring vehicles, the Government will give preference to those which comply with environmental and energy efficiency standards, including EVs. Subject to the availability of suitable EV models in the market and their meeting the operational needs and other requirements (such as sufficient choices and competition in the market) of government departments, the Government will continue to procure EVs to replace the vehicles due to retire.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB072**

**(Question Serial No. 2643)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the newly announced “One-for-One Replacement” Tax Concession Scheme for electric private cars (paragraph 170):

- a) The Transport Department anticipates that 170 000 “old private cars” are eligible for the Scheme. Has the Department estimated how many vehicles will be replaced by electric vehicles (EVs) through this scheme during the scheme period? If yes, what are the details? What is the increase in the number of EVs in Hong Kong in the coming 3 years as anticipated by the Government?
- b) If the ownership period is changed from “3 years or more without interruption” to “12 months”, how many “old private cars” are estimated by the Department to be eligible for the scheme?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 35)

Reply:

It is the Government’s standing policy to encourage the public to use public transport as far as possible, and should they need to acquire private cars (PCs), choose electric vehicles (EVs). Taking into account factors such as the technological development and market situation of EVs, road traffic conditions and views of stakeholders, the Government considers that on one hand, it has to control the growth of PCs to avoid causing traffic congestion and aggravating roadside air pollution, and on the other hand, it also hopes to encourage car owners to go for EVs as far as possible when purchasing PCs. As such, apart from continuing with the current first registration tax (FRT) concession up to \$97,500 from 28 February 2018 to 31 March 2021, the Government has introduced the new “One-for-One Replacement” Scheme (the Scheme) in the same period to allow eligible existing car owners who buy a new electric private car (e-PC) and scrap their own eligible old PC to enjoy a higher FRT concession of up to \$250,000.

- a) The Government believes that the Scheme will provide greater economic incentives to encourage eligible existing PC owners to purchase e-PCs when replacing their cars. However, the sales of EVs are affected by various factors (such as the local situation, developments of EVs and relevant technologies, economic environment, pricing of EVs, preferences of car owners as well as suitable EV models and their supplies, etc.). Therefore, we are unable to estimate the future sales number of EVs.
- b) According to the information of the Transport Department (TD), as at 9 March 2018, about 170 000 PCs met the two criteria that the vehicles “must have been first registered for 6 years or more” and “owned by the owner for 3 years or more without interruption”. TD anticipates that by the time the Scheme ends on 31 March 2021, the number of PCs meeting the above two criteria will increase to about 430 000, i.e. about 3/4 of the total number. Assuming that the number of licensed PCs remains unchanged, if the eligibility criterion on the “Old PC” ownership period under the Scheme is changed from “the owners must have owned the vehicles for 3 years or more without interruption” to “the owners must have owned the vehicles for 12 months or more without interruption”, some PCs would meet the eligibility criterion on the vehicle ownership period earlier. However, the total number of PCs (i.e. 430 000) meeting the two criteria that the vehicles “must have been first registered for 6 years or more in Hong Kong” and “the owners must have owned the vehicles for 1 year or more without interruption” would remain unchanged by the time the Scheme ends on 31 March 2021. The Government indicated that the requirement for the car owner to be a registered owner of an “old PC” for 3 years or more without interruption under the Scheme is to prevent non-genuine PC users from gathering a large number of old PCs from overseas or second-hand markets to participate in the Scheme for profit making.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB073**

**(Question Serial No. 2644)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the concessions on floor area for car parks that have put in place the necessary Electric Vehicle (EV) charging infrastructure:

- a) Please set out the new car parks that have put in place the necessary EV charging infrastructure and have successfully applied for floor area concessions since 2011, the names of the developers and the floor area concessions that have been granted.
- b) The Government has, since April 2011, granted concessions on gross floor area for car parks in new buildings to encourage developers to put in place the necessary EV charging infrastructure in the car parks of new buildings during the building construction stage. However, the Government did not require the developers to provide connection to the power supply. Has the Government reviewed the relevant policies? What are the specific measures, timetable, manpower and expenditure?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 36)

Reply:

- a) From 2013 to 2017, the Buildings Department (BD) approved a total of 339 building plans involving the exemption of car parks of new buildings from gross floor area (GFA) calculations. Upon completion of these developments, 38 975 parking spaces will be provided with electric vehicle (EV) charging-enabling infrastructure. The BD has not compiled a list of the buildings where the car parks are exempted from GFA calculations to provide EV charging-enabling infrastructure, the names of the developers and information on the GFA concessions granted.
- b) In light of the recommendations of the Council for Sustainable Development, the Government introduced a package of measures in April 2011 to enhance the design standard of new buildings to foster a quality and sustainable built environment. They include tightening GFA concessions to mitigate the problem of “inflated buildings” and

meet public aspirations for more green and amenity features in development projects. One of the tightened requirements is that, instead of allowing space designated for car parks in an approved plan to be fully exempted from GFA calculations as in the past, only underground car parks provided with infrastructure for enabling EV charging facilities at each parking space can be fully exempted from GFA calculations.

The main consideration for encouraging the provision of underground car parks is to address the public concern that car parks are a significant contributor to building bulk and height. By launching the new measures, the Government also aims to encourage developers to put in place EV charging-enabling infrastructure in car parks of new private buildings so that if EVs are widely used in the future, owners of parking spaces will not be hindered from installing the required EV chargers due to constraints in respect of power supply capacity, cabling and conduits, etc.

On this principle, the Environment Bureau and the Electrical and Mechanical Services Department have issued the Technical Guidelines for Electric Vehicle Charging-enabling for Car Parks of New Building Developments (the Guidelines), stipulating that future GFA concessions for car parks of new buildings will only be granted if car parks meet the basic conditions of providing EV charging-enabling infrastructure. These basic conditions include the provision of switchboards, distribution boards, cabling, conduits and trunking so that owners of parking spaces may install EV chargers at their parking spaces according to their specific needs in the future. As EVs were still at the initial development stage back then, mainstream standards for EV chargers and related installations were not established yet. Therefore, the Guidelines have not required for installing EV chargers and arranging for electricity meter connection at parking spaces provided with EV charging-enabling infrastructure.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts will include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs, retrofitting existing car parks with charging facilities and updating the relevant guidelines and planning standards as necessary. Specific timetable and the estimated expenditure are not available for the time being.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB074**

**(Question Serial No. 1850)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (700) General non-recurrent

Programme:

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

For the next financial year, what are the estimated expenditure and work plan for the new item "Countryside Conservation Office"? Why is there a need to seek funding for it in the context of the Appropriation Bill 2018 instead of seeking approval from the Legco Finance Committee separately?

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 1112)

Reply:

The Chief Executive announced in her 2017 Policy Address that a Countryside Conservation Office (CCO) would be established to co-ordinate conservation projects that would promote sustainable development of remote countryside. The CCO will be set up in 2018-19, which is expected to comprise about 28 officers from various grades. The increase in expenditure under the Programme is mainly for the staff costs of these officers (about \$19.61 million) and cashflow needs earmarked for launching conservation activities and projects mentioned in the paragraph below (about \$10 million).

The Government has earmarked \$1 billion for such conservation and revitalisation efforts, as well as minor improvement works. The CCO plans to support collaborative interaction and co-operation of non-governmental organisations (NGOs) and villagers with half of the \$1 billion mentioned above, i.e. \$500 million, under non-recurrent account. For instance, the long-term conservation and revitalisation of certain areas may be funded by an approach similar to that of the Nature Conservation Management Agreement Scheme under the Environment and Conservation Fund. The CCO also plans to spend the remaining \$500 million on suitable minor improvement works and rehabilitating the existing architectural environment in the countryside.

The CCO will devise future specific work plans and projects upon establishment. As a priority, the CCO will enhance countryside revitalisation in Lai Chi Wo, as well as ecological conservation in Sha Lo Tung, and will keep under review the implementation of

these initiatives and their effectiveness from time to time, with the aim of extending the initiatives progressively to other remote countryside areas.

We will set up an advisory committee (AC) comprising non-official members including non-government stakeholders such as scholars, professionals, rural/district stakeholders and green groups. The main duties of the AC are to examine applications on the relevant conservation and revitalisation projects (not including minor improvement works) submitted by NGOs and monitor the implementation of approved projects and proposals. The CCO will consult the AC on the scope of and application procedures for conservation and revitalisation projects.

It is not a new arrangement to include funding proposals for commitments under the General Revenue Account, including proposals for creating or increasing expenditure ceilings for commitment items, in the draft Estimates for consideration by the Legislative Council in the context of the Appropriation Bill. The Government explained the relevant arrangements to the Finance Committee in early 2015. We had submitted relevant information to the Panel on Environmental Affairs in December 2017 before including the establishment of the CCO and related items into the draft Estimates. Besides, we have also set out the commitment required for the proposal under the Subhead of Expenditure of the Environmental Protection Department, and have provided information appropriately in the Controlling Officer's Report for Members' consideration.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB075**

**(Question Serial No. 1685)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the establishment of the Countryside Conservation Office (the Office), please advise this Committee on the following:

1. Whether the Office will involve engagement of additional staff or secondment from other departments? If yes, please provide the estimated number of staff to be engaged, the expenditure and other details.
2. The Bureau has indicated that the priority tasks include interacting and collaborating with non-government organisations on diversified and innovative activities as well as planning enhancement to countryside revitalisation efforts in Lai Chi Wo, and implementing an ecological conservation project in Sha Lo Tung. Has the Government set a timetable for these objectives? If yes, please provide details.

Asked by: Hon CHEUNG Wah-fung, Christopher (Member Question No. (LegCo use): 36)

Reply:

The Chief Executive announced in her 2017 Policy Address that a Countryside Conservation Office (CCO) would be established to co-ordinate conservation projects that would promote sustainable development of remote countryside. The CCO will be set up in 2018-19, which is expected to comprise about 28 officers from various grades including 1 Administrative Officer Staff Grade C, 1 Senior Environmental Protection Officer, 3 Environmental Protection Officers/Assistant Environmental Protection Officers, 1 Senior Environmental Protection Inspector, 2 Environmental Protection Inspectors, 1 Chief Executive Officer, 1 Senior Executive Officer, 2 Executive Officer Is, 2 Executive Officer IIs, 2 Clerical Officers, 4 Assistant Clerical Officers, 1 Personal Secretary I, 1 Senior Engineer, 1 Engineer/Assistant Engineer, 1 Architect/Assistant Architect, 1 Town Planner/Assistant Town Planner, 1 Landscape Architect/Assistant Landscape Architect, 1 Forestry Officer/Assistant Forestry Officer and 1 Liaison Officer I. The increase in

expenditure under the Programme mainly includes the staff costs of these officers (about \$19.61 million) and cashflow needs earmarked for launching conservation activities and projects mentioned in the paragraph below (about \$10 million).

The Government has earmarked \$1 billion for such conservation and revitalisation efforts, as well as minor improvement works. The CCO plans to support collaborative interaction and co-operation of non-governmental organisations (NGOs) and villagers with half of the \$1 billion mentioned above, i.e. \$500 million, under non-recurrent account. For instance, the long-term conservation and revitalisation of certain areas may be funded by an approach similar to that of the Nature Conservation Management Agreement Scheme under the Environment and Conservation Fund. The CCO also plans to spend the remaining \$500 million on suitable minor improvement works and rehabilitating the existing architectural environment in the countryside.

The CCO will devise future specific work plans and projects upon establishment. As a priority, the CCO will enhance countryside revitalisation in Lai Chi Wo, as well as ecological conservation in Sha Lo Tung, and will keep under review the implementation of these initiatives and their effectiveness from time to time, with the aim of extending the initiatives progressively to other remote countryside areas.

We will set up an advisory committee (AC) comprising non-official members including non-government stakeholders such as scholars, professionals, rural/district stakeholders and green groups. The main duties of the AC are to examine applications on the relevant conservation and revitalisation projects (not including minor improvement works) submitted by NGOs and monitor the implementation of approved projects and proposals. The CCO will consult the AC on the scope of and application procedures for conservation and revitalisation projects.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB076**

**(Question Serial No. 0106)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding continuing to promote reduction of food waste and on-site/off-site recycling of unavoidable food waste under the Food Wise Hong Kong Campaign in 2018-19, please provide details, including specific measures, the progress of the Campaign, the number of participating merchants, and the manpower and expenditure involved.

Asked by: Hon CHEUNG Yu-yan, Tommy (Member Question No. (LegCo use): 38)

Reply:

The Food Wise Hong Kong Campaign (the Campaign) has promoted a food wise and waste less culture and encouraged behavioural change to reduce food waste in the community through various schemes and activities since its launching in 2013. The schemes and activities held in 2017-18 include:

- The Food Wise Charter – As at February this year, about 730 organisations have signed the Food Wise Charter and are committed to reducing food waste. The signatories include public organisations and public utilities, the commercial and industrial sector, food and beverage sector, hotel sector, property development and management sector, higher education institutions, secondary schools, primary schools, kindergartens, etc.
- “Food Wise” Talk – As at February this year, 82 “Food Wise” talks were held by the Government with over 6 600 participants. The talks helped promote the “Food Wise” messages and mainly introduced the food waste issues, treatment of food waste, food waste separation and recycling, as well as the Campaign, etc.
- “Food Wise” Roving Exhibition – As at February this year, a total of 18 roving exhibitions were held by the Government at various districts in Hong Kong to bring the message of food wise and waste less to the community and encourage the public to reduce food waste at source. The roving exhibitions featured display panels with food

waste reduction tips, including food trimmings for the second dish recipes, tactics of food storage and purchase management, etc., and let the public share their “Food Wise” wishes and opinions on the exhibition board. The exhibitions attracted a total of over 24 000 visitors.

- The “Big Waster” Facebook and Instagram page – The “Big Waster” symbolising food wastage in the Campaign has strengthened interaction with supporters, particularly the young people, through Facebook and Instagram page in which information on food waste reduction is provided. Up to February this year, the “Big Waster” Facebook has received more than 52 000 “likes” and there are about 3 000 “followers” on Instagram.
- The Food Wise Eateries Scheme – To continue to encourage the food and beverage sector to offer portioned meals for customers to choose from, so as to avoid the generation of food waste. As at February this year, about 1 080 eateries have enrolled in the scheme, among which about 310 and 430 eateries have been awarded with gold class and silver class status respectively.

The Government will continue to take forward the above schemes and activities in 2018-19. In addition, to tie in with the commissioning of the Organic Resources Recovery Centre (ORRC) Phase 1 in 2018 where food waste generated from the commercial and industrial sectors will be treated, the Campaign will enter a new stage. Besides promoting the food wise and waste less culture, it is committed to promoting the on-site/off-site recycling of unavoidable food waste. The total estimated expenditure of the Campaign is about \$6.5 million in 2018-19. Furthermore, to support the promotion of commercial and industrial food waste recovery, the Government will implement a pilot project to source separate food waste from 40 wet markets and cooked food centres managed by the Food and Environmental Hygiene Department, as well as 9 shopping malls managed by the Hong Kong Housing Authority, for delivery to the ORRC Phase 1 for recycling. The estimated expenditure involved in 2018-19 is about \$27 million.

Regarding promoting domestic food waste recycling, up to February this year, a total of 33 housing estates have been funded by the Environment and Conservation Fund with a total amount of \$36 million to fund housing estates to install on-site food waste composters and organise relevant educational and promotional activities in order to encourage the residents to participate in domestic food waste recovery and raise their awareness on food waste reduction and recycling. So far, a total of some 4 000 residents have participated in these activities, and the total quantity of food waste collected in the past 5 years was over 1 600 tonnes.

To foster “Food Wise” culture at campus, the Government will gradually install small-scale food waste composters for those schools with meals provided and suitable venues, and provide the relevant technical support and teaching materials to demonstrate how to convert unavoidable food waste to compost as well as remind students of the importance of food wise and waste less. The Environment and Conservation Fund has earmarked a funding of \$20 million to continue to support various food waste reduction projects, of which \$5 million will be used to provide small-scale food waste composters for about 100 schools. The preparatory work for the new measure is underway, and it is expected to begin to invite schools to participate in 2018-19.

With the gradual establishment of the ORRC network, the Environmental Protection Department will provide additional 15 non-directorate professional staff (including Environmental Protection Officers (EPOs) and Environmental Protection Inspectors (EPIs)) together with 13 professional and non-professional staff (including EPOs, EPIs, Executive Officers and Clerical Officers) to be deployed from the existing staffing establishment responsible for food waste management to set up a new Food Waste Recycling Group dedicated to implement source separation and collection of food waste, including studying and formulating new regulatory measures on food waste disposal and the feasibility to implement mandatory source separation of food waste. This new group will also be responsible for the administration of the Campaign and the ORRC Phase 1. In 2018-19, the additional notional annual salary cost incurred by the new posts is about \$9.8 million.

- End -

**CONTROLLING OFFICER'S REPLY****ENB077****(Question Serial No. 0107)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding continuing to develop the Community Green Stations in the 18 districts, please provide details, including the development progress in various districts, the selected sites, the quantity of materials recovered from the collection points, as well as the manpower and expenditure involved.

Asked by: Hon CHEUNG Yu-yan, Tommy (Member Question No. (LegCo use): 39)Reply:

The Environmental Protection Department (EPD) is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. The total cost for capital works is estimated to be about \$400 million. The operating expenditure of individual projects may vary, depending on the financial proposals submitted by individual operators in their open tender submissions. At present, there are a total of 17 posts tasked to implement this initiative and monitor the projects, including 16 permanent posts and 1 time-limited post (until 2020). As at the end of 2017, 5 CGSs have progressively been in operation, including the Sha Tin CGS and the Eastern CGS which commenced operation in 2015 and the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS which commenced operation in 2017. The latest development of individual CGSs is tabulated below:

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Sha Tin CGS	10 On Ping Street, Shek Mun	The CGS commenced operation in May 2015. In 2017, the CGS collected about 415 tonnes of recyclables, with operating expenditure of about \$4.22 million.



<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Eastern CGS	30 Oi Shun Road, Shau Kei Wan	The CGS commenced operation in August 2015. In 2017, the CGS collected about 395 tonnes of recyclables, with operating expenditure of about \$3.61 million.
Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables, with operating expenditure of about \$4.69 million.
Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables, with operating expenditure of about \$3.98 million.
Sham Shui Po CGS	339 Tung Chau Street	The CGS commenced operation in October 2017. As at the end of 2017, the CGS collected about 17 tonnes of recyclables, with operating expenditure of about \$0.99 million.
Tuen Mun CGS	9 Tuen Yee Street	The tendering for the operation contract is underway. The CGSs are expected to commence operation in the second half of 2018.
Kwai Tsing CGS	12 Tam Kon Shan Road, Tsing Yi	
Tai Po CGS	Between Ting Kok Road and Dai Wah Street	
Islands CGS	Junction of Yu Tung Road and Chung Mun Road, Tung Chung, Lantau	Construction works are underway, which are expected to be completed in the second half of 2018.
Sai Kung CGS	Po Lam Lane, near Po Hong Road and Po Lam Road North, Tseung Kwan O	
Wan Chai CGS	Junction of Wan Shing Street and Hung Hing Road	A design idea competition is underway. The design and construction works are expected to commence in the second half of 2018.
Tsuen Wan CGS 」	Hoi Shing Road, near Hoi Kok Street	Sites have been confirmed and planning of construction works is in progress.
Wong Tai Sin CGS	Junction of Yuk Wah Street and Po Leung Lane, Tsz Wan Shan	

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Kowloon City CGS, Southern CGS, Yau Tsim Mong CGS, Central and Western CGS and North CGS	Site to be confirmed	We have been following up the views from District Councils. Taking into account the actual operating experience in other projects, we are continuing with site search and other associated preparation work.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB078**

**(Question Serial No. 0108)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Under the Environment and Conservation Fund, how many applications were received in each of the past 3 years (i.e. 2015-16, 2016-17 and 2017-18) for recycling commercial waste? Out of these applications, how many were approved and what were the amounts of funding involved? What were the numbers of participating enterprises in each year?

Asked by: Hon CHEUNG Yu-yan, Tommy (Member Question No. (LegCo use): 40)

Reply:

The relevant statistics showing the Environment and Conservation Fund's support of non-government organisations to undertake community waste recovery projects for recycling commercial waste in the past 3 years are provided below:

	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b> (as at end of <b>December 2017</b> )
No. of applications received	87	84	92
No. of applications approved	70	61	33 <sup>#</sup>
Total provision approved in the year, the expenditure may span over a number of years (\$ million)	20.50	16.50	4.05
No. of participating enterprises / commercial and industrial buildings *	about 1 320 companies/shops and 830 buildings	about 1 020 companies/shops and 880 buildings	about 810 companies/shops and 910 buildings

# About 50 more applications are under vetting.

\* The figures include the number of participants of approved projects in that year and on-going projects that were approved in previous years.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB079**

**(Question Serial No. 0109)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Environment and Conservation Fund (ECF),

(a) What were the annual fund allocations for strengthening household participation in waste separation, food waste recovery and recycling as well as the numbers of applications involved in the past 3 years (i.e. 2015, 2016 and 2017)?

(b) Please list in table form the total numbers of domestic units, housing estates and single-block buildings which participated in waste separation in the past 3 years (i.e. 2015, 2016 and 2017).

(c) Please list in table form the total numbers of domestic units, housing estates and single-block buildings which participated in food waste recovery in the past 3 years (i.e. 2015, 2016 and 2017).

(d) Please list in table form the total numbers of domestic units, housing estates and single-block buildings which participated in recycling in the past 3 years (i.e. 2015, 2016 and 2017).

(e) How does the Administration plan to further promote and encourage the community to use the ECF for the promotion of environmental protection activities?

Asked by: Hon CHEUNG Yu-yan, Tommy (Member Question No. (LegCo use): 41)

**Reply:**

- (a) – (d) The amounts of funds approved to projects in the areas of source separation of domestic waste, food waste reduction and recovery as well as waste recycling by the Environment and Conservation Fund (ECF) from 2015-16 to 2017-18 are provided in the table below:

	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18(as at end of December 2017)</b>
<b><u>Source separation of domestic waste</u></b>			
No. of Projects	2	0	1
Total Provision (\$ million)	0.02	0	0.01
No. of Participants (Note 1)	about 94 housing estates and 101 buildings (Note 2) covering about 135 000 households (Note 3)	about 94 housing estates and 101 buildings (Note 2) covering about 135 000 households (Note 3)	about 95 housing estates and 101 buildings (Note 2) covering about 135 000 households (Note 3)
<b><u>Food waste reduction and recovery</u></b>			
No. of Projects	17	26	7
Total Provision (\$ million)	19.66	33.54	16.19
No. of Participants (Note 1)	about 20 housing estates, 115 schools and 20 community groups	about 10 housing estates, 125 schools and 25 community groups	about 10 housing estates, 125 schools and 30 community groups
<b><u>Waste recycling</u></b>			
No. of Projects	18	16	16
Total Provision (\$ million)	47.83	50.59	41.04
No. of Participants (Note 1)	about 650 housing estates, 2 130 buildings (Note 2), 240 schools, 160 community groups and 1 320 shops/companies	about 600 housing estates, 3 080 buildings (Note 2), 100 schools, 90 community groups and 1 020 shops/companies	about 20 housing estates, 4 810 buildings (Note 2), 10 schools, 10 community groups and 810 shops/companies

Note 1: The figures include the number of participants of approved projects in that year and on-going projects that were approved in previous years.

Note 2: It refers to the number of single-block buildings. This number is calculated separately and is not included in the number of housing estates.

Note 3: Rounded to the nearest thousand.

(e) Through organising seminars, exhibitions, sharing sessions and workshops for various environmental schemes, ECF constantly promotes and encourages the community to use the fund. Information for ECF funding applications will be uploaded to the ECF webpage for reference by the community and relevant interested parties. We also collaborate with District Councils to enhance promotion on use less, waste less, and waste recycling to build up a wider community recycling network. Major areas of projects being supported recently under the ECF include waste reduction and recovery (including food waste), energy conservation, research on environmental technologies, nature conservation, and environmental education programmes related to the above areas.

- End -

**CONTROLLING OFFICER'S REPLY****ENB080****(Question Serial No. 2072)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the pursuit of the proposal for requiring the use of Global Positioning System on construction waste collection vehicles, what are the plan, timetable, manpower establishment and estimated expenditure involved?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 42)Reply:

The Global Positioning System (GPS) may help track and log the activities of construction waste collection vehicles, which may in turn help narrow down the scope of investigation and enhance enforcement effectiveness, as well as facilitate the prevention and combating against illegal dumping of construction waste. The Environmental Protection Department (EPD) has, jointly with the Civil Development and Engineering Department, engaged a consultant to carry out a study and a trial. The trial has affirmed that the GPS technology is technically mature and reliable, with readily available and affordable applications in the market, and that the use of GPS in fleet management in the trade has become more common.

After careful consideration, EPD is of the view that GPS is useful in facilitating enforcement, and its operation and technological development (including the technical specifications of the tracking devices, and the principles over data collection and use) is mature. This being the case, some members of the trade however expressed worries about the compliance cost and the detailed operational arrangements, as well as the confidentiality and protection of the data collected. To further ascertain the necessary arrangements for the adoption of GPS devices in the actual operating environment and to address the trade's concerns, the Government will take the lead, and plans to adopt the practice of requiring contractors to install GPS tracking devices in their construction waste collection vehicles in larger-scale public works contracts. Taking into account the experience gained and the overall effectiveness in facilitating monitoring and enforcement actions, we will review and consider how to implement the initiative in the construction industry.



We will take forward the above work with existing manpower and there is no breakdown for such expenditure.

- End -

**CONTROLLING OFFICER'S REPLY****ENB081****(Question Serial No. 2073)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The number of illegal waste disposal offences decreased from 397 in 2016 to 198 in 2017.

1) Please provide a breakdown of the illegal waste disposal offences in the past 5 years, by types of waste, such as construction waste, electronic waste, domestic waste, others, etc.

	2013	2014	2015	2016	2017
Construction waste					
Electronic waste					
Domestic waste					
Others					

2) Further to the above question, please set out the manpower, number of proactive inspections and expenditure involved in conducting the inspection and monitoring work.

	2013	2014	2015	2016	2017
Construction waste	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:
Electronic waste	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:
Domestic waste	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:
Others	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:	Manpower: Number of proactive inspections: Expenditure:

3) In January this year, the Office of the Ombudsman published a Direct Investigation Report on “Government’s Control over Fly-tipping of Construction Waste and Landfilling Activities on Private Land”, recommending the Government to redeploy or augment resources to step up inspections on weekends and holidays. Will the Government accept this recommendation and put in more resources? If not, what are the reasons?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 43)

Reply:

1) The numbers of prosecutions made under the Waste Disposal Ordinance by the Environmental Protection Department (EPD) for illegal disposal of waste in the past 5 years are as follows:

	Year				
	2013	2014	2015	2016	2017
<b>Total number of prosecutions</b>	<b>60</b>	<b>63</b>	<b>96</b>	<b>397</b>	<b>198</b>
Number of prosecutions made for illegal disposal of construction waste	40	44	60	110	85
Number of prosecutions made for illegal disposal of other waste*	20	19	36	287	113

Remark: \* Other waste includes domestic waste, trade waste, etc.

2) As the work of handling illegal disposal of waste is part of the routine duties of the EPD and relevant government departments, we do not have separate figures for the manpower and expenditure involved. The numbers of inspections conducted by the EPD for handling illegal disposal of waste in the past 5 years are tabulated below:

	<b>Year</b>				
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Number of inspections	9 391	9 335	9 730	9 875	12 195

3) Regarding the investigation report of the Office of the Ombudsman which recommended to step up inspections outside office hours, the EPD will deploy manpower resources according to specific needs, to cope with inspections on weekends and holidays.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB082**

**(Question Serial No. 2085)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the problem of illegal dumping of construction and demolition (C&D) materials, please advise on the expenditure involved in dealing with the illegal dumping of C&D materials on government land in the past 5 years.

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 39)

Reply:

The actions against illegal dumping of construction & demolition (C&D) materials on government land form part of the Environmental Protection Department's and relevant government departments' routine duties. We do not have separate account for the expenses involved in such work.

- End -

**CONTROLLING OFFICER'S REPLY****ENB083****(Question Serial No. 2086)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (6) Nature ConservationControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please set out the works projects or conservation projects of the Countryside Conservation Office in the coming 5 years, as well as its staffing establishment and breakdown of expenditure.

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 40)Reply:

The Chief Executive announced in her 2017 Policy Address that a Countryside Conservation Office (CCO) would be established to co-ordinate conservation projects that would promote sustainable development of remote countryside. The CCO will be set up in 2018-19, which is expected to comprise about 28 officers from various grades including 1 Administrative Officer Staff Grade C, 1 Senior Environmental Protection Officer, 3 Environmental Protection Officers/Assistant Environmental Protection Officers, 1 Senior Environmental Protection Inspector, 2 Environmental Protection Inspectors, 1 Chief Executive Officer, 1 Senior Executive Officer, 2 Executive Officer Is, 2 Executive Officer IIs, 2 Clerical Officers, 4 Assistant Clerical Officers, 1 Personal Secretary I, 1 Senior Engineer, 1 Engineer/Assistant Engineer, 1 Architect/Assistant Architect, 1 Town Planner/Assistant Town Planner, 1 Landscape Architect/Assistant Landscape Architect, 1 Forestry Officer/Assistant Forestry Officer and 1 Liaison Officer I. The increase in expenditure under the Programme mainly includes the staff costs of these officers (about \$19.61 million) and cashflow needs earmarked for launching conservation activities and projects mentioned in the paragraph below (about \$10 million).

The Government has earmarked \$1 billion for such conservation and revitalisation efforts, as well as minor improvement works. The CCO will devise future specific work plans and projects upon establishment. On the whole, the CCO will co-ordinate collaboration of the departments concerned in regard to the conservation and revitalisation work, and provide an integrated and dedicated mechanism with resources for the conservation and sustainable development of the remote countryside in the long run. The CCO plans to support

collaboration of non-governmental organisations (NGOs) and villagers to organise diverse and innovative conservation activities and projects based on an interactive and co-operative approach with half of the \$1 billion mentioned above, i.e. \$500 million, under non-recurrent account. For instance, the long-term conservation and revitalisation of certain areas may be funded by an approach similar to that of the Nature Conservation Management Agreement Scheme under the Environment and Conservation Fund. Where circumstances permit, the rich natural and cultural resources in remote countryside can be utilised for planning some “in-depth” travel focusing on the ecological conservation, geological exploration and traditional cultural experience. The CCO also plans to spend the remaining \$500 million on suitable minor improvement works for public facilities, such as providing or improving walkways, piers, walkway lightings, toilets, thematic footpaths and trails, public transportation services and waste recycling and treatment facilities, and rehabilitating the existing architectural environment in the countryside like refurbishment of representative village houses. Moreover, the CCO will follow the Government’s established procurement procedures to engage contractors to take forward necessary conservation initiatives as necessary and appropriate.

We will set up an advisory committee (AC) comprising non-official members including non-government stakeholders such as scholars, professionals, rural/district stakeholders and green groups. The main duties of the AC are to examine applications on the relevant conservation and revitalisation projects (not including minor improvement works) submitted by NGOs and monitor the implementation of approved projects and proposals. The CCO will consult the AC on the scope of and application procedures for conservation and revitalisation projects.

As a priority, the CCO will enhance countryside revitalisation in Lai Chi Wo, as well as ecological conservation in Sha Lo Tung, and will keep under review the implementation of these initiatives and their effectiveness from time to time, with the aim of extending the initiatives progressively to other remote countryside areas.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB084**

**(Question Serial No. 0781)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding handling of refuse on various beaches and marine refuse, please advise on:

(a) the staffing establishment and expenditure for collection of refuse by the Department's staff in the past 3 years (2015-16 to 2017-18);

(b) the total amount of refuse collected by the Department in the past 3 years (2015-16 to 2017-18) (please list by existing zoning and by month).

Asked by: Hon HO Chun-yin, Steven (Member Question No. (LegCo use): 24)

Reply:

(a) Various government departments are responsible for collecting and cleaning up marine refuse (including floating refuse and shoreline refuse washed ashore) according to the locations where such refuse is found. The Marine Department, the Leisure and Cultural Services Department and the Agriculture, Fisheries and Conservation Department have outsourced the cleaning services of marine refuse to contractors, which do not involve any staffing establishment of the Government. As for the Food and Environmental Hygiene Department, apart from outsourcing to cleaning contractors, its routine cleaning services also include collecting and cleaning up of marine refuse. No separate breakdown on the staffing establishment and the expenditure involved is available.



(b) In the past 3 years, the total amount of marine refuse collected by the above Departments each month is tabulated below:

	<b>Total amount of marine refuse collected (tonnes)</b>		
	2015/16	2016/17	2017/18
April	1 128	1 172	1 110
May	1 520	1 302	1 234
June	1 570	1 652	1 405
July	1 712	2 084	1 503
August	1 569	1 905	1 890
September	1 422	1 491	1 605
October	1 293	1 364	1 314
November	1 149	1 174	1 222
December	1 083	1 066	1 070
January of the following year	1 101	1 065	1 091
February of the following year	1 053	1 017	Note
March of the following year	1 122	1 094	Note

Note: The figures are under compilation.

As the zoning demarcations adopted by various departments on cleaning up of marine refuse are different, the total amount of marine refuse collected could not be further broken down by zones.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB085**

**(Question Serial No. 3153)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding discharge from landfills, please advise on the following:

(a) What were the expenditure and manpower establishment for handling discharge from landfills in the past 3 years (2015-16 to 2017-18)?

(b) How many times did the contractors responsible for handling discharge from landfills fail to meet the contractual requirements in the past 3 years (2015-16 to 2017-18)?

(c) What were the daily amounts of discharge from various major sewage treatment plants managed by the Drainage Services Department, landfills managed by the Environmental Protection Department and wastewater treatment facilities of power plants operated by the private sector, as well as the water quality monitoring data (including the annual mean of major water quality data and discharge limit indicated by the monitoring data of the facilities) in the past 3 years (2015-16 to 2017-18)?

(d) How will the Administration ensure that such discharge will not affect fisheries and fisheries resources? How will the Administration continue to improve the quality of the discharge?

Asked by: Hon HO Chun-yin, Steven (Member Question No. (LegCo use): 53)

Reply:

(a) Management and monitoring of the operation of landfills is mainly carried out by the Environmental Infrastructure Division of the Environmental Protection Department (EPD). We do not have a separate breakdown on the manpower resources involved in individual tasks.

(b) In the past 3 years (2015-16 to 2017-18), only the contractor of the Pillar Point Valley Restored Landfill in Tuen Mun failed to meet the contractual requirement on leachate discharge for 21 times from 2016 to 2017. The EPD has deducted the operation payments against the contractor in accordance with the relevant provision in the contract. During this period, we did not observe any other landfill contractors failing to meet the contractual requirements on leachate discharge.

(c) The discharge flow rates and effluent quality monitoring data of the major sewage treatment works managed by the Drainage Services Department (DSD), leachate treatment plants of landfills managed by the EPD and sewage treatment facilities of power stations operated by the private sector in the past 3 years are set out in detail in the following tables.

**Major Sewage Treatment Facilities in Hong Kong and Their Effluent Quality Data**  
**(1) Major Sewage Treatment Works Managed by the DSD**

Name	Maximum Discharge Limit in the WPCO Licence (x1000m <sup>3</sup> /day)	Annual Average of Effluent Quality as shown in the Facilities' Monitoring Data (Year 2015, 2016, 2017)		
		Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen (mg/L)
Chemically Enhanced Primary Treatment				
Stonecutters Island Sewage Treatment Works	4 000	2015: 69 2016: 70 2017: 61 (Discharge Upper Limit: 170/150) (See Note 2)	2015 : 44 2016 : 46 2017: 50 (Discharge Upper Limit: 114)	Not Applicable (See Note 1)
Pillar Point Sewage Treatment Works	525	2015: 89 2016: 93 2017: 84 (Discharge Upper Limit: 360)	2015: 48 2016: 64 2017: 50 (Discharge Upper Limit: 240)	Not Applicable (See Note 1)
Siu Ho Wan Sewage Treatment Works	360	2015: 57 2016: 48 2017: 68 (Discharge Upper Limit: 200)	2015: 65 2016: 66 2017: 50 (Discharge Upper Limit: 200)	Not Applicable (See Note 1)
Sham Tseng Sewage Treatment Works	50.5	2015: 64 2016: 63 2017: 44 (Discharge Upper Limit: 220)	2015: 51 2016: 48 2017: 53 (Discharge Upper Limit: 180)	Not Applicable (See Note 1)

Name	Maximum Discharge Limit in the WPCO Licence (x1000m <sup>3</sup> /day)	Annual Average of Effluent Quality as shown in the Facilities' Monitoring Data (Year 2015, 2016, 2017)		
		Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen (mg/L)
Secondary Treatment				
Sha Tin Sewage Treatment Works	1 020	2015: < 5 2016: < 5 2017: < 5 (Discharge Upper Limit: 40)	2015: < 11 2016: < 10 2017: < 8 (Discharge Upper Limit: 60)	2015: < 7 2016: < 8 2017: < 10 (Discharge Upper Limit: 35)
Tai Po Sewage Treatment Works	250	2015: < 6 2016: < 5 2017: < 5 Discharge Upper Limit: 40)	2015: < 9 2016: < 7 2017: < 7 (Discharge Upper Limit: 60)	2015: < 9 2016: < 8 2017: < 10 (Discharge Upper Limit: 35)
Shek Wu Hui Sewage Treatment Works	240	2015: < 6 2016: < 5 2017: < 5 (Discharge Upper Limit: 40)	2015: < 8 2016: < 9 2017: < 7 (Discharge Upper Limit: 60)	2015: < 9 2016: < 7 2017: < 9 (Discharge Upper Limit: 28) (See Note 3)
Yuen Long Sewage Treatment Works	210	2015: < 6 2016: < 6 2017: < 6 (Discharge Upper Limit: 40)	2015: < 9 2016: < 8 2017: < 10 (Discharge Upper Limit: 60)	Not Applicable (See Note 1)
Stanley Sewage Treatment Works	34.7	2015: <3 2016: <3 2017: <4 (Discharge Upper Limit: 40)	2015: <4 2016: <4 2017: <4 (Discharge Upper Limit: 60)	2015: <6 2016: <5 2017: <4 (Discharge Upper Limit: 26) (See Note 3)
Sai Kung Sewage Treatment Works	24	2015: < 6 2016: < 5 2017: < 5 (Discharge Upper Limit: 40)	2015: < 6 2016: < 6 2017: < 6 (Discharge Upper Limit: 60)	2015: < 5 2016: < 4 2017: < 4 (Discharge Upper Limit: 24)

Note:

- (1) Discharge upper limits and the water quality monitoring requirements are formulated based on the design of the sewage treatment facilities and their environmental impact to the relevant receiving waters.
- (2) The discharge upper limit of biochemical oxygen demand of Stonecutters Island Sewage Treatment Works has been updated to 150 mg/L since 3 March 2017.
- (3) The figure stated is the sum of the amounts of ammonia nitrogen, nitrate nitrogen and nitrite nitrogen in the water sample(s).

**(2) Leachate Treatment Plants at Landfills Managed by EPD**

Name	Maximum Discharge Limit in the WPCO Licence (m <sup>3</sup> /day)	Annual Average of Discharge Quality as shown in the Facilities' Monitoring Data (Year 2015, 2016, 2017)		
		Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen (mg/L)
<b>Pillar Point Valley Landfill</b>	2 600	2015: 4 2016: 3 2017: 4 (Discharge Upper Limit: 800)	2015: 4 2016: 4 2017: 7 (Discharge Upper Limit: 800)	2015: 64 2016: 85 2017: 86 (Discharge Upper Limit: 100)
<b>Tseung Kwan O Stage I Landfill, Tseung Kwan O Stage II/III Landfill</b> (See Note 4)	1 450	2015: 10 2016: 9 2017: 10 (Discharge Upper Limit: 800)	2015: 4 2016: 4 2017: 9 (Discharge Upper Limit: 800)	2015: 36 2016: 48 2017: 46 (Discharge Upper Limit: 200)
<b>Siu Lang Shui Landfill, Ma Tso Lung Landfill, Ngau Tam Mei Landfill and Gin Drinkers Bay Landfill</b> (See Note 4)	480	2015: 12 2016: 19 2017: 17 (Discharge Upper Limit: 800)	2015: 8 2016: 6 2017: 6 (Discharge Upper Limit: 800)	2015: 61 2016: 69 2017: 62 (Discharge Upper Limit: 200)
<b>Sai Tso Wan Landfill, Ngau Chi Wan Landfill, Jordan Valley Landfill, Ma Yau Tong West Landfill, Ma Yau Tong Central Landfill</b> (See Note 5)	<u>Jordan Valley Landfill</u> 350	<u>Jordan Valley Landfill</u> 2015: 17 2016: 19 2017: 28 (Discharge Upper Limit: 800)	<u>Jordan Valley Landfill</u> 2015: 18 2016: 28 2017: 30 (Discharge Upper Limit: 800)	<u>Jordan Valley Landfill</u> 2015: 64 2016: 58 2017: 69 (Discharge Upper Limit: 200)
	<u>Ma Yau Tong Central Landfill</u> 350	<u>Ma Yau Tong Central Landfill</u> 2015: 2 2016: 1 2017: 3 (Discharge Upper Limit: 800)	<u>Ma Yau Tong Central Landfill</u> (See Note 6) (Discharge Upper Limit: 800)	<u>Ma Yau Tong Central Landfill</u> 2015: 101 2016: 88 2017: 91 (Discharge Upper Limit: 200)
<b>Shuen Wan Landfill</b> (See Note 7)	Not Applicable	Not Applicable	Not Applicable	Not Applicable
<b>West New Territories Landfill</b>	3 000 (See Note 8)	2015: 6 2016: 7 2017: 10 (Discharge Upper Limit: 800)	2015: 14 2016: 26 2017: 97 (Discharge Upper Limit: 800)	2015: 128 2016: 143 2017: 137 (Discharge Upper Limit: 200)

Name	Maximum Discharge Limit in the WPCO Licence (m <sup>3</sup> /day)	Annual Average of Discharge Quality as shown in the Facilities' Monitoring Data (Year 2015, 2016, 2017)		
		Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen (mg/L)
<b>North East New Territories Landfill</b>	2 800	2015: 14 2016: 12 2017: 20 (Discharge Upper Limit: 400)	2015: 73 2016: 36 2017: 53 (Discharge Upper Limit: 400)	2015: 86 2016: 99 2017: 103 (Discharge Upper Limit: 150)
<b>South East New Territories Landfill</b>	2 000	2015: 27 2016: 17 2017: 21 (Discharge Upper Limit: 800)	2015: 71 2016: 67 2017: 78 (Discharge Upper Limit: 800)	2015: 122 2016: 114 2017: 95 (Discharge Upper Limit: 200)

Note:

(4) Leachate from these landfills is collected and delivered to one leachate treatment plant for collective treatment.

(5) Leachate from these landfills is collected and delivered to the leachate treatment plant at Jordan Valley Landfill for collective treatment, while the leachate treatment plant at Ma Yau Tong Central Landfill will only be operated in wet season.

(6) Discharge upper limits and the water quality monitoring requirements are formulated based on the design of the sewage treatment facilities and their environmental impacts to the relevant receiving waters.

(7) Leachate from Shuen Wan Landfill is collected and delivered to the adjacent Tai Po Sewage Treatment Works for treatment.

(8) The maximum discharge limit in the WPCO Licence of the West New Territories (WENT) Landfill has been updated from 2 000 m<sup>3</sup> per day to 3 000 m<sup>3</sup> per day since 29 November 2017.

### **(3) Sewage Treatment Facilities of Power Stations**

Name	Operator	Maximum Discharge Limit in the WPCO Licence (m <sup>3</sup> /day)	Annual Average of Discharge Quality as shown in the Facilities' Monitoring Data (Year 2015, 2016, 2017)		
			Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen (mg/L) (See Note 9)
<b>Castle Peak Power Station</b>	Castle Peak Power Company Limited	2 000	2015 : <5 2016 : <5 2017 : 5 (Discharge Upper Limit: 20)	2015 : 5 2016 : 6 2017 : 7 (Discharge Upper Limit: 30)	Not Applicable
<b>Black Point Power Station</b>	Castle Peak Power Company Limited	420	2015 : <5 2016 : <5 2017 : 5 (Discharge Upper Limit: 20)	Not Applicable	Not Applicable

Name	Operator	Maximum Discharge Limit in the WPCO Licence (m <sup>3</sup> /day)	Annual Average of Discharge Quality as shown in the Facilities' Monitoring Data (Year 2015, 2016, 2017)		
			Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen (mg/L) (See Note 9)
<b>Lamma Power Station</b>	HK Electric	664	2015: <2 2016: <2 2017: <2 (See Note 10) (Discharge Upper Limit: 20)	2015: 9 2016: 12 2017: 13 (See Note 10) (Discharge Upper Limit: 30)	Not Applicable
<b>Penny's Bay Power Station (Standby facility)</b>	Castle Peak Power Company Limited	4 181	See Note 11 (Discharge Upper Limit: 20)	See Note 11 (Discharge Upper Limit: 30)	Not Applicable

Note:

(9) Discharge upper limits and the water quality monitoring requirements are formulated based on the design of the sewage treatment facilities and their environmental impact to the relevant receiving waters.

(10) Figures as at September 2017.

(11) Penny's Bay Power Station is a standby facility and there is no discharge recorded from 2015 to 2017.

(d) All the discharge from the major sewage treatment works managed by the DSD, leachate treatment plants of landfills managed by the EPD, and sewage treatment facilities of power stations operated by the the private sector should comply with the relevant discharge limits and the corresponding licence requirement stipulated in the licence granted under the Water Pollution Control Ordinance (WPCO) to ensure that the relevant discharge would not cause any adverse impact on the surrounding environment.

At present, there are on-site EPD staff at all landfills to conduct regular environmental monitoring and to monitor the day-to-day operation of the facilities. The DSD also conducts regular water quality monitoring at major sewage treatment works. The Environmental Compliance Division of the EPD conducts inspections to the relevant facilities operated by the public and private sectors at irregular time intervals to check whether the facility is in normal operation and in compliance with the discharge licence issued.

The Water Policy Division of the EPD has set up 76 marine monitoring stations in Hong Kong open waters and conducts monthly sampling at each station for various physical, chemical and biological analyses. According to the EPD's water quality monitoring data, the discharges from the above waste water treatment facilities have not caused any adverse impact on marine ecology and fishery resources. The Agriculture, Fisheries and Conservation Department also did not observe any abnormality in the ecological condition at Marine Parks.

The EPD and DSD will continue to carry out the above work to ensure that the discharges comply with the licence requirement and will increase sewage treatment facilities timely to protect fishery resources.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB086**

**(Question Serial No. 2830)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Electric vehicles (EVs), driven by electric energy in place of fuel oil, can achieve zero emission and zero pollution. To pursue a comfortable environment free of pollution, it is imperative to develop EVs. Though the EV technology has reached a certain level, the Hong Kong market is currently still in an infant stage. The Government has launched a number of policies to promote the development of EVs in recent years, which is undoubtedly a great force to help promote the market. However, how the Government continues to play a supporting role behind is essential in the development of the EV industry. In this connection, would the Government advise this Committee:

1. Some countries have announced one after another the policy of banning the sale of fuel-driven vehicles. Will the Government introduce in due course a similar policy to promote more vigorously the development of EVs?
2. Pricing directly affects consumers' decision whether to purchase EVs. It is generally considered that EVs' failure to take off rapidly as yet is due to their high price. Apart from extending the first registration tax (FRT) concessions for EVs and launching the new "One-for-One Replacement" Scheme, will the Government consider introducing more measures to further promote the development of EVs?
3. Currently, the number of EVs procured by various government departments only represents a small portion of all vehicles. Will the Government "take the lead" to give priority to EVs when replacing non-EVs so as to reduce emissions?

Asked by: Hon HO Kwan-yiu, Junius (Member Question No. (LegCo use): 32)



Reply:

1. To mitigate tailpipe emissions and climate change, developing clean energy vehicles (CEVs) has become a global trend. Several individual places have set out timetables or targets for a total ban on the sales of private cars (PCs) solely using petrol or diesel. The Government is collating relevant information, including the specific plans and measures to be taken by these places, and the latest development of various manufacturers in producing CEVs, with a view to exploring the availability of CEVs suitable for use in Hong Kong and their conditions of use, for considering our next step.

2. Commercial vehicles (CVs) account for 95% of the vehicular emissions of respirable suspended particulates and nitrogen oxides, both major air pollutants. Hence, CVs have all along been a major target of the Government's measures to improve roadside air quality. EVs have no tailpipe emissions and are efficient in converting energy from the grid to power at the wheels. Replacing conventional vehicles, especially CVs, with EVs can help improve roadside air quality and reduce greenhouse gas emissions.

The Government currently focus on promoting electric CVs (e-CVs) through various measures: the first registration tax of e-CVs is fully waived; since 2010, enterprises which procure environment-friendly vehicles including EVs are allowed full profit tax deduction for the capital expenditure on the vehicle in the first year of procurement; a \$300 million Pilot Green Transport Fund (PGTF) has been put in place since March 2011 to encourage the public transport sectors, goods vehicle operators and non-profit-making organisations to test out green innovative transport technologies, including e-CVs; and \$180 million was set aside to fully subsidise the franchised bus companies to purchase 36 single-deck electric buses for trial on a number of routes.

The effectiveness of our policies on promoting the use of e-CVs depends very much on the maturity of e-CV technologies, their prices and suitability for use in Hong Kong (including their ability to suit the modus operandi of local transport sectors). However, existing e-CV technologies are yet to fully meet the operational needs of the local transport sectors. As at the end of January 2018, the trials on e-CVs approved by PGTF covered various types of vehicles (including taxis, light buses, single-deck buses and goods vehicles). Results of the trials have reflected that high production cost, limited service life, long charging time and low energy density of EV batteries are the key constraints for e-CVs to become popular. The driving range and charging time of most e-CVs currently available in the local market are yet to completely cope with the requirements of the local transport sectors. Besides, prices of e-CVs are not as competitive as their conventional counterparts, and inadequate maintenance services are also not uncommon. The trial results have also revealed that electric light goods vehicles (e-LGVs) are more likely to prevail and are suitable for operators who require relatively lower daily mileage and payload. Looking ahead, we will promote the use of e-LGVs, continue to keep in view the technological developments of e-CVs, and encourage the transport sectors to make use of the PGTF to try out other green innovative transport technologies and their suppliers to introduce more products for use by the local transport sectors.

On promoting the use of EVs in franchised buses, the Government is fully subsidising the franchised bus companies to purchase 36 single-deck electric buses and their charging facilities for trial on a number of routes to assess their operational efficiency and

performance under local conditions. At present, 26 electric buses have commenced operations. It is expected that most of the remaining electric buses will progressively commence operation in 2018. The Government will explore how to promote wider use of single-deck electric buses by the franchised bus companies, subject to the outcome of the trials as well as the affordability of the franchised bus companies and passengers. As for double-deck electric buses, their technology is still developing and there are very few models available in the international arena. Furthermore, their passenger carrying capacity and operational efficiency still fail to fulfill the local operational needs of franchised buses. We will keep in view the development in other places and introduce suitable models for trial in due course.

As for electric private cars (e-PCs), the Government's standing policy is to encourage the public to use public transport as far as possible, and should they need to acquire private cars, choose e-PCs. The Government's main supporting measures include offering financial incentives such as tax concession and lower annual vehicle licence fee, and facilitating the development and improvement of charging networks for e-PCs.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts will include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs.

3. When procuring vehicles, the Government will assess whether EVs can be procured to replace the vehicles due to retire in the Government fleet, subject to the availability of suitable models on the market and the departments' operational and resource considerations. As at 31 December 2017, there were 254 EVs in the Government fleet. In addition, the Government Logistics Department has ordered 11 EVs which are due for delivery in mid-2018. By then, there will be a total of 265 EVs in the Government fleet. The percentage of EVs in the Government fleet is still low, mainly because of the unsatisfactory battery performance, including the failure to charge to the rated capacity and the short driving range after charging, as well as the unavailability of suitable EV models on the market for replacement of a number of vehicle types such as the ambulance, refuse collection vehicle and street washing vehicle, etc. in the fleet.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB087**

**(Question Serial No. 2831)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding roadside air quality, according to quite a number of media reports, there were often goods vehicles and private cars failing to “switch off idling engines” on existing roads, especially during summer time. It seems that the scope of exemptions is a bit too wide. For example, all taxis at taxi stands are exempted and all motor vehicles are exempted when a very hot weather warning signal is in force. In this connection, would the Government advise this Committee on the following:

(1) Last year, I asked the Government about the numbers of the inspections, enforcement actions conducted and the penalties imposed by the Department. The Government replied that from April 2016 to February 2017, only 53 drivers who violated the Ordinance were issued with fixed penalty notices. The low number of prosecutions does not reflect the actual situation. Many citizens asked me to urge the Government to step up enforcement. Will the Government consider tightening the enforcement standards to raise drivers' awareness of the requirement to “switch off idling engines” when parking on the roadside?

(2) With indicators, effectiveness can be ensured. Will the Department consider establishing indicators for reducing roadside air pollution?

Asked by: Hon HO Kwan-yiu, Junius (Member Question No. (LegCo use): 33)

Reply:

1. The Motor Vehicle Idling (Fixed Penalty) Ordinance (the Ordinance), which came into operation on 15 December 2011, prohibits drivers from idling vehicle engines for more than 3 minutes in any 60-minute period. The Ordinance provides for exemption for certain vehicles from the idling prohibition under certain situations. These exempted motor vehicles include a vehicle that is stationary because of traffic conditions (such as a traffic accident), a vehicle when a very hot weather warning or an amber, red or black rainstorm warning signal is in force, a taxi that is at a taxi stand, vehicles (such as refrigerator trucks and concrete mixer trucks, etc.) designed to keep their engines running out of operational need.

During scrutiny of the Motor Vehicle Idling (Fixed Penalty) Bill (the Bill), the community had strong views on the scope and mechanism of exemption. We have made amendments to the Bill after careful consideration of the operational need of different vehicle and transport trades, public views and foreign practices. After further discussions with the Bills Committee of the Legislative Council (LegCo), the current scope and mechanism of exemption were passed by the LegCo eventually. We consider that efforts were made in the current scope and mechanism of exemption to strike a balance between reducing the environmental nuisance caused by idling engines and caring for the drivers' needs under specific conditions.

Taking the exemption under very hot weather as example, the Bills Committee of the LegCo has thoroughly discussed and explored different schemes, including the suitability of granting full exemption for all drivers during a specified period such as in the summer months. Having struck a balance between the impact on the drivers' health and the effectiveness of prohibiting idling engines in improving the air quality, the "very hot weather warning" was eventually adopted as the basis of exemption.

The Ordinance empowers traffic wardens (TWs) of the Hong Kong Police Force and Environmental Protection Inspectors (EPIs) of the Environmental Protection Department (EPD) to issue fixed penalty notices (FPNs) to offending drivers. The TWs enforce the ban in their daily patrol duties and enforcement-cum-publicity activities are also conducted by the EPD with TWs. The EPD is responsible for co-ordinating publicity activities to help drivers foster a green driving habit of switching off idling engines and reduce the environmental nuisance caused by vehicles with idling engines.

We have stepped up the enforcement-cum-publicity activities in various districts of Hong Kong over the past 3 years, with the number of activities increased from 319 in 2015 to 429 in 2017. In the same period, the number of complaints against vehicles with idling engines dropped by about 30% from 1 580 in 2015 to 1 025 in 2017, and the number of FPNs issued also dropped from 53 in 2015 to 45 each in 2016 and 2017, indicating that the drivers in general were more self-disciplinary and paying more attention to switching off idling engines. The Government will continue the two-pronged approach, i.e. enforcement and publicity, to promote the green driving habit of switching off idling engines. The relevant statistics in the past 3 years are as follows:

<b>Year</b>	<b>No. of complaints against vehicles with idling engines</b>	<b>No. of enforcement-cum-publicity activities</b>	<b>No. of vehicles timed with idling engines</b>	<b>No. of FPNs issued</b>
2015	1 580	319	840	53
2016	1 193	400	799	45
2017	1 025	429	1 164	45
<b>Total:</b>	<b>3 798</b>	<b>1 148</b>	<b>2 803</b>	<b>143</b>

2. As regards the setting of air pollution indicators, the Government has stipulated through the Air Pollution Control Ordinance a set of Air Quality Objectives (AQOs) based on the air pollutants' concentrations. The current AQOs came into effect from 1 January 2014. The AQOs, which are benchmarked against the World Health Organization's Air Quality Guidelines, are applicable to general and roadside air quality. According to Section 7A of the Air Pollution Control Ordinance, the Secretary for the Environment is required to review the AQOs at least once in every 5 years and submit a review report to the Advisory Council on the Environment (ACE). In May 2016, the Environment Bureau embarked on the review of the AQOs and set up an AQOs Review Working Group led by the Under Secretary for the Environment to carry out the related work. We will complete the statutory review and submit the report to the ACE in 2018, and then launch a full-scale public consultation on the review results.

To improve roadside air quality and better protect public health, the EPD has implemented various vehicle emission control measures in recent years. They include phasing out old diesel commercial vehicles, tightening progressively the emission standards for newly registered vehicles, strengthening the emission control for petrol and liquefied petroleum gas vehicles and retrofitting franchised buses of older models with emission reduction devices, etc. The concentrations of major roadside air pollutants have dropped by about 30% over the past 5 years. This reflects that the measures for reducing vehicle emissions are effective.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB088**

**(Question Serial No. 2832)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Question:

The Government launched the \$1 billion Recycling Fund for promoting the development of the recycling industry in 2015, the effectiveness of which has all along been in doubt. The application success rate for recyclers is relatively low. It has even given rise to intermediaries that apply for the Fund for the applicants and eat away the funding. In this connection, would the Government advise this Committee on the following:

1. Although the Government replied to the Legislative Council earlier that some of the application procedures of the Recycling Fund had been streamlined to facilitate recyclers, an extraordinarily lukewarm response was received from recyclers in submitting applications. Will the Government consider employing other means, such as providing direct subsidies for recyclables that are currently unprofitable, or other feasible methods?

2. By the end of last year, China has tightened control on the import of 24 types of “foreign rubbish”, including unsorted waste paper, unprocessed waste plastics and waste textile materials, etc. The profitability and business prospects of global recycling industries have become bleak. The Government should better make assessments in advance. Does the Government have any plans to develop long-term measures so as to balance the current interests of the industry? If yes, what are the details? If no, how does the Government alleviate the pressure faced by the recycling industry?

3. What is the latest work of the Steering Committee to Promote Sustainable Development of Recycling Industry?

Asked by: Hon HO Kwan-yiu, Junius (Member Question No. (LegCo use): 34)

Reply:

1. The Environmental Protection Department (EPD) and the Advisory Committee on Recycling Fund (RFAC) have been striving to enhance the operation of the Recycling Fund so that it will better address the needs of the industry and support its development. Without compromising the need in safeguarding the use of the Recycling Fund and maintaining effective control on applicants, the RFAC has introduced various facilitation measures since the Fund's early stage of operation. These measures include providing partial reimbursement of expenses to successful applicants before the launch of the projects under the Enterprise Support Programme (ESP) and the Industry Support Programme (ISP) and establishing a category of Standard Projects under the ESP to minimise the administrative workload of small and medium enterprises (SMEs) in making applications. The SMEs undertaking Standard Projects can also submit applications, report achievements and seek reimbursements in accordance with a set of streamlined procedures. Besides, the RFAC has approved the waiving of a condition on opening a designated project bank account for Standard Projects, and can provide reimbursement midway through the project period.

It is practically difficult to provide funding to recyclers by direct subsidies because such support method involves the determination of a price baseline for recyclables and an appropriate level of subsidy, and the monitoring of every part of the operation of the recyclers is required. Moreover, such price subsidies may encourage relatively inefficient recyclers to continue to operate in their old ways, which is not conducive to the sustainable development of the recycling industry. It may also provide improper incentives and encourage the generation of recyclables, the disposal of which is originally avoidable at source.

2. To help the recycling industry adapt to the latest Mainland policies, the Government supports the development of the recycling industry on various fronts, which includes initiatives to enhance waste reduction at source and clean recycling. For example, the EPD is kicking off a new round of publicity and education campaign for clean recycling and plans to establish new outreaching teams, with a view to enhancing the recyclability and recycling value of recyclables. The EPD will also strengthen its support of the recycling of low-value recyclables in the community and introduce a new pilot district collection service for waste plastic bottles, in order to enhance the cost effectiveness of handling the relevant recyclables. On another front, the Recycling Fund has launched different funding schemes, which will encourage the trade to process their recyclables to standards that meet the new import requirements of the Mainland. The EPD together with the RFAC will continue to liaise with the industry and take forward more initiatives to support the recycling industry in its upgrading and transformation. In addition, the municipal solid waste charging to be promulgated will enlarge the supply of recyclables for the recycling industry, bringing new opportunities to the industry.

In the long run, in order to explore more long-term effective and diversified outlets for recycled materials, we will study the feasibility of incubating a local manufacturing industry using recycled materials in the longer term. As waste paper makes up the largest proportion of local recyclables, the development of a recycling industry capable of processing local waste paper is currently accorded priority. We have conducted an

open tender at end of March 2018 to invite manufacturers who are interested in developing the waste paper recycling industry in the EcoPark to submit their tenders.

3. The Steering Committee to Promote Sustainable Development of Recycling Industry (the Steering Committee) chaired by the Chief Secretary for Administration was established in August 2013, which aims to promote the development of the recycling industry through coordinating the work of various bureaux and departments and mapping out a comprehensive strategy. The main work of the Steering Committee in the past included the establishment of a Recycling Fund, studying the land requirements and support measures for the recycling industry, promoting green procurement, and steering the government departments to take the lead in food waste recovery. In the recent meeting, the Steering Committee actively explored the measures and strategies to strengthen the promotion of inculcating the habit of wider and proper waste reduction and clean recycling among various sectors and enhance recycling support at the community level, with a view to enhancing the quality and quantity of the recyclables. In addition, in addressing the Mainland's tightening requirements on imports of recyclables and at the same time embracing opportunities to raise the operational capabilities and standards of local recycling, the Steering Committee has also explored the feasibility of incubating a local manufacturing industry using recycled materials to facilitate the creation of higher value for the industry and more stable and diverse outlets for local recyclables in the long run.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB089**

**(Question Serial No. 2833)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Question:

In view of the insufficient electric vehicle (EV) charging stations in Hong Kong, a start-up enterprise has developed a portable EV charger for rental by vehicle owners. The car parks only need to install a \$1,000-odd socket outlet, which is just about 10% of the cost of a dedicated charging station, to provide “medium” speed charging for EVs. Although that charger is only the size of a tissue box, the premise is that the car parks have to install the socket outlet in each parking space to tie in with the chargers rented by the vehicle owners. In this connection, would the Government inform this Committee:

1. If the new charger developed by that start-up enterprise can effectively solve the problem of insufficient charging facilities and help promote the use of EVs, will the Government adopt, install and apply it in the government car parks?
2. Will the Government subsidise private car parks to install the above-mentioned charger?
3. Please set out the number of chargers at all public charging locations (and by charging speed), the share of EV parking spaces in all parking spaces and the utilisation rate of chargers, with a breakdown by district.

Asked by: Hon HO Kwan-yiu, Junius (Member Question No. (LegCo use): 35)

Reply:

1 & 2.

Regarding the charging arrangements for electric private cars (e-PCs), it has always been the Government's policy direction that e-PC owners should perform daily charging of their e-PCs by using charging facilities at their home, workplace or other suitable places (including charging facilities provided by e-PC suppliers). Public charging facilities in Hong Kong are supplementary in nature, set up for EVs to top up their batteries at times of occasional needs. They do not serve as daily charging facilities or their alternatives.

Potential buyers of e-PCs should fully consider the daily charging arrangements required and should not rely on public charging facilities for daily charging of their e-PCs. Therefore, the Government's priority is to facilitate and encourage the installation of charging facilities in private premises when planning for the development of charging facilities for e-PCs. On the development of public charging networks as supplementary facilities, the Government not only takes the lead in providing and enhancing governmental public charging facilities but also supports private establishments to set up and enhance non-governmental public charging networks.

Given this policy direction, the Government welcomes private enterprises to study and introduce innovative charging facilities and services for electric vehicles (EVs), so that car parks and EV owners who want to install charging facilities can have more choices. The Government has all along kept in view market developments and will actively get to understand different EV charging facilities/products and services. We would not comment on the characteristics of individual branded product. As far as we know, however, there are companies now in the market beginning to develop portable chargers which are suitable for parking spaces equipped with EV charging-enabling infrastructure (i.e. switchboards, distribution boards, cabling and conduits) and installed with specific power socket to tie in with the portable charger, whose charging rate is lower than that of medium public chargers in government car parks.

As far as the public chargers provided in government car parks are concerned, the existing medium chargers are suitable for the vast majority of e-PCs supplied in Hong Kong where car owners only equipped with suitable connecting cable can directly use the chargers without any need to rent or purchase additional devices. As such, we have no plan to install the specific power sockets to tie in with those portable chargers in government car parks. As for private car parks, the Government considers that it is open for private car parks and EV owners to choose based on the principle of fair commercial competition.

The Government is reviewing the various policies and measures on promoting the use of EVs to encourage installation of charging facilities to tie in with the usage of EVs.

3. The number of public EV chargers with a breakdown by their distribution in 18 districts of Hong Kong as at the end of December 2017 is as follows:

<b>District</b>	<b>No. chargers</b>		
	<b>Standard</b>	<b>Medium</b>	<b>Quick</b>
Central & Western	93	75	24
Eastern	37	68	32
Southern	4	17	19
Wan Chai	84	91	20
Kowloon City	65	2	18
Kwun Tong	214	40	41

District	No. chargers		
	Standard	Medium	Quick
Sham Shui Po	17	46	4
Wong Tai Sin	24	46	9
Yau Tsim Mong	100	58	28
Kwai Tsing	16	9	25
Tsuen Wan	16	40	7
Sai Kung	38	14	16
North	35	16	6
Tai Po	28	3	8
Sha Tin	90	35	32
Yuen Long	46	11	14
Tuen Mun	10	8	14
Islands	14	26	9
<b>Total:</b>	<b>931</b>	<b>605</b>	<b>326</b>
	<b>1 862</b>		

The Government currently provides a total of 680 public chargers in government car parks (including the Transport Department (TD), Government Property Agency (GPA), Leisure and Cultural Services Department, Electrical and Mechanical Services Department, Housing Department and the Cruise Terminal). Among them, 519 chargers were installed by the Environmental Protection Department at 425 parking spaces (accounting for 7% of the parking spaces) in the government car parks managed by the TD and GPA which are open for public use. From January 2016 to September 2017, the average utilisation rate of the 519 chargers was about 13 times per month per charger.

We do not have statistics on the relevant utilisation rate of the public chargers provided in non-government car parks.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB090**

**(Question Serial No. 2834)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Question:

In recent years, incidents of illegal disposal of construction waste, such as the cases of “soil hill near Kingswood Villas” and the agricultural land at Ho Sheung Heung in Sheung Shui, have been brought to light one after another in Hong Kong, arousing widespread concern in the territory. To combat illegal deposition of construction waste, the Government set up an inter-departmental co-ordination mechanism in 2009, whereby the Environmental Protection Department (EPD) would co-ordinate the work of relevant government departments to address and combat the illegal disposal problem. In this connection, would the Government advise this Committee on the following:

1. What is the effectiveness of the trial scheme of surveillance camera system since it was launched by the Department in 2016?
2. Have there been signs of improvement to the illegal deposition of construction waste in the community since the launch of the trial scheme?
3. Will the Department consider amending the current legislation and empowering the law enforcers to institute immediate prosecutions against the fly-tippers of construction waste? If yes, what are the details? If not, what are the reasons?

Asked by: Hon HO Kwan-yiu, Junius (Member Question No. (LegCo use): 36)

Reply:

In order to step up efforts in combating illegal disposal of construction waste, the Environmental Protection Department (EPD) has progressively installed surveillance camera systems at construction waste illegal disposal black spots on government land and public places since 2016, to facilitate enforcement and enhance the deterrence against illegal disposal of construction waste. At present, about 50 black spots of construction waste illegal disposal have been covered. In 2017, 14 cases were successfully prosecuted using

the information obtained from these surveillance camera systems. The EPD has also made use of different channels to enhance the deterrent effect and gradually reduce illegal disposal of construction waste at black spots. These include issuing press releases to raise public awareness of environmental protection, encouraging the public to report illegal disposal of construction waste, launching joint publicity activities with the relevant District Councils or the local communities, installing surveillance camera systems at illegal disposal black spots and displaying warning posters at prominent places, etc. The EPD will continue to closely monitor the situation of illegal disposal of construction waste and flexibly adjust the strategies or deploy the surveillance camera systems as appropriate to achieve effective enforcement and deter illegal disposal of construction waste.

Under the existing Fixed Penalty (Public Cleanliness and Obstruction) Ordinance, if the enforcement officers of the EPD and 6 other relevant government departments intercept fly-tippers during inspections, they are empowered to issue fixed penalty notices of \$1,500 to the offenders on the spot or collect further information and institute prosecution by summons after investigation, depending on the facts and evidences of the cases. The Fixed Penalty (Public Cleanliness and Obstruction) Ordinance has also authorised the enforcement officers of 6 other relevant government departments to impose fixed penalties to fly-tippers intercepted during routine inspections. The EPD will continue to strengthen collaboration with relevant departments through the inter-departmental co-ordination mechanism to jointly carry out monitoring and enforcement work.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB091**

**(Question Serial No. 2835)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

It was proposed in the 2017 Policy Address that the Government would mandate the use of a Global Positioning System on construction waste collection vehicles by legislation to help combat illegal depositing of construction waste. There are frequent occurrences of fly-tipping in the rural New Territories. A proactive investigation conducted by the Office of the Ombudsman earlier reveals that the Environmental Protection Department's inspections outside office hours are inadequate and the number of prosecutions is relatively low. It is obvious that the Government's efforts in this area are inadequate. In this connection, would the Government inform this Committee:

1. What is the latest work progress of the present legislative exercise on "mandating the use of a Global Positioning System on construction waste collection vehicles"?
2. Will the Government increase the number of inspections outside office hours to enhance enforcement and deterrent effect?

Asked by: Hon HO Kwan-yiu, Junius (Member Question No. (LegCo use): 37)

Reply:

1. The Global Positioning System (GPS) may help track and log the activities of construction waste collection vehicles, which may in turn help narrow down the scope of investigation and enhance enforcement effectiveness, as well as facilitate the prevention and combating against illegal dumping of construction waste. The Environmental Protection Department (EPD) has, jointly with the Civil Development and Engineering Department, engaged a consultant to carry out a study and a trial. The trial has affirmed that the GPS technology is technically mature and reliable, with readily available and affordable applications in the market, and that the use of GPS in fleet management in the trade has become more common.

After careful consideration, EPD is of the view that GPS is useful in facilitating enforcement, and its operation and technological development (including the technical

specifications of the tracking devices, and the principles over data collection and use) is mature. This being the case, some members of the trade however expressed worries about the compliance cost and the detailed operational arrangements, as well as the confidentiality and protection of the data collected. To further ascertain the necessary arrangements for the adoption of GPS devices in the actual operating environment and to address the trade's concerns, the Government will take the lead, and plans to adopt the practice of requiring contractors to install GPS tracking devices in their construction waste collection vehicles in larger-scale public works contracts. Taking into account the experience gained and the overall effectiveness in facilitating monitoring and enforcement actions, we will review and consider how to implement the initiative in the construction industry.

2. Regarding the suggestion to step up inspections outside office hours, we will deploy manpower resources flexibly to increase the number of inspections within and outside office hours as well as on public holidays according to the specific needs so as to strengthen monitoring and enforcement actions.

- End -

**CONTROLLING OFFICER'S REPLY****ENB092****(Question Serial No. 1999)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

What is the number of electric vehicle (EV) chargers and car parks, set out by District Councils, for public use in Hong Kong? Separately, the Government amended the legislation years ago to grant concessions on gross floor area in exchange for the construction of new car parks installed with chargers. How many developers applied for concessions on gross floor area to provide EV charging facilities in the past 5 years? What were the areas and plot ratios involved?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 59)Reply:

The number of public chargers for electric vehicles (EVs) and the number of car parks installed with public EV chargers with a breakdown by their distribution in 18 districts of Hong Kong as at the end of December 2017 are as follows:

District	No. of chargers			No. of car parks
	Standard	Medium	Quick	
Central & Western	93	75	24	17
Eastern	37	68	32	28
Southern	4	17	19	10
Wan Chai	84	91	20	23
Kowloon City	65	2	18	11
Kwun Tong	214	40	41	39
Sham Shui Po	17	46	4	12
Wong Tai Sin	24	46	9	8



District	No. of chargers			No. of car parks
	Standard	Medium	Quick	
Yau Tsim Mong	100	58	28	37
Kwai Tsing	16	9	25	9
Tsuen Wan	16	40	7	14
Sai Kung	38	14	16	11
North	35	16	6	11
Tai Po	28	3	8	4
Sha Tin	90	35	32	23
Yuen Long	46	11	14	14
Tuen Mun	10	8	14	10
Islands	14	26	9	11
Total:	931	605	326	292
	1 862			

From 2013 to 2017, the Buildings Department (BD) approved a total of 339 building plans involving the exemption of car parks of new buildings from gross floor area (GFA) calculations. Upon completion of these developments, 38 975 parking spaces will be provided with EV charging-enabling infrastructure. The BD has not compiled statistics for the areas and plot ratios involved in the application for exemption of car parks from GFA calculations to provide EV charging infrastructure.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB093**

**(Question Serial No. 2000)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The media exposed that in a car park which the developer claimed to be for electric vehicles, there were no charging facilities. What measures has the Government taken to follow up on this?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 60)

Reply:

In light of the recommendations of the Council for Sustainable Development, the Government introduced a package of measures in April 2011 to enhance the design standard of new buildings to foster a quality and sustainable built environment. They include tightening gross floor area (GFA) concessions to mitigate the problem of "inflated buildings" and meet public aspirations for more green and amenity features in development projects. One of the tightened requirements is that, instead of allowing space designated for car parks in an approved plan to be fully exempted from GFA calculations as in the past, only underground car parks provided with infrastructure for enabling electric vehicle (EV) charging facilities at each parking space can be fully exempted from GFA calculations.

The main consideration for encouraging the provision of underground car parks is to address the public concern that car parks are a significant contributor to building bulk and height. By launching the new measures, the Government also aims to encourage developers to put in place EV charging-enabling infrastructure in car parks of new private buildings so that if EVs are widely used in the future, owners of parking spaces will not be hindered from installing the required EV chargers due to constraints in respect of power supply capacity, cabling and conduits, etc.

On this principle, the Environment Bureau and the Electrical and Mechanical Services Department have issued the Technical Guidelines for Electric Vehicle Charging-enabling for Car Parks of New Building Developments (the Guidelines), stipulating that future GFA concessions for car parks of new buildings will only be granted if car parks meet the basic

conditions of providing EV charging-enabling infrastructure. These basic conditions include the provision of switchboards, distribution boards, cabling, conduits and trunking so that owners of parking spaces may install EV chargers at their parking spaces according to their specific needs in the future. As EVs were still at the initial development stage back then, mainstream standards for EV chargers and related installations were not established yet. Therefore, the Guidelines have not required for installing EV chargers and arranging for electricity meter connection at parking spaces provided with EV charging-enabling infrastructure.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts will include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs, retrofitting existing car parks with charging facilities and updating the relevant guidelines and planning standards as necessary.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB094**

**(Question Serial No. 2002)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding yard waste, the relevant questions are as follows:

1. Please provide the respective weights of yard waste (a) collected, (b) recycled and (c) disposed of at landfills by various government departments in the past 5 years.
2. Regarding the programmes launched by the Government to recycle Christmas trees and peach blossom trees (PBTs) in recent years, how effective were the relevant programmes? What was the expenditure involved for each programme? Please set out in detail the quantities of Christmas trees and PBTs collected every year, the respective quantities of those converted into mulches for gardening and compost, and sent to schools or non-profit-making organisations. Please set out separately in detail the names of the organisations that received mulches for gardening and/ or compost, as well as the quantities received. Please also advise on the whereabouts of the remaining Christmas trees and PBTs not converted into useful substances, especially the quantities of which sent to landfills.
3. At present, are various government departments still following the "Guidelines on Yard Waste Reduction and Treatment" (the Guidelines) only in handling their respective yard waste? If yes, why is there still a considerable amount of yard waste sent to landfills instead of recycled every year?
4. What are the Government's solutions to tackle the yard waste generated by housing estates? Please provide the relevant work details and the expenditure involved.

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 39)

Reply:

1. The weights of yard waste (a) collected, (b) recycled and (c) disposed of at landfills by various government departments from 2014 to 2017 are as follows. The Government does not maintain statistics on yard waste in 2013.

	(a) Weight of yard waste collected (tonnes)			
Department (Note 1)	2014	2015	2016	2017
Agriculture, Fisheries and Conservation Department	80	80	72	25
Architectural Services Department	#	#	1757	3043
Civil Engineering and Development Department	#	#	2100	3250
Drainage Services Department	460	480	450	512
Highways Department	2370	4770	2810	3340
Leisure and Cultural Services Department (LCSD)	3600	3600	3600	3600
Water Supplies Department (Note 2)	10	3	4	510
Total	6520	8933	10793	14280

	(b) Weight of yard waste recycled (tonnes)			
Department (Note 1)	2014	2015	2016	2017
Agriculture, Fisheries and Conservation Department	80	80	32	25
Architectural Services Department	#	#	68	60
Civil Engineering and Development Department	#	#	0	50
Drainage Services Department	9	9	10	24
Highways Department	0	60	50	70
LCSD	161	147	160	160
Water Supplies Department (Note 2)	6	2	2	49
Total	256	298	322	438

	(c) Weight of yard waste disposed of at landfills (tonnes)			
Department (Note 1)	2014	2015	2016	2017
Agriculture, Fisheries and Conservation Department	0	0	40	0
Architectural Services Department	#	#	1689	2983
Civil Engineering and Development Department	#	#	2100	3200
Drainage Services Department	451	471	440	488
Highways Department	2370	4710	2760	3270
LCSD	3439	3453	3440	3440
Water Supplies Department (Note 2)	4	1	2	461
Total	6264	8635	10471	13842

# Relevant data has not been recorded.

Note 1. Government departments with records on the weight of yard waste are included. Although the Housing Department has not kept data of yard waste for an extended period of time, it recycled about 26 tonnes of yard waste in 2017.

Note 2. The Water Supplies Department's figures in 2014-2016 are just a rough estimate. It started to formally collect the relevant data in 2017.

2. In order to promote recycling of yard waste left over after Christmas and the Lunar New Year, since 2016 the Environmental Protection Department (EPD) has followed the prevailing government procurement procedures to engage qualified contractors with relevant experience and the capability to carry out proper collection and treatment services for natural Christmas trees (NCTs) and peach blossom trees (PBTs) and subsequent processing into materials suitable for recycling or reuse. In the 2016 NCT and 2017 PBT recycling programmes, the contractors collected a total of 22.7 tonnes of NCTs and 34.7 tonnes of PBTs and accomplished the major requirements of the contract, including properly recycling and converting the NCTs and PBTs into compost, bulking agents, wood pellets and other useful recycled products for use by education, social and charity organisations, as well as agricultural organisations. Since we have not obtained the consent of these organisations, the EPD is not in a position to reveal their names. In the recycling process, the contractors will only dispose of materials unsuitable for recycling, such as ropes for tying and damaged decorations, etc. The expenditure involved for the relevant recycling programmes was about \$1.22 million.

18 tonnes of NCTs in total were collected in the 2017 NCT recycling programme and 31.9 tonnes of PBTs in total were collected in the 2018 PBT recycling programme (Note: The recycling programme also included recycling of bamboo and wooden pallets at Lunar New Year fairs.). The contractors will recycle all yard waste collected and the EPD will continue to closely monitor the work progress of the contractors, so as to ensure that the work of the contractors is in full compliance with the contractual requirements. The

expenditures involved for the 2 recycling programmes were \$820,000 and \$1.4 million respectively.

3. The Environment Bureau (ENB) promulgated A Food Waste and Yard Waste Plan for Hong Kong 2014-2022 (the Plan) in February 2014, which sets out the Government's strategies to deal with organic waste, including promoting waste reduction at source and encouraging separation and collection. The inter-departmental working group chaired by the EPD co-ordinates the work of the government departments in implementing the Plan, including enhancing data collection and promoting best practices. For example, the Greening, Landscape and Tree Management Section of the Development Bureau published the "Guidelines on Yard Waste Reduction and Treatment" (the Guidelines) in July 2014, which provides general reference for government departments relating to measures on yard waste reduction at various stages from landscape design to maintenance. At present, with the exception of plants infested by pests, diseases or invasive species, yard waste would be treated by government departments according to its nature by appropriate means, including natural degradation, composting, mulching, fuel production and reusing as recreational facilities or decoration.

In addition, the Agriculture, Fisheries and Conservation Department has adopted the best practice available to treat yard waste on site as far as possible, including stockpiling on site to provide niches for wildlife. Tree logs suitable for reuse would be used for making furniture or decorative materials for the recreational facilities in country parks, such as animated features, waymarks, and benches, etc. Yard waste from the LCSD would be delivered to the Animal Waste Composting Plant in Ngau Tam Mei and the Kowloon Bay Waste Recycling Centre for composting. Since 2014, the LCSD has started to produce compost on-site from yard waste using garden composters at suitable venues for use by the venues. In the longer term, the LCSD will specify in the Schedule of Accommodation of suitable new venues the requirement for installation of on-site composting facilities. The Civil Engineering and Development Department's greening works relating to infrastructural development, works of slope stabilisation and greening master plan would focus on planting of perennials suitable for local environment, with the right vegetation in the right place and choose native perennials in order to reduce yard waste.

4. The yard waste recycling programmes currently implemented by the Government in the community mainly target at Christmas trees and PBTs, which will be properly recycled and converted into compost, bulking agents, wood pellets and other useful recycled products for use by education, social and charity organisations, as well as agricultural organisations. The details and expenditure involved are set out in part 2 of the above reply.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB095**

**(Question Serial No. 2981)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the implementation of the Community Green Stations (CGSs), please advise on:

1. the types of waste collected at the CGSs in service and the recovery quantities in each quarter of 2017 (if different types of waste plastics are collected by the CGSs, please specify), as well as the actual whereabouts of various types of waste collected;
2. the latest number of recyclable collection points at the districts where the CGSs are located;
3. the number of educational activities organised by the CGSs in service in 2017 and the number of visitors; and
4. the latest progress and details of the CGSs in the 18 districts, including the expenditure and manpower resources involved.

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 29)

Reply:

1. and 3.

The Environmental Protection Department (EPD) is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2017, 5 CGSs have progressively been in operation, namely the Sha Tin CGS and the Eastern CGS which commenced operation in 2015 and the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS which commenced operation in 2017. Details of the 2017 quarterly operational statistics of the CGSs are set out below (Notes: As the Sham Shui Po CGS commenced operation in October 2017, only the operational statistics for the 4<sup>th</sup> quarter of 2017 are available):



	1 <sup>st</sup> Quarter of 2017				2 <sup>nd</sup> Quarter of 2017			
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sha Tin	Eastern	Kwun Tong	Yuen Long
Quantity of various types of recyclables handled (kg)								
Electrical appliances and computer products	20 476	19 963	12 015	12 172	13 242	12 691	5 301	7 699
Glass bottles	69 722	75 318	50 026	22 896	79 895	75 590	58 893	49 832
Fluorescent lamps/tubes	1 089	1 097	474	564	1 044	925	294	422
Rechargeable batteries	302	674	84	102	181	177	46	859
Used books	930	1 854	523	1 124	1 427	1 052	289	1 052
Clothing	449	4 241	150	3 840	2 078	2 108	966	258
Waste paper	210	912	1 377	1 045	463	1 215	2 953	4 600
Waste plastics	403	695	303	414	999	627	419	545
Waste metals	21	229	61	198	16	166	144	835
Number of educational activities and visitors								
Number of activities	120	103	39	22	115	96	56	52
Number of visitors	6 918	44 902	5 857	5 684	10 218	45 605	9 188	8 219

	3 <sup>rd</sup> Quarter of 2017				4 <sup>th</sup> Quarter of 2017				
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Quantity of various types of recyclables handled (kg)									
Electrical appliances and computer products	16 362	13 222	7 044	18 133	14 565	14 381	7 512	14 735	4 031
Glass bottles	83 144	69 655	61 506	53 681	96 251	70 378	62 604	57 281	5 864
Fluorescent lamps/tubes	1 023	2 012	645	953	924	781	635	888	234
Rechargeable batteries	299	503	271	295	342	182	76	447	85
Used books	2 177	1 102	44	1 489	1 412	2 978	388	3 591	523
Clothing	371	771	320	505	727	2 051	412	6 211	1 826
Waste paper	998	1 124	3 919	7 560	1 114	1 207	4 560	5 899	360
Waste plastics	904	1 609	1 011	883	573	1 469	1 493	1 258	2 385
Waste metals	19	290	323	878	130	682	965	2 115	50
Number of educational activities and visitors									
Number of activities	82	91	60	53	71	94	69	48	183
Number of visitors	7 422	49 916	8 702	7 501	9 424	42 103	8 862	8 176	9 213

The arrangement for the various types of recyclables in the above table is as follows:

Electrical appliances and computer products	The electrical appliances and computer products were mainly sent to the ALBA Integrated Waste Solutions (Hong Kong) Ltd. for refurbishment or dismantling. The company is the operator of the Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE·PARK); some of them were sent to the Vannex International Limited, which is the contractor of the Computer and Communication Products Recycling Programme; and some of them were sent to another contractor for waste electrical and electronic equipment dismantling and recycling services, who was appointed through tendering.
Glass bottles	All glass bottles were sent to the K. Wah Construction Products Ltd., the Laputa Eco-Construction Material Co. Ltd. and the Hong Kong Glass Resources Limited for producing eco-pavers.
Fluorescent lamps/tubes	All fluorescent lamps/tubes were sent to the Ecospace Limited for proper handling. The company is the contractor of the Chemical Waste Treatment Centre.
Rechargeable batteries	All rechargeable batteries were sent to the Vannex International Limited for export for further processing. The company is the contractor of the Rechargeable Battery Recycling Programme.
Old books and clothing	Reuse of used books and clothing was mainly arranged through donation, exchange programmes and second-hand shops. Some of them would be kept in stock for use in future functions.
Waste paper, plastics and metals	All waste paper, plastics and metals were handled by private recyclers through tendering.

2. The CGSs have set up collection points at residential estates and other suitable sites (such as schools and social service organisations). Quarterly operational statistics of individual CGSs are published every 3 months. As at the 4<sup>th</sup> quarter of 2017, the number of collection points of the 5 CGSs is tabulated below:

	Number of residential collection points					Number of other collection points				
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Electrical appliances and computer products	109	80	54	75	9	43	52	16	24	4
Glass bottles	124	124	68	104	19	31	35	5	16	3

	Number of residential collection points					Number of other collection points				
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Fluorescent lamps/tubes	91	96	32	77	12	13	32	13	10	2
Rechargeable batteries	123	94	65	89	13	11	20	16	13	2

4. The total cost for capital works of the CGSs is estimated to be about \$400 million. The operating expenditure of individual projects may vary, depending on the financial proposals submitted by individual operators in their open tender submissions. At present, there are a total of 17 posts tasked to implement this initiative and monitor the projects, including 16 permanent posts and 1 time-limited post (until 2020). The latest development of individual CGSs is tabulated below:

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Sha Tin CGS	10 On Ping Street, Shek Mun	The CGS commenced operation in May 2015. In 2017, the CGS collected about 415 tonnes of recyclables, with operating expenditure of about \$4.22 million.
Eastern CGS	30 Oi Shun Road, Shau Kei Wan	The CGS commenced operation in August 2015. In 2017, the CGS collected about 395 tonnes of recyclables, with operating expenditure of about \$3.61 million.
Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables, with operating expenditure of about \$4.69 million.
Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables, with operating expenditure of about \$3.98 million.
Sham Shui Po CGS	339 Tung Chau Street	The CGS commenced operation in October 2017. As at the end of 2017, the CGS collected about 17 tonnes recyclables, with operating expenditure of about \$0.99 million.
Tuen Mun CGS	9 Tuen Yee Street	The tendering for the operation contract is underway. The CGSs are expected to commence operation in the second half of 2018.
Kwai Tsing CGS	12 Tam Kon Shan Road, Tsing Yi	

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Tai Po CGS	Between Ting Kok Road and Dai Wah Street	Construction works are underway, which are expected to be completed in the second half of 2018.
Islands CGS	Junction of Yu Tung Road and Chung Mun Road, Tung Chung, Lantau	
Sai Kung CGS	Po Lam Lane, near Po Hong Road and Po Lam Road North, Tseung Kwan O	Design and construction works are in progress.
Wan Chai CGS	Junction of Wan Shing Street and Hung Hing Road	A design idea competition is underway. The design and construction works are expected to commence in the second half of 2018.
Tsuen Wan CGS 」	Hoi Shing Road, near Hoi Kok Street	Sites have been confirmed and planning of construction works is in progress.
Wong Tai Sin CGS	Junction of Yuk Wah Street and Po Leung Lane, Tsz Wan Shan	
Kowloon City CGS, Southern CGS, Yau Tsim Mong CGS, Central and Western CGS and North CGS	Site to be confirmed	We have been following up the views from District Councils. Taking into account the actual operating experience in other projects, we are continuing with site search and other associated preparation work.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB096**

**(Question Serial No. 2982)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The number of prosecutions against illegal deposit of waste in 2017 has reduced by about a half than that in 2016. Please advise on the following:

1. What does the Administration think are the reasons?
2. The expenditure involved and manpower arrangement for combating illegal deposit of waste in the past 3 years, as well as the relevant work details, estimated expenditure and manpower arrangement in the coming year; and
3. The number of complaints received by the Administration regarding illegal deposit of waste, as well as the number of persons arrested, the number of prosecutions, conviction rate, the maximum and minimum penalties and total fines in the past 3 years.

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 30)

Reply:

1. In order to step up efforts in combating illegal disposal of waste, the Environmental Protection Department (EPD) has progressively installed surveillance camera systems at illegal disposal black spots on government land and public places since 2016 to facilitate enforcement and enhance the deterrence against illegal disposal of waste. At present, about 70 illegal disposal black spots have been covered, including some 50 black spots of construction waste illegal disposal. The EPD has also made use of different channels to enhance the deterrent effect and gradually reduce illegal disposal of waste at black spots. These include issuing press releases to raise public awareness of environmental protection, encouraging the public to report illegal disposal of waste, launching joint publicity activities with the relevant District Councils or the local communities, installing surveillance camera systems at illegal disposal black spots and displaying warning posters at prominent places, etc. Hence, there were fewer intercepted cases of illegal waste disposal and prosecutions taken in 2017 than in 2016. The EPD will continue to closely monitor the situation of illegal disposal of waste and flexibly adjust the strategies or deploy the surveillance camera systems as appropriate to achieve effective enforcement and deter illegal disposal of waste.

2. The cost for installing the above surveillance camera systems at the black spots of illegal waste disposal in 2017-18 was about \$3 million. In 2018-19, we have earmarked about \$3 million to expand the coverage of the surveillance camera systems. Moreover, through internal redeployment of staff, the EPD set up special operation units to support the inspections and enforcement work of the environmental legislations, which also include combating illegal disposal. We will continue to flexibly deploy staff according to the manpower resources, work priorities and actual conditions in the districts, and adjust the strategies or conduct more inspections according to the specific needs so as to enhance the effectiveness of monitoring and enforcement. The EPD will also continue to strengthen collaboration with other relevant departments to jointly carry out monitoring and enforcement work. As the relevant enforcement work is part of the routine duties of the EPD, there is no separate figure for the manpower and expenditure involved.

3. The number of reported cases on illegal disposal of waste handled by the EPD, as well as the number of prosecutions, conviction rate, number of offenders, the maximum and minimum fines and total amount of fines in the past 3 years are as follows:

	Year		
	2015	2016	2017
Number of reported cases*	2 649	2 702	2 962
Number of prosecutions			
(1) Number of summonses issued	96	397	198
(2) Conviction rate	96%	99%	98%
(3) Number of Fixed Penalty Notice (FPN) issued**	112	195	177
(4) Number of offenders	208	592	375
Minimum fines (\$)	1,000	500	1,200
Maximum fines (\$)	30,000	50,000	25,000
Total amount of fines (\$)	837,400	3,309,400	1,282,900

Notes:

\* Include repeated cases

\*\* The fine level of the FPN is \$1, 500.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB097**

**(Question Serial No. 2983)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

1. Regarding the Food Wise Hong Kong Campaign, please advise on the following:

(a) the latest number of participating merchants, and the details and expenditure of each activity held last year; and

(b) the work details and estimated expenditure in the coming year.

2. On reduction of food waste at source, the Administration mentioned that it would promote on-site/off-site recycling of unavoidable food waste. Please provide the relevant work details, including the quantity of food waste recycled on-site and off-site last year, and the expenditure and manpower resources involved. Does this project include the Environmental Protection Department's pilot scheme to source separate and collect food waste from public markets and cooked food centres? What are the work details of the scheme?

3. Please provide the work progress of the Organic Resources Recovery Centre Phase 1, the expenditure involved, manpower arrangements, the total quantity of food waste handled, the total quantity of food waste collected from commercial and industrial institutions, and the amount of biogas and compost generated and their whereabouts in 2017 and 2018-19.

4. What is the work progress of the Organic Resources Recovery Centre Phase 2? What are the estimated expenditure and manpower arrangements in the coming year?

5. What were the Administration's work/relevant projects in promoting/funding the collection of domestic food waste in the past 2 years? Please provide details, including the expenditure involved, manpower arrangements, locations of the projects, the quantity of food waste collected each year, and the work details for the coming year.



6. Has the Administration assessed whether the quantity of food waste in Hong Kong has reduced since the launch of the campaign and other food waste reduction programmes? If yes, what are the details? If not, what are the reasons?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 31)

Reply:

1. The Food Wise Hong Kong Campaign (the Campaign) has promoted a food wise and waste less culture and encouraged behavioural change to reduce food waste in the community through various schemes and activities since its launching in 2013. The schemes and activities held in 2017-18 include:

- The Food Wise Charter – As at February this year, about 730 organisations have signed the Food Wise Charter and are committed to reducing food waste. The signatories include public organisations and public utilities, commercial and industrial sector, food and beverage sector, hotel sector, property development and management sector, higher education institutions, secondary schools, primary schools, kindergartens, etc.
- “Food Wise” Talk – As at February this year, 82 “Food Wise” talks were held by the Government with over 6 600 participants. The talks helped promote the “Food Wise” messages and mainly introduced the food waste issues, treatment of food waste, food waste separation and recycling, as well as the Campaign, etc.
- “Food Wise” Roving Exhibition – As at February this year, a total of 18 roving exhibitions were held by the Government at various districts in Hong Kong to bring the message of food wise and waste less to the community and encourage the public to reduce food waste at source. The roving exhibitions featured display panels with food waste reduction tips, including food trimmings for the second dish recipes, tactics of food storage and purchase management, etc., and let the public share their “Food Wise” wishes and opinions on the exhibition board. The exhibitions attracted a total of over 24 000 visitors.
- The “Big Waster” Facebook and Instagram page – The “Big Waster” symbolising food wastage in the Campaign has strengthened interaction with supporters, particularly the young people, through Facebook and Instagram page in which information on food waste reduction is provided. Up to February this year, the “Big Waster” Facebook has received more than 52 000 “likes” and there are about 3 000 “followers” on Instagram.
- The Food Wise Eateries Scheme – To continue to encourage the food and beverage sector to offer portioned meals for customers to choose from, so as to avoid the generation of food waste. As at February this year, about 1 080 eateries have enrolled in the scheme, among which about 310 and 430 eateries have been awarded with gold class and silver class status respectively.

The total estimated expenditure of the Campaign is about \$4 million in 2017-18.

The Government will continue to promote the food wise and waste less culture by enhancing the above schemes and activities. In addition, to tie in with the commissioning of the Organic Resources Recovery Centre (ORRC) Phase 1 in 2018 enabling food waste generated from the commercial and industrial sectors to be treated, the Campaign will enter a new stage. Besides promoting the food wise and waste less culture, it is committed to promoting the on-site/off-site recycling of unavoidable food waste. The total estimated expenditure of the Campaign is about \$6.5 million in 2018-19.

2. The Government is committed to promoting the on-site/off-site recycling of unavoidable food waste, and the manpower involved has been absorbed by the existing establishment. To support the promotion of commercial and industrial food waste recovery, the Government will implement a pilot project to source separate food waste from 40 wet markets and cooked food centres managed by the Food and Environmental Hygiene Department (FEHD), as well as 9 shopping malls managed by the Hong Kong Housing Authority, for delivery to the ORRC Phase 1 for turning into energy. The FEHD is currently conducting the tender process and the estimated expenditure involved for the 2018-19 financial year is about \$27 million per annum.

Regarding promoting domestic food waste recycling, up to February this year, a total of 33 housing estates have been funded by the Environment and Conservation Fund (ECF) to install on-site food waste composters and organise relevant educational and promotional activities in order to encourage the residents to participate in domestic food waste recovery and raise their awareness on food waste reduction and recycling. So far, a total of some 4 000 residents have participated in these activities. The housing estates provided with the funding are distributed throughout Hong Kong, Kowloon and the New Territories. The total amount of funding for these projects and the quantity of food waste recycled over the past 2 years are set out below:

Year	Amount of funding (\$)	Quantity of food waste recovered (tonnes)
2016-17	2,196,000	469
2017-18 (as at end of December 2017)	1,167,000	365

To foster a “Food Wise” culture at campus, the Government will gradually install small-scale food waste composters for those schools with meals provided and suitable venues, and provide the relevant technical support and teaching materials to demonstrate how to convert unavoidable food waste to compost as well as remind students of the importance of food wise and waste less. The ECF has earmarked a funding of \$20 million to continue to support various food waste reduction projects, of which \$5 million will be used to provide small-scale food waste composters for about 100 schools. The preparatory work for the new measure is underway, and it is expected to begin to invite schools to participate in 2018-19.

3. The funding for ORRC Phase 1 was approved by the Financial Committee of the Legislative Council in October 2014, and the Design Build and Operate Contract was awarded in December 2014. The ORRC Phase 1 is now under construction, and the

construction of all main buildings and the installation of building services components have substantially been completed. The contractor is currently installing and testing the remaining electrical and mechanical equipment. The ORRC Phase 1 is scheduled to be commissioned in 2018, with a daily capacity of 200 tonnes of food waste mainly from the commercial and industrial sector. Anaerobic digestion and composting will be adopted in the ORRC Phase 1 for treating food waste which will be converted to biogas for generation of electricity. Apart from internal use of the plant, it is estimated that about 14 million kWh of surplus electricity can be exported each year. The residue produced during the recycling process can be processed to become about 6 500 tonnes of compost each year. At present, the contractor is discussing with the interested organisations the sale and promotion of the compost produced by the ORRC Phase 1.

The expenditure involved for the ORRC Phase 1 project in 2017-18 and 2018-19 is \$382 million and \$133 million respectively. With the commissioning of the ORRC Phase 1 in 2018, the Environmental Protection Department (EPD) has created/will create 7 and 6 non-directorate professional staff posts in 2017-18 and 2018-19 respectively, involving an annual salary cost of \$3.1 million and \$3.2 million respectively, so as to monitor the daily operation of the ORRC Phase 1 and implement the above pilot project to source separate and recycle food waste from wet markets, cooked food centres and shopping malls.

Regarding food waste collection, up to February this year, over 150 commercial and industrial organisations have expressed their initial interest and pledged to source separate food waste and then deliver it to the ORRC Phase 1 for treatment. The EPD will continue to encourage more commercial and industrial organisations to express their interest through briefing sessions, and provide training on food waste source separation to those organisations which have expressed interest.

4. The tendering for ORRC Phase 2 has been completed. We will seek funding approval from the Legislative Council as soon as possible. The estimated expenditure involved for the project is about \$200 million in 2018-19, and the relevant work will be absorbed by the existing staffing establishment.
5. The reply in part 2 above has already set out the work on promotion of domestic food waste recycling. Such work is an integral part of the work of the Committee Secretariat under the ECF and the EPD and is absorbed by existing resources. We do not have a separate breakdown on the manpower resources involved in individual tasks.
6. According to the reports on “Monitoring of Solid Waste in Hong Kong”, the average daily quantity of food waste disposed of at landfills was 3 600 tonnes in 2016, which was 6.5% higher than that of 2015. It was mainly driven by the increase of commercial and industrial food waste. Domestic food waste disposal had dropped for 3 consecutive years, from 2 645 tonnes per day in 2013 to 2 326 tonnes per day in 2016, representing a decrease of 12%. The per capita disposal rate of domestic food waste also decreased from 0.37 kg per day in 2013 to 0.32 kg per day in 2016.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB098**

**(Question Serial No. 2984)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

To implement the “Hong Kong: Blueprint for Sustainable Use of Resources 2013-2022” and “A Food Waste & Yard Waste Plan for Hong Kong 2014-2022” unveiled earlier, coupled with the municipal solid waste (MSW) charging which is soon to be implemented, and in response to China’s tightened policy on import recyclables,

1. What projects will the Government launch to develop complementary recycling systems? What is the breakdown of the expenditure, including the details, purposes, targets, amount of funding and current progress?
2. Regarding the implementation of MSW charging, how much provision will be allocated for the charging scheme in respect of administration, law enforcement and operation of systematic infrastructure?
3. Has the Government earmarked provision for a holistic reform of the local plastics recycling system? If yes, please set out in detail the breakdown of the expenditure involved, including the details, purposes, targets, amount of funding and current progress.
4. What are the outcomes of the Recycling Fund established in 2015? When will a review be conducted on the effectiveness of the Fund?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 32)

Reply:

1. According to A Food Waste & Yard Waste Plan for Hong Kong 2014-2022, the Environmental Protection Department (EPD) will build a network of around five to six organic resources recovery centres (ORRCs). ORRC Phase 1 will be located at Siu Ho

Wan on Lantau Island with a capacity of 200 tonnes of food waste per day. It is anticipated that the facility will be commissioned in 2018 and the project expenditure involved in 2018-19 is \$134 million. ORRC Phase 2 will be located at Sha Ling, North District, with a maximum capacity of 300 tonnes of food waste per day. We have completed the tender exercise for ORRC Phase 2 and will start to seek funding approval from the Legislative Council as soon as possible so as to commence the construction early. We have also identified a site in Shek Kong, Yuen Long for the development of ORRC Phase 3 with a maximum capacity of 300 tonnes of food waste per day. We will commence the third phase of environmental implication assessment and engineering feasibility study for the project in 2018. We will continue to work with relevant departments to identify suitable locations for construction of the remaining ORRCs.

In addition, we will commission the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po Sewage Treatment Works (STW) in 2019 to study and establish the technical feasibility and installation requirements of using existing sewage treatment facilities for food waste/sewage sludge anaerobic co-digestion to help raise Hong Kong's overall food waste treatment capability. Under the Trial Scheme, Food Waste Pre-treatment Facilities will be constructed at the existing Shuen Wan Leachate Pre-treatment Works in Tai Po to treat up to 50 tonnes of food waste per day which will then be transported to the existing sewage sludge anaerobic digestion system at the Tai Po STW for food waste/sewage sludge anaerobic co-digestion. The biogas so generated will be turned into electricity for use by the Tai Po STW. The design, construction and 6-year operation contracts for the food waste pre-treatment facilities in the pilot scheme were awarded in November 2017. The value of the contracts awarded is \$82.75 million. The design and construction work formally commenced in December 2017 and the facilities are expected to be commissioned in early 2019.

Besides, to seek more long-term, effective and diversified ways out for local recyclables, we will study the feasibility of further incubating a local recycled product manufacturing industry. As waste paper makes up the largest proportion of local recyclables, we have conducted an open tender at end of March 2018 to invite manufacturers who are interested in developing the waste paper recycling industry in the EcoPark to submit their tenders.

2. To implement the Municipal Solid Waste (MSW) charging, the Environment Bureau announced the proposed enhanced arrangements in October 2017 to extend the scope of application of pre-paid designated garbage bags as a charging tool, thereby enabling the charging regime to achieve the “polluter pays” principle to a greater extent and responding to the views of the relevant industries. The community and various stakeholders responded positively in general to the modified arrangements. We have been proactively undertaking relevant preparatory work, including drafting of the relevant bill, maintaining close communication with the stakeholders of various sectors to formulate specific implementation details, planning the production and sales arrangements of the designated garbage bags, and implementing a waste reduction and recycling promotional campaign under the central theme of “Dump Less, Save More”, etc. Meanwhile, the Environment and Conservation Fund (ECF) has since 2015 provided a total of about \$55 million to non-profit-making organisations and bodies for organising community involvement projects in different types of premises to try out MSW charging in actual settings. The relevant experiences can provide useful references for us to develop the best practice guides on the implementation of MSW charging. EPD has earmarked about \$32 million in 2018-19

for the preparation work of the MSW charging. As the charging scheme is still under preparation, details of the expenditure involved are not yet available.

3. To enhance local recycling support for waste plastics, EPD and the Environmental Campaign Committee are stepping up promotion and public education efforts in clean recycling, with focus on encouraging the public to recycle waste plastic bottles first, including plastic containers of beverages or personal care products, and practise clean separation and recycling, so as to facilitate subsequent recycling process and seek further outlets. We will also expand the Programme on Source Separation of Domestic Waste, establish a territory-wide Community Recycling Network, launch the Community Participation Programme in Environmental Protection in collaboration with the 18 District Councils and support NGOs in conducting educational activities and promoting community recycling through the ECF, etc., with a view to encouraging the public to actively participate in waste source separation and clean recycling.

Besides, we are making preparation for the implementation of a pilot scheme on district central collection of waste plastic bottles, including drafting the collection arrangements, budget, etc. It is anticipated that the tender exercise could be conducted at the end of 2018 and the scheme could be implemented progressively in 2018-2019 at the earliest. The pilot scheme will mainly accept waste plastic bottles collected by the Community Green Stations as well as the Community Recycling Centres supported by the Environment and Conservation Fund in the district, and will collect waste plastic bottles directly from public and private housing estates and public bodies such as schools, etc. as necessary. The pilot scheme will involve 9 staff in the Environmental Protection Officer grade and the Environmental Protection Inspector grade. The estimated manpower expenditure is about \$5,300,000. Apart from manpower expenditure, the estimated expenditure of the pilot scheme is about \$7,100,000. As the pilot scheme is still at its preparatory stage, the districts to be covered under the scheme are in consideration.

4. The Government launched the \$1 billion Recycling Fund in October 2015. As at 28 February 2018, the Advisory Committee on Recycling Fund (RFAC) has received 382 applications (of which 101 had been withdrawn before vetting by the RFAC) and approved 163 applications. Excluding the projects which have been withdrawn by some applicant organisations after their applications were approved, a total of 128 funded projects have been or will soon be commenced, of which 24 are under the Enterprise Support Programme (ESP), 97 are for Standard Projects and 7 are under the Industry Support Programme, involving a total funding of about \$94 million.

EPD and the RFAC have kept under review the operation of the Recycling Fund and actively listened and responded to the recycling industry's views and aspirations through various channels such as meetings, seminars, briefing sessions, etc. so as to introduce various timely facilitation measures to meet the needs of the industry in its operation, upgrading and transformation and to attract more applications. EPD will launch a mid-term review of the Recycling Fund in 2018-19 to examine its overall operation and effectiveness.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB099**

**(Question Serial No. 2994)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Environment Bureau has been promoting waste reduction at source, but the pollution problem caused by marine refuse is getting serious — most marine refuse was plastics and was generated on land. Besides allocating provisions each year to clean up marine refuse through an end-of-pipe approach (just the provision this year has already reached \$8 million), has provision been earmarked to reduce generation of plastic waste at source (i.e. on land)? For example:

1. After the Government ceased the sale of bottled water measuring 1 litre or less, are there any corresponding measures to encourage the public to bring their own drinking water? Also, please set out the estimated number of additional water dispensers to be installed at government departments and on government sites in 2018-19 and the expenditure involved.
2. What is the latest progress of the feasibility study on producer responsibility scheme (PRS) on plastic containers? What are the details of the study in the coming year? What are the expenditure and manpower involved?
3. What is the latest progress of the study to formulate proposals applicable to Hong Kong regarding the bans on personal care and cosmetic products containing microplastics? What are the expenditure and manpower involved?
4. Besides the above plans to reduce plastic at source, are there other measures and policies for which the Government has earmarked provisions? For example, are there further plans to reduce plastic other than ceasing the sale of plastic bottled water?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 33)

Reply:

1. The stop-sale measure introduced on automatic vending machines in government venues is applicable to bottled water measuring 1 litre or less. The measure aims to create a social atmosphere which encourages the public to develop a habit of bringing their own

water bottles with a view to reducing waste at source. Currently, there are a total of over 10 000 water dispensers in government venues, of which about 2 700 mainly serve the public. These water dispensers are mostly installed at the active leisure facilities managed by the Leisure and Cultural Services Department, such as sport centres, sport grounds and swimming pools, etc. to provide drinking water for the public. When constructing new facilities and carrying out large-scale renovation of existing facilities, the government departments will add or replace water dispensers where it is physically and technically feasible so as to further promote waste reduction at source. We do not have the number of water dispensers to be added in government departments and sites in 2018-19 and the estimated expenditure involved.

2. The Environmental Protection Department (EPD) appointed a consultant through open tender in October 2017 to conduct a feasibility study on how to implement a producer responsibility scheme (PRS) targeting suitable plastic containers, mainly those carrying beverages or personal care products. The consultant will review and analyse the practice in other jurisdictions and the actual situation of Hong Kong, as well as the implication of the introduction of the PRS on different stakeholders. In the process, the consultant will engage with the relevant trade associations and seek their views. The EPD expects to complete the whole study in 18 months, and the estimated expenditure for the study is about \$3 million. This study and the relevant work are carried out with the EPD's existing manpower and the relevant breakdown on the manpower resources involved is not available. This said, the EPD will create 3 time-limited posts in 2018-19 for 3 years to cope with the additional workload arising from taking forward the project.

3. The EPD will commence a one-year study in April 2018 to examine the impacts of microplastics on Hong Kong's environment, to understand the international ban on personal care and cosmetic products containing microplastics and its mode of implementation, to gauge views from stakeholders such as manufacturers, sellers of the relevant products and the beauty sector, etc. on the regulation of products containing microplastics, and to look into the need and options for introducing regulation. The estimated consultant's fee is about \$1.4 million. The EPD will carry out the relevant study with its existing manpower and a breakdown on the manpower establishment involved is not available.

4. The Government will continue to adopt a multi-pronged approach, including rolling out the Municipal Solid Waste Charging, studying the introduction of a PRS on plastic bottles carrying beverages and personal care products, promoting waste source separation and clean recycling, establishing a community recycling network and the Community Green Stations, conducting large-scale and community activities to enhance waste reduction and recycling performance, etc., and employing the existing manpower and resources to further promote and facilitate active participation of the public and the commercial and industrial sectors in waste reduction at source, including reduction of plastics.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB100**

**(Question Serial No. 2995)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Please advise on:

1. the work details of the outreach teams set up by the Administration on pilot basis, including the districts they are currently responsible for, the number of residents and property management companies they have reached out to, the work arrangements in the coming year, including whether the scheme will be extended to cover other districts, and the estimated expenditure and manpower resources involved;
2. the details of a new pilot district collection service for waste plastic bottles to be introduced by the Administration, including when the collectors will launch their service, the locations of the collection points, the whereabouts of the waste plastic bottles to be collected, and the estimated expenditure and manpower resources involved.

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 35)

Reply:

(1.) The initial phase of the outreaching service will be launched on pilot basis within 2018. It is anticipated that the outreaching service will be gradually extended to cover the whole territory later in 2018-19. The outreaching service will involve 32 staff in the Environmental Protection Officer grade and the Environmental Protection Inspector grade. The estimated manpower expenditure is about \$16,000,000. As the initial phase of the outreaching service is still under preparation, details of service areas and work arrangements, etc. are not yet available. We will review the implementation and effectiveness of the pilot scheme on outreaching service, improve the relevant service and then consider the arrangements and timetable for extending the service to cover other districts.

(2.) We are making preparation for the implementation of a pilot scheme on district central collection of waste plastic bottles, including drafting the collection arrangements, budget, etc. It is anticipated that the tender exercise could be conducted at the end of 2018 and the scheme could be implemented progressively in 2018-19 at the earliest. The pilot scheme will involve 9 staff in the Environmental Protection Officer grade and the Environmental Protection Inspector grade. The estimated manpower expenditure is about \$5,300,000. Apart from manpower expenditure, the estimated expenditure of the pilot scheme is about \$7,100,000. As the pilot scheme is still under preparation, details of service areas and scheme arrangements, etc. are not yet available.

- End -

**CONTROLLING OFFICER'S REPLY****ENB101****(Question Serial No. 2996)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the regulation of marine dumping activities, the relevant questions are as follows:

1. Please provide the number of inspections conducted and the expenditure and manpower resources involved in each of the past 3 years for deterring irregularities or illegal marine dumping activities; and
2. On marine dumping offences, please provide the number of cases handled, the number of persons arrested and the number of prosecutions made by the Administration, as well as the maximum and minimum penalties and the total amount of penalties imposed in the past 5 years.

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 36)Reply:

1. On the enforcement of the Dumping at Sea Ordinance, the Environmental Protection Department (EPD) conducted 738, 859 and 754 surprise inspections, including those conducted at sea, on land and by helicopter in the air in 2015, 2016 and 2017 respectively. The EPD currently has 12 staff responsible for processing applications for marine dumping permits and conducting inspections and enforcement work. As control of marine dumping is part of the EPD's routine integrated enforcement work, there is no separate breakdown of expenditure in this area.
2. The number of offence cases, the number of offenders and number of prosecutions made in respect of marine dumping offences, as well as the maximum and minimum fines and the total amount of fines imposed in the past 5 years are set out as follows:

	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>

No. of offence cases	0	1	1	1	2
No. of offenders	--	4	2	1	4
No. of prosecutions	--	72*	2	2	4
No. of convictions	--	0	2	0	3
Maximum fines	--	--	\$10,000	--	\$100,000
Minimum fines	--	--	\$5,000	--	\$6,000
Total amount of fines	--	--	\$15,000	--	\$206,000

\*It involved a single works project. Prosecutions were made against the contractors of the project and the person-in-charge of the sediment disposal vessel separately for multiple incidents of illegal dumping of marine sediment. The court considered that the accuracy of the electronic records of the concerned vessel was in doubt, and no conviction was made eventually.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB102**

**(Question Serial No. 2997)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The number of waste import/export offences in 2017 was 3 times more than that in 2016. What were the types of illegal waste involved? How would these illegal wastes be handled after being intercepted? In addition, please provide the number of inspections conducted and the expenditure and manpower resources involved in each of the past 3 years; and advise on the work details and estimated expenditure involved in the coming year.

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 37)

Reply:

The offences in 2017 mainly involved illegal import of hazardous wastes, such as chemical wastes like waste flat panel displays, waste printed circuit boards and waste batteries. For the intercepted illegally-imported wastes, the Environmental Protection Department (EPD) has instructed the concerned importers to return all containers with illegal wastes to their places of origin. As for the intercepted illegally-exported wastes, the exporters have to arrange proper disposal of the concerned wastes.

The EPD inspected 647, 701 and 712 containers in 2015, 2016 and 2017 respectively for regulating import and export of wastes. In the coming year, we will continue to strengthen cooperation with other relevant departments to jointly carry out monitoring and law enforcement work in light of the actual circumstances of the import and export of wastes. As the relevant enforcement work is part of the routine duties of the EPD, there is no separate figure for the expenditure involved.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB103**

**(Question Serial No. 2998)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Please advise on the work progress of the South East New Territories Landfill, the North East New Territories Landfill and the West New Territories Landfill Extension Schemes and the estimated expenditure in the coming year.

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 38)

Reply:

We are implementing the extension schemes of the three strategic landfills (i.e. the South East New Territories Landfill, the North East New Territories Landfill and the West New Territories Landfill). The work progress is as follows:

The South East New Territories Landfill Extension Scheme

- (i) The associated site investigation works, including on-site drilling and testing of soil and rock samples, have been completed;
- (ii) The outline design of the works project has been completed. We are discussing with the relevant government departments on the interfacing issues, such as the arrangements and specific timetable for the hand-over of the site involved, etc.; and
- (iii) We are preparing to sign the contract of the project with the landfill contractor, and are making preparation for the advance works.

The North East New Territories Landfill Extension Scheme

- (i) The associated site investigation works, including on-site drilling and testing of soil and rock samples, have been completed;
- (ii) The outline design of the works project has been completed. We are studying the interfacing between the extended part and the existing landfill; and
- (iii) Details and terms of the tender documents for the project are being drawn up.

The design and site investigation consultancy study of the West New Territories (WENT) Landfill Extension Scheme

- (i) Preparation of outline design of the extension scheme – we have substantially completed reviewing the outline design, and are studying in detail the proposal put forward by the stakeholders to set up a green zone at the peripheral area of the landfill site close to the nearby villages and the marine frontage to mitigate the potential visual impacts brought about by the extension scheme to the neighbouring communities and exploring the feasibility of carrying out the project in phases and in a bottom-up manner;
- (ii) Study on interfacing and hand-over issues – we have commenced discussions with relevant government departments to study the interfacing issues of the extension scheme with the neighbouring projects and facilities (such as the existing power plants, WENT Landfill, T-PARK and other government facilities under planning); and
- (iii) Associated site investigation works – we have completed on-site drilling works and the analysis of soil and rock samples. The geological information obtained will be used during detailed design of the project in future.

The estimated expenditure on the above relevant work in 2018-19 is \$158 million in total.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB104**

**(Question Serial No. 2999)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding glass recycling, the relevant questions are as follows:

1. Please advise on the Administration's work details in 2017 and the coming year regarding glass recycling and the producer responsibility scheme on glass beverage containers, including the expenditure and manpower arrangements involved.
2. What are the respective numbers of collection points in the 18 districts at present?
3. Please provide the quantity of glass collected in each district in each of the past 5 years.
4. Please advise on the whereabouts of the glass collected, including the quantities of the glass converted into useful substances, with a breakdown of the respective useful substances, and the respective uses of such useful substances.

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 40)

Reply:

1. We are actively undertaking the preparatory work for the Producer Responsibility Scheme (PRS) on glass beverage containers for its full implementation targeted in 2018-19. Among other things, the Government awarded 2 glass management contracts for Hong Kong Island (including Islands district) and the New Territories regions through open tender in November 2017 to provide glass container collection and treatment services for the 2 regions. Regarding the contract for the Kowloon region, the tendering exercise is underway and is expected to be completed with the contract awarded in the second quarter of 2018. Besides, we are drafting the relevant subsidiary legislation to provide for the operational details for the implementation of the scheme. We aim to submit the subsidiary legislation to the Legislative Council for scrutiny later this year.



The Waste Management Policy Division of the Environmental Protection Department is responsible for a number of waste management policies and initiatives, including the implementation of the PRS mentioned above. We do not have a breakdown on the manpower resources involved in the implementation of the PRS. As for the operational expenses of the scheme, it will depend on the actual quantity of waste glass beverage containers collected and treated after the implementation of the scheme.

2. As at the end of December 2017, the respective numbers of collection points in the 18 districts are tabulated below:

<b>District</b>	<b>Number of collection points</b>	<b>District</b>	<b>Number of collection points</b>
Central & Western	226	Outlying Islands	60
Eastern	160	Kwai Tsing	91
Southern	92	North	82
Wan Chai	123	Sai Kung	126
Kowloon City	120	Sha Tin	225
Kwun Tong	93	Tai Po	87
Sham Shui Po	104	Tsuen Wan	87
Wong Tai Sin	70	Tuen Mun	147
Yau Tsim Mong	108	Yuen Long	148

3. We do not have a breakdown of the quantity of glass containers recycled by districts. The respective total quantities of glass containers recycled in the past 5 years are tabulated below:

<b>Year</b>	<b>Total quantity of glass containers recycled (tonnes)</b>
2013	10 000
2014	8 400
2015	9 400
2016	9 300
2017	Under compilation

4. Currently, collected glass containers, after crushing treatment, will be mainly used for producing eco-pavers and construction materials. Some will be exported for recycling. Besides, the Civil Engineering and Development Department has drawn up relevant technical guidelines on the use of recycled glass cullet as fill material. The use of recycled glass cullet in public works projects has started. We envisage that the glass containers collected can be fully absorbed through these outlets.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB105**

**(Question Serial No. 3000)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding protection of the ozone layer, the relevant questions are as follows:

1. Please provide the number of cases of violation of the Ozone Layer Protection Ordinance handled by the Administration, the details of offences by types, the number of persons arrested, the number of prosecutions, as well as the maximum and minimum penalties and total amount of fine imposed in the past 5 years;
2. Please advise on the details of the Administration's work to implement the Ozone Layer Protection Ordinance, as well as the expenditure involved;
3. What are the details of and the expenditure involved in the Administration's work to protect the ozone layer in the coming year?
4. What is the Administration's schedule of phasing out HCFCs? Has the Administration considered expediting its phase-out schedule?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 41)

Reply:

- 1.&2.The Ozone Layer Protection Ordinance (OLPO) (Cap. 403) regulates the local production, import and export of ozone depleting substances in order to phase out ozone depleting substances progressively according to the schedule laid down in the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer (the Montreal Protocol) and its subsequent amendments. At present, production of ozone depleting substance is banned in Hong Kong. Only hydrochlorofluorocarbons (HCFCs), which have lower ozone depleting potentials, are allowed to be imported and exported under a strict quota and licensing system.

Violations of the OLPO mainly involve the illegal import and export of ozone depleting substances without a licence. The Environmental Protection Department (EPD) enforces the OLPO in collaboration with the Hong Kong Customs and Excise Department (C&ED). If the C&ED officers find any suspected activity of illegal import and export of ozone depleting substances at import and export control points, they will notify the EPD immediately to send staff to the scene and collect evidence from the companies or individuals involved so as to determine whether the activity constitutes an offence and whether to institute a prosecution. Prosecutions initiated by the EPD against illegal import of ozone depleting substances without a licence in the past 5 years (2013-2017) are tabulated below:

Year	Number of prosecutions	Range of fines (lowest to highest)	Total amount of fines
2013	1	\$30,000	\$30,000
2014	0	Not applicable	Not applicable
2015	2*	\$80,000	\$80,000
2016	1	\$80,000	\$80,000
2017	2	\$20,000 to \$60,000	\$80,000

\* The defendant in one of the cases was sentenced to imprisonment for 1 month.

The enforcement of OLPO is absorbed by existing resources and manpower. As the staff concerned are also responsible for other duties, a separate breakdown on manpower expenditure is not available.

3.&4. In 2018-19, the EPD will continue to work closely with the C&ED in enforcing the OLPO to combat illegal import and export of ozone depleting substances. Besides, the EPD will progressively phase out HCFCs in strict accordance with the schedule laid down in the Montreal Protocol and its subsequent amendments. According to the accelerated HCFC phase-out schedule drawn up in the Meeting of the Parties to the Montreal Protocol held in September 2007, Hong Kong has further tightened the annual quota for importing HCFCs for local consumption from 2015 to 2019 to 10% of the baseline level of 1989, and will completely ban the import of HCFCs in 2020. The Parties to the Montreal Protocol will continue to review in 2018 whether to allow 0.5% of the baseline level for servicing from 2020 to 2030. We will closely monitor the relevant developments so as to take corresponding actions in a timely manner.

- End -

**CONTROLLING OFFICER'S REPLY****ENB106****(Question Serial No. 3001)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) Waste (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the issue of promoting the use of electric vehicles (EVs), the relevant questions are as follows:

1. Please provide the number of newly registered EVs each month in the past 5 years.
2. Please provide the expenditure and details of the enhancement of the charging network, operational and maintenance costs of chargers each year in the past 5 years.
3. Please provide the number of EVs procured by various government departments and the expenditure involved in the past 3 years.
4. What are the numbers of EVs and non-EVs owned by various government departments? What is the model of the EV mostly used?
5. As the number of EVs has been increasing over the years, we have to face the disposal problem of EV batteries eventually. What are the details of the Administration's current efforts in recycling waste batteries?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 42)Reply:

1. The number of first registered electric vehicles (EVs) each month in the past 5 years is as follows:

Year	Month	No. of first registered EVs in the month
2013	January	18
	February	5
	March	5
	April	6
	May	11
	June	7
	July	4

<b>Year</b>	<b>Month</b>	<b>No. of first registered EVs in the month</b>
2013	August	14
	September	6
	October	1
	November	12
	December	21
2014	January	11
	February	5
	March	8
	April	5
	May	13
	June	8
	July	21
	August	164
	September	101
	October	168
	November	56
	December	333
2015	January	169
	February	84
	March	180
	April	132
	May	130
	June	146
	July	74
	August	181
	September	238
	October	353
	November	438
	December	505
2016	January	268
	February	167
	March	511
	April	148
	May	85
	June	208
	July	297
	August	291
	September	529
	October	162
	November	167
	December	210
2017	January	201
	February	601
	March	2 967
	April	2
	May	10
	June	15
	July	3
	August	15

Year	Month	No. of first registered EVs in the month
2017	September	13
	October	9
	November	36
	December	21

Note: Not including government vehicles and special purpose vehicles.

2. On the development of public charging networks as supplementary facilities, the Government not only takes the lead in providing and enhancing its public charging facilities in government car parks but also supports private establishments to set up and enhance non-governmental public charging networks. Regarding the government public charging networks, the Government took the lead in 2012 to install 500 public chargers in government public car parks managed by the Transport Department (TD) and government car parks managed by the Government Property Agency (GPA) which are open for public use. To improve the charging efficiency, the Environmental Protection Department (EPD) has progressively upgraded standard chargers to medium chargers in the past few years (as compared with standard chargers, medium chargers can reduce the charging time by up to 60%). As at the end of 2017, EPD has installed 519 chargers, among which 268 are medium chargers, in 425 parking spaces (representing 7% of the relevant parking spaces) in government car parks managed by the TD and GPA which are open for public use. We have also installed electrical installations of quick chargers for taxis for trial and as an encouragement. Moreover, EPD is conducting a pilot scheme at four government outdoor car parks (located at the Electrical and Mechanical Services Department Headquarters, Hong Kong Wetland Park, Wai Tsuen Sports Centre and Shek Kip Mei Park) managed by contractors, where a total of 11 outdoor medium chargers have been installed to assess their reliability. The Government's expenditure involved in the above enhancement of public charging facilities at government car parks in the past 5 years is as follows:

Year	No. of additional public EV charging facilities provided at government car parks	Expenditure involved (\$ million)
2011-13	500 standard chargers	4.50
2014-15	100 medium chargers	1.28
	Installation of electrical installations of quick chargers for taxis at 6 car parks	1.49
	6 medium charging posts at outdoor car parks *	0.55
2015-16	6 medium charging posts at outdoor car parks *	0.23
2016-17	174 medium chargers upgrading and 5 medium charging posts at outdoor car parks	2.94
2017-18	96 medium chargers upgrading	1.32
<b>Total</b>		<b>12.31</b>

\* The expenditure on 6 medium charging posts at outdoor car parks spanned over two financial years

The electricity cost of chargers at government car parks borne by the Government in the past 5 years is as follows:

<b>Year</b>	<b>Electricity cost of chargers at government car parks borne by the Government (\$)</b>
2013-14	67,582
2014-15	129,532
2015-16	429,241
2016-17	885,189
2017-18 (as of February 2018)	946,424

There was no expenditure on maintenance of chargers from 2011-12 to 2015-16. The expenditures on maintenance of chargers in 2016-17 and 2017-18 as at the end of this year were about \$54,000 and \$53,000 respectively.

3. 43 EVs were procured by various government departments in the past 3 years, involving an expenditure of about \$11 million.

4. As at the end of December 2017, the numbers of EVs and non-EVs owned by various government departments were as follows. The EV model mostly owned by the Government was Renault Fluence ZE, totaling 118 vehicles.

<b>Policy bureaux/departments</b>	<b>No. of EVs</b>	<b>No. of non-EVs</b>
Hong Kong Police Force	122	2 366
Water Supplies Department	17	236
Electrical and Mechanical Services Department (EMSD)	12	202
Agriculture, Fisheries and Conservation Department	10	204
Post Office	9	269
Buildings Department	8	28
Food and Environmental Hygiene Department	7	721
Lands Department	7	159
Drainage Services Department	6	42
Fire Services Department	6	711
Customs and Excise Department	5	184
Leisure and Cultural Services Department	5	151
Transport Department	5	157
Civil Aviation Department	4	11
Housing Department	4	47
Social Welfare Department	3	26
Environmental Protection Department (EPD)	3	44
Administration Wing	2	25
Civil Engineering and Development Department	2	42

<b>Policy bureaux/departments</b>	<b>No. of EVs</b>	<b>No. of non-EVs</b>
Independent Commission Against Corruption	2	33
Labour Department	2	25
Working Family and Student Financial Assistance Agency	2	0
Architectural Services Department	1	9
Chief Executive's Office	1	7
Correctional Services Department	1	125
Department of Health	1	55
Environment Bureau	1	0
Government Logistics Department	1	61
Highways Department	1	37
Home Affairs Bureau	1	6
Office for Film, Newspaper and Article Administration	1	20
Planning Department	1	11
Radio Television Hong Kong	1	22
Other policy bureaux/departments	-	263
<b>Total</b>	<b>254</b>	<b>6 299</b>

5. The collection and disposal of waste EV batteries, or their export overseas for recycling are regulated under the Waste Disposal Ordinance and the Waste Disposal (Chemical Waste) (General) Regulation to ensure their proper disposal. EV suppliers have to register with EPD and engage licensed collector to collect waste batteries which will be transported to local licensed chemical waste treatment facility for preliminary treatment before being exported to overseas authorised waste treatment facility for recycling. Before exporting each batch of waste batteries, export permit has to be applied from EPD.

At present, the use-age of most EVs in Hong Kong is still relatively low. There are at this stage few retired EV batteries, and most waste EV batteries being disposed of are the damaged ones that are beyond repair. Most of the EV manufacturers or agents have already engaged licensed collectors to handle these waste EV batteries. The licensed collector will handle the waste batteries with suitable preliminary treatment and arrange them to be exported to treatment facilities in Japan, Korea or Belgium for recycling and reprocessing. In anticipation of the growth and wider adoption of EVs in the future, apart from regulating the disposal of waste batteries according to the legislation, EPD has earlier started discussion with the EV suppliers for the promotion of proper collection and handling of waste EV batteries and the long-term arrangements.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB107**

**(Question Serial No. 3002)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Please advise on the details, expenditure and manpower arrangements of various tasks to further reduce the concentration levels of various air pollutants in the coming year, including the Cleaner Production Partnership Programme launched in collaboration with the Guangdong Province, as well as the details and progress of the implementation of regional air quality improvement measures.

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 43)

Reply:

The Environmental Protection Department (EPD) will continue to implement various air quality improvement measures outlined in “A Clean Air Plan for Hong Kong” and to strengthen co-operation with the relevant Guangdong (GD) authorities in 2018-19 with a view to further improving the air quality. Details of the measures are provided at the Annex.

Major policies and measures for improving the air quality to be implemented by the HKSAR Government in 2018-19

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
<b>Vehicles</b>			
1. Encouraging the use of environment-friendly (EF) commercial vehicles	<p>Since April 2008, the Government has launched the Tax Incentives Scheme for EF Commercial Vehicles to encourage vehicle owners to choose EF commercial vehicles with exhaust emissions that out-perform the prevailing statutory emission standards.</p> <p>The qualifying standards for EF commercial vehicles are reviewed and updated annually in the light of vehicle technological advancement such that the tax incentive is available only to vehicles of outstanding environmental performance.</p>	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	From implementation of the Tax Incentives Scheme for EF Commercial Vehicles to the end of February 2018, the number of newly registered EF commercial vehicles was about 51 000 and the amount of first registration tax concession was about \$1.4 billion.
2. Pilot Green Transport Fund (PGTF)	The PGTF was set up in March 2011 for application by the public transport sector, goods vehicle operators and charity/non-profit making organisations to try out green innovative transport technologies.	<p>A funding of \$300 million was approved for setting up the Fund. As at the end of February 2018, the total amount of subsidy approved was about \$131 million.</p> <p>The relevant workload has been partly absorbed under the existing resources of the EPD and the remaining has been met by 4 already created additional time-limited (from 2016-17 to 2020-21) civil service posts, including 1 Senior Environmental Protection Officer, 1 Environmental Protection Officer, 1 Environmental Protection Inspector and 1 Assistant Clerical Officer.</p>	<p>The Fund can promote a wider use of green innovative transport technologies which help improve roadside air quality and reduce greenhouse gas emission.</p> <p>As at the end of February 2018, the Fund has approved 118 trials, involving 81 electric vehicles (including 3 taxis, 3 light buses, 21 single-deck buses and 54 light goods vehicles (van type), 85 hybrid vehicles (including 44 light goods vehicles, 28 medium goods vehicles, 11 light buses and 2 single-deck buses), a solar air-conditioning system for a bus, 4 electric inverter air-conditioning systems for buses, and retrofitting 3 ferries with diesel-electric propulsion systems to replace their old systems and 1 ferry with a seawater scrubber.</p>

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
3. Trial of electric buses	Funding was approved in 2012 to fully subsidise the franchised bus companies to procure 36 single-deck electric buses (including 8 supercapacitor buses and 28 battery-electric buses) for conducting two-year trials on different routes.	Funding of \$180 million was approved for this programme. The workload has been partly absorbed by deploying existing resources and partly met by creating 3 two-year (until end of March 2014) time-limited posts in the EPD and Transport Department (TD) (including 1 Environmental Protection Officer, 1 Senior Environmental Protection Inspector and 1 Motor Vehicle Examiner I). In addition, TD has created a three-year (until end of 2019) time-limited Transport Officer I post to cope with the trials of electric buses.	At present, 24 battery-electric buses and 2 supercapacitor buses have commenced operations. It is expected that most of the remaining electric buses will progressively commence operation in 2018.  During the trial, we will gather information to assess the operational efficiency and performance of these buses under the local conditions. Preliminary trial results showed that the driving performance of the single-deck electric buses is comparable with that of conventional buses. However, when the ambient temperature is high, the driving range of battery-electric buses after a full charge is only about 110 km to 150 km, which is lower than the daily mileage requirement of general public buses for 200 km to 300 km.
4. Subsidising franchised bus companies to retrofit Euro II and III franchised buses with selective catalytic reduction (SCR) devices	Funding was approved in 2013 to fully subsidise the franchised bus companies to retrofit eligible Euro II and III franchised buses with SCR devices for upgrading their emission performance to Euro IV or above level.	The total expenditure on retrofitting franchised buses with SCR devices is about \$197 million. The relevant workload is partly absorbed by deploying existing resources and partly met by the creation of 4 time-limited posts (until end of 2016, including 1 Senior Environmental Protection Officer, 1 Environmental Protection Officer, 1 Transport Officer I and 1 Motor Vehicle Examiner II) by the EPD and TD.	1 030 Euro II and III franchised buses have been retrofitted with SCR devices to upgrade their emission performance to Euro IV or above level. All the retrofitting was completed at the end of 2017.
5. Phasing out pre-Euro IV diesel commercial vehicles (DCVs)	The EPD launched an incentive-cum-regulatory scheme in March 2014 with an aim to phase out by end 2019 progressively some 82 000 pre-Euro IV DCVs. Moreover, the EPD has also set a limit on the service life of DCVs newly registered on or after 1 February 2014 at 15 years.	Funding of about \$11.4 billion was approved for implementation of the ex-gratia payment scheme.  The workload for implementing the ex-gratia payment scheme has been partly absorbed under the existing resources of the EPD and TD, and partly met by the creation by the EPD (from 2013-14 to 2019-20) of 3 time-limited civil service posts, including 1 Senior Environmental	As at the end of February 2018, about 60 900 pre-Euro IV DCVs (i.e. about 74% of the eligible vehicles) have been retired under the ex-gratia payment scheme, involving an ex-gratia payment of about \$8.2 billion.  The phasing out of pre-Euro IV DCVs contributed to the substantial reduction of respirable suspended particulates (RSP) and nitrogen oxides (NO <sub>x</sub> ) from vehicles.

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
		Protection Officer, 1 Environmental Protection Officer and 1 Environmental Protection Inspector. In addition, the TD has created in phases a maximum of 25 time-limited civil service posts (reduced to 22 in 2018-19, including 1 Senior Executive Officer, 1 Executive Officer I, 1 Executive Officer II, 2 Clerical Officers, 8 Assistant Clerical Officers, 1 Motor Vehicle Examiner I, 2 Motor Vehicle Examiners II and 6 Vehicle Testers) in the above years according to the progress of the scheme to cope with applications under the ex-gratia payment scheme.	
6. Strengthening the control of emissions from petrol and liquefied petroleum gas (LPG) vehicles	The EPD has been using roadside remote sensing equipment to identify petrol and LPG vehicles emitting excessively since 1 September 2014. For vehicle found emitting excessively, the EPD will issue an Emission Testing Notice to its owner. The owner is required to rectify the excessive emission problem and to send the vehicle to a Designated Vehicle Emission Testing Centre for an emission test with the aid of a chassis dynamometer within 12 working days so as to confirm the rectification of the excessive emission problem. If the owner fails to send the vehicle to the testing centre, or the vehicle fails to pass the emission test, the licence of the vehicle concerned will be cancelled by the TD.	This is part of the EPD's routine work on improving air quality, and there is no separate breakdown on the expenditure involved.	As at the end of February 2018, the EPD has monitored some 2.12 million vehicle counts and issued about 11 700 emission testing notices requiring the owners to repair and to rectify the excessive emissions of their vehicles. During the above period, the licences of a total of 173 vehicles were cancelled for failing the emission test. Another 608 vehicles were voluntarily scrapped by their owners. The percentage of petrol vehicles emitting excessively has reduced from about 10% to 5%, while the percentage of LPG vehicles emitting excessively has reduced from about 80% to 20% from 2014 to 2016.
7. Setting up franchised bus low emission zones (FBLEZs)	To improve roadside air quality and protect public health, the Government set up FBLEZs at the busy corridors in Causeway Bay, Central and Mong Kok at the end of 2015, allowing only low emission franchised buses (including buses of Euro IV or above, or Euro II and	This is part of the EPD's routine work on improving air quality, and there is no separate breakdown on the expenditure involved.	Three FBLEZs were set up at the end of 2015. Starting from April 2016, all franchised bus companies have confirmed that they have sufficient low emission buses to run in FBLEZs. According to reports submitted by the franchised bus companies, as of December 2017, the overall compliance rate was about 99.7%. In case of

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
	III buses retrofitted with SCR devices and diesel particulate filters) to run in these zones.		<p>traffic congestion, vehicle breakdowns and traffic accidents, etc., the franchised bus companies may need to deploy non-low emission buses to run in the FBLEZs occasionally in order to maintain normal bus services. However, these exceptional cases will be reduced with the franchised bus companies acquiring more new buses.</p> <p>Franchised buses can account for up to 40% of the traffic at the busy corridors in Causeway Bay, Central and Mong Kok. Therefore, the setting up of FBLEZs at these busy corridors allowing only low emission franchised buses to run in these zones could bring significant improvement to the roadside air quality in the FBLEZs and other districts where the low emission buses will ply.</p>
8. Implementing the Euro VI emission standards for newly registered vehicles	The Government has tightened in phases by vehicle type the emission standards for newly registered vehicles to Euro VI starting from 1 July 2017, and the emission standards for newly registered diesel private cars to California LEV III emission standards starting from 1 October 2017.	This is part of the EPD's routine work on improving air quality, and there is no separate breakdown on the expenditure involved.	Compared with their Euro V counterparts, Euro VI heavy duty diesel vehicles emit about 80% less NOx and 50% less RSP while Euro VI light duty diesel vehicles emit about 55% less NOx.
<b>Vessels</b>			
9. Control of sulphur content of locally supplied marine light diesel	The sulphur content of locally supplied marine light diesel has been capped at 0.05% since 1 April 2014.	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	The sulphur dioxide (SO <sub>2</sub> ) and RSP emissions from local vessels were reduced through implementing this measure.
10. Requiring ocean-going vessels (OGVs) to switch to low sulphur fuel while at berth in Hong Kong waters	The EPD implemented a new regulation on 1 July 2015 requiring OGVs to switch to low sulphur fuel with sulphur content not exceeding 0.5% while at berth in Hong Kong. The Port Facilities and Light Dues Incentive Scheme which was launched since September 2012 to	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	As at the end of February 2018, a total of some 60 700 OGV-calls have their port facilities and light dues reduced for switching to low sulphur fuel while berthing in Hong Kong which account for about 44% of vessel arrivals. After the regulation came into effect, the average concentration of SO <sub>2</sub> recorded at the Kwai Chung general Air

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
	encourage the use of low sulphur fuel by OGVs while berthing in Hong Kong will end on 31 March 2018.		Quality Monitoring Station when it was downwind of the container terminals during the period from 2016 to 2017 was 59% lower than that recorded before the implementation of the regulation (i.e. 2014), indicating that the regulation has taken effect in improving the air quality in the vicinity of the container terminals.
11. Requiring vessels to use compliant fuel	The Government proposed to introduce a new legislation requiring vessels to use compliant fuel (including low sulphur fuel with sulphur content not exceeding 0.5%) within Hong Kong waters starting from 1 January 2019 in order to keep on par with the control of the Pearl River Delta (PRD) Domestic Marine Emission Control Area in Pearl River Delta waters.	The relevant consultation and drafting of the new legislation will be undertaken by existing manpower and resources of the EPD. The EPD intends to create 1 Senior Environmental Protection Inspector and 2 Environmental Protection Inspectors in 2018-19 to enforce the new legislation.	The EPD has consulted relevant stakeholders and the Advisory Council on the Environment (ACE) regarding the proposed control, and submitted it to the Panel on Environmental Affairs (the Panel) of the Legislative Council for discussion in 2017, which was generally supported. We are now drafting the legislation on the proposal with a view to implementing the control from 1 January 2019.
<b>Other emission sources</b>			
12. Control of emissions from the power sector	<p>The EPD has formulated Technical Memorandums (TMs) in accordance with the Air Pollution Control Ordinance to stipulate the air pollutant emission caps for the power sector.</p> <p>Since 2010, the EPD has successively promulgated seven TMs to progressively tighten the SO<sub>2</sub>, NO<sub>x</sub> and RSP emission caps for the power sector.</p>	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	<p>The latest Seventh TM was issued in November 2017 and the emission caps stipulated in it will come into effect in 2022. Compared with the emission caps stated in the First TM, the annual emissions of SO<sub>2</sub>, NO<sub>x</sub> and RSP will be reduced by 79%, 59% and 61% respectively.</p> <p>To meet the emission caps stated in the TM, the power plants have to maximise the use of low-emission coal and electricity generated by renewable energy facilities, etc. In addition, the two power companies are now constructing new gas-fired generating units to increase the proportion of gas-fired electricity generation and replace the coal-fired generating units which are to retire. It is anticipated that the new gas-fired units will commence operation in 2020 at the earliest, by then the percentage of local gas-fired electricity generation will be raised to about 50% of the total fuel mix for electricity generation.</p>

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
13. Control of emissions from non-road mobile machinery (NRMMs)	Starting from 1 June 2015, NRMMs (including regulated machines and non-road vehicles) newly sold and leased for use in Hong Kong have to comply with the statutory emission standards. NRMMs that were in use in Hong Kong when the legislation came into effect were exempted from the new requirements.	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	<p>Starting from 1 December 2015, all NRMMs used in construction sites, airport, container terminals and other specified locations are required to bear approval or exemption labels issued by the EPD. As at the end of January 2018, labels were issued to a total of some 45 600 NRMMs</p> <p>Currently, the statutory emission standards for regulated machines and non-road vehicles are EU Stage IIIA standards and Euro V standards (or its equivalent standards) respectively. The Government proposed to tighten the statutory emission standards for some non-road vehicles starting from 1 January 2019 to tie in with the latest emission standards for newly registered road vehicles.</p> <p>The EPD has consulted relevant stakeholders on the proposal and consulted the ACE and submitted it to the Panel of the Legislative Council for discussion in March 2018.</p>
<b>Regional Collaboration</b>			
14. PRD regional air pollutant emission reduction co-operation	The HKSAR Government and the GD Government set in 2012 the air pollutant emission reduction targets and ranges for 2015 and 2020, and have implemented control measures according to the PRD Regional Air Quality Management Plan in order to achieve the targets set.	This is part of the EPD's routine work on improving air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	In December 2017, HK and GD released the results of the mid-term review study on emission reduction targets of air pollutants in the PRD region and confirmed that both sides had achieved their respective 2015 reduction targets for SO <sub>2</sub> , NO <sub>x</sub> , RSP and VOC, and finalised the reduction targets for 2020. The two Governments will jointly form a scientific research team to discuss regional air pollution reduction co-operation beyond 2020, including the launch of a study on post-2020 air pollutant emission reduction targets and concentration levels for Hong Kong and GD, in order to continuously improve regional air quality and protect public health.
15. Routine monitoring of volatile organic compounds (VOC) in the PRD Regional Air Quality Monitoring	HK and GD have adopted a progressive approach to include routine monitoring of VOC in the PRD Regional Air Quality	This is part of the EPD's routine work on improving air quality and is absorbed under existing resources. There is no	HK and GD have completed the work in Phase 1 in 2017, including to consider the distribution and locations of stations for routine VOC monitoring,

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Network	Monitoring Network in 3 phases from 2017 to 2020. VOC facilitates ozone formation. The monitoring data can help investigate the causes of ozone formation in the PRD region.	separate breakdown on the expenditure involved.	select the parameters to be monitored and monitoring methods, and compile the standard operating procedure and quality assurance/quality control protocol. Both sides are now undertaking the work in Phase 2, i.e. each selected one of its stations in the regional network to carry out a pilot of online VOC monitoring and preliminary data analysis in 2018-19 based on the Phase 1 results. For Phase 3 in 2020, both sides will comprehensively review the experiences gained in Phase 2, including the operation of the monitoring equipment, expenditure, data quality and the preliminary analysis results, etc., and by making reference to relevant national standards and guidelines fine tune the monitoring protocol and consider increasing the number of VOC routine monitoring stations.
16. Cleaner Production Partnership Programme (The Programme)	Launched in April 2008, the Programme encourages and facilitates Hong Kong-owned factories in GD and HK to adopt cleaner production technologies and practices through funding support and technology promotion activities, thereby improving the regional air quality. In light of the environmental benefits brought by the Programme, the Government provided an additional funding of \$150 million in 2015 and extended the Programme for 5 years until 31 March 2020.	The Government's total expenditure on implementing the Programme from 2008 to 2018 is around \$236 million. The expenditure in 2018-19 is about \$35 million. This is part of the EPD's routine work, and there is no separate breakdown on the expenditure involved.	As at end February 2018, over 2 900 funding projects were approved and about 500 awareness and technology promotion activities were organised under the Programme.
<b>Review of the air quality objectives</b>			
17. Review of the air quality objectives (the Review)	The current air quality objectives (AQOs) came into effect on 1 January 2014. According to Section 7A of the Air Pollution Control Ordinance (Cap. 311), the Secretary for the Environment is required to review the AQOs at least once in every 5 years and submit a review report to the ACE.	We set up an AQOs Review Working Group (Working Group), led by the Under Secretary for the Environment, to conduct the Review. Members of the Working Group include air scientists, business sector representatives, professional bodies, green groups and representatives from relevant government departments, etc.	Four dedicated Sub-groups have been formed under the Working Group, viz. Road Transportation, Marine Transportation, Energy and Power Generation, as well as Air Science and Health. The first three Sub-groups are to identify possible new air quality improvement measures under their respective areas and examine the practicability of their implementation



Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
	<p>The Environment Bureau embarked on the Review in May 2016, and would complete the statutory Review and submit a report to the ACE in 2018. Afterwards, we will commence a full-scale public consultation on the review outcome.</p>	<p>All non-government members of the Working Group take part in the Review on a voluntary basis. As for government members, the work is undertaken under existing manpower and resources and therefore there is no separate breakdown on the expenditure involved.</p> <p>Besides, the EPD commissioned a consultancy study through open tender in November 2016 to assist in the Review. The consultancy contract fee is about \$7 million.</p>	<p>for the consideration of the Working Group. The Sub-group on Air Science and Health focuses on examining the air science and health aspect of the Review including the assessment of air quality improvements and health and economic impact arising from the possible measures, and hence the possible scope for further tightening the AQOs.</p> <p>The Sub-groups on Road Transportation, Marine Transportation, and Energy and Power Generation have so far convened 19 meetings, and proposed 69 possible new air quality improvement measures and deliberated on the practicability of their implementation within the timeframe up to 2025. These measures covered a wide spectrum encompassing transport planning and management, urban planning and design, use of clean fuel, as well as energy demand management and use of renewable energy, etc. Amongst these 69 possible new measures, 26 are either on-going or under consideration by the relevant departments which are likely to produce results by 2025 or earlier (short-term), 4 may be ready for consideration in the next AQOs review period of 2019 – 2023 (medium-term) while 14 require detailed planning or further study to ascertain the practicability for implementation beyond the next review period (long-term). The remaining 25 are considered as not practicable, short of air quality benefits or not suitable to be considered under the current scope of the Review. The Air Science and Health Sub-group has so far convened 5 meetings and deliberated on the methodologies for the assessment of air quality, health and economic impacts.</p> <p>Besides, the EPD conducted a public engagement exercise between 11 September and 14 October 2017 to solicit public views on the new measures proposed by the Sub-groups or other air quality improvement measures, and organised 2 public</p>

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
			<p>forums to explain the progress of the Review and listen to public views.</p> <p>The consultant engaged in the Review is assisting in the assessment of air quality, public health and economic impacts arising from the implementation of possible new measures, which includes running the models of air quality, etc., for the Air Science and Health Sub-group and the Working Group to examine the possible scope for further tightening the AQOs.</p>

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**CONTROLLING OFFICER'S REPLY**

**ENB108**

**(Question Serial No. 3003)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Please advise on the following:

1. The percentage of vehicle emissions in the overall air pollutants in Hong Kong in the past 5 years (with a breakdown by vehicle type and by air pollutants emitted).
2. The percentage of vessel emissions in the overall air pollutants in Hong Kong in the past 5 years (with a breakdown by types of ocean-going vessels and by air pollutants emitted).

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 44)

Reply:

The Environmental Protection Department (EPD) compiles the Hong Kong Air Pollutant Emission Inventory every year to analyse the distribution and trends of major pollution sources in Hong Kong. The Hong Kong Air Pollutant Emission Inventory for 2016 is still under compilation.

1. Please see the following table for the percentage of emissions of major air pollutants from vehicles in Hong Kong's total emissions from 2011 to 2015.

Year	Vehicle type	Percentage of vehicle emissions in the total amount of local emissions (%)					
		Sulphur dioxide	Nitrogen oxides	Respirable suspended particulates	Fine suspended particulates	Volatile organic compounds	Carbon monoxide
2015	Motorcycle	<1%	<1%	<1%	<1%	11%	7%
	Private car	<1%	1%	<1%	<1%	3%	12%
	Taxi	<1%	1%	0%	0%	1%	16%
	Public light bus	<1%	1%	1%	1%	1%	9%
	Private light bus	<1%	<1%	<1%	<1%	<1%	1%
	Light goods vehicle	<1%	3%	2%	2%	1%	1%
	Heavy goods vehicle	<1%	6%	4%	4%	1%	3%
	Non-franchised public bus	<1%	2%	1%	1%	<1%	1%
	Franchised public bus (single-deck)	<1%	<1%	<1%	<1%	<1%	<1%
	Franchised public bus (double-deck)	<1%	4%	1%	1%	<1%	2%
	<b>Total emissions</b>	<b>&lt;1%</b>	<b>18%</b>	<b>9%</b>	<b>10%</b>	<b>18%</b>	<b>51%</b>
2014	Motorcycle	<1%	<1%	<1%	<1%	11%	7%
	Private car	<1%	1%	<1%	<1%	3%	12%
	Taxi	<1%	3%	0%	0%	1%	15%
	Public light bus	<1%	1%	1%	2%	1%	10%
	Private light bus	<1%	<1%	<1%	<1%	<1%	1%
	Light goods vehicle	<1%	3%	2%	3%	1%	2%
	Heavy goods vehicle	<1%	6%	5%	6%	1%	3%
	Non-franchised public bus	<1%	1%	1%	1%	<1%	1%
	Franchised public bus (single-deck)	<1%	<1%	<1%	<1%	<1%	<1%
	Franchised public bus (double-deck)	<1%	4%	1%	2%	<1%	1%

	<b>Total emissions</b>	<b>&lt;1%</b>	<b>19%</b>	<b>12%</b>	<b>14%</b>	<b>18%</b>	<b>54%</b>
2013	Motorcycle	<1%	<1%	<1%	<1%	10%	7%
	Private car	<1%	1%	<1%	<1%	3%	11%
	Taxi	<1%	5%	0%	0%	1%	21%
	Public light bus	<1%	1%	1%	1%	1%	11%
	Private light bus	<1%	<1%	<1%	<1%	<1%	1%
	Light goods vehicle	<1%	3%	3%	3%	1%	2%
	Heavy goods vehicle	<1%	7%	5%	6%	1%	3%
	Non-franchised public bus	<1%	2%	1%	1%	<1%	1%
	Franchised public bus (single-deck)	<1%	<1%	<1%	<1%	<1%	<1%
	Franchised public bus (double-deck)	<1%	4%	1%	1%	<1%	1%
	<b>Total emissions</b>	<b>&lt;1%</b>	<b>22%</b>	<b>12%</b>	<b>14%</b>	<b>19%</b>	<b>58%</b>
2012	Motorcycle	<1%	<1%	<1%	<1%	10%	7%
	Private car	<1%	1%	<1%	<1%	4%	11%
	Taxi	<1%	7%	0%	0%	2%	31%
	Public light bus	<1%	1%	2%	2%	2%	14%
	Private light bus	<1%	<1%	<1%	<1%	<1%	1%
	Light goods vehicle	<1%	4%	3%	4%	1%	2%
	Heavy goods vehicle	<1%	6%	5%	6%	1%	2%
	Non-franchised public bus	<1%	2%	1%	1%	<1%	1%
	Franchised public bus (single-deck)	<1%	<1%	<1%	<1%	<1%	<1%
	Franchised public bus (double-deck)	<1%	5%	2%	2%	<1%	1%
	<b>Total emissions</b>	<b>&lt;1%</b>	<b>26%</b>	<b>13%</b>	<b>15%</b>	<b>21%</b>	<b>68%</b>

2011	Motorcycle	<1%	<1%	<1%	<1%	9%	7%
	Private car	<1%	1%	<1%	<1%	4%	12%
	Taxi	<1%	7%	0%	0%	2%	28%
	Public light bus	<1%	1%	1%	1%	2%	13%
	Private light bus	<1%	<1%	<1%	<1%	<1%	1%
	Light goods vehicle	<1%	4%	3%	3%	1%	2%
	Heavy goods vehicle	<1%	7%	5%	6%	1%	3%
	Non-franchised public bus	<1%	2%	1%	1%	<1%	1%
	Franchised public bus (single-deck)	<1%	<1%	<1%	<1%	<1%	<1%
	Franchised public bus (double-deck)	<1%	5%	1%	2%	<1%	1%
	<b>Total emissions</b>	<b>&lt;1%</b>	<b>28%</b>	<b>12%</b>	<b>13%</b>	<b>19%</b>	<b>67%</b>

2. Please see the following table for the percentage of emissions of three types of major air pollutants from ocean-going vessels (OGVs) in Hong Kong's total emissions from 2011 to 2015.

Year	OGV type	Percentage of OGV emissions in Hong Kong's total emissions (%)		
		Sulphur dioxide	Nitrogen oxides	Respirable suspended particulates
2015	Cruise ships	5%	2%	3%
	Oil tankers	2%	<1%	1%
	Container vessels	43%	12%	19%
	General cargo vessels	1%	<1%	<1%
	Others	5%	2%	2%
	<b>All OGVs</b>	<b>57%</b>	<b>16%</b>	<b>26%</b>
2014	Cruise ships	4%	2%	3%
	Oil tankers	2%	<1%	1%
	Container vessels	30%	11%	20%
	General cargo vessels	1%	<1%	<1%

Year	OGV type	Percentage of OGV emissions in Hong Kong's total emissions (%)		
		Sulphur dioxide	Nitrogen oxides	Respirable suspended particulates
2014	Others	4%	2%	2%
	<b>All OGVs</b>	<b>40%</b>	<b>15%</b>	<b>27%</b>
2013	Cruise ships	2%	1%	1%
	Oil tankers	2%	<1%	1%
	Container vessels	31%	11%	16%
	General cargo vessels	1%	<1%	<1%
	Others	4%	1%	2%
	<b>All OGVs</b>	<b>39%</b>	<b>14%</b>	<b>20%</b>
2012	Cruise ships	2%	1%	1%
	Oil tankers	2%	<1%	1%
	Container vessels	32%	11%	20%
	General cargo vessels	1%	<1%	1%
	Others	3%	1%	1%
	<b>All OGVs</b>	<b>40%</b>	<b>14%</b>	<b>24%</b>
2011	Cruise ships	3%	1%	1%
	Oil tankers	2%	<1%	1%
	Container vessels	34%	12%	17%
	General cargo vessels	1%	<1%	<1%
	Others	2%	1%	1%
	<b>All OGVs</b>	<b>42%</b>	<b>14%</b>	<b>21%</b>

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**CONTROLLING OFFICER'S REPLY****ENB109****(Question Serial No. 3004)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (4) WaterControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

In 2016 and 2017, 9 % and 7% of the sampling points were classified as fair and bad respectively. What were the details of these sampling points? For the sampling points classified as fair and bad, were they the same in these two years? What are the Administration's key measures to improve the water quality of these sampling points in the coming year? Please advise on the estimated expenditure and manpower arrangements involved.

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 45)Reply:

The locations of the sampling points with river water quality classified as "Fair" and "Bad" in 2016 and 2017 were generally the same (see Table 1). They are mainly situated in the northwestern part of the New Territories affected by illegal discharge from livestock farms, expedient connections and villages where public sewerage is not yet available for connection.

Table 1 Sampling points with river water quality classified as "Fair" and "Bad" in 2016 and 2017

Area	Water Quality Index grading	
	Fair	Bad
Northwestern Northern and Western New Territories	Downstream of River Indus	Upstream of Tuen Mun River
	Downstream of Fairview Park Nullah	Downstream of Kam Tin River
	Downstream of Tin Shui Wai Nullah	Downstream of Yuen Long Creek
	Upstream of Yuen Long Creek	



Sai Kung and Urban area of Kowloon	Upstream of Tseng Lan Shue Stream Downstream of Kai Tak River #	---
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# Upgraded to “Good” in 2017.

The Environmental Protection Department (EPD)’s main strategies for improving the river water quality in Hong Kong are to implement the Water Pollution Control Ordinance, the Livestock Waste Control Scheme, and to extend the sewerage network to various villages according to the Sewerage Master Plans, so that village houses can be gradually connected to the public sewerage. In the coming year, the EPD will continue to take enforcement actions in accordance with the Water Pollution Control Ordinance and Waste Disposal Ordinance, combat illegal discharge of wastewater and livestock waste as well as expedient connections. The Government will also continue to implement the North District Sewerage Master Plans and Yuen Long and Kam Tin Sewerage Master Plans progressively to cover most villages that are not yet connected to the sewerage system. With the provision of public sewers, the water quality of these rivers will gradually improve. The EPD, in collaboration with other relevant departments, will continue to take various actions including publicity and education to reduce pollutants entering storm drains or rivers, so as to improve river water quality.

As taking enforcement actions, implementing the sewerage schemes, and publicity and education programmes are part of the routine duties of the EPD, there is no separate breakdown on the expenditure and manpower involved. In recent years, the Government has implemented a series of sewerage projects in the northwestern part of the New Territories, including provision of trunk sewers, rehabilitation of aging sewers and addition of dry weather flow interception facilities to improve river water quality. The estimated expenditure involved in these projects in 2018-19 is about \$827 million.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB110**

**(Question Serial No. 3005)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The provision earmarked for the Nature Conservation Programme in the coming year shows a significant increase of 395.1% over last year. What are the reasons and details?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 46)

Reply:

The Chief Executive announced in her 2017 Policy Address that a Countryside Conservation Office (CCO) would be established to co-ordinate conservation projects that would promote sustainable development of remote countryside. The CCO will be set up in 2018-19, which is expected to comprise about 28 officers from various grades. The increase in expenditure under the Programme is mainly for the staff costs of these officers (about \$19.61 million) and cashflow needs earmarked for launching conservation activities and projects after establishment of the CCO (about \$10 million).

- End -

**CONTROLLING OFFICER'S REPLY****ENB111****(Question Serial No. 3006)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the increase of 155 posts in the Waste Reduction and Recycling Division in the coming year, what are the reasons for the increase, the job nature of the relevant posts and the breakdown of the expenditure involved?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 47)Reply:

There will be a net increase of 155 posts in the Environmental Protection Department under "Programme (1) Waste" in 2018-19 and the notional annual salary cost at mid-point is about \$87 million. This is mainly for taking forward the producer responsibility schemes, preparing for the Municipal Solid Waste Charging Scheme, setting up new outreach teams, implementing landfill extension schemes and enhancing management of food waste, etc. The details are as follows:

Post	Pay scale	Net increase of posts
Principal Environmental Protection Officer	Directorate Pay Scale Point 1	+ 2
Senior Environmental Protection Officer	Master Pay Scale Point 45-49	+ 12
Environmental Protection Officer/ Assistant Environmental Protection Officer	Master Pay Scale Point 27-44 (Environmental Protection Officer) Master Pay Scale Point 16-21 (Assistant Environmental Protection Officer)	+ 29

Post	Pay scale	Net increase of posts
Chief Environmental Protection Inspector	Master Pay Scale Point 29-33	+ 6
Senior Environmental Protection Inspector	Master Pay Scale Point 22-28	+ 22
Environmental Protection Inspector	Master Pay Scale Point 8-21	+ 62
Senior Treasury Accountant	Master Pay Scale Point 45-49	+ 1
Treasury Accountant	Master Pay Scale Point 30-44	+ 1
Engineer/Assistant Engineer	Master Pay Scale Point 32-44 (Engineer) Master Pay Scale Point 19-27 (Assistant Engineer)	+ 2
Senior Executive Officer	Master Pay Scale Point 34-44	+ 1
Executive Officer II	Master Pay Scale Point 15-27	+ 1
Clerical Officer	Master Pay Scale Point 16-21	+ 1
Assistant Clerical Officer	Master Pay Scale Point 3-15	+ 8
Clerical Assistant	Master Pay Scale Point 1-10	+ 4
Assistant Supplies Officer	Master Pay Scale Point 8-26	+ 1
Motor Driver	Master Pay Scale Point 5-8	+ 2
Total		+ 155

- End -

**CONTROLLING OFFICER'S REPLY****ENB112****(Question Serial No. 0352)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Government set up the Recycling Fund in 2015 to strengthen the support for the recycling industry. The Enterprise Support Programme (ESP) and the Industry Support Programme (ISP) have been set up under the Recycling Fund respectively. In this connection, would the Government advise this Committee on:

(1) The total number of applications, the number of applications approved, not approved and withdrawn by the applicants as well as the accumulated amount of funding under the ESP since its establishment. Please provide the breakdown in table form:

Item (according to the types of recyclables)	Number of applications and accumulated amount of funding*			
	Total number of applications	Approved	Not approved	Withdrawn by the applicants
Waste metals				
Waste paper				
Waste plastics				
Waste styrofoam				
Waste tyres				
Food waste				
Waste cooking oil				
Construction waste				
Waste electrical and electronic equipment				
Waste wood				
Used furniture				

\*As at 31 December 2017

(2) The total number of applications, the number of applications approved, not approved and withdrawn by the applicants as well as the accumulated amount of funding under the ISP since its establishment. Please provide the breakdown in table form:

Item (according to the types of recyclables)	Number of applications and accumulated amount of funding*			
	Total number of applications	Approved	Not approved	Withdrawn by the applicants
Waste metals				
Waste paper				
Waste plastics				
Waste styrofoam				
Waste tyres				
Food waste				
Waste cooking oil				
Construction waste				
Waste electrical and electronic equipment				
Waste wood				
Used furniture				

\*As at 31 December 2017

(3) The reasons for applications not approved and applications withdrawn by the applicants under the two programmes; please provide the relevant figures by reasons; and

(4) The number of hours, budget and staffing establishment for handling the relevant applications under the two programmes respectively.

Asked by: Hon IP LAU Suk-ye, Regina (Member Question No. (LegCo use): 25)

Reply:

(1) As at 28 February 2018, the Recycling Fund received 113 applications for the Enterprise Support Programme (ESP) (excluding standard projects) and approved 30 projects (excluding 11 projects under assessment). Except for approved projects which were subsequently withdrawn, 24 projects had commenced right then or would soon commence, involving a total funding of around \$52.3 million. The status of applications for the ESP is as follows:

Item (according to the types of recyclables)	Number of cases			
	Total number of applications	Approved	Not approved	Withdrawn by the applicants (including only the number of applications withdrawn by the applicants before approval)
Waste metals	27	7	7	12
Waste paper	16	6	3	6
Waste plastics	19	4	4	10
Waste styrofoam	3	1	2	0
Waste tyres	5	2	1	2
Food waste or waste cooking oil	29	10	2	10
Construction waste	7	3	0	4
Waste electrical and electronic equipment	15	5	4	5
Waste wood	8	1	1	5
Used furniture	5	4	0	1
Others	13	4	2	7

Note:

1. As some approved projects under the ESP will process more than one type of recyclables, the sum of the figures listed in the table will be higher than the actual numbers of applications, applications approved, applications not approved and applications withdrawn respectively.
2. To minimise the administrative workload of small and medium enterprises (SMEs) in making applications, a category of Standard Project (SP) has been created under the ESP. This includes acquisition of equipment to enhance operational capacity and efficiency, obtaining accreditation for recycling operation and occupational safety and health (OSH) management as well as conducting OSH audit, subsidising staff to receive training, etc. Since it is difficult to categorise these projects according to the types of recyclables, the numbers of applications above do not include SP applications.

(2) As the objective of the Industry Support Programme (ISP) is to enhance the operational level and production capacity of the industry, it is not possible to categorise according to the types of recyclables. As at 28 February 2018, the Secretariat of the Recycling Fund received 36 applications for the ISP, with 9 projects approved. Except for approved projects which were subsequently withdrawn, 7 projects had commenced right then or would soon commence, involving a total funding of around \$29 million.

(3) All applications were considered by the Advisory Committee on the Recycling Fund with reference to a set of published vetting criteria. The reasons for applications not approved and applications withdrawn are as follows:

<b>Reasons for rejection</b>	<b>Number of cases involved</b>
The project or company information submitted by the applicant was incomplete	15
The project did not show that it could reduce disposal at landfills	14
The project content was not within the coverage of the Fund	14
The applicant did not meet the application eligibility	11
The project was not practicable	8
The project was not financially viable/sustainable	4
The applicant failed to prove his/her ability in implementing the project	3
The project was not cost-effective	1

<b>Reasons for applicant to withdraw the application*</b>	<b>Number of cases involved</b>
The project or company information submitted by the applicant was incomplete	41
A change of the organisation's strategy	24
Internal structural factors of the organisation	8
Internal financial factors of the organisation	5
The project did not show that it could reduce disposal at landfills	5
The applicant did not meet the application eligibility	4
The project was not practicable or within the coverage of the Fund	3
Others	11

\* Including only the number of applications withdrawn by the applicants before approval.

(4) The Secretariat of the Recycling Fund (i.e. the Hong Kong Productivity Council) has a dedicated team for project management and technical assessment to offer inputs on general application procedures to applicant organisations, accept and process applications, monitor the progress of approved projects and check on compliance with the funding conditions, etc. Since the preparation for the establishment of the Recycling Fund in September 2015 till March 2017, the Secretariat's expenditure on processing, monitoring and verifying applications for the Recycling Fund was about \$13 million.

- End -



**CONTROLLING OFFICER'S REPLY****ENB113****(Question Serial No. 0378)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

This year, the Environmental Protection Department is progressively developing a network of Community Green Stations (CGSs) across the territory to promote environmental education and enhance recycling support for the local community. Would the Government please advise on the following:

- 1 What are the progress and effectiveness of the CGSs, as well as their performance targets?
- 2 What are the specific measures to enhance recycling support?
- 3 As the public is not well informed of the locations of the four-colour recycling bins, will the Administration review the situation? Will recycling bins be placed at prominent places, such as all MTR exits? And will the Administration consider placing recycling bins beside public toilets to facilitate rinsing of plastic bottles and aluminium cans by members of the public to encourage the community's participation in recycling?
- 4 There are incessant press reports that rubbish was always indiscriminately placed in the four-colour recycling bins, making the recyclables therein which could have been recycled unrecyclable due to contamination. What specific measures does the Government have to solve the problem?
- 5 There are also press reports that outsourced companies dumped all the recyclables in the four-colour recycling bins directly into the refuse collection vehicles and transported them to the landfills. How will the Government prohibit such acts?

Asked by: Hon IP LAU Suk-ye, Regina (Member Question No. (LegCo use): 51)Reply:

1. The Environmental Protection Department (EPD) is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2017, 5 CGSs have progressively been in operation, namely the Sha Tin CGS and the Eastern CGS which commenced operation in 2015 and the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS which commenced operation in 2017. The latest development of individual CGSs is tabulated below:

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Sha Tin CGS	10 On Ping Street, Shek Mun	The CGS commenced operation in May 2015. In 2017, the CGS collected about 415 tonnes of recyclables.
Eastern CGS	30 Oi Shun Road, Shau Kei Wan	The CGS commenced operation in August 2015. In 2017, the CGS collected about 395 tonnes of recyclables.
Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables.
Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables.
Sham Shui Po CGS	339 Tung Chau Street	The CGS commenced operation in October 2017. As at the end of 2017, the CGS collected about 17 tonnes of recyclables.
Tuen Mun CGS	9 Tuen Yee Street	The tendering for the operation contract is underway. The CGSs are expected to commence operation in the second half of 2018.
Kwai Tsing CGS	12 Tam Kon Shan Road, Tsing Yi	
Tai Po CGS	Between Ting Kok Road and Dai Wah Street	
Islands CGS	Junction of Yu Tung Road and Chung Mun Road, Tung Chung, Lantau	Construction works are underway, which are expected to be completed in the second half of 2018.
Sai Kung CGS	Po Lam Lane, near Po Hong Road and Po Lam Road North, Tseung Kwan O	
Wan Chai CGS	Junction of Wan Shing Street and Hung Hing Road	A design idea competition is underway. The design and construction works are expected to commence in the second half of 2018.
Tsuen Wan CGS	Hoi Shing Road, near Hoi Kok Street	Sites have been confirmed and planning of construction works is in progress.
Wong Tai Sin CGS	Junction of Yuk Wah Street and Po Leung Lane, Tsz Wan Shan	

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Kowloon City CGS, Southern CGS, Yau Tsim Mong CGS, Central and Western CGS and North CGS	Site to be confirmed	We have been following up the views from District Councils. Taking into account the actual operating experience in other projects, we are continuing with site search and other associated preparation work.

Since inception the CGSs have been running smoothly. We will take into account their operation statistics to evaluate the effectiveness of each of the CGSs. Besides, we will take into account views from various stakeholders and make suitable adjustment to the work of the CGSs on environmental education and recycling support as and when necessary.

2. At the community level, the EPD has extended the Source Separation of Waste Programme to encourage members of the public to practise source separation of waste at home or at workplace. As at early 2018, over 2 000 housing estates, some 700 rural villages and over 1 000 industrial and commercial buildings have participated in the Programme. The Government has now placed about 16 000 sets of waste separation bins in public places, schools, office buildings, country parks and buildings participating in the Source Separation of Waste Programme to facilitate source separation of waste by the public. The provision of recycling bins (RBs) covers over 80% of the places where Hong Kong people live and work.

Since single block buildings in older districts usually do not have any property management company in implementing and overseeing a recycling programme or the space for waste recovery facilities, the Government has set up Community Recycling Centres (CRCs) operated by non-government organisations (NGOs) in various districts through the Environment and Conservation Fund (ECF) so as to provide services for residents living in these buildings, facilitate their separation of waste for recovery and promote waste reduction and recycling activities at the community level. Active public participation in waste source separation is encouraged to nurture and sustain habits of waste reduction and recycling. There are currently 18 CRCs operated by NGOs, 1 mobile community recycling project and over 50 collection points in Hong Kong.

Moreover, the EPD has collaborated with the Environmental Campaign Committee (ECC) to launch a Clean Recycling Campaign since mid-2015 to promote behavioural change towards clean recycling, with a view to increasing the quality and quantity and in turn the value of the recyclables. The EPD launched a new round of clean recycling campaigns in December 2017, with focus on encouraging the public to mainly recover three types of paper (i.e. newspapers, office papers and paperboards), recycle two types of plastic bottles first (plastic containers of beverages or personal care products) and practise clean separation and recycling, so as to facilitate subsequent recycling process and seek further outlets. The EPD also collects clean non-bottle waste plastics through the CGSs and Community Recycling Network and send them to suitable recyclers for processing where there are viable outlets. Meanwhile, the EPD is going to recruit additional manpower to set up outreaching teams to assist and support the property management companies and residents in practising source separation of waste and clean recycling.

As regards promoting the producer responsibility scheme (PRS), we are actively undertaking the preparatory work for the PRS on glass beverage containers for its full implementation targetted in 2018-19. Among other things, the Government awarded two glass management contracts for Hong Kong Island (including Islands district) and the New Territories regions through open tender in November 2017 to provide glass container collection and treatment services for the two regions. Regarding the contract for the Kowloon region, the tendering exercise is underway and is expected to be completed with the contract awarded in the second quarter of 2018. Besides, we are drafting the relevant subsidiary legislation to provide for the operational details for the implementation of the scheme. We aim to submit the subsidiary legislation to the Legislative Council for scrutiny later this year. Moreover, the PRS on waste electrical and electronic equipment will be fully implemented in 2018. From 1 August 2018 onwards, suppliers who distribute regulated electrical equipment (REE) are required to register with the EPD as registered suppliers and pay a recycling levy for REE distributed in Hong Kong, whilst sellers of REE are required to arrange free statutory removal service for consumers to dispose of an equipment of the same class that they intend to abandon. The disposal licensing control, import and export permit control and landfill disposal ban in respect of e-waste will come into effect from 31 December 2018 onwards.

The EPD has also appointed a consultant through open tender in October 2017 to conduct a feasibility study on how to implement a PRS targeting suitable plastic containers, mainly those carrying beverages or personal care products. The consultant will review and analyse the experience of other jurisdictions and the actual situation of Hong Kong, as well as the implication of the introduction of the PRS on different stakeholders. In the process, the consultant will engage with the relevant trade associations and seek their views. The EPD expects to complete the whole study in 18 months.

Meanwhile, the EPD is preparing to introduce a pilot scheme on collection of waste plastic bottles to centrally collect the waste plastic bottles received by the CRCs and as necessary, from the sources direct (i.e. the individual residential estates), across the territory for delivery to competent recyclers for onward processing.

As mentioned earlier, the EPD will continue to take forward the CGSs projects. Apart from the 5 CGSs which are now in service, we are tendering for appointment of an operator for the Tuen Mun CGS and the Kwai Tsing CGS. It is estimated that the CGSs will start service in the second half of 2018.

The Government will continue to provide short-term tenancy sites and waste paper berths in the public cargo working areas with the \$ 1 billion Recycling Fund for exclusive use and bidding by the recycling operators. It will also continue to develop the 20-hectare EcoPark to support the development of local recycling industry and look for more long-term, effective and diversified ways out for the processing of local recyclables. We will study the feasibility of nurturing a local manufacturing industry using recycled materials. As waste paper makes up the largest proportion of local recyclables, we plan to invite open tenders in late March 2018 from interested manufacturers to develop the waste paper recycling industry in the EcoPark.

3. The Government will adjust the number and location of the RBs in public places as well as the collection frequency, taking into account various factors such as street conditions, pedestrian circulation, quantity of recyclables recovered, bin-overfilling condition, and local demand. Members of the public can visit the Waste Reduction Website or make use of the mobile application “Waste Less” of the EPD to locate the waste separation bins nearby or being placed in public places. Apart from showing the locations of the recyclable collection points through maps and instant search, the “Waste Less” mobile application also provides relevant information and knowledge on recycling.

RBs are being provided in public places to provide recycling support to buildings which have space constraints in placing such facilities (e.g. single block buildings) and to promote public awareness of waste separation and recycling. To complement the implementation of municipal solid waste charging and to enhance the support for recycling, the Steering Group on the Modification of Recycling and Refuse Collection Facilities in Public Places (the Steering Group), chaired by Secretary for the Environment, was set up in February 2016 to review the number, distribution and design of the RBs and litter containers (LCs) in public places.

The Steering Group has recently completed the first stage of its work on the review of number and distribution of the RBs and LCs and recommended that the current RBs to LCs ratio of 1:14 in public places be increased to 1:6 to encourage waste reduction and recycling. It was also recommended that additional specific RBs dedicated to collect certain types of recyclables (e.g. paper) should be provided at appropriate locations (e.g. exits of MTR stations where typically more waste paper has been collected) to facilitate resource recovery. The RBs and LCs should be placed at strategic locations (e.g. crossroads, entrance and exits of venues, etc.) to provide the public with greater certainty on their placement, which would help encourage their use. The Steering Group commissioned a Stage 2 consultancy study at the end of 2017 to review the existing designs of RBs and LCs in public places. The consultants will collect views from the general public and stakeholders on the new designs in due course.

4. Contaminants or impurities in recyclables will substantially increase the processing costs and directly affect the cost effectiveness of the recycling process. Therefore, clean recycling has an important bearing on the recycling value and recyclability of the recyclables. If refuse or contaminated recyclables (e.g. containers containing food residues, bottles and cans containing drinks, used tissues, etc.) are wrongly disposed of in the RBs, the whole batch of recyclables may be contaminated and be disposed of at landfill eventually. As mentioned above, the EPD will roll out a new round of publicity and public education campaign to promote clean recycling, with focus on encouraging the general public to practise clean recycling. Meanwhile, the EPD is going to recruit additional manpower to set up outreaching teams to assist and support the property management companies and residents in practising source separation of waste and clean recycling.

5. For RBs placed in public places (e.g pavements, public transport interchanges, refuse collection points, etc.), the Food and Environmental Hygiene Department (FEHD) has put in place a robust contract management mechanism under which the FEHD staff conduct regular and surprise checks to monitor the performance of the contractors who collect recyclables from the RBs. Among all obligations, these contractors are strictly prohibited

from disposing of the collected recyclables at landfills or other waste treatment facilities. If any breach of contract provisions is found, the FEHD will take punitive actions accordingly, including issuing verbal warning, written warning and default notices. The monthly amount payable to the contractors who have received default notices will be deducted in the light of the breaches. In collaboration with the EPD, the FEHD will continue to closely monitor the performance of the contractors and keep the monitoring regime under review with a view to identifying the need and room for enhancement to the recyclables collection service.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB114**

**(Question Serial No. 0379)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

In 2018-19, the Environmental Protection Department (EPD) will continue to promote green procurement in the Government and the community. Would the Administration advise on the following:

- 1 What are the details and standards of the Government Green Procurement currently? How does the Government plan to enhance them?
- 2 How will EPD promote green procurement in the community and the business sector? For example, will it provide measures like tax incentives?

Asked by: Hon IP LAU Suk-ye, Regina (Member Question No. (LegCo use): 52)

Reply:

The Government has taken the lead to adopt green procurement to promote environmental protection and set a role model for the community.

The Government amended the Stores and Procurement Regulations in 2000, requiring various departments to take environmental factors into account in setting out the tender specifications and purchase green products as far as possible and where economically rational. Under the steer of the Inter-departmental Working Group on Green Government Procurement, we have developed the green specifications and guidelines for the goods and services commonly used by the Government with reference to the standards and practices generally adopted in the market for adoption by departments to practise green procurement. The Government's green procurement list has been expanded to 150 items of products and services. To enhance the overall performance of green procurement in the Government, we have commissioned a consultancy study to further expand the Government's green procurement list to cover more products and services and update the relevant green specifications. It is expected that the study will be completed in the 4th quarter of 2019.

We will continue to step up publicity efforts to share the Government's experience in implementing the green procurement policy with various sectors of the community and seek their support by organising experience sharing sessions, talks and forums, as well as distributing electronic promotional materials, etc. We will also upload the relevant information, such as the latest Government's green procurement list and the relevant specifications, as well as the local and international best practices onto the Environmental Protection Department's website for public reference. Moreover, we are arranging outreach activities for the commercial and industrial sectors to encourage them to formulate their trade-specific green procurement guidelines having regard to the actual needs of their respective industries and to purchase and use green products and services in their daily operations as far as possible.

Besides, the Financial Secretary announced in the 2018-19 Budget Speech that the Government would enhance tax concessions for capital expenditure incurred by enterprises in procuring eligible energy efficient building installations and renewable energy devices by allowing tax deduction to be claimed in full in one year instead of the current time frame of five years.

- End -



**CONTROLLING OFFICER'S REPLY****ENB115****(Question Serial No. 2165)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Would the Department reply on the following in table form:

- (1) The numbers of three-colour recycling bins across the territory in the past 5 years.
- (2) The respective quantities of waste paper, aluminium cans and plastic bottles collected by three-colour recycling bins across the territory in the past 5 years, among which, the quantities of recyclables and non-recyclables.
- (3) The numbers of contractors contracted for the recyclables in three-colour recycling bins in the past 5 years.
- (4) Does the Department have any plan to review the effectiveness of the three-colour recycling bins and whether to increase or reduce the number of the bins? If yes, what are the details?
- (5) What are the types, quantities and percentages of recyclables in local waste? And
- (6) What is the percentage of recyclables in three-colour recycling bins in the total quantity of recyclables across the territory? Please reply by type of waste.

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 2)Reply:

In the past 5 years, the Government placed about 16 000 sets of waste separation bins throughout the territory, including public places, schools, government quarters and offices, hospitals, clinics and housing estates/residential buildings which had participated in the Source Separation of Waste Programme (the Programme). More than 2 000 housing estates/residential buildings have joined the Programme, covering about 80% of Hong Kong population.

Apart from the waste separation bins provided by the Government, a certain number of bins are placed by the housing estates/residential buildings, and arrangements have been made by them with the downstream recyclers for the collection and treatment of the recyclables. The Environmental Protection Department (EPD) does not have the number of waste

separation bins placed by these housing estates/residential buildings on their own. Therefore, we do not have information on the quantities of recyclables collected by recycling bins across the territory, their recovery rate and percentage in recyclables of Hong Kong, as well as the number of contractors involved.

To prepare for the implementation of municipal solid waste (MSW) charging and enhance the supporting facilities for recycling, the Steering Group on the Modification of Recycling and Refuse Collection Facilities in Public Places (the Steering Group) was set up in February 2016 under the chairmanship of the Secretary for the Environment to review the number, distribution and design of recycling bins (RBs) and litter containers (LCs) in public places. The Steering Group has recently completed the first stage review of the number and distribution of RBs and LCs, and recommended the increase of the ratio of RB to LC in public places from the current 1:14 to 1:6 to encourage waste reduction and recovery. The number of RBs in public places is expected to be increased to 4 000 by the end of 2019. The Steering Committee has also commissioned a Stage 2 consultancy study at the end of 2017 to review the existing designs of LCs and RBs in public places. The consultants will, at a later stage, solicit views from the public and stakeholders on the proposed designs.

The statistics on the quantity of recyclables recovered from MSW in 2016 by recyclable type from the reports on “Monitoring of Solid Waste in Hong Kong” compiled by EPD are shown in the table below. The relevant statistics for 2017 are still under compilation.

Recyclable type	Quantity of recyclables recovered (thousand tonnes)	
Paper	805.7	(42.1%)
Plastics	125.9	(6.6%)
Ferrous metals	808.1	(42.3%)
Nonferrous metals	71.6	(3.7%)
Glass (1)	9.3	(0.5%)
Rubber tyres (2)	12.5	(0.7%)
Textile	4.2	(0.2%)
Wood	3.9	(0.2%)
Food waste (3)	15.6	(0.8%)
Electrical and electronic equipment (4)	55.4	(2.9%)
Total	1 912.3	(100.0%)

Notes:

- (1) Glass beverage bottles recovered for reuse through deposit-and-refund system operated by local beverage manufacturers are not included.
- (2) The quantity includes reuse, retreading and recycling of vehicle tyres and retreading of aircraft tyres in Hong Kong.
- (3) The quantity of food waste recycled locally includes those recycled by industrial operators and those recycled at outlying islands transfer facilities and EPD’s composting facilities at Kowloon Bay.
- (4) The volume of waste electrical and electronic equipment recovered for recycling is compiled from results of a biennial survey on “Generation & Disposal Practice of Used/ End-of-Life Electrical & Electronic Equipment and Batteries in Hong Kong” commissioned by EPD.
- (5) The figures in brackets are the percentages of recyclables in the total quantity of recyclables.
- (6) The figures may not add up to total due to rounding off.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB116**

**(Question Serial No. 0317)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

“A Food Waste & Yard Waste Plan for Hong Kong 2014-2022” sets out a target of reducing food waste disposal at landfills from around 3 600 tonnes a day to around 2 160 tonnes a day (a reduction of about 500 000 tonnes per year) by 2022. Would the Government advise:

1 the tonnage of food waste per day from 2014 to 2017;

2 the respective percentages of commercial and domestic food waste per day;

3 the number of food waste recovery projects supported by the Environmental Protection Department and the amount of subsidy for each project. Please list the amount of food waste recovered in these projects by districts.

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 2)

Reply:

(1) and (2)

The quantities of food waste (including domestic and commercial & industrial food waste) disposed of at landfills from 2014 to 2016 are tabulated below. The relevant statistics for 2017 are still under compilation.

Year	Domestic food waste		Commercial & industrial food waste		Total daily quantity of food waste disposal (tonnes) (c)=(a)+(b)
	Daily quantity of disposal (tonnes) (a)	Percentage in total quantity of food waste disposal (%)	Daily quantity of disposal (tonnes) (b)	Percentage in total quantity of food waste disposal (%)	
<b>2014</b>	2 608	71.6%	1 033	28.4%	3 640
<b>2015</b>	2 397	70.9%	985	29.1%	3 382
<b>2016</b>	2 326	64.6%	1 274	35.4%	3 600

Note: The above figures may not add up to total due to rounding off.

(3) Since 2010, the Environmental Protection Department (EPD) has been taking forward the “Food Waste Recycling Partnership Scheme” (the Partnership Scheme) with relevant commercial and industrial (C&I) organisations to promote good food waste management to the C&I sectors. Under the Partnership Scheme, the EPD collaborates with District Councils and non-profit-making organisations to hold “Food Waste Reduction Activities” which would last for 3 to 6 months in various shopping malls in different districts on a roving basis, so as to enhance public participation and promote food waste reduction at source to the C&I sectors. In addition, the EPD also subsidises domestic food waste reduction and recycling projects through the implementation of the “Food Waste Recycling Projects in Housing Estates” and food waste recycling projects under the “Community Waste Reduction Projects” funded by the Environment and Conservation Fund (ECF).

From 2014-15 to 2017-18 (as at end December 2017), about \$2.2 million was paid for the “Food Waste Recycling Partnership Scheme” and “Food Waste Reduction Activities”. The amount of subsidies granted by the ECF for the “Food Waste Recycling Projects in Housing Estates” and food waste recycling projects under the “Community Waste Reduction Projects” was about \$25.8 million. Regarding the above food waste recycling projects, the quantities by district of food waste recovered are as follows:

District	Quantities of food waste recovered (tonnes)
Central and Western	147
Wan Chai	151
Eastern	368
Yau Tsim Mong	187
Sham Shui Po	387
Kowloon City	49
Wong Tai Sin	277
Kwun Tong	68
Kwai Tsing	356
Tsuen Wan	136
Tuen Mun	84
Yuen Long	209
North	69
Tai Po	232
Sha Tin	157
Sai Kung	28

District	Quantities of food waste recovered (tonnes)
Islands	860
Cross-district	110

To foster “food wise” culture at campus, the EPD will gradually install small-scale food waste composters for those schools with meals provided and suitable venues, and provide the relevant technical support and teaching materials to demonstrate how to convert unavoidable food waste to compost as well as remind students of the importance of food wise and waste less. The ECF has earmarked a funding of \$20 million to continue to support various food waste reduction projects, of which \$5 million will be used to provide small-scale food waste composters for about 100 schools. The preparatory work for the new measure is underway, and it is expected to invite schools to participate in 2018-19.

According to “A Food Waste & Yard Waste Plan for Hong Kong 2014–2022” announced in 2014, the Government will gradually develop a network comprising 5 to 6 organic resources recovery centres (ORRCs). ORRC Phase 1 is located at Siu Ho Wan of Lantau with a daily capacity of 200 tonnes of food waste, which is scheduled to be commissioned in 2018. ORRC Phase 2 is located at Sha Ling of the North District with a daily capacity of 300 tonnes of food waste. We have completed the tender exercise for phase 2, and will apply for funding approval from the Legislative Council as soon as possible to enable the commencement of construction at the earliest date. We have identified a site at Shek Kong of Yuen Long to develop ORRC Phase 3 with a daily capacity of 300 tonnes of food waste. We will take forward the environmental impact assessment and engineering feasibility study for Phase 3 in 2018. We will continue to work with the relevant departments on the search for suitable sites for the remaining ORRCs.

In addition, we will commission the “Food Waste/Sewage Sludge Anaerobic Co-digestion” Trial Scheme at the Tai Po Sewage Treatment Works (STW) in 2019. Under the Trial Scheme, Food Waste Pre-treatment Facilities will be constructed at the existing Shuen Wan Leachate Pre-treatment Works in Tai Po to treat up to 50 tonnes of food waste per day, which will then be transported to the existing sewage sludge anaerobic digestion system at the Tai Po STW for food waste/sewage sludge anaerobic co-digestion. The Trial Scheme is to study and establish the technical feasibility and installation requirements of using existing sewage treatment facilities for food waste/sewage sludge anaerobic co-digestion to help raise Hong Kong’s overall food waste treatment capability.

- End -

**CONTROLLING OFFICER'S REPLY****ENB117****(Question Serial No. 0383)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

With regard to electric vehicles (EVs), would the Government inform this Committee:

- the changes in the number of EVs and diesel vehicles respectively in the past 5 years;
- the changes in the number of public and private charging stations in the territory, with a breakdown by the 18 districts, in each of the past 5 years;
- In view of the shortage of public/private charging stations and the need for improvement in the charging facilities for parking spaces for EVs, has the Government allocated additional resources to cope with the situation? If yes, what are the corresponding measures and strategies?

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 4)Reply:

- The number of registered / licensed electric vehicles (EVs) and diesel vehicles (DV) in the past 5 years are as follows:

Year	DVs		EVs	
	No. of registered vehicles (by year end)	Difference with the number at the end of the previous year	No. of registered vehicles (by year end)	Difference with the number at the end of the previous year
2013	143 559	6 018	436	100
2014	136 656	-6 903	1 325	889
2015	136 015	-641	3 954	2 629
2016	138 478	2 463	6 982	3 028
2017*	143 208	4 730	10 845	3 863

Note: Not including government vehicles and special purpose vehicles.

\* The number of DVs increased rapidly in 2017 because many diesel private cars hurried to register before the implementation of the new emission standards (1 October 2017).

Year	DV <sub>s</sub>		EV <sub>s</sub>	
	No. of licensed vehicles (by year end)	Difference with the number at the end of the previous year	No. of licensed vehicles (by year end)	Difference with the number at the end of the previous year
2013	135 132	4 949	416	95
2014	133 339	-1 793	1 309	893
2015	133 331	-8	3 848	2 539
2016	135 662	2 331	6 827	2 979
2017	140 195	4 533	10 569	3 742

Note: Not including government vehicles and special purpose vehicles.

- b) The number of public EV chargers provided in government car parks and private car parks (to our knowledge) in the past 5 years is as follows:

Year	No. of public EV chargers	Difference with the number in the previous year
2013	1 036	32
2014	1 125	89
2015	1 221	96
2016	1 518	297
2017	1 862	344

Since there was no breakdown on the number of chargers by 18 districts in 2013 or before, we only have the information on the distribution of chargers in 18 districts of Hong Kong in the past 4 years as follows:

The number of public EV chargers by 18 districts of Hong Kong as at the end of 2014 is as follows:

District	No. of chargers		
	Standard	Medium	Quick
Central & Western	164	34	1
Eastern	110	19	1
Southern	2	1	8
Wan Chai	67	15	8
Kowloon City	55	0	6
Kwun Tong	60	16	2
Sham Shui Po	43	8	0

District	No. of chargers		
	Standard	Medium	Quick
Wong Tai Sin	58	9	0
Yau Tsim Mong	103	6	1
Kwai Tsing	16	18	0
Tsuen Wan	47	5	0
Sai Kung	29	7	0
North	33	10	1
Tai Po	15	0	0
Sha Tin	67	6	1
Yuen Long	39	0	1
Tuen Mun	18	0	0
Islands	9	5	1
<b>Total:</b>	<b>935</b>	<b>159</b>	<b>31</b>
	<b>1 125</b>		

The number of public EV chargers by 18 districts of Hong Kong as at the end of 2015 is as follows:

District	No. of chargers		
	Standard	Medium	Quick
Central & Western	164	33	6
Eastern	107	19	6
Southern	2	4	15
Wan Chai	66	17	10
Kowloon City	54	1	12
Kwun Tong	60	17	9
Sham Shui Po	40	8	0
Wong Tai Sin	58	9	6
Yau Tsim	95	22	12



District	No. of chargers		
	Standard	Medium	Quick
Mong			
Kwai Tsing	16	11	7
Tsuen Wan	46	7	7
Sai Kung	29	7	5
North	33	10	1
Tai Po	3	0	5
Sha Tin	64	12	12
Yuen Long	39	2	3
Tuen Mun	12	9	6
Islands	11	6	6
<b>Total:</b>	<b>899</b>	<b>194</b>	<b>128</b>
	<b>1 221</b>		

The number of public EV chargers by 18 districts of Hong Kong as at the end of 2016 is as follows:

District	No. of chargers		
	Standard	Medium	Quick
Central & Western	164	42	19
Eastern	126	34	17
Southern	4	7	16
Wan Chai	67	30	10
Kowloon City	54	2	14
Kwun Tong	62	42	23
Sham Shui Po	43	20	4
Wong Tai Sin	55	12	9
Yau Tsim Mong	100	48	23
Kwai Tsing	17	13	7

District	No. of chargers		
	Standard	Medium	Quick
Tsuen Wan	44	12	10
Sai Kung	38	11	8
North	35	10	3
Tai Po	3	3	8
Sha Tin	79	12	24
Yuen Long	40	11	9
Tuen Mun	10	13	9
Islands	13	23	6
<b>Total:</b>	<b>954</b>	<b>345</b>	<b>219</b>
	<b>1 518</b>		

The number of public EV chargers by 18 districts of Hong Kong as at the end of 2017 is as follows:

District	No. of chargers		
	Standard	Medium	Quick
Central & Western	93	75	24
Eastern	37	68	32
Southern	4	17	19
Wan Chai	84	91	20
Kowloon City	65	2	18
Kwun Tong	214	40	41
Sham Shui Po	17	46	4
Wong Tai Sin	24	46	9
Yau Tsim Mong	100	58	28
Kwai Tsing	16	9	25
Tsuen Wan	16	40	7
Sai Kung	38	14	16

District	No. of chargers		
	Standard	Medium	Quick
North	35	16	6
Tai Po	28	3	8
Sha Tin	90	35	32
Yuen Long	46	11	14
Tuen Mun	10	8	14
Islands	14	26	9
<b>Total:</b>	<b>931</b>	<b>605</b>	<b>326</b>
	<b>1 862</b>		

c) Regarding the charging arrangements for electric private cars (e-PCs), it has always been the Government's policy direction that e-PC owners should perform daily charging of their e-PCs by using charging facilities at their home, workplace or other suitable places (including charging facilities provided by e-PC suppliers). Public charging facilities in Hong Kong are supplementary in nature, set up for EVs to top up their batteries at times of occasional needs. They do not serve as daily charging facilities or their alternatives. Potential buyers of e-PCs should fully consider the daily charging arrangements required and should not rely on public charging facilities for daily charging of their e-PCs.

Given the above policy direction, the Government's priority is to facilitate and encourage the installation of charging facilities in private premises when planning for the development of charging facilities for e-PCs. These measures include the Environmental Protection Department's (EPD) establishment in 2011 of a dedicated team and a hotline to provide information and technical support for the installation of EV charging facilities, and the Government's tightening of gross floor area concessions for private car parks in new buildings in April 2011 to encourage developers to provide the EV charging-enabling infrastructure, including provision of sufficient power supply, cabling and conduits for all parking spaces in the buildings concerned. On the development of public charging networks as supplementary facilities, the Government not only takes the lead in providing and enhancing its public charging facilities in government car parks but also supports private establishments to set up and enhance non-governmental public charging networks.

To improve the charging efficiency, EPD has progressively upgraded standard chargers to medium chargers in the past few years (as compared with standard chargers, medium chargers can reduce the charging time by up to 60%). As at the end of 2017, EPD has installed 519 chargers, among which 268 are medium chargers, in 425 parking spaces (representing 7% of the relevant parking spaces) in the government car parks managed by the Transport Department and Government Property Agency which are open for public use.

The EPD's manpower and expenditure involved in promoting the use of EVs in 2018-19 and the expenditure related to other work areas for promoting the use of EVs will be met by the existing resources under the Air Programme.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs and retrofitting existing car parks with charging facilities. Specific timetables and estimated expenditure are not available for the time being.

- End -

**CONTROLLING OFFICER'S REPLY****ENB118****(Question Serial No. 0702)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

It is mentioned in the budget that *A Food Waste & Yard Waste Plan for Hong Kong 2014–2022* was unveiled by the Government in 2014 to map out the comprehensive strategy, targets, policies and action plans for the management of food waste and yard waste in the coming years. The Plan aims to cut down the amount of food waste that goes to landfills by at least 40% by 2022 from around 3 600 tonnes a day to around 2 160 tonnes a day, representing a reduction of about 500 000 tonnes per year. In this connection, would the Government inform this Committee:

1. What was the amount of food waste in each year since the Plan was unveiled? Please list the amount of domestic and commercial food waste separately by the 18 districts.
2. What was the percentage of food waste in each landfill?
3. What was the amount of source-separated food waste handled by the Organic Resources Recovery Centre (ORRC) in each of the past 5 years? What was its percentage in the total amount of food waste? Is there any plan to increase the amount of food waste to be recovered in the next 5 years? If yes, what are the details? What is the increase in the amount of food waste to be recovered in each year?
4. What was the amount of food waste recovered from residential premises and restaurants respectively in the past 5 years? Please list by years. What was the percentage of food waste recovered and delivered to the ORRC? If the relevant figures cannot be provided, what are the reasons?
5. Will the Administration review and increase the channels of food waste recovery? If yes, what are the details? If not, why not?

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 51)

Reply:

1. The quantities of food waste (including domestic and commercial & industrial food waste) disposed of at landfills from 2014 to 2016 are tabulated below. The Environmental Protection Department (EPD) does not have statistics on food waste by district.

<b>Year</b>	<b>Quantity of domestic food waste disposal (thousand tonnes) (a)</b>	<b>Quantity of commercial &amp; industrial food waste disposal (thousand tonnes) (b)</b>	<b>Total quantity of food waste disposal (thousand tonnes) (c)=(a)+(b)</b>
<b>2014</b>	952	377	1 329
<b>2015</b>	875	360	1 234
<b>2016</b>	851	466	1 318

Note 1: The figures may not add up to total due to rounding off. The relevant waste statistics for 2017 are still being compiled.

2. Since 6 January 2016, the South East New Territories Landfill has only received construction waste, and the North East New Territories and West New Territories Landfills have still continued to receive municipal solid waste (MSW) including food waste. In 2016, food waste accounted for about 35% of the total amount of MSW received by the landfills. The EPD does not have statistics on food waste by landfill.
3. According to “A Food Waste & Yard Waste Plan for Hong Kong 2014–2022”, the EPD will build a network comprising 5 to 6 Organic Resources Recovery Centres (ORRCs). ORRC Phase 1 is located at Siu Ho Wan of North Lantau with a daily capacity of 200 tonnes of food waste, which is scheduled to be commissioned in 2018. Therefore, statistics on the amount of food waste recovered are not yet available. ORRC Phase 2 will be located at Sha Ling of the North District with a daily capacity of 300 tonnes of food waste. We have completed the tender exercise for Phase 2, and will seek funding approval from the Financial Committee of the Legislative Council as soon as possible so as to commence the construction early.
4. Under the Food Waste Recycling Projects in Housing Estate funded by the Environment and Conservation Fund, the amounts of food waste recovered in the past 5 years are set out below:

<b>Year</b>	<b>Amount of Food waste recovered (tonnes)</b>
2013-14	201
2014-15	204
2015-16	292
2016-17	469
2017-18	470 <sup>(Note 2)</sup>

Note 2: Estimated amount of food waste recovered up to end of March 2018

Through the Food Waste Recycling Partnership Scheme, the EPD delivered the commercial and industrial food waste collected from various districts to the Kowloon Bay Pilot Composting Plant for recycling. The amounts of commercial and industrial food waste recovered in the past 5 years are set out below:

Year	Amount of food waste recovered (tonnes)
2013-14	336
2014-15	293
2015-16	324
2016-17	431
2017-18	247 (Note 3)

Note 3: Estimated amount of food waste recovered up to end of February 2018

As ORRC Phase 1 is scheduled to be commissioned in 2018, statistics on the amount of food waste recovered are not yet available.

5. The ORRC network is the infrastructure which will turn food waste into energy. Apart from Phase 1 and Phase 2 mentioned above, we have identified a site at Shek Kong of Yuen Long to develop ORRC Phase 3 with a daily capacity of 300 tonnes of food waste. We will take forward the environmental impact assessment and engineering feasibility study for Phase 3 in 2018. We will continue to work with the relevant departments on the search for suitable sites for the remaining ORRCs.

In addition, we will commission the “Food Waste/Sewage Sludge Anaerobic Co-digestion” Trial Scheme at the Tai Po Sewage Treatment Works (STW) in 2019 to study and establish the technical feasibility and installation requirements of using existing sewage treatment facilities for food waste/sewage sludge anaerobic co-digestion, and to help raise Hong Kong’s overall food waste treatment capability. Under the Trial Scheme, Food Waste Pre-treatment Facilities will be constructed at the existing Shuen Wan Leachate Pre-treatment Works in Tai Po to treat up to 50 tonnes of food waste per day, which will then be transported to the existing sewage sludge anaerobic digestion system at the Tai Po STW for food waste/sewage sludge anaerobic co-digestion. The biogas so generated will be turned into electricity for use by the Tai Po STW.

To tie in with the establishment of the ORRC network, the EPD will set up a new Food Waste Recycling Group to, among other things, conduct the feasibility study of the implementation of a food waste source separation scheme in Hong Kong, including exploring its impacts on the industry, economy and people’s livelihood, and studying the legislative procedures that the scheme may involve. The Food Waste Recycling Group will also endeavour to promote the Food Wise Hong Kong Campaign with a view to further enhancing the community’s understanding of and participation in food waste separation and recycling.

- End -

**CONTROLLING OFFICER'S REPLY****ENB119****(Question Serial No. 0955)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

According to the Administration's goals, one of the objectives of the establishment of the Steering Committee to Promote Sustainable Development of the Recycling Industry is to promote the development of the recycling industry in Hong Kong. In this connection, would the Administration advise this Committee on the following:

1. Please provide in table form details of various types of recyclables including metals, wood, plastics, glass, batteries, electrical and electronic equipment, waste construction materials, waste cooking oil, food waste, tyres and textile in each of the past 5 financial years, as well as the final quantity recovered, the final quantity disposed of at landfills, the materials exported directly after recovery or after simple processing (quantity and total market value), products or semi-products for use in the local market after local recycling (quantity and total market value) and products or semi-products exported after local recycling (quantity and total market value) of these recyclables respectively;
2. Please provide the user names, areas, types of recyclables and distribution of the idle sites in respect of the land use zones designated as "environmental recycling and treatment" and "environmental recycling industry" by 18 districts in the past 3 years;
3. Please provide information on the new sites designated for environmental recycling use, which are scheduled to be released in the latest financial year, and the estimated expenditure for the relevant land development and staff management.

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 31)Reply:

1) The 2017 figures are still being compiled. The information on the quantity of recyclables recovered and disposed of from 2012 to 2016 <sup>(1)</sup> <sup>(2)</sup> is set out in the following tables:



## 2016

Recyclables	Materials exported directly after recovery or after simple processing		Recycled locally	Quantity recovered <sup>(3)</sup>	Quantity disposed of at landfills
	Quantity (a)	Total income	Quantity (b)	Quantity (a)+(b)	Quantity
	'000 tonnes	\$'000	'000 tonnes	'000 tonnes	'000 tonnes
Metals	879.4	2,599,433	0.2	879.7	88.4
Wood	1.0	1,487	2.9	3.9	101.4
Plastics	118.7	203,093	7.2	125.9	780.3
Glass	0.1	177	9.2 <sup>(4)</sup>	9.3	120.4
Batteries <sup>(5)</sup>	N.A.	N.A.	N.A.	N.A.	3.3
Electrical and electronic equipment <sup>(5)</sup>	51.0	N.A.	4.4	55.4	19.2
Waste construction materials <sup>(6)</sup>	N.A.	N.A.	N.A.	22,828.9	1,618.6
Waste cooking oil <sup>(7)</sup>	N.A.	N.A.	N.A.	N.A.	N.A.
Food waste	<0.05	<0.5	15.6 <sup>(8)</sup>	15.6	1,317.8
Tyres	<0.05	591	12.5	12.5	26.1
Textile	0.3	3,596	3.9	4.2	125.6

## 2015

Recyclables	Materials exported directly after recovery or after simple processing		Recycled locally	Quantity recovered <sup>(3)</sup>	Quantity disposed of at landfills
	Quantity (a)	Total income	Quantity (b)	Quantity (a)+(b)	Quantity
	'000 tonnes	\$'000	'000 tonnes	'000 tonnes	'000 tonnes
Metals	947.9	3,098,736	0.1	948.0	86.2
Wood	0.2	65	1.0	1.2	129.9
Plastics	88.5	206,658	5.4	93.9	796.9
Glass	<0.05	11	9.3 <sup>(4)</sup>	9.3	134.0
Batteries <sup>(5)</sup>	N.A.	N.A.	N.A.	N.A.	3.4
Electrical and electronic equipment <sup>(5)</sup>	54.0	N.A.	4.5	58.5	16.0
Waste construction materials <sup>(6)</sup>	N.A.	N.A.	N.A.	22,767.0	1,533.0
Waste cooking oil <sup>(7)</sup>	N.A.	N.A.	N.A.	N.A.	N.A.

Recyclables	Materials exported directly after recovery or after simple processing		Recycled locally	Quantity recovered <sup>(3)</sup>	Quantity disposed of at landfills
	Quantity (a)	Total income	Quantity (b)	Quantity (a)+(b)	Quantity
	'000 tonnes	\$'000	'000 tonnes	'000 tonnes	'000 tonnes
Food waste	<0.05	<0.5	14.0 <sup>(8)</sup>	14.0	1,234.5
Tyres	<0.05	437	6.8	6.8	17.9
Textile	0.2	4,287	4.5	4.8	111.6

## 2014

Recyclables	Materials exported directly after recovery or after simple processing		Recycled locally	Quantity recovered <sup>(3)</sup>	Quantity disposed of at landfills
	Quantity (a)	Total income	Quantity (b)	Quantity (a)+(b)	Quantity
	'000 tonnes	\$'000	'000 tonnes	'000 tonnes	'000 tonnes
Metals	920.2	4,011,675	0.5	920.7	76.5
Wood	3.1	3,584	3.2	6.3	116.1
Plastics	82.7	144,003	16.0	98.7	735.6
Glass	<0.05	20	8.4 <sup>(4)</sup>	8.4	104.1
Batteries <sup>(5)</sup>	N.A.	N.A.	N.A.	N.A.	7.5
Electrical and electronic equipment <sup>(5)</sup>	52.6	N.A.	2.9	55.5	14.8
Waste construction materials <sup>(6)</sup>	N.A.	N.A.	N.A.	19 566.0	1 438.7
Waste cooking oil <sup>(7)</sup>	N.A.	N.A.	N.A.	N.A.	N.A.
Food waste	<0.05	<0.5	6.9 <sup>(8)</sup>	6.9	1 328.7
Tyres	0.2	595	4.4	4.6	9.2
Textile	1.5	8,912	2.8	4.2	106.8

## 2013

Recyclables	Materials exported directly after recovery or after simple processing		Recycled locally	Quantity recovered <sup>(3)</sup>	Quantity disposed of at landfills
	Quantity (a)	Total income	Quantity (b)	Quantity (a)+(b)	Quantity
	'000 tonnes	\$'000	'000 tonnes	'000 tonnes	'000 tonnes
Metals	585.0	3,098,434	16.8	601.8	64.7
Wood	5.0	5,020	1.1	6.1	134.5
Plastics	191.0	318,146	51.7	242.7	681.1
Glass	0.1	118	10.0 <sup>(4)</sup>	10.2	129.0

Recyclables	Materials exported directly after recovery or after simple processing		Recycled locally	Quantity recovered <sup>(3)</sup>	Quantity disposed of at landfills
	Quantity (a)	Total income	Quantity (b)	Quantity (a)+(b)	Quantity
	'000 tonnes	\$'000	'000 tonnes	'000 tonnes	'000 tonnes
Batteries <sup>(5)</sup>	N.A.	N.A.	N.A.	N.A.	3.5
Electrical and electronic equipment <sup>(5)</sup>	49.6	N.A.	6.2	55.8	15.4
Waste construction materials <sup>(6)</sup>	N.A.	N.A.	N.A.	22 768.4	1 310.8
Waste cooking oil <sup>(7)</sup>	N.A.	N.A.	N.A.	N.A.	N.A.
Food waste	<0.05	<0.5	28.6 <sup>(8)</sup>	28.6	1 331.5
Tyres	<0.05	212	21.7	21.7	9.5
Textile	1.4	10,828	5.8	7.2	98.7

2012

Recyclables	Materials exported directly after recovery or after simple processing		Recycled locally	Quantity recovered <sup>(3)</sup>	Quantity disposed of at landfills
	Quantity (a)	Total income	Quantity (b)	Quantity (a)+(b)	Quantity
	'000 tonnes	\$'000	'000 tonnes	'000 tonnes	'000 tonnes
Metals	570.0	3,347,370	8.0	578.0	87.4
Wood	8.3	8,327	0.7	9.0	127.7
Plastics	308.0	728,215	8.6	316.6	668.2
Glass	0.1	220	18.2 <sup>(4)</sup>	18.3	105.8
Batteries <sup>(5)</sup>	N.A.	N.A.	N.A.	N.A.	2.6
Electrical and electronic equipment <sup>(5)</sup>	49.8	N.A.	6.2	56.0	14.0
Waste construction materials <sup>(6)</sup>	N.A.	N.A.	N.A.	23 309.7	1 258.9
Waste cooking oil <sup>(7)</sup>	N.A.	N.A.	N.A.	N.A.	N.A.
Food waste	<0.05	<0.5	6.7 <sup>(8)</sup>	6.7	1 221.4
Tyres	<0.05	255	12.0	12.0	2.0
Textile	3.8	18,180	<0.05	3.8	107.1

Notes:

N.A. Not Applicable/ No statistics on that item available.

- (1) The 2017 figures are still being compiled.
- (2) The trade statistics system provides statistics on quantities and values of general merchandise exports. All products/ semi-products exported after local recycling use the same commodity code as other similar products when lodging export declaration. As it is not required by law in Hong Kong to process these products separately, no statistics on the quantities and values of the products/ semi-products exported directly after recovery or after simple processing, or exported after local recycling are available under the trade statistics system.
- (3) (a) and (b) were shown in rounded figures, and thus may not add up to total.
- (4) Glass beverage bottles recovered for reuse through deposit-and-refund system operated by local beverage manufacturers are not included.
- (5) The volume recovered for recycling is compiled from the findings of a survey on “Generation & Disposal Practice of Used/ End-of-Life Electrical & Electronic Equipment and Batteries in Hong Kong” conducted by the consultant commissioned by the Environment Protection Department (EPD) on a regular basis. The survey aims to estimate the generation volume and the recovery volume of waste electrical and electronic equipment, and does not involve any data related to the value of the materials. For the quantity of electrical and electronic equipment recovered, there is no separate breakdown on the batteries recovered.
- (6) For the data on overall construction waste, in which inert materials like debris, rubble, earth and concrete (called public fill) are reused in construction sites, or as fill in reclamation sites when available. Others (basically non-inert waste) are disposed of at landfills.
- (7) As there is no separate category for “waste cooking oil” in the existing trade declaration system, no statistics on the quantity and value of waste cooking oil are available under the trade statistics system.
- (8) The quantity of food waste recycled locally includes those recycled by private operators and those recycled at the EPD’s outlying islands transfer facilities and composting facilities at Kowloon Bay.

2) The Government has been allocating suitable land through short-term tenancy (STT) for exclusive bidding by the recycling industry to operate recovery and recycling businesses. As at 31 December 2017, there were 32 STT sites dedicated to the recycling industry, occupying a total area of 4.8 hectares. The site areas ranged from about 70 square metres to 5 000 square metres. The details of these 32 STT sites for exclusive use by the recycling industry are provided in Table 1 below.

Table 1 STT sites for exclusive use by the recycling industry in the past 3 years

Districts	Number of sites (no.)	Area (m <sup>2</sup> )	Types of recyclables
Kowloon City	4	1 000 – 1 480	Paper, metals and wood
Sham Shui Po	1	590	Paper
Kwun Tong	2	240 – 730	Paper
Eastern	1	2 530	Paper and plastics
Tai Po	3	4 300 – 5 300	Paper, metals and plastics
*Yuen Long	1	4 140	Plastics and tyres
North	4	1 990 – 4 730	Paper, metals and plastics
Sai Kung	10	200 – 270	Metals and wood

<b>Districts</b>	<b>Number of sites (no.)</b>	<b>Area (m<sup>2</sup>)</b>	<b>Types of recyclables</b>
Kwai Tsing	3	520 – 1 590	Paper and metals
Islands	3	70 – 1 000	Paper, metals and plastics

\*The site in Yuen Long is a STT site newly added in 2016-17.

In addition, the EcoPark, which occupies 20 hectares of land in Tuen Mun, provides long-term land at affordable rent for the industry to operate recycling business. At present, a total of 11 lots in the EcoPark have been leased to private recyclers for recycling waste cooking oil, waste metals, waste wood, waste electrical and electronic equipment, waste plastics, waste construction materials, waste glass, food waste and waste tyres, etc.

3) The EPD has been working with the Lands Department and the Planning Department in searching more suitable STT sites for bidding by the recycling industry. Apart from the above-mentioned 32 sites, we have been working with the above departments to identify a few potential STT sites which are likely to be used for waste recycling purpose. The total area of the relevant land is about 0.7 hectares. We are conducting evaluation on the sites and consulting the local stakeholders, so as to ascertain the suitability of the relevant sites for waste recycling purpose, determine the types of recyclable materials that can be handled, the pollution control requirements and the term of tenancy, etc. Upon completion, suitable STT sites will be let out as soon as possible through open bidding by the recycling industry.

Moreover, to incubate a local manufacturing industry using recycled materials, we will carry out studies and identify more effective and diverse outlets for locally-generated recyclables in the long run. As waste paper makes up the largest proportion of local recyclables, the development of a recycling industry capable of processing local waste paper is currently accorded priority. We have conducted an open tender at end of March 2018 to invite manufacturers who are interested in developing the waste paper recycling industry in the EcoPark to submit their tenders.

As the above work is part of the waste management work of the EPD, we do not have a breakdown on the expenditure involved for the relevant work.

- End -

**CONTROLLING OFFICER'S REPLY****ENB120****(Question Serial No. 2613)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Administration is progressively developing Community Green Stations (CGSs), a community waste reduction and recycling project, and the Sha Tin CGS, Eastern CGS, Kwun Tong CGS, Yuen Long CGS and Sham Shui Po CGS have been commissioned one after another. Regarding the effectiveness of the project, would the Administration advise this Committee on the following:

1. Please list in table form by month the number of visitors and the quantity of various types of recyclables treated (including electrical appliances, computers, glass beverage bottles, fluorescent lamps, rechargeable batteries, used books, clothes, waste paper, waste plastics and waste metals) respectively at the 5 CGSs since their commissioning.
2. Please list in table form by month the public education activities (including exhibitions, seminars workshops, etc.) organised by the operators in charge, the number of participants in each of the activities and the relevant expenditure.
3. Please list in table form the subsequent disposal of various types of recyclables collected, including: the quantity of materials (kilogram) recycled eventually and once recycled, the quantity for export and local recycling/reuse; the quantity of materials (kilogram) disposed of at landfills eventually. Please also list the names of the recyclers responsible for the treatment of various types of recyclables collected and the quantity of such recyclables they have treated.
4. Regarding various types of recyclables, what are the numbers of existing residential collection points and institutional collection points in Sha Tin, Eastern, Kwun Tong, Yuen Long and Sham Shui Po, the new recovery target for the latest financial year and the estimated expenditure involved in promotion?

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 30)

Reply:

1. and 2.

The Environmental Protection Department (EPD) is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2017, 5 CGSs have progressively been in operation, namely the Sha Tin CGS and the Eastern CGS which commenced operation in 2015 and the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS which commenced operation in 2017. Details of the 2017 quarterly operational statistics of the CGSs are set out below (Notes: As the Sham Shui Po CGS commenced operation in October 2017, only the operational statistics for the 4<sup>th</sup> quarter of 2017 are available):

	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Operating expenditure in 2017(\$ million)	4.22	3.61	4.69	3.98	0.99

The operating expenditure of individual projects may vary, depending on the financial proposals submitted by individual operators in their open tender submissions. We do not have a breakdown of the expenditure of individual activities of the CGSs.

	1 <sup>st</sup> Quarter of 2017				2 <sup>nd</sup> Quarter of 2017			
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sha Tin	Eastern	Kwun Tong	Yuen Long
Quantity of various types of recyclables handled (kg)								
Electrical appliances and computer products	20 476	19 963	12 015	12 172	13 242	12 691	5 301	7 699
Glass bottles	69 722	75 318	50 026	22 896	79 895	75 590	58 893	49 832
Fluorescent lamps/tubes	1 089	1 097	474	564	1 044	925	294	422
Rechargeable batteries	302	674	84	102	181	177	46	859
Used books	930	1 854	523	1 124	1 427	1 052	289	1 052
Clothing	449	4 241	150	3 840	2 078	2 108	966	258
Waste paper	210	912	1 377	1 045	463	1 215	2 953	4 600
Waste plastics	403	695	303	414	999	627	419	545

	1 <sup>st</sup> Quarter of 2017				2 <sup>nd</sup> Quarter of 2017			
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sha Tin	Eastern	Kwun Tong	Yuen Long
Waste metals	21	229	61	198	16	166	144	835
Number of educational activities and visitors								
Number of activities	120	103	39	22	115	96	56	52
Number of visitors	6 918	44 902	5 857	5 684	10 218	45 605	9 188	8 219

	3 <sup>rd</sup> Quarter of 2017				4 <sup>th</sup> Quarter of 2017				
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Quantity of various types of recyclables handled (kg)									
Electrical appliances and computer products	16 362	13 222	7 044	18 133	14 565	14 381	7 512	14 735	4 031
Glass bottles	83 144	69 655	61 506	53 681	96 251	70 378	62 604	57 281	5 864
Fluorescent lamps/tubes	1 023	2 012	645	953	924	781	635	888	234
Rechargeable batteries	299	503	271	295	342	182	76	447	85
Used books	2 177	1 102	44	1 489	1 412	2 978	388	3 591	523
Clothing	371	771	320	505	727	2 051	412	6 211	1 826
Waste paper	998	1 124	3 919	7 560	1 114	1 207	4 560	5 899	360
Waste plastics	904	1 609	1 011	883	573	1 469	1 493	1 258	2 385
Waste metals	19	290	323	878	130	682	965	2 115	50
Number of educational activities and visitors									
Number of activities	82	91	60	53	71	94	69	48	183
Number of visitors	7 422	49 916	8 702	7 501	9 424	42 103	8 862	8 176	9 213



3. The arrangement for the various types of recyclables in the above table is as follows:

Electrical appliances and computer products	The electrical appliances and computer products were mainly sent to the ALBA Integrated Waste Solutions (Hong Kong) Ltd. for refurbishment or dismantling. The company is the operator of the Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE·PARK); some of them were sent to the Vannex International Limited, which is the contractor of the Computer and Communication Products Recycling Programme; and some of them were sent to another contractor for waste electrical and electronic equipment dismantling and recycling service, who was appointed through tendering.
Glass bottles	All glass bottles were sent to the K. Wah Construction Products Ltd., the Laputa Eco-Construction Material Co. Ltd. and the Hong Kong Glass Resources Limited for producing eco-pavers.
Fluorescent lamps/tubes	All fluorescent lamps/tubes were sent to the Ecospace Limited for proper handling. The company is the contractor of the Chemical Waste Treatment Centre.
Rechargeable batteries	All rechargeable batteries were sent to the Vannex International Limited for export for further processing. The company is the contractor of the Rechargeable Battery Recycling Programme.
Used books and clothing	Reuse of used books and clothing was mainly arranged through donation, exchange programmes and second-hand shops. Some of them would be kept in stock for use in future functions.
Waste paper, plastics and metals	All waste paper, plastics and metals were handled by private recyclers through tendering.

4. The CGSs have set up collection points at residential estates and other suitable sites (such as schools and social service organisations). Quarterly operational statistics of individual CGSs are published every 3 months. As at the 4<sup>th</sup> quarter of 2017, the number of collection points of the 5 CGSs is tabulated below:

	Number of residential collection points					Number of other collection points				
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Electrical appliances and computer products	109	80	54	75	9	43	52	16	24	4
Glass bottles	124	124	68	104	19	31	35	5	16	3

	Number of residential collection points					Number of other collection points				
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Fluorescent lamps/tubes	91	96	32	77	12	13	32	13	10	2
Rechargeable batteries	123	94	65	89	13	11	20	16	13	2

During their first three-year contract period, each of the 5 CGSs has a collection target of no less than 600 tonnes of recyclables. In the follow-on three-year contract for the Sha Tin CGS and the Eastern CGS, the collection targets have respectively been raised to no less than 1 310 tonnes and 1 160 tonnes of recyclables.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB121**

**(Question Serial No. 2623)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in this Programme that the Administration will continue with the study to explore how to implement a producer responsibility scheme (PRS) on plastic beverage and personal care product containers. In this connection, please advise this Committee on the following:

1. Please provide the detailed scope of the relevant study, the progress of the study and the details of the staff establishment and expenditure involved;
2. Please provide the progress of the relevant study which is targeted to be completed in the latest financial year, the increase in staff on the establishment and the expenditure situation; and
3. Please provide the timetable for the full implementation of the scheme, as well as the details and estimated expenditure of the promotion work targeting relevant producers and users in the next two years.

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 57)

Reply:

The Environmental Protection Department (EPD) appointed a consultant through open tender in October 2017 to conduct a feasibility study on how to implement a producer responsibility scheme (PRS) targeting suitable plastic containers, mainly those carrying beverages or personal care products. This study will review and analyse the experience of other jurisdictions and the actual situation of Hong Kong, as well as the implication of the introduction of the PRS on different stakeholders. In the process, the consultant will conduct exchanges with the relevant trade associations and seek their views. The whole study is targeted for completion in 18 months. We will consider the results and suggestions of the study and then formulate proposed implementation plans and timetable. The estimated expenditure for the study is about \$3 million.

The Waste Management Policy Division of EPD is responsible for a number of waste management policies and initiatives, including this study and the related works. We do not have a breakdown on the manpower resources involved in this study and the related works. To meet the increased workload arising from implementing the relevant initiative, EPD will create 3 time-limited posts for 3 years in 2018-19.

- End -

**CONTROLLING OFFICER'S REPLY****ENB122****(Question Serial No. 2624)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

A publicity campaign under the central theme of “Dump Less, Save More” has been launched to promote waste reduction and recycling, initially focusing on the clean recycling of waste paper and waste plastic bottles. Would the Government inform this Committee of the following:

1. What publicity activities have been launched to teach the public how to distinguish various types of waste plastics, especially how to identify number 1 plastic (PET) and number 2 plastic (HDPE) (Nos. 1 & 2 Plastics)? If yes, what are the details? If not, will promotion be stepped up?
2. Has the Government's promotion mentioned how to recycle non-Nos. 1 & 2 Plastics? If yes, what are the details? If not, will promotion be stepped up?
3. Please list in detail the current recycling collection points of non-Nos. 1 & 2 Plastics.
4. What are the quantities of non-Nos. 1 & 2 Plastics recovered respectively from various recycling collection points since the implementation of the recycling work on which the campaign initially focuses?
5. What are the measures to help increase the recovery quantities of non-Nos. 1 & 2 Plastics? For example, will the existing plastics recycling bins be further divided into recycling bins for bottles, boxes and bags so as to facilitate detailed classification of recyclable plastics by the public?

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 65)Reply:

A new round of the clean recycling publicity campaign has been launched by the Environmental Protection Department (EPD), disseminating the messages of **“dump less, save more, recycle right”** and **“clean recycling of three types of paper and priority**

**recovery of plastic bottles”.** The campaign focuses on encouraging the public to recover waste plastic bottles first, including those made of number 1 plastic (PET) and number 2 plastic (HDPE) (Nos. 1 & 2 Plastics) as well as plastic with other codes. We call on the public to fully consume the drinks or personal care products in plastic bottles as far as possible and put them in the recycling bins (RBs) after simple rinsing.

We disseminate the above messages through different channels, including posters, leaflets, the free mobile application “Waste Less” and the social media on the internet to let the public know why we have to practise clean recycling and how to separate the recyclables properly. Moreover, we are going to broadcast Announcements in the Public Interests on waste plastic bottles recycling on television and radio.

Apart from promoting priority recovery of plastic bottles, we also encourage the public to separate and recycle other clean waste plastics (i.e. non-bottle waste plastics), such as plastic bags, plastic cutlery, straws, food containers, disposable plastic food containers (e.g. plastic trays for holding fruits and vegetables and sushi packages), yogurt cups, plastic bottle caps, plastic buckets, plastic boxes for packaging, etc. Members of the public can take these clean plastic materials to the Community Green Stations (CGSs) operated by the non-governmental organisations commissioned by the EPD on contract basis. The CGSs has got RBs for waste plastics with different plastic codes. The public are educated to put the clean and sorted waste plastics into suitable RBs. The 18 Community Recycling Centres (CRCs) supported by the Environment and Conservation Fund will also collect waste plastic bottles and disposable plastic food containers from the public. The locations of the CRCs and CGSs across the territory are listed at Annex 1.

If estate residents’ organisations or management companies find certain non-bottle waste plastics suitable for use and are willing to take them up, they can arrange on their own to collect the non-bottle waste plastics in their buildings and housing estates. The EPD can provide them with additional RBs if necessary after obtaining consent from the Environmental Campaign Committee.

The Department does not have statistics on the non-Nos. 1 & 2 Plastics recovered at various CGSs and CRCs. The amount of waste plastics recovered at the CGSs and CRCs across the territory in the past 3 years is tabulated below:

	CRCs (tonnes)	CGSs (tonnes)*
2015	1366	0.2
2016	1475	2.3
2017	1565	16

\* The number of CGSs increased from 2 in 2015 to 5 in 2017.

# Annex 1

## Community Recycling Centres (CRCs)

	CRCs	Address
1.	Central & Western Mid-Levels Owners Association -- 121C Plastic Recycling Centre	121C Second St., Sai Ying Poon
2.	Fong Chung Social Service Centre -- Dynamic Plastic Waste Collection Centre	Shop A, 466 Des Voeux Road West, Sai Wan
3.	Boys' Brigade -- To Kwan Wan District Waste Recovery Centre	12 Tsun Fat St., Ma Tau Kok, To Kwa Wan
4.	Boys' Brigade -- Hung Hom District Waste Recovery Centre	Shop 2, G/F, Po Yuen Mansion, 28 Bulkeley Street, Hung Hom
5.	United Labour Chi Hong Association Limited -- Community Recycling Center	G/F, No. 49 Fuk Wing Street, Sham Shui Po
6.	Cheung Sha Wan Kai Fong Welfare Association -- Community Recycling Centre	Shop B, 550 Fuk Wa Street, Cheung Sha Wan
7.	Action Health Limited -- North District Recycling Centre	Ex-Luen Wo Market, Luen Wo Hui, Luen Wo Road, Fanling
8.	North District Residents Association Limited -- North District Recycling Centre	Shop B6, G/F., Block B, Sheung Shui Plaza, 95 Po Wan Road, Sheung Shui
9.	Environmental Association -- Ways for Plastic Recycling	G/F, 16 Sui On Street, Tai Po
10.	New Opportunity Limited -- Tuen Mun Environmental Centre	Shop F2, Ground Floor, Tuen King Building, 8, Tsing Hoi Circuit, Tuen Mun
11.	Boys' Brigade -- Tsuen Wan District Waste Recovery Centre	Shop 8B, G/F., Po Yip Building, 62-70 Texaco Road, Tsuen Wan
12.	Boys' Brigade -- Kwai Tsing District Waste Recovery Centre	Shop 45, G/F, Bank Building, 23-51 Tai Loong Street, Kwai Chung
13.	East Kowloon District Residents' Committee Limited -- Wong Tai Sin Recycling Centre	G/F, Wing Wah Building, 51 Ming Fung Street, Fung Wong San Tsuen, Wong Tai Sin
14.	Ma On Shan Youth Association -- Shatin Recycle Centre	Unit A03 on G/F, Unison Industrial Centre, 27 - 31 Au Pui Wan Street, Fo Tan, Sha Tin
15.	Tai Kok Tsui Resources Centre Association -- Green Point	G/F, 35 Fuk Chak Street (Fuk Cheung Building G/F No.7 )
16.	121C Society For Recycling -- Causeway Bay and Wan Chai Society For Recycling Project	G/F, 11 Watson Road, North Point
17.	New Opportunity Limited -- Yuen Long Environmental Education Centre	Shop 2, G/F, Hing Fook Building (Phase 4), 75 Ma Wang Road, Yuen Long
18.	121C Society For Recycling -- Southern District Community Recycling Centre	Shop A, G/F, No. 41 San Shi Street, Ap Lei Chau

### Community Green Stations (CGSs)

	CGSs	Address
1.	Sha Tin CGS	10 On Ping Street, Shek Mun
2.	Eastern CGS	30 Oi Shun Road, Shau Kei Wan
3.	Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay
4.	Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai
5.	Sham Shui Po CGS	339 Tung Chau Street

- End -



**CONTROLLING OFFICER'S REPLY****ENB123****(Question Serial No. 2489)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The new air quality objectives (AQOs) took effect on 1 January 2014 and the Administration is required by the law to review the AQOs at least once every 5 years. The Department states in the "Matters Requiring Special Attention" this year that it has completed the review of the AQOs and will consult the public on review findings. What is the expenditure involved in the review? Please set out in table form the work details and a breakdown of the estimated expenditure, including the manpower arrangements, resource allocation and expenditure on studies, etc. Please also provide a detailed account of the commencement date and progress of various work items.

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 111)

Reply:

The current air quality objectives (AQOs) came into effect on 1 January 2014. According to Section 7A of the Air Pollution Control Ordinance (Cap. 311), the Secretary for the Environment is required to review the AQOs at least once in every 5 years and submit a review report to the Advisory Council on the Environment (ACE).

In May 2016, the Environment Bureau embarked on the review of the AQOs (the Review) and set up an AQOs Review Working Group (Working Group), led by the Under Secretary for the Environment. Members of the Working Group include air scientists, business sector representatives, professional bodies, green groups and representatives from relevant government departments, etc. Four dedicated Sub-groups have been formed under the Working Group, viz. Road Transportation, Marine Transportation, Energy and Power Generation, as well as Air Science and Health. The first three Sub-groups are to identify possible new air quality improvement measures under their respective areas and examine the practicability of their implementation for the consideration of the Working Group. The Air Science and Health Sub-group focuses on examining the air science and health aspect of the Review including the assessment of air quality improvements and health and economic impact arising from the possible measures, and hence the possible scope for further

tightening the AQOs. Moreover, the Environmental Protection Department (EPD) commissioned a consultancy study through open tender in November 2016 to assist in the Review.

The Sub-groups on Road Transportation, Marine Transportation, and Energy and Power Generation have convened 19 meetings so far, and proposed 69 possible new air quality improvement measures and deliberated on the practicability of their implementation within the timeframe up to 2025. These measures covered a wide spectrum encompassing transport planning and management, urban planning and design, use of clean fuel, as well as energy demand management and use of renewable energy, etc. Amongst these 69 possible new measures, 26 are either on-going or under consideration by the relevant departments which are likely to produce results by 2025 or earlier (short-term), 4 may be ready for consideration in the next AQOs review period of 2019-2023 (medium-term) while 14 require detailed planning or further study to ascertain the practicability for implementation beyond the next review period (long-term). The remaining 25 are considered as not practicable, short of air quality benefits or not suitable to be considered under the current scope of the Review. The Air Science and Health Sub-group has convened 5 meetings so far and deliberated on the methodologies for the assessment of air quality, health and economic impacts.

In addition, EPD conducted a public engagement exercise between 11 September and 14 October 2017 to solicit public views on the new measures proposed by the Sub-groups or other air quality improvement measures, and organised two public forums to explain the progress of the review and listen to public views.

The consultant engaged in the Review is assisting in the assessment of air quality, public health and economic impacts arising from the implementation of possible new measures, which includes running the models of air quality, etc., for the Air Science and Health Sub-group and the Working Group to examine the possible scope for further tightening the AQOs.

All non-government members of the Working Group take part in the Review on a voluntary basis. As for the Government, the work is undertaken under existing manpower and resources and therefore we do not have a separate breakdown for this item.

The scope of the consultancy work commissioned by EPD and the expenditure involved are as follows:

Project	Details of the study	Expenditure involved
Review of the AQOs - Feasibility Study	<ul style="list-style-type: none"> <li>appraising the latest air quality situation;</li> <li>assessing the effectiveness of air quality improvement measures implemented and the development of emission reduction technologies;</li> <li>assisting in the assessment on the practicability to implement possible new air quality improvement measures and analysing their emission reduction benefits;</li> </ul>	About \$7 million

Project	Details of the study	Expenditure involved
	<ul style="list-style-type: none"> <li>• soliciting public views on possible new measures proposed;</li> <li>• assessing the implications of possible new measures on air quality improvement, public health and the economy;</li> <li>• examining the scope for further tightening the AQOs;</li> <li>• drafting relevant technical and review reports; and</li> <li>• conducting public consultation on recommendations made in the review report.</li> </ul>	

We will complete the statutory review and submit a report to the ACE in 2018. Afterwards, we will commence a full-scale public consultation on the review outcome.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB124**

**(Question Serial No. 0878)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Would the Government tell this Committee why the estimate for 2018-19 is 22.6% lower than the original estimate for 2017-18 under this Programme?

Asked by: Hon LAM Kin-fung, Jeffrey (Member Question No. (LegCo use): 21)

Reply:

The estimate for 2018-19 is 22.6% lower than the original estimate for 2017-18 under the Air Programme, mainly because some non-recurrent projects have reached their later stage of implementation. Therefore, the cash flow requirement will be decreased in 2018-19. The non-recurrent projects include granting ex-gratia payment for phasing out pre-Euro IV diesel commercial vehicles, fully subsidising franchised bus companies to conduct trials of electric buses, and retrofitting emission reduction devices for franchised buses which has been completed in 2017.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB125**

**(Question Serial No. 0879)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Would the Government inform this Committee of the following:

(1) What were the ambient concentration limits for respirable suspended particulates, fine suspended particulates, nitrogen dioxide, sulphur dioxide and ozone in 2017?

(2) What were the respective numbers of days on which the levels of the above 5 pollutants exceeded the limits in 2017?

(3) The Administration said that a wide range of emission reduction measures were being implemented in respect of motor vehicles and vessels locally. What are the details and budget of the measures?

Asked by: Hon LAM Kin-fung, Jeffrey (Member Question No. (LegCo use): 22)

Reply:

1&2 According to the preliminary air quality data recorded at various air quality monitoring stations (AQMSs) by the Environmental Protection Department (EPD) in 2017, the concentrations of respirable suspended particulates (RSP), fine suspended particulates (FSP) and sulphur dioxide (SO<sub>2</sub>) all met the relevant Air Quality Objectives (AQOs). Although the concentrations of nitrogen dioxide (NO<sub>2</sub>) recorded at some AQMSs still exceeded the concentration limit, the annual average concentrations of ambient and roadside NO<sub>2</sub> have dropped by 26% and 28% respectively over the past 5 years (2013 to 2017), indicating that the emission control measures implemented in recent years are effective. As for ozone (O<sub>3</sub>), under the influence of regional photochemical smog, the concentration limit was still exceeded in some AQMSs in which high O<sub>3</sub> concentrations were recorded. Detailed figures are provided at Annex 1.

- 3 The various measures implemented by the HKSAR Government to cope with air pollutant emissions from local vehicles and vessels are provided at Annex 2.

Table 1: The annual average concentrations of pollutants recorded at various AQMSs and the AQOs compliance status in 2017

Long-term (annual) AQOs <small>Note 1</small>		Concentration limit (µg/m <sup>3</sup> )		
		RSP	FSP	NO <sub>2</sub>
		50	35	40
Number of exceedances allowed		Not applicable		
Annual average concentrations in 2017 <sup>Note 2</sup> (µg/m <sup>3</sup> ) and compliance with the AQOs (Yes/No)				
AQMS				
General AQMS	Central& Western	35(Yes)	23(Yes)	41(No)
	Eastern	33(Yes)	20(Yes)	42(No)
	Kwun Tong	39(Yes)	23(Yes)	44(No)
	Sham Shui Po	33(Yes)	21(Yes)	54(No)
	Kwai Chung	35(Yes)	23(Yes)	57(No)
	Tsuen Wan	33(Yes)	22(Yes)	52(No)
	Tseung Kwan O	31(Yes)	18(Yes)	28(Yes)
	Yuen Long	40(Yes)	22(Yes)	41(No)
	Tuen Mun	43(Yes)	27(Yes)	46(No)
	Tung Chung	34(Yes)	21(Yes)	36(Yes)
	Tai Po	32(Yes)	22(Yes)	39(Yes)
	Sha Tin	31(Yes)	21(Yes)	34(Yes)
	Tap Mun	35(Yes)	20(Yes)	10(Yes)
Roadside AQMS	Causeway Bay	46(Yes)	31(Yes)	97(No)
	Central	33(Yes)	21(Yes)	80(No)
	Mong Kok	38(Yes)	27(Yes)	81(No)

Note 1: There are no long-term AQOs for SO<sub>2</sub> and O<sub>3</sub>.

Note 2: The data of 2017 are not yet validated.

Table 2: The short-term concentrations of pollutants recorded at various AQMSs and the AQOs compliance status in 2017

Short-term AQOs		RSP	FSP	NO <sub>2</sub>	SO <sub>2</sub>		O <sub>3</sub>
Average time		24-hour	24-hour	1-hour	10-minute	24-hour	8-hour
Concentration limit (µg/m <sup>3</sup> )		100	75	200	500	125	160
Number of exceedances allowed		9	9	18	3	3	9
AQMS		Short-term concentrations in 2017 <sup>Note 1</sup> (µg/m <sup>3</sup> ), number of exceedances (in brackets) and compliance with the AQOs (Yes/No)					
General AQMS	Central & Western	84(1)/Yes	59(0)/Yes	164(1)/Yes	125(0)/Yes	29(0)/Yes	159(9)/Yes
	Eastern	74(0)/Yes	49(0)/Yes	139(0)/Yes	54(0)/Yes	14(0)/Yes	160(8)/Yes
	Kwun Tong	84(1)/Yes	53(0)/Yes	199(18)/Yes	53(0)/Yes	19(0)/Yes	135(2)/Yes
	Sham Shui Po	72(0)/Yes	46(0)/Yes	194(15)/Yes	76(0)/Yes	25(0)/Yes	130(3)/Yes
	Kwai Chung	74(0)/Yes	49(0)/Yes	204(21)/No	93(0)/Yes	24(0)/Yes	129(4)/Yes
	Tsuen Wan	77(3)/Yes	52(3)/Yes	179(9)/Yes	105(0)/Yes	24(0)/Yes	141(7)/Yes
	Tseung Kwan O	65(0)/Yes	43(0)/Yes	165(2)/Yes	39(0)/Yes	17(0)/Yes	175(22)/No
	Yuen Long	87(2)/Yes	52(2)/Yes	156(2)/Yes	80(0)/Yes	20(0)/Yes	175(13)/No
	Tuen Mun	99(9)/Yes	65(3)/Yes	188(12)/Yes	88(0)/Yes	26(0)/Yes	176(20)/No
	Tung Chung	81(5)/Yes	57(2)/Yes	144(2)/Yes	87(0)/Yes	21(0)/Yes	187(14)/No
	Tai Po	82(1)/Yes	55(0)/Yes	128(0)/Yes	39(0)/Yes	9(0)/Yes	181(17)/No
	Sha Tin	72(1)/Yes	54(1)/Yes	144(0)/Yes	47(0)/Yes	16(0)/Yes	167(14)/No
	Tap Mun	74(0)/Yes	43(0)/Yes	52(0)/Yes	32(0)/Yes	14(0)/Yes	192(37)/No
Roadside AQMS	Causeway Bay	90(2)/Yes	65(4)/Yes	325(275)/No	95(0)/Yes	25(0)/Yes	78(0)/Yes
	Central	84(2)/Yes	56(1)/Yes	267(126)/No	91(0)/Yes	24(0)/Yes	103(0)/Yes
	Mong Kok	84(0)/Yes	57(1)/Yes	257(90)/No	83(0)/Yes	20(0)/Yes	91(0)/Yes

Note 1: The data of 2017 are not yet validated. The short-term RSP and FSP concentrations were the tenth highest level, the short-term NO<sub>2</sub> concentrations were the nineteenth highest level and the short-term SO<sub>2</sub> concentrations were the fourth highest level.



**Measures to cope with air pollutant emissions from local vehicles and vessels**

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
<b>Vehicles</b>			
1. Encouraging the use of environment-friendly (EF) commercial vehicles	<p>Since April 2008, the Government has launched the Tax Incentives Scheme for EF Commercial Vehicles to encourage vehicle owners to choose EF commercial vehicles with exhaust emissions that out-perform the prevailing statutory emission standards.</p> <p>The qualifying standards for EF commercial vehicles are reviewed and updated annually in the light of vehicle technological advancement such that the tax incentive is available only to vehicles of outstanding environmental performance.</p>	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	From implementation of the Tax Incentives Scheme for EF Commercial Vehicles to the end of February 2018, the number of newly registered EF commercial vehicles was about 51 000 and the amount of first registration tax concession was about \$1.4 billion.
2. Pilot Green Transport Fund (PGTF)	The PGTF was set up in March 2011 for application by the public transport sector, goods vehicle operators and charity/non-profit making organisations to try out green innovative transport technologies.	<p>A funding of \$300 million was approved for setting up the Fund. As at the end of February 2018, the total amount of subsidy approved was about \$131 million.</p> <p>The relevant workload has been partly absorbed under the existing resources of the EPD and the remaining has been met by 4 already created additional time-limited (from 2016-17 to 2020-21) civil service posts, including 1 Senior Environmental Protection Officer, 1 Environmental Protection Officer, 1 Environmental Protection Inspector and 1 Assistant Clerical Officer.</p>	<p>The Fund can promote a wider use of green innovative transport technologies which helps improve roadside air quality and reduce greenhouse gas emission.</p> <p>As at the end of February 2018, the Fund has approved 118 trials, involving 81 electric vehicles (including 3 taxis, 3 light buses, 21 single-deck buses and 54 light goods vehicles (van type), 85 hybrid vehicles (including 44 light goods vehicles, 28 medium goods vehicles, 11 light buses and 2 single-deck buses), a solar air-conditioning system for a bus, 4 electric inverter air-conditioning systems for buses, and retrofitting 3 ferries with diesel-electric propulsion systems to replace their old systems and 1 ferry with a seawater scrubber.</p>

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
3. Trial of electric buses	Funding was approved in 2012 to fully subsidise the franchised bus companies to procure 36 single-deck electric buses (including 8 supercapacitor buses and 28 battery-electric buses) for conducting two-year trials on different routes.	Funding of \$180 million was approved for this programme. The workload has been partly absorbed by deploying existing resources and partly met by creating 3 two-year (until end of March 2014) time-limited posts in the EPD and Transport Department (TD) (including 1 Environmental Protection Officer, 1 Senior Environmental Protection Inspector and 1 Motor Vehicle Examiner I). In addition, TD has created a three-year (until end of 2019) time-limited Transport Officer I post to cope with the trials of electric buses.	At present, 24 battery-electric buses and 2 supercapacitor buses have commenced operations. It is expected that most of the remaining electric buses will progressively commence operation in 2018.  During the trial, we will gather information to assess the operational efficiency and performance of these buses under the local conditions. Preliminary trial results showed that the driving performance of the single-deck electric buses is comparable with that of conventional buses. However, when the ambient temperature is high, the driving range of battery-electric buses after a full charge is only about 110 km to 150 km, which is lower than the daily mileage requirement of general public buses for 200 km to 300 km.
4. Subsidising franchised bus companies to retrofit Euro II and III franchised buses with selective catalytic reduction (SCR) devices	Funding was approved in 2013 to fully subsidise the franchised bus companies to retrofit eligible Euro II and III franchised buses with SCR devices for upgrading their emission performance to Euro IV or above level.	The total expenditure on retrofitting franchised buses with SCR devices is about \$197 million. The relevant workload is partly absorbed by deploying existing resources and partly met by the creation of 4 time-limited posts (until end of 2016, including 1 Senior Environmental Protection Officer, 1 Environmental Protection Officer, 1 Transport Officer I and 1 Motor Vehicle Examiner II) by the EPD and TD.	1 030 Euro II and III franchised buses have been retrofitted with SCR devices to upgrade their emission performance to Euro IV or above level. All the retrofitting was completed at the end of 2017.
5. Phasing out pre-Euro IV diesel commercial vehicles (DCVs)	The EPD launched an incentive-cum-regulatory scheme in March 2014 with an aim to phase out by end 2019 progressively some 82 000 pre-Euro IV DCVs. Moreover, the EPD has also set a limit on the service life of DCVs newly registered on or after 1 February 2014 at 15 years.	Funding of about \$11.4 billion was approved for implementation of the ex-gratia payment scheme.  The workload for implementing the ex-gratia payment scheme has been partly absorbed under the existing resources of the EPD and TD, and partly met by the creation by EPD (from 2013-14 to 2019-20) of 3 time-limited civil service posts, including 1 Senior Environmental	As at the end of February 2018, about 60 900 pre-Euro IV DCVs (i.e. about 74% of the eligible vehicles) have been retired under the ex-gratia payment scheme, involving an ex-gratia payment of about \$8.2 billion.  The phasing out of pre-Euro IV DCVs contributed to the substantial reduction of respirable suspended particulates (RSP) and nitrogen oxides (NO <sub>x</sub> ) from vehicles.

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
		Protection Officer, 1 Environmental Protection Officer and 1 Environmental Protection Inspector. In addition, the TD has created in phases a maximum of 25 time-limited civil service posts (reduced to 22 in 2018-19, including 1 Senior Executive Officer, 1 Executive Officer I, 1 Executive Officer II, 2 Clerical Officers, 8 Assistant Clerical Officers, 1 Motor Vehicle Examiner I, 2 Motor Vehicle Examiners II and 6 Vehicle Testers) in the above years according to the progress of the scheme to cope with applications under the ex-gratia payment scheme.	
6. Strengthening the control of emissions from petrol and liquefied petroleum gas (LPG) vehicles	The EPD has been using roadside remote sensing equipment to identify petrol and LPG vehicles emitting excessively since 1 September 2014. For vehicle found emitting excessively, the EPD will issue an Emission Testing Notice to its owner. The owner is required to rectify the excessive emission problem and to send the vehicle to a Designated Vehicle Emission Testing Centre for an emission test with the aid of a chassis dynamometer within 12 working days so as to confirm the rectification of the excessive emission problem. If the owner fails to send the vehicle to the testing centre, or the vehicle fails to pass the emission test, the licence of the vehicle concerned will be cancelled by the TD.	This is part of the EPD's routine work on improving air quality, and there is no separate breakdown on the expenditure involved.	As at the end of February 2018, the EPD has monitored some 2.12 million vehicle counts and issued about 11 700 emission testing notices requiring the owners to repair and to rectify the excessive emissions of their vehicles. During the above period, the licences of a total of 173 vehicles were cancelled for failing the emission test. Another 608 vehicles were voluntarily scrapped by their owners. The percentage of petrol vehicles emitting excessively has reduced from about 10% to 5%, while the percentage of LPG vehicles emitting excessively has reduced from about 80% to 20% from 2014 to 2016.
7. Setting up franchised bus low emission zones (FBLEZs)	To improve roadside air quality and protect public health, the Government set up FBLEZs at the busy corridors in Causeway Bay, Central and Mong Kok at the end of 2015, allowing only low emission franchised buses (including buses of Euro IV or above, or Euro II and	This is part of the EPD's routine work on improving air quality, and there is no separate breakdown on the expenditure involved.	3 FBLEZs were set up at the end of 2015. Starting from April 2016, all franchised bus companies have confirmed that they have sufficient low emission buses to run in FBLEZs. According to reports submitted by the franchised bus companies, as of December 2017, the overall compliance rate was about 99.7%. In case of

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
	III buses retrofitted with SCR devices and diesel particulate filters) to run in these zones.		<p>traffic congestion, vehicle breakdowns and traffic accidents, etc., the franchised bus companies may need to deploy non-low emission buses to run in the FBLEZs occasionally in order to maintain normal bus services. However, these exceptional cases will be reduced with the franchised bus companies acquiring more new buses.</p> <p>Franchised buses can account for up to 40% of the traffic at the busy corridors in Causeway Bay, Central and Mong Kok. Therefore, the setting up of FBLEZs at these busy corridors allowing only low emission franchised buses to run in these zones could bring significant improvement to the roadside air quality in the FBLEZs and other districts where the low emission buses will ply.</p>
8. Implementing the Euro VI emission standards for newly registered vehicles	The Government has tightened in phases by vehicle type the emission standards for newly registered vehicles to Euro VI starting from 1 July 2017, and the emission standards for newly registered diesel private cars to California LEV III emission standards starting from 1 October 2017.	This is part of the EPD's routine work on improving air quality, and there is no separate breakdown on the expenditure involved.	Compared with their Euro V counterparts, Euro VI heavy duty diesel vehicles emit about 80% less NOx and 50% less RSP while Euro VI light duty diesel vehicles emit about 55% less NOx.
<b>Vessels</b>			
9. Control of sulphur content of locally supplied marine light diesel	The sulphur content of locally supplied marine light diesel has been capped at 0.05% since 1 April 2014.	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	The sulphur dioxide (SO <sub>2</sub> ) and RSP emissions from local vessels were reduced through implementing this measure.
10. Requiring ocean-going vessels (OGVs) to switch to low sulphur fuel while at berth in Hong Kong waters	EPD implemented a new regulation on 1 July 2015 requiring OGVs to switch to low sulphur fuel with sulphur content not exceeding 0.5% while at berth in Hong Kong. The Port Facilities and Light Dues Incentive Scheme which was launched since September 2012 to encourage the	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	As at the end of February 2018, a total of some 60 700 OGV-calls have their port facilities and light dues reduced for switching to low sulphur fuel while berthing in Hong Kong which account for about 44% of vessel arrivals. After the regulation came into effect, the average concentration of SO <sub>2</sub> recorded at the Kwai Chung general Air

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
	use of low sulphur fuel by OGVs while berthing in Hong Kong will end on 31 March 2018.		Quality Monitoring Station when it was downwind of the container terminals during the period from 2016 to 2017 was 59% lower than that recorded before the implementation of the regulation (i.e. 2014), indicating that the regulation has taken effect in improving the air quality in the vicinity of the container terminals.
11. Requiring vessels to use compliant fuel	The Government proposed to introduce a new legislation requiring vessels to use compliant fuel (including low sulphur fuel with sulphur content not exceeding 0.5%) within Hong Kong waters starting from 1 January 2019 in order to keep on par with the control of the Pearl River Delta (PRD) Domestic Marine Emission Control Area in Pearl River Delta waters.	The relevant consultation and drafting of the new legislation will be undertaken by existing manpower and resources of EPD. EPD intends to create 1 Senior Environmental Protection Inspector and 2 Environmental Protection Inspectors in 2018-19 to enforce the new legislation.	The EPD has consulted relevant stakeholders and the Advisory Council on the Environment regarding the proposed control, and submitted it to the Panel on Environmental Affairs of the Legislative Council for discussion in 2017, which was generally supported. We are now drafting the legislation on the proposal with a view to implementing the control from 1 January 2019.

- End -

**CONTROLLING OFFICER'S REPLY****ENB126****(Question Serial No. 0894)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The municipal solid waste (MSW) charging scheme will be implemented in the second half of 2019 at the earliest. What are the latest details of this scheme? What is the estimated expenditure involved in the project? What were the average daily weights of waste transported by collectors to various refuse transfer stations and landfills in the past three years and their percentages in the total weights of solid waste?

Year	2015		2016		2017	
	Average daily quantity (tpd)	Percentage of MSW received	Average daily quantity (tpd)	Percentage of MSW received	Average daily quantity (tpd)	Percentage of MSW received
MSW collected by private waste collectors and delivered to waste disposal facilities						

Asked by: Hon LAM Kin-fung, Jeffrey (Member Question No. (LegCo use): 40)Reply:

The Municipal Solid Waste (MSW) charging aims to create financial incentives to drive behavioural changes in waste generation and hence reducing the overall waste disposal,

which is a major policy to promote waste reduction at source and recycling. In October 2017, the Environment Bureau announced the proposed modifications to the implementation arrangements for MSW charging, to expand the scope of application of pre-paid designated garbage bags as a charging tool, thereby enabling the charging regime to achieve the polluter-pays principle to a greater extent and responding to the views of the relevant industries. The community and various stakeholders responded positively in general to the modified arrangements.

We have been proactively undertaking relevant preparatory work, including drafting of the relevant bill, maintaining close communication with the stakeholders of various sectors to formulate specific implementation details, planning the production and sales arrangements of the designated garbage bags, implementing a waste reduction and recycling promotional campaign under the central theme of “Dump Less, Save More”, etc. Meanwhile, the Environment and Conservation Fund has since 2015 provided funding support of about \$55 million to non-profit-making organisations and bodies for organising community involvement projects in different types of premises to try out MSW charging in actual settings. The relevant experiences can provide useful references for us to develop the best practice guides on the implementation of MSW charging. As at March 2018, more than 50 community involvement projects on MSW charging have been funded. We are proactively taking forward the above preparatory work and seeking to introduce the relevant bill to the Legislative Council as soon as possible.

The Environmental Protection Department has earmarked about \$32 million in 2018-19 for the preparation work of MSW charging.

The statistics on the MSW collected by private waste collectors and delivered to waste disposal facilities from 2014 to 2016 are set out in the following table. The relevant statistics for 2017 are still under compilation.

Year	2014		2015		2016	
	Average daily quantity (tpd)	Percentage in the total amount of MSW received by the landfills	Average daily quantity (tpd)	Percentage in the total amount of MSW received by the landfills	Average daily quantity (tpd)	Percentage in the total amount of MSW received by the landfills
MSW collected by private waste collectors and delivered to waste disposal facilities	4 536	46%	4 849	48%	5 092	49%

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB127**

**(Question Serial No. 0898)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Would the Administration please advise on the following:

- (1) What were the total numbers of three-colour recycling bins placed throughout Hong Kong in each of the past 5 years?
- (2) What were the respective average recycling and disposal rates of waste plastics, paper and metals in each of the past 5 years?
- (3) Has the Administration reviewed the effectiveness of three-colour recycling bins in waste recycling, including aspects such as their locations, quantities of waste collected, and whether the publicity channels and funding are adequate? If yes, what are the details? If not, what are the reasons?

Asked by: Hon LAM Kin-fung, Jeffrey (Member Question No. (LegCo use): 54)

Reply:

(1) In the past 5 years, the Government placed about 16 000 sets of waste separation bins throughout the territory, including public places, schools, government quarters and offices, hospitals and clinics, as well as housing estates/residential buildings which have participated in the Source Separation of Waste Programme (the Programme). More than 2 000 housing estates/residential buildings have joined the Programme, covering about 80% of Hong Kong population. Apart from the recycling bins (RBs) provided by the Government, RBs are also placed by the housing estates/residential buildings on their own. The Environmental Protection Department (EPD) does not have the number of RBs placed by these housing estates/residential buildings on their own.

(2) The statistics on the quantity of waste plastics, paper and waste metals including ferrous and nonferrous metals disposed of at landfills and their recovery rate between 2013 and



2016 according to our information are shown in the table below. The relevant statistics for 2017 are still under compilation.

		<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Waste plastics	Disposal Quantity (Thousand tonnes)	681	736	797	780
	Recovery rate (%)	26%	12%	11%	14%
Paper	Disposal Quantity (Thousand tonnes)	666	702	824	821
	Recovery rate (%)	61%	57%	52%	50%
Waste metals (including ferrous and nonferrous metals)	Disposal Quantity (Thousand tonnes)	65	76	86	88
	Recovery rate (%)	90%	92%	92%	91%

(3) To facilitate resource recovery and to tie in with the implementation of the municipal solid waste charging, the Government set up the Steering Group on the Modification of Recycling and Refuse Collection Facilities in Public Places (the Steering Group) in 2016 to review the distribution and design of recycling and refuse collection facilities in public places. Based on the findings of the study and with reference to international experiences, the Government will increase the number of RBs and reduce the number of litter containers (LCs) in public places respectively. The Steering Group has commissioned a consultancy study to review the existing designs of LCs and RBs in public places and to recommend on new designs. It is expected to conduct public engagement activities this year to collect views from the general public and stakeholders on the new designs.

Apart from using waste separation bins for collection and recovery of recyclables by the public, some residents or cleaners of private premises would sell recyclables directly to recyclers, carry out recovery through other means such as exchanging recyclables or delivering them to various Community Green Stations and the Community Recycling Centres funded by the Environment and Conservation Fund.

- End -

**CONTROLLING OFFICER'S REPLY****ENB128****(Question Serial No. 0899)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Administration has launched the \$1 billion Recycling Fund earlier to facilitate the upgrading of the operational capabilities and efficiencies of the recycling industry, so as to promote the sustainable development of the recycling industry. What are the details of the allocation of the fund so far? On what basis does the Administration allocate the fund? Has the Administration assessed the effectiveness of the scheme and its special concessionary measures? If yes, what are the details?

Asked by: Hon LAM Kin-fung, Jeffrey (Member Question No. (LegCo use): 56)Reply:

The Government launched the \$1 billion Recycling Fund in October 2015. As at 28 February 2018, the Advisory Committee on Recycling Fund (RFAC) has received 382 applications (of which 101 had been withdrawn before vetting by the RFAC) and approved 163 applications. Excluding the projects which have been withdrawn by some applicant organisations after their applications were approved, a total of 128 funded projects have been or will soon be commenced, of which 24 are under the Enterprise Support Programme (ESP), 97 are for Standard Projects and 7 are under the Industry Support Programme (ISP), involving a total funding of about \$94 million.

The RFAC will consider the applications having regard to factors like how the applications can achieve the objective of the Fund, the project results and the ability of the project applicants in implementation as well as the merits of individual applications. The Government will then assess the applications based on the RFAC's recommendations. Apart from encouraging the raising of the quantity and quality of recyclables and recycled products, the Recycling Fund also supports local recycling projects, explores more effective and diversified outlets for local recycled materials and reduces the amount of waste disposed of at landfills.

Successful applicants are required to submit reports on a regular basis and report the relevant milestones achieved. The Secretariat of the Recycling Fund will also conduct spot

checks, review the utilisation of the equipment purchased by the projects and verify if the deliverables and targets achieved are true.

The Environmental Protection Department (EPD) and the RFAC have been striving to enhance the operation of the Recycling Fund so that it will better address the needs of the industry and support its development. Without compromising the need in safeguarding the use of the Recycling Fund and maintaining effective control on applicants, various facilitation measures have been introduced since the Fund's early stage of operation. These measures include providing partial reimbursement of expenses to successful applicants before the launch of the projects under the ESP and the ISP and establishing a category of Standard Projects under the ESP to minimise the administrative workload of small and medium enterprises (SMEs) in making applications. The SMEs undertaking Standard Projects can also submit applications, report achievements and seek reimbursements in accordance with a set of streamlined procedures. Besides, the RFAC has approved the waiving of a condition on opening a designated project bank account for Standard Projects, and can provide reimbursement midway through the project period.

The EPD and the RFAC have all along been liaising closely with the industry on various waste management and waste reduction and recycling policies and measures, actively listening and responding to the views and aspirations of the industry through different channels such as meetings, seminars, briefing sessions so as to introduce timely facilitation measures to meet the needs of the recycling industry in its operation and upgrading and transformation and to attract more applications. The EPD will launch a mid-term review of the Recycling Fund in 2018-19 to examine its overall operation and performance.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB129**

**(Question Serial No. 0560)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

1. The Environmental Protection Department will set up the Countryside Conservation Office to plan and co-ordinate works projects and conservation projects for priority areas in the remote rural countryside with the \$1 billion funding set aside. What are the breakdowns of expenditure, staffing establishment and work projects of the Countryside Conservation Office in 2018-19?
2. The provision for 2018-19 for this Programme is \$32.4 million (395.1%) higher than the revised estimate for 2017-18. The Administration has explained that it is due to increased operating expenses and increased cash flow requirement for a non-recurrent project. What is that non-recurrent project? What is the breakdown of estimated expenditure for such project?
3. There will be an increase of 28 posts under this Programme in 2018-19. Please list the size of establishment, work nature and salary expenditure of each rank.

Asked by: Hon LAU Ip-keung, Kenneth (Member Question No. (LegCo use): 61)

Reply:

The Chief Executive announced in her 2017 Policy Address that a Countryside Conservation Office (CCO) would be established to co-ordinate conservation projects that would promote sustainable development of remote countryside. The CCO will be set up in 2018-19, which is expected to comprise about 28 officers from various grades including 1 Administrative Officer Staff Grade C, 1 Senior Environmental Protection Officer, 3 Environmental Protection Officers/Assistant Environmental Protection Officers, 1 Senior Environmental Protection Inspector, 2 Environmental Protection Inspectors, 1 Chief Executive Officer, 1 Senior Executive Officer, 2 Executive Officer Is, 2 Executive Officer IIs, 2 Clerical Officers, 4 Assistant Clerical Officers, 1 Personal Secretary I, 1 Senior Engineer, 1 Engineer/Assistant Engineer, 1 Architect/Assistant Architect, 1 Town Planner/Assistant Town Planner, 1 Landscape Architect/Assistant Landscape Architect, 1

Forestry Officer/Assistant Forestry Officer and 1 Liaison Officer I. The increase in expenditure under the Programme mainly includes the staff costs of these officers (about \$19.61 million) and cashflow needs earmarked for launching conservation activities and projects mentioned in the paragraph below (about \$10 million).

The Government has earmarked \$1 billion for such conservation and revitalisation efforts, as well as minor improvement works. The CCO will devise future specific work plans and projects upon establishment. On the whole, the CCO will co-ordinate collaboration of the departments concerned in regard to the conservation and revitalisation work, and provide an integrated and dedicated mechanism with resources for the conservation and sustainable development of the remote countryside in the long run. The CCO plans to support collaboration of non-governmental organisations and villagers to organise diverse and innovative conservation activities and projects based on an interactive and co-operative approach with half of the \$1 billion mentioned above, i.e. \$500 million, under non-recurrent account. For instance, the long-term conservation and revitalisation of certain areas may be funded by an approach similar to that of the Nature Conservation Management Agreement Scheme under the Environment and Conservation Fund. Where circumstances permit, the rich natural and cultural resources in remote countryside can be utilised for planning some “in-depth” travel focusing on the ecological conservation, geological exploration and traditional cultural experience. The CCO also plans to spend the remaining \$500 million on suitable minor improvement works for public facilities, such as providing or improving walkways, piers, walkway lightings, toilets, thematic footpaths and trails, public transportation services and waste recycling and treatment facilities, and rehabilitating the existing architectural environment in the countryside like refurbishment of representative village houses. Moreover, the CCO will follow the Government’s established procurement procedures to engage contractors to take forward necessary conservation initiatives as necessary and appropriate.

The CCO will devise future specific work plans and projects upon establishment.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB130**

**(Question Serial No. 3479)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “continue to monitor and enhance the operation of the Recycling Fund”, would the Administration advise on the following:

- What were the parties, manpower and resources involved in the past 3 years?
- What are the work details?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 110)

Reply:

The Government launched the \$1 billion Recycling Fund in October 2015. As at 28 February 2018, the Advisory Committee on Recycling Fund (RFAC) has received 382 applications (of which 101 had been withdrawn before vetting by the RFAC) and approved 163 applications. Excluding the projects which have been withdrawn by some applicant organisations after their applications were approved, a total of 128 funded projects have been or will soon be commenced, involving a total funding of about \$94 million, of which 24 are under the Enterprise Support Programme (ESP), 97 are for Standard Projects and 7 are under the Industry Support Programme (ISP).

The Environmental Protection Department (EPD) and the RFAC have been striving to enhance the operation of the Recycling Fund so that it will better address the needs of the industry and support its development. Without compromising the need in safeguarding the use of the Recycling Fund and maintaining effective control on applicants, various facilitation measures have been introduced since the Fund's early stage of operation. These measures include providing partial reimbursement of expenses to successful applicants before the launch of the projects under the ESP and the ISP and establishing a category of Standard Projects under the ESP to minimise the administrative workload of small and medium enterprises (SMEs) in making applications. The SMEs undertaking Standard Projects can also submit applications, report achievements and seek reimbursements in accordance with a set of streamlined procedures. Besides, the RFAC

has approved the waiving of a condition on opening a designated project bank account for Standard Projects, and can provide reimbursement midway through the project period.

To assist the recycling industry to address the Mainland's progressive tightening requirements on imports of recyclables, the Recycling Fund announced in September 2017 that \$20 million had been earmarked to expand the list of fundable items under "Standard Projects" to help upgrade the recyclers' ability in turning waste plastics into plastic products or raw materials as well as processing waste paper. The Recycling Fund also earmarked \$50 million for encouraging recyclers to use compactor trucks for more effective and efficient transportation of waste plastics and waste paper and hence reduce the collection and transportation costs of recyclables.

Managing and monitoring the implementation of the Recycling Fund and undertaking the work to enhance the Recycling Fund are part of the work of the Waste Reduction and Recycling Division of the EPD, and are absorbed by existing resources. In addition, the Secretariat of the Recycling Fund (i.e. the Hong Kong Productivity Council) has a dedicated team for project management and technical assessment to offer inputs on general application procedures to applicant organisations, accept and process applications, monitor the progress of approved projects and check on compliance with the funding conditions, etc. Since the preparation for the establishment of the Recycling Fund in September 2015 till March 2017, the Secretariat's expenditure on processing, monitoring and verifying applications for the Recycling Fund was about \$13 million.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB131**

**(Question Serial No. 3480)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Community Green Stations (CGSs), would the Administration advise on:

- What were the manpower and resources involved since the launch of the CGSs?
- What is the anticipated future work plan?
- It was pointed out that the CGSs failed to facilitate the public in carrying out environmental and recycling activities due to their remote locations. What are the Administration's considerations in site selection? Is there a mechanism to review the effectiveness of the CGSs? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 111)

Reply:

The Environmental Protection Department (EPD) is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. The total cost for capital works is estimated to be about \$400 million. The operating expenditure of individual projects may vary, depending on the financial proposals submitted by individual operators in their open tender submissions. At present, there are a total of 17 posts tasked to implement this initiative and monitor the projects, including 16 permanent posts and 1 time-limited post (until 2020). As at the end of 2017, 5 CGSs have progressively been in operation, namely the Sha Tin CGS and the Eastern CGS which commenced operation in 2015 and the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS which commenced operation in 2017. The latest development of individual CGSs is tabulated below:



<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Sha Tin CGS	10 On Ping Street, Shek Mun	The CGS commenced operation in May 2015. In 2017, the CGS collected about 415 tonnes of recyclables, with operating expenditure of about \$4.22 million.
Eastern CGS	30 Oi Shun Road, Shau Kei Wan	The CGS commenced operation in August 2015. In 2017, the CGS collected about 395 tonnes of recyclables, with operating expenditure of about \$3.61 million.
Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables, with operating expenditure of about \$4.69 million.
Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables, with operating expenditure of about \$3.98 million.
Sham Shui Po CGS	339 Tung Chau Street	The CGS commenced operation in October 2017. As at the end of 2017, the CGS collected about 17 tonnes of recyclables, with operating expenditure of about \$0.99 million.
Tuen Mun CGS	9 Tuen Yee Street	The tendering for the operation contract is underway. The CGSs are expected to commence operation in the second half of 2018. Construction works are underway, which are expected to be completed in the second half of 2018.
Kwai Tsing CGS	12 Tam Kon Shan Road, Tsing Yi	
Tai Po CGS	Between Ting Kok Road and Dai Wah Street	
Islands CGS	Junction of Yu Tung Road and Chung Mun Road, Tung Chung, Lantau	
Sai Kung CGS	Po Lam Lane, near Po Hong Road and Po Lam Road North, Tseung Kwan O	Design and construction works are in progress.
Wan Chai CGS	Junction of Wan Shing Street and Hung Hing Road	A design idea competition is underway. The design and construction works are expected to commence in the second half of 2018.
Tsuen Wan CGS J	Hoi Shing Road, near Hoi Kok Street	Sites have been confirmed and planning of construction works is in progress.

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Wong Tai Sin CGS	Junction of Yuk Wah Street and Po Leung Lane, Tsz Wan Shan	
Kowloon City CGS, Southern CGS, Yau Tsim Mong CGS, Central and Western CGS and North CGS	Site to be confirmed	We have been following up the views from District Councils. Taking into account the actual operating experience in other projects, we are continuing with site search and other associated preparation work.

On the site selection for a CGS, the site area should better be no less than 1 500 square metres and we have, as far as practicable, been identifying sites that are conveniently located to facilitate visits by local residents. It is however quite challenging to identify suitable sites in densely populated areas. This notwithstanding, we would avoid setting up the CGS in remote area of the district. The CGSs currently in service or under planning and construction generally meet the above site selection criteria. In addition, the CGS operators will set up mobile collection points in the relevant district to provide more channels and flexibility for the collection of recyclables. The CGS operators will also send collection vehicles to pick up recyclables at different locations within their respective districts.

Since inception the CGSs have been running smoothly. We will take into account their operation statistics to evaluate the effectiveness of each of the CGSs. During their first three-year contract period, both the Sha Tin CGS and the Eastern CGS have exceeded the key performance indicator for collecting not less than 600 tonnes of recyclables, and also fulfilled the requirements in respect of the number and types of educational activities organised. Besides, the Kwun Tong CGS and the Yuen Long CGS have also been operating well, and are expected to be able to meet or even exceed the relevant requirement during the three-year contract period. The Sham Shui Po CGS commenced operation just in October 2017. We will continue to monitor its operation performance. Besides, we will continue to take into account views from various stakeholders and make suitable adjustment to the work of the CGSs on environmental education and recycling support as and when necessary.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB132**

**(Question Serial No. 3481)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Administration states that it will continue to promote reduction of food waste under the Food Wise Hong Kong Campaign. In this connection, would the Administration advise this Committee on the following:

- What were the manpower and expenditure involved in the Campaign in the past 3 years? What were the number of participating organisations and the total quantity of food waste recovered annually?
- Has the effectiveness of the Campaign been reviewed regularly? If yes, what are the details? If no, what are the reasons?
- Are there any plans to widen the scope of the Campaign? If yes, what are the details and timetable? If no, what are the reasons?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 112)

Reply:

1. The Food Wise Hong Kong Steering Committee was set up in December 2012 to formally launch the Food Wise Hong Kong Campaign (the Campaign) in May 2013. The manpower involved in the implementation of the Campaign will continue to be absorbed by the existing establishment. The expenditure of the Campaign in the past 3 years is shown in the table below:

<b>Description</b>	<b>Expenditure 2015-16 (\$m)</b>	<b>Expenditure 2016-17 (\$m)</b>	<b>Estimated expenditure 2017-18 (\$m)</b>
Advertising for the Campaign (including those in public transport system, printed materials and electronic platform, etc.)	1.3	1	2.1
Establishing a supporting website for the Campaign and organising “Food Wise” talks	1	0.9	0.8
Organising publicity activities to promote the Food Wise message, including: - Food Wise Hong Kong Campaign Roving Exhibitions - Promotional activities of the Food Wise Eateries Scheme	2.2	1.7	1.1

The Campaign has promoted a food wise and waste less culture and encouraged behavioural change to reduce food waste in the community through various schemes and activities since its launching in 2013. The major deliverables of the Campaign include:

- The Food Wise Charter – As at February this year, about 730 organisations have signed the Food Wise Charter and are committed to reducing food waste. The signatories include public organisations and public utilities, commercial and industrial sector, food and beverage sector, hotel sector, property development and management sector, higher education institutions, secondary schools, primary schools, kindergartens, etc.
- “Food Wise” Talk – As at February this year, 82 “Food Wise” talks were held by the Government with over 6 600 participants. The talks helped promote the “Food Wise” messages and mainly introduced the food waste issues, treatment of food waste, food waste separation and recycling, as well as the Campaign, etc.
- “Food Wise” Roving Exhibition – As at February this year, a total of 18 roving exhibitions were held by the Government at various districts in Hong Kong to bring the message of food wise and waste less to the community and encourage the public to reduce food waste at source. The roving exhibitions featured display panels with food waste reduction tips, including food trimmings for the second dish recipes, tactics of food storage and purchase management, etc., and let the public share their “Food Wise” wishes and opinions on the exhibition board. The exhibitions attracted a total of over 24 000 visitors.
- The “Big Waster” Facebook and Instagram page – The “Big Waster” symbolising food wastage in the Campaign has strengthened interaction with supporters, particularly the young people, through Facebook and Instagram page in which information on food

waste reduction is provided. Up to February this year, the “Big Waster” Facebook has received more than 52 000 “likes” and there are about 3 000 “followers” on Instagram.

- The Food Wise Eateries Scheme – To continue to encourage the food and beverage sector to offer portioned meals for customers to choose from, so as to avoid the generation of food waste. As at February this year, about 1 080 eateries have enrolled in the scheme, among which about 310 and 430 eateries have been awarded with gold class and silver class status respectively.

Regarding the total quantity of food waste recycled annually under the Campaign, as food waste is currently recycled by various organisations on their own, no specific figures on this are available.

2. According to the reports on “Monitoring of Solid Waste in Hong Kong”, the average daily quantity of food waste disposed of at landfills was 3 600 tonnes in 2016, which was 6.5% higher than that of 2015. It was mainly driven by the increase of commercial and industrial food waste. Domestic food waste disposal had dropped for 3 consecutive years, from 2 645 tonnes per day in 2013 to 2 326 tonnes per day in 2016, representing a decrease of 12%. The per capita disposal rate of domestic food waste also decreased from 0.37 kg per day in 2013 to 0.32 kg per day in 2016.
3. In 2018-19, the Government will promote the food wise and waste less culture by enhancing the above schemes and activities. In addition, to tie in with the commissioning of the Organic Resources Recovery Centre (ORRC) Phase 1 in 2018 where food waste generated from the commercial and industrial sectors will be treated, the Campaign will enter a new stage. Besides promoting the food wise and waste less culture, it is committed to promoting the on-site/off-site recycling of unavoidable food waste. To support the promotion of commercial and industrial food waste recovery, the Government will implement a pilot project to source separate food waste from 40 wet markets and cooked food centres managed by the Food and Environmental Hygiene Department, as well as 9 shopping malls managed by the Hong Kong Housing Authority, for delivery to the ORRC Phase 1 for recycling. Besides, to foster “Food Wise” culture at campus, the Campaign through the Environment and Conservation Fund (ECF) will gradually install small-scale food waste composters for those schools with meals provided and suitable venues, and provide the relevant technical support and teaching materials to demonstrate how to convert unavoidable food waste to compost as well as remind students of the importance of food wise and waste less. The ECF has earmarked a funding of \$20 million to continue to support various food waste reduction projects, of which \$5 million will be used to provide small-scale food waste composters for about 100 schools. The preparatory work for the new measure is underway, and it is expected to begin to invite schools to participate in 2018-19.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB133**

**(Question Serial No. 3482)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the “Steering Committee to Promote Sustainable Development of the Recycling Industry”, would the Administration advise on:

- What were the parties, manpower and resources involved in the past 3 years?
- What is the work schedule in the next 2 years?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 113)

Reply:

The various policies and measures implemented by the Steering Committee to Promote Sustainable Development of the Recycling Industry (the Steering Committee) span across the areas of work of different bureaux and departments. Regarding the support of the operation of the Steering Committee, as it is part of the routine duties of the Waste Reduction and Recycling Division of the Environmental Protection Department (EPD), the manpower and expenditure involved are absorbed by its existing establishment and resources. A breakdown of the manpower and expenditure involved in taking forward the relevant work by other departments is not available either.

One of the work priorities of the Steering Committee in future is to assist the recycling industry and the community in addressing Mainland's tightening requirements on imports of recyclables and at the same time embracing opportunities to enhance the operation level at each stage of the recycling chain including source separation, clean recycling, collection of recyclables, transportation and handling of recycling and export issues. In this regard, EPD and the relevant bureau and departments will actively explore measures and strategies to step up efforts to drive behavioural change in the community towards better and more widespread waste reduction and clean recycling practices and to enhance support at the community level so as to raise the quality of recyclables. The Steering Committee will

also study the feasibility of incubating a local manufacturing industry using recycled materials to absorb more effectively part of the locally generated recyclables. This in the long run will help the recycling industry to move up the value chain and provide more stable and diversified outlets for local recyclables. We will continue to carry out the above work.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB134**

**(Question Serial No. 3483)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “to raise public awareness of and enhance community participation in clean recycling and proper source separation of waste”, would the Administration advise on:

- What were the parties, manpower and resources involved in the past 3 years?
- What are the work details?
- Are there records of the percentage of clean recycling among the recyclables collected through the Environmental Protection Department currently? If yes, what are the details? If no, what are the reasons?
- Are there regular reviews on the effectiveness of such efforts? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 114)

Reply:

The Environmental Protection Department (EPD) has been encouraging the public to separate waste at source whether at home or at workplace through the Source Separation of Waste Programme. The EPD has received support from the Environmental Campaign Committee (ECC) to provide more free recycling bins (RBs) to the relevant housing estates or industrial and commercial development projects for placing at common areas such as carparks, podium gardens or sitting out areas. As at early 2018, over 2 000 housing estates, some 700 rural villages and over 1 000 industrial and commercial buildings have participated in the Programme. The Government has now placed about 16 000 sets of waste separation bins at public places, schools, office buildings, country parks and buildings participating in the Source Separation of Waste Programme to facilitate source separation of waste by the public. The provision of RBs covers over 80% of the places where Hong Kong people live and work.



Since single block buildings in older districts usually do not have any property management company in implementing and overseeing a recycling programme or the space for waste recovery facilities, the Government has set up Community Recycling Centres (CRCs) operated by non-government organisations (NGOs) in various districts through the Environment and Conservation Fund (ECF) so as to provide services for residents living in these buildings, facilitate their separation of waste for recovery and promote waste reduction and recycling activities at the community level. Active public participation in waste source separation is encouraged to nurture and sustain habits of waste reduction and source separation. There are currently 18 CRCs operated by NGOs, 1 mobile community recycling project and over 50 collection points in Hong Kong. In early 2018, we have expanded the scope of service of these CRCs to receive also waste plastic bottles delivered from other private housing estates and residential buildings (i.e. buildings with some form of property management) on a need basis and send them to suitable recyclers for recycling.

The EPD has collaborated with the ECC to launch a Clean Recycling Campaign since mid-2015 to promote behavioural change towards clean recycling, with a view to increasing the quality and quantity and in turn the value and recyclability of the recyclables.

The EPD also launched a free mobile application “Waste Less” in 2014 to provide information on the location of recyclable collection points in public places all over Hong Kong as well as the latest news and useful knowledge about waste reduction and recycling, so as to facilitate community participation. As at early 2018, the download rate of the mobile application has reached 25 000 times. To encourage public participation in recovery, the application has been installed with an interactive function so that useful knowledge, information and games, etc. relating to waste reduction are readily available to the public.

Regarding co-operation with the District Councils (DCs), the EPD, the ECC and the Home Affairs Department have worked with the DCs on the Community Participation Programme in Environmental Protection in Collaboration with District Councils since 2012 to jointly promote environmental education, waste reduction at source and recycling programmes at the district level to further cultivate the “use less, waste less” culture in different sectors of the community. In the past 3 years, the EPD provided a total funding of \$10.7 million to the 18 DCs to subsidise the DCs to roll out environmental programmes at the district level. Besides, the Government also supports non-profit-making organisations in conducting educational activities and promoting community recycling through the ECF.

The EPD has been assessing the effectiveness of the above work and making adjustments in light of the local recycling situation. In response to Mainland’s tightening requirements on imports of recyclables since January 2018, the EPD has launched a new round of clean recycling campaigns in December last year, with focus on encouraging the public to mainly recover three types of paper (i.e. newspapers, office papers and paperboards), recycle two types of plastic bottles first (plastic containers of beverages or personal care products) and practise clean separation and recycling, so as to facilitate subsequent recycling process and seek further outlets. The EPD also collects clean non-bottle waste plastics through the Community Green Stations and CRCs and send them to suitable recyclers for processing where there are viable outlets.

For the above projects, apart from allocation of fund by the ECF to DCs for promotional activities, other work is is part of the work of the EPD in waste reduction and recycling. The manpower and expenditure in the past 3 years were absorbed by existing establishment and resources. We do not have a breakdown on such expenditure or keep records on the proportions of various cleanly recycled materials collected through different channels.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB135**

**(Question Serial No. 3484)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “to set up outreach teams on pilot basis with a view to gradually reaching out to the community so as to facilitate the practice of proper waste source separation and clean recycling”, would the Administration advise on:

- What were the parties, manpower and resources involved in the past 3 years?
- What was the number of housing estates that had received support or assistance in the past 3 years?
- Are there regular reviews on the effectiveness of the outreach teams? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 115)

Reply:

The initial phase of the outreaching service will be launched on pilot basis within 2018. It is anticipated that the outreaching service will be gradually extended to cover the whole territory later in 2018-19. The outreaching service will involve 32 staff in the Environmental Protection Officer grade and the Environmental Protection Inspector grade. The estimated manpower expenditure is about \$16,000,000. As the initial phase of the outreaching service is still under preparation, details of service areas and actual expenditure, etc. are not yet available. We will keep reviewing the implementation and effectiveness of the outreaching service and enhance the relevant service to cater for the practical needs of different stakeholders in the districts.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB136**

**(Question Serial No. 3485)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “the new pilot district collection service for waste plastic bottles”, would the Administration advise on:

- What are the anticipated parties, manpower and resources involved?
- What are the work details?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 116)

Reply:

The Environmental Protection Department is making preparation for the implementation of a pilot scheme on district central collection of waste plastic bottles, including drafting the collection arrangements, budget, etc. It is anticipated that the tender exercise could be conducted at the end of 2018 and the scheme could be implemented progressively in 2018-2019 at the earliest. The pilot scheme will involve 9 staff in the Environmental Protection Officer grade and the Environmental Protection Inspector grade. The estimated manpower expenditure is about \$5,300,000. Apart from manpower expenditure, the estimated expenditure of the pilot scheme is about \$7,100,000. As the pilot scheme is still under preparation, details of the work arrangement are not yet available.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB137**

**(Question Serial No. 3486)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “to take forward the development of Organic Resources Recovery Centres (ORRCs) for the treatment of source-separated food waste”, would the Administration advise on:

- What were the parties, manpower and resources involved in the past 3 years?
- Since the commissioning of the Centres, what is the average quantity of recyclable food waste processed by the Centres per day?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 117)

Reply:

According to “A Food Waste & Yard Waste Plan for Hong Kong 2014–2022”, the Environmental Protection Department (EPD) will build a network comprising 5 to 6 Organic Resources Recovery Centres (ORRCs). ORRC Phase 1 is located at Siu Ho Wan of North Lantau with a daily capacity of 200 tonnes of food waste generated from the industrial and commercial sectors, which is scheduled to be commissioned in 2018. Therefore, statistics on the amount of food waste recovered are not yet available. The works expenditure of ORRC Phase 1 in the past 3 years was \$244 million, \$491 million and \$382 million respectively.

ORRC Phase 2 will be located at Sha Ling of the North District with a daily capacity of 300 tonnes of food waste. We have completed the tendering procedures for Phase 2, and will seek funding approval from the Legislative Council as soon as possible so as to commence the construction early. We have also identified a site at Shek Kong of Yuen Long to develop ORRC Phase 3 with a daily capacity of 300 tonnes of food waste, and we plan to take forward the Environmental Impact Assessment and engineering feasibility study for Phase 3 this year. We will continue to work with the relevant departments on the search for suitable sites for the remaining ORRCs.

The work for developing the ORRC network is handled by EPD's current staff establishment.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB138**

**(Question Serial No. 3487)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “implement the South East New Territories Landfill Extension Scheme and the North East New Territories Landfill Extension Scheme”, would the Administration advise on the following:

- What were the parties, manpower and resources involved in the past 3 years?
- Are there measures and technologies to alleviate the odour problem in the vicinity of the landfills? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 118)

Reply:

The implementation work of the South East New Territories Landfill Extension Scheme and the North East New Territories Landfill Extension Scheme is mainly undertaken by the Environmental Infrastructure Division of the Environmental Protection Department (EPD). We do not have a separate breakdown on the manpower resources involved in individual tasks.

In implementing the landfill extension schemes, we will continue to strictly comply with the requirements of the concerned environmental impact assessment reports and the environmental permits. Key measures to alleviate the odour problem of the landfills include:

- (i) minimising the size of tipping areas as far as practicable;
- (ii) covering the waste completely at the end of daily operation to reduce dispersion of odour;
- (iii) covering the inactive tipping areas with temporary impermeable liners to further minimise dispersion of odour;
- (iv) installing landfill gas extraction wells and mobile landfill gas flaring units to enhance

the collection and treatment of landfill gas so as to prevent the dispersion of landfill gas and associated odour;

- (v) setting up deodorizers to alleviate the odour; and
- (vi) providing full-body vehicle washing facilities and wheel washing facilities to reduce the environmental hygiene problem which may arise from vehicles leaving the landfills.

In addition, the landfill contractors should continue to conduct environment monitoring including setting up environmental monitoring points at specified locations inside and in the vicinity of the landfills for environmental parameters including air, water and noise. The on-site EPD staff and independent consultants at the landfills will also monitor on site the operation of the landfill contractors and their environmental performance.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB139**

**(Question Serial No. 3488)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “continue to expedite the implementation of various measures in *A Clean Air Plan for Hong Kong*”, would the Administration advise on:

- What were the parties, manpower and resources involved in the past 3 years?
- What is the progress?
- What is the implementation timetable?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 119)

Reply:

The Environmental Protection Department (EPD) will continue to implement various measures outlined in “A Clean Air Plan for Hong Kong”, details of which are as follows:

## Details of the implementation of various measures outlined in “A Clean Air Plan for Hong Kong” by the EPD in the past 3 years

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
<b>Vehicles</b>			
1. Encouraging the use of environment-friendly (EF) commercial vehicles	<p>Since April 2008, the Government has launched the Tax Incentives Scheme for EF Commercial Vehicles to encourage vehicle owners to choose EF commercial vehicles with exhaust emissions that out-perform the prevailing statutory emission standards.</p> <p>The qualifying standards for EF commercial vehicles are reviewed and updated annually in the light of vehicle technological advancement such that the tax incentive is available only to vehicles of outstanding environmental performance.</p>	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	From implementation of the Tax Incentives Scheme for EF Commercial Vehicles to the end of February 2018, the number of newly registered EF commercial vehicles was about 51 000 and the amount of FRT concession was about \$1.4 billion.
2. Pilot Green Transport Fund (PGTF)	The PGTF was set up in March 2011 for application by the public transport sector, goods vehicle operators and charity/non-profit making organisations to try out green innovative transport technologies.	<p>A funding of \$300 million was approved for setting up the Fund. As at the end of February 2018, the total amount of subsidy approved was about \$131 million.</p> <p>The relevant workload has been partly absorbed under the existing resources of the EPD and the remaining has been met by 4 already created additional time-limited (from 2016-17 to 2020-21) civil service posts, including 1 Senior Environmental Protection Officer, 1 Environmental Protection Officer, 1 Environmental Protection Inspector and 1 Assistant Clerical Officer.</p>	<p>The Fund can promote a wider use of green innovative transport technologies which help improve roadside air quality and reduce greenhouse gas emission.</p> <p>As at the end of February 2018, the Fund has approved 118 trials, involving 81 electric vehicles (including 3 taxis, 3 light buses, 21 single-deck buses and 54 light goods vehicles (van type), 85 hybrid vehicles (including 44 light goods vehicles, 28 medium goods vehicles, 11 light buses and 2 single-deck buses), a solar air-conditioning system for a bus, 4 electric inverter air-conditioning systems for buses, and retrofitting 3 ferries with diesel-electric propulsion systems to replace their old systems and 1 ferry with a seawater scrubber.</p>
3. Trial of electric buses	Funding was approved in 2012 to fully subsidise the franchised bus companies to procure 36 single-deck electric buses	Funding of \$180 million was approved for this programme. The workload has been partly absorbed by deploying existing	At present, 24 battery-electric buses and 2 supercapacitor buses have commenced operations. It is expected that most of the

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
	(including 8 supercapacitor buses and 28 battery-electric buses) for conducting two-year trials on different routes.	resources and partly met by creating 3 two-year (until end of March 2014) time-limited posts in the EPD and Transport Department (TD) (including 1 Environmental Protection Officer, 1 Senior Environmental Protection Inspector and 1 Motor Vehicle Examiner I). In addition, TD has created a three-year (until end of 2019) time-limited Transport Officer I post to cope with the trials of electric buses.	remaining electric buses will progressively commence operation in 2018.  During the trial, we will gather information to assess the operational efficiency and performance of these buses under the local conditions. Preliminary trial results showed that the driving performance of the single-deck electric buses is comparable with that of conventional buses. However, when the ambient temperature is high, the driving range of battery-electric buses after a full charge is only about 110 km to 150 km, which is lower than the daily mileage requirement of general public buses for 200 km to 300 km.
4. Subsidising franchised bus companies to retrofit Euro II and III franchised buses with selective catalytic reduction (SCR) devices	Funding was approved in 2013 to fully subsidise the franchised bus companies to retrofit eligible Euro II and III franchised buses with SCR devices for upgrading their emission performance to Euro IV or above level.	The total expenditure on retrofitting franchised buses with SCR devices is about \$197 million. The relevant workload is partly absorbed by deploying existing resources and partly met by the creation of 4 time-limited posts (until end of 2016, including 1 Senior Environmental Protection Officer, 1 Environmental Protection Officer, 1 Transport Officer I and 1 Motor Vehicle Examiner II) by the EPD and TD.	1 030 Euro II and III franchised buses have been retrofitted with SCR devices to upgrade their emission performance to Euro IV or above level. All the retrofitting was completed at the end of 2017.
5. Phasing out pre-Euro IV diesel commercial vehicles (DCVs)	The EPD launched an incentive-cum-regulatory scheme in March 2014 with an aim to phase out by end 2019 progressively some 82 000 pre-Euro IV DCVs. Moreover, the EPD has also set a limit on the service life of DCVs newly registered on or after 1 February 2014 at 15 years.	Funding of about \$11.4 billion was approved for implementation of the ex-gratia payment scheme.  The workload for implementing the ex-gratia payment scheme has been partly absorbed under the existing resources of the EPD and TD, and partly met by the creation by the EPD (from 2013-14 to 2019-20) of 3 time-limited civil service posts, including 1 Senior Environmental Protection Officer, 1 Environmental Protection Officer and 1 Environmental Protection Inspector. In addition, the TD	As at the end of February 2018, about 60 900 pre-Euro IV DCVs (i.e. about 74% of the eligible vehicles) have been retired under the ex-gratia payment scheme, involving an ex-gratia payment of about \$8.2 billion.  The phasing out of pre-Euro IV DCVs contributed to the substantial reduction of respirable suspended particulates (RSP) and nitrogen oxides (NO <sub>x</sub> ) from vehicles.

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
		has created in phases a maximum of 25 time-limited civil service posts (reduced to 22 in 2018-19, including 1 Senior Executive Officer, 1 Executive Officer I, 1 Executive Officer II, 2 Clerical Officers, 8 Assistant Clerical Officers, 1 Motor Vehicle Examiner I, 2 Motor Vehicle Examiners II and 6 Vehicle Testers) in the above years according to the progress of the scheme to cope with applications under the ex-gratia payment scheme.	
6. Strengthening the control of emissions from petrol and liquefied petroleum gas (LPG) vehicles	The EPD has been using roadside remote sensing equipment to identify petrol and LPG vehicles emitting excessively since 1 September 2014. For vehicle found emitting excessively, the EPD will issue an Emission Testing Notice to its owner. The owner is required to rectify the excessive emission problem and to send the vehicle to a Designated Vehicle Emission Testing Centre for an emission test with the aid of a chassis dynamometer within 12 working days so as to confirm the rectification of the excessive emission problem. If the owner fails to send the vehicle to the testing centre, or the vehicle fails to pass the emission test, the licence of the vehicle concerned will be cancelled by the TD.	This is part of the EPD's routine work on improving air quality, and there is no separate breakdown on the expenditure involved.	As at the end of February 2018, the EPD has monitored some 2.12 million vehicle counts and issued about 11 700 emission testing notices requiring the owners to repair and to rectify the excessive emissions of their vehicles. During the above period, the licences of a total of 173 vehicles were cancelled for failing the emission test. Another 608 vehicles were voluntarily scrapped by their owners. The percentage of petrol vehicles emitting excessively has reduced from about 10% to 5%, while the percentage of LPG vehicles emitting excessively has reduced from about 80% to 20% from 2014 to 2016.
7. Setting up franchised bus low emission zones (FBLEZs)	To improve roadside air quality and protect public health, the Government set up FBLEZs at the busy corridors in Causeway Bay, Central and Mong Kok at the end of 2015, allowing only low emission franchised buses (including buses of Euro IV or above, or Euro II and III buses retrofitted with SCR devices and diesel particulate filters) to run in these zones.	This is part of the EPD's routine work on improving air quality, and there is no separate breakdown on the expenditure involved.	Three FBLEZs were set up at the end of 2015. Starting from April 2016, all franchised bus companies have confirmed that they have sufficient low emission buses to run in FBLEZs. According to reports submitted by the franchised bus companies, as of December 2017, the overall compliance rate was about 99.7%. In case of traffic congestion, vehicle breakdowns and traffic accidents, etc., the franchised bus companies may need to deploy non-low emission buses to run in

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
			<p>the FBLEZs occasionally in order to maintain normal bus services. However, these exceptional cases will be reduced with the franchised bus companies acquiring more new buses.</p> <p>Franchised buses can account for up to 40% of the traffic at the busy corridors in Causeway Bay, Central and Mong Kok. Therefore, the setting up of FBLEZs at these busy corridors allowing only low emission franchised buses to run in these zones could bring significant improvement to the roadside air quality in the FBLEZs and other districts where the low emission buses will ply.</p>
8. Implementing the Euro VI emission standards for newly registered vehicles	The Government has tightened in phases by vehicle type the emission standards for newly registered vehicles to Euro VI starting from 1 July 2017, and the emission standards for newly registered diesel private cars to California LEV III emission standards starting from 1 October 2017.	This is part of the EPD's routine work on improving air quality, and there is no separate breakdown on the expenditure involved.	Compared with their Euro V counterparts, Euro VI heavy duty diesel vehicles emit about 80% less NOx and 50% less RSP while Euro VI light duty diesel vehicles emit about 55% less NOx.
<b>Vessels</b>			
9. Control of sulphur content of locally supplied marine light diesel	The sulphur content of locally supplied marine light diesel has been capped at 0.05% since 1 April 2014.	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	The sulphur dioxide (SO <sub>2</sub> ) and RSP emissions from local vessels were reduced through implementing this measure.
10. Requiring ocean-going vessels (OGVs) to switch to low sulphur fuel while at berth in Hong Kong waters	The EPD implemented a new regulation on 1 July 2015 requiring OGVs to switch to low sulphur fuel with sulphur content not exceeding 0.5% while at berth in Hong Kong. The Port Facilities and Light Dues Incentive Scheme which was launched since September 2012 to encourage the use of low sulphur fuel by OGVs while berthing in Hong Kong will end on 31 March 2018.	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	As at the end of February 2018, a total of some 60 700 OGV-calls have their port facilities and light dues reduced for switching to low sulphur fuel while berthing in Hong Kong which account for about 44% of vessel arrivals. After the regulation came into effect, the average concentration of SO <sub>2</sub> recorded at the Kwai Chung general Air Quality Monitoring Station when it was downwind of the container terminals during the period from 2016 to 2017 was 59% lower than

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
			that recorded before the implementation of the regulation (i.e. 2014), indicating that the regulation has taken effect in improving the air quality in the vicinity of the container terminals.
11. Requiring vessels to use compliant fuel	The Government proposed to introduce a new legislation requiring vessels to use compliant fuel (including low sulphur fuel with sulphur content not exceeding 0.5%) within Hong Kong waters starting from 1 January 2019 in order to keep on par with the control of the Pearl River Delta (PRD) Domestic Marine Emission Control Area in Pearl River Delta waters.	The relevant consultation and drafting of the new legislation will be undertaken by existing manpower and resources of the EPD. The EPD intends to create 1 Senior Environmental Protection Inspector and 2 Environmental Protection Inspectors in 2018-19 to enforce the new legislation.	The EPD has consulted relevant stakeholders and the Advisory Council on the Environment (ACE) regarding the proposed control, and submitted it to the Panel on Environmental Affairs (the Panel) of the Legislative Council for discussion in 2017, which was generally supported. We are now drafting the legislation on the proposal with a view to implementing the control from 1 January 2019.
<b>Other emission sources</b>			
12. Control of emissions from the power sector	<p>The EPD has formulated Technical Memorandums (TMs) in accordance with the Air Pollution Control Ordinance to stipulate the air pollutant emission caps for the power sector.</p> <p>Since 2010, the EPD has successively promulgated seven TMs to progressively tighten the SO<sub>2</sub>, NO<sub>x</sub> and RSP emission caps for the power sector.</p>	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	<p>The latest Seventh TM was issued in November 2017 and the emission caps stipulated in it will come into effect in 2022. Compared with the emission caps stated in the First TM, the annual emissions of SO<sub>2</sub>, NO<sub>x</sub> and RSP will be reduced by 79%, 59% and 61% respectively.</p> <p>To meet the emission caps stated in the TM, the power plants have to maximise the use of low-emission coal and electricity generated by renewable energy facilities, etc. In addition, the two power companies are now constructing new gas-fired generating units to increase the proportion of gas-fired electricity generation and replace the coal-fired generating units which are to retire. It is anticipated that the new gas-fired units will commence operation in 2020 at the earliest, by then the percentage of local gas-fired electricity generation will be raised to about 50% of the total fuel mix for electricity generation.</p>
13. Control of emissions from non-road mobile machinery (NRMMS)	Starting from 1 June 2015, NRMMS (including regulated machines and non-road vehicles) newly sold and leased for use in Hong Kong have to comply	This is part of the EPD's routine work on improving the air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure	Starting from 1 December 2015, all NRMMS used in construction sites, airport, container terminals and other specified locations are required to bear approval or exemption labels issued by the EPD.

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
	with the statutory emission standards. NRMMs that were in use in Hong Kong when the legislation came into effect were exempted from the new requirements.	involved.	<p>As at the end of January 2018, labels were issued to a total of some 45 600 NRMMs.</p> <p>Currently, the statutory emission standards for regulated machines and non-road vehicles are EU Stage IIIA standards and Euro V standards (or its equivalent standards) respectively. The Government proposed to tighten the statutory emission standards for some non-road vehicles starting from 1 January 2019 to tie in with the latest emission standards for newly registered road vehicles.</p> <p>The EPD has consulted relevant stakeholders on the proposals and consulted the ACE and submitted it to the Panel of the Legislative Council for discussion in March 2018.</p>
<b>Regional Collaboration</b>			
14. PRD regional air pollutant emission reduction co-operation	The HKSAR Government and the GD Government set in 2012 the air pollutant emission reduction targets and ranges for 2015 and 2020, and have implemented control measures according to the PRD Regional Air Quality Management Plan in order to achieve the targets set.	This is part of the EPD's routine work on improving air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	In December 2017, HK and GD released the results of the mid-term review study on emission reduction targets of air pollutants in the PRD region and confirmed that both sides had achieved their respective 2015 reduction targets for SO <sub>2</sub> , NO <sub>x</sub> , RSP and VOC, and finalised the reduction targets for 2020. The two Governments will jointly form a scientific research team to discuss regional air pollution reduction co-operation beyond 2020, including the launch of a study on post-2020 air pollutant emission reduction targets and concentration levels for Hong Kong and GD, in order to continuously improve regional air quality and protect public health.
15. Routine monitoring of volatile organic compounds (VOC) in the PRD Regional Air Quality Monitoring Network	HK and GD have adopted a progressive approach to include routine monitoring of VOC in the PRD Regional Air Quality Monitoring Network in 3 phases from 2017 to 2020. VOC facilitates ozone formation. The monitoring data can help investigate the causes of ozone	This is part of the EPD's routine work on improving air quality and is absorbed under existing resources. There is no separate breakdown on the expenditure involved.	HK and GD have completed the work in Phase 1 in 2017, including to consider the distribution and locations of stations for routine VOC monitoring, select the parameters to be monitored and monitoring methods, and compile the standard operating procedure and quality assurance/quality control protocol. Both sides are now

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
	formation in the PRD region.		undertaking the work in Phase 2, i.e. each selected one of its stations in the regional network to carry out a pilot of online VOC monitoring and preliminary data analysis in 2018-19 based on the Phase 1 results. For Phase 3 in 2020, both sides will comprehensively review the experiences gained in Phase 2 including the operation of the monitoring equipment, expenditure, data quality and the preliminary analysis results, etc., and by making reference to relevant national standards and guidelines – fine tune the monitoring protocol and consider increasing the number of VOC routine monitoring stations.
16. Cleaner Production Partnership Programme (The Programme)	Launched in April 2008, the Programme encourages and facilitates Hong Kong-owned factories in GD and H K to adopt cleaner production technologies and practices through funding support and technology promotion activities, thereby improving the regional air quality. In light of the environmental benefits brought by the Programme, the Government provided an additional funding of \$150 million in 2015 and extended the Programme for 5 years until 31 March 2020.	The Government's total expenditure on implementing the Programme from 2008 to 2018 is around \$236 million. The expenditure in 2018-19 is about \$35 million. This is part of the EPD's routine work, and there is no separate breakdown on the expenditure involved.	As at end February 2018, over 2 900 funding projects were approved and about 500 awareness and technology promotion activities were organised under the Programme.
<b>Review of the air quality objectives</b>			
17. Review of the air quality objectives (the Review)	<p>The current air quality objectives (AQOs) came into effect on 1 January 2014. According to Section 7A of the Air Pollution Control Ordinance (Cap. 311), the Secretary for the Environment is required to review the AQOs at least once in every 5 years and submit a review report to the ACE.</p> <p>The Environment Bureau embarked on the Review in May 2016, and would complete the statutory Review and</p>	<p>We set up an AQOs Review Working Group (Working Group), led by the Under Secretary for the Environment, to conduct the Review. Members of the Working Group include air scientists, business sector representatives, professional bodies, green groups and representatives from relevant government departments, etc. All non-government members of the Working Group take part in the Review on a voluntary basis. As for government members, the work is undertaken under</p>	<p>Four dedicated Sub-groups have been formed under the Working Group, viz. Road Transportation, Marine Transportation, Energy and Power Generation, as well as Air Science and Health. The first three Sub-groups are to identify possible new air quality improvement measures under their respective areas and examine the practicability of their implementation for the consideration of the Working Group. The Sub-group on Air Science and Health focuses on examining the air science and health aspect of the Review including the assessment of air quality</p>



Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
	<p>submit a report to the ACE in 2018. Afterwards, we will commence a full-scale public consultation on the review outcome.</p>	<p>existing manpower and resources and therefore there is no separate breakdown on the expenditure involved.</p> <p>Besides, the EPD commissioned a consultancy study through open tender in November 2016 to assist in the Review. The consultancy contract fee is about \$7 million.</p>	<p>improvements and health and economic impact arising from the possible measures, and hence the possible scope for further tightening the AQOs.</p> <p>The Sub-groups on Road Transportation, Marine Transportation, and Energy and Power Generation have so far convened 19 meetings, and proposed 69 possible new air quality improvement measures and deliberated on the practicability of their implementation within the timeframe up to 2025. These measures covered a wide spectrum encompassing transport planning and management, urban planning and design, use of clean fuel, as well as energy demand management and use of renewable energy, etc.. Amongst these 69 possible new measures, 26 are either on-going or under consideration by the relevant departments which are likely to produce results by 2025 or earlier (short-term), 4 may be ready for consideration in the next AQOs review period of 2019 – 2023 (medium-term) while 14 require detailed planning or further study to ascertain the practicability for implementation beyond the next review period (long-term). The remaining 25 are considered as not practicable, short of air quality benefits or not suitable to be considered under the current scope of the Review. The Air Science and Health Sub-group has so far convened 5 meetings and deliberated on the methodologies for the assessment of air quality, health and economic impacts.</p> <p>Besides, the EPD conducted a public engagement exercise between 11 September and 14 October 2017 to solicit public views on the new measures proposed by the Sub-groups or other air quality improvement measures, and organised 2 public forums to explain the progress of the Review and listen to public views.</p> <p>The consultant engaged in the Review is assisting</p>

Policies/ Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
			in the assessment of air quality, public health and economic impacts arising from the implementation of possible new measures, which includes running the models of air quality, etc., for the Air Science and Health Sub-group and the Working Group to examine the possible scope for further tightening the AQOs.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB140**

**(Question Serial No. 3489)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “continue to collaborate with Guangdong and Macao to include routine volatile organic compounds monitoring in the Pearl River Delta regional air quality monitoring network”, would the Administration advise on the following:

- What are the parties, manpower and resources involved in such work;
- What is the detailed work schedule;
- What is the progress of the joint regional study on fine suspended particulates (FSP) (PM2.5)?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 120)

Reply:

Ozone is a regional problem, and volatile organic compounds (VOC) will facilitate ozone formation. To strengthen the management of the ozone problem in the Pearl River Delta (PRD) region, the Hong Kong-Guangdong Joint Working Group on Sustainable Development and Environmental Protection at the meeting in January 2017 agreed on a specific proposal for routine monitoring of VOC in the PRD Regional Air Quality Monitoring Network. The proposal will be implemented in three phases from 2017 to 2020 in Guangdong and Hong Kong (see Table 1).

Table 1: Specific proposal for routine monitoring of VOC

Phase	Details	Implementation timetable and progress
Phase 1	Consider the distribution and locations of stations for routine VOC monitoring; select the parameters to be monitored and monitoring method; compile the standard operating procedure and the quality assurance/quality control (QA/QC) protocol.	Completed in 2017
Phase 2	Based on the VOC monitoring station distribution and the QA/QC protocol decided in Phase 1, Guangdong and Hong Kong will each select one of its stations in the regional network to carry out a pilot of online VOC monitoring and preliminary data analysis.	2018-2019 In progress
Phase 3	With the experience gained in Phase 2 including monitoring equipment operation, expenditure, data quality and preliminary analysis results, etc. and by making reference to relevant national standards and guidelines, review and fine tune the monitoring protocol and increase the number of VOC routine monitoring stations.	Commence implementation in 2020

As the work is part of the Environmental Protection Department's on-going duties, there is no breakdown on the expenditure.

The Guangdong-Hong Kong-Macao Joint Regional PM<sub>2.5</sub> Study commenced in November 2014. Concurrent sampling in Guangdong, Hong Kong and Macao, chemical analysis, refining of the PRD emission inventory, air quality modelling and integrated data analysis were completed as scheduled. The study team has submitted a draft final report on the study findings at the end of 2017 to the governments of Guangdong, Hong Kong and Macao for review.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB141**

**(Question Serial No. 3490)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The provision for Programme (2) for 2018-19 is \$182.1 million lower than the revised estimate for 2017-18. Would the Administration advise on the non-recurrent projects that have been trimmed down and the details?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 121)

Reply:

The estimate for 2018–19 under the “Air” Programme is \$182.1 million lower than the revised estimate for 2017–18. This is mainly due to decreased cash flow requirement in 2018-19 for some non-recurrent projects which have reached their later stage of implementation. These non-recurrent projects include granting ex-gratia payment for phasing out pre-Euro IV diesel commercial vehicles, fully subsidising franchised bus companies to conduct trials of electric buses, and retrofitting emission reduction devices for franchised buses which has been completed in 2017.

- End -

**CONTROLLING OFFICER'S REPLY****ENB142****(Question Serial No. 3491)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

It is mentioned in paragraphs 169 and 170 of the Budget Speech that the Government will continue to promote the use of electric vehicles (EVs), including waiving in full the first registration tax (FRT) for electric commercial vehicles, electric motor cycles and electric motor tricycles. Would the Administration advise on the following:

- What were the parties, manpower and resources involved in the past 3 years?
- What are the anticipated parties, manpower and resources involved in the new "one-for-one replacement" scheme?
- What is the anticipated number of vehicles joining the above scheme?
- Are there regular reviews on whether there are adequate EV charging facilities currently? Is technical support provided to private venues such as shopping arcades to promote the use of EVs? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEE Kok-long, Joseph (Member Question No. (LegCo use): 122)Reply:

To improve roadside air quality, the Government has been taking various measures including providing first registration tax (FRT) concessions for electric vehicles (EVs) to promote wider use of EVs as replacements of their conventional counterparts.

The Environmental Protection Department (EPD) takes up part of the work on promoting the use of EVs with existing resources. On the other hand, EPD also spent about \$7.1 million, \$8.9 million and \$7.4 million respectively in the past 3 financial years (i.e. 2015-16, 2016-17 and 2017-18), mainly involving upgrading part of the standard chargers to medium chargers in government public car parks managed by the Transport Department (TD) and government car parks managed by the Government Property Agency (GPA) which are open for public use; covering the operation and maintenance costs of chargers; establishing a dedicated technical support team; and setting up 11 outdoor medium charging posts for trial and conducting publicity and promotion activities and fact-finding study, etc.

A designated unit has been established in TD for handling vehicle registration and related issues. As regards the new FRT concession arrangement for electric private cars (e-PCs) announced in the 2017-18 Budget, additional resources (2 time-limited non-civil service contract (NCSC) posts) were allocated to TD for handling the work for 1 year, involving about \$210,000.

Besides, TD anticipates an increase of 2 more time-limited NCSC posts for handling additional work arising from applications under the “One-for-One Replacement” Scheme from 28 February 2018 to 31 March 2021, involving about \$490,000 each year.

The Government believes that the new “One-for-One Replacement” Scheme will provide greater economic incentives to encourage eligible existing PC owners to purchase e-PCs when replacing their cars. However, the sales of EVs are affected by various factors (such as the local situation, development of EVs and the relevant technologies, economic environment, pricing of EV, preferences of car owners as well as suitable EV models and their supplies, etc.). Therefore, we are unable to estimate the number of vehicles participating in the above Scheme.

Regarding the charging arrangements for e-PCs, it has always been the Government's policy direction that e-PC owners should perform daily charging of their e-PCs by using charging facilities at their home, workplace or other suitable places (including charging facilities provided by e-PC suppliers). Public charging facilities in Hong Kong are supplementary in nature, set up for EVs to top up their batteries at times of occasional needs. They do not serve as daily charging facilities or their alternatives. Potential buyers of e-PCs should fully consider the daily charging arrangements required and should not rely on public charging facilities for daily charging of their e-PCs.

Given the above policy direction, the Government's priority is to facilitate and encourage the installation of charging facilities in private premises when planning for the development of charging facilities for e-PCs. These measures include the EPD's establishment in 2011 of a dedicated team and a hotline to provide information and technical support for the installation of EV charging facilities, and the Government's tightening of gross floor area concessions for private car parks in new buildings in April 2011 to encourage developers to provide the EV charging-enabling infrastructure, including provision of sufficient power supply, cabling and conduits for all parking spaces in the buildings concerned. On the development of public charging networks as supplementary facilities, the Government not only takes the lead in providing and enhancing its public charging facilities in government car parks but also supports private establishments to set up and enhance non-governmental public charging networks.

As at the end of 2017, the number of public chargers provided in government and private car parks open for public use in Hong Kong was 1 862, including 931 standard chargers, 605 medium chargers and 326 quick chargers. To improve the charging efficiency, EPD has progressively upgraded standard chargers to medium chargers in the past few years (as compared with standard chargers, medium chargers can reduce the charging time by up to 60%). As at the end of 2017, EPD has installed 519 chargers, among which 268 are medium chargers, in 425 parking spaces (representing 7% of the relevant parking spaces) in government car parks managed by the TD and GPA which are open for public use.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs and retrofitting existing car parks with charging facilities.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB143**

**(Question Serial No. 1160)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Department says it will set up the Countryside Conservation Office to plan and co-ordinate works projects and conservation projects for priority areas in the remote rural countryside with the \$1 billion funding set aside.

(a) What is the manpower involved in the setting up of the Countryside Conservation Office? Are additional posts involved?

(b) What are the work plans, indicators and expenditure of the Countryside Conservation Office in 2018-19?

(c) Conservation issues generally involve a number of departments or private land. How can the Countryside Conservation Office carry out its work effectively?

Asked by: Hon LEUNG Che-cheung (Member Question No. (LegCo use): 9)

Reply:

The Chief Executive announced in her 2017 Policy Address that a Countryside Conservation Office (CCO) would be established to co-ordinate conservation projects that would promote sustainable development of remote countryside. The CCO will be set up in 2018-19, which is expected to comprise about 28 officers from various grades including 1 Administrative Officer Staff Grade C, 1 Senior Environmental Protection Officer, 3 Environmental Protection Officers/Assistant Environmental Protection Officers, 1 Senior Environmental Protection Inspector, 2 Environmental Protection Inspectors, 1 Chief Executive Officer, 1 Senior Executive Officer, 2 Executive Officer Is, 2 Executive Officer IIs, 2 Clerical Officers, 4 Assistant Clerical Officers, 1 Personal Secretary I, 1 Senior Engineer, 1 Engineer/Assistant Engineer, 1 Architect/Assistant Architect, 1 Town Planner/Assistant Town Planner, 1 Landscape Architect/Assistant Landscape Architect, 1 Forestry Officer/Assistant Forestry Officer and 1 Liaison Officer I. The increase in expenditure under the Programme mainly includes the staff costs of these officers (about

\$19.61 million) and cashflow needs earmarked for launching conservation activities and projects mentioned in the paragraph below (about \$10 million).

The Government has earmarked \$1 billion for such conservation and revitalisation efforts, as well as minor improvement works. The CCO will devise future specific work plans and projects upon establishment. On the whole, the CCO will co-ordinate collaboration of the departments concerned in regard to the conservation and revitalisation work, and provide an integrated and dedicated mechanism with resources for the conservation and sustainable development of the remote countryside in the long run. The CCO plans to support collaboration of non-governmental organisations (NGOs) and villagers to organise diverse and innovative conservation activities and projects based on an interactive and co-operative approach with half of the \$1 billion mentioned above, i.e. \$500 million, under non-recurrent account. For instance, the long-term conservation and revitalisation of certain areas may be funded by an approach similar to that of the Nature Conservation Management Agreement Scheme under the Environment and Conservation Fund. Where circumstances permit, the rich natural and cultural resources in remote countryside can be utilised for planning some “in-depth” travel focusing on the ecological conservation, geological exploration and traditional cultural experience. The CCO also plans to spend the remaining \$500 million on suitable minor improvement works for public facilities, such as providing or improving walkways, piers, walkway lightings, toilets, thematic footpaths and trails, public transportation services and waste recycling and treatment facilities, and rehabilitating the existing architectural environment in the countryside like refurbishment of representative village houses. Moreover, the CCO will follow the Government’s established procurement procedures to engage contractors to take forward necessary conservation initiatives as necessary and appropriate.

We will set up an advisory committee (AC) comprising non-official members including non-government stakeholders such as scholars, professionals, rural/district stakeholders and green groups. The main duties of the AC are to examine applications on the relevant conservation and revitalisation projects (not including minor improvement works) submitted by NGOs and monitor the implementation of approved projects and proposals. The CCO will consult the AC on the scope of and application procedures for conservation and revitalisation projects.

As a priority, the CCO will enhance countryside revitalisation in Lai Chi Wo, as well as ecological conservation in Sha Lo Tung, and will keep under review the implementation of these initiatives and their effectiveness from time to time, with the aim of extending the initiatives progressively to other remote countryside areas.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB144**

**(Question Serial No. 1482)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding air pollution, would the Government advise this Committee on the following:

- (a) Please list the indexes of distribution of health risk categories recorded at different monitoring stations in the past 2 years;
- (b) Please list the average concentrations of respirable suspended particulates, fine suspended particulates, nitrogen dioxide, sulphur dioxide and ozone recorded at the air monitoring stations in Tuen Mun and Yuen Long in the past 3 years, and their comparison with the territory-wide average concentrations;
- (c) The Department stated in its reply (ENB144) last year that, "the EPD and relevant Guangdong departments will continue to actively implement measures to improve regional air quality. We plan to complete the Mid-term Review Study on the 2015 and 2020 Air Pollutant Emission Reduction Targets around the middle of this year". The Study should have been completed in 2017. What are the details and the next stage of work?

Asked by: Hon LEUNG Che-cheung (Member Question No. (LegCo use): 54)

Reply:

- (a) Air quality is affected by both the air pollutant emissions and meteorological factors. Air pollutant emissions are directly related to economic activities and control measures and are the major determinants of the long-term trend of air quality, while fluctuations in meteorological conditions can cause short-term changes in air quality. Therefore, there could be differences in air quality from one year to another due to changes in meteorological conditions even though the air pollutant emissions remain constant. To assess the overall changes in air quality and the effectiveness of control measures, we should monitor the long-term trend of air quality rather than its short-term changes.

The Air Quality Health Index (AQHI) is a health risk based system which reflects the short-term health risk of air quality and helps the public take precautionary measures

to protect their health. The AQHIs are reported on a scale of 1 to 10 and 10+ and are grouped into five health risk categories (“Low” health risk category for AQHIs 1-3, “Moderate” health risk category for AQHIs 4-6, “High” health risk category for AQHI 7, “Very High” health risk category for AQHIs 8-10 and “Serious” health risk category for AQHI 10+).

The AQHI mainly reflects short-term changes in air quality and hence is more susceptible to influence by short-term meteorological factors, e.g. sunshine, wind speed, rainfall, etc. Compared with 2016, there were more days in 2017 with meteorological conditions favoring the formation of regional photochemical smog or hindering the effective dispersion of pollutants (e.g. sunny and calm weather, or under the influence of outer subsiding air of tropical cyclones). As a result, there were more days in 2017 with AQHI at “7” (corresponding to the health risk category of “High”) or above. The health risk category distribution recorded at different air quality monitoring stations (AQMSs) (including 3 roadside AQMSs and 13 general AQMSs) in 2016 and 2017 is shown in Table 1.

Table 1: The distribution of health risk categories recorded at different AQMSs in 2016 and 2017

		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of hours															
2016 (Note 1)	Low	3 777	4 831	4 970	5 464	5 045	4 804	5 333	5 265	5 545	4 611	6 003	5 455	6 421	6 362	6 186	5 039
	Moderate	4 796	3 788	3 694	3 214	3 641	3 866	3 373	3 405	3 118	2 306	2 573	3 084	2 174	2 333	2 540	2 231
	High	103	82	71	57	64	70	45	72	63	33	94	102	85	48	32	56
	Very High	97	70	43	38	25	32	26	35	50	19	101	128	93	30	19	21
	Serious	7	9	2	9	5	10	5	5	6	7	11	13	8	9	5	4
2017	Low	3 122	4 273	4 296	4 638	4 272	4 728	4 826	4 812	4 947	4 737	5 251	5 028	5 620	4 895	5 187	5 015
	Moderate	5 160	4 167	4 130	3 869	4 246	3 820	3 728	3 709	3 565	3 801	3 159	3 290	2 868	3 558	3 340	3 266
	High	256	165	172	120	149	125	116	111	100	128	138	155	104	141	113	160
	Very High	197	142	137	115	84	77	77	108	123	81	183	234	119	139	97	77
	Serious	21	9	21	17	8	8	12	19	24	12	22	46	42	15	11	3

Note 1: As the operation of Tap Mun AQMS was suspended from 30 November 2015 to 25 February 2016 owing to the renovation works of the building where it was located, AQHI data were not available for this station from 1 January to 25 February 2016. In addition, as Tseung Kwan O AQMS only commenced operation on 16 March 2016, no AQHI data were available for this station before this date.

- (b) There has been improvement in the overall air quality in Hong Kong, indicating the effectiveness of the control measures implemented in recent years. Over the past 3 years (i.e. 2015-2017), the ambient concentrations of major air pollutants including respirable suspended particulates (RSP), fine suspended particulates (FSP) and nitrogen dioxide (NO<sub>2</sub>) in Hong Kong had dropped by 3µg/m<sup>3</sup> to 9µg/m<sup>3</sup> respectively, while the concentration of sulphur dioxide (SO<sub>2</sub>) was broadly unchanged. Only the ozone level had increased under the influence of regional pollution.

The air quality situations in Tuen Mun and Yuen Long were about the same. Except the ozone level had increased and similar levels of SO<sub>2</sub> recorded at Yuen Long AQMS in 2017 over 2015, the concentrations of RSP, FSP and NO<sub>2</sub> recorded at these two AQMS had dropped by 2µg/m<sup>3</sup> to 8µg/m<sup>3</sup> respectively in the past 3 years. The concentrations of major pollutants in the past 3 years (2015-2017) are shown in Table 2.

Table 2: The concentrations of major pollutants recorded at Tuen Mun, Yuen Long and General AQMSs as a whole in the past 3 years

		2015	2016	2017 (Note 1)	Difference between 2017 and 2015
Air pollutants	AQMS	Annual average concentrations (µg/m <sup>3</sup> )			
RSP	Tuen Mun	45	44	43	-2
	Yuen Long	44	37	40	-4
	General AQMSs (average)	39	34	35	-4
FSP	Tuen Mun	30	27	27	-3
	Yuen Long	30	23	22	-8
	General AQMSs (average)	25	22	22	-3
NO <sub>2</sub>	Tuen Mun	48	51	46	-2
	Yuen Long	45	46	41	-4
	General AQMSs (average)	49	47	40	-9
SO <sub>2</sub>	Tuen Mun	10	10	8	-2
	Yuen Long	8	10	9	+1
	General AQMSs (average)	10	9	8	-2
Ozone	Tuen Mun	38	34	43	+5
	Yuen Long	37	35	45	+8
	General AQMSs (average)	42	39	51	+9

Note 1: The data for 2017 has yet to be validated.

- (c) Both Guangdong and Hong Kong released the results of the mid-term review study on emission reduction targets of air pollutants in the Pearl River Delta (PRD) region in December 2017, confirming that both sides have achieved their respective 2015 reduction targets for SO<sub>2</sub>, NO<sub>x</sub>, RSP and volatile organic compounds (VOC) (Table 3). In addition, having taken into account the current and committed emission reduction measures, the mid-term review study finalised the emission reduction targets for 2020 for both sides (Table 4).

Table 3: Emission reduction results for PRD region in 2015

Pollutants	Region <sup>Note 1</sup>	Recalculated emissions in 2010 (tonnes)	2015 Emission Reduction Targets <sup>Note 2</sup>	Emissions in 2015 (tonnes)	Actual Emission Reduction in 2015 <sup>Note 2</sup>
SO <sub>2</sub>	HKSAR	35 480	-25%	19 540	-45%
	PRD Economic Zone	505 750	-16%	379 300	-25%
NO <sub>x</sub>	HKSAR	107 150	-10%	91 700	-14%
	PRD Economic Zone	942 830	-18%	735 420	-22%
RSP	HKSAR	6 770	-10%	5 430	-20%
	PRD Economic Zone	622 390	-10%	535 260	-14%
VOC	HKSAR	31 020	-5%	26 610	-14%
	PRD Economic Zone	980 950	-10%	873 060	-11%

Table 4: 2020 emission reduction targets for PRD region

Pollutants	Region <sup>Note 1</sup>	Recalculated emissions in 2010 (tonnes)	Original 2020 Emission Reduction Ranges <sup>Note 2</sup>	Finalised 2020 Emission Reduction Targets <sup>Note 2</sup>
SO <sub>2</sub>	HKSAR	35 480	-35% ~ -75%	-55%
	PRD Economic Zone	505 750	-20% ~ -35%	-28%
NO <sub>x</sub>	HKSAR	107 150	-20% ~ -30%	-20%
	PRD Economic Zone	942 830	-20% ~ -40%	-25%
RSP	HKSAR	6 770	-15% ~ -40%	-25%
	PRD Economic Zone	622 390	-15% ~ -25%	-17%
VOC	HKSAR	31 020	-15%	-15%
	PRD Economic Zone	980 950	-15% ~ -25%	-20%

Note 1: The PRD Economic Zone includes Guangzhou, Shenzhen, Zhuhai, Dongguan, Zhongshan, Foshan, Jiangmen, Huizhou and Zhaoqing

Note 2: Reductions are relative to 2010 emission levels

The two governments will continue to implement the control measures under the Pearl River Delta Regional Air Quality Management Plan to meet the above emission reduction targets for 2020. The key emission reduction measures implemented by Hong Kong include: requiring power plants to increase the use of natural gas in electricity generation; imposing and progressively tightening emission caps for power plants; tightening vehicle emission standards to Euro VI; continuing to phase out pre-Euro IV diesel commercial vehicles; collaborating with the Guangdong Provincial Government on the implementation of a domestic emission control area (DECA) in PRD waters as well as mandating vessels to use low-sulphur fuel in Hong Kong waters; and controlling VOC content in solvents used in the printing industry and printing machine cleaning agents. Meanwhile, the Environment Bureau and the Environmental Protection Department are conducting a review of the Air Quality Objectives to explore new measures for further improving the air quality. It is expected that the review will be completed in 2018.

The key emission reduction measures implemented by Guangdong include: controlling the pollutant emissions of coal-fired thermal power plants; advancing the implementation of National VI emission standards for motor vehicles in the PRD and strongly promoting the use of new energy vehicles; enhancing VOC control by regulating 13 major industries associated with sources of VOC including the petrochemical, furniture and printing industries; and progressively implementing the use of low-sulphur fuel for vessels navigating, berthing and operating within the DECA in accordance with requirements.

Regarding the next phase of the emission reduction plan, the two Governments will jointly form a scientific research team to discuss regional air pollution reduction co-operation beyond 2020, including the launch of a study on post-2020 air pollutant emission reduction targets and concentration levels for Hong Kong and Guangdong, in order to continuously improve regional air quality and protect public health.

- End -

**CONTROLLING OFFICER'S REPLY****ENB145****(Question Serial No. 2366)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the Food Waste Recycling Projects in Housing Estates funded by the Environment and Conservation Fund (ECF), please advise on the following:

The Administration has launched a funding scheme for housing estates known as the Food Waste Recycling Projects in Housing Estates since 2011. How many applications were received each year since the launching of the scheme? Among these applications, how many were approved and rejected? If there were rejected applications, what were the reasons for that? What was the average time required for completion of approval?

Please use the table below to set out the number of participating housing estates in each of the past 5 years:

(Year)

Name of the housing estates	Total number of households in the housing estates	Amount of food waste collected	Daily capacities of the food waste composting machines	Eventual outlet of the converted compost	Approved ECF funding	Expenditure involved

Were measures carried out to encourage other housing estates to participate in the projects in the past 5 years? If yes, what were the details? Please list the expenditure and manpower involved by years.

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.01)Reply:



Since the launch of the Food Waste Recycling Projects in Housing Estates funding scheme in 2011 till the end of December 2017, a total of 99 applications were received. The number of applications received each year is set out below:

Year	No. of application received
2011/12	35
2012/13	25
2013/14	17
2014/15	8
2015/16	5
2016/17	8
2017/18 (As at end of December 2017)	1

Among these applications, the number of applications approved is 57, the number of applications withdrawn by the applicants is 36, the number of applications rejected is 1 and the number of applications under processing is 5. For the refusal case, it was because the applicant housing estate failed to resolve the site selection and technical problems of the composting system. The average time required for processing approved projects is about half a year.

The number of participating housing estates in each of the past 5 years is set out below:

Approval year of the project	Name of the housing estates with approved projects in the year	Total number of households in the housing estates with approved projects in the year	Amount of food waste collected [Note1] in the year (tonnes)	Capacities of the food waste composting machines in the year [Note1] (tonnes)	Eventual outlet of the compost produced	Approved ECF funding/ Expenditure involved in the year (\$ million)
2013/14	Sceneway Garden, Harbour Place, Po Sing Centre, Pristine Villa, Royal Peninsula, Serenade Cove, Sham Wan Towers, The Latitude, The	about 43 300	201	24	Most of the compost was used by the participating housing estates for greening of the housing estates and was given to the residents free of charge for	23.50

Approval year of the project	Name of the housing estates with approved projects in the year	Total number of households in the housing estates with approved projects in the year	Amount of food waste collected [Note1] in the year (tonnes)	Capacities of the food waste composting machines in the year [Note1] (tonnes)	Eventual outlet of the compost produced	Approved ECF funding/ Expenditure involved in the year (\$ million)
	Parcville, Wonderland Villas, Yu Chui Court, Yu Tung Court, Aegean Coast, Grand Pacific Views Palatial Coast, Grand Pacific Heights Palatial Coast, Metropolis Plaza, Ocean Shores, Coastal Skyline, Peak One, Pacific Palisades, Grand Del Sol, Lei On Court, Ming Nga Court and Kingsford Terrace				planting purposes.	
2014/15	Aria and Scenic View	about 1 800	204	24	Most of the compost was used by the participating housing estates for greening of the housing estates and was given to the residents free of charge for planting purposes.	2.25

Approval year of the project	Name of the housing estates with approved projects in the year	Total number of households in the housing estates with approved projects in the year	Amount of food waste collected [Note1] in the year (tonnes)	Capacities of the food waste composting machines in the year [Note1] (tonnes)	Eventual outlet of the compost produced	Approved ECF funding/ Expenditure involved in the year (\$ million)
2015/16	Hong Lok Yuen (extension project), Park Island (extension project), Rhythm Garden, Sereno Verde (extension project) and Woodland Crest (extension project)	about 11 600	292	32	Most of the compost was used by the participating housing estates for greening of the housing estates and was given to the residents free of charge for planting purposes.	1.97
2016/17	Laguna Verde (extension project), Manhattan Hill (extension project), Pacific Palisades (extension project), Residence Bel-Air and The Parcville (extension project)	about 11 000	469	54	Most of the compost was used by the participating housing estates for greening of the housing estates and was given to the residents free of charge for planting purposes.	2.20
2017/18 (as at end of December 2017)	Hilton Plaza	about 900	365	44	Most of the compost was used by the participating housing estates for greening of	1.17

Approval year of the project	Name of the housing estates with approved projects in the year	Total number of households in the housing estates with approved projects in the year	Amount of food waste collected [Note1] in the year (tonnes)	Capacities of the food waste composting machines in the year [Note1] (tonnes)	Eventual outlet of the compost produced	Approved ECF funding/ Expenditure involved in the year (\$ million)
					the housing estates and was given to the residents free of charge for planting purposes.	

[Note1] The figures do not necessarily represent the amount of food waste collected in the approved projects for that year. Since the housing estates had to make preparations, such as recruiting staff, arranging tenders for the rental of composters, after approval of the projects, food waste recovery activities might not be commenced in the same year. Moreover, the recipient housing estates had to carry on food waste recovery activities for 24 months, and the projects approved in earlier years would continue to recover food waste after commissioning. Hence, the relevant figures include those projects approved in earlier years and were still in operation.

To encourage other housing estates to participate in the project, the Environmental Protection Department (EPD) has set up a help-desk service to assist housing estates which are interested to participate in the scheme to make application and provide technical support to them. Apart from setting up a website and a hotline to answer enquiries, the EPD also provides a technical guideline; assists the housing estates to choose the suitable locations for installing the food waste composting machines and conduct mechanical inspection; provides professional and technical advices to housing estates during planning and implementation stages; and conducts evaluation of the performance of the food waste treatment facility and the effectiveness and outcomes of the scheme. In addition, the EPD organised 4 briefing sessions/sharing sessions from 2013 to 2017 to provide technical information, introduce application procedures and invite successful participating housing estates to share their practical experiences in food waste recycling so as to encourage other housing estates to participate in the Food Waste Recycling Projects in Housing Estates funding scheme. As the relevant work is an integral part of the EPD's work on food waste management, no separate breakdown on the staffing establishment and expenditure involved is available.

- End -

**CONTROLLING OFFICER'S REPLY****ENB146****(Question Serial No. 2367)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding “various new subsidy programmes under the Recycling Fund were launched in 2017” mentioned in the Programme:

Please provide details on various new subsidy programmes in the table below.

Project name	Launch date	Objectives of the programme and its targets	No. of application received	No. of application approved	No. of application rejected (Please specify the reasons for rejection)	Vetting completion time	Amount of fund granted	Expenditure involved

What are the work details, staffing arrangement, estimated expenditure on the above various subsidy programmes launched by the Environmental Protection Department in 2018-2019?

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.02)

Reply:

Details of the subsidy programme under the Recycling Fund launched in 2017 as at 28 February 2018 are shown below:

<b>Project name</b>	<b>Launch date</b>	<b>Objectives of the programme and its targets</b>	<b>No. of application received</b>	<b>No. of application approved</b>	<b>No. of application rejected (Please specify the reasons for rejection)</b>	<b>Vetting completion time</b>	<b>Amount of fund approved</b>	<b>Amount of fund granted (Note 4)</b>
A category of Standard Projects under the Enterprise Support Programme (ESP)	January 2017	To enhance the existing projects, streamline the procedures and reduce the number of documents required to facilitate small and medium enterprises (SMEs) to apply for funding, e.g. SMEs may submit applications, report achievements and seek reimbursements in accordance with a set of streamlined procedures; the requirement of opening a	148 (Note 1)	88	5 (Note 2)	2-5 months	About \$7.4 million	About \$700 000

		designated project bank account has been waived; and reimbursement can be provided midway through the project period.						
	September 2017	\$20 million has been earmarked to expand the list of fundable items to help upgrade the recyclers' ability in turning waste plastics into plastic products or raw materials as well as processing waste paper.	10	3 (7 applications are still being processed)	0	3 months <b>(Note 3)</b>	About \$2.4 million	0
	September 2017	\$50 million has been earmarked for encouraging recyclers to use compactor trucks for more effective and efficient transportation of waste plastics and waste paper, hence reducing the	7	4 (3 applications are still being processed)	0	3 months <b>(Note 3)</b>	About \$2.8 million	0

		collection and transportation costs of recyclables.						
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Note:

1. Some applicants withdrew their applications of their own accord before vetting.
2. Applications were rejected mainly because the applicant failed to meet the eligibility criteria of the Recycling Fund (1 application), or the particulars of the project or the company submitted were incomplete (4 applications).
3. In order to provide more timely and appropriate support to recyclers, applicants can start the purchase of the equipment one day after the submission of the application to the Secretariat of the Recycling Fund (the Productivity Council) (the Secretariat), i.e. before the application has been vetted by the Advisory Committee on Recycling Fund (RFAC). However, it is still subject to approval by the RFAC.
4. Applicants are required to carry out procurement and prepare the documents and receipts for vetting by the RFAC. As such, the amount of fund granted is lower than the amount of fund approved.

Managing and monitoring the implementation of the Recycling Fund and undertaking the work to enhance the Recycling Fund are part of the work of the Waste Reduction and Recycling Division of the Environmental Protection Department (EPD), and are absorbed by existing resources. In addition, the Secretariat has a dedicated team for project management and technical assessment to offer inputs on general application procedures to applicant organisations, accept and process applications, monitor the progress of approved projects and check on compliance with the funding conditions, etc. Since the preparation for the establishment of the Recycling Fund in September 2015 till March 2017, the Secretariat's expenditure on processing, monitoring and verifying applications for the Recycling Fund was about \$13 million.

The EPD and the RFAC will continue to take forward the above projects and encourage the industry to make application, constantly review the operation of the Recycling Fund, and actively listen and respond to the views and aspirations of the industry through different channels such as meetings, seminars, briefing sessions so as to introduce various timely facilitation measures to meet the needs of the recycling industry in its operation, upgrading and transformation and to attract more applications. The EPD will launch a mid-term review of the Recycling Fund in 2018-19 to examine its overall operation and performance.

- End -



**CONTROLLING OFFICER'S REPLY****ENB147****(Question Serial No. 2368)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the Environmental Levy Scheme on Plastic Shopping Bags (the Levy Scheme):

Please set out in the following table the number of cases received or identified by the Administration each year regarding the violation of the Product Eco-responsibility Ordinance and the details;

Year	Number of warning letters issued	Number of fixed penalty notices issued	Number of prosecutions made	Number of convictions made	Total fine

Please provide the number of inspections, the expenditure and manpower resources involved in each of the past 5 years for carrying out work related to the Levy Scheme;

Has the Administration assessed whether the amount of plastic shopping bags in the territory has decreased since the introduction of the Levy Scheme? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.03)Reply:

The Product Eco-responsibility (Amendment) Ordinance 2014 (the Ordinance) which regulates the Plastic Shopping Bag (PSB) Charging was fully implemented on 1 April 2015 to cover all businesses with retail sales of goods in the territory.

Figures on the enforcement actions taken by the Environmental Protection Department (EPD) are as follows:

<b>Year</b>	<b>No. of inspections</b>	<b>No. of warnings issued</b>	<b>No. of fixed penalty notices <sup>(Note1)</sup></b>	<b>No. of prosecution by summons</b>	<b>No. of convictions</b>	<b>Total fines</b>
2015 (Apr- Dec)	43 163	82	141	0	0	0
2016	30 967	0	174	3	3	\$14,000
2017	26 266	0	154	15	14	\$63,800
2018 (Jan-Feb)	4 586	0	22	3	3	\$7,400
<b>Total</b> (Apr 2015-Feb 2018)	<b>104 982</b>	82	<b>491</b>	<b>21</b>	<b>20</b>	<b>\$85,200</b>

Note 1 : Fixed penalty system was introduced upon the full implementation of the Ordinance.

The enforcement of the PSB Charging legislation is part of the EPD's routine integrated enforcement. We will arrange enforcement staff to conduct inspections according to the actual circumstances, and will also deploy contract staff to support the inspections and screening checks. There is no breakdown on the relevant work.

EPD conducts surveys on the disposal of PSBs annually. According to the survey results, we estimated that after the full implementation of PSB Charging in 2015, the total amount of PSBs disposed of in that year reduced by about a quarter as compared to 2014. While there was an increase in the disposal amount in 2016 when compared with 2015, there was a marked reduction of 18% as compared with 2014 before the full implementation of PSB Charging. This shows that the measure has been effective in reducing the use of PSBs.

- End -

**CONTROLLING OFFICER'S REPLY****ENB148****(Question Serial No. 2369)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Department mentions in the Programme that provision for 2018-19 is \$1,014.7 million higher than the revised estimate for 2017-18, and there will be an increase of 155 posts. In this connection, please advise on the ranks and work details of the posts concerned, as well as the expenditure involved of these posts.

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.04)Reply:

There will be a net increase of 155 posts in the Environmental Protection Department under "Programme (1) Waste" in 2018-19 and the notional annual salary cost at mid-point is about \$87 million. This is mainly for taking forward the producer responsibility schemes, preparing for the Municipal Solid Waste Charging Scheme, setting up new outreach teams, implementing landfill extension schemes and enhancing management of food waste, etc. The details are as follows:

Post	Pay scale	Net increase of posts
Principal Environmental Protection Officer	Directorate Pay Scale Point 1	+ 2
Senior Environmental Protection Officer	Master Pay Scale Point 45-49	+ 12
Environmental Protection Officer/ Assistant Environmental Protection Officer	Master Pay Scale Point 27-44 (Environmental Protection Officer) Master Pay Scale Point 16-21 (Assistant Environmental Protection Officer)	+ 29

Post	Pay scale	Net increase of posts
Chief Environmental Protection Inspector	Master Pay Scale Point 29-33	+ 6
Senior Environmental Protection Inspector	Master Pay Scale Point 22-28	+ 22
Environmental Protection Inspector	Master Pay Scale Point 8-21	+ 62
Senior Treasury Accountant	Master Pay Scale Point 45-49	+ 1
Treasury Accountant	Master Pay Scale Point 30-44	+ 1
Engineer/Assistant Engineer	Master Pay Scale Point 32-44 (Engineer) Master Pay Scale Point 19-27 (Assistant Engineer)	+ 2
Senior Executive Officer	Master Pay Scale Point 34-44	+ 1
Executive Officer II	Master Pay Scale Point 15-27	+ 1
Clerical Officer	Master Pay Scale Point 16-21	+ 1
Assistant Clerical Officer	Master Pay Scale Point 3-15	+ 8
Clerical Assistant	Master Pay Scale Point 1-10	+ 4
Assistant Supplies Officer	Master Pay Scale Point 8-26	+ 1
Motor Driver	Master Pay Scale Point 5-8	+ 2
Total		+ 155

- End -

**CONTROLLING OFFICER'S REPLY****ENB149****(Question Serial No. 2370)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Government is progressively developing Community Green Stations (CGSs) which will mainly provide support for the community in the collection of low-value recyclables and will also promote clean recycling and other green messages to enhance both the quantity and quality of the collected recyclables in the respective district. 5 CGSs, namely the Sha Tin CGS, Eastern CGS, Kwun Tong CGS, Yuen Long CGS and Sham Shui Po CGS, are now in service.

Regarding the effectiveness of the Sha Tin CGS, Eastern CGS, Kwun Tong CGS, Yuen Long CGS and Sham Shui Po CGS:

1. Please list by month the number of visitors and the quantity of various types of recyclables treated (including electrical appliances, computers, glass beverage bottles, fluorescent lamps, rechargeable batteries, used books, clothes, waste paper, waste plastics and waste metals) respectively at the 5 CGSs since their commissioning.
2. Please list by month the public education activities (including exhibitions, seminars workshops, etc.) organised by the operators of the 5 CGSs and the number of participants in each of the activities.
3. Please list the whereabouts of various types of recyclables collected, including: how many materials (kilogram) were recycled eventually and once recycled, the quantity for export and local use; how many materials (kilogram) were disposed of at landfills eventually. Please list the recyclers responsible for the treatment of various types of recyclables collected and the quantity of such recyclables they have treated.
4. Regarding various types of recyclables, please list the numbers of existing residential collection points and institutional collection points in Sha Tin, Eastern, Kwun Tong, Yuen Long and Sham Shui Po districts and the number of collection points to be increased in future.

Reply:

The Environmental Protection Department (EPD) is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2017, 5 CGSs have progressively been in operation, namely the Sha Tin CGS and the Eastern CGS which commenced operation in 2015 and the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS which commenced operation in 2017. Details of the 2017 quarterly operational statistics of the CGSs are set out below (Notes: As the Sham Shui Po CGS commenced operation in October 2017, only the operational statistics for the 4<sup>th</sup> quarter of 2017 are available):

	1 <sup>st</sup> Quarter of 2017				2 <sup>nd</sup> Quarter of 2017			
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sha Tin	Eastern	Kwun Tong	Yuen Long
Quantity of various types of recyclables handled (kg)								
Electrical appliances and computer products	20 476	19 963	12 015	12 172	13 242	12 691	5 301	7 699
Glass bottles	69 722	75 318	50 026	22 896	79 895	75 590	58 893	49 832
Fluorescent lamps/tubes	1 089	1 097	474	564	1 044	925	294	422
Rechargeable batteries	302	674	84	102	181	177	46	859
Used books	930	1 854	523	1 124	1 427	1 052	289	1 052
Clothing	449	4 241	150	3 840	2 078	2 108	966	258
Waste paper	210	912	1 377	1 045	463	1 215	2 953	4 600
Waste plastics	403	695	303	414	999	627	419	545
Waste metals	21	229	61	198	16	166	144	835
Number of educational activities and visitors								
Number of activities	120	103	39	22	115	96	56	52
Number of visitors	6 918	44 902	5 857	5 684	10 218	45 605	9 188	8 219

	3 <sup>rd</sup> Quarter of 2017				4 <sup>th</sup> Quarter of 2017				
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Quantity of various types of recyclables handled (kg)									
Electrical appliances and computer products	16 362	13 222	7 044	18 133	14 565	14 381	7 512	14 735	4 031
Glass bottles	83 144	69 655	61 506	53 681	96 251	70 378	62 604	57 281	5 864
Fluorescent lamps/tubes	1 023	2 012	645	953	924	781	635	888	234
Rechargeable batteries	299	503	271	295	342	182	76	447	85
Used books	2 177	1 102	44	1 489	1 412	2 978	388	3 591	523
Clothing	371	771	320	505	727	2 051	412	6 211	1 826
Waste paper	998	1 124	3 919	7 560	1 114	1 207	4 560	5 899	360
Waste plastics	904	1 609	1 011	883	573	1 469	1 493	1 258	2 385
Waste metals	19	290	323	878	130	682	965	2 115	50
Number of educational activities and visitors									
Number of activities	82	91	60	53	71	94	69	48	183
Number of visitors	7 422	49 916	8 702	7 501	9 424	42 103	8 862	8 176	9 213

The arrangement for the various types of recyclables in the above table is as follows:

Electrical appliances and computer products	The electrical appliances and computer products were mainly sent to the ALBA Integrated Waste Solutions (Hong Kong) Ltd. for refurbishment or dismantling. The company is the operator of the Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE·PARK); some of them were sent to the Vannex International Limited, which is the contractor of the Computer and Communication Products Recycling Programme; and some of them were sent to another contractor for waste electrical and electronic equipment dismantling and recycling services, who was appointed through tendering.
Glass bottles	All glass bottles were sent to the K. Wah Construction Products Ltd., the Laputa Eco-Construction Material Co. Ltd. and the Hong Kong Glass Resources Limited for producing eco-pavers.
Fluorescent lamps/tubes	All fluorescent lamps/tubes were sent to the Ecospace Limited for proper handling. The company is the contractor of the Chemical Waste Treatment Centre.
Rechargeable batteries	All rechargeable batteries were sent to the Vannex International Limited for export for further processing. The company is the contractor of the Rechargeable Battery Recycling Programme.
Used books and clothing	Reuse of used books and clothing was mainly arranged through donation, exchange programmes and second-hand shops. Some of them would be kept in stock for use in future functions.
Waste paper, plastics and metals	All waste paper, plastics and metals were handled by private recyclers through tendering.

The CGSs have set up collection points at residential estates and other suitable sites (such as schools and social service organisations). Quarterly operational statistics of individual CGSs are published every 3 months. As at the 4<sup>th</sup> quarter of 2017, the number of collection points of the 5 CGSs is tabulated below:

	Number of residential collection points					Number of other collection points				
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Electrical appliances and computer products	109	80	54	75	9	43	52	16	24	4
Glass bottles	124	124	68	104	19	31	35	5	16	3



	Number of residential collection points					Number of other collection points				
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Fluorescent lamps/tubes	91	96	32	77	12	13	32	13	10	2
Rechargeable batteries	123	94	65	89	13	11	20	16	13	2

- End -

**CONTROLLING OFFICER'S REPLY****ENB150****(Question Serial No. 2389)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please provide the amount of domestic waste disposed of at landfills (tonnes) in the following table according to the Environmental Protection Department's classification of solid waste:

	2013	2014	2015	2016	2017
Household waste, waste generated from daily activities in institutional premises and waste from public cleansing services collected by government departments					
Marine waste collected by the Marine Department (MD)					
Waste from country parks collected by the Agriculture, Fisheries and Conservation Department (AFCD)					
Dirt and litter collected by the Food and Environmental Hygiene Department (FEHD)					
Domestic waste collected by private waste collectors					
Total amount of domestic waste					

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.06)

Reply:

According to data recorded at waste treatment facilities of the Environmental Protection Department, breakdowns of domestic waste are tabulated below:

	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017<sup>(1)</sup></b>
	<b>(tonnes)</b>	<b>(tonnes)</b>	<b>(tonnes)</b>	<b>(tonnes)</b>	<b>(tonnes)</b>
(1)Household waste, waste generated from daily activities in institutional premises and waste from public cleansing services collected by government departments <sup>(3)</sup>  including:	1 907 497	1 914 571	1 937 910	1 922 590	1 928 056
(a) Marine waste collected via MD	566	768	737	389	440
(b) Waste from country parks collected via AFCD	3 700	3 800	3 700	3 400	3 400
(c) Various types of waste collected via FEHD	1 903 231	1 910 003	1 933 473	1 918 801	1 924 216
(2)Domestic waste collected by private waste collectors	413 494	427 909	421 606	416 669	409 394
<b>Total amount of domestic waste</b> (2),(3)	<b>2 320 991</b>	<b>2 342 480</b>	<b>2 359 516</b>	<b>2 339 259</b>	<b>2 337 451</b>

Notes:

- (1) Provisional statistics.
- (2) Including domestic waste delivered to landfills directly and that transported via refuse transfer stations to landfills for disposal.
- (3) The figures may not add up to total due to rounding off.

- End -

**CONTROLLING OFFICER'S REPLY****ENB151****(Question Serial No. 2390)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

On promoting the use of electric vehicles (EVs):

1. Please set out in the following table the numbers of various types of EVs first registered and registered in Hong Kong in each of the past 5 years:

Type of EVs	Number of first registered vehicles				
	2013	2014	2015	2016	2017
Private car					
Goods vehicle					
Bus					
Light bus					
Taxi					
Motorcycle					
Motor tricycle					

Type of EVs	Number of registered vehicles				
	2013	2014	2015	2016	2017
Private car					
Goods vehicle					
Bus					
Light bus					
Taxi					
Motorcycle					
Motor tricycle					

2. Please set out in the following table the number of chargers at all public charging locations (by charging speed), the share of EV parking spaces in all parking spaces, utilisation rate of chargers, car park operators, and measures on priority or exclusive use by EVs (if any), with a breakdown by district.

Location (by 18 districts)	Number of chargers			Share of EV parking spaces in all parking spaces	Utilisation rate of chargers	Car park operators
	Standard					
					Medium	Quick

3. What was the Administration's expenditure on enhancing the charging network, covering operation and maintenance costs of chargers in each of the past 5 years? What are the Administration's estimated expenditure on EV charging facilities and its details in 2018-19?

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.07)

Reply:

1. The numbers of various types of electric vehicles (EVs) first registered and registered in Hong Kong in each of the past 5 years are as follows:

Type of EVs	No. of vehicles first registered in the year				
	2013	2014	2015	2016	2017
Private car	35	845	2 607	3 020	3 860
Goods vehicle	24	9	11	11	12
Bus	3	4	12	5	18
Light bus	0	0	0	4	1
Taxi	33	15	0	1	0
Motorcycle	14	25	0	2	2
Motor tricycle	0	0	0	0	0

Note: Not including special purpose vehicles and government vehicles.

Type of EVs	No. of registered vehicles as at year end				
	2013	2014	2015	2016	2017
Private car	317	1 160	3 806	6 829	10 666
Goods vehicle	36	56	67	76	86
Bus	4	7	19	24	40
Light bus	4	4	4	7	7

Type of EVs	No. of registered vehicles as at year end				
	2013	2014	2015	2016	2017
Taxi	33	48	8	1	1
Motorcycle	42	50	50	45	45
Motor tricycle	0	0	0	0	0

Note: Not including special purpose vehicles and government vehicles.

2. The number of public EV chargers with a breakdown by 18 districts of Hong Kong as at the end of 2017 is as follows:

District	No. of chargers		
	Standard	Medium	Quick
Central & Western	93	75	24
Eastern	37	68	32
Southern	4	17	19
Wan Chai	84	91	20
Kowloon City	65	2	18
Kwun Tong	214	40	41
Sham Shui Po	17	46	4
Wong Tai Sin	24	46	9
Yau Tsim Mong	100	58	28
Kwai Tsing	16	9	25
Tsuen Wan	16	40	7
Sai Kung	38	14	16
North	35	16	6
Tai Po	28	3	8
Sha Tin	90	35	32
Yuen Long	46	11	14
Tuen Mun	10	8	14
Islands	14	26	9
<b>Total:</b>	<b>931</b>	<b>605</b>	<b>326</b>
	<b>1862</b>		

As at the end of 2017, 680 public chargers were provided at government car parks (including the Transport Department (TD), Government Property Agency (GPA), Leisure and Cultural Services Department, Electrical and Mechanical Services Department (EMSD), Housing Department and Cruise Terminal), and the Environmental Protection Department (EPD) has installed 519 chargers in 425 parking spaces (representing 7% of the relevant

parking spaces) in the government car parks managed by the TD and GPA which are open for public use. The average utilisation rate of the 519 chargers was about 13 times per month per charger from January 2016 to September 2017.

At present, electric private cars only account for about 2 per cent of the total number of registered private cars. Given the supplementary nature of charging facilities provided in the government car parks and the principle that users of EVs and all other vehicles should be treated alike for full utilisation of parking space resources, public parking spaces installed with charging facilities are not designated for exclusive use by EVs. That said, contractors of the government car parks managed by the TD and GPA which are open for public use will, depending on the utilisation situation of the car parks, arrange for traffic cones to be placed and notices to be displayed at parking spaces installed with charging facilities to reserve such spaces for priority use by EVs during non-peak hours whenever practicable.

EPD does not have the relevant statistics on the provision of public chargers at non-government car parks.

3. On the development of public charging networks as supplementary facilities, the Government not only takes the lead in providing and enhancing its public charging facilities in government car parks but also supports private establishments to set up and enhance non-governmental public charging networks. Regarding the government public charging networks, the Government took the lead in 2012 to install 500 public chargers in government public car parks managed by the TD and government car parks managed by the GPA which are open for public use. To improve the charging efficiency, EPD has progressively upgraded standard chargers to medium chargers in the past few years (as compared with standard chargers, medium chargers can reduce the charging time by up to 60%). As at the end of 2017, EPD has installed 519 chargers, among which 268 are medium chargers, in 425 parking spaces (representing 7% of the relevant parking spaces) in the government car parks managed by the TD and GPA which are open for public use. We have also installed electrical installations of quick chargers for taxis for trial and as an encouragement. Moreover, EPD is conducting a pilot scheme at four government outdoor car parks (located at the EMSD Headquarters, Hong Kong Wetland Park, Wai Tsuen Sports Centre and Shek Kip Mei Park) managed by contractors, where a total of 11 outdoor medium chargers have been installed to assess their reliability. The Government's expenditure involved in the above enhancement of public charging facilities at government car parks in the past 5 years is as follows:

<b>Year</b>	<b>No. of additional public EV charging facilities provided at government car parks</b>	<b>Expenditure involved (\$ million)</b>
2011-13	500 standard chargers	4.50
2014-15	100 medium chargers	1.28
	Installation of electrical installations of quick chargers for taxis at 6 car parks	1.49
	6 medium charging posts at outdoor car parks *	0.55
2015-16	6 medium charging posts at outdoor car parks *	0.23
2016-17	174 medium chargers upgrading and 5 medium charging posts at outdoor car parks	2.94

<b>Year</b>	<b>No. of additional public EV charging facilities provided at government car parks</b>	<b>Expenditure involved (\$ million)</b>
2017-18	96 medium chargers upgrading	1.32
<b>Total</b>		<b>12.31</b>

\* The expenditure on 6 medium charging posts at outdoor car parks spanned over two financial years

The electricity cost of chargers at government car parks borne by the Government in the past 5 years is as follows:

<b>Year</b>	<b>Electricity cost of chargers at government car parks borne by the Government (\$)</b>
2013-14	67,582
2014-15	129,532
2015-16	429,241
2016-17	885,189
2017-18 (as of February 2018)	946,424

There was no expenditure on maintenance of chargers from 2011-12 to 2015-16. The expenditures on maintenance of chargers in 2016-17 and 2017-18 as at the end of February this year were about \$54,000 and \$53,000 respectively.

About \$5.8 million of the EPD's estimated expenditure is used on EV charging facilities in 2018-19, which mainly includes enhancing the charging networks and meeting the operation and maintenance costs of chargers, and the relevant manpower and expenditure will be met by the existing resources under the Air Programme.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs.

- End -



**CONTROLLING OFFICER'S REPLY****ENB152****(Question Serial No. 2391)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please set out in the following table the number of public and private organisations joining the Indoor Air Quality Certification Scheme for Offices and Public Places in each of the past 5 years;

(Year)

Applicant organisation	Name of building	Address	Location of certification	Indoor Air Quality Certificate Issuing Body employed	Level of certificate	Validity period

Were measures carried out to encourage other public and private organisations to join the scheme in the past 5 years? If yes, what were the details? Please set out the expenditure and manpower involved each year.

What are the estimated expenditure used by the Administration to improve indoor air quality in 2018-19 and the details?

What were the statistics of complaints received by the Government about indoor air quality in each of the past 5 years and the details?

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.08)Reply:

The Government is committed to promoting the work on improving indoor air quality (IAQ), including enhancing public understanding and awareness of IAQ. The Environmental Protection Department (EPD) launched a voluntary Indoor Air Quality Certification Scheme for Offices and Public Places (the Certification Scheme) in September 2003 to commend good IAQ management and encourage building/premises owners or property management companies to enhance the IAQ of their premises. Participating owners or property management companies are required to employ IAQ Certificate Issuing Bodies (CIBs) accredited by the Hong Kong Accreditation Service to assess the air quality in their premises every year. The CIBs will issue certificates to the premises where the indoor air quality complies with the prevailing IAQ objectives.

Regarding government buildings, according to the joint circular on “Green Government Buildings” issued by the Development Bureau and the Environment Bureau in April 2009, all new government buildings served with central air-conditioning systems should aim to achieve the “Excellent Class” IAQ level of the Certification Scheme and existing government buildings with a total construction floor area of more than 10 000m<sup>2</sup> should aim to achieve the “Good Class” IAQ level. The Government updated the circular in April 2015 to require that all existing government buildings, irrespective of their floor areas, should aim to achieve the “Good Class” IAQ level.

Premises participating in the Certification Scheme include offices, shopping malls, club houses, theatres/halls, sports venues, libraries, etc. In the past 5 years, the number of registered certificates issued to public and private organisations participating in the Certification Scheme increased from about 1 000 in 2013 to about 1 500 in 2017. The detailed statistics are tabulated below:

Year	Certificates of premises of government departments		Certificates of premises of private organisations		Total number of certificates
	IAQ Class		IAQ Class		
	Excellent Class	Good Class	Excellent Class	Good Class	
2013	14	229	179	554	976
2014	27	257	208	667	1159
2015	22	320	218	600	1160
2016	33	451	231	617	1332
2017	39	512	267	676	1494

The EPD has engaged Hong Kong Productivity Council to operate the IAQ Information Centre for vetting applications under the Certification Scheme and issuing IAQ certificates, providing information and technical support, as well as promoting the Certification Scheme through seminars, etc. In addition, the EPD has carried out publicity on different media, such as broadcasting promotional messages on radio, television and trains, putting up posters on buses, trams and trains, as well as organising roving exhibitions, in order to enhance public awareness of IAQ and the Certification Scheme.

The EPD’s expenditures on the operation of the IAQ Information Centre, and promotion and publicity in the past 5 years are tabulated below. As for the manpower of the EPD, it was absorbed by the Department’s existing resources:

Financial Year	2013-14	2014-15	2015-16	2016-17	2017-18
Expenditure (\$million)	3	2.4	3.8	3.8	3.6

In 2018-19, the estimated expenditure for the operation of the IAQ Information Centre, and promotion and publicity is about \$3.8 million. In addition, we have earmarked about \$1.2 million for carrying out other work on improving IAQ, including reviewing the IAQ objectives, developing IAQ guidance notes for schools and elderly homes, etc.

The numbers of complaints on IAQ received by various government departments from 2013 to 2016 are tabulated below. The complaints are mainly about poor ventilation, indoor temperature (too high or too low) and odour. The number of complaints in 2017 is still under compilation.

Year	2013	2014	2015	2016
Complaints on buildings	401	660	573	637
Complaints on public transport	61	50	163	167

- End -

**CONTROLLING OFFICER'S REPLY****ENB153****(Question Serial No. 2392)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

It is mentioned in the Programme that the Department will “support bureaux and departments in carrying out carbon audits on major government buildings”. In this regard:

Has the Administration assisted the bureaux and departments in conducting carbon audits for government buildings and public facilities in the past? If yes, please list the audit results in the table below:

Date of carbon audits	Government buildings/ public facilities	Departments/ bureaux	Energy consumption	Carbon emissions	Emission reduction targets/ measures (if any)

What are the estimated expenditure and manpower resources used by the Administration for supporting the bureaux and departments in conducting carbon audits for major government buildings in 2018-19?

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.09)Reply:

To better understand the carbon emission situation of government buildings and public facilities so as to identify room for carbon reduction, the Government completed in 2015 a three-year programme to conduct energy-cum-carbon audits for 120 government buildings and public facilities, and the Environmental Protection Department (EPD) subsequently assisted relevant bureaux and departments in conducting carbon audits for over 40 government buildings and public facilities in 2016-17. These audits covered office buildings, healthcare facilities, schools, public markets, community halls, postal facilities,

public swimming pools, indoor sports centres, fire and ambulance facilities and a wholesale food market. According to the completed carbon audits, the sectoral average electricity consumption and average carbon emissions of the related government buildings and public facilities are as follows:

<b>Government buildings/public facilities</b>	<b>Responsible bureaux/ departments</b>	<b>Average electricity consumption (kWh/ m<sup>2</sup> / annum)</b>	<b>Average carbon emissions (tonnes CO<sub>2</sub>-e/ m<sup>2</sup> / annum)</b>
Office buildings	Civil Aid Service, Immigration Department, Radio Television Hong Kong, Tourism Commission, Water Supplies Department, Environment Bureau	219	0.15
Healthcare facilities	Department of Health, Government Laboratory	271	0.19
Schools	Education Bureau	101	0.08
Public markets	Food and Environmental Hygiene Department	342	0.23
Community halls	Home Affairs Department	220	0.14
Postal facilities	Hongkong Post	226	0.16
Public swimming pools	Leisure and Cultural Services Department	230	0.13
Indoor sports centres	Leisure and Cultural Services Department	417	0.26
Fire and ambulance facilities	Fire Services Department	173	0.14
Wholesale food market	Agriculture, Fisheries and Conservation Department	377	0.22

Those government buildings and public facilities having undergone carbon audits could implement measures including energy use (such as air conditioning, electrical facilities, lift/escalator and lighting installations, etc.), waste management, use of water and behavioural change etc. to achieve carbon reduction. Individual bureaux and departments could consider taking appropriate energy saving and carbon reduction measures according

to their needs and operational circumstances, such as switching to energy-efficient lighting installations, installing occupancy sensors, as well as installing variable speed drives to improve the energy efficiency of air-conditioning systems.

Starting from April 2017, bureaux and departments are required to start conducting regular carbon audits on major government buildings managed by them with a view to exploring room for carbon reduction and to disclose their carbon emissions information. EPD has compiled a set of 9 sector-specific carbon management guidebooks for reference by bureaux and departments, and has organised a number of carbon audit workshops to provide training for relevant staff. EPD has also set up a hotline to provide technical support for bureaux and departments to kick start their carbon audits.

Bureaux and departments may consider engaging consultants to conduct professional carbon audits, or conducting simple carbon audits by using the electronic template provided by EPD. Depending on the building area and the complexity of operation, the cost for conducting a professional carbon audit for each building is about \$30,000 to \$100,000, while only internal resources and manpower are required to conduct a simple carbon audit.

The promotion of carbon audits, including the work to support bureaux and departments in carrying out carbon audits on major government buildings, is an integral part of the Government's work on addressing climate change. The manpower and expenditure involved are met by the recurrent expenditure of EPD.

- End -

**CONTROLLING OFFICER'S REPLY****ENB154****(Question Serial No. 2393)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (6) Nature ConservationControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please provide details of the 77 country park enclaves:

Please set out the details of the inclusion of 77 enclaves into country parks or in development permission area (DPA) plans/outline zoning plans (OZPs), including their year of inclusion, total area, ecological value, number of residents, current land uses (including country park, agricultural use, institution, residential use, village type development, green belt, etc.) and the sizes of areas for different land uses in the following table.

Enclave	Year of inclusion	Total area	Ecological value	Number of residents	Land uses and their area sizes	Title of DPA plans/ OZPs (if any)

Please set out the enclaves which are not yet included into country parks or in DPA plans/OZPs and advise on the timetable for the inclusion work and the expenditure and manpower resources involved.

Please set out by enclave site the number of cases involving unauthorised development, pollution or vandalism in enclaves received or detected by the Agriculture, Fisheries and Conservation Department, the number of follow-up cases, as well as the number of warnings, prosecutions and convictions made by the Department over the past 5 years in the following table.

Enclave	Year	Number of cases involving unauthorised development, pollution or vandalism	Number of follow-up cases	Number of warnings made by the Department	Number of prosecutions made by the Department	Number of convictions made by the Department

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.10)

Reply:

1. and 2. There are a total of 77 country park enclaves in Hong Kong, of which 23 were already covered by statutory town plans before 2010. The Government also indicated that it would either include the remaining 54 enclaves into country parks, or determine their proper uses through statutory planning to meet conservation and social development needs.

The Planning Department (the PlanD) has completed the formulation of Development Permission Area (DPA) Plans for 30 enclaves, among which the enclave in Sai Wan has also been incorporated into the country park. For the remaining 29 enclaves, the PlanD has also completed the preparation of draft Outline Zoning Plans (OZPs) at the end of March 2017 to replace the DPA Plans.

It rests with the Agriculture, Fisheries and Conservation Department (AFCD) to assess whether the remaining 24 enclaves are suitable for incorporation into country parks for appropriate protection. Three of the enclaves situated in Sai Wan, Kam Shan and Yuen Tun, and another 3 enclaves situated in Fan Kei Tok, Sai Lau Kong and near Nam Shan were respectively incorporated into country parks with effect from 30 December 2013 and 1 December 2017.

AFCD will continue to assess the suitability for incorporating the remaining enclaves not covered by statutory town plans into country parks according to the established principles and criteria as well as relevant considerations, and will put forward proposals to incorporate suitable enclaves into country parks in accordance with the statutory procedures stipulated in the Country Parks Ordinance (Cap. 208). As assessing the suitability for enclaves to be incorporated into country parks and incorporating suitable sites into relevant country parks are part of the routine work of AFCD, we do not have separate breakdown on the relevant expenditure and manpower.

Information on the above 77 enclaves is set out at the Annex.

3. AFCD conducts regular patrols in country parks including the enclaves. If suspected cases of unauthorised developments are detected in enclaves



incorporated in the country parks, AFCD will take enforcement actions under the Country Parks Ordinance (Cap. 208) or refer such cases to the relevant departments as appropriate for follow-up actions to be taken in accordance with the relevant legislation or lease conditions. Since the incorporation of enclaves into country parks in 2013, AFCD has not received or detected cases of pollution or vandalism in these enclaves.

**Information on the 77 Enclaves**

<b>Name of enclave site</b>	<b>Approx. area (in hectares)</b>	<b>Year of inclusion in statutory plan and/or country park</b>	<b>Title of existing statutory plan (if any)</b>	<b>Land use zonings on the current statutory plan<sup>Note</sup></b>
<b>Already included in statutory plan as planned</b>				
Shap Yi Wat	3	1990	Kwun Yam Shan & Fa Sam Hang OZP No. S/ST-KYS/11	Agriculture (AGR), Country Park (CP), Village Type Development (V) & Green Belt (GB)
Mau Ping, Mau Ping Lo Uk, Mau Ping San Uk and Wong Chuk Shan	45	2011	Mau Ping OZP No. S/ST-MP/2	Conservation Area (CA) & V
Site near Ngau Wu Tok	5	2014	Tai Po Kau OZP No. S/NE-TPK/2	CA
Wong Chuk Yeung	37	1990	Shap Sz Heung OZP No. S/NE-SSH/11	CA, GB & V
Sha Lo Tung	56	1997	Sha Lo Tung OZP No. S/NE-SLT/4	CA, GB, Site of Special Scientific Interest (SSSI) & V
Sham Chung	32	2006	Sham Chung OZP No. S/NE-SC/3	AGR, CA, Coastal Protection Area (CPA), GB & V
Chau Mei, Tai Tong, Chau Tau and Sha Tau	26	2014	Ping Chau OZP No. S/NE-PC/1	CPA, SSSI, GB, V & Government, Institution or Community (G/IC)
Pak Tam Au	14	2011	To Kwa Peng & Pak Tam Au OZP No. S/NE-TKP/2	AGR, CA, GB & V
To Kwa Peng	9	2011	To Kwa Peng & Pak Tam Au OZP No. S/NE-TKP/2	CA, CPA, GB & V
Chek Keng	31	2012	Chek Keng OZP No. S/NE-CK/2	CPA, GB, V & G/IC

<b>Name of enclave site</b>	<b>Approx. area (in hectares)</b>	<b>Year of inclusion in statutory plan and/or country park</b>	<b>Title of existing statutory plan (if any)</b>	<b>Land use zonings on the current statutory plan<sup>Note</sup></b>
Tai Tan, Uk Tau, Ko Tong and Ko Tong Ha Yeung	67	2013	Tai Tan, Uk Tau, Ko Tong & Ko Tong Ha Yeung OZP No. S/NE-TT/2	CA, CPA, GB, V & G/IC
Ko Lau Wan, Mo Uk, Lam Uk, Lau Uk and Tse Uk	33	2011	Ko Lau Wan OZP No. S/NE-KLW/2	CPA, GB, V & G/IC
Hoi Ha	8	2010	Hoi Ha OZP No. S/NE-HH/1	CA, CPA, GB(1), V, Other Specified Uses (OU) annotated "Water Sports Recreation Centre" & G/IC
Pak Sha O and Pak Sha O Ha Yeung	29	2012	Pak Sha O OZP No. S/NE-PSO/1	CA, GB, AGR, V, V(1) & G/IC
Yung Shue O	32	2012	Yung Shue O OZP No. S/NE-YSO/2	CPA, GB, V & G/IC
Cheung Sheung	16	2014	Cheung Sheung OZP No. S/NE-CS/2	CA, GB & V
Site near Tai Po Mei	6	2014	Tai Po Kau OZP No. S/NE-TPK/2	CA
Shui Mong Tin	2	2011	Yim Tin Tsai & Ma Shi Chau OZP No. S/NE-YTT/2	CP & SSSI
Kai Kuk Shue Ha, Ho Lek Pui and Ham Hang Mei	8	1990	Luk Keng & Wo Hang OZP No. S/NE-LK/11	AGR, CA, GB & V
Ho Pui, Tin Sam, Sam Ka Tsuen, San Uk Tsuen, San Uk Ha, Lo Wai, Leng Pui and Kau Tam Tso	98	1994	Wu Kau Tang OZP No. S/NE-WKT/6	CA, GB & V
Sam A Tsuen	23	2011	Lai Chi Wo, Siu Tan & Sam A Tsuen OZP No. S/NE-LCW/2	AGR, CA, GB & V

<b>Name of enclave site</b>	<b>Approx. area (in hectares)</b>	<b>Year of inclusion in statutory plan and/or country park</b>	<b>Title of existing statutory plan (if any)</b>	<b>Land use zonings on the current statutory plan<sup>Note</sup></b>
Siu Tan	20	2011	Lai Chi Wo, Siu Tan & Sam A Tsuen OZP No. S/NE-LCW/2	CA & GB
Kop Tong, Mui Tsz Lam and Lai Chi Wo	91	2011	Lai Chi Wo, Siu Tan & Sam A Tsuen OZP No. S/NE-LCW/2	AGR, CA, GB, V & G/IC
So Lo Pun	29	2010	So Lo Pun OZP No. S/NE-SLP/1	AGR, CA, GB & V
Kuk Po San Uk Ha, Kuk Po Lo Wai, Yi To, Sam To, Sze To and Ng To	64	2013	Kuk Po, Fung Hang & Yung Shue Au OZP No. S/NE-KP/2	AGR, CA, GB, V & G/IC
Fung Hang	9	2013	Kuk Po, Fung Hang & Yung Shue Au OZP No. S/NE-KP/2	AGR, CA, GB & V
Yung Shue Au	18	2013	Kuk Po, Fung Hang & Yung Shue Au OZP No. S/NE-KP/2	CA, GB & V
Wong Yi Chau and Hei Tsz Wan	9	2000	Tai Mong Tsai & Tsam Chuk Wan OZP No. S/SK-TMT/4	CA, CP, CPA, GB & V
Pak Tam Chung	2	2000	Tai Mong Tsai & Tsam Chuk Wan OZP No. S/SK-TMT/4	CP, GB & V
Tsak Yue Wu	15	2000	Tai Mong Tsai & Tsam Chuk Wan OZP No. S/SK-TMT/4	CA, GB, V & CP
Tai Long, Lam Uk Wai, Lung Mei Tau, Tai Wan and Ham Tin	46	1997	Tai Long Wan OZP No. S/SK-TLW/5	CA, SSSI & V
Pak Tam	5	2000	Tai Mong Tsai & Tsam Chuk Wan OZP No. S/SK-TMT/4	GB, V, Recreation (REC), CP & G/IC(1)

<b>Name of enclave site</b>	<b>Approx. area (in hectares)</b>	<b>Year of inclusion in statutory plan and/or country park</b>	<b>Title of existing statutory plan (if any)</b>	<b>Land use zonings on the current statutory plan<sup>Note</sup></b>
Shek Hang	3	2000	Tai Mong Tsai & Tsam Chuk Wan OZP No. S/SK-TMT/4	GB & V
Tai Mong Tsai, She Tau, Ping Tun, Tit Kim Hang, Tam Wat, Tai Po Tsai, San Tin Hang, Tso Wo Hang, Wong Chuk Wan and Wong Mo Ying	126	2000	Tai Mong Tsai & Tsam Chuk Wan OZP No. S/SK-TMT/4	CA,GB, Residential (Group C) (R(C))1, R(C)2, R(C)3, V, G/IC, CP & REC
Wong Keng Tei and Tsam Chuk Wan	36	2000	Tai Mong Tsai & Tsam Chuk Wan OZP No. S/SK-TMT/4	CP, CPA, CPA(1), GB, REC & V
Pak A	11	2011	Tung A & Pak A OZP No. S/SK-TA/2	CPA, GB, R(C), V & OU annotated "Pier"
Tung A	10	2011	Tung A & Pak A OZP No. S/SK-TA/2	CPA, G/IC, GB, Open Space (O) & V
Pak Lap	6	2010	Pak Lap OZP No. S/SK-PL/1	AGR, CA, V & G/IC
Fan Lau Tsuen	24	1980	South Lantau Coast OZP No. S/SLC/21	CP, GB & V
Pak Fu Tin	3	1980	South Lantau Coast OZP No. S/SLC/21	CP & GB
Lung Mei and Tai Long	28	1980	South Lantau Coast OZP No. S/SLC/21	CP, GB, R(C) & V
Ngong Ping	103	1999	Ngong Ping OZP No. S/I-NP/6	CA, G/IC(1), G/IC(2), R(C), GB, O, OU annotated "Cable Car Terminal", OU annotated "Tourist Corridor", OU annotated "Sewage Treatment Plant", OU annotated "Amenity Area", REC, SSSI & V

Name of enclave site	Approx. area (in hectares)	Year of inclusion in statutory plan and/or country park	Title of existing statutory plan (if any)	Land use zonings on the current statutory plan <sup>Note</sup>
Lai Chi Yuen	5	1980	South Lantau Coast OZP No. S/SLC/21	CP & GB
Shui Tseng Wan	2	1980	South Lantau Coast OZP No. S/SLC/21	GB
Yi Long	7	1980	South Lantau Coast OZP No. S/SLC/21	CP & R(C)
Shui Hau Wan	1	1980	South Lantau Coast OZP No. S/SLC/21	CP & GB
Luk Wu, Upper Keung Shan, Lower Keung Shan, Cheung Ting and Hang Pui	155	2011	Luk Wu & Keung Shan OZP No. S/I-LWKS/2	AGR, G/IC, GB, G/IC(1), R(C) & V
Ngau Kwo Tin	7	2011	Luk Wu & Keung Shan OZP No. S/I-LWKS/2	GB & G/IC(1)
Tin Fu Tsai	53	2011	Tin Fu Tsai OZP No. S/TM-TFT/2	CA, GB & V
Ngau Liu and Kwun Yam Shan	72	1990	Ho Chung OZP No. S/SK-HC/11 and Kwun Yam Shan & Fa Sam Hang OZP No. S/ST-KYS/11	AGR, CA, G/IC, GB, V & SSSI
Tai Ho and Site near Wong Kung Tin	277	2014	Tai Ho OZP No. S/I-TH/1	SSSI, CA, CPA, GB, V & G/IC
Yi O	23	2012	Yi O OZP No. S/I-YO/2	GB, AGR, V & CPA
<b>Already included into country park</b>				
Sai Wan	17	2013	-	-
Kam Shan	1	2013	-	-
Yuen Tun	19	2013	-	-
Fan Kei Tok	5	2017	-	-
Sai Lau Kong	2	2017	-	-
Site near Nam Shan	6	2017	-	-
<b>Not included in country park/statutory plan</b>				
Ping Shan Chai	15	-	-	-
Tei Tong Tsai	15	-	-	-

<b>Name of enclave site</b>	<b>Approx. area (in hectares)</b>	<b>Year of inclusion in statutory plan and/or country park</b>	<b>Title of existing statutory plan (if any)</b>	<b>Land use zonings on the current statutory plan <sup>Note</sup></b>
Tung Sam Kei	4	-	-	-
Nam Sham Tung	5	-	-	-
Lai Chi Chong	16	-	-	-
Tai Hom	5	-	-	-
Wong Chuk Long	4	-	-	-
Site near Wong Mau Kok	3	-	-	-
Hung Shek Mun Tsuen	10	-	-	-
Lai Tau Shek	10	-	-	-
Tsin Yue Wan	4	-	-	-
Yi Tung Shan	7	-	-	-
Man Cheung Po	2	-	-	-
Site near Peaked Hill	5	-	-	-
Site near Chuen Lung	10	-	-	-
Site near Tso Kung Tam	9	-	-	-
Tsing Fai Tong	26	-	-	-
Sheung Tong	10	-	-	-
Sheung Fa Shan	26	-	-	-

Note: According to the PlanD, a breakdown on the sizes of areas of different land use zonings on statutory plans is not available.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB155**

**(Question Serial No. 2394)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Environmental Protection Department aims to promote the use of electric vehicles in Hong Kong.

To promote the use of electric vehicles (EVs) in order to improve roadside air quality, the Government has been exempting EVs from the payment of first registration tax (FRT) since 1994.

- a. What is the respective total number of newly-registered private and commercial EVs being exempted from the payment of FRT in each of the past 5 financial years?
- b. What is the total amount in tax saved by the public in each respective financial year since the induction of the scheme?
- c. Has the Department analysed the effectiveness of the aforementioned profit tax deduction? If no, why not? If yes, what are the conclusions drawn?
- d. What is the respective total number of newly-registered private and commercial non-electric vehicles in the past 5 financial years?

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 1.06)

Reply:

Commercial vehicles account for 95% of the vehicular emissions of respirable suspended particulates (RSP) and nitrogen oxides (NOx), both major air pollutants. Hence, commercial vehicles have all along been a major target of the Government's measures to improve roadside air quality. Electric vehicles (EVs) have no tailpipe emissions and are efficient in converting energy from



the grid to power at the wheels. Replacing conventional vehicles, especially commercial vehicles, with EVs can help improve roadside air quality and reduce greenhouse gas emissions. As for electric private cars (e-PCs), on one hand, the Government has to control the growth of private cars to prevent aggravating traffic congestion and roadside air pollution, and on the other hand it also hopes to encourage car owners to go for EVs as far as possible when purchasing private cars.

Taking into account factors such as the technological development and market situation of EVs, road traffic considerations, and views from various stakeholders, the Government has decided to continue to waive in full the first registration tax (FRT) for electric commercial vehicles (e-CVs), electric motor cycles and electric motor tricycles until 31 March 2021. As for e-PCs, apart from continuing with the current FRT concession up to \$97,500 until 31 March 2021, the Government has introduced the new 'One-for-One Replacement' Scheme from 28 February 2018 to 31 March 2021 to allow eligible private car owners who buy a new e-PC and arrange to scrap an eligible old private car they own to enjoy a higher FRT concession of up to \$250,000.

- a) The number of newly-registered EVs which enjoyed FRT exemptions in the past 5 financial years are as follows:

	<b>Number of newly registered EVs which enjoyed FRT exemptions (Note 1)</b>		
<b>Financial Year</b>	<b>Private cars</b>	<b>Commercial vehicles (Goods vehicles, buses, light buses, taxis and special purpose vehicles)</b>	<b>Motor cycles and motor tricycles</b>
2013-14	28	79	15
2014-15	1 270	31	7
2015-16	3 118	31	0
2016-17	5 839	29	2
2017-18 (up to end February 2018)	18 e-PCs enjoyed FRT exemption while 98 e-PCs enjoyed a FRT concession of \$97,500 (Note 2)	36	2

Note (1): Exclude government vehicles.

Note (2): As a one-off arrangement, e-PCs ordered by buyers from local registered distributors or arranged for shipment to Hong Kong by owners before 11 a.m. (Hong Kong time) of 22 February 2017, the delivery date of the 2017-18 Budget Speech by the Financial Secretary, could still have their FRT fully waived even if the concerned e-PCs were first registered after 31 March 2017. Between 1 April 2017 and 28 February 2018, 18 number of newly registered e-PCs were eligible for the one-off arrangement and 98 number of newly registered e-PCs were granted FRT concession of up to \$97,500.

- b) The total amount of FRT forgone in each financial year since the launch of FRT concessions on EVs in 1994 are as follows:

<b>Financial Year</b>	<b>FRT Forgone (\$'000)</b>
1994-95	47.2
1995-96	1,250.6
1996-97	61.6
1997-98	2,149.2
1998-99	736.6
1999-2000	17.7
2000-01	153.1
2001-02	37.1
2002-03	169.1
2003-04	11.8
2004-05	31.2
2005-06	44.5
2006-07	48.7
2007-08	22.8
2008-09	39.0
2009-10	6,350.4
2010-11	24,025.2
2011-12	67,208.4
2012-13	27,196.1
2013-14	10,637.0
2014-15	816,430.8
2015-16	2,095,664.8
2016-17	4,492,317.1
2017-18 (up to end February 2018)	19,580.3
<b>Total</b>	<b>7,564,230.3</b>

Note: Government EVs are not subject to FRT.

- c) For e-PCs, the Government's main supporting measures include offering financial incentives such as FRT concession and lower annual vehicle licence fee, and facilitating the development and improvement of charging networks for e-PCs. Through these measures, and coupled with advances in EV technology particularly for e-PCs, there has been substantial increase in the number of EVs in Hong Kong in recent years. The number of licensed e-PCs has increased to 10 424 as at the end of February 2018, as compared with 59 at the end of 2010.

For e-CVs, aside from full waiver of FRT, the Government has put in place other promotion measures. These measures include the setting up of a \$300 million Pilot Green Transport Fund (PGTF) since March 2011 to encourage the public transport sectors, goods vehicle operators and non-profit-making organisations to test out green innovative transport technologies, including e-CVs; full profit tax deduction for capital expenditure on the e-CV in the first year of procurement; and fully

subsidising the franchised bus companies to purchase 36 single-deck electric buses for trial on a number of routes. The effectiveness of our policies on promoting the use of e-CVs depends very much on the maturity of e-CV technologies, their prices and suitability for use in Hong Kong (including their ability to suit the modus operandi of local transport sectors). At present, e-CVs are still constrained by high production cost, limited service life, long charging time and low energy density of EV batteries. As a result, the number of licensed e-CVs has remained low, at 115 as at the end of February 2018. The Government will keep in view the development of e-CV technologies, encourage the transport sector to make use of the PGTF to try out other green innovative transport technologies and vehicle suppliers to introduce more products for use by the local transport sectors. The Government will explore how to promote the wider use of single-deck electric buses by the franchised bus companies, subject to the outcome of the trials as well as the affordability of the franchised bus companies and passengers. As for double-deck electric buses, we will keep in view the development in other places and introduce suitable models for trial in due course.

- d) The total number of newly registered non-electric vehicles in the past 5 financial years are as follows:

<b>Financial Year</b>	<b>Number of newly registered non-electric vehicles</b>		
	<b>Private cars</b>	<b>Commercial vehicles (Goods vehicles, buses, light buses, taxis and special purpose vehicles)</b>	<b>Motor cycles and motor tricycles</b>
2013-14	45 632	11 585	4 576
2014-15	46 258	18 607	5 291
2015-16	44 355	17 713	5 883
2016-17	44 305	14 378	5 501
2017-18 (up to end February 2018)	37 223	13 323	5 361

Note: Exclude government vehicles.

- End -

**CONTROLLING OFFICER'S REPLY****ENB156****(Question Serial No. 2410)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (5) Environmental Assessment and PlanningControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the work on environmental assessment and planning:

Please set out in the following table the works projects which applied for variation of the Environmental Permit (VEP) in the past 5 years, and provide information on the government departments or private sectors in charge of each works project, the number of VEP applications made, project types, reasons for variation, approval status, and the expenditure involved in VEP;

(Year)

<b>Project applied for VEP</b>	<b>Government department or private organisation in charge of the project</b>	<b>Number of applications for VEP</b>	<b>Project type</b>	<b>Reason for variation</b>	<b>Approval status</b>	<b>Expenditure involved in VEP</b>

Please set out the number of appeal or judicial review cases against the environmental impact assessment (EIA) reports in the past 5 years, and provide details of these cases, including the works projects, the points of contention and the judgements of the court;

Please set out the designated projects which require ecological mitigation measures under the Environmental Impact Assessment Ordinance in each of the past 5 years, and specify the ecological mitigation measures required by these projects, the progress of implementation and the expenditure involved in the works;

Please set out the major projects undergoing environmental monitoring and audit (EM&A), including the number and frequency of EM&A conducted for these projects in each of the past 5 years. Please provide a breakdown of the expenditure involved and the manpower deployed in conducting various EM&A programmes each year;

Please set out the planning studies and strategic planning studies conducted in each of the past 5 years, including the expenditure involved and the manpower deployed for these studies (if consultants were commissioned to conduct these studies, please set out separately);

Please set out the number of EIA reports scrutinised by the Advisory Council on Environment (ACE) in each of the past 5 years, and provide a breakdown of the expenditure involved for ACE in each year.

Asked by: Hon LEUNG Kenneth (Member Question No. 3.17)

Reply:

1. The main reason for applying for variation of an Environmental Permit (VEP) is normally due to the need to modify the construction methods during the construction period, or the need to adjust the project designs to suit the actual site conditions. Regardless of the reasons for application, the amended Environmental Permit (EP) can only be issued by the Environmental Protection Department (EPD) after EPD and other relevant government departments have confirmed that there is no material change to the environmental impact of the project with the mitigation measures in place, and the project complies with the requirements of the Technical Memorandum on Environmental Impact Assessment Process in accordance with the requirements of the Environmental Impact Assessment Ordinance (EIAO). As the costs of VEP fall under the estimated expenditure of the relevant works projects, EPD does not have information in this regard. Project information on applications for VEP in the past 5 years is tabulated at Annex 1.
2. There were 3 applications for appeal or judicial review on the Environmental Impact Assessment (EIA) reports in the past 5 years. Please refer to Annex 2 for the designated projects concerned, the points of contention and the judgments of the court.
3. Of the EPs issued by EPD under the EIAO in the past 5 years, implementation of ecological mitigation measures was required for 46 designated projects. The relevant projects are set out by year in the table at Annex 3. The ecological mitigation measures implemented for the projects generally include:
  - (1) establishing habitats to compensate for ecological impact in order to protect the affected rare species of wildlife fauna and flora or those that are of conservation importance;
  - (2) translocation or in-situ conservation of important fauna and flora or coral species;
  - (3) imposing restrictions on the methods, programme or duration of construction; implementation of mitigation measures to reduce the impact of the projects on ecologically sensitive areas, marine ecology or marine life such as the Chinese White Dolphins; and
  - (4) designating new marine parks.

All ecological mitigation measures must be implemented in accordance with the requirements of the EPs, and their implementation is ensured through the Environmental Monitoring and Audit (EM&A) mechanism. As the costs of implementing ecological mitigation measures fall under the estimated expenditure of the relevant works projects,

EPD does not have information in this regard.

4. Please refer to Annex 4 for information on major projects requiring EM&A in accordance with the requirements of the EPs in the past 5 years. As for the number and frequency of EM&A conducted, the EIA report of the projects concerned should recommend an EM&A programme, having regard to the respective environmental parameters requiring monitoring, the possible environmental impacts, the location and scope, for implementation after approval by EPD. EPs generally require permit holders to submit monthly EM&A reports to EPD to report the monitoring and audit results of all environmental parameters in that period. The reports will also be uploaded to EPD's website as well as the project website for public inspection. As the costs of conducting EM&A programmes fall under the estimated expenditure of the relevant works projects, EPD does not have information in this regard.
5. The number of major planning studies and strategic planning studies assessed by EPD in each of the past 5 years is listed as follows:

<b>Year</b>	<b>Major planning studies and strategic planning studies</b>
2013	40
2014	41
2015	65
2016	75
2017	72

As the assessment work is an integral part of the work of EPD, we do not have separate breakdowns of the manpower resources and expenditure involved in individual work items.

6. Of the EIA reports submitted to the Advisory Council on the Environment (ACE) under the EIAO in the past 5 years, a total of 28 reports were selected by the ACE for detailed discussion at the meetings of its EIA Subcommittee. The number of EIA reports discussed by the EIA Subcommittee is listed by years as follows:

<b>Year</b>	<b>Number of EIA reports scrutinised by the EIA Subcommittee</b>
2013	7
2014	3
2015	2
2016	10
2017	6

EPD provides secretariat services for the ACE, and the relevant expenses are absorbed by EPD's existing resources. We do not have a separate account for the expenditure of the ACE.

**Information on Applications for Variation of an Environmental Permit (VEP)**  
**in the Past 5 Years (Year 2013 to 2017)**

**Year 2013**

	<b>Project that Applied for VEP</b>	<b>Responsible Government Department or Private Organisation</b>	<b>Number of Applications for VEP</b>	<b>Project Type</b>	<b>Approval Status</b>
1	Fill Bank at Tseung Kwan O Area 137	Civil Engineering and Development Department	1	Public dumping area	Issued
2	Expansion and Extension of Fill Bank at Tuen Mun Area 38	Civil Engineering and Development Department	1	Public dumping area	Issued
3	Liantang / Heung Yuen Wai Boundary Control Point and Associated Works	Civil Engineering and Development Department	1	Roads	Issued
4	Upgrading of Pillar Point Sewage Treatment Works	Drainage Services Department	1	Sewage treatment	Issued
5	Water Reclamation Facilities for Stanley Sewage Treatment Works	Drainage Services Department	1	Sewage treatment	Issued
6	Development of an EcoPark in Tuen Mun Area 38	Environmental Protection Department	2	Waste storage, transfer and disposal facilities	Issued
7	Organic Waste Treatment Facilities Phase 1	Environmental Protection Department	2	Waste storage, transfer and disposal facilities	Issued
8	Sludge Treatment Facilities	Environmental Protection Department, VW-VES (HK) Limited	2	Waste storage, transfer and disposal facilities	Issued
9	Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road	Highways Department	2	Roads	Issued
10	Hong	Highways	2	Roads	Issued

	Kong-Zhuhai-Macao Bridge – Hong Kong Boundary Crossing Facilities	Department			
11	Restoration to Yan Tun Kong Study Hall at Ping Shan, Yuen Long, New Territories	Leisure and Cultural Services Department	1	Works in an existing site of cultural heritage	Issued
12	Sheung Shui to Lok Ma Chau Spur Line	MTR Corporation Limited	2	Railways	Issued
13	West Island Line	MTR Corporation Limited	2	Railways	Issued
14	Hong Kong Section of Guangzhou-Shenzhen-Hong Kong Express Rail Link	MTR Corporation Limited	2	Railways	Issued
15	West Rail	MTR Corporation Limited	1	Railways	Issued
16	South Island Line (East)	MTR Corporation Limited	2	Railways	Issued
17	Shatin to Central Link – Tai Wai to Hung Hom Section	MTR Corporation Limited	2	Railways	Issued
18	Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate	ASB Biodiesel (Hong Kong) Limited	2	Industrial activities	Issued
19	Phase III Redevelopment of The Hong Kong Federation of Youth Groups Jockey Club Sai Kung Outdoor Training Camp	The Hong Kong Federation of Youth Groups, Fat Cheong (Hong Kong) Construction Co. Limited	2	Works in country park	Issued
20	Cement Silos Additional Work in Tai Po Cement Depot	K.Wah Materials Limited	1	Industrial activities	Issued
21	Repositioning Long Term Operation Plan of Ocean Park	Ocean Park Corporation	1	Tourist and recreational developments	Issued
22	Proposed Comprehensive Development at Wo Shang Wai, Yuen Long	Profit Point Enterprises Limited	1	Residential and other developments	Issued



23	The Proposed Submarine Gas Pipelines from Cheng Tou Jiao Liquefied Natural Gas Receiving Terminal, Shenzhen to Tai Po Gas Production Plant, Hong Kong	The HK & China Gas Company Limited	1	Utility pipelines, transmission pipelines and substations	Issued
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## Year 2014

	<b>Project that Applied for VEP</b>	<b>Responsible Government Department or Private Organisation</b>	<b>Number of Applications for VEP</b>	<b>Project Type</b>	<b>Approval Status</b>
1	Sha Tin New Town - Stage II, Road T3 and Associated Roadworks	Civil Engineering and Development Department	1	Roads	Issued
2	Liantang / Heung Yuen Wai Boundary Control Point and Associated Works	Civil Engineering and Development Department	1	Roads	Issued
3	Kai Tak Development - Roads D3A & D4A	Civil Engineering and Development Department	2	Roads	1 Issued 1 Withdrawn
4	Sediment Removal at Yim Tin Tsai (East) Fish Culture Zones	Civil Engineering and Development Department	1	Reclamation or dredging	Issued
5	Tai Po Sewage Treatment Works Stage 5 Phase 2A - Disinfection and Stage 5 Phase 2B	Drainage Services Department	1	Sewage treatment	Issued
6	Upgrading of Pillar Point Sewage Treatment Works	Drainage Services Department	1	Sewage treatment	Issued
7	Harbour Area Treatment Scheme (HATS) Stage 2A	Drainage Services Department	1	Sewage treatment	Issued
8	Yuen Long Kau Hui No. 2 Sewage Pumping Station	Drainage Services Department	1	Sewage treatment	Issued
9	Water Reclamation Facilities in Shatin Sewage Treatment Works	Drainage Services Department	1	Sewage treatment	Issued
10	Sewerage Works at Pik Shui Sun Tsuen	Drainage Services Department	1	Sewage treatment	Issued
11	Tuen Mun Sewerage - Eastern Coastal Sewerage Extension	Drainage Services Department	1	Sewage treatment	Withdrawn

12	Drainage Improvement in Tsuen Wan and Kwai Chung - Tsuen Wan Drainage Tunnel	Drainage Services Department, Maeda-CRGL-SELI Joint Venture	2	Drainage works in country park	Issued
13	Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling	Highways Department	1	Roads	Issued
14	Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road	Highways Department	1	Roads	Issued
15	Tuen Mun - Chek Lap Kok Link	Highways Department	2	Roads	Issued
16	Central - Wanchai Bypass (CWB) including its road tunnel and slip roads	Highways Department	1	Roads	Issued
17	Central Kowloon Route (CKR)	Highways Department	1	Roads	Issued
18	Improvement of Fresh Water Supply to Cheung Chau	Water Supplies Department	1	Water supply works in country park	Issued
19	Underpass Road and Austin Road Flyover Serving the West Kowloon Cultural District	West Kowloon Cultural District Authority	1	Roads	Issued
20	Tsim Sha Tsui Station Northern Subway	MTR Corporation Limited	1	Railways	Issued
21	MTR Wan Chai Station Lee Tung Street Subway	MTR Corporation Limited	1	Railways	Issued
22	West Island Line	MTR Corporation Limited	2	Railways	Issued
23	Hong Kong Section of Guangzhou-Shenzhen-Hong Kong Express Rail Link	MTR Corporation Limited	1	Railways	Issued
24	South Island Line (East)	MTR Corporation Limited	1	Railways	Issued

25	Shatin to Central Link – Hung Hom to Admiralty Section	MTR Corporation Limited	1	Railways	Issued
26	Shatin to Central Link – Tai Wai to Hung Hom Section	MTR Corporation Limited	4	Railways	Issued
27	Sheung Shui to Lok Ma Chau Spur Line	MTR Corporation Limited, Kowloon-Canton Railway Corporation	2	Railways	Issued
28	Repositioning Long Term Operation Plan of Ocean Park	Ocean Park Corporation	1	Tourist and recreational developments	Issued
29	Connection of Existing 400kV Transmission Circuit to Lai Chi Kok 400kV Substation	CLP Power Hong Kong Company Limited	1	Utility pipelines, transmission pipelines and substations	Issued
30	Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate	ASB Biodiesel (Hong Kong) Limited	1	Industrial activities	Issued
31	Proposed Shooting Range at Pillar Point Valley Landfill	Hong Kong Shooting Association	1	Tourist and recreational developments	Issued

## Year 2015

	<b>Project that Applied for VEP</b>	<b>Responsible Government Department or Private Organisation</b>	<b>Number of Applications for VEP</b>	<b>Project Type</b>	<b>Approval Status</b>
1	Kwun Tong Line Extension	MTR Corporation Limited	1	Railways	Issued
2	Hong Kong-Zhuhai-Macao Bridge – Hong Kong Boundary Crossing Facilities	Highways Department	2	Roads	Issued
3	Drainage Improvements in Southern Lantau	Drainage Services Department	2	Drainage works	Issued
4	Liantang / Heung Yuen Wai Boundary Control Point and Associated Works	Civil Engineering and Development Department	1	Roads	Issued
5	Shatin to Central Link – Hung Hom to Admiralty Section	MTR Corporation Limited	2	Railways	Issued
6	Widening and Reconstruction of Tai Po Road (Sha Tin Section)	Civil Engineering and Development Department	1	Roads	Issued
7	Tuen Mun - Chek Lap Kok Link	Highways Department	1	Roads	Issued
8	Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling	Highways Department	2	Roads	Issued
9	Tuen Mun Sewerage - Eastern Coastal Sewerage Extension	Drainage Services Department	1	Sewage treatment	Issued
10	Tseung Kwan O – Lam Tin Tunnel and Associated Works	Civil Engineering and Development Department	2	Roads	Issued

11	Central Kowloon Route (CKR)	Highways Department	1	Roads	Issued
12	Harbour Area Treatment Scheme (HATS) – Provision of Disinfection Facilities at Stonecutters Island Sewage Treatment Works	Drainage Services Department	1	Sewage treatment	Issued
13	Demolition of Buildings and Structures in the Proposed Kennedy Town Comprehensive Development Area Site	Civil Engineering and Development Department	1	Decommissioning of a municipal incinerator	Issued
14	Hiram's Highway Improvement Phase 3: Improvement between Nam Wai and Ho Chung and Upgrading Local Access Roads	Highways Department	1	Roads	Issued
15	Construction of Cycle Tracks and the associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River	Civil Engineering and Development Department	1	Roads	Issued
16	Widening of Tolo Highway between Island House Interchange and Ma Liu Shui Interchange	Highways Department	1	Roads	Issued
17	An Extension to the Existing Boardwalk and New Floating Mudflat Bird-watching Hide at Mai Po Nature Reserve for Education and Conservation Purposes	World Wide Fund for Nature, Hong Kong	1	Works in an existing conservation area	Issued

18	Central Reclamation Phase III	Civil Engineering and Development Department	1	Reclamation or dredging	Issued
19	Shatin to Central Link – Tai Wai to Hung Hom Section	MTR Corporation Limited	1	Railways	Issued
20	Central - Wanchai Bypass (CWB) including its road tunnel and slip roads	Highways Department, Chun Wo - CRGL - MBEC Joint Venture	2	Roads	Issued
21	Organic Waste Treatment Facilities Phase 1	Environmental Protection Department, Oscar Bioenergy Joint Venture	2	Waste storage transfer and disposal facilities	Issued

## Year 2016

	<b>Project that Applied for VEP</b>	<b>Responsible Government Department or Private Organisation</b>	<b>Number of Applications for VEP</b>	<b>Project Type</b>	<b>Approval Status</b>
1	Shatin to Central Link – Hung Hom to Admiralty Section	MTR Corporation Limited	2	Railways	Issued
2	Sludge Treatment Facilities	Environmental Protection Department , VW-VES (HK) Limited	2	Waste storage, transfer and disposal facilities	Issued
3	Kwun Tong Line Extension	MTR Corporation Limited	1	Railways	Issued
4	Development of an EcoPark in Tuen Mun Area 38	Environmental Protection Department	1	Waste storage, transfer and disposal facilities	Issued
5	Shatin to Central Link – Tai Wai to Hung Hom Section	MTR Corporation Limited	2	Railways	Issued
6	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities	Highways Department	3	Roads	1 Withdrawn 2 Issued
7	Central Police Station Conservation and Revitalisation Project	The Jockey Club CPS Limited	1	Works in an existing site of cultural heritage	Issued
8	Improvement of Fresh Water Supply to Cheung Chau	Water Supplies Department	3	Water supply works in country park	2 Withdrawn 1 Issued
9	Development of a Grease Trap Waste Treatment Facility at West Kowloon Transfer Station	SITA Waste Services Limited	1	Waste storage, transfer and disposal facilities	Issued



10	Underpass Road and Austin Road Flyover Serving the West Kowloon Cultural District	West Kowloon Cultural District Authority	1	Roads	Issued
11	Operation of the Existing Tai Lam Explosive Magazine at Tai Shu Ha, Yuen Long for Liantang / Heung Yuen Wai Boundary Control Point Project	Dragages Hong Kong Limited	1	Industrial activities	Issued
12	Development of the Integrated Waste Management Facilities Phase 1	Environmental Protection Department	1	Waste storage, transfer and disposal facilities	Issued
13	South Island Line (East)	MTR Corporation Limited	1	Railways	Issued
14	Proposed Upgrading of Kwun Tong Preliminary Treatment Works	Drainage Services Department	1	Sewage treatment	Issued
15	Central - Wan Chai Bypass (CWB) including its road tunnel and slip roads	Highways Department	2	Roads	Issued
16	Wan Chai Development Phase II – Central - Wan Chai Bypass – Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning (Contract No. HY/2011/08)	Leighton Joint Venture	1	Roads	Issued
17	Widening and Reconstruction of Tai Po Road (Sha Tin Section)	Civil Engineering and Development Department	1	Roads	Issued

## Year 2017

	<b>Project that Applied for VEP</b>	<b>Responsible Government Department or Private Organisation</b>	<b>Number of Applications for VEP</b>	<b>Project Type</b>	<b>Approval Status</b>
1	Restoration to Yan Tun Kong Study Hall at Ping Shan, Yuen Long, New Territories	Leisure and Cultural Services Department	1	Works in an existing site of cultural heritage	Issued
2	Reprovision of temporary wholesale market in Fanling North New Development Area	Civil Engineering and Development Department	1	Community Facilities	Issued
3	Central Kowloon Route (CKR)	Highways Department	1	Roads	Issued
4	Deep Bay Link and Widening of Yuen Long Highway between Lam Tei and Shap Pat Heung (Lam Tei to Tan Kwai Tsuen Section)	Highways Department	1	Roads	Issued
5	Liantang / Heung Yuen Wai Boundary Control Point and Associated Works	Civil Engineering and Development Department	1	Roads	Issued
6	San Tin Highway and Fanling Highway Kwu Tung Section Widening (Between San Tin Interchange and Po Shek Wu Interchange)	Civil Engineering and Development Department	1	Roads	Issued
7	South East New Territories (SENT) Landfill Extension	Environmental Protection Department	1	Landfill for waste	Issued
8	Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling	Highways Department	1	Roads	Issued

9	Kwu Tung North New Development Area - Roads P1 and P2 (New Road) and associated new Kwu Tung Interchange (New Road) and Pak Shek Au Interchange Improvement	Civil Engineering and Development Department	1	Roads	Issued
10	Kwu Tung North New Development Area - Roads D1 to D5	Civil Engineering and Development Department	1	Roads	Issued
11	Fanling Bypass Western Section	Civil Engineering and Development Department	1	Roads	Issued
12	Fanling Bypass Eastern Section	Civil Engineering and Development Department	1	Roads	Issued
13	Tseung Kwan O – Lam Tin Tunnel and Associated Works	Civil Engineering and Development Department	1	Roads	Issued
14	Dredging Works for Proposed Cruise Terminal at Kai Tak	Civil Engineering and Development Department	1	Dredging works	Issued
15	TV Transposer Station at Hill 374, Lam Tsuen Country Park	Television Broadcasts Limited	1	Works in country park	Issued
16	Proposed Comprehensive Development at Wo Shang Wai, Yuen Long	Profit Point Enterprises Limited	2	Residential and other developments	1 Withdrawn 1 Issued
17	Installation of One Additional Gas-fired Generation unit (Combined Cycle Gas Turbine Unit No.1) at the Black Point Power Station	Castle Peak Power Company Limited	1	Energy Supply	Issued

18	Development of an EcoPark in Tuen Mun Area 38	Environmental Protection Department	1	Waste storage, transfer and disposal facilities	Issued
19	Widening of Tolo Highway between Island House Interchange and Ma Liu Shui Interchange	Highways Department	2	Roads	1 Withdrawn 1 Issued
20	Shatin to Central Link – Mong Kok East to Hung Hom Section	MTR Corporation Limited	1	Railways	Issued
21	Main Drainage Channels for Yuen Long and Kam Tin, Remainder, Phase 1 (Kam Tin Road to Tai Kek Section)	Drainage Services Department, Civil Engineering and Development Department	2	Drainage works	Issued

**Judicial Reviews on Designated Projects in the Past 5 Years (Year 2013 to 2017)****Judicial Review on the Development of a Bathing Beach at Lung Mei, Tai Po (2013)**

In June 2013, a local organisation challenged that the ecology assessment in the EIA report on the bathing beach at Lung Mei, Tai Po was incorrect or misleading, and made an application for judicial review regarding the Government's inaction to temporarily suspend, vary or cancel the environmental permit issued for developing the bathing beach at Lung Mei. The Court of First Instance (CFI) of the High Court decided to dismiss the application for judicial review in August 2014. The complainant lodged an appeal and the case was dismissed by the Appeal Court in March 2016.

**Judicial Review on the Expansion of Hong Kong International Airport into a Three-Runway System (2015)**

In February 2015, citizens made 2 applications for judicial review against EPD's decision to approve the EIA report on the expansion of Hong Kong International Airport into a three-runway system and to grant an environmental permit. The CFI of the High Court decided to dismiss the applications for judicial review in December 2016. The two complainants lodged an appeal against the decision of the CFI. The Appeal Court dismissed the 2 appeal applications in May and July 2017 respectively.

**Judicial Review on the Extension of Tseung Kwan O Landfill (2015)**

In March 2015, citizens made 2 applications for judicial review against the Legislative Council's decision to provide funding for extension of the landfill according to the EIA report on the extension of Tseung Kwan O Landfill. The application was dismissed by the CFI of the High Court in May 2015. The complainant lodged an appeal and the case was dismissed by the Appeal Court in December 2015.

**Designated Projects With Environmental Permits (EPs) Granted in the Past 5 Years  
(Year 2013 to 2017) Which Required Ecological Mitigation Measures**

**Year 2013**

	<b>Designated Projects</b>
1.	Decommissioning of the Magazine Site at Victoria Road for West Island Line
2.	Natural Terrain Hazard Mitigation Works at Study Area No. 12NW-C/SA1 above Leung Fai Tin along Clear Water Bay Road, Sai Kung
3.	Construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River
4.	Drainage Improvement Works at Ngong Ping
5.	Tseung Kwan O – Lam Tin Tunnel and Associated Works
6.	Development of Organic Waste Treatment Facilities, Phase 2
7.	North East New Territories (NENT) - San Tin Highway and Fanling Highway Kwu Tung Section Widening (Between San Tin Interchange and Po Shek Wu Interchange)
8.	NENT - Castle Peak Road Diversion
9.	NENT - Kwu Tung North New Development Area Roads P1 and P2 (New Road) and Associated New Kwu Tung Interchange (New Road) and Pak Shek Au Interchange Improvement
10.	NENT - Kwu Tung North New Development Area Roads D1 to D5
11.	NENT - Sewage Pumping Stations in Kwu Tung North New Development Area
12.	NENT - Po Shek Wu Interchange Improvement
13.	NENT - Fanling Bypass Western Section
14.	NENT - Fanling Bypass Eastern Section
15.	NENT - Shek Wu Hui Sewage Treatment Works - Further Expansion at Fanling North New Development Area
16.	Development of Lok Ma Chau Loop

**Year 2014**

	<b>Designated Projects</b>
1.	Hong Kong Offshore Wind Farm in Southeastern Waters
2.	Natural Terrain Hazard Mitigation Works at Study Area 12SW-A/SA1, Tai Wan Tau Road, Sai Kung
3.	Natural Terrain Hazard Mitigation Works at Study Area 12NW-C/SA2, Sheung Yeung, Sai Kung
4.	Asia Pacific Gateway (APG) - Tseung Kwan O
5.	Drainage Works at Mai Po
6.	Proposed Residential Cum Passive Recreation Development within “Recreation” Zone and “Residential (Group C)” Zone at Various Lots in DD 104, Yuen Long, New Territories
7.	Tai Shue Wan Development at Ocean Park

8.	Expansion of Hong Kong International Airport into a Three-Runway System
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#### **Year 2015**

	<b>Designated Projects</b>
1.	In-situ Reprovisioning of Sha Tin Water Treatment Works - South Works
2.	Decommissioning of West Portion of The Middle Ash Lagoon at Tsang Tsui, Tuen Mun
3.	Comprehensive Development and Wetland Protection near Yau Mei San Tsuen
4.	Construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River
5.	Desalination Plant at Tseung Kwan O

#### **Year 2016**

	<b>Designated Projects</b>
1.	Installation of One Additional Gas-fired Generation Unit (Combined Cycle Gas Turbine Unit No.1) at the Black Point Power Station
2.	Asia-Africa-Europe-1 (AAE-1) Cable System
3.	Police Facilities in Kong Nga Po
4.	Development of Anderson Road Quarry Site - Road Improvement Works
5.	Tung Chung New Town Extension

#### **Year 2017**

	<b>Designated Projects</b>
1.	Proposed Low-rise and Low-density Residential Development at Various Lots and their Adjoining Government Land in D.D. 104, East of Kam Pok Road, Mai Po, Yuen Long, New Territories
2.	Expansion of Sha Tau Kok Sewage Treatment Works
3.	Hung Shui Kiu New Development Area
4.	Mui Wo Lai Chi Yuen Cemetery Extension
5.	Sha Tin Cavern Sewage Treatment Works
6.	Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery
7.	Improvement Dredging for Lamma Power Station Navigation Channel
8.	Proposed Extension of Academic Block, The Swire Institute of Marine Science, Faculty of Science, The University of Hong Kong, Cape D'Aguilar Road, Shek O
9.	Outlying Islands Sewerage Stage 2 – South Lantau Sewerage Works
10.	Pacific Light Cable Network (PLCN) – Deep Water Bay
11.	Proposed Installation of Integrated Mobile Phone Base Station in Lantau North (Extension) Country Park, Lantau Island, New Territories
12.	Outlying Islands Sewerage Stage 2 – Upgrading of Tai O Sewage Collection, Treatment and Disposal Facilities

**Major Projects With Environmental Permits (EPs) Granted in the Past 5 Years (Year 2013 to 2017) Which Required Environmental Monitoring and Audit (EM&A)**

**Year 2013**

	<b>Titles of the Projects</b>
1	Decommissioning of the Magazine Site at Victoria Road for West Island Line
2	Natural Terrain Hazard Mitigation Works at Study Area No. 12NW-C/SA1, above Leung Fai Tin along Clear Water Bay Road, Sai Kung
3	Construction of Cycle Tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River
4	Development of Anderson Road Quarry – Po Lam Road – Road Widening

**Year 2014**

	<b>Titles of the Projects</b>
1	Upgrading of Cheung Chau Sewage Collection, Treatment and Disposal Facilities
2	Proposed Residential Cum Passive Recreation Development within "Recreation" Zone and "Residential (Group C)" Zone at Various Lots in DD 104, Yuen Long, New Territories
3	Tai Shue Wan Development at Ocean Park
4	Expansion of Hong Kong International Airport into a Three-Runway System

**Year 2015**

	<b>Titles of the Projects</b>
1	In-situ Reprovisioning of Sha Tin Water Treatment Works – South Works – Designs and Construction
2	Decommissioning of West Portion of The Middle Ash Lagoon at Tsang Tsui, Tuen Mun
3	Comprehensive Development and Wetland Protection near Yau Mei San Tsuen
4	Operation of the Existing Tai Lam Explosives Magazine at Tai Shu Ha, Yuen Long for Liantang / Heung Yuen Wai Boundary Control Point Project
5	Desalination Plant at Tseung Kwan O
6	Chai Wan Government Complex and Vehicle Depot

**Year 2016**

	<b>Titles of the Projects</b>
1	Police Facilities in Kong Nga Po
2	Tung Chung New Town Extension



**Year 2017**

	<b>Titles of the Projects</b>
1	Proposed Low-rise and Low-density Residential Development at Various Lots and their Adjoining Government Land in D.D. 104, East of Kam Pok Road, Mai Po, Yuen Long, New Territories
2	Port Shelter Sewerage, Stage 3 – Sewerage Works at Po Toi O
3	Expansion of Sha Tau Kok Sewage Treatment Works
4	Elevated Pedestrian Corridor in Yuen Long Town Connecting with Long Ping Station
5	Hung Shui Kiu New Development Area
6	Sha Tin Cavern Sewage Treatment Works
7	Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery
8	Improvement Dredging for Lamma Power Station Navigation Channel
9	Outlying Islands Sewerage Stage 2 – South Lantau Sewerage Works
10	Outlying Islands Sewerage Stage 2 – Upgrading of Tai O Sewage Collection, Treatment and Disposal Facilities
11	Kai Tak Sports Park

Note: The major projects in the tables above do not include projects which were granted EPs before 2013 and still need to carry out EM&A.

- End -

**CONTROLLING OFFICER'S REPLY****ENB157****(Question Serial No. 2530)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

There has been a shortage of housing supply in recent years. In old districts such as Sham Shui Po, Kowloon City and Yau Tsim Mong, quite a number of flats in the old buildings have been converted by the owners into “sub-divided units” for renting out, and the relevant alteration works have produced a large quantity of construction waste. Since the nearby streets and back lanes are not managed by Incorporated Owners or property management companies, some renovation workers have dumped the construction waste in such places. Such practice not only pollutes the environment, but also blocks fire escapes, posing hazard to the safety of the residents.

In the Controlling Officer's Report 2018-19, under this Programme, the Environmental Protection Department (EPD) enforces relevant legislation to control the illegal disposal of waste. To address the serious problem of fly-tipping of construction waste, the Administration set up an inter-departmental co-ordination mechanism in 2009, whereby the EPD would co-ordinate with relevant government departments to carry out enforcement actions and clean up the fly-tipped construction waste as soon as possible. Would the Administration advise this Committee on the following:

1. What were the manpower and resources deployed by the Administration to handle such problem in the past 3 years? If there were any, what were the details? If there were none, what were the reasons?
2. Will additional manpower and resources be deployed to handle such problem in the coming 3 years? If yes, what are the details? If no, what are the reasons?
3. In addition, will the Administration consider using technology, such as the Transport Department's road monitoring system (commonly called the “eyes in the sky”) to provide

information and evidence to help the EPD follow up on prosecutions? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use): 22)

Reply:

In order to step up efforts in combating fly-tipping of construction waste, the Environmental Protection Department (EPD) has progressively installed surveillance camera systems at fly-tipping black spots on government land and public places since 2016 to facilitate enforcement and enhance the deterrence against illegal disposal of waste. The cost for installing and operating the surveillance camera systems at the above some 50 black spots in 2017-18 was about \$3 million. In 2018-19, we have earmarked about \$3 million to expand the coverage of the surveillance camera systems. Moreover, through internal redeployment of staff, the EPD set up special operation units to support the inspections and enforcement work of the environmental legislations, which also include combating illegal disposal. We will continue to strengthen collaboration with other relevant departments to jointly carry out monitoring and enforcement work. As the relevant enforcement work is part of the routine duties of the EPD, there is no separate figure for the expenditure involved.

The EPD continues to procure and install surveillance camera systems with enhanced and more advanced technical specifications for capturing images of registration marks of vehicles more effectively under different circumstances, so as to facilitate combating illegal disposal of waste and follow up prosecutions. 48 successful prosecutions were made in 2017 with the information captured by the surveillance camera systems. The EPD will continue to closely monitor the conditions of various black spots and flexibly deploy the surveillance camera systems as appropriate to sustain the efforts in combating and deterring fly-tipping.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB158**

**(Question Serial No. 3194)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Last year, the Legislative Council received complaints from Sham Shui Po residents that the electrical appliance recycling shops in the vicinity of Yee Kuk Street, Pei Ho Street and Hai Tan Street had caused obstruction and nuisance to the residents. It was reported that there were 20-odd recycling shops in the vicinity of the above areas. The shop operators have occupied nearby pavements or even traffic lanes for loading and unloading of goods from 4 pm to 11pm for a long period, creating loud noises which affected residents' sleep. The obstruction has continued for 10 years. The situation was worsened in the past year or two with the emergence of more recycling shops. Accompanied by officers of various law enforcement departments, including the Environmental Protection Department (EPD), the Food and Environmental Hygiene Department, the Planning Department, the Hong Kong Police Force, etc., I made a visit there to observe the obstruction caused by the recycling shops.

It is mentioned in the 2018-19 Controlling Officer's Report that the EPD will continue to promote sustainable development of the recycling industry under the waste programme. Please advise this Committee on the following:

1. Did the Administration allocate any manpower and resources to deal with the issue in the past 3 years? If yes, what were the details? If not, what were the reasons?
2. Will the Administration provide additional manpower and resources to seek a solution in close collaboration with the relevant government departments in the next 3 years? Will legislation with deterrent effect be introduced when necessary to tackle the serious obstruction problem? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use): 64)

Reply:

The Government is very concerned about the nuisances, such as illegal parking, occupation of pavements/roads and noise, etc. caused by the electrical appliance recycling shops in the

district. The relevant departments, including the Food and Environmental Hygiene Department, the Hong Kong Police Force (HKPF), the Environmental Protection Department (EPD) and the Sham Shui Po District Office, etc., have been making every effort to deal with the issues under their purview. As the above work is part of the routine duties of the various departments and has been absorbed by existing resources, there is no separate breakdown of the manpower and resources involved.

In the next three years, the EPD and the relevant departments will continue to coordinate and collaborate closely to further strengthen the enforcement work, including making use of the Fixed Penalty (Public Cleanliness and Obstruction) Ordinance that has come into operation since September 2016 to impose fixed penalties to combat the problem of street obstruction caused by the recycling shops and exploring feasible options to regulate the loading and unloading activities of the electrical appliance recycling shops in the vicinity of Yee Kuk Street, Hai Tan Street and Pei Ho Street to alleviate the obstruction and nuisance problems. Moreover, the HKPF and the FEHD will continue to take joint enforcement actions against street obstruction, illegal parking and obstruction to scavenging operations caused by the operation of the recycling shops and vehicles, so as to improve the obstruction and environmental nuisance problems. The relevant work of the departments will be absorbed by existing resources.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB159**

**(Question Serial No. 3289)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme:

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the provision of sign language interpretation services in the past 5 years, would the Government inform this Committee of the following:

1. Have sign language interpretation services been provided? If yes, what are the frequency, occasions and reasons for providing sign language interpretation services in each year?
2. Further to the above question, what are the number of sign language interpreters involved in each year, their pay and the organisations to which they belong, as well as the total expenditure involved in each year? And
3. Whether the Government will consider allocating more resources to improve the services for communicating with the deaf and/or persons with hearing impairment in future? If yes, what are the details (including measures, manpower, expenditure and timetable, etc.)? If no, what are the reasons?

Asked by: Hon LEUNG Yiu-chung (Member Question No. (LegCo use): 60)

Reply:

In the past 5 years, the Environmental Protection Department did not have operational needs for provision of sign language interpretation services. If needs for provision of sign language interpretation services arise, we will procure from non-government social welfare organisations which can provide such services.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB160**

**(Question Serial No. 0161)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the study to explore the feasibility to launch pilot schemes on green ferry and green government vessels, what are the details of the study? What are the manpower and expenditure involved? When is the study expected to be completed?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 6)

Reply:

The Environmental Protection Department (EPD) is commencing a study to launch pilot schemes for testing green technologies in local ferries and new government vessels. The study makes reference to the latest international developments and applications of green technologies for vessels, explores potential technologies that are suitable for application in the local context, and considers the details and feasibility of launching the pilot schemes. The timetable and estimated expenditure of the pilot schemes are yet to be worked out.

EPD is now using its existing manpower and resources to conduct the above study.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB161**

**(Question Serial No. 0451)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The \$1 billion Recycling Fund was formally launched in October 2015 to provide appropriate funding support to enhance the overall capability, capacity, efficiency and skills of the recycling industry and to help develop the market for recycled products by providing more market information. Would the Government advise this Committee on the following:

1. What are the number of applications received by the Advisory Committee on Recycling Fund, the percentage of applications approved and the total sum involved so far?
2. It is learnt that the applicants have to “pay first and then declare” and the long approval time has caused pressure to their operation. Will the Administration improve the arrangement of the funding procedure? If yes, what are the details? If not, what are the reasons?
3. It is learnt that there are agencies in the market to help with the applications and the industry is worried that these agencies will eat away the funding. Has the Administration looked into this situation and what are the corresponding measures to forbid the agencies' participation?
4. What new strategies and measures does the Administration have to promote the development of the local environment protection industry? Please provide details.

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 31)

Reply:

1. The Government launched the \$1 billion Recycling Fund in October 2015. As at 28 February 2018, the Advisory Committee on Recycling Fund (RFAC) has received 382 applications (of which 101 had been withdrawn before vetting by the RFAC) and approved 163 applications. Excluding the projects which have been withdrawn by some applicant organisations after their applications were approved, a total of 128



funded projects have been or will soon be commenced, involving a total funding of about \$94 million, of which 24 are under the Enterprise Support Programme (ESP), 97 are for Standard Projects and 7 are under the Industry Support Programme (ISP).

2. The Environmental Protection Department (EPD) and the RFAC has been striving to enhance the operation of the Recycling Fund so that it will better address the needs of the industry and support its development. Without compromising the need in safeguarding the use of the Recycling Fund and maintaining effective control on applicants, the RFAC has introduced various facilitation measures since the Fund's early stage of operation. These measures include providing partial reimbursement of expenses to successful applicants before the launch of the projects under the ESP and the ISP and establishing a category of Standard Projects under the ESP to minimise the administrative workload of small and medium enterprises (SMEs) in making applications. The SMEs undertaking Standard Projects can also submit applications, report achievements and seek reimbursements in accordance with a set of streamlined procedures. Besides, the RFAC has approved the waiving of a condition on opening a designated project bank account for Standard Projects, and can provide reimbursement midway through the project period.
3. The Recycling Fund has not authorised any intermediaries to act on its behalf to provide services to applicants in making their applications, and any consultant/service fees so incurred will not be covered by the grants of the Fund. The Secretariat has all along been providing support services to the industry, including hotline, email service and information webpage, and has also organised seminars, briefing sessions and workshops for the recycling industry so that the recyclers will have better understanding of the scope of the Fund, its requirements and applications procedures. The Secretariat has also offered direct advice and guidance to recyclers in submitting project proposals.
4. The Government supports the development of the recycling industry on various fronts, which includes new initiatives to enhance waste reduction at source and clean recycling. For example, the EPD will establish new outreaching teams and kick off a new round of publicity and education campaign, with a view to enhancing the recyclability and recycling value of recyclables. The EPD will also strengthen its support of the recycling of low-value recyclables in the community and introduce a new pilot district collection service for waste plastic bottles, in order to enhance the cost effectiveness of handling the relevant recyclables. On another front, the Recycling Fund has launched different funding schemes, which will encourage the trade to process their recyclables to a standard that meets the new import requirements of the Mainland. The EPD together with the RFAC will continue to liaise with the industry and take forward more initiatives to support the recycling industry in its upgrading and transformation. In addition, the municipal solid waste charging to be promulgated will enlarge the supply of recyclables for the recycling industry, bringing new opportunities to the industry.

In the long run, in order to explore more long-term effective and diversified outlets for recycled materials, we will study the feasibility of incubating a local manufacturing industry using recycled materials in the longer term. As waste paper makes up the largest proportion of local recyclables, the development of a recycling industry capable of processing local waste paper is currently accorded priority. We have conducted an

open tender at end of March 2018 to invite manufacturers who are interested in developing the waste paper recycling industry in the EcoPark to submit their tenders.

- End -

**CONTROLLING OFFICER'S REPLY****ENB162****(Question Serial No. 0453)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (6) Nature ConservationControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

As stated in Programme (6), the estimated provision for 2018–19 is \$32.4 million higher than the actual provision for last year, representing an increase of 395.1%. This is mainly for operating expenses and increased cash flow requirement for a non-recurrent project. In this connection, would the Administration advise on the details and implementation timetable of this project, as well as the staffing establishment and expenditure involved?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 34)Reply:

The Chief Executive announced in her 2017 Policy Address that a Countryside Conservation Office (CCO) would be established to co-ordinate conservation projects that would promote sustainable development of remote countryside. The CCO will be set up in 2018-19, which is expected to comprise about 28 officers from various grades including 1 Administrative Officer Staff Grade C, 1 Senior Environmental Protection Officer, 3 Environmental Protection Officers/Assistant Environmental Protection Officers, 1 Senior Environmental Protection Inspector, 2 Environmental Protection Inspectors, 1 Chief Executive Officer, 1 Senior Executive Officer, 2 Executive Officer Is, 2 Executive Officer IIs, 2 Clerical Officers, 4 Assistant Clerical Officers, 1 Personal Secretary I, 1 Senior Engineer, 1 Engineer/Assistant Engineer, 1 Architect/Assistant Architect, 1 Town Planner/Assistant Town Planner, 1 Landscape Architect/Assistant Landscape Architect, 1 Forestry Officer/Assistant Forestry Officer and 1 Liaison Officer I. The increase in expenditure under the Programme mainly includes the staff costs of these officers (about \$19.61 million) and cashflow needs earmarked for launching conservation activities and projects after establishment of the CCO (about \$10 million).

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB163**

**(Question Serial No. 0454)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the implementation of the Producer Responsibility Scheme (PRS) on glass beverage containers, would the Government advise on:

1. the work details and estimated expenditure of the scheme in 2018-19, including the projects or promotion programmes; and
2. It is learnt that the Government is conducting an open tender for the appointment of Glass Management Contractors to provide territory-wide glass container collection and treatment services. What is the current progress of the tender exercise? When is the tender exercise expected to be completed?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 36)

Reply:

We are actively undertaking the preparatory work for the Producer Responsibility Scheme (PRS) on glass beverage containers with a view to implementing the PRS officially in 2018-19. Among other things, the Government has awarded two glass management contracts for Hong Kong Island (including Islands district) and the New Territories regions through open tender in November 2017 to provide glass container collection and treatment services for the districts. Regarding the contract for the Kowloon region, it is being tendered out and expected to be completed and awarded by the second quarter of 2018. On the other hand, we are drafting the required subsidiary legislation to set some operational details for the implementation of the scheme. It is anticipated that the subsidiary legislation will be introduced to the Legislative Council for scrutiny later this year.

As for the operational expenses for implementing the scheme, it will depend on the actual quantity of waste glass beverage containers collected and treated by the contractors after the implementation of the scheme.

As regards publicity programmes, the relevant work includes the production of Announcements in the Public Interest, media advertising, publicity materials, dedicated website and environmental education programmes, etc. We also plan to collaborate with

different stakeholders to jointly promote the collection of waste glass beverage containers. The estimated expenditure is about \$2.5 million.

- End -

**CONTROLLING OFFICER'S REPLY****ENB164****(Question Serial No. 2204)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

It is mentioned under Matters Requiring Special Attention in 2018-19 that the Department will continue to implement the Restored Landfill Revitalisation Funding Scheme to expedite the development of gainful facilities at restored landfills. In this connection, please advise this Committee on the following:

(a) Please use the table below to provide information on the approved applications under Batch 1 of the Scheme.

Restored landfill	Approved applicant	Approved usage	Expected date for public use	Approved funding

(b) Since the applications received for the Pillar Point Valley Landfill in Tuen Mun in general failed to address the various development constraints of the landfill, no application was approved eventually. In this connection, what measures will the Administration take to mitigate the development constraints of the landfill? Will the Administration consider including the landfill in Batch 2 of the Scheme for application by organisations?

(c) When is Batch 2 of the Scheme expected to be launched?

Asked by: Hon MA Fung-kwok (Member Question No. (LegCo use): 41)

Reply:

To expedite the development of suitable facilities at restored landfills, \$1 billion has been earmarked under the Capital Works Reserve Fund to set up a "Restored Landfill Revitalisation Funding Scheme" (the Scheme) for application by Non-profit-making Organisations or National Sports Associations to fund their applications for development of recreational facilities or other innovative proposals at seven restored landfills. To take the Scheme forward, the Environmental Protection Department (EPD) has established a

Steering Committee (SC) to advise the Administration on the operational arrangement of the Scheme and assist in assessing the applications and monitoring the progress of the approved projects.

(a) Information on the approved applications under Batch 1 of the Scheme is tabulated below:

Restored landfill	Approved applicant	Approved usage	Expected date for public use	Approved funding
Tseung Kwan O Stage I Landfill Lot B	Tung Wah Group of Hospitals	Camp site-cum-green education ground	Year 2021	<u>One-off capital grant:</u> About \$100 million (in money-of-the-day (MOD) prices) <sup>#</sup>  <u>Grant to meet the starting costs and operating deficits for the first two years of operation:</u> \$5 million in total (in MOD prices)

# The Tung Wah Group of Hospitals is undertaking the detailed design and planning to work out the detailed project costs.

The SC of the Scheme has also selected the Christian Family Service Centre to develop detailed revitalisation proposal for Ma Yau Tong Central Landfill. After the SC has received the proposal, it will conduct the assessment as soon as possible.

(b) & (c)

For the Pillar Point Valley Landfill in Tuen Mun under Batch 1 of the Scheme, a total of 7 applications were received by the EPD. Since the applications received in general failed to address the various development constraints of the landfill, the SC did not recommend the Government to accept any of the applications eventually. The EPD will review the development constraints of the landfill and consider how best to address the issues concerned to facilitate the future afteruse of the landfill. The EPD is actively taking forward the projects under Batch 1 of the Scheme so that the projects can commence operation as soon as possible. We will also review the operation of Batch 1 of the Scheme and make recommendations to the SC on the possible operational improvements before launching Batch 2 of the Scheme for application by relevant organisations.

- End -

**CONTROLLING OFFICER'S REPLY****ENB165****(Question Serial No. 2277)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Budget mentions the “One-for-One Replacement” Scheme which allows eligible private car owners who buy a new electric private car and scrap an eligible old private car they own to enjoy a higher first registration tax (FRT) concession of up to \$250,000. Would the Administration advise on the following:

- (1) Currently, what are the number of old private cars aged 6 years or more from the “date of first registration” as shown on the “Vehicle Registration Document” (VRD) and their percentage in the total number of private cars?
- (2) Currently, what are the number of car owners registered for 3 consecutive years or more from the “date registered as owner” as shown on the VRD and their percentage in total number of private car owners?
- (3) Is there any assessment of the impact of cancelling the requirement under the “One-for-One Replacement” Scheme that the car owners must be registered owners of “old private cars” for 3 consecutive years or more? If yes, what are the details? If not, what are the reasons?
- (4) Currently, what are the number of electric private cars and their percentage in the total number of private cars? What are the anticipated number and growth figure of EVs in Hong Kong under the Scheme up to 31 March 2021?
- (5) Regarding the reply to item (4), what is the number of car owners who are first-time buyers out of the electric private cars now running on the roads?
- (6) In response to the plan to totally ban the sale of fuel -driven vehicles in countries such as Britain, France, Germany and China, will the Government plan to set a timetable for introducing the relevant ban? If yes, what are the details? If not, what are the reasons?



Reply:

- (1) According to the information of the Transport Department (TD), the number of licensed private cars (PCs) first registered for 6 years or more is about 302 000, representing 54% of the total number of licensed PCs (about 564 000) in Hong Kong as at 9 March 2018.
- (2) According to the information of TD, the number of licensed PCs owned by existing registered owners for 3 years or more is about 258 000, representing 46% of the total number of licensed PCs as at 9 March 2018.
- (3) According to the information of TD, the requirement that the car owner must be a registered owner of an “old PC” for 3 years or more without interruption under the “One-for-One Replacement” Scheme (the Scheme) is to prevent non-genuine PC users from gathering a large number of old PCs from overseas or second-hand markets to participate in the Scheme for profit making. Currently, the number of PCs meeting the two criteria that the vehicles must have been first registered for 6 years or more and owned by the registered owner for 3 years or more without interruption is about 170 000. TD anticipates that by the time the Scheme ends on 31 March 2021, the number of PCs meeting the two criteria that the vehicles must have been first registered for 6 years or more and owned by the registered owner for 3 years or more without interruption would increase to about 430 000, i.e. about 3/4 of the total number.
- (4) According to the information of TD, the number of licensed e-PCs is about 10 300, representing 1.8% of the total number of licensed PCs in Hong Kong as at 9 March 2018.

The Government believes that the new Scheme will provide greater economic incentives to encourage eligible existing PC owners to purchase e-PCs when replacing their cars. However, the sales of electric vehicles (EVs) are affected by various factors (such as the local situation, development of EVs and the relevant technologies, economic environment, pricing of EV, preferences of car owners as well as suitable EV models and their supplies, etc.). Therefore, we are unable to estimate the number of EVs when the Scheme ends on 31 March 2021.

- (5) According to the information of TD, the number of car owners who are first-time buyers out of the 10 300-odd e-PCs now running on the roads is about 1 500.
- (6) To mitigate tailpipe emissions and climate change, developing clean energy vehicles (CEVs) has become a global trend. Several individual places have set out timetables or targets for a total ban on the sales of PCs solely using petrol or diesel. The Government is collating relevant information, including the specific plans and measures to be taken by these places, and the latest development of various manufacturers in producing CEVs, with a view to exploring the availability of CEVs suitable for use in Hong Kong and their conditions of use, for considering our next step.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB166**

**(Question Serial No. 2279)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Some electric vehicle (EV) owners reflected that they could not have their vehicles charged due to a lack of charging facilities at present. Regarding the work on promoting the installation of charging facilities, please advise on the following:

(1) The number of EV charging facilities installed in public places and the type of the charging facilities;

(2) The number of EV charging facilities installed in private places and the type of the charging facilities;

(3) In 2017-18, have any incentives been provided to encourage developers and property management companies to install charging facilities and provide charging services in their estates? If yes, what are the details and the installation timetables, the expenditure involved, as well as the relevant work plans and estimated expenditure in 2018-19?

(4) Does the Administration have any plan to provide funding support for private property owners to install charging facilities in their old buildings or properties in housing estates? If yes, what are the details?

(5) Is there any plan to set up charging facilities in remote suburban areas? If yes, what are the details? If no, what are the reasons?

(6) Is there any assessment on the growth rate of EV charging facilities in Hong Kong and the Government's planning and development strategies on the setting up of EV charging facilities; and whether they comply with the target of "30% of the private cars in Hong

Kong being electric or hybrid vehicles by 2020” set by the Government years ago? Will the Government review its current planning and development strategies on EV charging facilities? If yes, what are the details? If no, what are the reasons?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 8)

Reply:

(1) and (2)

As at the end of 2017, the number of public chargers provided in government and private car parks open for public use in Hong Kong was 1 862, including 931 standard chargers, 605 medium chargers and 326 quick chargers. The Government does not have statistics for private chargers provided in private car parks not open for public use.

(3) - (6)

Regarding the charging arrangements for electric private cars (e-PCs), it has always been the Government's policy direction that e-PC owners should perform daily charging of their e-PCs by using charging facilities at their home, workplace or other suitable places (including charging facilities provided by e-PC suppliers). Public charging facilities in Hong Kong are supplementary in nature, set up for EVs to top up their batteries at times of occasional needs. They do not serve as daily charging facilities or their alternatives. Potential buyers of e-PCs should fully consider the daily charging arrangements required and should not rely on public charging facilities for daily charging of their e-PCs.

Given the above policy direction, the Government's priority is to facilitate and encourage the installation of charging facilities in private premises when planning for the development of charging facilities for e-PCs. These measures include the Environmental Protection Department's (EPD) establishment in 2011 of a dedicated team and a hotline to provide information and technical support for the installation of EV charging facilities, and the Government's tightening of gross floor area concessions for private car parks in new buildings in April 2011 to encourage developers to provide the EV charging-enabling infrastructure, including provision of sufficient power supply, cabling and conduits for all parking spaces in the buildings concerned. On the development of public charging networks as supplementary facilities, the Government not only takes the lead in providing and enhancing its public charging facilities in government car parks but also supports private establishments to set up and enhance non-governmental public charging networks.

To improve the charging efficiency, EPD has progressively upgraded standard chargers to medium chargers in the past few years (as compared with standard chargers, medium chargers can reduce the charging time by up to 60%). As at the end of 2017, EPD has installed 519 chargers, among which 268 are medium chargers, in 425 parking spaces (representing 7% of the relevant parking spaces) in government car parks managed by the TD and GPA which are open for public use.

The number of registered vehicles in Hong Kong as at the end of February 2018 was 835 935 (not including government vehicles and special purpose vehicles), among which 10 850 were EVs, representing about 1.3% of all the vehicles in Hong Kong. The Government has not set targets for each type of vehicles. Hong Kong is a free market. The Government's policy on promoting EVs is to establish measures to encourage and

assist market development. The sales of EVs can be affected by various factors such as local conditions, development of EVs and the related technologies, economic situations, EV prices, vehicle owners' preferences and availability of suitable EV models and their supply, etc. Therefore, we are unable to estimate the future sales of EVs.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs and retrofitting existing car parks with charging facilities. Specific timetables and estimated expenditure are not available for the time being.

- End -

**CONTROLLING OFFICER'S REPLY****ENB167****(Question Serial No. 0680)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Emissions from fuel driven vehicles have long been the major source of roadside air pollution in Hong Kong. One of the major tasks of the Environmental Protection Department (EPD) is to monitor the air quality and to promote the use of electric vehicles (EVs) in Hong Kong. Under Programme (2): Air, the Administration's estimate for 2018-19 is 8.8% less than the revised estimate for 2017-18 (or 22.6% less than the original estimate for 2017-18).

According to the latest information provided by the Transport Department, the number of registered private cars exceeded 600 000 at the end of last year, and the past decade saw an increase in the number of private cars by nearly 50%. To contain the growth in the number of vehicles, the Budget last year cancelled the "zero tax" concessions for electric private cars. Only 81 electric private cars were sold in the subsequent 8 months, while the number of registered diesel private cars sharply increased by 41% in the same period. The total number of vehicles also increased.

Please advise what specific measures EPD had in place to improve roadside air pollution and how effective they were in the past 3 years. How does the Administration assess the impact of the cancellation of the "zero tax" concessions for electric private cars in last year's Budget on roadside air pollution? Have relevant manpower and expenditure been reserved for publicising and promoting the use of EVs to particularly encourage car owners to switch to electric private cars? If yes, what are the details? If not, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 94)Reply:

Commercial vehicles (CVs) account for 95% of the vehicular emissions of respirable suspended particulates and nitrogen oxides, both major air pollutants. Hence, CVs have all along been a major target of the Government's measures to improve roadside air quality. To improve roadside air quality and better protect public health, the Environmental Protection Department (EPD) launched and continuously implemented in the past 3 years

various major emission control measures, including phasing out pre-Euro IV diesel commercial vehicles, progressive tightening of emission standards of newly registered vehicles, strengthening the control of emissions from petrol and liquefied petroleum gas vehicles and retrofitting older franchised buses with emission control devices, etc. Moreover, the Government has been promoting the use of green transport technologies by CVs. Apart from continuing to waive in full the first registration tax (FRT) for electric CVs (e-CVs) until the end of March 2021, EPD also continued to implement the Pilot Green Transport Fund to encourage the public transport sector, goods vehicle operators and charitable and non-profit making organisations to test green innovative transport technologies, including e-CVs. Meanwhile, EPD has also fully subsidised franchised bus companies to conduct trials of double-deck hybrid buses and single-deck electric buses. The concentrations of major roadside air pollutants have dropped by about 30% over the past 5 years. This reflects that the measures for reducing vehicle emissions have been taking effect.

As for electric private cars (e-PCs), the Government's standing policy is to encourage the public to use public transport as far as possible, and should they need to acquire private cars, choose e-PCs. As mentioned above, CVs account for 95% of the vehicular emissions of major air pollutants. Therefore, the impact on roadside air pollution due to capping of the FRT concessions for e-PCs last year would be limited. After capping the FRT concessions for e-PCs in 2017-18, the Government has been closely monitoring the latest situation. Taking into account factors such as the technological development and market situation of EVs, road traffic conditions and views of stakeholders, the Government considers that on one hand, it has to control the growth of PCs to avoid causing traffic congestion and aggravating roadside air pollution, and on the other hand, it also hopes to encourage car owners to go for EVs as far as possible when purchasing PCs. As such, apart from continuing with the current FRT concession up to \$97,500, the Government has introduced the new "One-for-One Replacement" Scheme from 28 February 2018 to 31 March 2021 to allow eligible existing car owners who buy a new e-PC and scrap their own eligible old PC to enjoy a higher FRT concession of up to \$250,000.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts will include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs.

The EPD's manpower and expenditure involved in promoting the use of EVs in 2018-19 and the expenditure related to other work areas for promoting the use of EVs will be met by the existing resources under the Air Programme.

The estimate for 2018-19 is 8.8% lower than the revised estimate for 2017-18 under the Air Programme, mainly because some non-recurrent projects have reached their later stage of implementation. Therefore, the cash flow requirement will be decreased in 2018-19. The non-recurrent projects include granting ex-gratia payment for phasing out pre-Euro IV diesel commercial vehicles, fully subsidising franchised bus companies to conduct trials of electric buses, and retrofitting of emission reduction devices for franchised buses which has been completed in 2017.

- End -

**CONTROLLING OFFICER'S REPLY****ENB168****(Question Serial No. 2659)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the work to “promote the use of electric vehicles (EVs) in Hong Kong”, please set out the number of cases in which the First Registration Tax was waived for buying EVs in the past 5 years respectively. Please provide the data in the table below.

Vehicle Type  Year	Electric private car		Electric commercial vehicle		Electric motor cycle		Electric motor tricycle	
	Quantity	Total amount of tax waived	Quantity	Total amount of tax waived	Quantity	Total amount of tax waived	Quantity	Total amount of tax waived
2013								
2014								
2015								
2016								
2017								

Asked by: Hon OR Chong-shing, Wilson (Member Question No. (LegCo use): 38)Reply:

The number of first registered electric vehicles by vehicle type and the amount of first registration tax waived in the past 5 years are as follows:

Year	Vehicle Type							
	Electric private car		Electric commercial vehicle		Electric motorcycle		Electric motor tricycle	
	Quantity	Total amount of tax waived (\$ million)	Quantity	Total amount of tax waived (\$ million)	Quantity	Total amount of tax waived (\$ million)	Quantity	Total amount of tax waived (\$ million)
2013	35	10.67	81	4.14	14	0.25	0	0
2014	845	549.12	30	2.98	25	0.38	0	0
2015	2 607	1,743.45	30	1.65	0	0	0	0
2016	3 020	1,975.37	25	1.07	2	0.09	0	0
2017	3 860	3,149.41	42	1.37	2	0.11	0	0

Note: Not including government vehicles.

- End -



**CONTROLLING OFFICER'S REPLY****ENB169****(Question Serial No. 3213)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Under Programme (1), the estimated expenditure on waste in 2018-19 has increased to \$3,664 million from \$2,649.3 million in 2017-18 (representing an increase of 16.4% as compared with the original estimates in 2017-18). Please advise this Committee on the details of three items stated in the Matters Requiring Special Attention in 2018-19 on page 207 of the Estimates:

1) On “continuing to monitor and enhance the operation of the Recycling Fund to facilitate the upgrading of the operational capabilities and efficiencies of the recycling industry”: As recycling work involves a series of transportation process, operation of equipment and even large-scale machinery, work injury incidents involving recycling work occur every year. How many projects/contracts among the applications approved by the Recycling Fund have specified the implementation and promotion of occupational safety to protect the practitioners? How many recycling fund projects participated or have participated in government-approved occupational health and safety programmes in the past 5 years? Are there any specific work plans rolled out and implemented to compile statistics on occupational safety and health in the environmental protection industry in future? If yes, what are the details? If not, what are the reasons?

2) On “continuing to take forward the development of Community Green Station (CGSs) across the territory”: Members of the public recycle waste papers, plastics and metals mainly through the three-colour recycling bins placed in the housing estates and at the roadside. Other waste, such as waste glass bottles, batteries, fluorescent lamps, etc. can be taken to the collection points of the CGSs. Please provide the numbers and profiles of the CGSs and the expenditure involved in the past 3 years by District Council districts. Please provide specific plans and locations for the CGSs in 2018. If not available, why not?

3) On “continuing to take forward the development of Organic Resources Recovery Centres for the treatment of source-separated food waste” : Food waste accounts for 40% of municipal solid waste in Hong Kong. Apart from the Organic Resources Recovery Centre

at Siu Ho Wan which helps to collect food waste, what else complementary facilities does the Administration have to help the community handle such a large amount of food waste? Please also state specifically how the outreaching team set up by the Environmental Protection Department will support food waste recycling in housing estates in the coming financial year?

Asked by: Hon POON Siu-ping (Member Question No. (LegCo use): 55)

Reply:

- 1) The applicants of all projects approved by the Advisory Committee on Recycling Fund (RFAC) are required to sign project funding agreements or undertakings, which set out the terms and conditions governing the use of the funding, among which the requirements on occupational safety and health (OSH) should be met. Under the “Standard Projects” category of the Recycling Fund, applicants may apply for funding for undergoing OSH accreditation and implementing improvement measures. As at 28 February 2018, 10 projects with elements of promoting OSH were approved by the RFAC, of which 7 were under the “Standard Projects” category that individual recycling enterprises were subsidised to undergo OSH accreditation or procure OSH equipment. Another 3 projects were under the Industry Support Programme for upgrading the recycling industry. One of them was rolled out by the Occupational Safety and Health Council. The work undertaken by the project included setting OSH standards and operational guidelines for the recycling industry, providing safety system audit service, OSH consultancy service on housekeeping and risks and relevant training courses, etc. The Environmental Protection Department (EPD) and the Secretariat of the RFAC will continue to follow up the progress of the approved projects as well as pursue the implementation of relevant OSH programmes.
- 2) The EPD is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. Through recycling programmes and educational activities, the CGS operators have proactively connected with the housing estates and property management companies in their districts to establish an extensive service network and provide support to the collection of low-value recyclables in the community, including waste paper, waste plastic bottles, electrical appliances, glass containers, fluorescent lamps and tubes, as well as rechargeable batteries, etc. The recyclables collected will then be sent to suitable recyclers for processing. The total cost for capital works is estimated to be about \$400 million. The operating expenditure of individual projects may vary, depending on the financial proposals submitted by individual operators in their open tender submissions. As at the end of 2017, 5 CGSs have progressively been in operation, namely the Sha Tin CGS and the Eastern CGS which commenced operation in 2015 and the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS which commenced operation in 2017. The latest development of individual CGSs is tabulated below:

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Sha Tin CGS	10 On Ping Street, Shek Mun	The CGS commenced operation in May 2015. In 2017, the CGS collected about 415 tonnes of recyclables, with operating expenditure of about \$4.22 million.
Eastern CGS	30 Oi Shun Road, Shau Kei Wan	The CGS commenced operation in August 2015. In 2017, the CGS collected about 395 tonnes of recyclables, with operating expenditure of about \$3.61 million.
Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables, with operating expenditure of about \$4.69 million.
Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables, with operating expenditure of about \$3.98 million.
Sham Shui Po CGS	339 Tung Chau Street	The CGS commenced operation in October 2017. As at the end of 2017, the CGS collected about 17 tonnes of recyclables, with operating expenditure of about \$0.99 million.
Tuen Mun CGS	9 Tuen Yee Street	The tendering for the operation contract is underway. The CGSs are expected to commence operation in the second half of 2018.
Kwai Tsing CGS	12 Tam Kon Shan Road, Tsing Yi	
Tai Po CGS	Between Ting Kok Road and Dai Wah Street	
Islands CGS	Junction of Yu Tung Road and Chung Mun Road, Tung Chung, Lantau	Construction works are underway, which are expected to be completed in the second half of 2018.
Sai Kung CGS	Po Lam Lane, near Po Hong Road and Po Lam Road North, Tseung Kwan O	
Wan Chai CGS	Junction of Wan Shing Street and Hung Hing Road	A design idea competition is underway. The design and construction works are expected to commence in the second half of 2018.
Tsuen Wan CGS J	Hoi Shing Road, near Hoi Kok Street	Sites have been confirmed and planning of construction works is in progress.

Project	Site	Latest Development and Schedule
Wong Tai Sin CGS	Junction of Yuk Wah Street and Po Leung Lane, Tsz Wan Shan	
Kowloon City CGS, Southern CGS, Yau Tsim Mong CGS, Central and Western CGS and North CGS	Site to be confirmed	We have been following up the views from District Councils. Taking into account the actual operating experience in other projects, we are continuing with site search and other associated preparation work.

In addition, the CGSs have set up collection points at residential estates and other suitable sites (such as schools and social service organisations). As at the 4<sup>th</sup> quarter of 2017, the number of collection points of the 5 CGSs is tabulated below:

	Number of residential collection points					Number of other collection points				
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Electrical appliances and computer products	109	80	54	75	9	43	52	16	24	4
Glass bottles	124	124	68	104	19	31	35	5	16	3
Fluorescent lamps/tubes	91	96	32	77	12	13	32	13	10	2
Rechargeable batteries	123	94	65	89	13	11	20	16	13	2

- 3) According to “A Food Waste & Yard Waste Plan for Hong Kong 2014–2022”, the Government will build a network comprising 5 to 6 organic resources recovery centres (ORRCs). ORRC Phase 1 is located at Siu Ho Wan of North Lantau with a daily capacity of 200 tonnes of food waste, which is scheduled to be commissioned in 2018. ORRC Phase 2 will be located at Sha Ling of the North District with a daily capacity of 300 tonnes of food waste. We have completed the tender exercise for phase 2, and will apply for funding approval from the Financial Committee of the Legislative Council as soon as possible so as to commence the construction early. We have also identified a site at Shek Kong of Yuen Long to develop ORRC Phase 3 with a daily capacity of 300 tonnes of food waste. We will take forward the environmental impact assessment and engineering feasibility study for Phase 3 in 2018. We will continue to work with the relevant departments on the search for suitable sites for the remaining ORRCs.

In addition, we will commission the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po Sewage Treatment Works (STW) in 2019. Under the Trial Scheme, Food Waste Pre-treatment Facilities will be constructed at the existing Shuen Wan Leachate Pre-treatment Works in Tai Po to treat up to 50 tonnes of food waste per

day which will then be transported to the existing sewage sludge anaerobic digestion system at the Tai Po STW for anaerobic co-digestion. The Scheme aims to study and establish the technical feasibility and installation requirements of using existing sewage treatment facilities for food waste/sewage sludge anaerobic co-digestion to help raise Hong Kong's overall food waste treatment capability.

Regarding promoting domestic food waste recycling, the EPD has subsidised housing estates to install on-site food waste composters and organise relevant educational and promotional activities through the Environment and Conservation Fund (ECF) in order to encourage the residents to participate in domestic food waste recovery and raise their awareness on food waste reduction and recycling. As at February this year, a total of 33 housing estates have been funded with a total amount of \$36 million. So far, a total of some 4 000 residents have participated in these activities, and the total quantity of food waste collected in the past 5 years is over 1 600 tonnes.

Moreover, the Government will gradually install small-scale food waste treatment composters for those schools with meals provided and suitable venues, and provide the relevant technical support and teaching materials to demonstrate how to convert unavoidable food waste to compost as well as remind students of the importance of "food wise" and waste less. The ECF has earmarked a funding of \$20 million to continue to support various food waste reduction projects, of which \$5 million will be used to provide small-scale food waste composters for about 100 schools. The preparatory work for the new measure is underway, and it is expected to begin to invite schools to participate in 2018-19.

Besides, the EPD will commence the first stage of out-reaching service in 2018-19 in the form of a pilot scheme to provide on-site assistance and support to the property management companies and residents. The work in the first stage will focus on the publicity and education campaign for source separation of waste and clean recycling. We will review the experience and effectiveness of the pilot scheme and timely expand the work and scope of the outreaching teams subject to the availability of resources in order to meet future service needs.

- End -

**CONTROLLING OFFICER'S REPLY****ENB170****(Question Serial No. 0189)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Would the Government advise this Committee on the following:

- a) Please list the numbers of registered electric private cars and non-electric private cars in the past 3 years;
- b) Is there any review on the previous programmes for promoting the wider use of electric vehicles (EVs)? If yes, what are the details? If no, what are the reasons?
- c) Is there any plan to review the situation of insufficient parking spaces and supplementary charging facilities for EVs? If yes, what are the details? If no, what are the reasons?

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 58)Reply:

- a) The numbers of registered electric private cars (e-PCs) and non-electric private cars in the past 3 years are as follows:

Vehicle type	No. of registered vehicles (as at year end)		
	2015	2016	2017
e-PCs	3 806	6 829	10 666
Non-e-PCs	564 080	576 208	589 777

Note: Not including government vehicles.

- b) Commercial vehicles (CVs) account for 95% of the vehicular emissions of respirable suspended particulates and nitrogen oxides, both major air pollutants. Hence, CVs have all along been a major target of the Government's measures to improve roadside air quality. Electric vehicles (EVs) have no tailpipe emissions and are efficient in converting energy

from the grid to power at the wheels. Replacing conventional vehicles, especially CVs, with EVs can help improve roadside air quality and reduce greenhouse gas emissions.

The Government currently focus on promoting electric CVs (e-CVs) through various measures: the first registration tax (FRT) of e-CVs is fully waived; since 2010, enterprises which procure environment-friendly vehicles including EVs are allowed full profit tax deduction for the capital expenditure on the vehicle in the first year of procurement; a \$300 million Pilot Green Transport Fund (PGTF) has been put in place since March 2011 to encourage the public transport sectors, goods vehicle operators and non-profit-making organisations to test out green innovative transport technologies, including e-CVs; and \$180 million was set aside to fully subsidise the franchised bus companies to purchase 36 single-deck electric buses for trial on a number of routes.

The effectiveness of our policies on promoting the use of e-CVs depends very much on the maturity of e-CV technologies, their prices and suitability for use in Hong Kong (including their ability to suit the modus operandi of local transport sectors). However, existing e-CV technologies are yet to fully meet the operational needs of the local transport sectors. As at the end of January 2018, the trials on e-CVs approved by PGTF covered various types of vehicles (including taxis, light buses, single-deck buses and goods vehicles). Results of the trials have reflected that high production cost, limited service life, long charging time and low energy density of EV batteries are the key constraints for e-CVs to become popular. The driving range and charging time of most e-CVs currently available in the local market are yet to completely cope with the requirements of the local transport sectors. Besides, prices of e-CVs are not as competitive as their conventional counterparts, and inadequate maintenance services are also not uncommon. The trial results have also revealed that electric light goods vehicles (e-LGVs) are more likely to prevail and are suitable for operators who require relatively lower daily mileage and payload. Looking ahead, we will promote the use of e-LGVs, continue to keep in view the technological developments of e-CVs, and encourage the transport sectors to make use of the PGTF to try out other green innovative transport technologies and their suppliers to introduce more products for use by the local transport sectors.

On promoting the use of EVs in franchised buses, the Government is fully subsidising the franchised bus companies to purchase 36 single-deck electric buses and their charging facilities for trial on a number of routes to assess their operational efficiency and performance under local conditions. At present, 26 electric buses have commenced operations. It is expected that most of the remaining electric buses will progressively commence operation in 2018. The Government will explore how to promote wider use of single-deck electric buses by the franchised bus companies, subject to the outcome of the trials as well as the affordability of the franchised bus companies and passengers. As for double-deck electric buses, their technology is still developing and there are very few models available in the international arena. Furthermore, their passenger carrying capacity and operational efficiency still fail to fulfill the local operational needs of franchised buses. We will keep in view the development in other places and introduce suitable models for trial in due course.

As for e-PCs, the Government's standing policy is to encourage the public to use public transport as far as possible, and should they need to acquire private cars, choose e-PCs. The Government's main supporting measures include offering financial incentives such as

tax concession and lower annual vehicle licence fee, and facilitating the development and improvement of charging networks for e-PCs. Through these measures, and coupled with the significant technology advancement for e-PCs in recent years, the number of e-PCs in Hong Kong has substantially increased to 10 997 as at the end of March 2017 from less than 100 at the end of 2010. After capping the FRT concessions for e-PCs at \$97,500 in 2017-18, the Government has been closely monitoring the latest situation. Taking into account factors such as the technological development and market situation of EVs, road traffic conditions and views of stakeholders, the Government considers that on one hand, it has to control the growth of PCs to avoid causing traffic congestion and aggravating roadside air pollution, and on the other hand, it also hopes to encourage car owners to go for EVs as far as possible when purchasing PCs. As such, apart from continuing with the current FRT concession up to \$97,500 from 28 February 2018 to 31 March 2021, the Government has introduced the new “One-for-One Replacement” Scheme (Scheme) in the above period to allow eligible existing car owners who buy a new e-PC and scrap their own eligible old PC to enjoy a higher FRT concession of up to \$250,000. The Government believes that the new Scheme will provide greater economic incentives to encourage eligible existing PC owners to purchase e-PCs when replacing their cars.

c) Regarding the charging arrangements for e-PCs, it has always been the Government's policy direction that e-PC owners should perform daily charging of their e-PCs by using charging facilities at their home, workplace or other suitable places (including charging facilities provided by e-PC suppliers). Public charging facilities in Hong Kong are supplementary in nature, set up for EVs to top up their batteries at times of occasional needs. They do not serve as daily charging facilities or their alternatives. Potential buyers of e-PCs should fully consider the daily charging arrangements required and should not rely on public charging facilities for daily charging of their e-PCs.

Given the above policy direction, the Government's priority is to facilitate and encourage the installation of charging facilities in private premises when planning for the development of charging facilities for e-PCs. These measures include the Environmental Protection Department's (EPD) establishment in 2011 of a dedicated team and a hotline to provide information and technical support for the installation of EV charging facilities, and the Government's tightening of gross floor area concessions for private car parks in new buildings in April 2011 to encourage developers to provide the EV charging-enabling infrastructure, including provision of sufficient power supply, cabling and conduits for all parking spaces in the buildings concerned. On the development of public charging networks as supplementary facilities, the Government not only takes the lead in providing and enhancing its public charging facilities in government car parks but also supports private establishments to set up and enhance non-governmental public charging networks.

As at the end of 2017, the number of public chargers provided in government and private car parks open for public use in Hong Kong was 1 862, including 931 standard chargers, 605 medium chargers and 326 quick chargers. To improve the charging efficiency, EPD has progressively upgraded standard chargers to medium chargers in the past few years (as compared with standard chargers, medium chargers can reduce the charging time by up to 60%). EPD has installed 519 chargers, among which 268 are medium chargers, in 425 parking spaces (representing 7% of the relevant parking spaces) in the government car parks managed by the Transport Department and Government Property Agency which are open for public use.



In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs and retrofitting existing car parks with charging facilities.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB171**

**(Question Serial No. 3403)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Budget Speech that “we will also launch a “one-for-one replacement” scheme to allow eligible private car owners who buy a new electric private car and scrap an eligible old private car they own to enjoy a higher first registration tax (FRT) concession of up to \$250,000.” In this connection, please advise this Committee on the following:

- a) What is the anticipated increase in the number of electric private cars under this scheme?
- b) Are there long-term policies to support the promotion and development of electric vehicles? If yes, what are the details? If no, what are the reasons?

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 57)

Reply:

- a) The Government believes that the new “One-for-One Replacement” Scheme will provide greater economic incentives to encourage eligible existing private car (PC) owners to purchase electric private cars (e-PCs) when replacing their cars. However, the sales of electric vehicles (EVs) are affected by various factors (such as the local situation, development of EVs and the relevant technologies, economic environment, pricing of EVs, preferences of car owners as well as suitable EV models and their supplies, etc.). Therefore, we are unable to estimate the additional sales number of EVs as a result of the provision of first registration tax (FRT) concession arrangement (including the “One-for-One Replacement” Scheme) for EVs.
- b) Commercial vehicles (CVs) account for 95% of the vehicular emissions of respirable suspended particulates and nitrogen oxides, both major air pollutants. Hence, CVs have all along been a major target of the Government’s measures to improve roadside air quality. EVs have no tailpipe emissions and are efficient in converting energy from the grid to power at the wheels. Replacing conventional vehicles, especially CVs, with EVs can help improve roadside air quality and reduce greenhouse gas emissions.

The Government currently focus on promoting electric CVs (e-CVs) through various measures: the FRT of e-CVs is fully waived; since 2010, enterprises which procure environment-friendly vehicles including EVs are allowed full profit tax deduction for the capital expenditure on the vehicle in the first year of procurement; a \$300 million Pilot Green Transport Fund (PGTF) has been put in place since March 2011 to encourage the public transport sectors, goods vehicle operators and non-profit-making organisations to test out green innovative transport technologies, including e-CVs; and \$180 million was set aside to fully subsidise the franchised bus companies to purchase 36 single-deck electric buses for trial on a number of routes.

The effectiveness of our policies on promoting the use of e-CVs depends very much on the maturity of e-CV technologies, their prices and suitability for use in Hong Kong (including their ability to suit the modus operandi of local transport sectors). However, existing e-CV technologies are yet to fully meet the operational needs of the local transport sectors. As at the end of January 2018, the trials on e-CVs approved by PGTF covered various types of vehicles (including taxis, light buses, single-deck buses and goods vehicles). Results of the trials have reflected that high production cost, limited service life, long charging time and low energy density of EV batteries are the key constraints for e-CVs to become popular. The driving range and charging time of most e-CVs currently available in the local market are yet to completely cope with the requirements of the local transport sectors. Besides, prices of e-CVs are not as competitive as their conventional counterparts, and inadequate maintenance services are also not uncommon. The trial results have also revealed that electric light goods vehicles (e-LGVs) are more likely to prevail and are suitable for operators who require relatively lower daily mileage and payload. Looking ahead, we will promote the use of e-LGVs, continue to keep in view the technological developments of e-CVs, and encourage the transport sectors to make use of the PGTF to try out other green innovative transport technologies and their suppliers to introduce more products for use by the local transport sectors.

On promoting the use of EVs in franchised buses, the Government is fully subsidising the franchised bus companies to purchase 36 single-deck electric buses and their charging facilities for trial on a number of routes to assess their operational efficiency and performance under local conditions. At present, 26 electric buses have commenced operations. It is expected that most of the remaining electric buses will progressively commence operation in 2018. The Government will explore how to promote wider use of single-deck electric buses by the franchised bus companies, subject to the outcome of the trials as well as the affordability of the franchised bus companies and passengers. As for double-deck electric buses, their technology is still developing and there are very few models available in the international arena. Furthermore, their passenger carrying capacity and operational efficiency still fail to fulfill the local operational needs of franchised buses. We will keep in view the development in other places and introduce suitable models for trial in due course.

As for e-PCs, the Government's standing policy is to encourage the public to use public transport as far as possible, and should they need to acquire private cars, choose e-PCs. The Government's main supporting measures include offering financial incentives such as tax concession and lower annual vehicle licence fee, and facilitating the development

and improvement of charging networks for e-PCs. Through these measures, and coupled with the significant technology advancement for e-PCs in recent years, the number of e-PCs in Hong Kong has substantially increased to 10 997 as at the end of March 2017 from less than 100 at the end of 2010. After capping the FRT concessions for e-PCs at \$97,500 in 2017-18, the Government has been closely monitoring the latest situation. Taking into account factors such as the technological development and market situation of EVs, road traffic conditions and views of stakeholders, the Government considers that on one hand, it has to control the growth of PCs to avoid causing traffic congestion and aggravating roadside air pollution, and on the other hand, it also hopes to encourage car owners to go for EVs as far as possible when purchasing PCs. As such, apart from continuing with the current FRT concession up to \$97,500 from 28 February 2018 to 31 March 2021, the Government has introduced the new “One-for-One Replacement” Scheme in the above period to allow eligible existing car owners who buy a new e-PC and scrap their own eligible old PC to enjoy a higher FRT concession of up to \$250,000.

Regarding the charging arrangements for e-PCs, it has always been the Government's policy direction that e-PC owners should perform daily charging of their e-PCs by using charging facilities at their home, workplace or other suitable places (including charging facilities provided by e-PC suppliers). Public charging facilities in Hong Kong are supplementary in nature, set up for EVs to top up their batteries at times of occasional needs. They do not serve as daily charging facilities or their alternatives. Potential buyers of e-PCs should fully consider the daily charging arrangements required and should not rely on public charging facilities for daily charging of their e-PCs.

Given the above policy direction, the Government's priority is to facilitate and encourage the installation of charging facilities in private premises when planning for the development of charging facilities for e-PCs. These measures include the Environmental Protection Department's (EPD) establishment in 2011 of a dedicated team and a hotline to provide information and technical support for the installation of EV charging facilities, and the Government's tightening of gross floor area concessions for private car parks in new buildings in April 2011 to encourage developers to provide the EV charging-enabling infrastructure, including provision of sufficient power supply, cabling and conduits for all parking spaces in the buildings concerned. On the development of public charging networks as supplementary facilities, the Government not only takes the lead in providing and enhancing its public charging facilities in government car parks but also supports private establishments to set up and enhance non-governmental public charging networks.

As at the end of 2017, the number of public chargers provided in government and private car parks open for public use in Hong Kong was 1 862, including 931 standard chargers, 605 medium chargers and 326 quick chargers. To improve the charging efficiency, EPD has progressively upgraded standard chargers to medium chargers in the past few years (as compared with standard chargers, medium chargers can reduce the charging time by up to 60%). As at the end of 2017, EPD has installed 519 chargers, among which 268 are medium chargers, in 425 parking spaces (representing 7% of the relevant parking spaces) in the government car parks managed by the Transport Department and Government Property Agency which are open for public use.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs and retrofitting existing car parks with charging facilities.

- End -

**CONTROLLING OFFICER'S REPLY****ENB172****(Question Serial No. 3110)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Environment Bureau has set up the Steering Group on the Modification of Recycling and Refuse Collection Facilities in Public Places (the Steering Group) to review the distribution and design of recycling bins and litter containers in public places and to recommend on new designs. Would the Administration please advise on the progress of the Steering Group? Has expenditure been earmarked or how much expenditure has been earmarked for improving the refuse collection facilities?

Asked by: Hon SHIU Ka-chun (Member Question No. (LegCo use): 282)

Reply:

To complement the implementation of the Municipal Solid Waste (MSW) Charging, and to further enhance waste reduction and resource recovery, the Environment Bureau has established the Steering Group on Modification of Recycling and Refuse Collection Facilities in Public Places (the Steering Group) to review the distribution and design of recycling bins (RBs) and litter containers (LCs) in public places.

The Steering Group has commissioned a consultancy study earlier to review the distribution of RBs and LCs in public places. Among other things, the consultant recommended that the basic provision of RBs in urban areas should be increased and RBs would be placed at every village-type refuse collection point; meanwhile, the provision of LCs should be reduced in urban areas, and LCs should be placed at pedestrian gathering points in rural areas. In addition, the consultant recommended that adjustments should be made taking into account the nature and circumstances of individual areas and settings. For example, more LCs and RBs would be provided at key tourist spots with higher pedestrian flow, while the provision of RBs near existing recycling outlets provided by other entities (e.g. shopping malls) would be reduced. The consultant also recommended some planning parameters on the distribution of RBs and LCs in general public places as well as leisure and cultural facilities, venues and large outdoor venues managed by the Leisure and Cultural Services Department (LCSD).

With reference to the relevant planning parameters, LCSD and the Food and Environmental Hygiene Department (FEHD) put forward an adjustment plan on RBs and LCs. By end of 2019, the number of LCs in public places will be reduced by 40% to 24 300 and the corresponding number of RBs will be increased by 45% to 4 000, such that the current RB to LC ratio of 1:14 will be increased to 1:6. FEHD and LCSD will conduct reviews thereafter with a view to further adjusting the number of LCs and RBs in public places, taking into account the actual situation, public reaction and other operational considerations. The Steering Group has commissioned a Stage 2 consultancy study in late 2017 to review the existing designs of RBs and LCs in public places. The consultant will, at a later stage, collect views from the general public and stakeholders on the proposed new designs.

We will earmark \$13 million in 2018-19 for improving RBs and LCs in public places.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB173**

**(Question Serial No. 0739)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

It is estimated that WEEE·PARK will treat 9 000 tonnes of waste electrical and electronic equipment (WEEE) in 2018-19. How did the Administration come up with this estimated amount? What are the estimated manpower required and the expenditure involved in each of the next 5 years?

Asked by: Hon SHIU Ka-fai (Member Question No. (LegCo use): 14)

Reply:

The Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE·PARK) commenced initial operation in late October 2017 and came into full operation in early March 2018. With the full commissioning of the facility and the operator progressively improving its operational arrangements, as well as taking into account the formal implementation of the requirement on the provision of statutory removal service under the producer responsibility scheme on WEEE on 1 August 2018, we anticipate that the facility can process about 9 000 tonnes of WEEE in 2018.

The estimated annual operation cost of the WEEE·PARK in 2018-19 is around \$155 million. The estimated operation costs in the 4 subsequent years will depend on the actual quantity of WEEE processed each year.

Besides, the Waste Management Policy Division of the Environmental Protection Department has created 9 permanent posts starting from 2017-18 to monitor and manage the operation contract of the WEEE·PARK and related matters. The estimated annual expenditure on salaries in 2018-19 is about \$5.2 million.

- End -



**CONTROLLING OFFICER'S REPLY****ENB174****(Question Serial No. 0740)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE·PARK), which came into operation at the end of 2017, processed 930 tonnes of waste electrical and electronic equipment (WEEE) in 2017-18. What were the means of processing and the amount of WEEE processed? What was the operating expenditure involved?

Asked by: Hon SHIU Ka-fai (Member Question No. (LegCo use): 15)Reply:

The WEEE·PARK commenced initial operation in October 2017, turning WEEE into reusable materials such as plastics and metals through a series of detoxification, dismantling and recycling processes, etc., and selling them to other manufacturers for reuse. As at the end of December 2017, the facility processed a total of around 930 tonnes of WEEE. The items and the amount of WEEE processed are as follows:

Item processed	Amount (tonnes) from October to December 2017
Washing machine	420
Television set	240
Computer and computer product	270
Total	930

The expenditure incurred for paying the WEEE·PARK operator during the above period was \$14.67 million.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB175**

**(Question Serial No. 0741)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Why is there an increase in the number of waste import/export permits issued by the Administration from 9 in 2016-17 to 21 as estimated for 2018-19?

Asked by: Hon SHIU Ka-fai (Member Question No. (LegCo use): 16)

Reply:

The Environmental Protection Department (EPD) estimates that 21 chemical waste import/export permits will be issued in 2018, which are similar to the 22 permits issued in 2017. In recent years, through reinforcing communication and cooperation with the electronic waste recycling trade, the EPD has urged the trade to strictly comply with the statutory requirements, and to apply for export permits from the EPD. We seek verification from the control authorities of the proposed places of import to ensure that the chemical wastes, such as waste printed circuit boards and waste batteries, recovered in Hong Kong are exported to designated and up-to-standard facilities for recycling.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB176**

**(Question Serial No. 0742)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Administration will continue to take forward the development of the Community Green Stations across the territory in 2018-19. What public services will be included in this project? What is the estimated operating expenditure required for each of the next 5 years (please list with a breakdown by services)?

Asked by: Hon SHIU Ka-fai (Member Question No. (LegCo use): 17)

Reply:

The Environmental Protection Department (EPD) is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. Through recycling programmes and educational activities, the CGS operators have proactively connected with the housing estates and property management companies in their districts to establish an extensive service network and provide support to the collection of low-value recyclables in the community, including waste paper, waste plastic bottles, electrical appliances, glass containers, fluorescent lamps and tubes, as well as rechargeable batteries, etc. The recyclables collected will then be sent to suitable recyclers for processing. The total cost for capital works is estimated to be about \$400 million. The operating expenditure of individual projects may vary, depending on the financial proposals submitted by individual operators in their open tender submissions. We do not have a breakdown of the estimated expenditure for individual services.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB177**

**(Question Serial No. 0743)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Administration is undertaking preparation work for the implementation of Municipal Solid Waste charging in 2018-19. What are the project details, timetable and estimated expenditure in this regard respectively?

Reply:

The Municipal Solid Waste (MSW) charging aims to create financial incentives to drive behavioural changes in waste generation and hence reducing the overall waste disposal, which is a major policy to promote waste reduction at source and recycling. In October 2017, the Environment Bureau announced the proposed modifications to the implementation arrangements for MSW charging, to expand the scope of application of pre-paid designated garbage bags as a charging tool, thereby enabling the charging regime to achieve the polluter-pays principle to a greater extent and responding to the views of the relevant industries. The community and various stakeholders responded positively in general to the modified arrangements.

We have been proactively undertaking relevant preparatory work, including drafting of the relevant bill, maintaining close communication with the stakeholders of various sectors to formulate specific implementation details, planning the production and sales arrangements of the designated garbage bags, implementing a waste reduction and recycling promotional campaign under the central theme of “Dump Less, Save More”, etc. Meanwhile, the Environment and Conservation Fund has since 2015 provided funding support of about \$55 million to non-profit-making organisations and bodies for organising community involvement projects in different types of premises to try out MSW charging in actual settings. The relevant experiences can provide useful references for us to develop the best practice guides on the implementation of MSW charging. As at March 2018, more than 50 community involvement projects on MSW charging have been funded. We are proactively taking forward the above preparatory work and seeking to introduce the relevant bill to the Legislative Council as soon as possible.

The Environmental Protection Department has earmarked about \$32 million in 2018-19 for the preparation work of MSW charging.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB178**

**(Question Serial No. 1125)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Administration will continue to provide the first registration tax (FRT) concessions for electric vehicle (EV) owners and launch the “one-for-one replacement” scheme. In this connection, please advise on the following:

- (a) How much public revenue will be forgone as a result of the above two tax concession measures respectively in the coming 5 years?
- (b) Currently, what is the percentage of EVs in the total number of vehicles in Hong Kong? Has any target percentage been set for the number of EVs?
- (c) Is there any plan to allocate more resources to increase the charging facilities? If yes, what are the details? What is the expenditure in the coming 5 years?

Asked by: Hon TIEN Puk-sun, Michael (Member Question No. (LegCo use): 45)

Reply:

- a) The Government has been providing first registration tax (FRT) concessions for electric vehicles (EVs) since 1994. According to the information provided by the Transport Department, the amount of FRT concessions for newly registered EVs was about \$7.6 billion from April 1994 to February 2018.

The sales of EVs can be affected by various factors such as local conditions, development of EVs and the related technologies, economic situations, EV prices, vehicle owners' preferences and availability of suitable EV models and their supply, etc. Therefore, we are unable to estimate the future sales of EVs and the tax revenue forgone as a result of providing the FRT concession arrangement for EVs (including the One-for-One Replacement Scheme).

- b) The number of registered vehicles in Hong Kong as at the end of February 2018 was 835 935 (not including government vehicles and special purpose vehicles), among which 10 850 were EVs, representing about 1.3% of all the vehicles in Hong Kong.

The Government has not set targets for each type of vehicles. Hong Kong is a free market. The Government's policy on promoting EVs is to establish measures to encourage and assist market development. As mentioned above, the number of EVs, which is affected by a number of factors, is not predictable by the Government.

- c) In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs and retrofitting existing car parks with charging facilities. Specific timetables and estimated expenditure are not available for the time being.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB179**

**(Question Serial No. 2062)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

In the Matters Requiring Special Attention in 2018-19, it is mentioned that a new pilot district collection service for waste plastic bottles will be introduced. In this connection, would the Government advise this Committee on the following:

1. What are the estimated manpower and expenditure on the publicity for the implementation of the service?
2. In what districts is the service anticipated to be implemented? Will implementation in Kowloon East be considered? If yes, what are the locations/districts or the names of the housing estates involved.
3. Individuals/organisations in the community launched a number of activities to collect waste plastics in the past. However, the public's participation has not been satisfactory. What are the measures/policies to encourage active public participation in recycling programmes?
4. What is the estimated expenditure involved for the entire programme? When will the complete programme be announced?

Asked by: Hon TSE Wai-chun, Paul (Member Question No. (LegCo use): 7)

Reply:

The Environmental Protection Department (EPD) is making preparation for the implementation of a pilot scheme on district central collection of waste plastic bottles, including drafting the collection arrangements, budget, etc. It is anticipated that the tender exercise could be conducted at the end of 2018 and the scheme could be implemented progressively in 2018-2019 at the earliest. This pilot scheme will mainly accept waste plastic bottles collected by the Community Green Stations as well as the Community Recycling Centres supported by the Environment and Conservation Fund in the district, and will collect waste plastic bottles directly from public and private housing estates and public



bodies such as schools, etc. as necessary. As the pilot scheme is still at its preparatory stage, the districts to be covered under the scheme are still under consideration.

The pilot scheme will involve 9 staff in the Environmental Protection Officer grade and the Environmental Protection Inspector grade. The estimated manpower expenditure is about \$5,300,000. Apart from manpower expenditure, the estimated expenditure of the pilot scheme is about \$7,100,000.

The low economic value and recyclability of waste plastics have always been a concern in the community. The EPD and the Environmental Campaign Committee are stepping up the current promotional and public education efforts on clean recycling, with focus on encouraging the public to recycle waste plastic bottles first, including plastic containers of beverages or personal care products, and practise clean separation and recycling, so as to facilitate subsequent recycling process and seek further outlets. We will also launch the Community Participation Programme in Environmental Protection in collaboration with the 18 District Councils, expand the Programme on Source Separation of Domestic Waste, establish a territory-wide Community Recycling Network and the Community Green Stations, and support non-profit-making organisations in conducting educational activities and promoting community recycling through the Environment and Conservation Fund, etc., with a view to encouraging the public to actively participate in waste source separation and clean recycling.

In the long run, the EPD is studying the feasibility of implementing a producer responsibility scheme on waste plastic bottles to promote the circular economy of waste plastic bottles. Besides, the introduction of quantity-based Municipal Solid Waste Charging will provide further incentives which promote active community participation in source separation and recovery of waste plastics, etc.

- End -

**CONTROLLING OFFICER'S REPLY****ENB180****(Question Serial No. 2063)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Matters Requiring Special Attention in 2018-19 that the Department will “continue to take forward the legislative proposal of municipal solid waste (MSW) charging and undertake other preparatory work for the implementation of MSW charging”. In this connection, would the Government advise this Committee on the following:

1. What are the estimated manpower and expenditure involved in the preparatory work for the scheme in this financial year?
2. What are the manpower and expenditure involved in the promotion/publicity of the scheme? As there is a larger population in Kowloon East due to a larger number of public housing estates in the district, has the Administration considered how to promote the scheme?

Asked by: Hon TSE Wai-chun, Paul (Member Question No. (LegCo use): 8)

Reply:

The Municipal Solid Waste (MSW) charging aims to create financial incentives to drive behavioural changes in waste generation and hence reducing the overall waste disposal, which is a major policy to promote waste reduction at source and recycling. We have been proactively undertaking relevant preparatory work, including drafting of the relevant bill, maintaining close communication with the stakeholders of various sectors to formulate specific implementation details, planning the production and sales arrangements of the designated garbage bags, implementing a waste reduction and recycling promotional campaign under the central theme of “Dump Less, Save More”, etc. Meanwhile, the Environment and Conservation Fund has since 2015 provided funding support of about \$55 million to non-profit-making organisations and bodies for organising community involvement projects in different types of premises to try out MSW charging in actual settings. The relevant experiences can provide useful references for us to develop the best

practice guides on the implementation of MSW charging. As at March 2018, more than 50 community involvement projects on MSW charging, including those implemented in the public housing estates have been funded. We are proactively taking forward the above preparatory work and seeking to introduce the relevant bill to the Legislative Council as soon as possible.

The Environmental Protection Department (EPD) has 49 posts and has earmarked about \$32 million in 2018-19 for the preparatory work of MSW charging.

As promotion and publicity are part of the overall preparatory work, the EPD does not have a breakdown of the manpower and expenditure involved in individual work items.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB181**

**(Question Serial No. 3199)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in this Programme that the Department will continue to implement the producer responsibility schemes (PRs) on waste electrical and electronic equipment (WEEE) and glass beverage containers.

a) Please provide details of the effectiveness of the schemes in waste reduction in the past year;

b) The practice of exporting WEEE still prevails, and the relevant equipment was found placed on the pavements and roads in the community. Has the Government considered deploying resources to alleviate the obstruction problem caused by the electrical equipment? If yes, please provide the details. If no, what are the reasons?

Asked by: Hon WONG Pik-wan, Helena (Member Question No. (LegCo use): 72)

Reply:

a) The relevant subsidiary legislation for the producer responsibility scheme on waste electrical and electronic equipment (WPRS) was passed in July 2017. The Government has been actively undertaking preparation work with a view to formally implementing the scheme in phases in 2018. Among other things, we began to accept applications for e-waste disposal licences from 19 June 2017 onwards; a trial scheme was launched in November 2017 to help the trade familiarise themselves with the relevant legislative requirements and operation; and the Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE-PARK), which was built to underpin the implementation of the WPRS, commenced initial operation in late October 2017 and came into full operation in early March 2018. The WPRS will be formally implemented in 2018. Starting from 1 August 2018, suppliers who distribute regulated electrical equipment (REE) are required to register with the Environmental Protection Department (EPD) as registered suppliers and pay a recycling levy for REE distributed in Hong Kong, whilst sellers of REE are required to arrange free statutory removal service for consumers to dispose of an equipment of the same class that they intend to abandon. The disposal licensing control, import and export

permit control and landfill disposal ban in respect of e-waste will come into effect from 31 December 2018 onwards. The Government will also step up publicity efforts to inform the public of the impending implementation of the WPRS.

In addition, we are actively undertaking the preparatory work for the Producer Responsibility Scheme on glass beverage containers for full implementation of the scheme targeted in 2018-19. Among other things, the Government awarded 2 glass management contracts for Hong Kong Island (including Islands district) and the New Territories regions through open tender in November 2017 to provide glass container collection and treatment services for the 2 regions. Regarding the contract for the Kowloon region, the tendering exercise is underway and is expected to be completed with the contract awarded in the second quarter of 2018. We are in parallel drafting the relevant subsidiary legislation to provide for the operational details for the implementation of the scheme. We aim to submit the subsidiary legislation to the Legislative Council for scrutiny later this year.

b) The Government is very concerned about the nuisances, such as illegal parking, occupation of pavements/lanes and noise, etc. caused by the electrical appliance recycling shops. The problem is more obvious in the vicinity of Yee Kuk Street, Hai Tan Street and Pei Ho Street in Sham Shui Po. The relevant departments, including the Food and Environmental Hygiene Department (FEHD), the Hong Kong Police Force (HKPF), the EPD and the Sham Shui Po District Office, etc., have been making every effort to deal with the issues under their purview. Since August 2016, the HKPF and the FEHD have been taking joint enforcement actions continuously against street obstruction, illegal parking and obstruction to scavenging operations caused by the operation of the recycling shops and vehicles, so as to improve the obstruction and environmental nuisance problems. The EPD and the relevant departments have been coordinating and collaborating closely to further strengthen the enforcement work, including making use of the fixed penalties imposed under the Fixed Penalty (Public Cleanliness and Obstruction) Ordinance, which has come into operation since September 2016, to combat the problem of street obstruction caused by the recycling shops and exploring feasible options to regulate the loading and unloading activities of the electrical appliance recycling shops in the vicinity of Yee Kuk Street, Hai Tan Street and Pei Ho Street to alleviate the obstruction and nuisance problems. As the work is part of the routine duties of various departments and has been absorbed by existing resources, there is no separate breakdown of the manpower and resources involved.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB182**

**(Question Serial No. 1264)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Administration has earmarked an expenditure of \$40.6 million for nature conservation in 2018-19, which increases significantly by \$32.4 million compared with 2017-18, representing a substantial increase of 395.1%. What is the specific breakdown of the increase in expenditure?

Asked by: Hon WONG Ting-kwong (Member Question No. (LegCo use): 33)

Reply:

The Chief Executive announced in her 2017 Policy Address that a Countryside Conservation Office (CCO) would be established to co-ordinate conservation projects that would promote sustainable development of remote countryside. The CCO will be set up in 2018-19, which is expected to comprise about 28 officers from various grades. The increase in expenditure under the Programme is mainly for the staff costs of these officers (about \$19.61 million) and cashflow needs earmarked for launching conservation activities and projects after establishment of the CCO (about \$10 million).

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB183**

**(Question Serial No. 1771)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

During 2018-19, the Environmental Protection Department will introduce legislative control to mandate the use of compliant fuel for vessels within Hong Kong waters starting from 2019. Regarding the work details and schedules, has the industry been consulted on the relevant proposals? If yes, what is the outcome of the consultation? If not, when is it anticipated that the relevant consultation will commence? What are the manpower and budget involved in the work?

Asked by: Hon YICK Chi-ming, Frankie (Member Question No. (LegCo use): 31)

Reply:

Marine vessels are one of the major local air pollution emission sources. To improve air quality, the Government proposes to introduce legislation to mandate vessels to use compliant fuel (including low sulphur marine fuel with sulphur content not exceeding 0.5%) within Hong Kong waters starting from 1 January 2019.

During March to June 2017, the Environmental Protection Department (EPD) held three consultation sessions with marine stakeholders including shipping agents, trade associations, fishing associations, ferry operators, yacht clubs, classification societies, terminal operators, oil suppliers, green groups, chambers of commercial/professional institutions and consulates to explain the proposed control and invite their views and comments. Stakeholders are generally supportive of the control and their views have been taken into account to formulate the proposal.

The proposal was submitted to the Advisory Council on the Environment for consultation and the Legislative Council (LegCo) Panel on Environmental Affairs for discussion respectively in July 2017. Their members generally support the proposal.

We are now drafting a new legislation on the proposal and aim at tabling the new legislation to the LegCo for scrutiny in mid-2018, with a view to implementing the control from 1 January 2019.

The work relating to consultation and drafting of the new legislation is undertaken by existing manpower and resources of EPD. EPD intends to create 1 Senior Environmental Protection Inspector (EPI) and 2 EPI posts to enforce the new legislation in 2018-19.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB184**

**(Question Serial No. 1782)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “the study to explore how to implement a producer responsibility scheme (PRS) on plastic beverage and personal care product containers”, would the Government advise this committee on the following:

(a) What is the estimated expenditure of the study on the above scheme?

(b) Will the Administration work with professional bodies to conduct a study on the work in item (a)? If yes, what are the mode of cooperation, details and estimated expenditure?

Asked by: Hon YICK Chi-ming, Frankie (Member Question No. (LegCo use): 42)

Reply:

The Environmental Protection Department (EPD) appointed a consultant through open tender in October 2017 to conduct a feasibility study on how to implement a producer responsibility scheme (PRS) targeting suitable plastic containers, mainly those carrying beverages or personal care products. The consultant will review and analyse the experience of other jurisdictions and the actual situation of Hong Kong, as well as the implication of the introduction of the PRS on different stakeholders. In the process, the consultant will conduct exchanges with the relevant trade associations and seek their views. EPD expects to complete the whole study in 18 months. The estimated expenditure for the study is about \$3 million.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB185**

**(Question Serial No. 1783)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the “Food Wise Hong Kong Campaign”, would the Government advise this Committee on:

(a) the work progress or timetable, and the staffing establishment and estimated expenditure of the above promotional activity in 2018-19;

(b) the effectiveness of the above promotional activity.

Asked by: Hon YICK Chi-ming, Frankie (Member Question No. (LegCo use): 43)

Reply:

The Food Wise Hong Kong Campaign (the Campaign) has promoted a food wise and waste less culture and encouraged behavioural change to reduce food waste in the community through various schemes and activities since its launching in 2013. The schemes and activities held in 2017-18 include:

- The Food Wise Charter – As at February this year, about 730 organisations have signed the Food Wise Charter and are committed to reducing food waste. The signatories include public organisations and public utilities, the commercial and industrial sector, food and beverage sector, hotel sector, property development and management sector, higher education institutions, secondary schools, primary schools, kindergartens, etc.
- “Food Wise” Talk – As at February this year, 82 “Food Wise” talks were held by the Government with over 6 600 participants. The talks helped promote the “Food Wise” messages and mainly introduced the food waste issues, treatment of food waste, food waste separation and recycling, as well as the Campaign, etc.

- “Food Wise” Roving Exhibition – As at February this year, a total of 18 roving exhibitions were held by the Government at various districts in Hong Kong to bring the message of food wise and waste less to the community and encourage the public to reduce food waste at source. The roving exhibitions featured display panels with food waste reduction tips, including food trimmings for the second dish recipes, tactics of food storage and purchase management, etc., and let the public share their “Food Wise” wishes and opinions on the exhibition board. The exhibitions attracted a total of over 24 000 visitors.
- The “Big Waster” Facebook and Instagram page – The “Big Waster” symbolising food wastage in the Campaign has strengthened interaction with supporters, particularly the young people, through Facebook and Instagram page in which information on food waste reduction is provided. Up to February this year, the “Big Waster” Facebook has received more than 52 000 “likes” and there are about 3 000 “followers” on Instagram.
- The Food Wise Eateries Scheme – To continue to encourage the food and beverage sector to offer portioned meals for customers to choose from, so as to avoid the generation of food waste. As at February this year, about 1 080 eateries have enrolled in the scheme, among which about 310 and 430 eateries have been awarded with gold class and silver class status respectively.

The Government will continue to take forward the above schemes and activities in 2018-19. In addition, to tie in with the commissioning of the Organic Resources Recovery Centre (ORRC) Phase 1 in 2018 where food waste generated from the commercial and industrial sectors will be treated, the Campaign will enter a new stage. Besides promoting the food wise and waste less culture, it is committed to promoting the on-site/off-site recycling of unavoidable food waste. The total estimated expenditure of the Campaign is about \$6.5 million in 2018-19. Furthermore, to support the promotion of commercial and industrial food waste recovery, the Government will implement a pilot project to source separate food waste from 40 wet markets and cooked food centres managed by the Food and Environmental Hygiene Department, as well as 9 shopping malls managed by the Hong Kong Housing Authority, for delivery to the ORRC Phase 1 for recycling. The estimated expenditure involved in 2018-19 is about \$27 million.

To foster “Food Wise” culture at campus, the Government will gradually install small-scale food waste composters for those schools with meals provided and suitable venues, and provide the relevant technical support and teaching materials to demonstrate how to convert unavoidable food waste to compost as well as remind students of the importance of food wise and waste less. The Environment and Conservation Fund has earmarked a funding of \$20 million to continue to support various food waste reduction projects, of which \$5 million will be used to provide small-scale food waste composters for about 100 schools. The preparatory work for the new measure is underway, and it is expected to begin to invite schools to participate in 2018-19.

The manpower involved in the implementation of the Campaign will continue to be absorbed by the existing establishment.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB186**

**(Question Serial No. 1784)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the issue of emissions from local vessels, would the Administration inform this Committee:

(a) Will the local piers be retrofitted with on-shore power supply? If yes, what are the locations and expenditure?

(b) Will the Administration study how to help local vessels to be retrofitted with air scrubbers or converted into smoke-free/low-emission green ferries? If yes, what is the expenditure required for the subsidy?

Asked by: Hon YICK Chi-ming, Frankie (Member Question No. (LegCo use): 44)

Reply:

In May 2016, the Environment Bureau (ENB) set up an Air Quality Objectives (AQOs) Review Working Group (Working Group). The Marine Transportation Sub-group (Sub-group) under the Working Group discussed various suggestions that could improve air quality in respect of marine transportation. Members of the Sub-group included stakeholders of local vessel operators, trade associations, professional bodies, green groups and representatives of relevant government bureaux and departments.

The Sub-group discussed 3 possible new measures to reduce emissions from local vessels, including the use of on-shore electricity while at berth, installation of emission reduction devices (e.g. particulate filters) on engines, and the imposition of control on nitrogen oxides (NOx) emissions from engines. The Sub-group noted that vessel operators could approach the power companies to apply for the setting up of power supply installations at piers, provided that they could satisfy the conditions such as space, safety and operation requirements set out by the power companies and the relevant authorities. In fact, some local vessel operators have already connected their berthed vessels to on-shore power supply at night. As for the other 2 measures, the Sub-group opined that although the

technologies of particulate filters and certain devices for reducing NOx emissions were mature, owing to some technical constraints and uncertainties (including possible lack of space in the engine room, emission reduction devices being not compatible with engines of all existing vessels, additional investment in the emission reduction devices, expenditure on operation and maintenance, etc.), the room for wider adoption of these measures on local vessels was limited. The Sub-group suggested that interested local vessel operators could apply for subsidy from the Pilot Green Transport Fund to test out the feasibility of installing emission reduction devices (e.g. diesel particulate filters that could reduce particulate emissions and selective catalytic reduction devices that could reduce NOx emissions) at local vessels and their emission reduction performance.

The Government has been encouraging the local public transport sector to apply for subsidy from the Pilot Green Transport Fund to test out green innovative transport technologies so as to enhance energy efficiency and reduce emissions. As at the end of February 2018, the Pilot Green Transport Fund has totally subsidised 3 in-use ferries to replace their old diesel engines with diesel-electric propulsion systems and to install a seawater scrubber on one of them. Among them, a ferry which has retrofitted with a diesel-electric propulsion system and installed a seawater scrubber has completed a one-year trial. According to the current trial data collected, the diesel-electric propulsion system can effectively reduce dark smoke emissions and fuel consumption of the ferry. As for the seawater scrubber, since local ferries have fully adopted the use of low-sulphur diesel with sulphur content not exceeding 0.05%, there is a substantial decrease in the emission of sulphur dioxide. Therefore, the seawater scrubber has little effect in further reducing sulphur dioxide emission from the ferry.

In addition, the 2017 Policy Address announced that the Government would explore the launch of pilot schemes for local ferries to adopt green technologies to reduce their emissions. The Environmental Protection Department is exploring to launch the pilot schemes; studying latest international development and application of green technologies that could be suitable for local ferries and new government vessels and considering the details and feasibility of implementation. The estimated expenditure of the pilot scheme is yet to be worked out.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB187**

**(Question Serial No. 1785)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Biodiversity Strategy and Action Plan, what are the content, staffing and work arrangements, estimated expenditure and effectiveness of the plan?

Asked by: Hon YICK Chi-ming, Frankie (Member Question No. (LegCo use): 45)

Reply:

At the end of 2016, the Government announced the “Hong Kong Biodiversity Strategy and Action Plan 2016-2021” (BSAP), which outlines the strategies and 67 specific actions to be taken by the Government for conserving biodiversity in Hong Kong as well as supporting sustainable development. The actions under BSAP can be grouped into 4 major areas: (1) enhancing the existing conservation measures, including the implementation of plantation enrichment in country parks, formulation of species action plans and enhanced enforcement action against wildlife crime; (2) mainstreaming biodiversity, promoting the incorporation of considerations for biodiversity conservation in relevant policies, programmes, works and projects by public and private sectors; (3) improving the relevant knowledge, such as monitoring and studying priority habitats and species, as well as development of a biodiversity information hub; (4) enhancing public awareness and participation in biodiversity to drive home the message of conservation through publicity and education activities.

The Government has earmarked \$150 million for the Agriculture, Fisheries and Conservation Department (AFCD) to meet the cost of the implementation of BSAP for the first 3 years (2016-17 to 2018-19). In 2017-18, the AFCD's expenditure on implementation of BSAP (revised estimate) is \$60.56 million. The estimated expenditure for 2018-19 is \$55 million and it is expected that 39 staff will be involved.

Since the launch of BSAP, progress has been made in the work under the 4 major areas. The outcomes include the designation of new marine parks, preparation for the establishment of Countryside Conservation Office to co-ordinate conservation of remote countryside areas and promote sustainable development, establishment of an

inter-departmental working group to regularly oversee the implementation of BSAP and promote mainstreaming of biodiversity within the Government, subsidisation of various relevant studies and public education projects, as well as the holding of the 3rd Hong Kong Biodiversity Festival in 2017, in which over 100 education projects were provided to the public in collaboration with 40 partners to promote biodiversity, etc. Moreover, the Government continues to take forward the initiatives that have commenced under BSAP, which include enhancing habitat management, formulating species action plans, enhancing the control of invasive alien species and implementing the Plantation Enrichment Project in country parks, etc.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB188**

**(Question Serial No. 2771)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Administration mentioned in Programme (1) that it would continue to monitor and enhance the operation of the Recycling Fund to facilitate the upgrading of the operational capabilities and efficiencies of the recycling industry. In this connection, would the Administration inform this Committee of the following:

1. Since the launch of the fund in 2015, what were the number of applications received by the Administration, the number of applications approved and their percentage in the total number of applications and the amount of funding involved? What are the anticipated changes in the number of applications, proportion and amount of funding involved in 2018-19?
2. What was the number of applications rejected in 2017-18 and what were the main reasons involved?
3. What is the current balance of the fund? Will the Administration conduct a full review on the operation and effectiveness of the Recycling Fund? If yes, what are the details and implementation timetable?

Asked by: Hon YUNG Hoi-yan (Member Question No. (LegCo use): 44)

Reply:

1. The Government launched the \$1 billion Recycling Fund in October 2015. As at 28 February 2018, the Advisory Committee on Recycling Fund (RFAC) has received 382 applications (of which 101 had been withdrawn before vetting by the RFAC) and approved 163 applications. Excluding the projects which have been withdrawn by some applicant organisations after their applications were approved, a total of 128 funded projects have been or will soon be commenced, involving a total funding of about \$94 million, of which 24 are under the Enterprise Support Programme (ESP), 97 are for Standard Projects and 7 are under the Industry Support Programme (ISP). The RFAC



will consider the work plans and budget for 2018-19 in late March this year, so we are not able to provide the relevant information for 2018-19 at this moment.

2. All applications were considered by the RFAC with reference to the published vetting criteria. 70 applications were rejected in 2017-18 mainly because the applicants failed to submit sufficient information on the projects or organisations for vetting; the proposed projects were outside the scope of the Recycling Fund; the applicants failed to meet the eligibility criteria, etc.
3. Excluding the operating cost set aside for the Recycling Fund Secretariat and funding for the approved projects, the balance of the Recycling Fund is \$800 million approximately. The Environmental Protection Department (EPD) and the RFAC have kept under review the operation of the Recycling Fund and actively listened and responded to the recycling industry's views and aspirations through various channels such as meetings, seminars, briefing sessions, etc. so as to introduce various timely facilitation measures to meet the needs of the industry in its operation, upgrading and transformation and to attract more applications. EPD will launch a mid-term review of the Recycling Fund in 2018-19 to examine its overall operation and performance.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB189**

**(Question Serial No. 0773)**

Head: (100) Marine Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Port Services  
(3) Local Services

Controlling Officer: Director of Marine (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the collection of refuse from locally-licensed and river trade vessels, please advise on:

- (a) the staffing, expenditure and number of vessels involved in collecting refuse from fishing vessels, locally-licensed and river trade vessels, either by staff of the Marine Department (MD) or the contractor it engaged, in the past 3 years (2015-16 to 2017-18);
- (b) the mechanism adopted by the MD for collecting refuse in various typhoon shelters, and the daily collection schedules;
- (c) the staffing, expenditure and number of vessels involved in collecting refuse in various typhoon shelters in the past 3 years (2015-16 to 2017-18);
- (d) whether the MD will review the mechanism and improve the service in response to views from a number of fishermen about the refuse collection schedules for fishing vessels in typhoon shelters falling short of demand, and the Government failing to render timely and appropriate assistance to the fishing vessels that netted a large quantity of refuse from sea, despite the presence of a 24-hour hotline which somehow go unanswered at times;
- (e) the total quantities of marine refuse collected by the MD in the past 3 years (2015-16 to 2017-18) and the total quantities of refuse collected in typhoon shelters (please provide the information by month);
- (f) the details of the work and the effectiveness of the Inter-departmental Working Group on Clean Shorelines in the past 3 years (2015-16 to 2017-18); and

- (g) the details of the work and the effectiveness of the Hong Kong-Guangdong Marine Environmental Management Special Panel set up subsequent to the incident of illegal dumping of refuse in the Mainland.

Asked by: Hon HO Chun-yin, Steven (Member Question No. (LegCo use): 16)

Reply:

- (a) & (c) Since the commencement of the contract for marine refuse cleansing services of the MD on 1 October 2017, the contractor has been providing a fleet of about 80 vessels of various types to clean up refuse in Hong Kong waters on a daily basis (including Sundays and public holidays). About 13 refuse collection boats of the fleet provide domestic refuse collection service to vessels (including fishing, locally-licensed and river trade vessels) in anchorages, typhoon shelters and small boat anchorage areas. A refuse collection boat is normally operated by 2 persons, 1 for steering the boat and the other for collecting refuse. The contract cost for the marine refuse cleansing services, which include cleaning up floating refuse, collecting refuse from vessels, managing refuse collection points and transporting refuse to landfills for disposal, is about \$6.69 million a month. The expenditure for cleaning up marine refuse and collecting refuse from vessels forms part of the overall contract cost, where there is no separate breakdown. Moreover, in 2017-18, the MD has additionally deployed 3 Marine Inspector IIs and 1 patrol launch to step up inspection of cleanliness at sea and monitoring of the work of the contractor.
- (b) Currently, the marine refuse cleansing contractor of the MD has refuse collection boats stationed in major typhoon shelters such as Sam Ka Tsuen, Aberdeen, Shau Kei Wan, Causeway Bay, To Kwa Wan, Yau Ma Tei, Tuen Mun, Sai Kung, Cheung Chau and Shuen Wan for collecting refuse from vessels at those typhoon shelters at least once a day. The refuse collection boats of the contractor generally sail through the typhoon shelters in the morning period to collect refuse from vessels. Vessels berthed in the typhoon shelters may also make a call to the MD or the contractor for arranging refuse collection service. Since the end of 2015, the frequency of collecting refuse from vessels in Aberdeen Typhoon Shelter has been increased to twice a day, namely once in the morning and once in the afternoon.
- (d) In response to the possibility of a large quantity of refuse being netted during fishing operations, the MD sets up two 24-hour hotlines (2385 2791 and 2385 2792). Fishermen may call the MD to request for a large refuse collection vessel to the typhoon shelters wherein the fishing vessels concerned are berthed for collection of netted refuse as soon as possible. After reviewing the operation of the hotlines, the MD is preparing to make available other

notification channels for fishermen to provide information by email (admpcu@mardep.gov.hk) or by fax (2543 6877) for arranging refuse collection service.

- (e) The quantities of marine refuse (including floating refuse, refuse collected from ships, and refuse collected from locally-licensed and river trade vessels) collected in the past 3 years are as follows:

2015

<b>Month</b>	<b>Floating refuse (in tonnes)</b>	<b>Refuse collected from ships (in tonnes)</b>	<b>Refuse collected from locally-licensed and river trade vessels (in tonnes)</b>
January	765.3	215.0	140.1
February	738.5	192.2	148.6
March	798.7	212.1	140.8
April	829.3	205.1	140.9
May	1 133.6	205.7	171.9
June	1 133.5	205.6	173.6
July	1 263.9	207.3	182.6
August	1 174.4	212.7	171.8
September	1 049.9	204.2	156.7
October	918.6	201.5	148.5
November	863.6	204.3	141.3
December	814.9	211.8	141.8
Full year	11 484.2	2 477.5	1 858.6

2016

<b>Month</b>	<b>Floating refuse (in tonnes)</b>	<b>Refuse collected from ships (in tonnes)</b>	<b>Refuse collected from locally-licensed and river trade vessels (in tonnes)</b>
January	832.6	211.3	157.5
February	787.9	198.9	163.7
March	829.3	213.9	144.1
April	857.3	203.7	142.5
May	930.3	204.9	164.3
June	1 109.7	206.3	180.7
July	1 345.7	209.6	188.0
August	1 326.3	197.8	176.4
September	1 095.5	204.1	164.3
October	979.0	193.2	155.5

<b>Month</b>	<b>Floating refuse (in tonnes)</b>	<b>Refuse collected from ships (in tonnes)</b>	<b>Refuse collected from locally-licensed and river trade vessels (in tonnes)</b>
November	898.2	203.4	146.3
December	802.7	219.4	154.5
Full year	11 794.5	2 466.5	1 937.8

2017

<b>Month</b>	<b>Floating refuse (in tonnes)</b>	<b>Refuse collected from ships (in tonnes)</b>	<b>Refuse collected from locally-licensed and river trade vessels (in tonnes)</b>
January	801.2	209.8	168.9
February	775.6	189.9	147.9
March	813.7	210.8	152.0
April	835.5	202.8	151.3
May	943.3	210.4	179.8
June	1 053.2	196.2	186.9
July	1 122.9	210.6	193.3
August	1 406.1	195.8	175.8
September	1 140.8	199.8	160.6
October	993.3	202.0	151.9
November	937.5	203.2	143.3
December	819.2	213.5	145.8
Full year	11 642.3	2 444.8	1 957.5

The refuse from locally-licensed and river trade vessels is mainly collected in typhoon shelters, with only a small quantity collected in small boat anchorage areas. The MD does not maintain separate statistics on the quantities of refuse collected in individual typhoon shelters and small boat anchorage areas. The quantities of refuse collected in typhoon shelters are not separately accounted for.

- (f) The Government established the Inter-departmental Working Group on Clean Shorelines (Working Group) in November 2012 to enhance the collaboration among relevant government departments to address the marine refuse problem. The relevant departments are introducing long-term strategies to tackle the marine refuse problem in Hong Kong by adopting a three-pronged approach, namely reducing waste generation at source, reducing the amount of refuse entering the marine environment, and removing refuse from the marine

environment, in response to the recommendations of the Marine Refuse Study Report published by the Working Group.

Since April 2015, the relevant departments have stepped up cleaning efforts at 27 priority sites identified from the Study for enhanced clean-up of marine refuse and increased the total number of clean-up operations per year at these sites by nearly 50 per cent. According to the five-level Shorelines Cleanliness Grading system established by the Working Group, nearly half of the priority sites have shown significant improvement in their average cleanliness index. This reflects that the improvement measures and the enhanced cleaning efforts have generally delivered positive results. For the sake of better deployment of resources for improving shorelines cleanliness, the Environmental Protection Department (EPD) has reassessed the coastal sites across the territory and released the revised list of priority sites in January 2018. In addition, the relevant departments have implemented other improvement measures, such as providing support measures and facilities to reduce refuse entering the marine environment, and encouraging the public to report marine littering and refuse problems.

Apart from the efforts above, keeping the shorelines clean also requires public participation and support. In this regard, the Working Group and the relevant departments have over the past 3 years endeavoured to educate the community to enhance their awareness of keeping the shorelines clean. Such efforts include broadcasting announcements in the public interest and organising various publicity and education activities (e.g. beach clean-up activities, roving exhibitions and design competitions), which all aim at encouraging the public to change their habits to reduce waste at source and prevent refuse from entering the sea.

- (g) Hong Kong and Guangdong set up the Hong Kong-Guangdong Marine Environmental Management Special Panel (Special Panel) in October 2016 under the framework of the Hong Kong-Guangdong Joint Working Group on Sustainable Development and Environmental Protection, to enhance exchange and communication on various regional marine environmental matters. These include, among other things, developing the notification and alert system on marine refuse, establishing the Hong Kong-Guangdong Notification Mechanism on Marine Refuse with a view to enhancing the mutual responsiveness to the related issues and combating illegal marine dumping activities.

Meanwhile, the EPD has launched the notification and alert system on marine refuse in May 2017 for trial to perform real-time monitoring of the rainfall data

of Hong Kong and 13 cities of Guangdong Province in the Pearl River catchment and to predict the coastal areas of the two sides which may be potentially affected by massive amount of marine refuse. Since its trial operation, the notification mechanism has activated 7 times and issued notifications accordingly due to heavy rain, flooding or significant environmental incident.

The EPD will continue to maintain communication with the Guangdong authorities via the Special Panel to further improve the notification mechanism on marine environmental incidents for more effective response to the possible presence of massive amount of marine refuse in the future. The Special Panel is currently organising a meeting and a technology seminar to discuss matters of related work and facilitate experience sharing and learning on the management of marine environment. In addition, the Hong Kong side has planned to visit the search and rescue centre and the anti-pollution base in Guangdong Province to examine and exchange ways to enhance emergency cooperation in marine environmental incidents.

- End -

**CONTROLLING OFFICER'S REPLY****ENB190****(Question Serial No. 1953)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (000) Operational ExpensesProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding promoting local use of solar energy, would the Government advise this Committee on the following:

1. What is the current percentage of output of electricity generated locally by solar energy?
2. How many solar panels are there in government buildings? What are their respective locations and annual power generation?
3. What are the new selected sites for installation of additional solar panels?

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 43)Reply:

1. According to the "Hong Kong Energy End-use Data", the amount of renewable energy accounts for roughly 0.1% of the "electricity" consumption, including the solar energy used to heat water and electricity generated by photovoltaic panels. We do not have their breakdowns.

2. The solar panel projects of the Administration completed by the Architectural Services Department (ArchSD) in the past 5 years (from 2013-14 to 2017-18) are tabulated below:

Project	Completion date	Annual power generation (unit)*
Development of Aberdeen fire station-cum-ambulance depot	May 2013	9 000



<b>Project</b>	<b>Completion date</b>	<b>Annual power generation (unit)*</b>
Cruise terminal building and ancillary facilities for the Kai Tak cruise terminal development	May 2013	24 000
Construction of fire station-cum-ambulance facility at Cheung Yip Street, Kowloon Bay	June 2013	5 000
Construction of an Annex Building at the Ko Shan Theatre	December 2013	13 000
Town park, indoor velodrome-cum-sports centre in Area 45, Tseung Kwan O	December 2013	150 000
Local open space at Chung Yee Street, Kowloon City	February 2014	3 000
Construction of a station for the new Terminal Doppler Weather Radar	July 2014	4 000
District open space, sports centre and library in Area 74, Tseung Kwan O	November 2014	20 000
Kwun Tong promenade (stage 2)	December 2014	31 000
Reprovisioning of Cape Collinson Crematorium	December 2014	3 000
Redevelopment of Kwun Tong Swimming Pool Complex and Kwun Tong Recreation Ground	January 2015	15 000
Community Green Station (New Territories East)	January 2015	3 000
Relocation of part of the offices of the Department of Justice to the Main and East Wings of the Former Central Government Offices	March 2015	25 000
Construction of Trade and Industry Tower in Kai Tak Development Area	April 2015	28 000
Redevelopment of Victoria Park Swimming Pool Complex	July 2015	39 000
Redevelopment of Fire Services Training School	October 2015	36 000

<b>Project</b>	<b>Completion date</b>	<b>Annual power generation (unit)*</b>
West Kowloon Law Courts Building	November 2015	49 000
Po Leung Kuk Stanley Ho Sau Nan Primary School	December 2015	6 000
Public library and indoor recreation centre in Area 3, Yuen Long	March 2016	9 000
Sports centre, community hall and district library in Area 14B, Sha Tin	March 2016	11 000
Reprovisioning of Yaumatei Specialist Clinic at Queen Elizabeth Hospital	June 2016	16 000
Redevelopment of Tai Lam Centre for Women	November 2016	25 000
Tung Wah Group of Hospitals Ma Kam Chan Memorial Primary School (in Area 36, Fanling)	July 2017	5 000
A school for social development for girls at Choi Hing Road, Kwun Tong, Kowloon	August 2017	3 000
Hong Kong Children's Hospital	September 2017	5 000
Two special schools at Sung On Street, To Kwa Wan	December 2017	3 000

\* The figure denotes the estimation of annual power generation made during the design stage of the renewable energy (RE) projects.

3. The new projects of installing solar panels in government buildings and offices which are to be completed by ArchSD in the coming year include relocation of office and Water Resources Education Centre of Water Supplies Department to Tin Shui Wai, construction of staff quarters for Immigration Department at Heng Lam Street, Kowloon and construction of the Boundary Control Point (BCP) buildings and associated facilities in Liantang/ Heung Yuen Wai BCP, etc.

In addition, since the financial year 2017-18, we have earmarked \$200 million for the provision of RE installations at suitable existing government buildings, venues and community facilities, etc. The sites of the approved solar panel projects are Kwai Chung Preliminary Treatment Works, Ma Tin Sewage Pumping Station, Lung Tin Sewage Pumping Station, Wang Chau Stormwater Pumping Station, Siu Ho Wan Sewage Treatment Works, Sha Tin Sewage Treatment Works, Tai Po Sewage Treatment Works, Stonecutters

Island Sewage Treatment Works, Hoi Ha Wan Marine Park Visitor Centre, Tai Mo Shan Country Park Visitor Centre, Aberdeen Tree Centre and Hong Kong Wetland Park.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB191**

**(Question Serial No. 2640)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

To ensure long-term and stable supply of clean energy for Hong Kong and to achieve the 2020 fuel mix target:

- a) What are the Environment Bureau's progress and work in ensuring future supply of natural gas in the past 3 years and the coming year? If it plans to enter into an agreement with the natural gas suppliers, what are the details and estimated expenditure?
- b) What is the Environment Bureau's work progress regarding the study on the construction of an offshore liquefied natural gas terminal in Hong Kong waters? Has the Bureau earmarked provision in 2018-19 for continuing to carry out the relevant studies? If yes, what are the details of the manpower and provision?
- c) Has the Environment Bureau earmarked manpower and provision for discussing issues relating to supply of gas and electricity with the Central Government in the coming 3 years? If yes, what are the details of the manpower and provision earmarked?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 32)

Reply:

a) and b) To ensure long-term stable supply of clean energy for Hong Kong and to achieve the 2020 fuel mix target, we understand that the two power companies are currently exploring new gas sources and studying the construction of an offshore liquefied natural gas (LNG) terminal in Hong Kong waters. After receiving concrete proposals from the two power companies, we will critically examine the impact on the reliability and safety of electricity supply, environmental performance and the affordability of the public according to the existing mechanism. Since the relevant work is part of the work of existing staff, no additional expenditure and manpower are involved.

c) We will make use of existing manpower to follow up on work relating to gas and power supplies.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB192**

**(Question Serial No. 2593)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Energy Saving for All 2017 Campaign including the Energy Saving Charter 2017, 4Ts Charter and Energy Saving Championship Scheme was launched in 2017 to promote public awareness of energy efficiency and conservation measures through community activities. What were the expenditures of the various campaigns?

Asked by: Hon CHOW Ho-ding, Holden (Member Question No. (LegCo use): 23)

Reply:

The Energy Saving for All 2017 Campaign, comprising the Energy Saving Charter 2017, the 4Ts Charter, the Energy Saving Championship Scheme 2017 and the Award Presentation Ceremony of the Energy Saving Championship Scheme 2016, aims to promote energy saving in all sectors of the community to combat climate change. The total expenditure of the Energy Saving for All 2017 Campaign was about \$4.5 million, which covered all of the aforesaid activities, and there was no breakdown available.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB193**

**(Question Serial No. 2594)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Matters Requiring Special Attention in 2018-19 that the Bureau will publicise and implement the various programmes and schemes under the post-2018 SCAs to promote energy efficiency and conservation and the development of renewable energy. Please advise on the following:

1. What is the estimated provision for publicising and implementing the programmes? Please explain in detail.
2. What are the publicity locations and manpower arrangements?

Asked by: Hon CHOW Ho-ding, Holden (Member Question No. (LegCo use): 24)

Reply:

The Government entered into the Scheme of Control Agreements (SCAs) which would take effect in October 2018 and January 2019 respectively with the two power companies in April 2017, and promoting Energy Efficiency and Conservation (EE&C) and Renewable Energy (RE) will be key foci of the post-2018 SCAs. The relevant measures include expanding the existing incentive schemes in relation to the promotion of EE&C and the existing energy efficiency funds of the two power companies, and introducing new energy saving funds, Feed-in Tariff and RE Certificates, etc.

We will use existing manpower and resources to handle the relevant work. We are now in discussion with the two power companies, and we plan to report details of the relevant measures under the SCAs to the Legislative Council in due course.

- End -

**CONTROLLING OFFICER'S REPLY****ENB194****(Question Serial No. 2071)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme:Controlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

For the purpose of formulating appropriate climate change strategies, please list:

1) The carbon emissions in Hong Kong in the past 5 years, the sources and their respective percentages.

2) The current carbon pools in Hong Kong and the future capacity, including the number of trees in country parks and urban green areas.

3) The estimated savings in expenditure due to switching to renewable energy.

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 41)Reply:

(1) The greenhouse gas (GHG) emissions by emission source and their percentages in Hong Kong from 2011 to 2015 are set out as follows:

Year	GHG emissions by emission source (in kilotonnes CO2-e)						
	Energy			Waste	Industrial processes and product use	Agriculture, forestry and other land use	Total+
	Electricity generation#	Transport	Other end use of fuels@				
2011	29 600 (69.4%)	7 240 (17.0%)	2 080 (4.9%)	2 300 (5.4%)	1 380 (3.2%)	32 (0.1%)	42 600 (100%)
2012	29 400 (68.5%)	7 220 (16.8%)	2 280 (5.3%)	2 350 (5.5%)	1 670 (3.9%)	30 (0.1%)	43 000 (100%)
2013	30 300 (68.4%)	7 360 (16.6%)	2 320 (5.2%)	2 540 (5.7%)	1 720 (3.9%)	32 (0.1%)	44 300 (100%)



Year	GHG emissions by emission source (in kilotonnes CO <sub>2</sub> -e)						
	Energy			Waste	Industrial processes and product use	Agriculture, forestry and other land use	Total+
	Electricity generation#	Transport	Other end use of fuels@				
2014	31 200 (69.4%)	7 340 (16.3%)	2 210 (4.9%)	2 530 (5.6%)	1 640 (3.6%)	31 (0.1%)	45 000 (100%)
2015*	27 700 (66.5%)	7 470 (18%)	2 260 (5.4%)	2 440 (5.9%)	1 720 (4.1%)	30 (0.1%)	41 600 (100%)

## Remarks

\* *Provisional figure subject to revision*

# *Including GHG emissions arising from Towngas production which accounted for about 0.72% of the total GHG emissions in Hong Kong in 2015*

@ *Including use of fuel for combustion in commercial, industrial and domestic premises*

+ *May not add up to 100 due to rounding*

(2) The Environmental Protection Department (EPD) compiles the GHG inventory and estimates the GHG uptake by carbon pools<sup>1</sup> in accordance with the methodologies as specified in the guidelines published by the United Nations' Intergovernmental Panel on Climate Change (IPCC Guidelines). The total GHG uptake by carbon pools of woodlands, shrublands and grasslands in Hong Kong in 2015 was 461,000 tonnes of carbon dioxide equivalent (CO<sub>2</sub>-e), accounting for about 1% of the total GHG emissions in Hong Kong. The EPD does not have information on the future areas of woodlands, shrublands and grasslands for the estimation of future GHG uptake of their carbon pools.

## Note

1. According to the IPCC Guidelines, "carbon pool" means "A reservoir, a component or components of the climate system where a greenhouse gas or a precursor of a greenhouse gas is stored."

(3) The Government will continue to apply renewable energy (RE) on a wider and larger scale based on mature and commercially available technologies with the public sector taking the lead. From 2013-2017, the annual power generation of the RE power generation installations in government buildings and other public infrastructure facilities<sup>1</sup> was estimated to be about 75 million kWh.<sup>2</sup> The electricity generated from some installations will only be used by the relevant facilities while some installations have been connected to the power grid (but whether these facilities have surplus electricity exported to power grid depends on various factors and cannot be generalised). As a result of the different circumstances mentioned above, we do not have the estimated figures of the savings in expenditure due to switching to renewable energy.

## Notes

1. Including the RE projects implemented by the Architectural Services Department in newly-built government buildings, and RE projects implemented by the EPD, Water Supplies Department, Highways Department, Drainage Services Department and Civil Engineering and Development Department in government facilities.

2. The figure denotes the estimation of annual power generation made by the Architectural Services Department, EPD, Water Supplies Department, Highways Department, Drainage Services Department and Civil Engineering and Development Department during the design stage of the RE projects implemented in government buildings and facilities.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB195**

**(Question Serial No. 2979)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding external lighting installations, the relevant questions are as follows:

1. Please advise on the current work details of the Charter on External Lighting (the Charter) implemented by the Administration, including its progress, effectiveness, as well as the expenditure and manpower resources involved;
2. The Administration mentions that it will conduct a review of the Charter in the coming year. Please advise on the relevant details, including the scope of the review, the time by which the review is expected to be completed, the expenditure and manpower arrangements involved;
3. The relevant work details, the estimated expenditure and manpower resources involved in the Administration's continued efforts to promote the Guidelines on Industry Best Practices for External Lighting Installations (the Guidelines) and the Charter in the coming year;
4. How will the Administration promote the Charter and the Guidelines to the owners and responsible persons of external lighting installations in a targeted manner? What is their reaction? What incentives has the Administration provided for them to follow the Charter and the Guidelines?
5. Is there any improvement to the nuisance and energy wastage problems caused by external lighting due to implementation of the above measures? What else measures does the Administration have to reduce the energy wastage problem caused by external lighting?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 27)

Reply:

Regarding parts (1), (4) and (5) of the question, the Environment Bureau (ENB) launched the Charter on External Lighting (the Charter) in April 2016. As at the end of February 2018, over 4 800 participants from different sectors, including property development, building management, hotels and catering, retail, banking, laundry, travel and cinemas, etc., as well as schools, public utilities and non-governmental organisations, have signed up to

the Charter. Participants who have signed up to the Charter will switch off lighting installations of decorative, promotional or advertising purposes which affect the outdoor environment from 11 p.m. or midnight to 7 a.m. on the following day, so as to minimise light nuisance to the public caused by external lighting.

The ENB has published a list of participants on the Charter's website and has distributed labels and certificates to participants for display at their properties/shops to show that they have signed up to the Charter, as well as to raise public awareness of the Charter. We plan to hold an award ceremony in June 2018 to commend participants who have fulfilled the switch-off pledge.

The Working Group on the Promotion of the Charter on External Lighting (the Working Group) was set up in June 2015 to plan and promote the Charter. The ENB has been working closely with the Working Group and liaising with the relevant trade associations and non-governmental organisations to invite owners or responsible persons of external lighting installations to sign up to the Charter. The ENB has also invited shopping malls, advertising companies, trade associations, professional bodies, etc. to encourage, through their network, other companies, business contacts and partners, clients, etc. to sign up their premises with external lighting installations to the Charter. We have also sent letters to invite premises with external lighting installations or signs to sign up to the Charter. We will continue to proactively invite organisations and business establishments that have not yet participated to sign up to the Charter.

In 2017, we arranged site visits to all Charter participants to check if the lighting installations had indeed been switched off during the preset time as pledged. When non-compliance cases were found, we would remind the concerned participants to adhere to their pledge to switch off the relevant lighting during the preset time. If these participants were still found not to have followed the advice to switch off the lighting during the preset time, we would remove their names from the list of participants of the Charter. After site visits and follow-up, 99% of the participants have fulfilled their pledge to switch off the lighting. We have also removed the names of a few participants who could not fulfill the requirement.

Regarding part (2) of the question, in 2018-19, the Government will conduct a review of the Charter and assess its effectiveness, including the conduct of survey on public opinion of light nuisance, their response to the Charter, and how the business establishments respond to complaints from the public, etc.. The Government will also study the overseas regimes and experiences in regulating external lighting, and assess whether those benchmarks and practices are applicable to Hong Kong. With reference to the outcome of the assessment, we will consider the next stage of work and whether there is a need for legislation.

Regarding part (3) of the question, with respect to the promotion of the Guidelines on Industry Best Practices for External Lighting Installations (the Guidelines), the ENB held a total of 30 discussion sessions between May 2016 and February 2018 to appeal to Charter participants and members of the relevant professional bodies, trade associations and public organisations to comply with the Guidelines when planning for or managing their external lighting installations, and to adopt the good practices stated in the Guidelines. The content of discussion included operating hours for lighting, control on lighting, light nuisance control measures, energy efficiency measures, lighting project design planning and glare prevention.

As at the end of February 2018, the expenditure involved in implementing the Charter and the Guidelines was about \$5 million. The relevant work is undertaken by the existing staff of the ENB. As the staff concerned have other responsibilities, we do not have a separate breakdown of the resources involved for the above work.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB196**

**(Question Serial No. 2980)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

1. How is the implementation of renewable energy (RE) projects in government buildings and facilities currently? Please set out by the type of RE used the total number of government buildings and facilities in which RE is used, the total generation capacity provided by that type of RE every year and the estimated savings in energy expenditure;
2. What are the projects for implementing RE in government buildings and facilities in the coming year? Please set out the names of those government buildings/public facilities, the names of the RE installations, the work progress, the annual electricity generation, the estimated savings in energy expenditure and the works expenditure involved;
3. Judging from the current situation of implementing energy saving projects in government buildings and facilities, is it possible for the Government to achieve the target of reducing electricity consumption by 5% by 2019-20? If no, what are the reasons?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 28)

Reply:

1. The types of renewable energy (RE) projects implemented at government buildings and facilities include: photovoltaic (PV) systems, solar water heating systems, wind power systems, waste-to-energy systems, biogas and hydropower systems, etc.

The number of RE projects implemented by the Architectural Services Department (ArchSD) in newly-built government buildings, their annual power generation and estimated energy cost savings in the past 5 years are tabulated below:

<b>Project completion year</b>	<b>Number of buildings</b>	<b>Annual power generation (kWh)*</b>	<b>Annual energy cost savings (\$)***^</b>
<u>PV system<sup>+</sup></u>			
2013	5	201 000	221,000
2014	6	84 000	92,000
2015	8	201 000	221,000
2016	4	61 000	67,000
2017	4	16 000	18,000
<u>Solar water heating system</u>			
2013	6	119 000	131,000
2014	1	133 000	146,000
2015	4	434 000	477,000
2016	5	190 000	209,000
2017	4	580 000	638,000
<u>Wind power system<sup>+</sup></u>			
2015	3	5 000	5,500

- + Excluding small-scale RE installations such as lighting systems used in open spaces and public parks.
- \* The figures are the annual power generation and energy cost savings estimated during the design of the RE installations.
- ^ Calculated on the basis of \$1.1 per kWh of electricity.

The number of RE projects implemented by the Environmental Protection Department (EPD), Water Supplies Department (WSD), Highways Department (HyD), Drainage Services Department (DSD) and Civil Engineering and Development Department (CEDD) at government facilities, their annual power generation and estimated energy cost savings in the past 5 years are tabulated below:

<b>Project completion year</b>	<b>Number of facilities</b>	<b>Annual power generation (kWh)*</b>	<b>Annual energy cost savings (\$)***^</b>
<u>PV system</u>			
2013	3	36 000	39,600^
2014	5	23 480	25,828^
2015	3	38 700	4 2,570^
2016	4	1 110 000	1,221,000^
2017	5	290 900	319,990^
<u>Waste-to-energy system</u>			
2015	1 <sup>#</sup>	47 482 000 <sup>#</sup>	45,030,000 <sup>#@</sup>
<u>Biogas</u>			
2013	2	18 330 000	20,163,000^
2014	1	1 870 000	2,057,000^
2016	1	770 000	847,000^
<u>Hydropower system</u>			
2013	1	434 040	477,000^
2017	1	2 500 000	2,750,000^

- \* The figures are the annual power generation and energy cost savings estimated during the design of the RE installations.
- ^ Calculated on the basis of \$1.1 per kWh of electricity.

- # The figure is the actual power generation of T·PARK in 2017. 45.03 million kWh of the power generated was used for operating the T·PARK facilities, and 2.45 million kWh was exported to the public power grid.
- @ Projected on the basis of CLP's Bulk Tariff.

2. The names of those RE projects implemented in some of the government buildings and facilities constructed by ArchSD, EPD, WSD, HyD, DSD and CEDD, the types of the RE installations, the work progress, the annual power generation, the estimated energy cost savings and the works expenditure involved in 2018 are tabulated below:

Government departments	Name of the projects in government buildings/ public facilities +	Work progress	Type of RE installations	Annual power generation (kWh)*	Annual energy cost savings* (\$)	Expenditure of projects (\$'000)
ArchSD	Relocation of New Territories West Regional Office and Water Resources Education Centre of Water Supplies Department to Tin Shui Wai	Scheduled completion in the first quarter of 2018	PV system	24 000	26,000	1,500
	Construction of staff quarters for Immigration Department at Heng Lam Street, Kowloon	Scheduled completion in the second quarter of 2018	PV system	2 500	2,800	400
	Liantang/Heung Yuen Wai Boundary Control Point and associated works – construction of boundary control point buildings and associated facilities	Scheduled completion in the fourth quarter of 2018	PV system and solar water heating system	33 000	36,000	1,400
EPD	Organic Resources Recovery Centre (ORRC), Phase 1	Contract awarded in December 2014 and scheduled commissioning in 2018	Using anaerobic digestion technology to convert food waste into biogas for power generation	Apart from the internal use of ORRC, we estimate that about 14 million kWh of surplus electricity generated can be exported each year	10,000,000@	1,589,200
WSD	Shatin Water Treatment Works	Being tested in manufacturer's plant	Hydropower system	300 000	330,000^	15,000
	Tai Po Water Treatment Works	Being installed	PV system	268 200	295,020^	9,980

Government departments	Name of the projects in government buildings/ public facilities +	Work progress	Type of RE installations	Annual power generation (kWh)*	Annual energy cost savings* (\$)	Expenditure of projects (\$'000)
HyD	Hong Kong - Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities i) Customs and Excise Outbound Cargo Examination Building ii) Customs and Excise Inbound Cargo Examination Building iii) Police Main Building iv) Fire Station cum Ambulance Depot	Scheduled completion in 2018	PV system	150 000	170,000^	10,000
			Solar water heating system	220 000	240,000^	6,600
DSD	Mui Wo Sewage Treatment Works	Scheduled completion in the second quarter of 2018	PV system	11 000	12,100	1,600
	Stonecutters Island Sewage Treatment Works	January 2018	Hydropower system	120 000	132,000	21,380
		January 2018	PV system	5 300	5,830	840
		February 2018	PV system	10 500	11,550	1,280
CEDD	3 public piers (Tsuen Wan Public Landing Steps Tung Chung Development Pier (Public) Sai Kung Public Pier)	Completed in 2017	PV system	5 000	5,500	1,000
	Kai Tak Development – Stages 3A and 4 infrastructure at former north apron (pumping stations NPS and PS2)	The facility is being tested and scheduled for completion in 2018	PV system	59 000	64,900	680



Government departments	Name of the projects in government buildings/ public facilities +	Work progress	Type of RE installations	Annual power generation (kWh)*	Annual energy cost savings* (\$)	Expenditure of projects (\$'000)
	Liantang/Heung Yuen Wai Boundary Control Point Sewage Treatment Works	The PV system is being installed and scheduled for completion in 2018	PV system	23 000	25,300	1,600
	Administration building in tunnel area on a connecting road at Liantang/Heung Yuen Wai Boundary Control Point	The facility has been substantially completed and is scheduled for commissioning in late 2018	PV system	29 000	31,900	3,800
		The facility has been substantially completed and is scheduled for commissioning in late 2018	Solar water heating system	60 000	66,000	1,980

- + Excluding small-scale RE installations such as lighting systems used in open spaces and public parks.
- \* The figures are the annual power generation and energy cost savings estimated during the design of the RE installations.
- ^ Calculated on the basis on \$1.1 per kWh of electricity.
- @ Projected on the basis of CLP's Bulk Tariff.

The estimation of energy cost savings in parts (1) and (2) of the reply has not taken into account some relevant factors, such as the possible increase/decrease in size or service hours of the relevant government buildings or public facilities in the relevant periods, the changes of tariffs in the relevant periods, the actual weather conditions (e.g. cloudiness may affect the performance of the PV system), etc. These restrictions should be noted for any comparison of the estimates.

- To achieve the target of 5% reduction in the electricity consumption of government buildings in the financial years from 2015-16 to 2019-20, under comparable operating conditions in 2013-14, we have conducted energy audits on over 350 government buildings with higher electricity consumption to identify further energy management opportunities, including introducing electricity saving measures and implementing electricity saving projects. The Electrical and Mechanical Services Department will provide technical support to the bureaux and departments concerned to facilitate the implementation of energy management measures. To help bureaux and departments carry out the electricity saving projects proposed in the energy audits, we have earmarked at least \$600 million to progressively implement the projects. According to the current projection, the target of 5% electricity consumption reduction can be

achieved in 2019-20 after the bureaux and departments have implemented the energy saving projects recommended in the energy audits and the green management measures to reduce electricity consumption.

- End -

**CONTROLLING OFFICER'S REPLY****ENB197****(Question Serial No. 0375)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

In 2018-19, the Environment Bureau will continue to invite signatories and partners to support the Charter on External Lighting and conduct a review of the Charter on External Lighting. Would the Administration advise on the following:

1. the number of complaints about light pollution received in the past 3 years;
2. the follow-up actions taken by the Administration in the past 3 years and their progress, and the financial commitments involved;
3. In what specific ways can the light pollution problem be tackled by promoting the Charter on External Lighting?
4. the number of organisations which have signed up to the Charter on External Lighting at present;
5. how will the Administration handle those organisations which have not signed up to the Charter on External Lighting?
6. the details of the review of the scheme;
7. There is presently no law prohibiting light pollution. Will the Administration consider introducing any legislation? If not, what are the reasons?

Asked by: Hon IP LAU Suk-ye, Regina (Member Question No. (LegCo use): 48)Reply:

Regarding parts (1) and (2) of the question, the statistics on the complaints about external lighting received by the Environmental Protection Department (EPD) in the past 3 years are set out in the following table.

Year	2015	2016	2017
No. of complaints	256	335	355

As nearly 40% of the complaints involved lighting installations for safety, security and operational purposes, they were not covered by the Charter on External Lighting (the Charter).

Upon receipt of complaints about light nuisance caused by external lighting, EPD would relay the complainants' concerns and requests to the persons responsible for the lighting installations in question, and advise them to refer to the Guidelines on Industry Best Practices for External Lighting Installations and take appropriate measures to minimise the impacts of the lighting installations on the residents in the vicinity. Most of the persons responsible for the lighting installations would, upon receipt of complaints, adopt measures to minimise light nuisance as far as practicable. EPD will continue to follow up on the complaints with existing staff.

Regarding parts (3) to (5) of the question, the Environment Bureau (ENB) launched the Charter in April 2016. As at the end of February 2018, over 4 800 participants from different sectors, including property development, building management, hotels and catering, retail, banking, laundry, travel and cinemas, as well as schools, public utilities and non-governmental organisations, have signed up to the Charter. Participants who have signed up to the Charter will switch off lighting installations of decorative, promotional or advertising purposes which affect the outdoor environment from 11 p.m. or midnight to 7 a.m. on the following day, so as to minimise light nuisance to the public caused by external lighting. We will continue to proactively invite organisations and business establishments that have not yet participated to sign up to the Charter.

In 2017, we arranged site visits to all Charter participants to check if the lighting installations had indeed been switched off during the preset time as pledged. When non-compliance cases were found, we reminded the concerned participants to adhere to their pledge to switch off the relevant lighting during the preset time. If these participants were found not to have followed the advice to switch off the lighting during the preset time, we would remove their names from the list of participants of the Charter. After site visits and follow-up, 99% of the participants have fulfilled their pledge to switch off the lighting. We have also removed the names of a few participants who could not fulfill the requirement.

Regarding parts (6) and (7) of the question, in 2018-19, the Government will conduct a review of the Charter and assess its effectiveness, including the conduct of survey on public opinion of light nuisance, their response to the Charter, and how the business establishments respond to complaints from the public, etc.. The Government will also study the overseas regimes and experiences in regulating external lighting, and assess whether those benchmarks and practices are applicable to Hong Kong. With reference to the outcome of the assessment, we will consider the next stage of work and whether there is a need for legislation.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB198**

**(Question Serial No. 2621)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Bureau has mentioned that it will conduct a review of the Charter on External Lighting. Would the Government inform this Committee of the following:

1. When will the review be conducted?
2. Will professionals and pressure groups be invited to participate? If yes, please provide the list of invited persons/groups. If not, what are the reasons?
3. Will the review include regulation of the switch-on time, luminosity level, the number of lighting installations and LED displays as well as their impacts on nearby residents?

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 52)

Reply:

In 2018-19, the Government will conduct a review of the Charter on External Lighting (the Charter) and assess its effectiveness, including the conduct of survey on public opinion of light nuisance, their response to the Charter, and how the business establishments respond to complaints from the public, etc.. The Government will also study the overseas regimes and experiences in regulating external lighting, and assess whether those benchmarks and practices are applicable to Hong Kong. We will also consider the stakeholders' views and other relevant issues in the review. With reference to the outcome of the assessment, we will consider the next stage of work and whether there is a need for legislation.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB199**

**(Question Serial No. 2622)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Bureau mentions that it will continue to implement the Charter on External Lighting. Would the Government tell this Committee since the implementation of the Charter:

1. How many organisations have participated in the Charter and whether any of them withdrew during the period? If yes, what is the number?
2. Please set out the number of complaints received about light pollution for 18 districts and of which how many were against the participating organisations in the Charter;
3. Have inspections been carried out on participating organisations to check on their compliance? If yes, please set out by districts the number and results of inspections made every year. Were there any cases of removal from the list of participating organisations due to non-compliance with the Charter? If yes, please set out the organisations. If no inspections were carried out, what were the reasons for not inspecting?

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 53)

Reply:

1. As at the end of February 2018, over 4 800 participants from different sectors, including property development, building management, hotels and catering, retail, banking, laundry, travel and cinemas, as well as schools, public utilities and non-governmental organisations, have signed up to the Charter on External Lighting (the Charter). 8 participants have withdrawn as they could not fulfill the requirement of the Charter due to operational needs or technical reasons. Another 70 participants have withdrawn from the Charter due to relocation or closure.
2. The statistics and breakdowns by district on the complaints about external lighting received by the Environmental Protection Department (EPD) in the past year are shown in the table below.

<b>District</b>	<b>2017</b>
Central & Western	30
Wan Chai	51
Eastern	28
Southern	5
Yau Tsim Mong	53
Sham Shui Po	19
Kowloon City	39
Wong Tai Sin	8
Kwun Tong	10
Tsuen Wan	1
Tuen Mun	13
Yuen Long	17
North	8
Tai Po	8
Sai Kung	27
Sha Tin	14
Kwai Tsing	20
Islands	4
<b>Total</b>	<b>355</b>

21 of these complaints involved Charter participants. Upon receipt of complaints about light nuisance caused by external lighting, EPD would relay the complainants' concerns and requests to the persons responsible for the lighting installations in question so that they can take appropriate measures to minimise the impacts of the lighting installations on the residents in the vicinity. Most of the persons responsible for the lighting installations would, upon receipt of complaints, adopt measures to minimise light nuisance as far as practicable.

3. In 2017, we arranged site visits to all Charter participants to check if the lighting installations had indeed been switched off during the preset time as pledged. When non-compliance cases were found, we would remind the concerned participants to adhere to their pledge to switch off the relevant lighting during the preset time. If these participants were still found not to have followed the advice to switch off the lighting during the preset time, we would remove their names from the list of participants of the Charter. After site visits and follow-up, 99% of the participants have fulfilled their pledge to switch off the lighting. We have also removed the names of a few participants who could not fulfill the requirement.

- End -

**CONTROLLING OFFICER'S REPLY****ENB200****(Question Serial No. 0298)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

To address the climate issues of global warming, many places around the world are working hard on renewable energy (RE) to mitigate global warming. The Government has earmarked \$200 million for the provision of RE installations in government buildings, venues and community facilities in 2017-18, and the funding will be increased to \$800 million in 2018-19. In this connection, would the Government advise this Committee:

1. How was the \$200 million used in the past year? Please provide details of the government buildings / venues / community facilities where RE installations were provided by using the fund in the past year, including the types and quantities of the RE installations as well as the amount involved in each project.
2. Will a ceiling be set for each installation project?
3. What are the justifications for the significant increase in funding from \$200 million to \$800 million?

Asked by: Hon LAU Ip-keung, Kenneth (Member Question No. (LegCo use): 25)Reply:

The Government has earmarked \$200 million for the provision of RE installations in government buildings, venues and community facilities etc. since 2017-18. Details of the funding granted are as follows:

Type of RE installations	Projects in government buildings/ public facilities	Expenditure of projects (\$m)
Combined Heat and Power	Tai Po Sewage Treatment Works	29.8
Biogas	Yuen Long Sewage Treatment Works	6.2



<b>Type of RE installations</b>	<b>Projects in government buildings/ public facilities</b>	<b>Expenditure of projects (\$m)</b>
Solar energy	Kwai Chung Preliminary Treatment Works, Ma Tin Sewage Pumping Station, Lung Tin Sewage Pumping Station, Wang Chau Stormwater Pumping Station, Siu Ho Wan Sewage Treatment Works, Sha Tin Sewage Treatment Works and Tai Po Sewage Treatment Works	30
	Stonecutters Island Sewage Treatment Works	10
	Hoi Ha Wan Marine Park Visitor Centre, Tai Mo Shan Country Park Visitor Centre and Aberdeen Tree Centre	7.5
	Hong Kong Wetland Park	4.5
		Total : 88

2. The project cost for each project is capped at \$30 million.

3. In “Hong Kong’s Climate Action Plan 2030+” published by the Government in January last year, the Government pointed out that we would take the lead in further promoting the development of RE where technically and financially feasible in order to achieve the policy objective of addressing climate change. The public sector will spearhead the application of RE on a wider and larger scale in the years ahead based on mature and commercially available technologies. We will also create the conditions to encourage the private sector to consider adopting RE.

As nearly half of the \$200 million funding earmarked in 2017-18 has been granted, and many departments are actively considering developing RE installations, we have decided to set aside another \$800 million in 2018-19, bringing the total earmarked fund to \$1 billion for more departments to develop RE.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB201**

**(Question Serial No. 0663)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Hong Kong people are increasingly concerned about the light pollution problem. As recommended by the Task Force on External Lighting, the Government has launched the Charter on External Lighting (the Charter) to encourage owners of external lighting installations to switch off their external lighting installations during the preset time. In this connection, would the Government inform this Committee of the following:

1. What were the public's complaints about nuisance caused by external lighting received by the Government in each of the past 5 years?
2. What is the current number of installation owners or responsible persons who have participated in the Charter? What is the number of installations involved?
3. What was the number of installation owners or responsible persons who were removed from the list in the Charter for failing to switch off their lighting installations according to the time set by the Charter in the past 5 years?
4. What was the Government's expenditure on public education and publicity in the past 5 years for launching the Charter? What is the budget for 2018-19?
5. The Government will conduct a review of the Charter in 2018-19. What are the details of the review? When is it expected to be completed?

Asked by: Hon LAU Ip-keung, Kenneth (Member Question No. (LegCo use): 24)

Reply:

1. The numbers of complaints about external lighting received by the Environmental Protection Department in the past 5 years are as follows:

Year	2013	2014	2015	2016	2017
No. of complaints	259	229	256	335	355

2. The Environment Bureau (ENB) launched the Charter on External Lighting (the Charter) in April 2016. As at the end of February 2018, over 4 800 participants from different sectors, including property development, building management, hotels and catering, retail, banking, laundry, travel and cinemas, as well as schools, public utilities and non-governmental organisations, have signed up to the Charter. Since there is a great variety of external lighting installations, including decorative lights made up of multiple lamps or illuminated signboards, etc., it is difficult to devise a uniform standard for counting the number of installations. Therefore, we do not mandate the Charter participants to provide such figures.

3. In 2017, we arranged site visits to all the Charter participants to check if the lighting installations had indeed been switched off during the preset time as pledged. When non-compliance cases were found, we would remind the concerned participants to adhere to their pledge to switch off the relevant lighting during the preset time. If these participants were still found not to have followed the advice to switch off the lighting during the preset time, we would remove their names from the list of participants of the Charter. After site visits and follow-up, 99% of the participants have fulfilled their pledge to switch off the lighting. We have also removed the names of 52 participants who could not fulfill the requirement.

4. From the launch of the Charter in April 2016 to end February 2018, the ENB's expenditure on public education and publicity on the Charter was about \$2.9 million. The estimated expenditure is about \$1.5 million in 2018-19.

5. In 2018-19, the Government will conduct a review of the Charter and assess its effectiveness, including the conduct of survey on public opinion of light nuisance, their response to the Charter, and how the business establishments respond to complaints from the public, etc. The Government will also study the overseas regimes and experiences in regulating external lighting, and assess whether those benchmarks and practices are applicable to Hong Kong. With reference to the outcome of the assessment, we will consider the next stage of work and whether there is a need for legislation. The Government is making preparatory arrangements for the review, and therefore there is no detailed information on the completion date yet.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB202**

**(Question Serial No. 2407)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

To reinforce the drive to install renewable energy (RE) installations at government buildings, venues and community facilities, the Government will increase the relevant funding reserved from \$200 million to \$1 billion for application by government bureaux and departments. Upon completion of all RE projects, the total annual electricity generated is estimated to be over 6 million kilowatt-hours. In this connection, please advise on the following:

Of the \$200 million funding reserved in 2017-18, what was the amount of funding allocated? What were the RE projects completed with such funding? What were the costs, installed capacity, estimated and actual annual power generation and estimated payback period of each project?

Apart from the completed projects mentioned above, what projects are under preparation? What are the costs, installed capacity, estimated annual power generation and estimated payback period of these projects?

How did the Administration come up with the estimate that “upon completion of all RE projects, the total annual electricity generated is estimated to be over 6 million kilowatt-hours”? Is this estimate based on actual project planning or assumptions? If it is based on assumptions, please explain in detail what the assumptions are (for example, assumptions of the power of solar panels that can be installed with every \$100,000, and assumptions of the power generation efficiency) and why such assumptions are adopted.

What are the relevant application and assessment procedures for government bureaux and departments to install RE installations with the reserved funding? What conditions must the applications meet for them to be approved (for example, a certain level that the power generation efficiency must reach, or the duration that the payback period must not exceed)?

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.14)

Reply:

The Government has reserved funding for provision of renewable energy (RE) installation at government buildings and venues, as well as community facilities etc. since the financial year 2017-18. The projects for which the reserved funding has been approved are as follows:

<b>Project</b>	<b>Reserved funding (\$ million)</b>	<b>Estimated installed capacity (kW)</b>	<b>Estimated annual power generation (kWh)</b>
Installation of an additional combined heat and power generation system and re-installation of an electricity distribution network at Tai Po Sewage Treatment Works	29.8	630.0	2 000 000
Installation of an additional mini-turbine at Yuen Long Sewage Treatment Works	6.2	60.0	180 000
Provision of a grid-connected solar energy system at Stonecutters Island Sewage Treatment Works	10.0	100.0	73 000
Provision of solar energy systems at some rainwater and sewage treatment facilities	30.0	300.0	284 700
Installation of solar energy systems at Hoi Ha Wan Marine Park Visitor Centre, Tai Mo Shan Country Park Visitor Centre and Aberdeen Tree Centre	7.5	37.5	4 500
Installation of a solar energy system at the Hong Kong Wetland Park	4.5	22.5	2 700

The above projects are expected to be completed between 2019-20 and 2021-22, so there is no record on power generation at present. As for other projects under planning, as individual project proposals are being considered by the relevant policy bureaux and government departments, details of these projects are not yet available at this stage.

As regards the estimated payback period, we would like to point out that payback period is not the only criterion for evaluating the effectiveness of RE systems. Some unquantifiable values, e.g. reduced reliance on the use of fossil fuels for power generation and less pollution caused to the environment, and the demonstrative effects of the systems, etc., have not been taken into account. Under such circumstances, the duration of the payback period may not accurately reflect the actual benefits of the systems. Moreover, the actual power generation of RE systems such as solar PV panels may vary with the weather, daylight condition of the district, as well as the specific installation details such as the tilting of PV panels, while the actual reduction in energy cost due to installation of solar water heating system also depends on the utilisation and operation patterns of the buildings, which will lead to a discrepancy in estimation of the payback period.

On the estimation of power generation, in view of the development projects which can be supported by the funding left, the need to reserve funds for subsequent maintenance, and the assumption that all projects in future are solar energy systems (one of our assumptions is that all solar energy systems use mono-crystalline PV panels with a conversion rate of about 17%; cogeneration and biogas projects are suitable for consideration by just a few departments and should not be used as a basis of estimation.), it is envisaged that the minimum annual output of all RE projects is over 6 million kWh.

Departments will submit their plan on the proposed projects covering project costs, location and estimated power generation, etc.. The Environment Bureau and the Electrical and Mechanical Services Department will consider such issues as the power generation potentials, costs and the demonstration effect of the projects when processing applications for various projects.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB203**

**(Question Serial No. 2408)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding deepening energy saving in existing buildings in Hong Kong through “4Ts” partnership:

Please list by type of organisation (for example, private developer, private property management company, public organisation and non-profit making organisation) the number of organisations that have participated in the dialogue platform of the ‘4Ts’ partnership so far, the total energy consumption of such participating organisations in 2017;

According to the “Deepening Energy Saving in Existing Buildings in Hong Kong through ‘4Ts’ Partnership” published by the Environment Bureau in June 2017, the central building services installation of the top 1 % commercial buildings (about 400 buildings) uses about 11 % of the total electricity consumed in the commercial sector. What is the percentage of buildings participating in the dialogue platform of the “4Ts” partnership among the 400 buildings?

What are the work details, expenditure and manpower involved for the dialogue platform of the “4Ts” partnership in 2017-18?

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.15)

Reply:

The Environment Bureau published “the Energy Saving Plan for the Built Environment 2015~2025+” in 2015, which sets a target of reducing energy intensity by 40 per cent by 2025 using 2005 as the base. To promote green building, the Environment Bureau has established a dialogue platform and invited built environment stakeholders to participate and share their experiences and measures in energy saving through the 4Ts framework (target, timeline, transparency and togetherness). Participants in the dialogue platform of the “4Ts” partnership include 17 developers, builders or property management companies, 3

public utility companies, 14 hotel groups, 5 public organisations, 3 professional bodies or business organisations from the property development sector, 1 non-profit-making organisation and 1 organisation which fosters sustainable development of 8 tertiary institutions.

Among the 400 commercial buildings mentioned in the question, about 230 commercial buildings are properties under the “4Ts” partnership. The Bureau does not have data of the total energy consumption of all properties under the participants of the “4Ts” partnership. According to the data provided by the “4Ts” participants, the overall electricity saving of the relevant companies and organisations from 2015 to 2020 is estimated to be around 5%, and the estimated total electricity saving is about 230 million kWh.

In 2017-18, the Government continues to promote energy saving measures, such as retro-commissioning, through the “4Ts” partnership. As the relevant work is handled by existing manpower, there is no breakdown on the expenditure and manpower involved.

- End -



**CONTROLLING OFFICER'S REPLY****ENB204****(Question Serial No. 2409)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

According to the Hong Kong's Climate Action Plan 2030+, starting from April 2017, the target of electricity consumption powered by renewable energy (RE) in new schools and educational buildings will be upgraded from 1% to 1.5%. In this connection, please inform this Committee of the following:

What was the percentage of new schools and educational buildings with RE power generation installations in the past year in the total number of new schools and educational buildings? Please set out in the following table the details of the RE installation projects in new schools and educational buildings in the past year:

Names of buildings	Content of projects	Locations of the RE installations	Years of service	Cost	Installed capacity	Total electricity generated from the completion date to the end of 2017	The average electricity generated in a year	The estimated payback period

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.16)

Reply:

The details of the renewable energy (RE) projects completed by the Architectural Services Department at new schools and educational buildings in the past year are set out as follows:

Names of buildings	Content of projects	Locations of the RE installations	Years of service	Cost	Installed capacity (kW)	Total electricity generated from the completion date to the end of 2017*	The average electricity generated in a year (kWh)*
Tung Wah Group of Hospitals Ma Kam Chan Memorial Primary School (Area 36, Fanling)	Photovoltaic system	Rooftop	3 <sup>rd</sup> quarter of 2017	\$490,000	8	As there is no record on the electricity generated, such information is not available.	5,200
A school for social development for girls at Choi Hing Road, Kwun Tong, Kowloon	Photovoltaic system and solar water heating system	Rooftop	Completed in the 3 <sup>rd</sup> quarter of 2017 and partially commissioned	\$910,000	7		6,000
Two special schools at Sung On Street, To Kwa Wan	Photovoltaic system and solar water heating system	Rooftop	Completed in the 4 <sup>th</sup> quarter of 2017 and currently under commissioning	\$570,000	13		6,200

\*The figure denotes the estimation of annual power generation made during the design stage of the RE projects.

As regards the estimated payback period, we would like to point out that payback period is not the only criterion for evaluating the effectiveness of RE systems. Some unquantifiable values, e.g. reduced reliance on the use of fossil fuels for power generation and less pollution caused to the environment, and the demonstrative effects of the system, etc., have not been taken into account. Under such circumstances, the duration of the payback period may not accurately reflect the actual benefits of the systems. Moreover, the actual power generation of RE systems such as solar PV panels may vary with the weather, daylight condition of the district, as well as the specific installation details such as the tilting of PV panels, while the actual reduction in tariff due to installation of solar water heating system also depends on the utilisation and operation patterns of the buildings, which will lead to a discrepancy in estimation of the payback period.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB205**

**(Question Serial No. 1566)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

According to a survey, light pollution is serious at night in urban areas such as Mong Kok, Tsim Sha Tsui, Hung Hom, etc. The light pollution caused by many large spotlights of advertising signs, hotels and shops causes nuisance to the life of nearby residents, affecting the public's physical and mental health. In this connection, would the Government inform this Committee of the following:

1. What was the public expenditure used by the Administration in total and allocated for various districts for light pollution control and related measures in the past 3 years?
2. What was the number of complaint cases received by the Environmental Protection Department (EPD) about nuisance caused by external lighting in the past 3 years? What is the number of cases that have been followed up? And
3. Has the Administration recorded figures of hospitalisation and related medical expenses caused by light pollution in the past year? If yes, what are the details? If no, what are the reasons?
4. Has the Government deployed resources or co-ordinated with the Hospital Authority to study the impact of light pollution on health and related medical costs before? If yes, what are the details? If not, will the Government plan to do so in future? If not, what are the reasons?

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use): 33)

Reply:

Regarding parts (1) and (2) of the question, the statistics on the complaints about external lighting received by the Environmental Protection Department (EPD) in the past 3 years are shown in the table below. The complaints handling is undertaken by the existing staff of the EPD. As the staff members concerned have other responsibilities, we do not have a separate breakdown of the resources involved for the above work.

Year	2015	2016	2017
No. of complaints	256	335	355

As nearly 40% of the complaints involved lighting installations for safety, security and operational purposes, they were not covered by the Charter on External Lighting (the Charter).

Upon receipt of complaints about light nuisance caused by external lighting, EPD would relay the complainants' concerns and requests to the persons responsible for the lighting installations in question, and advise them to refer to the Guidelines on Industry Best Practices for External Lighting Installations and take appropriate measures to minimise the impact of the lighting installations on the residents in the vicinity. Most of the persons responsible for the lighting installations would, upon receipt of complaints, adopt measures to minimise light nuisance as far as practicable. EPD will follow up on the complaints with existing staff.

Regarding parts (3) and (4) of the question, the Task Force on External Lighting stated in its report submitted to the Government in April 2015 that research studies conducted in different countries so far have not come to any conclusive view on any direct relationship between light exposure and health problems.

On the other hand, the Hospital Authority (HA) has not kept statistical record on hospitalisation and related medical cases caused by light nuisance. The Government and HA have also not conducted study on the impact of light nuisance on health and relevant healthcare service needs.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB206**

**(Question Serial No. 2548)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (000) Operational Expenses

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

It is stated in the Policy Address that the Government has pledged to reduce carbon intensity and to further promote the development of renewable energy (RE), and that the Government is discussing the Feed-in Tariff and the Renewable Energy Certificates Schemes with the power companies. As reflected in the government accounts in the Budget, the increase of \$11,424,000 (15%) in the 2018-19 revised estimate of the Environment Bureau is mainly due to the increased provision for the 5-year Development Plan Review under the Scheme of Control Agreements. Would the Bureau tell us what are the estimated expenditure and manpower arrangement for studying the development of RE in Hong Kong? What are the specific details and estimated effectiveness of the new measures?

Asked by: Hon LIAO Cheung-kong, Martin (Member Question No. (LegCo use): 50)

Reply:

The increased provision is mainly used for the 5-year Development Plan Review under the Scheme of Control Agreements. We will make use of existing manpower to conduct studies and promote renewable energy.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB207**

**(Question Serial No. 0449)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the implementation of the third phase of the Mandatory Energy Efficiency Labelling Scheme (MEELS), televisions, electric storage water heaters, induction cookers, washing machines, etc. will be incorporated into the scheme. The Government estimates that the potential annual energy saving is around 150 million kilowatt-hours (kWh), and the potential annual reduction of carbon dioxide emissions is over 100 000 tonnes. In this connection, would the Government advise this Committee on the following:

1. Regarding the implementation of the third phase of the MEELS, what is the current progress? What are the manpower and expenditure involved in implementing such measure in 2018-19?
2. What measures does the Administration have to speed up the implementation of labelling of energy efficient products? For example, will it consider providing incentives through the two power companies to encourage the public to save energy and reduce emissions? If yes, what are the details? If not, why not?
3. Will the Administration consider incorporating some of the appliances and equipment under the Voluntary Energy Efficiency Labelling Scheme into the MEELS? If yes, when will the study commence and what are the estimated resources involved?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 28)

Reply:

The Government introduced the Energy Efficiency (Labelling of Products) Ordinance (Amendment of Schedules) Order 2018 to the Legislative Council (LegCo) according to the negative vetting procedure on 24 January 2018. After completion of the relevant procedures, the Government will publish the commencement notices of all relevant Amendment Orders in the Gazette and table the commencement notices to LegCo for scrutiny and passage. Taking into account the relevant procedures involved, we envisage that the third phase of the Mandatory Energy Efficiency Labelling Scheme (MEELS) would

commence in mid-2018 at the earliest. The Electrical and Mechanical Services Department (EMSD) will implement the third phase of MEELS with its existing manpower and resources.

The Environment Bureau (ENB) and EMSD are committed to promoting MEELS and have conducted publicity and promotion to consumers and the trades through different channels, including websites, Announcements in the Public Interest (APIs) on television and radio, school talks, exhibitions, trade talks, outreach to retail outlets, and publication of articles and updates in magazines and journals. ENB and EMSD will continue to carry out publicity activities.

The power companies play an important role in further promoting energy saving. Under the Scheme of Control Agreements (SCAs) which will take effect in October 2018 and January 2019 respectively, the two power companies will introduce measures and provide incentives to encourage the public to save energy and reduce emission. We are now in discussion with the power companies and plan to report details of the relevant energy saving measures under the SCAs to the LegCo in due course.

According to the “Energy Saving Plan for Hong Kong’s Built Environment 2015~2025+”, the Government plans to conduct 2 further reviews on MEELS by end 2025 to include more types of products and further promote energy saving. When considering products for inclusion in MEELS, ENB and EMSD will take into account various factors, including overseas experiences, international test standards, testing laboratories, estimated power consumption of the relevant products, potential energy savings, and stakeholders’ views, etc. EMSD has started to consider products that may be included in the next phase of MEELS in early 2018, including some of the appliances and equipment under the Voluntary Energy Efficiency Labelling Scheme. The relevant work will be absorbed with the existing manpower and resources of EMSD.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB208**

**(Question Serial No. 2479)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Administration mentions in the Matters Requiring Special Attention in 2018-19 that it will continue to promote public awareness of energy efficiency and conservation measures, and promote the wider application of renewable energy. What indicators has the Government set? What are the measures to promote the above work?

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 54)

Reply:

Regarding energy efficiency and conservation measures, the Environment Bureau and the Electrical and Mechanical Services Department (EMSD) will continue to run the Energy Saving for All Campaign in 2018-19 to promote energy saving in all sectors to combat climate change.

To promote the use of energy-efficient building installations and development of renewable energy (RE) for a low-carbon future, the Budget has proposed that the capital expenditure on these installations can be fully deducted from tax in the first year of purchase, instead of 5 years as currently stipulated.

Regarding RE, starting from the financial year 2017-18, the Government has earmarked \$200 million for the provision of RE installations at existing government buildings, venues and community facilities, etc. \$88 million of the earmarked funding has been approved for the provision of RE installations at various government venues. Since about half of the earmarked funding has been approved, while many departments are actively considering the development of RE installations, we have decided to set aside another \$800 million in 2018-19, bringing the total earmarked fund to \$1 billion for more departments to develop RE.

In addition, the EMSD plans to provide professional support on RE development to the private sector, including the provision of relevant information, guidance notes and



guidelines, etc. on RE through “HK RE Net” ([re.emsd.gov.hk](http://re.emsd.gov.hk)), as well as running a hotline to answer enquires on setting up of RE installations from and provide technical advice to private organisations and the public.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB209**

**(Question Serial No. 1786)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the measures to promote green buildings, what are the details of the plan or idea, the manpower or work arrangements, the estimated expenditure and the estimated effectiveness?

Asked by: Hon YICK Chi-ming, Frankie (Member Question No. (LegCo use): 46)

Reply:

The Government is committed to promoting green buildings. Regarding existing government buildings, we have set the target of 5% reduction in the electricity consumption of government buildings in the financial years from 2015-16 to 2019-20, under comparable operating conditions in the financial year 2013-14. In this connection, we have completed energy audits on about 350 government buildings and earmarked at least \$600 million for the gradual implementation of energy saving projects for these buildings. The relevant work is undertaken by the existing staff of the Electrical and Mechanical Services Department and Architectural Services Department.

In addition, to enhance building energy saving, the Government will tighten the statutory requirements on building energy efficiency, including undertaking a review on the Building Energy Code every 3 years. To further encourage energy efficiency and conservation in private buildings, we have proposed an enhanced tax incentive for using energy efficient building installations that help outperform the statutory standards and meet specified energy efficiency benchmarks. The capital expenditure concerned can be fully deducted in 1 year instead of the current time frame of 5 years. We will also continue to promote retro-commissioning and other energy saving measures to promote green buildings. The relevant work will be undertaken by existing staff.

- End -

**CONTROLLING OFFICER'S REPLY****ENB210****(Question Serial No. 3705)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

Under this Programme, the Government stated that there will be a net increase of 47 posts in 2018-19. Would the Government inform this Committee of the respective post titles, functions and estimated full-year expenditure on salaries of the aforesaid 47 new posts?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 202)Reply:

Details of the 47 posts are tabulated below:

Area of work	Rank	Number of posts	Annual provision (\$ million)
New posts created			
To monitor and patrol country park enclaves	Field Officer II	2	1.8
	Field Assistant	5	
To prepare for the setting up of a marine park for the Three Runway System Project	Fishery Officer	1	0.7
To strengthen education and publicity services provided by Hong Kong Wetland Park	Field Officer I	2	2.1
	Field Officer II	4	
To take forward new nature conservation and biodiversity initiatives	Senior Forestry Officer	4	18.9
	Forestry Officer	8	
	Senior Field Officer	2	
	Field Officer I	8	
	Field Officer II	8	
To strengthen the management of wild pigs	Forestry Officer	1	1.9
	Field Officer II	2	
	Field Assistant	3	

Offset by			
Lapse of time-limited posts for the enhancement of regulatory control in ivory trade	Field Officer I	-1	-1.1
	Field Officer II	-2	
<b>Net change</b>		<b>47</b>	<b>24.3</b>

- End -

**CONTROLLING OFFICER'S REPLY****ENB211****(Question Serial No. 3706)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

Would the Government inform this Committee of the following:

- (a) What were the respective numbers of monkeys in Kam Shan Country Park, Lion Rock Country Park and Shing Mun Country Park in each year over 2015-17?
- (b) What were the numbers of complaints received by the Department about nuisances caused to the public by monkeys over each of the past 3 years?
- (c) What were the numbers of monkeys caught by the Government over each of the past 3 years?
- (d) What were the operational expenses involved in the management of monkeys over each of the past 3 years?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 203)Reply:

The number of monkeys in Kam Shan, Lion Rock and Shing Mun Country Parks was maintained at about 1 800 in total over the past 3 years. As the scope of activities of most of the monkeys covers more than 1 country park, the respective numbers of monkeys in the above country parks are not available. The number of complaints received about monkey nuisance, the number of monkeys captured and the expenditure involved in the management of monkeys during the same period are tabulated as follows:

Financial year	2015-16	2016-17	2017-18
Number of monkeys captured	532	472	310 (up to January 2018)
Number of complaints about monkey nuisance	513	527	317 (up to January 2018)
Expenditure involved (\$ million)	5.0	4.2	4.8 (revised estimate)

- End -

**CONTROLLING OFFICER'S REPLY****ENB212****(Question Serial No. 3761)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (000) Operational expensesProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

Would the Government advise this Committee on the numbers of sightings of Green Turtles in Hong Kong each year since 2012? What were the numbers of eggs laid in Hong Kong each year? What were the numbers of eggs successfully hatched? Has the Government adopted any measures to attract Green Turtles to re-visit Hong Kong? If yes, what are the details? If not, what are the reasons for not adopting measures to attract Green Turtles to re-visit Hong Kong?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 259)Reply:

The sandy beach at Sham Wan, Lamma Island is the only regular nesting site of green turtles in Hong Kong. The number of sightings of green turtles and the number of eggs laid and hatched over the past 5 years are tabulated as follows:

<b>Calendar year</b>	<b>Number of sightings</b>	<b>Number of eggs laid</b>	<b>Number of eggs hatched</b>
2013	4	No nesting record	-
2014	7	No nesting record	-
2015	5	No nesting record	-
2016	5	About 130	0
2017	4	No nesting record	-

Green turtles return to their nesting sites once every several years. In order to minimise disturbance to green turtles including their nests and eggs, the sandy beach at Sham Wan was gazetted as a Restricted Area under the Wild Animals Protection Ordinance (Cap.170) in 1999. Access to the area is restricted during the period from 1 June to 31 October each year.

During the restricted period, patrols will be conducted to control unauthorised access/activities and to monitor the nesting activities of green turtles. Before the onset of the nesting season each year, the Agriculture, Fisheries and Conservation Department (AFCD) will carry out conservation management on the nesting site including removal of climbing plants and refuse. AFCD will also arrange for contractors to survey and remove ghost nets in Sham Wan bay as necessary.

- End -

**CONTROLLING OFFICER'S REPLY****ENB213****(Question Serial No. 3765)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (000) Operational expensesProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

What was the overall abundance of Chinese white dolphins (CWDs) in the 4 waters where they were mainly sighted, namely Southwest Lantau, West Lantau, Northwest Lantau and Northeast Lantau over the past 3 years? Has the Government assessed whether the reclamation project carried out for the construction of the Airport's third runway has affected and led to a decrease in the abundance of CWDs? What is the effectiveness of setting up the Brothers Marine Park? Besides, what is the present progress of designation of the proposed marine parks at Southwest Lantau and Soko Islands respectively?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 263)Reply:

The estimated abundance of Chinese white dolphins (CWDs) in Southwest Lantau, West Lantau, Northwest Lantau and Northeast Lantau over the past 3 years is tabulated as follows:

Calendar year	Abundance				
	Southwest Lantau	West Lantau	Northwest Lantau	Northeast Lantau	Total
2015	24	31	10	0	65
2016	9	27	11	0	47
2017	(Data being analysed)				

Under the proposed Expansion of the Hong Kong International Airport into a Three-Runway System project, the project proponent is required to carry out a comprehensive environmental monitoring and audit (EM&A) programme which includes systematic surveys on CWDs in Southwest Lantau, West Lantau, Northwest Lantau and Northeast Lantau waters. Action and limit levels and an event action plan for CWDs have also been formulated and devised to audit the environmental performance of the waters concerned. The monitoring results of the EM&A programme so far did not exceed the



action or limit levels nor triggered the event action plan for CWDs. There was thus no indication that the project has resulted in a decline of dolphin occurrence.

Management measures implemented at The Brothers Marine Park (BMP), including restrictions on vessel speed, control of fishing activities, and regulation of recreational activities, would help enhance fisheries resources and improve the habitat of marine life (including CWDs). A passive acoustic monitoring initiated in 2017 on the spatial and temporal patterns of CWDs in BMP confirmed that although dolphins were seldom sighted in BMP during the daytime, they did regularly occur there at night, albeit at a low level probably attributed to the effects of construction activities. Once short-term disturbance associated with construction activities is over, it is expected that dolphins will return to their previous occurrence hotspots such as the waters of the Brothers Islands.

Regarding the proposed Southwest Lantau Marine Park (SWLMP), the Government has prepared the draft map and published the required notice in the gazette on 23 June 2017, with the aim of designating SWLMP within 2018. In addition, the Government proposes to combine the proposed Soko Islands Marine Park and the proposed marine park for the Integrated Waste Management Facilities Phase 1 into one single marine park of approximately 2 000 hectares in order to facilitate more effective management and operation of the marine park in the future. This approach will facilitate the future management and operation of the marine park. We aim to designate the proposed marine park in 2019.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB214**

**(Question Serial No. 5668)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

- (a) Please advise on the details of the provision for the Hong Kong Biodiversity Education Centre in 2018-19.
- (b) Please advise on the expenditure on organic fertiliser among the total expenditure on fertiliser involved in producing seedlings in the 2018-19 Estimates.
- (c) Please advise on the Agriculture, Fisheries and Conservation Department (AFCD)'s expenditures involved on the promotion of public education and publicity on nature conservation over the past 5 years, as well as AFCD's estimated expenditure on the same aspects in 2018-19.
- (d) What were AFCD's expenditures on the management, maintenance and improvement of facilities in country parks, special areas, marine parks and marine reserves over the past 5 years, as well as AFCD's estimated expenditure on the same aspects in 2018-19?
- (e) Over the past 5 years, what were the expenditures incurred by AFCD on collecting refuse in country parks? What was the total volume of refuse collected by AFCD? What were the numbers of prosecutions initiated by AFCD for littering in country parks? What is the estimated expenditure to be incurred by AFCD in 2018-19 for education and publicity on protection of country parks and its details?
- (f) What were AFCD's specific expenditures involved in the study of country park extension in Hong Kong over the past 5 years?
- (g) What is AFCD's specific expenditure involved in the study of country park extension in Hong Kong in 2018-19?

- (h) What is AFCD's specific expenditure involved in the study of excising part of the country parks in Hong Kong for housing development in 2018-19?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 199)

Reply:

- (a) In 2018-19, the Agriculture, Fisheries and Conservation Department (AFCD) has earmarked \$4.2 million for the management and operation of the Woodside Biodiversity Education Centre. This includes expenditure on educational programmes, cleansing, security, building maintenance and staff cost.
- (b) The provision earmarked for the purchase of fertilisers for seedling production in 2018-19 is \$35,000, of which \$24,000 will be used on organic fertilisers.
- (c) The expenditure on education and publicity on nature conservation over the past 5 years and the provision earmarked for 2018-19 are tabulated below:

<b>Financial year</b>	<b>Expenditure (\$ million)</b>
2013-14	41
2014-15	43
2015-16	41
2016-17	50
2017-18 (revised estimate)	71
2018-19 (estimate)	70

- (d) The expenditure involved in the management, maintenance and improvement of facilities in country parks, special areas, marine parks and marine reserve over the past 5 years and the estimated expenditure in 2018-19 are tabulated below:

<b>Financial year</b>	<b>Expenditure (\$ million)</b>
2013-14	164
2014-15	174
2015-16	178
2016-17	194
2017-18 (revised estimate)	192
2018-19 (estimate)	219

- (e) The expenditure on keeping country parks clean and the volume of refuse collected in country parks over the 5 years are tabulated below:

<b>Financial year</b>	<b>Expenditure (\$ million)</b>	<b>Volume (tonnes)</b>
2013-14	41	3 700
2014-15	46	3 800
2015-16	54	3 600
2016-17	48	3 500
2017-18 (revised estimate)	53	3 300

Over the past 5 years, the number of prosecutions related to littering under the Country Parks and Special Areas Regulations (Cap. 208A) is tabulated below:

<b>Calendar year</b>	<b>Number of prosecutions</b>
2013	200
2014	126
2015	135
2016	61
2017	62

AFCD will conduct a series of education and publicity programmes on protection and promotion of country parks for students and the general public. These programmes include school visits, eco-tours, teacher's training, guided tours at visitor centres and education centres, thematic exhibition, educational workshops, public lectures and public engagement programmes such as nature ambassador scheme and volunteer scheme. A provision of \$27.2 million has been earmarked in 2018-19 for this area of work.

- (f) - (g) The assessment on the suitability of sites for country park extension forms part of AFCD's work in the planning and management of country parks. There is no separate breakdown on the manpower and expenditure involved.
- (h) AFCD has no plan to conduct any study of excising part of country parks in Hong Kong and no expenditure will be involved in 2018-19.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB215**

**(Question Serial No. 5707)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the management of country parks,

- (a) Please advise on the expenditures of the Agriculture, Fisheries and Conservation Department (AFCD) on the promotion of public education and publicity on nature conservation over the past 3 years, as well as AFCD's estimated expenditure on the same aspects in 2018-19.
- (b) What were AFCD's expenditures involved in the management, maintenance and improvement of facilities in country parks, special areas, marine parks and marine reserves over the past 3 years, as well as AFCD's estimated expenditure on the same aspects in 2018-19?
- (c) Over the past 3 years, what were the expenditures incurred by AFCD on collecting refuse in country parks? What was the total volume of refuse collected in country parks? What was the total volume of refuse collected on hiking trails in country parks? What were the numbers of prosecutions initiated by AFCD for littering in country parks? What is the estimated expenditure to be incurred by AFCD in 2018-19 for education and publicity on protection of country parks and its details?
- (d) AFCD has removed all 500 odd litter bins from hiking trails of country parks since mid-December 2017. Has the Department deployed staff to inspect the hygiene conditions of hiking trails in the first two months of 2018? If yes, what are the details? During the same period, has the Department deployed staff to collect refuse on hiking trails? If yes, what are the details? What was the total volume of refuse collected? If the Department has no plan to deploy staff to collect litter on hiking trails, what policy does the Department have in place to cope with littering upon removal of litter bins?

- (e) Please provide details, locations, expenditures involved, dates of commencement and completion of all projects approved under the minor recreational facilities and roadworks projects in country parks over the last 3 years.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 238)

Reply:

- (a) The expenditure of the Agriculture, Fisheries and Conservation Department (AFCD) on education and publicity on nature conservation over the past 3 years and the provision earmarked for 2018-19 are tabulated below.

<b>Financial year</b>	<b>Expenditure (\$ million)</b>
2015-16	41
2016-17	50
2017-18 (revised estimate)	71
2018-19 (estimate)	70

- (b) The expenditure of AFCD on the management, maintenance and improvement of facilities in country parks, special areas, marine parks and marine reserve over the past 3 years and the estimated expenditure in 2018-19 are tabulated below.

<b>Financial year</b>	<b>Expenditure (\$ million)</b>
2015-16	178
2016-17	194
2017-18 (revised estimate)	192
2018-19 (estimate)	219

- (c) The expenditure on keeping country parks clean and the volume of refuse collected in country parks by AFCD over the 3 years are tabulated below.

<b>Financial year</b>	<b>Expenditure (\$ million)</b>	<b>Volume (tonnes)</b>
2015-16	54	3 600
2016-17	48	3 500
2017-18 (revised estimate)	53	3 300

AFCD does not have a separate breakdown on the amount of refuse collected on hiking trails.

Over the past 3 years, the number of prosecutions related to littering under the Country Parks and Special Areas Regulations (Cap. 208A) is tabulated below.

<b>Calendar year</b>	<b>Number of prosecutions</b>
2015	135
2016	61
2017	62

AFCD will conduct a series of education and publicity programmes on protection and promotion of country parks for students and the general public. These programmes include school visits, eco-tours, teacher's training, guided tours at visitor centres and education centres, thematic exhibition, educational workshops, public lectures and public engagement programmes such as nature ambassador scheme and volunteer scheme. A provision of \$27.2 million has been earmarked in 2018-19 for this area of work.

- (d) AFCD is committed to keeping and promoting a clean environment in country parks. To step up the promotion efforts, AFCD has launched the "Take Your Litter Home" public education programme since September 2015 to encourage the public to take away their waste after their visits to country parks with a view to nurturing among them a sense of responsibility towards nature. To tie in with the publicity and education activities, refuse containers and recycle bins along the hiking trails within country parks have been progressively removed in late 2017. AFCD will maintain the cleaning service to upkeep the cleanliness of country parks. In addition, AFCD will continue with the education and publicity efforts to cultivate the green concept of waste reduction. AFCD will also step up patrol and cleaning, and take law enforcement action when necessary. By AFCD's observations, the general cleanliness and hygiene conditions of the hiking trails are well maintained in the first 2 months of 2018. AFCD does not have a separate breakdown on the amount of refuse collected on hiking trails.

- (e) Details of the improvement works carried out by AFCD in country parks over the past 3 years are tabulated below.

<b>Works item<sup>#</sup> / Financial year</b>	<b>2015-16 (\$ million)</b>	<b>2016-17 (\$ million)</b>	<b>2017-18 (revised estimate) (\$ million)</b>
Upgrading of hiking trails and related facilities (e.g. fencing, waymarks, etc) in various country parks	3.3	3.7	3.4
Construction of mountain bike trails in Tai Lam Country Park	0.7	1.3	0.7
Reconstruction of forest tracks in various country parks	0.9	3.3	3.7
Improvement of visitor centres and interpretation panels in various country park	3.3	4.5	2.7
Reconstruction of rainshelters in various country parks	0.7	3.2	1.9

<b>Works item<sup>#</sup> / Financial year</b>	<b>2015-16 (\$ million)</b>	<b>2016-17 (\$ million)</b>	<b>2017-18 (revised estimate) (\$ million)</b>
Provision of a star gazing site near Sai Wan, in Sai Kung East Country Park	-	0.2	0.1
Improvement of septic tank system of public toilets in various country park	-	1.8	-
Others (e.g. minor structures, outdoor furniture, minor slope works, etc.)	1.5	1.5	1.6
<b>Total<sup>*</sup></b>	<b>10.4</b>	<b>19.5</b>	<b>14.1</b>

<sup>#</sup> Except for the project “Provision of a Star Gazing Site near Sai Wan, in Sai Kung East Country Park” which will be continued in 2018-19, all the above minor improvement works (including the construction of mountain bike trails by sections in Tai Lam Country Park) were commenced and completed within the same financial year.

<sup>\*</sup> The improvement works include both the works recorded under the block vote for minor recreational facilities and roadworks (subhead 610) and works (subhead 600) which was also used for improvement works carried out by AFCD in country parks.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB216**

**(Question Serial No. 3905)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

In view of the frequent illegal felling of Incense Trees in Hong Kong in recent years, does the Agriculture, Fisheries and Conservation Department have any plan to conduct a territory-wide survey on Incense Trees? What measures will be taken to prevent the illegal tree-felling from deteriorating? What is the estimated expenditure on the work in the coming year?

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 4013)

Reply:

Incense Tree is a native tree species found in mature woodlands behind rural villages and lowland forests in many country parks. The Agriculture, Fisheries and Conservation Department (AFCD) has been conducting surveys and studies over the years to gather information on the distribution of local plant species, including Incense Tree. However, there is practical difficulty in conducting a specific territory-wide population survey on this species due to its widespread distribution and difficulty of access. To tackle this difficulty, AFCD is conducting a trial using a drone-based hyperspectral imaging system to survey Incense Trees.

In recent years, AFCD has strengthened its efforts on various fronts to protect Incense Trees from illegal felling. These measures include:

- (a) establishment of a special task force to conduct targeted patrol of sites at which important populations of Incense Tree are present, in addition to conducting regular patrols in country parks and special areas;
- (b) working closely with the Hong Kong Police Force (the Police) in the following aspects: gathering and exchange of intelligence, conducting joint operations at black spots and investigation of illegal tree felling cases, and enhancing the awareness and

vigilance of the public about such offences through the Police Magazine television programme as well as other education and publicity programmes;

- (c) enhancing liaison and cooperation with the concern groups and the villagers living nearby Incense Trees for intelligence gathering and encouraging reports of any illegal felling activities;
- (d) installation of tree guards to prevent felling or vandalism of important individuals of Incense Tree;
- (e) conducting a field trial on the use of infrared sensor camera trap for monitoring of Incense Trees in the countryside;
- (f) wound-dressing for the damaged trees with anti-fungal paint to suppress the formation of agarwood in order to discourage illegal harvesting;
- (g) assisting in organising training sessions to help frontline staff of the Police and the Customs and Excise Department to identify Incense Trees/agarwood and detect illegal activities; and
- (h) launching a pilot scheme to deploy quarantine detector dogs to facilitate detection of agarwood smuggling at the land control borders.

Besides, AFCD has stepped up the planting of Incense Trees extensively in country parks over the past few years. Since 2009, about 10 000 seedlings of Incense Trees have been produced and planted every year to assist in the re-stocking of Incense Trees in Hong Kong. A species-specific action plan for Incense Tree is also being formulated for the long-term conservation of the species. The action plan will include various studies and activities to conserve this native species and enhance public awareness.

In 2018-19, AFCD will continue to implement the measures mentioned above. The resources involved will be absorbed in the allocation for nature conservation and the management of country parks, which has included an additional provision of \$8.3 million for strengthening the conservation of Incense Trees.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB217**

**(Question Serial No. 3907)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

At present, it is very difficult for the disabled to use the country park facilities as most of the paths and facilities are not disabled-friendly. Please provide the following information:

- (a) Please set out in detail the existing barrier-free status of country parks, including the names of the country parks, the districts in which they are located, the barrier-free facilities available, country trails, and names of the dams.
- (b) Please set out in detail the country parks where barrier-free facilities are not yet available.
- (c) Is there any government policy to facilitate the development of barrier-free country parks for persons with disabilities and those in need?

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 4017)

Reply:

- (a) Barrier-free facilities in the country parks and their respective locations are listed in the Annex.
- (b) Barrier-free facilities are not yet available in the Lam Tsuen Country Park, Plover Cove (Extension) Country Park, Lantau North Country Park, Lantau North (Extension) Country Park, Kiu Tsui Country Park and Shek O Country Park.
- (c) In order to enhance the accessibility of country park facilities and services for persons with disabilities, the Agriculture, Fisheries and Conservation Department (AFCD) has implemented various measures including upgrading or providing barrier-free facilities in existing or new premises, as well as undertaking retrofitting programmes (such as

the construction of ramps and installation of handrails along the footpaths to accessible toilets). Officers in charge of the country park venues and facilities are also appointed as Access Officers by AFCD to facilitate the implementation of accessibility measures and provision of services for persons with disabilities. AFCD will maintain communication with the relevant stakeholders to collect their views on barrier-free trails and facilities in country parks.

Barrier-free facilities/Facilities with barrier-free design	Country parks/Other areas	Site / Venue / Location
Barbecue Sites	Sai Kung West Country Park	Pak Tam Chung Physically Handicapped and Able-Bodied (P.H.A.B.) Site
		Tai Mong Tsai No. 4 Barbecue Site
	Sai Kung East Country Park	Wong Shek No. 1 Barbecue Site
	Clear Water Bay Country Park	Tai Hang Tun Barbecue Site
	Ma On Shan Country Park	Ma On Shan Barbecue Site
		Nai Chung Barbecue Site
	Shing Mun Country Park	Shing Mun No. 4 Barbecue Site
		Shing Mun No. 5 Barbecue Site
	Tai Mo Shan Country Park	Rotary Barbecue Site
	Tai Lam Country Park	Shek Kong No. 3 Barbecue Site
		Shek Kong No. 10 Barbecue Site
		Shek Kong No. 11 Barbecue Site
		Chuen Lung No. 2 Barbecue Site
		Tai Tong No. 1 Barbecue Site
		Sham Tseng Barbecue Site
	Pat Sin Leng Country Park	Hok Tau No. 6 Barbecue Site
	Aberdeen Country Park	Aberdeen Physically Handicapped and Able-Bodied (P.H.A.B.) Site
	Tai Tam Country Park	Tai Tam No. 2 Barbecue Site
		Tai Tam Tuk No. 4 Barbecue Site
Picnic Sites	Tsiu Hang Special Area	Lions Nature Education Centre
	Shing Mun Country Park	Shing Mun No. 6 Picnic Site
		Shing Mun No. 10 Picnic Site
Visitor Centres	Sai Kung West Country Park	Sai Kung Country Park Visitor Centre
	Clear Water Bay Country Park	Clear Water Bay Country Park Visitor Centre
	Tai Mo Shan Country Park	Tai Mo Shan Country Park Visitor Centre
	Aberdeen Country Park	Aberdeen Tree Centre
	Tsiu Hang Special Area	Lions Nature Education Centre
	Hong Kong Wetland Park	Hong Kong Wetland Park Visitor Centre
	Other Areas Outside Country Park	Woodside Biodiversity Education Centre
		Ngong Ping Nature Centre
		Hong Kong UNESCO Global Geopark Volcano Discovery Centre
Toilets	52 numbers at various locations within country parks and special areas	Hong Kong Wetland Park Other locations of the toilets could be downloaded from our departmental website: <a href="http://www.afcd.gov.hk/english/country/cou_vis/cou_vis_rec/cou_vis_dis.html">http://www.afcd.gov.hk/english/country/cou_vis/cou_vis_rec/cou_vis_dis.html</a>

- End -

**CONTROLLING OFFICER'S REPLY****ENB218****(Question Serial No. 3979)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

Please provide the number of toilets in various country parks over the territory and the total number as well as the number and proportion of barrier-free toilets installed.

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 7208)Reply:

There are 64 flushing toilets in country parks and special areas. 52 of them ( i.e. 81% ) are provided with barrier-free cubicles. The distribution of flushing toilets in various country parks and special areas is tabulated below:

Country parks / Special areas	Number of flushing toilets	Number of flushing toilets with barrier-free cubicles
Aberdeen Country Park	1	1
Clear Water Bay Country Park	2	2
Kam Shan Country Park	1	1
Lantau North Country Park	1	1
Lantau South Country Park	1	1
Lion Rock Country Park	1	0
Lung Fu Shan Country Park	1	0
Ma On Shan Country Park	3	3
Pat Sin Leng Country Park	7	6
Plover Cove Country Park	2	2
Pok Fu Lam Country Park	1	0
Sai Kung East Country Park	5	2
Sai Kung West Country Park	8	7
Sai Kung West Country Park (Wan Tsai Extension)	2	2

<b>Country parks / Special areas</b>	<b>Number of flushing toilets</b>	<b>Number of flushing toilets with barrier-free cubicles</b>
Shing Mun Country Park	4	4
Tai Lam Country Park	5	5
Tai Mo Shan Country Park	2	2
Tai Tam Country Park	3	2
Tai Tam (Quarry Bay Extension) Country Park	2	2
Hong Kong Wetland Park (Special Area)	8	6
Tai Po Kau Nature Reserve (Special Area)	1	0
Tsiu Hang (Special Area)	3	3
Total	64	52

Besides flushing toilets, the Agriculture, Fisheries and Conservation Department has provided 116 hired portable toilets (of which 7 are barrier-free portable toilets) and 47 dry toilet pits at remote locations lacking supplies of water and electricity to meet the needs of country parks users.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB219**

**(Question Serial No. 4680)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

What policy does the Government have in place to facilitate drivers with disabilities to access the country park areas with a view to resolving the problem of lack of public transport for them to access the park areas? Please set out the application procedures for permits to access country parks for drivers with disabilities.

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 4018)

Reply:

In order to enhance the accessibility of country park facilities and services for persons with disabilities, the Agriculture, Fisheries and Conservation Department (AFCD) has implemented various measures including upgrading or providing barrier-free facilities in existing or new premises, as well as undertaking retrofitting programmes (such as construction of ramps and installation of handrails along footpaths to accessible toilets, etc.). Most of these barrier-free facilities/premises are either directly accessible by taxi and point-to-point rebus or connected to nearby car parks by accessible ramps with handrails. In some places (such as the Lions Nature Education Centre in the Tsiu Hang Special Area and the Hong Kong Wetland Park), designated parking spaces for persons with disabilities are provided.

According to the Country Parks and Special Areas Regulations (Cap. 208A), it is required to apply for a permit in advance for bringing a vehicle into a country park or a special area. The relevant application procedures and guidelines are published on AFCD's website. Applications will be assessed against the established guidelines and considered on their individual merits.

- End -



**CONTROLLING OFFICER'S REPLY****ENB220****(Question Serial No. 4359)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (000) Operational expenses

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

**Question:**

How did the Government enhance public awareness towards nature conservation over the past 3 years? What were the expenditures involved? Besides, has the Government ever enforced legislation related to nature conservation? What are the details of the enforcement work?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 358)

**Reply:**

Over the past 3 years, the Agriculture, Fisheries and Conservation Department (AFCD) conducted a series of education and publicity programmes on conservation and appreciation of nature for students and the general public. These programmes included school visits, eco-tours, teacher's training, guided tours at visitor centres and education centres, thematic exhibition, educational workshops, competitions, public lectures and public engagement programmes such as nature ambassador scheme and volunteer scheme. To publicise the programmes and promote appreciation of nature, AFCD also organised roving exhibitions, published leaflets and posters, and maintained thematic websites, mobile applications and social media platforms, etc.

In 2017, AFCD organised a series of nature appreciation, public engagement and educational activities under the Country Parks 40<sup>th</sup> Anniversary Celebration Programme, including tree planting events, guided tours, hiking and camping events, trail maintenance workshops and public lectures. AFCD also partnered with 40 organisations in the "Hong Kong Biodiversity Festival 2017" to organise more than 100 educational activities, and hosted an art exhibition at the city centre to promote Hong Kong's rich biodiversity.

The expenditure involved in promoting public awareness towards nature conservation over the past 3 years is tabulated as follows:

<b>Financial year</b>	<b>Expenditure (\$ million)</b>
2015-16	41
2016-17	50
2017-18 (revised estimate)	71

AFCD enforces legislation relevant to nature conservation, including the Forests and Countryside Ordinance (Cap. 96), the Wild Animals Protection Ordinance (Cap. 170), the Country Parks and Special Areas Regulations (Cap. 208A) and the Marine Parks and Marine Reserves Regulation (Cap. 476A). The total numbers of prosecutions initiated under the above legislation in 2015-16, 2016-17 and 2017-18 (up to February 2018) are 852, 932 and 674 respectively.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB221**

**(Question Serial No. 4360)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (000) Operational expenses

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

What were the details of the promotion of public education and publicity on nature conservation by the Government over the past 3 years? What were the details of the manpower and expenditure involved?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 359)

Reply:

Over the past 3 years, the Agriculture, Fisheries and Conservation Department (AFCD) has conducted a series of education and publicity programmes on conservation and appreciation of nature for students and the general public. These programmes included school visits, eco-tours, teacher's training, guided tours at visitor centres and education centres, thematic exhibition, educational workshops, competitions, public lectures and public engagement programmes such as nature ambassador scheme and volunteer scheme. To publicise the programmes and promote appreciation of nature, AFCD has organised roving exhibitions, published leaflets and posters, and maintained thematic websites, mobile applications and social media platforms, etc.

In 2017, AFCD organised a series of nature appreciation, public engagement and educational activities under the Country Parks 40<sup>th</sup> Anniversary Celebration Programme, including tree planting events, guided tours, hiking and camping events, trail maintenance workshops and public lectures. AFCD also partnered with 40 organisations in the "Hong Kong Biodiversity Festival 2017" to organise more than 100 educational activities, and hosted an art exhibition at the city centre to promote Hong Kong's rich biodiversity.

The manpower and expenditure involved in education and publicity on nature conservation over the past 3 years are tabulated as follows:

<b>Financial year</b>	<b>Manpower (Number of staff)</b>	<b>Expenditure (\$ million)</b>
2015-16	74	41
2016-17	81	50
2017-18 (revised estimate)	79	71

- End -

**CONTROLLING OFFICER'S REPLY****ENB222****(Question Serial No. 4361)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (000) Operational expensesProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

What were the details of the Government's work on the promotion of geo-conservation over the past 3 years? What were the details of the manpower and expenditures involved?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 360)Reply:

Over the past 3 years, the Agriculture, Fisheries and Conservation Department has conducted the following publicity and education activities for the promotion and popularisation of geo-conservation: (a) production of multilingual science publications and electronic books for visitors; (b) overseas promotion through the international platforms of the Global Geoparks Network; (c) upgrading the skills of the geopark guides through the Geopark Guide System in conjunction with non-governmental organisations; (d) training of tour operators, local communities and other stakeholders of the geopark; (e) science popularisation programme for students through the Geopark School Programme and its facebook page; (f) collaboration with local communities to set up and operate education and visitor centres, including the Volcano Discovery Centre; and (g) maintaining thematic website and other social media platforms of the geopark.

The expenditure and manpower involved in these areas of work over the past 3 years are tabulated as follows:

<b>Financial year</b>	<b>Expenditure (\$ million)</b>	<b>Manpower (Number of staff)</b>
2015-16	8.0	21
2016-17	8.0	23
2017-18 (revised estimate)	8.0	24

- End -

**CONTROLLING OFFICER'S REPLY****ENB223****(Question Serial No. 4373)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

The Department procured a patrol vessel in 2013-14. What was the utilisation situation of the patrol vessel concerned over the past 3 years? What were the expenditures on the manpower, maintenance and other related expenses involved?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 401)Reply:

The patrol vessel procured in 2013-14 is mainly deployed for patrol and law enforcement in marine parks and marine reserve. 2 or more staff are required to man the vessel, depending on the specific tasks on the day of operation.

The utilisation rate, maintenance cost and fuel expenditure of the subject vessel over the past 3 years are tabulated as follows:

<b>Financial year</b>	<b>Utilisation rate (day)</b>	<b>Maintenance cost (\$)</b>	<b>Fuel expenditure (\$)</b>
2015-16	236	125,000	89,000
2016-17	192	100,000	95,000
2017-18 (revised estimate)	166*	100,000	90,000

\* up to the end of February 2018

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB224**

**(Question Serial No. 6040)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Please provide a detailed breakdown of the following information for the past 5 years:

- (a) The numbers of operations carried out by the wild pig hunting teams, the operation areas, the numbers of wild pigs killed, the numbers of members of the wild pig hunting teams, their salaries and other expenditures, as well as the numbers of wild pig occurrences reported in the 18 districts and the numbers of injuries and deaths caused by wild pigs.
- (b) On the other hand, does the Agriculture, Fisheries and Conservation Department have the statistics on the number of wild pigs across the territory? If yes, what are the numbers in the respective districts? If not, what are the reasons?

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 204)

Reply:

- (a) In general, upon receipt of reports about wild pigs that were injured, trapped in urban areas or causing nuisances by straying into residential areas, the Agriculture, Fisheries and Conservation Department (AFCD) will deploy staff to attend to the scene. AFCD's veterinary officers will also be deployed to the scene to assist in catching the wild pigs with tranquiliser dart guns as necessary. The wild pigs caught will be released in remote and suitable locations in the countryside, including country parks, if circumstances warrant.

In addition, there are 2 wild pig hunting teams (the hunting teams) in Hong Kong, formed by a maximum of 20 civilian volunteers each, which are responsible for wild pig hunting operations. No expenditure of the AFCD is incurred. Only when there are confirmed public reports of damage caused by wild pigs or they are threatening human safety and property on a frequent basis, and that the preventive and other kinds of measures are not effective will AFCD notify the hunting teams to conduct hunting

operations. AFCD is conducting a comprehensive review of the strategies and measures for the management of wild pigs. As a result, hunting operations have been suspended since 2017 until completion of the review, and all cases in relation to wild pigs are currently attended to by AFCD officers on the scene.

The numbers of hunting operations carried out and the wild pigs caught by the hunting teams over the past 5 years are tabulated as follows:

Financial year	Number of hunting operations / wild pigs caught		
	New Territories	Hong Kong Island and other outlying islands	Total
2013-14	63/28	10/10	73/38
2014-15	27/15	4/6	31/21
2015-16	48/30	5/18	53/48
2016-17	39/19	10/15	49/34
2017-18 (up to February 2018)	0/0	0/0	0/0

The numbers of complaints on wild pigs received by AFCD (by district) over the past 5 years are tabulated as follows:

District	Financial year				
	2013-14	2014-15	2015-16	2016-17	2017-18*
Hong Kong Island and other outlying islands	114	160	222	255	308
Kowloon	13	25	35	56	24
New Territories	160	211	253	332	321
<b>Total</b>	<b>287</b>	<b>396</b>	<b>510</b>	<b>643</b>	<b>653</b>

\* Up to January 2018

Over the past 5 years, there was no human death caused by wild pigs in Hong Kong. The number of injury cases caused by wild pigs is tabulated as follows:

Financial year	Number of injury cases
2013-14	1
2014-15	0
2015-16	0
2016-17	2
2017-18 (Up to January 2018)	4

- (b) AFCD does not have the statistics on the number of wild pigs across the territory due the technical difficulty to compile, given that wild pigs are generally solitary or in small group, secretive, very widespread, and have large home range. In the past, wild pigs were mostly recorded in the New Territories. AFCD's infrared camera surveys have revealed that wild pigs are now found on Hong Kong Island, in Kowloon and on outlying islands as well.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB225**

**(Question Serial No. 5527)**

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): ( )

Programme: (7) Management of Construction and Demolition Materials

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for the Environment

Question:

It is stated that the Bureau will ensure good management and beneficial re-use of inert construction and demolition materials. Would the Government advise this Committee:

The estimated amount of public fill to be received at public fill reception facilities in 2018 will be 13.7 million tonnes, more or less the same as that of the previous year, but it is stated in the paper that the Department will co-ordinate the supply of public fill to the reclamation works of the Three-Runway System project and the Tung Chung New Town Extension project for beneficial re-use. Why will there be no reduction in the amount of public fill to be delivered to public fill reception facilities?

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 54)

Reply:

While both the Three-Runway System project and Tung Chung New Town Extension project will start receiving public fill in the second half of 2018 for beneficial reuse in reclamation, the required public fill will mainly come from the fill materials that have been sorted and stored at the public fill banks. The amount of public fill received at the public fill reception facilities depends on the actual activities of construction works in the year concerned. The amount of public fill to be received at the public fill reception facilities in 2018 is anticipated to be 13.7 million tonnes, comparable to last year's figure.

- End -

**CONTROLLING OFFICER'S REPLY****ENB226****(Question Serial No. 5164)**Head: (39) Drainage Services DepartmentSubhead (No. & title): Not specifiedProgramme: (2) Sewage ServicesControlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)Director of Bureau: Secretary for the EnvironmentQuestion:

Some sewage treatment works projects, such as the two sewage treatment and disposal facilities at Yung Shue Wan and Sok Kwu Wan on Lamma Island and upgrading of Pillar Point Sewage Treatment Works, adopt the "Design-Build-Operate" approach, in which the design, construction and operation are undertaken by the contractor. Please advise this Committee on the Government's actual annual expenditure over the past three years and estimates for 2018-19 on the sewage treatment services in the territory. Please provide the breakdown and details of such expenditure.

Year	Expenditure (HK\$)	Breakdown and details of expenditure	Sewage treatment works
2015-16 (Actual)			
2016-17 (Actual)			
2017-18 (Actual)			
2018-19 (Estimate)			

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 558)Reply:

The Government's annual expenditure over the past three years and estimates for 2018-19 on the sewage treatment services in the territory are as follows:

Year	Expenditure (HK\$ million)	Breakdown and details of expenditure	Sewage treatment works
2015-16 (Actual)	1,293	Departmental expenses (including electricity charges, chemicals, supplies and equipment, maintenance materials, contract maintenance, transportation and other departmental expenses, etc.), personal emoluments and personnel related expenses	Various sewage treatment facilities and pumping stations in the territory
2016-17 (Actual)	1,462		
2017-18 (Revised estimate)	1,488		
2018-19 (Estimate)	1,528		

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB227**

**(Question Serial No. 5353)**

Head: (39) Drainage Services Department

Subhead (No. & title): Not specified

Programme: (2) Sewage Services

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for the Environment

Question:

“Continue with the provision of professional advice and support to the development of cross-boundary infrastructure and priority infrastructure projects” is stated under Matters Requiring Special Attention in the Estimates of the Drainage Services Department (DSD) for the second consecutive year. In this connection, please advise:

- the cross-boundary infrastructure involving DSD last year and in the coming year;
- the definition and effect of “priority” in “priority infrastructure projects”; whether “priority” is set by sequence; levels other than “priority”; how DSD is notified that the projects are prioritised; the specific department or bureau which categorises a project as “priority”; how DSD will deal with the case where there are two priority projects at the same time;
- the “priority infrastructure projects” undertaken by DSD last year and in the coming year?

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 316)

Reply:

- The cross-boundary infrastructure involving DSD last year and in the coming year includes Liantang/Heung Yuen Wai Boundary Control Point and associated works, as well as Hong Kong-Zhuhai-Macao Bridge.
- Priority infrastructure projects mainly refer to certain large-scale or urgent works, such as Tuen Mun – Chek Lap Kok Link and Tung Chung New Town Extension project. DSD will provide the bureaux undertaking the infrastructure projects with professional advice and support on the sewerage systems as well as sewage treatment and disposal facilities of these projects.
- The priority infrastructure projects last year and in the coming year include Tuen Mun - Chek Lap Kok Link and Tung Chung New Town Extension project.

- End -

**CONTROLLING OFFICER'S REPLY****ENB228****(Question Serial No. 5671)**Head: (42) Electrical and Mechanical Services DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (3) Energy Efficiency and Conservation, and Alternative EnergyControlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)Director of Bureau: Secretary for the EnvironmentQuestion:

1. With regard to the renewable energy projects undertaken for the Government and public bodies, please provide information in accordance with the format below:

	Government Departments/ Public Bodies	Buildings/ Facilities Involved	Electricity and Cost Saving	Reduction in Carbon Emission
2015				
2016				
2017				

2. With regard to the energy-saving projects undertaken for the Government and public bodies, please provide information in accordance with the format below:

	Government Departments/ Public Bodies	Buildings/ Facilities Involved	Electricity and Cost Saving	Reduction in Carbon Emission
2015				
2016				
2017				

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 202)Reply:

In promoting the application of renewable energy (RE) and energy-saving projects, the Government follows the Technical Circular on "Green Government Buildings" in incorporating RE and energy-saving facilities in the public works projects or venues concerned where technically feasible and cost effective, having regard to the actual site conditions. As these RE projects are funded by the provision for individual capital works

projects, there is no need for the Electrical and Mechanical Services Department (EMSD) to allocate separate resources for their implementation.

To promote energy saving in buildings, the Government has taken the lead in setting a target of 5% saving in the electricity consumption in government buildings from financial year 2015-16 to 2019-20 under comparable operating conditions, using the electricity consumption in 2013-14 as the baseline. In this connection, the EMSD has completed energy audits for about 350 existing major government buildings. Starting from financial year 2017-18, the Government has earmarked funding of at least 600 million for implementing energy-saving projects recommended by the energy audits. In financial year 2017-18, funding of 150 million was allocated to the EMSD for conducting energy-saving projects for various government departments, including the retrofitting of more energy-efficient lighting and control systems, light emitting diode lights and floodlights, and more energy-efficient air-conditioning and control systems, etc. A breakdown is given in the table below.

	Government Departments	Buildings/ Facilities Involved	Electricity Saving#	Reduction in Carbon Emission
2017-18	Correctional Services Department, Department of Health, Electrical and Mechanical Services Department, Fire Services Department, Government Laboratory, Government Property Agency, Hong Kong Police Force, Immigration Department, Judiciary, and Marine Department.	Correctional institutions, prisons, reception centres, laboratories, clinics, departmental headquarters, fire stations ambulance depots, training centres, government offices, police stations, control points, court buildings, and ferry terminals.	About 5.8 million kWh (estimated)	About 4 060 tonnes (estimated)

# Note: The EMSD does not collect information on the electricity cost of individual government departments.

- End -

**CONTROLLING OFFICER'S REPLY****ENB229****(Question Serial No. 6366)**Head: (42) Electrical and Mechanical Services DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (1) Energy Supply; Electrical, Gas and Nuclear SafetyControlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)Director of Bureau: Secretary for the EnvironmentQuestion:

What are the respective numbers of electrical incidents reported to the Electrical and Mechanical Services Department in the past 5 years? What is the expenditure of the Electrical and Mechanical Services Department in 2018-19 for checking and repairing the electricity facilities in Hong Kong?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 201)Reply:

The respective numbers of electrical incidents reported to the Electrical and Mechanical Services Department (EMSD) in the past 5 years are as follows:

<b>Year</b>	<b>Number of Electrical Incidents</b>
2017	378
2016	427
2015	361
2014	401
2013	359

The checking and repairing works of electricity facilities are carried out by their owners but not by the EMSD. As for the electricity facilities owned by the Government, the checking and repairing works are undertaken by the relevant departments. The EMSD does not have the expenditure figure involved.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB230**

**(Question Serial No. 5286)**

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (000) Operational expenses

Programme: (3) Energy Efficiency and Conservation, and Alternative Energy

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for the Environment

Question:

The operational expenses of the Electrical and Mechanical Services Department in 2018-19 will be increased by about \$82 million over the previous year. Of which, how much will be spent on Phases IIIB and IIIC of the district cooling system project at the Kai Tak Development?

Asked by: Hon YEUNG Alvin (Member Question No. (LegCo use): 17)

Reply:

The increase of about \$82 million in the operational expenses of the Electrical and Mechanical Services Department (EMSD) in 2018-19 over the previous year is mainly due to the net increase of 64 posts in 2018-19, increased provision for filling of vacancies and day-to-day operating expenses of the portions of the district cooling system at the Kai Tak Development which have been completed by stages. The works under Phases IIIB and IIIC of the district cooling system project at the Kai Tak Development are classified as capital works projects. The expenditure of such works is funded under Subhead 5045CG of the Capital Works Reserve Fund and is not included in the operational expenses of the EMSD (Head 42).

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB231**

**(Question Serial No. 3637)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

In the Matters Requiring Special Attention in 2018-2019 under this Programme, the Administration mentions that it will continue to implement the South East New Territories Landfill Extension Scheme and the North East New Territories Landfill Extension Scheme and to carry out the design and site investigation study on the West New Territories Landfill Extension Scheme. Will the Administration advise this Committee on the following:

1. What are the operational expenses, the staff establishment and the estimated annual expenditure on the salary for the above work for 2018-2019?
2. What are the operational expenses, the staff establishment and the estimated annual expenditure on the salary of the Landfills and Development Group under the Environmental Protection Department for 2018-2019 respectively?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 76)

Reply:

1. We are progressively implementing the South East New Territories Landfill Extension Scheme and the North East New Territories Landfill Extension Scheme, and carrying out the design and site investigation study on the West New Territories Landfill Extension Scheme. The estimated expenditure on the design, study work and advance works of the relevant extension schemes in 2018-19 is \$158 million in total. The above work is mainly carried out by the Environmental Infrastructure Division of the Environmental Protection Department (EPD). We do not have separate breakdown on the manpower resources involved in individual tasks.
2. The Landfills and Development Group (LDG) of the Environmental Infrastructure Division of EPD is mainly responsible for managing the 3 existing strategic landfills,

implementing the extension schemes and other work relating to the landfills (including implementation of district liaison work, local betterment works and the Construction Waste Disposal Charging Scheme, etc.). It is estimated that 71 staff members at various levels in the LDG are involved in 2018-19, and the operational expenditure involved (including salary and other recurrent expenditure) is about \$53.89 million.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB232**

**(Question Serial No. 3712)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

In August last year, a vessel fully loaded with palm stearin collided with another vessel. The collision led to spillage of a huge quantity of palm stearin, which seriously polluted the Hong Kong waters. At that time, the Under Secretary for the Environment mentioned that all departments involved in cleaning up the palm stearin were required to record the manpower and resources deployed in the clean-up operation to facilitate subsequent compilation of statistics and submission of claims. In this connection, would the Administration advise this Committee on the total expenditure of various departments for cleaning up the palm stearin and the quantity of palm stearin collected?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 209)

Reply:

During the incident of palm stearin spillage in August 2017, a number of government departments, including the Marine Department, the Agriculture, Fisheries and Conservation Department, the Food and Environmental Hygiene Department and the Leisure and Cultural Services Department, participated in the cleaning up of the palm stearin on the sea surface and that washed ashore. A total of about 214 tonnes of palm stearin was collected. The Marine Department is currently seeking the Department of Justice's advice on the recovery of Government's expenses incurred in cleaning up the palm stearin. The relevant specific details cannot be provided at this stage.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB233**

**(Question Serial No. 5318)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding promotion of environmental protection by government departments, would the Government advise this Committee on the following for the past 5 years:

1. the amount of paper procured by government departments in each year, among which the amount and percentage of recycled paper, as well as the respective amount of expenditure;
2. the expenditure for green procurement of various types of materials, and its percentage in the total material cost;
3. the main countries from which the environmental products procured were imported;
4. the measures government departments have to take the lead in promoting environmental protection.

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 60)

Reply:

1. The details of the A3 and A4 paper procured by the Government Logistics Department for government bureaux /departments in the past 5 years were as follows:

Contract period	Item	Estimated contracted quantity (Ream <sup>#</sup> )	Contract amount (HK \$)
1 April 2013 to 31 March 2015	A. Woodfree paper*		
	A3	19 500	760,500.00
	A4	1 065 000	20,554,500.00
	B. Recycled paper		
	A3	69 000	2,967,000.00
	A4	2 930 000	62,995,000.00
1 April 2015 to 31 May 2017	A. Woodfree paper*		
	A3	23 000	887,800.00
	A4	1 146 306	22,123,705.80
	B. Recycled paper		
	A3	73 000	2,876,200.00
	A4	2 951 038	58,135,448.60
26 May 2017 to 25 May 2019	A. Woodfree paper*		
	A3	20 000	600,000.00
	A4	990 000	14,850,000.00
	B. Recycled paper		
	A3	84 000	2,814,000.00
	A4	3 289 000	54,926,300.00

<sup>#</sup> There are 500 pieces of paper in one ream.

\* The paper pulp of the woodfree paper procured is from sustainably managed forests and has no recycled content.

2. The expenditures of government departments on green procurement in 2017 are still being compiled. The expenditures from 2013 to 2016 by categories are tabulated below:

Materials	Expenditure (\$)			
	2013	2014	2015	2016
Agriculture and horticulture	-	-	244,000	6,200,000
Building and construction supplies	2,038,000	2,756,000	2,217,000	9,405,000
Cleansing products	2,780,000	4,745,000	4,616,000	12,779,000
Computer equipment and products	77,118,000	100,836,000	132,549,000	65,524,000
Distilled water	-	-	78,000	437,000
Electrical and gas appliances and light fittings	33,775,000	35,363,000	23,786,000	68,122,000
Fuel oils and hydrocarbon lubricants	58,584,000	532,551,000	55,550,000	200,634,000
Furniture	11,797,000	42,834,000	16,728,000	27,621,000
General stores and general services	-	-	65,000	1,086,000
Household goods	1,146,000	5,222,000	6,912,000	4,982,000
Office equipment	5,934,000	8,984,000	7,733,000	10,894,000
Packaging materials	-	-	224,000	1,870,000
Paper for printing and photocopying	125,291,000	37,639,000	113,411,000	25,989,000
Paper products other than for printing and photocopying	31,716,000	28,392,000	31,234,000	30,062,000
Plastic and rubber products	30,628,000	23,205,000	31,074,000	21,688,000
Printing and publishing supplies	1,964,000	3,082,000	1,156,000	2,351,000
Shoes and boots	3,085,000	3,474,000	5,910,000	19,085,000

Materials	Expenditure (\$)			
	2013	2014	2015	2016
Stationery and office supplies	95,064,000	102,708,000	113,194,000	132,309,000
Telecommunication equipment and spares	2,925,000	19,745,000	35,324,000	16,157,000
Textile materials and garment	67,011,000	104,051,000	80,505,000	104,581,000
Transportation services	-	-	5,235,000	172,342,000
Vehicles and spare parts	489,468,000	465,381,000	326,891,000	191,636,000
Water using equipment	-	-	227,000	2,003,000
Total	1,040,324,000	1,520,968,000	994,863,000	1,127,757,000

3. The Government's procurement policy is to obtain goods and services at the best value for money through open and fair competition. We treat all tenderers equally. Suppliers from different countries are allowed to bid on an equal basis irrespective of the place of origin of the products so long as they can provide products fulfilling the green specifications. As procurement is handled by departments themselves having regard to their needs, we do not have the relevant procurement information.

4. The Government has already issued internal circulars and guidelines to require departments to adopt good practices in environmental protection, such as waste reduction and recycling, energy and carbon reduction in their daily operations and preparation for conferences, exhibitions and events, etc. Moreover, the Government has recently begun to stop the sale of plastic bottled water of one litre or less in the automatic vending machines progressively at various venues managed by government departments so as to create a social atmosphere conducive to the collaboration of different sectors and enterprises in the community to promote waste reduction at source. The Government has taken the lead to adopt green procurement. When setting out the tender specifications, government departments have to purchase green products as far as possible and where economically rational. The EPD has developed the green specifications and guidelines for the goods and services commonly used by the Government for adoption by departments to practise green procurement. The Government's green procurement list has been expanded to 150 items of products and services. To enhance the overall performance of green procurement in the Government, we have commissioned a consultancy study to further expand the Government's green procurement list to cover more products and services and update the relevant green specifications. It is expected that the study will be completed in the 4th quarter of 2019.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB234**

**(Question Serial No. 5678)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Recycling Fund launched in 2015,

- 1) What is the total amount of funding granted in each year since its implementation?
- 2) What is the current balance of the Fund?
- 3) Please set out in table form the details of the projects completed so far, including the applicants, the amount of funding, the commencement and completion dates of the projects, the project summaries, the performance indicators of the projects stated in the applications and the information on whether the performance indicators of the projects could be achieved as stated in the final reports submitted by the applicants after the completion of the projects.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 209)

Reply:

1) The Government launched the \$1 billion Recycling Fund in October 2015. As at 28 February 2018, the Advisory Committee on Recycling Fund (RFAC) has received 382 applications (of which 101 had been withdrawn before vetting by the RFAC) and approved 163 applications. Excluding the projects which have been withdrawn by some applicant organisations after their applications were approved, a total of 128 funded projects have been or will soon be commenced, involving a total funding of about \$94 million, of which 24 are under the Enterprise Support Programme (ESP), 97 are for Standard Projects and 7 are under the Industry Support Programme (ISP).

2) Apart from the operating expenses earmarked for the Secretariat of the Recycling Fund (the Secretariat) and the funds granted for the approved projects, the balance of the Fund is about \$800 million.



3) As at 28 February 2018, a total of 36 projects have been completed, including 1 under the ESP, 1 under the ISP and 34 Standard Projects. Details of which are tabulated below:

**Completed ESP project:**

Applicant Organisation	Approximate Approved Amount	Commencement Date (Month/Year)	Completion Date (Month/Year)	Project Summary
Hip Wa Environmental Recycling Company	\$830,000	1/2017	1/2018	To enhance the collection of waste paper and waste metals from community for recycling.

The performance indicators of the above project mainly include increasing the quantities of waste paper and waste metals collected, updating the company's website and commissioning a consultant to provide and map out a comprehensive production maintenance plan. The RFAC will grant the fund at the earliest after verification of the project report.

**Completed ISP project:**

Applicant Organisation	Approximate Approved Amount	Commencement Date (Month/Year)	Completion Date (Month/Year)	Project Summary
Hong Kong Quality Assurance Agency	\$ 2,200,000	7/2016	7/2017	To develop the practice note for recycling of food waste, waste cooking oil, waste textile, waste rubber tyres and waste wood and to provide training to local recycling industry.

The performance indicators of the above project mainly include development and distribution of a practice note, organising promotional activities, training courses and award ceremony. The RFAC will grant the fund at the earliest after verification of the project report.

For the 34 completed Standard Projects, 3 of them are about the plans to collect waste plastic bottles for recycling and the remaining 31 are about purchasing equipment or obtaining certification.

• **The 3 completed Standard Projects on collection of waste plastic bottles for recycling:**

Applicant Organisations	Approximate Reimbursed Amount	Commencement Date (Month/Year)	Completion Date (Month/Year)	Project Summary
Lok Sze Recycling Company	\$85,000	7/2016	4/2017	To collect waste plastic bottles from community for recycling.
Leung Fai Kee Waste Paper Company	\$67,000	7/2016	4/2017	
Fat Kee Environmental Recycling Company Limited	\$62,000	7/2016	4/2017	

The performance indicators of the above projects mainly include participation in training, environmental auditing, distribution of publicity materials, invitation of locals to participate in waste plastic bottles recycling. The RFAC is satisfied with their effectiveness and has granted the funds.

• The 31 completed Standard Projects on purchasing equipment or obtaining certification:

	Applicant Organisations	Approximate Reimbursed Amount	Commencement Date (Month/Year)	Completion Date (Month/Year)	Project Summary
1	Chung Shing Environmental Service Company	\$2,000	6/2017	9/2017	To purchase metal cages and produce banner.
2	Dunwell Industrial (Holdings) Limited	\$87,000	6/2017	10/2017	To purchase forklift truck.
3	Foo Shing Metal Paper	\$10,000	6/2017	9/2017	To purchase metal cages and pallet truck with scale.
4	Hoi Kee Plastic Material Company Limited	\$104,000	8/2017	10/2017	To purchase forklift truck.
5	Hop Shing Environmental Recycling Limited	\$150,000	6/2017	9/2017	To purchase forklift truck.
6	K&S Enterprise Company Limited	\$63,000	6/2017	8/2017	To purchase metal cages and pallet truck with scale.
7	Kwong Fat Metal Waste-paper Company	\$9,000	8/2017	8/2017	To purchase hand tools.
8	Kwong Ming Waste Paper & Metal	\$13,000	7/2017	8/2017	To purchase metal cages and weight scales with ramp.
9	Ming Kee	\$6,000	7/2017	9/2017	To purchase pallet truck.
10	On Kee (HK) Environmental Recycling Limited	\$6,000	6/2017	8/2017	To purchase metal cages, pallet truck with scale and pallet truck.
11	Shek Lun Waste Paper	\$17,000	6/2017	11/2017	To purchase metal cages and pallet truck.
12	Shing Cheong Waste Paper Company	\$29,000	7/2017	10/2017	To purchase forklift truck and electric pallet truck.
13	Wang Chun Environmental Protection Development Company	\$150,000	6/2017	11/2017	To purchase forklift truck.
14	Wong Fat Recycling Company Limited	\$16,000	6/2017	8/2017	To purchase baler.
15	Yuen Cheong Hoo	\$29,000	7/2017	11/2017	To purchase baler and pallet truck.

The performance indicator of the above projects is using the equipment purchased for recycling operation. The RFAC is satisfied with the completion of these projects and has granted the funds.

	Applicant Organisations	Approximate Approved Amount	Commencement Date (Month/Year)	Completion Date (Month/Year)	Project Summary
16	Chung Shing Environmental Service Company	\$21,000	11/2017	1/2018	To purchase metal cages and pallet truck with scale.
17	Fat Kee Environmental Recycling Company Limited	\$144,000	11/2017	1/2018	To purchase metal cages, pallet truck with scale and forklift truck.
18	HP Metal Recycling (HK) Limited	\$97,000	11/2017	2/2018	To purchase crusher.
19	Hung Tai Trading Company Limited	\$87,000	11/2017	1/2018	To purchase forklift truck.
20	Made by Mao (MBM) Limited	\$108,000	7/2017	1/2018	To purchase movable weight scale and forklift trucks.
21	Man Wah (Environmental Recycling) Holdings Limited	\$141,000	8/2017	12/2017	To purchase forklift truck.
22	New Glory Environmental Recycling Services Company	\$150,000	8/2017	2/2018	To purchase metal cages.
23	P L Environmental Limited	\$122,000	12/2016	1/2018	To join certification schemes in recycling operation and occupational safety and health (OSH) management and conduct OSH audits.
24	Ping Kee Waste-Paper Fty	\$150,000	7/2017	1/2018	To purchase metal cages and forklift truck.
25	Treeland Services Company Limited	\$150,000	6/2017	1/2018	To purchase crusher and degausser.
26	Wai Sang Waste Paper & Metal Company Limited	\$150,000	8/2017	10/2017	To purchase forklift truck and install additional devices related to OSH to truck.
27	Wing Fung Gather Metal Waste Paper	\$134,000	11/2017	12/2017	To purchase metal cages and install additional equipment and hand

					tools to truck.
28	Wing Hing Gather Metal Waste Paper	\$34,000	11/2017	1/2018	To purchase metal cages and pallet truck with scale.
29	Yee Hop Environmental Protection Limited	\$97,000	8/2017	11/2017	To purchase forklift truck and pallet trucks.
30	Yee Hop Environmental Protection Limited	\$82,000	8/2017	11/2017	To purchase forklift truck.
31	廣進廢紙五金公司 (No English name provided)	\$18,000	6/2017	11/2017	To purchase metal cages, weight scale, hand trucks and pallet truck with scale.
The above projects have applied for funding for purchasing equipment or obtaining certification. The RFAC will grant the funds at the earliest after verification of the project reports.					

- End -

**CONTROLLING OFFICER'S REPLY****ENB235****(Question Serial No. 5682)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (5) Environmental Assessment and PlanningControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

1. Please provide in table form the works projects monitored by the Environmental Protection Department (EPD) under the Environmental Impact Assessment Ordinance (EIAO), and list in detail the frequency and approach of monitoring, expenditures and numbers of staff involved in the past 5 years:

Year	Works project	Frequency of monitoring	Approach of monitoring	Expenditure involved	Number of staff involved
2013-2014					
2014-2015					
2015-2016					
2016-2017					
2017-2018					

2. Please provide in table form the works projects in contravention of the EIAO detected by EPD in regular monitoring work in the past 5 years, and list the case details, dates of detection, dates and approaches of follow-up actions and expenditure involved in detail:

Year	Works project	Case details	Date of detection	Date of follow-up action	Approach of follow-up action	Expenditure involved	Number of staff involved
2013-2014							
2014-2015							
2015-2016							
2016-2017							
2017-2018							

3. What are the specific expenditure and number of staff for enforcement of EIAO by EPD in 2018-19?

4. Please provide in table form the estimated number of follow-up actions, approach of follow-up actions, the expenditure and number of staff involved in EPD's efforts to monitor whether on-going reclamation works are in contravention of the EIAO in 2018-19:

On-going reclamation works	Estimated number of follow-up actions	Approach of follow-up actions	Expenditure involved	Number of staff involved

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 213)

Reply:

For large-scale designated projects, such as airports, railways, reclamation, major roads, etc., they are generally designated projects under the control of the Environmental Impact Assessment Ordinance (EIAO). The environmental permits (EPs) issued under the EIAO require permit holders to implement environmental monitoring and audit (EM&A) programmes; set up Environmental Teams (ETs) and appoint Independent Environmental Checkers (IECs) to monitor the environmental conditions and audit the implementation of environmental mitigation measures so as to avoid potential environmental problems arising from the projects; and submit EM&A reports to the Environmental Protection Department (EPD) on a regular basis. Apart from reviewing the EM&A reports to ensure that the specified environmental monitoring data meet the relevant standards, EPD staff also formulate appropriate inspection strategies after taking various considerations (such as works progress, conducting of relatively sensitive works procedures, environmentally sensitive factors and other pollution control ordinances, etc.) into account, and carry out surprise site inspections irregularly. EPD will also conduct on-site investigations as soon as possible upon receipt of complaints. The numbers of on-site inspections by EPD for monitoring designated projects under the EIAO in the past 5 years are set out in Annex 1.

If EPD spots malpractices during the proactive and complaints follow up inspections, EPD would warn the persons-in-charge, requiring them to strengthen their checking and monitoring, so as to take enhanced measures to prevent non-compliance incidents. If violation of the EP is suspected during our inspections, the Department will collect evidences at once and proceed with follow-up enforcement actions. As mentioned above, the ETs and IECs of the works projects are required to closely monitor the environmental conditions around the project sites, and enhance the implementation of mitigation measures upon noting any alerts on potential problems, so as to prevent non-compliance. In the past 5 years, there was no EIAO violation case identified through EPD's enforcement inspections.

As the specific expenditure and number of staff for enforcement of EIAO by EPD including inspections to monitor designated projects in the past 5 years form part of the establishment of EPD's routine integrated enforcement practices, no separate breakdown on the expenditure and manpower involved in this respect is available.

In 2018-2019, EPD will be monitoring the following on-going reclamation projects in accordance with the EIAO. EPD staff will conduct surprise inspections every month, and conduct on-site investigations upon receipt of complaints:

<b>On-going reclamation works in 2018-2019</b>
Wan Chai Development Phase II - Central-Wanchai Bypass
Hong Kong - Zhuhai - Macao Bridge Tuen Mun - Chek Lap Kok Link
Hong Kong - Zhuhai - Macao Bridge Hong Kong Boundary Crossing Facilities
Hong Kong - Zhuhai - Macao Bridge Hong Kong Link Road
Expansion of Hong Kong International Airport into a Three-Runway System
Tseung Kwan O – Lam Tin Tunnel and Associated Works
Shatin to Central Link - Hung Hom to Admiralty Section

As mentioned above, as the relevant work forms part of the establishment of EPD's routine work on integrated enforcement practices, no separate breakdown of expenditure and manpower involved in monitoring individual works categories such as reclamation works is available.

**Monitoring approach and number of on-site inspections of designated projects  
under the Environmental Impact Assessment Ordinance in 2013 to 2017**

Works project	Number of on-site inspections				
	2013	2014	2015	2016	2017
Wan Chai Development Phase II - Central-Wanchai Bypass	15	13	23	57	39
Hong Kong - Zhuhai - Macao Bridge Tuen Mun - Chek Lap Kok Link	4	12	19	25	35
Hong Kong - Zhuhai - Macao Bridge Hong Kong Boundary Crossing Facilities	14	10	8	23	28
Hong Kong - Zhuhai - Macao Bridge Hong Kong Link Road	19	17	21	20	27
Expansion of Hong Kong International Airport into a Three-Runway System	Not applicable	Not applicable	2	17	60
Hong Kong Section of Guangzhou - Shenzhen - Hong Kong Express Rail Link	65	49	39	22	37
Shatin to Central Link - Hung Hom to Admiralty Section	1	2	9	30	23
Shatin to Central Link - Tai Wai to Hung Hom Section	21	27	17	21	15
Shatin to Central Link - Mong Kok East to Hung Hom Section	4	7	20	8	5
South Island Line (East)	84	84	32	18	1
Harbour Area Treatment Scheme Stage 2A	18	10	14	10	14
Road Works at West Kowloon	3	7	8	6	8
Road Works in West Kowloon Reclamation Development Phase 1	Not applicable	Not applicable	Not applicable	19	9
Reprovisioning of FEHD Sai Yee Street Environmental Hygiene Offices-cum-vehicle Depot at Yen Ming Road, West Kowloon Reclamation Area	Not applicable	Not applicable	Not applicable	8	5
Underpass Road and Austin Road Flyover Serving the West Kowloon Cultural District	Not applicable	Not applicable	0	0	6
Liantang / Heung Yuen Wai Boundary Control Point Associated Works	0	2	1	5	19
Widening of Tolo Highway/Fanling Highway	0	1	0	4	5
New Distributor Roads Serving the Kai Tak Development	2	4	4	0	0
New Sewage Pumping Stations Serving Kai Tak Development	0	4	1	0	1
Tseung Kwan O – Lam Tin Tunnel and Associated Works	Not applicable	Not applicable	Not applicable	3	66
Trunk Road T2	Not applicable	Not applicable	Not applicable	0	0
Construction of Cycle Tracks and the associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River	Not applicable	Not applicable	Not applicable	3	6
Central Police Station Conservation and Revitalisation Project	3	8	0	3	3
1 800 MW Combined Cycle Plant at Lamma Extension	4	2	0	0	3
Additional Gas-fired Generation Units Project - Installation of one additional gas-fired generation unit (CCGT Unit No. 1) at the Black Point Power Station	Not applicable	Not applicable	Not applicable	Not applicable	4



Works project	Number of on-site inspections				
	2013	2014	2015	2016	2017
Tai Shue Wan Development at Ocean Park	Not applicable	Not applicable	1	7	7
Development of a Bathing Beach at Lung Mei, Tai Po	Not applicable	Not applicable	Not applicable	Not applicable	25
Proposed Comprehensive Development at Wo Shang Wai, Yuen Long	2	6	2	0	2
Shek Wu Hui Sewage Treatment Works - Further Expansion at Fanling North New Development Area	Not applicable	Not applicable	1	3	1
Upgrading of San Wai Sewage Treatment Works (Phase 1)	Not applicable	Not applicable	Not applicable	6	5
Tuen Mun Sewerage - Eastern Coastal Sewerage Extension	Not applicable	Not applicable	Not applicable	3	5
Organic Waste Treatment Facilities, Phase I	Not applicable	Not applicable	0	2	2
In-situ Reprovisioning of Sha Tin Water Treatment Works - South Works - Designs and Construction	Not applicable	Not applicable	Not applicable	0	0

Note: (i) Only including those major designated projects still under construction in 2017

(ii) "Not applicable" means that the project had not commenced construction

(iii) Number of on-site inspections "0" means that the individual works projects which required inspections under the EPs had not commenced or had been substantially completed (inspections under other pollution control ordinances were not recorded under this category)

- End -

**CONTROLLING OFFICER'S REPLY****ENB236****(Question Serial No. 5685)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

1. Please set out the average annual total cost of handling one tonne of municipal solid waste in the past 5 years , including the costs for waste transfer and disposal at landfills.
2. Please set out the number of plastic bags processed at local landfills since the introduction of the Environmental Levy Scheme on Plastic Shopping Bags (the Levy Scheme).
3. Please set out the specific expenditure and policy objectives of the Food Wise Hong Kong Campaign in 2018-19.
4. Please set out the budget for rolling out the Organic Resources Recovery Centres (ORRCs) in 2018-19.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 216)Reply:

1. A breakdown of the average annual costs for transfer and disposal of municipal solid waste (MSW) at landfills in the past 5 years is provided below:

<b>Year</b>	<b>Transfer of MSW (\$/tonne)</b>	<b>Disposal of MSW at landfills (\$/tonne)</b>	<b>Total cost (\$/tonne)</b>
2013-14(Actual)	199	191	390
2014-15(Actual)	204	197	401
2015-16(Actual)	193	184	377
2016-17(Actual)	196	194	390
2017-18(Projected)	200	208	408

2. The Environmental Protection Department (EPD) conducts surveys annually on the disposal of plastic shopping bags (PSBs) starting from 2009. The statistics are set out in the Annex.
3. The total estimated expenditure of the Food Wise Hong Kong Campaign is about \$6.5 million in 2018-19.

The Food Wise Hong Kong Campaign is an integral part of “A Food Waste & Yard Waste Plan for Hong Kong 2014-2022” (the Plan) unveiled in 2014. It aims to encourage the entire community, from individuals and households to commercial and industrial sectors, to avoid and reduce food waste generation and facilitate surplus food donation to charitable organisations from establishments.

The Government will continue to take forward the Food Wise Hong Kong Campaign along the above direction in 2018-19. In addition, to tie in with the commissioning of the Organic Resources Recovery Centre (ORRC) Phase 1 in 2018 where food waste generated from the commercial and industrial sectors will be treated, apart from promoting the food wise and waste less culture, we are also committed to promoting the on-site/off-site recycling of unavoidable food waste. For example, the Government will gradually install small-scale food waste composters for those schools with meals provided and suitable venues, and provide the relevant technical support and teaching materials to demonstrate how to convert unavoidable food waste to compost as well as remind students of the importance of food wise and waste less. The Environment and Conservation Fund has earmarked a funding of \$5 million to provide small-scale food waste composters for about 100 schools. The preparatory work for the new measure is underway, and it is expected to invite schools to participate in 2018-19.

4. According to the Plan, the EPD will build a network comprising 5 to 6 ORRCs. ORRC Phase 1 is located at Siu Ho Wan of Lantau Island with a daily capacity of 200 tonnes of food waste generated from the commercial and industrial sectors, which is scheduled to be commissioned in 2018. The works and operating expenditures involved in 2018-19 are \$134 million and \$39 million respectively.

## Findings of the Surveys on Disposal of PSBs: Estimated annual disposal by number of bags

	2009		2010		2011		2012		2013		2014		2015 <sup>(3)</sup>		2016	
Retail categories <sup>(1)</sup>	Million/ Year	%	Million/ Year	%	Million/ Year	%	Million/ Year	%	Million/ Year	%	Million/ Year	%	Million/ Year	%	Million/ Year	%
Supermarkets	488.22	10.44%	84.22	1.90%	75.71	1.66%	75.09	1.43%	41.24	0.89%	59.40	1.13%	54.85	1.40%	32.26	0.75%
Convenience stores	89.98	1.92%	15.33	0.34%	17.55	0.39%	15.60	0.30%	15.13	0.33%	15.54	0.30%	18.71	0.48%	35.60	0.83%
Medicare and cosmetic stores	79.14	1.69%	53.57	1.21%	53.70	1.18%	65.12	1.24%	59.91	1.30%	80.22	1.53%	27.76	0.71%	37.20	0.87%
<i>Sub-total Retail categories in the first phase</i>	<i>657.34</i>	<i>14.05%</i>	<i>153.12</i>	<i>3.45%</i>	<i>146.96</i>	<i>3.23%</i>	<i>155.81</i>	<i>2.97%</i>	<i>116.28</i>	<i>2.52%</i>	<i>155.15</i>	<i>2.96%</i>	<i>101.31</i>	<i>2.58%</i>	<i>105.06</i>	<i>2.45%</i>
Other retail categories	823.48	17.60%	890.20	20.03%	906.95	19.96%	844.26	16.09%	849.45	18.37%	914.68	17.45%	704.67	17.93%	697.71	16.24%
<i>Sub-total All retail categories</i>	<i>1 480.82</i>	<i>31.65%</i>	<i>1 043.32</i>	<i>23.48%</i>	<i>1 053.91</i>	<i>23.19%</i>	<i>1 000.07</i>	<i>19.06%</i>	<i>965.73</i>	<i>20.89%</i>	<i>1 069.84</i>	<i>20.41%</i>	<i>805.99</i>	<i>20.52%</i>	<i>802.77</i>	<i>18.69%</i>
Source unidentified <sup>(2)</sup>	3 197.71	68.35%	3 400.42	76.52%	3 490.28	76.81%	4 247.35	80.94%	3 656.58	79.11%	4 171.99	79.59%	3 124.18	79.49%	3 493.71	81.32%
<b>Total</b>	<b>4 678.53</b>	<b>100 %</b>	<b>4 443.74</b>	<b>100 %</b>	<b>4 544.19</b>	<b>100%</b>	<b>5 247.42</b>	<b>100%</b>	<b>4 622.31</b>	<b>100 %</b>	<b>5 241.82</b>	<b>100 %</b>	<b>3 930.17</b>	<b>100%</b>	<b>4 296.48</b>	<b>100%</b>

(Figures may not add up to total due to rounding off.)

## Note:

1. The first phase of the Environmental Levy Scheme on PSBs was implemented from 7 July 2009 to 31 March 2015, applicable to registered retailers, covering mainly large chain supermarkets, convenience stores and medicare and cosmetic stores. However, PSBs bearing the characteristics of supermarkets, convenience stores or medicare and cosmetic stores found in the disposal surveys might be distributed by supermarkets, convenience stores or medicare and cosmetic stores which were not registered retailers.
2. PSBs bearing no logos or signs that show their sources will be categorised as “source unidentified”.
3. Since 1 April 2015, PSB charging has been extended to cover the entire retail sector.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB237**

**(Question Serial No. 5686)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

1. Please list out the average monthly air pollution index/air quality health index of each general monitoring station and roadside monitoring station in Hong Kong in the past 5 years.
2. Please provide details of the estimated expenditure and measures for improving air quality in 2018-19.
3. Please provide details of the estimated expenditure and measures for improving air quality in 2018-19.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 217)

Reply:

1. The Environmental Protection Department (EPD) replaced the Air Pollution Index (API) previously adopted with the Air Quality Health Index (AQHI) on 30 December 2013 to provide the public with more timely and useful air quality information, so that they can properly arrange their activities as necessary to minimise the impact of air pollution on health. The AQHI is a health risk based system which reflects the short-term health risks of air quality, enabling the public to take preventive measures for safeguarding their health. As compared with the API, which is based solely on the Air Quality Objectives (AQOs), AQHI can more accurately reflect the impact of air pollution on public health. The health risk based AQHIs are reported on a scale of 1 to 10 and 10+ and are grouped into five health risk categories (The health risk category of AQHI 1-3 is classified as “low”; the health risk category of AQHI 4-6 is classified as “moderate”; the health risk category of AQHI 7 is classified as “high”; the health risk category of AQHI 8-10 is classified as “very high” and the health risk category of AQHI 10+ is classified as “serious”).

To understand the change in health risk arising from air pollution encountered by the public in the past, the monthly distribution of health risk categories recorded at different air quality monitoring stations (AQMSs) (including 3 roadside AQMSs and 13 general AQMSs) is considered to be a more useful reference than the monthly averages. Relevant data from 2014 to 2017 is tabulated at the Annex. On the whole, with significant improvement in the air quality in recent years, the health risks encountered by the public have also reduced. Compared with 2014, the total numbers of hours with the health risk categories of “high” or above (i.e. AQHI at 7 or above) recorded at the general and roadside AQMSs have dropped by about 23% and 46% respectively.

- 2 & 3. In 2018-19, the total estimated expenditure under the Air Programme is \$1.889 billion. Most of the estimated expenditure is for some non-recurrent items for improving the air quality, including the provision of ex-gratia payment to phase out pre-Euro IV diesel commercial vehicles by stages, subsidising franchised bus companies in full to conduct trials of electric buses, supporting testing of green transport technologies by the public transport sector through the Pilot Green Transport Fund, and promoting the Cleaner Production Partnership Programme. The rest of the estimated expenditure is for monitoring the air quality and implementing measures to control emissions from various air pollution sources, so as to improve the air quality. This includes expenditure for the operation and maintenance of AQMSs, deploying roadside remote sensing equipment to detect the emissions of petrol and LPG vehicles, regulating vessels to use compliant fuel while at berth in Hong Kong and preparing for legislation to require vessels to use compliant fuel within Hong Kong waters starting from 2019, reviewing the AQOs and the continuous collaboration with the Guangdong Provincial Government on the implementation of the Pearl River Delta Regional Air Quality Management Plan.

Table 1: The monthly distribution of health risk categories recorded at different monitoring stations in 2014

		Roadside Station			General Station											
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of hours														
Jan 2014	Low	15	13	57	56	126	43	52	56	69	76	57	55	108	98	166
	Moderate	435	476	493	570	564	533	560	561	550	508	522	534	565	541	456
	High	108	100	93	69	35	105	79	76	68	86	94	81	40	59	70
	Very High	175	148	94	49	19	60	50	41	45	57	71	60	14	42	40
	Serious	11	5	4	0	0	3	2	2	1	2	0	3	0	2	0
Feb 2014	Low	140	133	212	341	410	306	305	344	347	370	377	324	356	403	406
	Moderate	499	521	447	328	261	361	347	319	311	281	287	338	310	258	262
	High	8	11	2	2	0	0	0	3	2	2	4	2	0	0	0
	Very High	3	4	0	0	0	0	0	0	3	0	3	3	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar 2014	Low	62	71	136	235	340	226	213	252	264	312	317	310	299	308	311
	Moderate	589	635	575	504	404	494	523	478	470	425	418	426	440	431	424
	High	58	31	28	5	0	6	8	6	6	2	7	5	3	5	7
	Very High	26	7	2	0	0	0	0	8	4	4	2	1	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr 2014	Low	60	57	81	213	267	205	142	180	221	285	271	369	281	294	290
	Moderate	617	628	593	500	447	505	569	529	490	420	438	338	439	419	420
	High	34	26	34	2	1	5	3	5	3	6	2	3	0	3	8
	Very High	8	7	9	5	5	5	6	5	5	8	7	10	0	4	2
	Serious	1	2	3	0	0	0	0	1	0	1	2	0	0	0	0
May 2014	Low	287	390	410	578	555	539	498	569	581	610	633	615	615	570	613
	Moderate	451	354	330	166	189	205	246	175	163	134	111	129	129	174	131
	High	6	0	4	0	0	0	0	0	0	0	0	0	0	0	0
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun 2014	Low	273	439	410	570	573	540	547	524	571	567	540	585	560	566	568
	Moderate	389	247	273	124	129	158	148	166	124	116	140	96	142	129	133
	High	30	14	18	12	8	9	10	10	5	8	12	11	12	9	13
	Very High	19	16	13	8	6	10	11	12	12	20	23	16	6	12	6

	Serious	9	4	6	6	4	3	4	8	7	9	5	12	0	4	0
Jul 2014	Low	377	507	465	619	626	575	586	572	613	610	578	625	593	613	652
	Moderate	328	206	257	115	110	150	148	154	113	105	147	99	124	116	70
	High	25	18	16	3	4	13	6	11	9	15	11	12	12	9	9
	Very High	14	13	6	7	4	6	4	6	7	10	6	8	12	4	13
	Serious	0	0	0	0	0	0	0	1	2	4	2	0	3	2	0
Aug 2014	Low	416	468	478	698	699	639	671	643	673	667	651	711	659	689	688
	Moderate	319	272	263	45	44	100	72	98	67	70	88	30	80	51	55
	High	6	3	2	0	0	2	0	2	0	2	1	2	2	3	0
	Very High	2	0	0	0	0	2	0	0	3	4	3	0	2	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 2014	Low	281	299	327	484	485	412	453	422	460	469	454	524	431	469	485
	Moderate	354	337	323	197	195	258	227	245	216	176	193	134	248	211	191
	High	30	35	32	11	21	20	11	19	11	19	17	15	15	16	7
	Very High	47	42	30	25	19	24	26	25	26	44	48	35	26	18	18
	Serious	8	7	8	3	0	6	3	9	7	12	8	12	0	6	6
Oct 2014	Low	32	18	6	13	29	0	3	3	40	50	25	74	37	34	129
	Moderate	681	595	667	695	683	650	651	642	637	578	594	568	658	628	505
	High	30	90	61	34	32	89	83	83	55	59	67	48	45	74	86
	Very High	1	41	10	2	0	5	7	16	12	57	58	54	4	8	19
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov 2014	Low	132	56	131	414	276	152	192	136	194	236	233	245	194	229	208
	Moderate	581	599	577	296	436	557	517	570	509	448	431	440	511	479	475
	High	1	32	6	2	0	3	3	4	6	15	11	13	5	2	5
	Very High	0	27	0	0	0	0	0	2	3	12	12	13	2	2	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec 2014	Low	87	37	119	393	247	139	197	122	223	184	200	221	167	206	196
	Moderate	542	599	591	346	492	592	538	600	504	520	499	488	571	536	504
	High	72	75	21	4	5	11	6	14	9	31	30	17	6	2	13
	Very High	41	31	13	1	0	2	3	8	7	9	13	15	0	0	0
	Serious	2	2	0	0	0	0	0	0	0	0	0	3	0	0	0
2014 whole year	Low	2 162	2 488	2 832	4 614	4 633	3 776	3 859	3 823	4 256	4 436	4 336	4 658	4 300	4 479	4 712
	Moderate	5 785	5 469	5 389	3 886	3 954	4 563	4 546	4 537	4 154	3 781	3 868	3 620	4 217	3 973	3 626
	High	408	435	317	144	106	263	209	233	174	245	256	209	140	182	218
	Very High	336	336	177	97	53	114	107	123	127	225	246	215	66	90	98



	Serious	31	20	21	9	4	12	9	21	17	28	17	30	3	14	6
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Table 2: The monthly distribution of health risk categories recorded at different monitoring stations in 2015

		Roadside Station			General Station											
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun (Note 1)
Health Risk Category		Number of hours														
Jan 2015	Low	21	47	61	240	165	94	118	75	140	167	116	152	199	147	207
	Moderate	525	587	565	483	562	609	606	633	573	526	567	543	533	574	487
	High	117	57	85	5	3	26	7	20	19	35	37	22	1	12	42
	Very High	64	42	21	10	9	7	10	12	12	8	14	21	7	5	8
	Serious	17	11	12	6	5	8	3	4	0	8	10	6	4	6	0
Feb 2015	Low	48	102	73	265	218	156	156	182	209	249	227	231	220	240	252
	Moderate	416	466	486	387	443	472	478	449	419	384	400	400	423	411	394
	High	106	52	60	15	3	35	29	25	25	21	25	20	21	14	20
	Very High	91	52	53	5	8	9	9	16	19	18	20	21	8	7	4
	Serious	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar 2015	Low	108	184	165	346	374	308	299	317	317	467	418	463	380	425	421
	Moderate	594	553	571	398	370	436	445	425	424	277	318	281	358	319	319
	High	25	7	5	0	0	0	0	2	3	0	7	0	3	0	0
	Very High	17	0	3	0	0	0	0	0	0	0	1	0	3	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr 2015	Low	188	300	253	413	442	381	418	386	436	452	439	477	444	455	454
	Moderate	446	361	404	276	263	299	272	295	259	241	250	216	252	240	232
	High	24	35	29	19	10	28	21	16	15	11	14	8	19	18	17
	Very High	57	22	33	12	5	12	9	23	10	15	17	19	5	5	3
	Serious	5	2	1	0	0	0	0	0	0	1	0	0	0	0	0
May 2015	Low	318	514	409	654	662	557	640	554	645	687	695	694	648	657	599
	Moderate	424	230	335	90	82	187	104	190	97	52	45	46	96	87	131
	High	2	0	0	0	0	0	0	0	2	1	1	2	0	0	0
	Very High	0	0	0	0	0	0	0	0	0	4	3	2	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		Roadside Station			General Station											
		Causeway Bay	Central	Mong Kok	Central/ Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun (Note 1)
Health Risk Category		Number of hours														
Jun 2015	Low	482	632	624	720	720	665	717	700	720	720	720	720	720	720	704
	Moderate	238	88	96	0	0	55	3	20	0	0	0	0	0	0	1
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul 2015	Low	346	469	409	623	627	443	578	469	593	622	622	639	598	614	619
	Moderate	349	232	292	86	84	263	127	236	123	93	85	74	130	101	113
	High	17	16	13	6	10	11	13	13	7	18	20	10	9	10	6
	Very High	28	27	30	29	20	22	26	26	21	11	17	21	7	19	2
	Serious	4	0	0	0	3	5	0	0	0	0	0	0	0	0	0
Aug 2015	Low	254	390	383	541	540	442	523	459	534	559	540	576	540	539	549
	Moderate	389	271	290	140	153	232	159	227	160	125	147	113	164	161	157
	High	27	28	15	19	20	18	18	17	16	22	20	6	19	17	15
	Very High	61	46	43	38	27	43	39	33	26	31	32	44	18	21	11
	Serious	13	9	13	6	4	9	5	8	8	7	5	5	3	6	1
Sep 2015	Low	206	277	282	318	314	256	306	312	330	369	336	386	345	347	319
	Moderate	450	423	405	381	385	431	387	381	373	329	361	311	354	355	367
	High	33	6	21	10	12	22	17	13	9	15	11	9	14	12	9
	Very High	27	14	12	11	9	8	10	12	8	7	12	14	7	4	12
	Serious	4	0	0	0	0	3	0	2	0	0	0	0	0	2	0
Oct 2015	Low	157	238	246	259	253	185	236	265	299	347	281	381	342	304	282
	Moderate	495	417	412	404	426	481	423	393	373	311	348	271	335	367	369
	High	53	60	54	59	55	58	64	49	40	28	41	31	46	50	42
	Very High	39	29	32	22	10	20	21	37	32	58	66	54	21	23	30
	Serious	0	0	0	0	0	0	0	0	0	0	8	7	0	0	0
Nov 2015	Low	226	309	290	337	284	309	313	360	376	425	385	420	401	372	311
	Moderate	483	403	421	374	436	411	400	351	330	278	305	276	310	341	385
	High	2	2	2	4	0	0	3	5	6	8	9	6	3	4	1
	Very High	9	6	7	5	0	0	4	4	8	9	21	18	6	3	3
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec 2015	Low	219	386	396	433	462	425	447	445	467	512	421	539	556	504	-
	Moderate	521	356	348	311	282	319	297	299	277	229	318	205	188	240	-

		Roadside Station			General Station											
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun (Note 1)
Health Risk Category		Number of hours														
	High	4	2	0	0	0	0	0	0	0	3	3	0	0	0	-
	Very High	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
2015 whole year	Low	2 573	3 848	3 591	5 149	5 061	4 221	4 751	4 524	5 066	5 576	5 200	5 678	5 393	5 324	4 717
	Moderate	5 330	4 387	4 625	3 330	3 486	4 195	3 701	3 899	3 408	2 845	3 144	2 736	3 143	3 196	2 955
	High	410	265	284	137	113	198	172	160	142	162	188	114	135	137	152
	Very High	393	238	234	132	88	121	128	163	136	161	205	214	82	87	73
	Serious	54	22	26	12	12	25	8	14	8	16	23	18	7	14	1
Note 1: As the building where Tap Mun Monitoring Station was located was closed from 30 November 2015 to 25 February 2016 for re-roofing and refurbishment works, there was no health risk data available during this period.																

Table 3: The monthly distribution of health risk categories recorded at different monitoring stations in 2016

		Roadside Station			General Station												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O (Note 1)	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun (Note 2)
Health Risk Category		Number of hours															
Jan 2016	Low	250	405	384	467	495	410	432	451	445	-	553	473	571	574	525	-
	Moderate	485	338	356	277	249	334	312	290	296	-	191	264	164	170	219	-
	High	3	1	4	0	0	0	0	3	3	-	0	7	9	0	0	-
	Very High	6	0	0	0	0	0	0	0	0	-	0	0	0	0	0	-
	Serious	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0
Feb 2016	Low	196	296	327	380	430	339	394	389	412	-	476	423	496	492	462	55
	Moderate	480	396	362	314	263	352	300	305	282	-	217	266	198	202	232	30
	High	14	2	5	0	0	3	0	0	0	-	1	5	0	0	0	0
	Very High	4	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0
Mar 2016	Low	192	296	268	309	286	323	298	304	337	170	470	375	443	490	443	452
	Moderate	531	436	467	431	457	404	443	429	403	206	266	350	290	249	298	281
	High	14	7	9	2	1	17	3	10	4	0	3	14	4	2	3	8
	Very High	7	5	0	2	0	0	0	1	0	0	5	5	5	3	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Apr 2016	Low	295	406	390	474	326	423	441	373	440	481	585	440	564	515	510	523
	Moderate	415	305	324	241	368	289	273	341	276	234	130	273	153	204	205	184
	High	10	9	6	5	26	8	6	6	4	5	0	4	2	1	5	5
	Very High	0	0	0	0	0	0	0	0	0	0	0	5	3	1	0	0

	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May 2016	Low	374	406	431	515	348	441	485	493	508	471	551	509	519	520	512	474
	Moderate	360	325	297	221	383	291	249	242	224	264	176	216	209	216	226	254
	High	5	8	10	8	8	11	7	6	9	9	13	10	10	8	6	10
	Very High	5	5	6	0	5	1	3	3	3	0	4	9	6	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun 2016	Low	526	652	685	715	673	607	715	681	701	714	713	714	719	716	716	704
	Moderate	194	68	35	5	47	113	5	39	19	6	7	6	1	4	4	9
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul 2016	Low	543	614	613	658	642	570	637	632	649	652	650	642	660	662	673	640
	Moderate	179	112	113	69	86	153	90	93	76	74	66	81	63	59	55	66
	High	6	3	2	2	0	3	2	4	3	2	9	4	4	6	2	5
	Very High	10	8	14	8	11	8	10	10	10	9	10	10	13	8	9	13
	Serious	6	7	2	7	5	10	5	5	6	7	9	7	4	9	5	4
Aug 2016	Low	368	450	455	515	484	413	500	445	497	556	513	498	586	561	569	565
	Moderate	355	287	274	217	254	323	233	285	232	182	202	223	140	167	167	165
	High	10	1	10	6	2	3	7	9	7	2	13	8	6	8	3	3
	Very High	10	4	5	5	4	5	4	5	8	4	16	15	12	8	5	4
	Serious	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Sep 2016	Low	219	358	386	364	370	308	368	379	396	389	383	347	462	436	447	390
	Moderate	441	324	309	322	329	380	331	316	299	310	291	313	215	261	257	301
	High	22	16	14	16	18	17	16	17	14	15	21	22	19	15	11	13
	Very High	38	22	11	18	3	15	5	8	11	6	23	35	22	8	5	4
	Serious	0	0	0	0	0	0	0	0	0	0	2	3	2	0	0	0
Oct 2016	Low	455	520	521	556	544	537	546	548	567	582	547	510	614	614	615	575
	Moderate	277	215	217	180	196	201	194	192	173	162	189	223	114	126	128	167
	High	5	2	0	3	2	3	0	1	1	0	3	4	9	2	1	0
	Very High	5	5	4	4	2	3	4	3	3	0	5	6	6	2	0	0
	Serious	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0
Nov 2016	Low	261	313	348	349	337	315	360	391	394	419	407	371	480	479	474	443
	Moderate	459	404	372	371	383	405	360	329	324	301	300	336	231	241	246	271
	High	0	3	0	0	0	0	0	0	2	0	9	5	5	0	0	3
	Very High	0	0	0	0	0	0	0	0	0	0	4	8	4	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec 2016	Low	98	115	162	162	110	118	157	179	199	177	155	153	307	303	240	218
	Moderate	620	578	568	566	626	621	583	544	514	567	538	533	396	434	503	503

	High	14	30	11	15	7	5	4	16	16	0	22	19	17	6	1	9
	Very High	12	21	3	1	0	0	0	5	15	0	29	37	24	1	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
2016 whole year	Low	3 777	4 831	4 970	5 464	5 045	4 804	5 333	5 265	5 545	4 611	6 003	5 455	6 421	6 362	6 186	5 039
	Moderate	4 796	3 788	3 694	3 214	3 641	3 866	3 373	3 405	3 118	2 306	2 573	3 084	2 174	2 333	2 540	2 231
	High	103	82	71	57	64	70	45	72	63	33	94	102	85	48	32	56
	Very High	97	70	43	38	25	32	26	35	50	19	101	128	93	30	19	21
	Serious	7	9	2	9	5	10	5	5	6	7	11	13	8	9	5	4
Note 1: Tseung Kwan O Monitoring Station commenced operation on 16 March 2016.																	
Note 2: As the building where Tap Mun Monitoring Station was located was closed from 30 November 2015 to 25 February 2016 for re-roofing and refurbishment works, there was no health risk data available during this period.																	

Table 4: The monthly distribution of health risk categories recorded at different monitoring stations in 2017

		Roadside Station			General Station												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of hours															
Jan 2017	Low	144	191	226	246	198	260	250	280	283	288	321	295	414	311	310	336
	Moderate	577	540	514	492	543	481	494	461	452	456	418	443	324	430	430	397
	High	13	5	4	2	3	3	0	3	4	0	1	1	1	3	2	2
	Very High	10	8	0	4	0	0	0	0	5	0	4	5	5	0	2	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb 2017	Low	133	181	205	245	184	222	226	262	265	239	301	292	411	284	330	269
	Moderate	535	487	466	427	486	450	446	410	407	432	368	374	261	388	342	390
	High	4	4	1	0	2	0	0	0	0	1	3	6	0	0	0	7
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar 2017	Low	74	121	120	149	101	207	204	199	176	169	280	302	288	191	253	230
	Moderate	649	604	614	587	630	530	532	538	561	564	457	436	452	546	485	463
	High	10	10	4	2	7	1	3	2	1	5	2	2	2	2	3	6
	Very High	11	9	6	6	6	6	5	5	6	6	5	4	2	5	3	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr 2017	Low	206	305	322	338	308	352	365	395	413	372	476	459	483	387	409	409
	Moderate	485	402	384	376	407	361	349	318	300	343	226	243	224	307	291	252
	High	16	9	7	5	4	6	5	6	6	4	8	5	6	12	8	12
	Very High	9	0	3	0	0	0	0	0	0	0	3	6	0	2	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May 2017	Low	195	246	272	290	252	347	309	336	353	314	409	354	322	364	391	393
	Moderate	490	442	421	407	452	368	403	376	356	390	291	343	372	344	322	308
	High	31	26	31	24	29	23	22	16	13	23	17	16	15	18	17	16

	Very High	28	30	17	23	11	6	10	16	16	17	24	23	20	18	14	10
	Serious	0	0	3	0	0	0	0	0	6	0	3	8	15	0	0	1
Jun 2017	Low	490	711	718	720	720	716	720	706	720	720	718	720	720	720	720	687
	Moderate	230	9	2	0	0	4	0	14	0	0	2	0	0	0	0	3
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul 2017	Low	607	685	681	694	679	685	691	683	687	687	683	674	692	678	694	683
	Moderate	113	42	43	33	47	39	38	43	41	39	41	47	32	43	33	34
	High	3	2	2	3	3	6	4	5	2	3	2	4	6	4	2	2
	Very High	13	13	14	11	12	10	9	9	12	8	14	13	11	12	11	14
	Serious	8	2	4	3	3	4	2	4	2	7	4	6	3	7	4	0
Aug 2017	Low	454	649	603	657	659	643	664	644	658	668	655	642	684	647	672	660
	Moderate	259	71	119	65	68	78	60	76	61	53	59	68	34	62	50	54
	High	15	9	3	4	6	8	11	10	4	11	8	2	4	8	8	6
	Very High	16	15	19	18	11	15	9	14	21	12	16	26	15	24	14	5
	Serious	0	0	0	0	0	0	0	0	0	0	6	6	7	3	0	0
Sep 2017	Low	275	442	407	454	430	444	466	447	485	471	506	458	528	459	485	479
	Moderate	380	221	244	210	236	223	203	224	187	204	153	192	145	207	190	191
	High	9	14	19	7	14	16	7	7	9	10	13	12	7	12	9	14
	Very High	43	36	36	35	35	32	34	27	23	30	39	36	23	37	29	17
	Serious	13	7	14	14	5	4	10	15	16	5	9	22	17	5	7	2
Oct 2017	Low	261	336	324	351	319	353	369	339	364	326	363	343	428	349	367	298
	Moderate	389	369	353	348	388	358	334	361	336	378	317	312	280	344	336	362
	High	71	31	48	39	35	31	38	29	23	38	30	44	20	31	31	46
	Very High	23	8	19	6	2	2	3	15	21	2	34	45	16	20	10	14
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov 2017	Low	169	257	249	293	254	305	337	324	349	282	356	317	400	317	360	361
	Moderate	527	453	457	418	453	409	377	387	353	425	325	347	295	379	349	333
	High	20	7	11	6	11	6	5	6	14	10	18	23	13	20	8	17
	Very High	4	3	3	3	2	0	1	3	4	3	21	29	12	4	3	4
	Serious	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0
Dec 2017	Low	114	149	169	201	168	194	225	197	194	201	183	172	250	188	196	210
	Moderate	526	527	513	506	536	519	492	501	511	517	502	485	449	508	512	479
	High	64	48	42	28	35	25	21	27	24	23	36	40	30	31	25	32
	Very High	40	20	20	9	5	6	6	19	15	3	23	47	15	17	11	13
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

2017 whole year	Low	3 122	4 273	4 296	4 638	4 272	4 728	4 826	4 812	4 947	4 737	5 251	5 028	5 620	4 895	5 187	5 015
	Moderate	5 160	4 167	4 130	3 869	4 246	3 820	3 728	3 709	3 565	3 801	3 159	3 290	2 868	3 558	3 340	3 266
	High	256	165	172	120	149	125	116	111	100	128	138	155	104	141	113	160
	Very High	197	142	137	115	84	77	77	108	123	81	183	234	119	139	97	77
	Serious	21	9	21	17	8	8	12	19	24	12	22	46	42	15	11	3

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB238**

**(Question Serial No. 5687)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Please advise on the details of various current measures for protecting country park enclaves, the effectiveness and the expenditure involved in the past 5 years. Please advise on the progress and details of the Administration's review on including enclaves in the territory into country parks.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 218)

Reply:

The Agriculture, Fisheries and Conservation Department (AFCD) conducts regular patrols in country parks including the enclaves. If suspected cases of unauthorised developments are detected in enclaves incorporated in the country parks, AFCD will take enforcement actions under the Country Parks Ordinance (Cap. 208) or refer such cases to the relevant departments as appropriate for follow-up actions to be taken in accordance with the relevant legislation or lease conditions. As monitoring enclaves is part of the patrolling duties of the frontline staff, AFCD does not have breakdowns in respect of the patrolling of enclaves.

There are a total of 77 country park enclaves in Hong Kong, of which 23 were already covered by statutory town plans before 2010. The Government indicated that it would either include the remaining 54 enclaves into country parks, or determine their proper uses through statutory planning to meet conservation and social development needs.

The Planning Department (the PlanD) has completed the formulation of Development Permission Area (DPA) Plans for 30 enclaves, among which the enclave in Sai Wan has also been incorporated into the country park. For the remaining 29 enclaves, the PlanD has also completed the preparation of draft Outline Zoning Plans (OZPs) at the end of March 2017 to replace the DPA Plans.

It rests with the AFCD to assess whether the remaining 24 enclaves are suitable for incorporation into country parks for appropriate protection. 3 of the enclaves situated in



Sai Wan, Kam Shan and Yuen Tun, and another 3 enclaves situated in Fan Kei Tok, Sai Lau Kong and near Nam Shan were respectively incorporated into country parks with effect from 30 December 2013 and 1 December 2017.

AFCD will continue to assess the suitability for incorporating the remaining enclaves not covered by statutory town plans into country parks according to the established principles and criteria as well as relevant considerations, and will put forward proposals to incorporate suitable enclaves into country parks in accordance with the statutory procedures stipulated in the Country Parks Ordinance (Cap. 208).

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB239**

**(Question Serial No. 5690)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding promotion of waste recovery in the community:

- a) Please set out the manpower and expenditure used by the Government on network of the Waste Recycling Centres under the Environment and Conservation Fund in each of the past 3 years, the amount of various types of waste recovered and its percentage in the total amount of that type of waste recovered in Hong Kong.
- b) Please set out the manpower and expenditure of each Community Green Station (CGS) in the district each year since the 5 CGSs commenced operation, the work progress, the number of visitors, the amount of various types of waste recovered and its percentage in the total amount of that type of waste recovered in Hong Kong.
- c) What are the details of the outreach teams set up on pilot basis? How many cases have been handled or how many companies/corporations have been assisted since their establishment? What are the relevant manpower and expenditure?
- d) How much manpower and provision has been earmarked by the Government in 2018-19 for promotion of waste reduction and recovery?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 221)

Reply:

- a) The Government funded the operation of the Community Recycling Centres (CRCs) through the Environment and Conservation Fund. The annual expenditure of the CRCs, quantity of recyclables recovered and their percentage in the total quantity of recyclables recovered in Hong Kong in the past 3 years are tabulated below:

Year	Approved funding (\$ million)	Quantity of recyclables recovered (tonnes)			Percentage in the total quantity of recyclables recovered in Hong Kong (percentage)		
		Plastics	Electrical and electronic equipment	Glass	Plastics	Electrical and electronic equipment	Glass
2015	30.54	1 366	48	131	1.5	0.1	1.4
2016	38.16	1 535	42	129	1.2	0.1	1.4
2017	38.04	1 643	43	158	(Note)	(Note)	(Note)

Note: The 2017 relevant waste statistics are still being compiled.

- b) The Environmental Protection Department (EPD) is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. The total cost for capital works is estimated to be about \$400 million. As at the end of 2017, 5 CGSs have progressively been in operation, namely the Sha Tin CGS and the Eastern CGS which commenced operation in 2015 and the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS which commenced operation in 2017. The operating expenditure of individual projects may vary, depending on the financial proposals submitted by individual operators in their open tender submissions.

Details of the 2017 quarterly operational statistics of the above 5 CGSs are set out below (Note: As the Sham Shui Po CGS commenced operation in October 2017, only the operational statistics for the 4<sup>th</sup> quarter of 2017 are available):

	1 <sup>st</sup> Quarter of 2017				2 <sup>nd</sup> Quarter of 2017			
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sha Tin	Eastern	Kwun Tong	Yuen Long
Quantity of various types of recyclables handled (kg)								
Electrical appliances and computer products	20 476	19 963	12 015	12 172	13 242	12 691	5 301	7 699
Glass bottles	69 722	75 318	50 026	22 896	79 895	75 590	58 893	49 832
Fluorescent lamps/tubes	1 089	1 097	474	564	1 044	925	294	422
Rechargeable batteries	302	674	84	102	181	177	46	859
Used books	930	1 854	523	1 124	1 427	1 052	289	1 052

	1 <sup>st</sup> Quarter of 2017				2 <sup>nd</sup> Quarter of 2017			
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sha Tin	Eastern	Kwun Tong	Yuen Long
Clothing	449	4 241	150	3 840	2 078	2 108	966	258
Waste paper	210	912	1 377	1 045	463	1 215	2 953	4 600
Waste plastics	403	695	303	414	999	627	419	545
Waste metals	21	229	61	198	16	166	144	835
Number of educational activities and visitors								
Number of activities	120	103	39	22	115	96	56	52
Number of visitors	6 918	44 902	5 857	5 684	10 218	45 605	9 188	8 219

	3 <sup>rd</sup> Quarter of 2017				4 <sup>th</sup> Quarter of 2017				
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Quantity of various types of recyclables handled (kg)									
Electrical appliances and computer products	16 362	13 222	7 044	18 133	14 565	14 381	7 512	14 735	4 031
Glass bottles	83 144	69 655	61 506	53 681	96 251	70 378	62 604	57 281	5 864
Fluorescent lamps/tubes	1 023	2 012	645	953	924	781	635	888	234
Rechargeable batteries	299	503	271	295	342	182	76	447	85
Used books	2 177	1 102	44	1 489	1 412	2 978	388	3 591	523
Clothing	371	771	320	505	727	2 051	412	6 211	1 826
Waste paper	998	1 124	3 919	7 560	1 114	1 207	4 560	5 899	360
Waste plastics	904	1 609	1 011	883	573	1 469	1 493	1 258	2 385

	3 <sup>rd</sup> Quarter of 2017				4 <sup>th</sup> Quarter of 2017				
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po
Waste metals	19	290	323	878	130	682	965	2 115	50
Number of educational activities and visitors									
Number of activities	82	91	60	53	71	94	69	48	183
Number of visitors	7 422	49 916	8 702	7 501	9 424	42 103	8 862	8 176	9 213

Since inception the CGSs have been running smoothly. During their first three-year contract period, both the Sha Tin CGS and the Eastern CGS have exceeded the key performance indicator for collecting not less than 600 tonnes of recyclables, and also fulfilled the requirements in respect of the number and types of educational activities organised. Besides, the Kwun Tong CGS and the Yuen Long CGS have also been operating well, and are expected to be able to meet or even exceed the relevant requirement during the three-year contract period. The Sham Shui Po CGS commenced operation just in October 2017. We will continue to monitor its operation performance.

- c) The initial phase of the outreaching service will be launched on pilot basis within 2018. It is anticipated that the outreaching service will be gradually extended to cover the whole territory later in 2018-19. The outreaching service will involve 32 Environmental Protection Officers and Environmental Protection Inspectors. The estimated manpower expenditure is about \$16,000,000. As the initial phase of the outreaching service is still under preparation, details of service areas and actual expenditure, etc. are not yet available. We will keep reviewing the implementation and effectiveness of the outreaching service and enhance the relevant service to cater for the practical needs of different stakeholders in the districts.
- d) The publicity and educational work on waste reduction and recovery is part of the routine duties of the EPD and the manpower and expenditure involved are absorbed by existing establishment and resources. We do not have separate breakdowns of the manpower and expenditure involved in this area.

- End -

**CONTROLLING OFFICER'S REPLY****ENB240****(Question Serial No. 5691)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the waste management infrastructure facilities:

- a) Please provide information on the waste management infrastructure facilities commissioned in the past 5 years, including the location, the capacity and project cost, and the annual operating cost;
- b) Please provide information on the waste management infrastructure facilities to be commissioned in the coming 5 years, including the location, the estimated capacity and project cost, and the estimated annual operating cost;
- c) The Department awarded the Design-Build-Operate contracts for the Integrated Waste Management Facilities Phase 1 and the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme in November 2017. Would the Department provide a breakdown of the amount of the above two contracts, including design cost, construction cost and annual operating cost?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 222)Reply:

a) The information of the waste management infrastructure facilities commissioned in the past 5 years is tabulated below:

Facility	Location	Waste Processing capacity	Approved project estimates (\$ million)	Annual operating cost	
				Year	Operating cost (\$ million)
T-PARK	25 Nim Wan Road, Tsang Tsui, Tuen Mun	Design daily capacity of 2 000 tonnes of sewage sludge	5,364.3	2015-16	220 <sup>(Note 1)</sup>
				2016-17	237
				2017-18 Revised estimates	244

Facility	Location	Waste Processing capacity	Approved project estimates (\$ million)	Annual operating cost	
				Year	Operating cost (\$ million)
WEEE-PARK	Lot P2-P4, EcoPark, 133 Lung Mun Road, Area 38, Tuen Mun	Design annual capacity of 30 000 tonnes	548.6	2017-18 Revised estimates	42 <sup>(Note 2)</sup>

Note:

1. T-PARK commissioned in the second quarter of 2015.
2. WEEE-PARK commenced operation in late 2017.

b) The information of the waste management infrastructure facilities to be commissioned in the coming 5 years is tabulated below:

Facility	Location	Waste Processing capacity	Estimated project cost (\$ million)	Estimated annual operating cost (\$ million)
South East New Territories Landfill Extension	Tai Chik Sha, Tseung Kwan O	Total design capacity of about 6.5 million cubic metres	2,101.6	240 <sup>(Note 1)</sup>
North East New Territories Landfill Extension	Ta Kwu Ling, North District	Total design capacity of about 19 million cubic metres	7,510.0	302 <sup>(Note 1)</sup>
Organic Resources Recovery Centre (ORRC) Phase 1	Siu Ho Wan, Lantau Island	Daily capacity of 200 tonnes of food waste	1,589.2	72 <sup>(Note 1)</sup>
ORRC Phase 2	Sha Ling, North District	Daily capacity of 300 tonnes of food waste	2,453.02	100 <sup>(Note 2)</sup>
Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme : Food Waste Pre-treatment Facilities	Existing Shuen Wan Leachate Pre-treatment Works in Tai Po	Daily capacity of 50 tonnes of food waste	14.97	11.3 <sup>(Note 1)</sup>

Note:

1. The estimated annual operating cost is calculated at 2017 price level.
2. The estimated annual operating cost is based on the estimate of the feasibility study conducted in 2014.

- c) The value of the Design-Build-Operate contract of the Integrated Waste Management Facilities (IWMF) Phase 1 is \$31.4 billion, including the estimated design and construction cost of \$18 billion and the estimated total operating cost of \$13.4 billion for 15 years of operation. The total operating cost includes the annual recurrent operating cost of about \$400 million <sup>(Note 1)</sup>, as well as other estimated costs, such as price adjustment and project contingencies during the 15-year contract operation period.

The value of the Design-Build-Operate contract of the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme: Food Waste Pre-treatment Facilities is \$82.75 million, including the estimated design and construction cost of \$14.97 million and the estimated total operating cost of \$67.78 million for 6 years of operation. The average annual recurrent operating cost is about \$11.3 million.

Note:

1. As mentioned in the Finance Committee of the Legislative Council paper No. FCR(2014-15)34A, we estimated that the annual recurrent operating cost of the IWMF Phase 1 was about \$400 million (excluding other estimated costs, such as price adjustment and project contingencies during the 15-year contract operation period).

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB241**

**(Question Serial No. 5692)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the operation of the EcoPark:

- a) How is the utilisation of the EcoPark in Tuen Mun Area 38? What is the full-year utilisation rate? How many types of recyclables (e.g. metals, paper, plastics, wood, batteries etc.) are recycled in the EcoPark currently? What was the total amount of various types of recyclables processed in terms of tonnes last year?
- b) How much manpower and provision will be earmarked by the Government in 2018-19 for monitoring the operation of the EcoPark? Have tenants been found to have violated the lease or requirements of the waste disposal licence since the establishment of the EcoPark? If yes, what are the details? It is reported that recyclers in the district have failed to handle the waste recovered properly. Has the Department followed up on the relevant press reports? If yes, what are the details? If no, what are the reasons?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 223)

Reply:

- a) At present, a total of 11 lots in the EcoPark have been leased to private recyclers. Among them, 9 tenants engaged in the recycling of waste cooking oil, waste metals, waste wood, waste electrical and electronic equipment (WEEE), waste plastics, waste construction materials, waste glass, food waste and waste rubber tyres have progressively commenced plant operation since 2010, and there is one lot on which demolition works of the existing plant and site reinstatement works are being carried out owing to the expiry of the lease. The remaining one with the tenant engaged in the recycling of waste batteries is under plant construction. Among the leased lots above-mentioned, one of them is being put up for lease in accordance with the usual practice and established procedures of the Government as its lease will expire in June 2018. Besides, in order to explore more long-term effective and diversified outlets for recycled materials, we have combined several lots in the EcoPark for the development

of a recycling industry capable of processing local waste paper, and have conducted an open tender at end of March 2018. Since the utilisation of various lots was different last year, a single representative utilisation rate cannot be calculated.

The quantities of recyclables processed at the EcoPark in 2017 by types of recyclables are as follows:

<b>Types of recyclables</b>	<b>Quantities of recyclables processed (tonnes)</b>
Waste cooking oil	4 800
Metals	153 600
Wood	800
Electric and electronic equipment	2 500
Plastics	1 300
Construction waste	8 600
Glass	1 700
Food waste	7 000
<b>Total (1)</b>	<b>180 000</b>

(1): The total quantities are rounded to the nearest thousand.

- b) Managing and monitoring the operation of the EcoPark is part of the work of the Waste Reduction and Recycling Division of the Environmental Protection Department (EPD), and is absorbed by existing resources. We do not have breakdowns on the manpower resources and expenditure involved for such work.

The EPD has closely monitored the development and operation of the tenants' recycling businesses in the EcoPark. The operation of the tenants of the EcoPark is required to meet the lease requirements and comply with the relevant laws and regulations. In general, if the tenants encounter any development or operational problem, the EPD will first take proactive steps to follow up and understand their difficulties in order to provide appropriate assistance. In case of breach of any of the conditions in the lease agreements by the tenants, the EPD will issue warning letters to the tenants and consider taking appropriate follow-up and legal actions, including termination of the lease agreements. Since the EcoPark came into operation in 2007, there was one tenant who could not commission in accordance with the lease agreement so the EPD has terminated his lease agreement through legal process and has resumed the lot. Besides, no violation of the requirements of the waste disposal licence by the tenants of the EcoPark is found.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB242**

**(Question Serial No. 5693)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

How many meetings were held by the Steering Committee on Climate Change last year? What was the attendance of each member? Was there any additional expenditure other than the recurrent expenditure incurred by the Committee last year?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 224)

Reply:

The Steering Committee on Climate Change held a total of 2 meetings in 2017. All members were present at every meeting. The above task is part of the Government's work on addressing climate change. The manpower and expenses involved are met by the recurrent expenditure of the departments concerned.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB243**

**(Question Serial No. 5694)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Government's carbon emissions reduction target:

Please set out the monthly carbon emissions of major government buildings and the room for carbon reduction identified for major government buildings since April 2017.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 225)

Reply:

Starting from April 2017, bureaux and departments are required to start conducting regular carbon audits on major government buildings under their management with a view to exploring room for carbon reduction and to disclose their carbon emissions information.

The carbon audit work for 2017-18, which is in progress, involves 34 bureaux and departments and over 300 major government buildings. The bureaux and departments will disclose the carbon audit findings of their relevant buildings to the public at a later stage through their annual environmental performance reports or other means.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB244**

**(Question Serial No. 5695)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the gradual phasing out of diesel commercial vehicles (DCVs):

- a) What is the current work progress of the scheme to phase out pre-Euro IV DCVs?
- b) Will the Government earmark resources in 2018-19 to study granting of ex-gratia payment to gradually phase out pre-Euro IV DCVs? If yes, what are the relevant details, manpower and expenditure?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 226)

Reply:

Diesel commercial vehicles (DCVs) are a major source of roadside air pollution in Hong Kong. To improve roadside air quality and better protect public health, the Environmental Protection Department launched an incentive-cum-regulatory scheme in March 2014 to phase out by end 2019 progressively some 82 000 pre-Euro IV DCVs with a funding of \$11.4 billion for offering ex-gratia payment to the affected vehicle owners. The ex-gratia payment applications for pre-Euro, Euro I and II DCVs have closed at the end of 2015, end of 2016 and end of 2017 respectively. The ex-gratia payment applications for Euro III DCVs will close at the end of 2019.

- a) About 60 900 pre-Euro IV DCVs (i.e. about 74% of the eligible vehicles) have been retired under this scheme as at the end of February 2018. Among them, about 60 500 DCVs have been granted ex-gratia payment, involving a subsidy amount of about \$8.2 billion.
- b) At present, the Government mainly works on phasing out the remaining 18 000-odd Euro III DCVs as scheduled and will consider whether it is necessary to implement other schemes in due course.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB245**

**(Question Serial No. 5696)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding control of roadside air pollution:

- a) Will the Government earmark resources in 2018-19 to study measures for containing the growth of vehicles and use of private cars, including exploring measures such as introducing electronic road pricing, raising the First Registration Tax (FRT) and raising fuel duty, etc.? If yes, what are the relevant details, manpower and expenditure?
- b) Since the full waiver of FRT for electric vehicles (EVs) was abolished last April, till December last year, only 99 EVs have been sold whereas the number of newly registered diesel vehicles has increased by 40%. What concrete measures does the Government have in the coming year to contain the growth of newly registered diesel private cars?
- c) Currently, there is a price difference between EVs and the conventional vehicles. Will the Government consider raising the FRT for petrol private cars to encourage the public to switch to zero-pollution EVs? If yes, what are the details? If no, what are the reasons?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 227)

Reply:

a) and c)

The Transport Department (TD) commenced in December 2017 an in-depth feasibility study on the Electronic Road Pricing Pilot Scheme in Central and its adjacent areas (ERP Pilot Scheme). The TD will then engage the public to develop a detailed ERP Pilot Scheme and its implementation strategy having regard to the feasibility study result. In 2018-19, the TD's estimated expenditure for the feasibility study is \$6.4 million.

The average annual growth rate of licensed private cars (PCs) is about 4% over the past 5 years. The growth trend is not sustainable. The Government will actively explore measures to manage the fleet size of PCs as recommended by the Transport Advisory

Committee in its Report on Study of Road Traffic Congestion in Hong Kong, including fiscal measures. The above work with regard to traffic management is carried out by staff in the Transport and Housing Bureau and TD as part of their routine duties. There is no breakdown of the expenditure involved.

b)

The number of diesel PCs saw a rapid increase last year because a more than usual number of diesel PCs hurried to register before the implementation of new tightened emission standards (1 October 2017). It is believed that the number of first registered diesel PCs will substantially decrease after the implementation of the new emission standards.

As for electric PCs (e-PCs), the Government's standing policy is to encourage the public to use public transport as far as possible, and should they need to acquire PCs, choose e-PCs. After capping the FRT concessions for e-PCs in 2017-18, the Government has been closely monitoring the latest situation. Taking into account factors such as the technological development and market situation of electric vehicles (EVs), road traffic conditions and views of stakeholders, the Government considers that on one hand, it has to control the growth of PCs to avoid causing traffic congestion and aggravating roadside air pollution, and on the other hand, it also hopes to encourage car owners to go for EVs as far as possible when purchasing PCs. As such, apart from continuing with the current FRT concession of up to \$97,500 from 28 February 2018 to 31 March 2021, the Government has introduced the new "One-for-One Replacement" Scheme in the above period to allow eligible existing car owners who buy a new e-PC and scrap their own eligible old PC to enjoy a higher FRT concession of up to \$250,000. The Government believes that the new Scheme will provide greater economic incentives to encourage eligible existing PC owners to purchase e-PCs when replacing their cars.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB246**

**(Question Serial No. 5697)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the public charging facilities for electric private cars:

- a) Currently, what are the time and cost of installation of standard, medium and quick chargers by the Government respectively? Is there any plan to install more chargers? If yes, what are the numbers of the proposed standard/medium/quick chargers, their locations and timetables?
- b) The Assistant Director (Air Policy) of the Environmental Protection Department advised the Panel on Environmental Affairs of the Legislative Council earlier that the Government had built some medium speed charging lamp posts on trial basis in four open car parks to test the durability of outdoor charging facilities, electricity connection, etc. How effective is the trial scheme so far? When is the trial scheme expected to be completed? Will consideration be given to providing more outdoor charging lamp posts afterwards? If yes, what is the timetable?
- c) There is no existing legislation requiring car parks to reserve electric vehicle (EV) charging-equipped parking spaces for EVs. There were many reports and complaints in the past year that such car parking spaces were frequently occupied by non-EVs. Will the Government require the car parks with charging facilities in their parking spaces to designate those parking spaces for exclusive use by EVs through amendment of the legislation or policy? If yes, what are the specific approach and timetable? If not, what are the reasons?
- d) Since the acquisition of the Housing Authority's properties and assets by LINK, its car parks are not required to observe the internal guidelines or policies of the Government. What measures does the Government have to induce LINK to provide more EV charging facilities in its car parks?
- e) Please set out in the table below the number of chargers at all public charging locations (by charging speed), the share of EV parking spaces in all parking spaces,



utilisation rate of chargers, car park operators, and measures on priority or exclusive use by EVs (if any).

Location (by 18 districts)	No. of chargers			Share of EV parking spaces in all parking spaces	Utilisation rate of chargers (monthly)	Car park operators	No. of parking spaces for exclusive use by EVs
	Standard					Medium	Quick

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 228)

Reply:

a), c) and d)

Regarding the charging arrangements for electric private cars (e-PCs), it has always been the Government's policy direction that e-PC owners should perform daily charging of their e-PCs by using charging facilities at their home, workplace or other suitable places (including charging facilities provided by e-PC suppliers). Public charging facilities in Hong Kong are supplementary in nature, set up for electric vehicles (EVs) to top up their batteries at times of occasional needs. They do not serve as daily charging facilities or their alternatives. Potential buyers of e-PCs should fully consider the daily charging arrangements required and should not rely on public charging facilities for daily charging of their e-PCs.

Given the above policy direction, the Government's priority is to facilitate and encourage the installation of charging facilities in private premises (including the car parks managed by LINK) when planning for the development of charging facilities for e-PCs. These measures include the Environmental Protection Department's (EPD) establishment in 2011 of a dedicated team and a hotline to provide information and technical support for the installation of EV charging facilities, and the Government's tightening of gross floor area concessions for private car parks in new buildings in April 2011 to encourage developers to provide the EV charging-enabling infrastructure, including provision of sufficient power supply, cabling and conduits for all parking spaces in the buildings concerned.

On the development of public charging networks as supplementary facilities, the Government not only takes the lead in providing and enhancing its public charging facilities in government car parks, but also supports private establishments to set up and enhance non-governmental public charging networks and encourages the power companies to install public charging facilities in private car parks (including the car parks managed by LINK). Regarding the government public charging networks, the Government took the lead in 2012 to install 500 public chargers in government public car parks managed by the Transport Department (TD) and government car parks managed by the Government Property Agency (GPA) which are open for public use. To improve the charging efficiency, EPD has progressively upgraded standard chargers to medium chargers in the past few years (as compared with standard chargers, medium chargers can reduce the charging time by up to 60%). We have also installed electrical installations of quick chargers for taxis for trial

and as an encouragement. Moreover, EPD is conducting a pilot scheme at 4 government outdoor car parks (located at the Electrical and Mechanical Services Department (EMSD) Headquarters, Hong Kong Wetland Park, Wai Tsuen Sports Centre and Shek Kip Mei Park) managed by contractors, where a total of 11 outdoor medium chargers have been installed to assess their reliability.

The Government's expenditure involved in the above enhancement of public charging facilities at government car parks in the past 5 years is as follows:

<b>Year</b>	<b>No. of additional public EV charging facilities provided at government car parks</b>	<b>Expenditure involved (\$ million)</b>
2011-13	500 standard chargers	4.50
2014-15	100 medium chargers	1.28
	Installation of electrical installations of quick chargers for taxis at 6 car parks	1.49
	6 medium charging posts at outdoor car parks *	0.55
2015-16	6 medium charging posts at outdoor car parks *	0.23
2016-17	174 medium chargers upgrading and 5 medium charging posts at outdoor car parks	2.94
2017-18	96 medium chargers upgrading	1.32
<b>Total</b>		<b>12.31</b>

\* The expenditure on 6 medium charging posts at outdoor car parks spanned over 2 financial years

At present, e-PCs only account for about 2% of the total number of registered private cars. Given the supplementary nature of charging facilities provided in the government car parks and the principle that users of EVs and all other vehicles should be treated alike for full utilisation of parking space resources, public parking spaces installed with charging facilities are not designated for exclusive use by EVs. That said, contractors of the government car parks managed by the TD and GPA which are open for public use will, depending on the utilisation situation of the car parks, arrange for traffic cones to be placed and notices to be displayed at parking spaces installed with charging facilities to reserve such spaces for priority use by EVs during non-peak hours whenever practicable.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs.

b)

EPD is conducting a pilot scheme at 4 open-air government car parks to test the reliability of outdoor charging facilities, which will be completed this year. EPD will complete the review of the findings of the pilot scheme by the end of this year and will then consider whether more outdoor charging facilities can be provided in other government premises.

e)

The number of public EV chargers (including chargers for public use in government and non-government car parks) with a breakdown by 18 districts of Hong Kong as at the end of 2017 is as follows:

<b>District</b>	<b>No. of chargers</b>		
	<b>Standard</b>	<b>Medium</b>	<b>Quick</b>
Central & Western	93	75	24
Eastern	37	68	32
Southern	4	17	19
Wan Chai	84	91	20
Kowloon City	65	2	18
Kwun Tong	214	40	41
Sham Shui Po	17	46	4
Wong Tai Sin	24	46	9
Yau Tsim Mong	100	58	28
Kwai Tsing	16	9	25
Tsuen Wan	16	40	7
Sai Kung	38	14	16
North	35	16	6
Tai Po	28	3	8
Sha Tin	90	35	32
Yuen Long	46	11	14
Tuen Mun	10	8	14
Islands	14	26	9
<b>Total:</b>	<b>931</b>	<b>605</b>	<b>326</b>
	<b>1 862</b>		

As at the end of 2017, 680 public chargers were provided at government car parks (including the TD, GPA, Leisure and Cultural Services Department, EMSD, Housing Department and Cruise Terminal), and the EPD has installed 519 chargers, 268 of which being medium chargers, in 425 parking spaces (representing 7% of the relevant parking spaces) in the government car parks managed by the TD and GPA which are open for public use. The average utilisation rate of the 519 chargers was about 13 times per month per charger from January 2016 to September 2017.

EPD does not have the relevant statistics on the provision of public chargers at non-government car parks.

- End -

**CONTROLLING OFFICER'S REPLY****ENB247****(Question Serial No. 5698)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the assistance for electric private car owners to install charging facilities:

- a) Does the Department have data on the two power companies' assistance for vehicle owners to connect power supply for car parking spaces? If yes, please provide figures on the two power companies' successful connection of power supply for car parking spaces for vehicle owners in the past 3 years.
- b) It is learnt that private companies have installed charging facilities for about 30 housing estates. Can the Department set out the names of these housing estates?
- c) Will the Administration earmark resources in 2018-19 to study provision of subsidy/assistance for owners of existing private residential premises to install charging facilities in old buildings/housing estates? If yes, what are the details of the study, the manpower and expenditure?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 229)Reply:

a)

According to the information provided by the two power companies, the number of new electricity accounts opened for connecting with electric vehicle (EV) charging facilities in existing private residential and commercial buildings from 2015 to 2017 is as follows:

Year	CLP	HKE	Aggregate
2015	60	151	211
2016	202	344	546
2017	321	309	630
Total	583	804	1 387

b)

As far as we know, there are private companies providing EV charging services for about 30 housing estates, including installation of charging facilities and provision of charging services for EV owners at their parking spaces. The names of the housing estates and their respective districts are as follows (the relevant information is set out on the websites of these private companies):

	<b>Name of housing estate</b>	<b>District</b>
1.	The Dahfuldy	Kowloon City
2.	Sunpeace Court	Kowloon City
3.	Laguna Verde	Kowloon City
4.	18 Farm Road	Kowloon City
5.	One Beacon Hill	Kowloon City
6.	The Primrose	Kowloon City
7.	Welcome Garden	Kowloon City
8.	Providence Bay	Tai Po
9.	Deerhill Bay	Tai Po
10.	JC Castle	Tai Po
11.	Clovelly Court	Central & Western
12.	Kennedy Heights	Central & Western
13.	Upton	Central & Western
14.	Blessings Garden (Phase One)	Central & Western
15.	The Belcher's	Central & Western
16.	JC Place	Tuen Mun
17.	Portofino Villas	Sai Kung
18.	The Beaumont (Phase One)	Sai Kung
19.	Mount Vienna	Sha Tin
20.	Imperial Cullinan	Yau Tsim Mong
21.	Pacific View	Southern
22.	Splendour Villa	Southern
23.	Twin Brook	Southern
24.	Bayview Garden	Tsuen Wan
25.	Royal Sea Crest	Tsuen Wan
26.	Parc Oasis	Sham Shui Po
27.	The Caldecott	Sham Shui Po
28.	The Pacifica	Sham Shui Po
29.	Manhattan Hill	Sham Shui Po
30.	One West Kowloon	Sham Shui Po
31.	Villa Carlton	Sham Shui Po
32.	Monte Carlton	Sham Shui Po
33.	Park Towers	Wan Chai

c)

Regarding the charging arrangements for electric private cars (e-PCs), it has always been the Government's policy direction that e-PC owners should perform daily charging of their e-PCs by using charging facilities at their home, workplace or other suitable places (including charging facilities provided by e-PC suppliers). Public charging facilities in Hong Kong are supplementary in nature, set up for EVs to top up their batteries at times of occasional needs. They do not serve as daily charging facilities or their alternatives. Potential buyers of e-PCs should fully consider the daily charging arrangements required and should not rely on public charging facilities for daily charging of their e-PCs.

Given the above policy direction, the Government's priority is to facilitate and encourage the installation of charging facilities in private premises when planning for the development of charging facilities for e-PCs. These measures include the Environmental Protection Department's establishment in 2011 of a dedicated team and a hotline to provide information and technical support for the installation of EV charging facilities, and the Government's tightening of gross floor area concessions for private car parks in new buildings in April 2011 to encourage developers to provide the EV charging-enabling infrastructure, including provision of sufficient power supply, cabling and conduits for all parking spaces in the buildings concerned. On the development of public charging networks as supplementary facilities, the Government not only takes the lead in providing and enhancing its public charging facilities in government car parks but also supports private establishments to set up and enhance non-governmental public charging networks.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs and retrofitting existing car parks with charging facilities. Specific timetables and estimated expenditure are not available for the time being.

- End -

**CONTROLLING OFFICER'S REPLY****ENB248****(Question Serial No. 5699)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please set out in the table below the number of first registered commercial electric vehicles (EVs) (including taxis, buses, light buses and goods vehicles, etc.), motorcycles and motor tricycles in the territory in the past 5 years.

	Motorcycle	Motor tricycle	Taxi	Public bus (KMB)	Public bus (NWFB)	Public bus (CTB)	Public bus (LWB)	Private bus	Public light bus (red minibus)	Public light bus (green minibus)	Light goods vehicle	Medium goods vehicle	Heavy goods vehicle	Special purpose vehicle
2013														
2014														
2015														
2016														
2017														
2018 (if any)														

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 230)Reply:

The number of first registered electric commercial vehicles, electric motorcycles and electric motor tricycles in Hong Kong in the past 5 years is as follows:

	Motorcycle	Motor tricycle	Taxi	Public bus (KMB)	Public bus (NWFB)	Public bus (CTB)	Public bus (LWB)	Private bus	Public light bus (red minibus)	Public light bus (green minibus)	Light goods vehicle	Medium goods vehicle	Heavy goods vehicle	Special purpose vehicle
2013	14	0	33	1	0	0	0	3	0	0	24	0	0	20
2014	25	0	15	0	0	0	0	0	0	0	9	0	0	2
2015	0	0	0	3	2	3	0	1	0	0	11	0	0	7
2016	2	0	1	0	2	3	0	0	0	0	11	0	0	4
2017	2	0	0	11	0	0	4	1	0	0	12	0	0	11
2018 (as of February)	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Note: Not including government vehicles

- End -



**CONTROLLING OFFICER'S REPLY****ENB249****(Question Serial No. 5700)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the first registration, tax and vehicle licence of electric private cars:

- a) Please set out the total amount of the First Registration Tax (FRT) concessions for electric private cars each year since 2010;
- b) Please set out the total amount of vehicle licence fee paid by electric private cars each year since 2010;
- c) Please set out the respective number of newly registered electric private cars each year since 2010 by model.
- d) Among all the existing registered electric private cars, how many are registered under car owners who are first-time private car buyers?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 231)Reply:

- a) According to the information provided by the Transport Department (TD), the amount of first registration tax (FRT) waived for electric private cars (e-PCs) in the past 5 years is as follows:

<b>Year</b>	<b>The amount of FRT waived for e-PCs (\$ million)</b>
2013	10.7
2014	549.1
2015	1,743.4
2016	1,975.4
2017	3,149.4

b) According to the information provided by the TD, the amount of annual vehicle licence fees paid by licensed e-PCs in the past 5 years is as follows:

<b>Year</b>	<b>The amount of annual vehicle licence fees paid by licensed e-PCs (\$'000) (Note 1)</b>
2013	208
2014	919
2015	3,191
2016	5,842
2017	9,491

Note 1: The estimation is made based on the number of licensed e-PCs at the end of each year and their annual vehicle licence fees required to be paid

c) According to the information provided by the TD, the number of first registered vehicles of various e-PC models in each of the past 5 years is set out at Annex.

d) According to the information provided by the TD, the number of car owners who were first time buyers among the registered 10 700-odd e-PCs is about 1 600 as at 9 March 2018.

The number of first registered vehicles of various e-PC models in each of the past 5 years

Name of manufacturer^	Model^	No. of first registered e-PCs in the year				
		2013	2014	2015	2016	2017
BMW	I3 (I01)	0	181	226	53	10
	I3 94AH (I01)	0	0	0	21	42
BYD	E6	1	7	9	4	3
HYUNDAI	IONIQ ELECTRIC	0	0	0	0	0
MITSUBISHI MOTORS CORPORATION	I-MIEV	1	4	1	0	1
NISSAN	E-NV200 5-Seats	0	0	1	2	5
	E-NV200 7-Seats	0	4	9	8	3
	LEAF	24	24	30	30	9
	LEAF PLUS	0	3	3	6	0
RENAULT	FLUENCE Z.E.	7	0	0	2	7
	ZOE	0	0	1	2	0
	ZOE (R240)	0	0	11	20	0
	ZOE ZE40	0	0	0	0	31
SMART	SMART FORTWO COUPE ELECTRIC DRIVE	0	0	0	2	0
TAZZARI	EM1	0	1	1	0	0
TESLA	MODEL S 60 KWH	0	78	87	98	150
	MODEL S 60 KWH DUAL MOTOR	0	0	0	95	102
	MODEL S 70 KWH	0	0	32	429	2
	MODEL S 70 KWH DUAL MOTOR	0	0	469	691	3
	MODEL S 75 KWH	0	0	0	82	90
	MODEL S 75 KWH DUAL MOTOR	0	0	0	132	229
	MODEL S 85 KWH DUAL MOTOR	0	0	421	284	0
	MODEL S 85 KWH PERFORMANCE DUAL MOTOR	0	0	431	65	4
	MODEL S 85 KWH	0	218	583	49	0
	MODEL S 85 KWH PERFORMANCE	0	324	121	0	0

Name of manufacturer^	Model^	No. of first registered e-PCs in the year				
		2013	2014	2015	2016	2017
TESLA	MODEL S 90 KWH	0	0	10	13	0
	MODEL S 90 KWH DUAL MOTOR	0	0	46	601	403
	MODEL S 90 KWH PERFORMANCE DUAL MOTOR	0	0	59	266	34
	MODEL S 100 KWH PERFORMANCE DUAL MOTOR	0	0	0	2	216
	MODEL S 100 KWH DUAL MOTOR	0	0	0	0	1
	MODEL X 60 KWH DUAL MOTOR	0	0	0	0	404
	MODEL X 75 KWH DUAL MOTOR	0	0	0	0	502
	MODEL X 90 KWH DUAL MOTOR	0	0	0	0	1 105
	MODEL X 90 KWH PERFORMANCE DUAL MOTOR	0	0	0	0	107
	MODEL X 100 KWH PERFORMANCE DUAL MOTOR	0	0	0	0	332
	MODEL X 100 KWH DUAL MOTOR	0	0	0	0	45
	ROADSTER	2	1	0	0	0
VOLKSWAGEN	E-GOLF 85KW 24.2KWH CL	0	0	56	63	7
	NEW E-GOLF	0	0	0	0	6
	NEW E-GOLF LIFE	0	0	0	0	7
	<b>Total</b>	<b>35</b>	<b>845</b>	<b>2 607</b>	<b>3 020</b>	<b>3 860</b>

^ Only English names are provided.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB250**

**(Question Serial No. 5701)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (3) Noise

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding roadside noise:

- a) Please set out by district the roads and road sections which will cause nearby residents to be exposed to traffic noise above the level of 70 dB(A) as stipulated in the Hong Kong Planning Standards and Guidelines for residential premises, and the number of households affected.
- b) Has the Environmental Protection Department conducted any study on noise reduction for the above road sections? If yes, what are the details, manpower and expenditure?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 232)

Reply:

- a) We have estimated the traffic noise level of residential premises near existing roads in Hong Kong and found that the road sections set out in Annex could cause nearby residents to be exposed to traffic noise above the 70dB(A) level. It is estimated that about 300 000 households are affected by the traffic noise concerned at present.
- b) To mitigate traffic noise impact of existing roads on nearby residents and reduce noise problems, apart from requiring noise impact assessment to be conducted during planning of residential developments and road works, we have also studied, in collaboration with relevant departments (e.g. the Highways Department), the technical feasibility of retrofitting noise barriers and noise enclosures on these road sections. The study has confirmed that it is technically feasible to retrofit noise reduction facilities on 41 road sections. So far, we have completed the retrofitting works on 17 road sections and those on 2 other road sections are under construction. In addition, we are preparing the funding submission for the retrofitting works on another road section to the Legislative Council. We have also studied the technical feasibility of applying low-noise road surfacing materials on roads to mitigate

traffic noise. Through the Low Noise Road Surface Trial Programme, we have resurfaced about 70 local road sections with low noise road surfacing materials. The above noise mitigation measures have already benefited about 60 000 households. As the above study work is part of the Environmental Protection Department's overall routine integrated duties, no breakdown of the manpower resources involved is available.

**Roads generating traffic noise at neighbouring residents at levels exceeding 70 dB(A)**

Road	From	To
Central and Western District		
ARBUTHNOT ROAD	Wyndham Street	Caine Road
BELCHER'S STREET	Cadogan Street	Queen's Road West
BELCHER'S STREET & VICTORIA ROAD	Smithfield	Mount Davis Road
BONHAM ROAD	Pok Fu Lam Road	Breezy Path
BORRETT ROAD	Island School	Hong Villa
CAINE ROAD	Hospital Road	Glenealy
CASTLE ROAD	Caine Road	Robinson Road
CENTRE STREET	Connaught Road West	High Street
CONDUIT ROAD	Kotewall Road	Glenealy
CONNAUGHT ROAD CENTRAL & WEST	Wilmer Street	Cleverly Street
CONNAUGHT ROAD FLYOVER<H173>	Ramp near Gilman Street	The nearest diverging & merging points west of Shun Tak Centre
CONNAUGHT ROAD WEST	Whitty Street	Wilmer Street
COTTON TREE DRIVE	Garden Road	Lower Albert Road
D'AGUILAR STREET	Wellington Street	Wyndham Street
DES VOEUX ROAD WEST	New Praya, Kennedy Town	Connaught Road Central
EASTERN STREET	Connaught Road West	Bonham Road
GARDEN ROAD	Citibank Tower	Magazine Gap Road
GLENEALY & ALBANY ROAD	Robinson Road	Wyndham Street
HILL ROAD FLYOVER<H114>	Pok Fu Lam Road	Connaught Road West
HILL ROAD	St Anthony's Catholic Church	Des Voeux Road West
HOLLYWOOD ROAD	Queen's Road West	Pottinger Street
HOSPITAL ROAD	Eastern Street	Caine Road
JUSTICE DRIVE	Queensway	Supreme Court Road
KENNEDY ROAD	Cotton Tree Drive	Queen's Road East
KOTEWALL ROAD	Hatton House	Robinson Road
LUNG WAH STREET	Ambulance Depot	Kwun Lung Lau
LYNDHURST TERRACE	Hollywood Road	Wellington Street
MAGAZINE GAP ROAD	Garden Road	Magazine Height
MORRISON STREET	Queen's Road Central	Des Voeux Road Central
MOUNT DAVIS ROAD	Victoria Road	Pok Fu Lam Road
PARK ROAD & ROBINSON ROAD	Bonham Road	Castle Road

Road	From	To
PEAK ROAD	Plunkett's Road	Stubbs Road
QUEEN'S ROAD WEST	Praya, Kennedy Town	Wilmer Street
QUEENSWAY	Cotton Tree Drive	Johnston Road
ROBINSON ROAD	Magazine Gap Road	Kotewall Road
SEYMOUR ROAD	Caine Road	Robinson Road
SMITHFIELD	Pokfield Road	Lung Wah Street
SMITHFIELD & POKFIELD ROAD	Belcher's Street	Pok Fu Lam Road
STUBBS ROAD FLYOVER<H119>	Stubbs Road	Wong Nai Chung Gap Road
THIRD STREET & WATER STREET	Pok Fu Lam Road	Queen's Road West
UPPER ALBERT ROAD	Lower Albert Road	Albany Road
WATER STREET	Third Street	Queen's Road West
WELLINGTON STREET	Wyndham Street	Queen's Road Central
WESTERN STREET	Des Voeux Road West	Bonham Road
WHITTY STREET	Queen's Road West	Des Voeux Road West
WING LOK STREET	Des Voeux Road West	Des Voeux Road Central
WYNDHAM STREET	Arbuthnot Road	Queen's Road Central
Eastern District		
BRAEMAR HILL ROAD	Tin Hau Temple Road	Pui Kiu Middle School
CAUSEWAY ROAD	Moreton Terrace	Tin Hau Temple Road
CHAI WAN ROAD	Sun Yip Street (including the section off Hing Man Estate)	Shau Kei Wan Road
CHEUNG LEE STREET	Hong Man Street	Ning Foo Street
CLOUD VIEW ROAD	Tin Hau Temple Road	Braemar Hill Road
ELECTRIC ROAD	Gordon Road	Tin Chong Street
ELECTRIC ROAD & JAVA ROAD	Power Street	North Point Road
ELECTRIC ROAD & LAU SIN STREET	Wing Hing Street	Hing Fat Street
FORTRESS HILL ROAD	King's Road	Tin Hau Temple Road
HEALTHY STREET WEST	King's Road	Police Quarters
HEALTHY STREET WEST & PAK FUK ROAD	King's Road	Tin Hau Temple Road
HOLY CROSS PATH	Sai Wan Ho Street	Hing Man Street
ISLAND EASTERN CORRIDOR (CHAI WAN)	Wan Tsui Road Roundabout	Wing Tai Road Interchange
ISLAND EASTERN CORRIDOR (HENG FA CHUEN)	A Kung Ngam Road	Heng Fa Chuen
ISLAND EASTERN CORRIDOR (NORTH POINT)	Oil Street	Tin Chiu Street



Road	From	To
ISLAND EASTERN CORRIDOR (SAI WAN HO)	Flyover off Island Eastern Corridor Link<H158>	Tung Hei Road
ISLAND EASTERN CORRIDOR (SHAU KEI WAN)	Tung Hei Road	A Kung Ngam Village Road
ISLAND EASTERN CORRIDOR (TAIKOO SHING)	Off Taikoo Shing	-
ISLAND EASTERN CORRIDOR APPROACH	Aldrich Bay Road	Chai Wan Road
ISLAND EASTERN CORRIDOR UP-RAMP EASTBOUND	Taikoo Wan Road access road	Taikoo Shing Interchange eastern end
ISLAND EASTERN CORRIDOR DOWN-RAMP EASTBOUND	Island Eastern Corridor eastbound	Tong Shui Road Flyover<H127>
ISLAND EASTERN CORRIDOR SLIP ROAD WESTBOUND	Sun Sing Street	Nam On Lane
ISLAND EASTERN CORRIDOR FLYOVER<H148>	Island Eastern Corridor Link Flyover<H158>	Tai Hong Street
ISLAND EASTERN CORRIDOR LINK FLYOVER<H158>	Hong On Street	Ramps to & from Island Eastern Corridor
ISLAND EASTERN CORRIDOR SLIP ROAD EASTBOUND	Taikoo Shing Interchange western end	Taikoo Wan Road access road
ISLAND EASTERN CORRIDOR SLIP ROAD WESTBOUND	Taikoo Wan Road access road	Taikoo Shing Interchange western end
ISLAND EASTERN CORRIDOR UP-RAMP WESTBOUND	King's Road	Healthy Street Interchange
ISLAND EASTERN CORRIDOR UP-RAMP WESTBOUND	Tong Shui Road	Island Eastern Corridor westbound
JAVA ROAD	Tin Chong Street	Tin Chiu Street
KING'S ROAD	Tin Hau Temple Road	Taikoo Shing Road
KORNHILL ROAD	Off Kornhill Plaza	-
LIN SHING ROAD	Wan Tsui Road	Cape Collinson
MONG LUNG STREET	Aldrich Bay Road	Factory Street
NAM ON LANE	Nam On Street	Shau Kei Wan Road
NORTH POINT ROAD	Wharf Road	King's Road
POWER STREET	City Garden Road	King's Road

Road	From	To
SAI WAN HO STREET	Sun Sing Street	Tai Cheong Street
SHAU KEI WAN ROAD	King's Road	Aldrich Street
SHU KUK STREET	Java Road	King's Road
TAI HONG STREET	Kwun Hoi Mansion	Shau Kei Wan Road
TAI ON STREET	Eastern Law Court Building	Shau Kei Wan Road
TAI YUE AVENUE & TAIKOO WAN ROAD	Taikoo Shing Road	Island Eastern Corridor slip road
TAIKOO SHING ROAD	Tai Yue Avenue	Shau Kei Wan Road
TAIKOO SHING ROAD & WESTLANDS ROAD	Tai Yue Avenue	King's Road
TAIKOO WAN ROAD & TAI WING AVENUE	Island Eastern Corridor access road to Taikoo Wan Road	Taikoo Shing Road
TIN CHIU STREET	East Embankment	King's Road
TIN HAU TEMPLE ROAD	King's Road	Kingsford Gardens
TONG CHONG STREET	King's Road	Hoi Wan Street
TONG SHUI ROAD	Marble Road	King's Road
TONG SHUI ROAD & FLYOVER<H127>	Island Eastern Corridor	Chun Yeung Street
TONG SHUI ROAD (GROUND LEVEL)	West Embankment	Java Road
TSAT TSZ MUI ROAD	Healthy Street East	Tin Chiu Street
TSING FUNG STREET FLYOVER<H74>	King's Road	Victoria Park Road
WING HING STREET	King's Road	Hing Fat Street
WING TAI ROAD	Tsui Wan Street	Chai Wan Road
Southern District		
ABERDEEN MAIN ROAD	Junctions of Aberdeen Praya Road	Yue Kwong Road
ABERDEEN PRAYA ROAD	Tin Wan Hill Road	Ap Lei Chau Bridge
ABERDEEN RESERVOIR ROAD	Aberdeen Main Road	Aberdeen Upper Reservoir
ABERDEEN TUNNEL APPROACH	Wong Chuk Hang Road	Aberdeen Tunnel
AP LEI CHAU BRIDGE	Aberdeen Praya Road	Ap Lei Chau Drive
AP LEI CHAU BRIDGE ROAD	Lee Chi Road	Lee Nam Road
BISNEY ROAD	Junctions of Consort Rise	Junctions of Consort Rise
CHI FU ROAD	Around Chi Fu Fa Yuen	Around Chi Fu Fa Yuen
DEEP WATER BAY ROAD	Wong Nai Chung Gap Road	Island Road
HEUNG YIP ROAD	Wong Chuk Hang Road	Ocean Park Road
ISLAND ROAD	Shouson Hill Road	Repulse Bay Road
NAM FUNG ROAD	Wong Chuk Hang Road	Wong Chuk Hang Path
POK FU LAM ROAD	Shek Pai Wan Road	Queen's Road West

Road	From	To
REPLUSE BAY ROAD	Deep Water Bay Road	South Bay Road
REPULSE BAY ROAD & STANLEY GAP ROAD	South Bay Road	Stanley Village Road
SASSOON ROAD	Victoria Road	Pok Fu Lam Road
SHEK O ROAD	Windy Gap	Shek O Village
SHEK PAI WAN ROAD	Pok Fu Lam Road	Aberdeen Praya Road
STANLEY VILLAGE ROAD	Stanley Gap Road	Carmel Road
TAI TAM ROAD	Stanley Gap Road	Chai Wan Road
VICTORIA ROAD	Pok Fu Lam Road	Cadogan Street
WAH FU ROAD	Pui Ying Secondary School	Shek Pai Wan Road
WONG CHUK HANG ROAD	Shouson Hill Road	Shouson Hill Road
Wan Chai District		
BLUE POOL ROAD	Wong Nai Chung Road	Tai Hang Road
CANAL ROAD FLYOVER<H110>	Sharp Street East	Aberdeen Tunnel North Portal
CANAL ROAD FLYOVER<H73>	Canal Road Flyover<H110>	Canal Road East & Canal Road West
CANAL ROAD FLYOVER<H75 & H110>	Cross Harbour Tunnel Southern Interchange	Sharp Street East
CAROLINE HILL ROAD	South China Athletic Association	Cotton Path
CAUSEWAY BAY FLYOVER<H72> SOUTHBOUND	Victoria Park Road eastbound	Gloucester Road
FENWICK STREET	Harbour Road	Johnston Road
FLEMING ROAD	Expo Drive East	Johnston Road
GLOUCESTER ROAD	Fenwick Pier Street	Sugar Street
GLOUCESTER ROAD & VICTORIA PARK ROAD	Cross Harbour Tunnel Southern Interchange	Houston Street
GLOUCESTER ROAD NORTHBOUND	Kingston Street	Houston Street
GORDON ROAD	Electric Road	Hing Fat Street
GREAT GEORGE STREET	East Point Road	Gloucester Road
HARBOUR ROAD	Fleming Road	Tonnochy Road
HENNESSY ROAD	Arsenal Street	East Point Road
HENNESSY ROAD & YEE WO STREET	Percival Street	Pennington Street
HING FAT STREET	King Ming Road	Causeway Road
IRVING STREET & PENNINGTON STREET	Leighton Road	Yee Wo Street
ISLAND EASTERN CORRIDOR DOWN-RAMP	Island Eastern Corridor	Hing Fat Street
ISLAND EASTERN	Hing Fat Street	Island Eastern Corridor

Road	From	To
CORRIDOR UP-RAMP		
JOHNSTON ROAD	Hennessy Road (east junction)	Hennessy Road (west junction)
KINGSTON STREET	Gloucester Road	Paterson Street
LEIGHTON ROAD	Hoi Ping Road	Canal Road East
LOCKHART ROAD	Fenwick Street	East Point Road
LUARD ROAD	Gloucester Road	Johnston Road
MARSH ROAD	Gloucester Road	Hennessy Road
MARSH ROAD & FLYOVER<H78>	Hung Hing Road	Lockhart Road
MORRISON HILL ROAD	Queen's Road East	Wan Chai Road
MOUNT BUTLER ROAD	Tai Hang Road	Mount Butler Road No.111 Block G
PATERSON STREET	Great George Street	Gloucester Road
PERCIVAL STREET	Gloucester Road	Leighton Road
QUEEN'S ROAD EAST	Queensway	Wong Nai Chung Road
RUSSELL STREET	Canal Road East	Percival Street
SHAN KWONG ROAD	Wong Nai Chung Road	Shan Kwong Court
SING WOO ROAD	Wong Nai Chung Road	Blue Pool Road
STEWART ROAD	Gloucester Road	Hennessy Road
STUBBS ROAD	Queen's Road East	Wan Chai Gap Road
TAI HANG ROAD	Wong Nai Chung Gap Road	Tung Lo Wan Road
TAI HANG ROAD FLYOVER<H134>	Gloucester Road	St. John Ambulance Brigade Headquarters
TIN LOK LANE	Wan Chai Road	Hennessy Road
TONNOCHY ROAD	Gloucester Road	Hennessy Road
TONNOCHY ROAD FLYOVER<H171>	Tonnochy Road	Gloucester Road
TUNG LO WAN ROAD	Leighton Road	Tung Lo Wan Road
TUNG LO WAN ROAD & TAI HANG ROAD	Causeway Road	Ka Ning Path
VICTORIA PARK ROAD	Percival Street	Victoria Park
VICTORIA PARK ROAD (GROUND LEVEL)	Island Eastern Corridor	Hing Fat Street
VICTORIA PARK ROAD ENTRY-RAMP WESTBOUND	Hing Fat Street	Victoria Park Road westbound
VILLAGE ROAD	Sing Woo Road	Shan Kwong Road northern end
WAN CHAI ROAD	Queen's Road East	Morrison Hill Road
WONG NAI CHUNG GAP ROAD	Leon Court	Woodland Heights
WONG NAI CHUNG ROAD	Leighton Road	Shan Kwong Road

Road	From	To
YEE KING ROAD & LAI TAK TSUEN ROAD	Cloud View Road	Tai Hang Road
YEE WO STREET	East Point Road	Moreton Terrace
Kowloon City District		
ARGYLE STREET & FLYOVER<K11B>	Prince Edward Road West	Kowloon City Interchange
ARRAN STREET	Tong Mi Road	Lai Chi Kok Road
BAILEY STREET	Ma Tau Wai Road	Hung Hom Road
BAKER STREET	Hung Hom Road	Chatham Road
BOUNDARY STREET & FLYOVER<K11A>	La Salle Road	Junction Road
BULKELEY STREET	Chatham Road North	Dock Street
CARPENTER ROAD	Junction Road	Lok Sin Road
CHATHAM ROAD FLYOVER<K20>	Gascoigne Road	Princess Margaret Road
CHATHAM ROAD NORTH	San Lau Street	Hong Chong Road
CHATHAM ROAD NORTH & MA TAU WAI ROAD	Sau Lau Street	Chi Kiang Street
CHATHAM ROAD SOUTH	Salisbury Road	Austin Road
GILLIES AVENUE SOUTH	Hung Hom South Road	Fat Kwong Street
CHI KIANG STREET	Kowloon City Road	Hoi Sham Park
CHOI HUNG ROAD & FLYOVER<K10A>	Prince Edward Road East	End of down-ramp
DORSET CRESCENT	Waterloo Road	Cornwall Street
EAST KOWLOON CORRIDOR FLYOVER	San Shan Road	Fat Kwong Street
EASTERN ROAD & KAI SHING STREET	Concorde Road	Kai Cheung Road
EMBANKMENT ROAD	Prince Edward Road West	Boundary Street
FAT KWONG STREET	Princess Margaret Road	Man Yue Street
FAT KWONG STREET & FLYOVER<K66>	Yan Fung Street	Hung Hom Road
FU NING STREET	Argyle Street	Ma Tau Chung Road
FUK LO TSUN ROAD	Prince Edward Road West	Carpenter Road
GASCOIGNE ROAD	Princess Margaret Road south	Nathan Road
GRAMPIAN ROAD	Dumbarton Road	Boundary Street
HENG LAM STREET	Junction Road	Fung Mo Street
HEREFORD ROAD	Waterloo Road	Baptist University Road
HONG CHONG ROAD	On Wan Road	Chatham Road South
HUNG HOM ROAD	Hung Hom South Road	Hok Yuen Street East
HUNG HOM SOUTH ROAD	Gillies Avenue North	Hung Hom Road
JUNCTION ROAD	Waterloo Road	Prince Edward Road West

Road	From	To
KAI CHEUNG ROAD	Wai Yip Street	Wang Kwong Road
KAI CHEUNG ROAD FLYOVER<K56>	Kai Fuk Road	Kai Cheung Road
KAI CHEUNG ROAD SLIP ROAD	Wang Kwong Road	Kai Fuk Road
KAI FUK ROAD FLYOVER<K58>	Wai Yip Street	Kwun Tong Road
KAI FUK ROAD FLYOVER<K58> DOWN-RAMP	Kai Fuk Road	Kwun Tong Road
KAI FUK ROAD FLYOVER<K58> UP-RAMP	Kwun Tong Road eastbound	Kai Fuk Road Flyover<K58>
KAI LOK STREET	Shui Ning Street	Shui Wo Street
KAI TAK AIRPORT FLYOVER<K72>	Prince Edward Road East	Departures Circuit
KAI TAK AIRPORT FLYOVER<K73>	Departures Circuit	Prince Edward Road East
KAU PUI LUNG ROAD	Chi Kiang Street	Tin Kwong Road
KENT ROAD	Cornwall Street	Suffolk Road
KNIGHT STREET	Boundary Street	Prince Edward Road West
KO SHAN ROAD	Chi Kiang Street	Pak Kung Street
KOWLOON CITY ROAD	Sung Wong Toi Road	Ma Tau Kok Road
KOWLOON CITY ROAD NORTHBOUND	San Shan Road	Sung Wong Toi Road
KWEI CHOW STREET	King Wan Street	To Kwa Wan Road
LA SALLE ROAD	Renfrew Road	Prince Edward Road West
LANCASHIRE ROAD	La Salle Road	Waterloo Road
LION ROCK ROAD	Prince Edward Road West	Carpenter Road
LOK SIN ROAD	Tak Ku Ling Road	Choi Hung Road
LONG YUET STREET	San Ma Tau Street	Kwei Chow Street
LUNG CHEUNG ROAD FLYOVER<K41A>	Kwun Tong Road	Lung Cheung Road
MA TAU CHUNG ROAD	Hang Wan Road	Ma Tau Kok Road
MA TAU CHUNG ROAD & FLYOVER<K11C>	Sung Wong Toi Garden	Kowloon City Interchange
MA TAU KOK ROAD	Shing Tak Street	Kowloon City Road
MA TAU WAI ROAD	Ma Tau Chung Road (Ruby Theatre Building)	Wuhu Street
MA TAU WAI ROAD & MA TAU CHUNG ROAD	Farm Road	Ma Tau Kok Road
MA TAU WAI ROAD & TO KWA WAN ROAD	San Lau Street & Bailey Street	Chi Kiang Street

<b>Road</b>	<b>From</b>	<b>To</b>
MAN YUE STREET	Ma Tau Wai Road	Man Lok Street
MOK CHEONG STREET	Ma Tau Chung Road	To Kwa Wan Road
NGA TSIN WAI ROAD	La Salle Road	Prince Edward Road East
NGA TSIN WAI ROAD & KAI TAK ROAD	Tak Ku Ling Road	Lok Sin Road
PAK TAI STREET	Ma Hang Chung Road	Sung Wong Toi Road
PAU CHUNG STREET	Lok Shan Road	Ma Tau Kok Road
PEONY ROAD & BEGONIA ROAD NEAR TAT CHEE AVENUE	Tat Chee Avenue	Tat Chee Avenue
PORTLAND STREET	Boundary Street	Man Ming Lane
PRINCE EDWARD ROAD EAST	Prince Edward Road West	Choi Hung Estate
PRINCE EDWARD ROAD INTERCHANGE<K78> SLIP ROADS A & B	Prince Edward Road	Kwun Tong By-pass
PRINCE EDWARD ROAD WEST & FLYOVER<K11A>	Prince Edward Road West Flyover<K11A> eastern tip	La Salle Road
PRINCE EDWARD ROAD WEST (GROUND LEVEL)	Lai Chi Kok Road	Yuen Ngai Street
PRINCESS MARGARET ROAD	Chatham Road South	Perth Street
RENFREW ROAD	Junction Road	Hereford Road
SAN MA TAU STREET	To Kwa Wan Road	Public Pier
SAN LAU STREET	San Lau Street	Bailey Street
SAN SHAN ROAD	Tam Kung Road	To Kwa Wan Road
SHEUNG SHING STREET	Fat Kwong Street	Tin Kwong Road
SHEUNG YEE ROAD FLYOVER<K57>	Ngau Tau Kok Road	Tsui Hing Street
SHUN YUNG STREET & PAK KUNG STREET	Fat Kwong Street	Chatham Road North
SUFFOLK ROAD & KENT ROAD	Waterloo Road	Cornwall Street
SUNG WONG TOI ROAD	Ma Tau Chung Road	Kowloon City Road (westbound)
SUNG WONG TOI ROAD & TO KWA WAN ROAD	Airport Tunnel	Mok Cheong Street
TAI SHING STREET	Tung Tau Tsuen Road	Choi Hung Road
TAK KU LING ROAD	Carpenter Road	Prince Edward Road East
TAK MAN STREET	Dock Street	Hung Hom Road
TAK ON STREET	Wan Hoi Street	Hung Hom Road
TAT CHEE AVENUE	Cornwall Street	Tai Hang Tung Road
TIN KWONG ROAD	Argyle Street	Ma Tau Wai Road
TO KWA WAN ROAD	Ma Tau Wai Road	Sung Wong Toi Road

Road	From	To
TSEUK LUK STREET	Choi Hung Road	King Fuk Street
TUNG TAU TSUEN ROAD	Junction Road	Shatin Pass Road
TUNG TSING ROAD	Tung Tau Tsuen Road	Lok Sin Road
WAI YIP STREET	Kai Cheung Road	Sheung Yee Road
WANG CHIU ROAD	Kai Cheung Road	Wang Kwong Road
WANG KWONG ROAD	Kai Cheung Road	Wang Chiu Road
WATERLOO ROAD	Fessenden Road	Ferry Street
WATERLOO ROAD FLYOVER	Lion Rock Tunnel	Fessenden Road
WATERLOO ROAD & FLYOVER<K12 & K44>	Argyle Street	Prince Edward Road West
WATERLOO ROAD & FLYOVER<K44>	Flint Road	Boundary Street
WATERLOO ROAD (GROUND LEVEL)	Ede Road	Suffolk Road
WATERLOO ROAD FLYOVER<K44>	Boundary Street	Prince Edward Road West
WATERLOO ROAD FLYOVER<K59>	Suffolk Road	Ede Road
WINSLOW STREET & UNDERPASS	Cheong Tung Road	Section under Chatham Road North
WO CHUNG STREET	Around Fat Kwong Street Garden	Around Fat Kwong Street Garden
WUHU STREET	Chatham Road North	Dock Street
YAN FUNG STREET	Chatham Road North	Fat Kwong Street
<b>Kwun Tong District</b>		
CHA KWO LING ROAD	Shing Yip Street	Shung Shun Street
CHUN WAH ROAD	Choi Ha Road	Ngau Tau Kok Road
HIP WO STREET	Shun Lee Tsuen Road	Kwun Tong Road
HIU KWONG STREET	Hip Wo Street	Tseung Kwan O Tunnel Road
HONG LEE ROAD	Kung Lok Road	Panorama Court
HONG NING ROAD	Hip Wo Street	Kwun Tong Road
KAI TIN ROAD	Lei Yue Mun Road	Tseung Kwan O Road
KO CHIU ROAD	Lei Yue Mun Road	Cha Kwo Ling Road
KUNG LOK ROAD	Kwai Shing Circuit	Kwai Shing Circuit
KWUN TONG BY-PASS<K77>	Lei Yue Mun Road (including Wai Yip Street to Shing Yip Street)	Wai Yip Street
KWUN TONG ROAD	Choi Hung Road	Tsui Ping Road
LEE ON ROAD	New Clear Water Bay Road	Shun On Road
LEI YUE MUN ROAD	Hoi Yuen Road	Yau Tong Road
LIN TAK ROAD	Pik Wan Road	Tseung Kwan O Road
MUT WAH STREET	Fu Yan Street	Hip Wo Street



<b>Road</b>	<b>From</b>	<b>To</b>
NGAU TAU KOK FIFTH STREET	Ngau Tau Kok Fourth Street	Kwun Tong Road
NGAU TAU KOK ROAD	Choi Wan Road	Luen On Street
NGAU TAU KOK ROAD & FLYOVER	Kwun Tong Road	Ngau Tau Kok Fourth Street
PIK WAN ROAD	Lin Tak Road	Ko Chiu Road
PING TIN STREET	Kai Tin Road	On Tin Street
SAU MAU PING ROAD	Shun On Road (including Sau Ming Road to Sau Mau Path)	Tseung Kwan O Road
SAU MING ROAD	Sau Mau Ping Road	Hiu Kwong Street
SHUN LEE TSUEN ROAD	San Lee Street (including Shun On Road to Hip Wo Street)	Hip Wo Street
SHUN ON ROAD	Shun Lee Tsuen Road	Sau Mau Ping Road
SHUNG SHUN STREET & YAN WING STREET	Cha Kwo Ling Road	Sam Ka Tsuen Ferry Pier
TAK TIN STREET	Kai Tin Road	On Tin Street
TSEUNG KWAN O ROAD	Tsui Ping (South) Estate	Lin Tak Road
TSEUNG KWAN O ROAD FLYOVER<K56>	Lei Yue Mun Road	Tsui Ping (South) Estate
TSUI PING ROAD	Hip Wo Street	Kwun Tong Road
TUNG YAN STREET	Hip Wo Street	Kwun Tong Road
YUE MAN SQUARE	Hong Ning Road	Tung Yan Street
<b>Sham Shui Po District</b>		
BOUNDARY STREET	Tung Chau Street	Prince Edward Road West
BOUNDARY STREET FLYOVER	Cheung Sha Wan Road	Sai Yee Street
BUTTERFLY VALLEY ROAD	Castle Peak Road	Lai Chi Kok Reception Centre
CASTLE PEAK ROAD - KOWLOON	Kwong Cheung Street	Yen Chow Street
CHEUNG SHA WAN ROAD	Cheung Wah Street	Boundary Street
CHING CHEUNG ROAD	Off Ching Lai Court	-
CORNWALL STREET	Slip road to Shek Kip Mei Park	Waterloo Road
FUK WING STREET	Castle Peak Road	Hing Wah Street
HING WAH STREET	Po On Road	Cheung Sha Wan Road
KI LUNG STREET	Yen Chow Street	Portland Street
KWAI CHUNG ROAD FLYOVER (MEI FOO)	Lai Chi Kok Bridge	Lai Chi Kok Road & Cheung Sha Wan Road
LAI CHI KOK BRIDGE	Mei Foo Sun Chuen	Ching Lai Court
LAI CHI KOK ROAD	Yen Chow Street	Nathan Road
LAI CHI KOK ROAD FLYOVER<K38>	Prince Edward Road West	Lai Chi Kok Road

<b>Road</b>	<b>From</b>	<b>To</b>
LAI WAN ROAD	Bus Terminus	Broadway
LUNG CHEUNG ROAD SLIP ROAD	Lung Cheung Road	Tai Po Road
MEI LAI ROAD & LAI WAN ROAD	Mei Foo Bus Terminus	Lai King Hill Road
NAM CHEONG STREET	Transport Department Driving Test Centre	Tung Chau Street
NASSAU STREET	Lai Wan Road	Mei Lai Road
PO ON ROAD	Wing Hong Street	Camp Street
SHEK KIP MEI STREET	Woh Chai Street	Yee Kuk Street
SHUN NING ROAD	Pratas Street	Wing Hong Street
TAI HANG TUNG ROAD	Nam Shan Chuen Road	North end of Tong Yam Street
TAI NAN STREET	Yen Chow Street	Prince Edward Road West
TAI PO ROAD (SHAM SHUI PO)	Cheung Sha Wan Road (including Kowloon Road to Tai Wo Ping Interchange)	Tai Wo Ping Interchange
TAI WOH PING ROAD	Tai Po Road	Nam Cheong Street
TONKIN STREET	Kwong Lee Road	Tung Chau Street
TONKIN STREET & KWONG LEE ROAD	Castle Peak Road	Cheung Fat Street
UN CHAU STREET	Castle Peak Road	Shek Kip Mei Street
WEST KOWLOON CORRIDOR (ALONG TUNG CHAU STREET)	Tonkin Street	Willow Street
WOH CHAI STREET	Pak Tin Street	Tai Hang Tung Road
WONG CHUK STREET	Sai Yeung Choi Street North	Lai Chi Kok Road
YEE KUK STREET	Lai Chi Kok Road	Boundary Street
YEN CHOW STREET	Kowloon Road	Tung Chau Street
YU CHAU STREET	Yen Chow Street	Portland Street
<b>Yau Tsim Mong District</b>		
ANCHOR STREET	Tai Kok Tsui Road	Tong Mi Road
ARGYLE STREET	Argyle Street Playground	Tong Mi Road
ARGYLE STREET & FLYOVER<K13>	Princess Margaret Road	Waterloo Road
AUSTIN AVENUE & KIMBERLEY ROAD	Observatory Road	Austin Road
AUSTIN ROAD	Chatham Road South / Observatory Road	Canton Road
CAMERON ROAD	Nathan Road	Chatham Road South
CANTON ROAD	Bowring Street	Haiphong Road
CARNARVON ROAD	Granville Road	Nathan Road
CHATHAM COURT	Chatham Road South	Kimberley Road

<b>Road</b>	<b>From</b>	<b>To</b>
CHEONG WAN ROAD	Cheong Tung Road	Gillies Avenue South
CHERRY STREET	Tong Mi Road	Olympic Station
COX'S ROAD	Jordan Road	Austin Road
DUNDAS STREET	Waterloo Road	Ferry Street
FA YUEN STREET	Boundary Street	Dundas Street
FERRY STREET	Argyle Street	Jordan Road
GASCOIGNE ROAD FLYOVER<K20>	Gascoigne Road near the ramp of Jordan Road	Chatham Road South
GASCOIGNE ROAD FLYOVER<K37>	Ferry Street	Gascoigne Road
HAIPHONG ROAD	Kowloon Park Drive	Nathan Road
HANKOW ROAD	Haiphong Road	Salisbury Road
HO MAN TIN HILL ROAD	Ho Man Tin Street	Wylie Road
HO MAN TIN STREET	Waterloo Road	Ho Man Tin Hill Road
JORDAN ROAD	Gascoigne Road	Ferry Street
KADOORIE AVENUE	Argyle Street	Prince Edward Road West
KANSU STREET	Canton Road	Nathan Road
KIMBERLEY ROAD	Austin Avenue	Nathan Road
KOWLOON PARK DRIVE	Peking Road	Haiphong Road
LAI CHI KOK ROAD (GROUND LEVEL)	Prince Edward Road West	Tong Mi Road
LOMOND ROAD	Prince Edward Road West	Argyle Street
MAN FUK ROAD	Pui Ching Road	Man Wan Road
MODY ROAD	Nathan Road	Chatham Road South
MONG KOK ROAD	Tong Mi Road	Sai Yee Street
NATHAN ROAD	Boundary Street	Salisbury Road
NELSON STREET	Yim Po Fong Street	Ferry Street
OAK STREET	Fuk Tsun Street	Cherry Street
OBSERVATORY ROAD	Chatham Road	Hong Kong Observatory
OLYMPIC AVENUE	Sung Wong Toi Road	Concorde Road
PEKING ROAD	Nathan Road	Canton Road
PINE TREE HILL ROAD & HILLWOOD ROAD	Nathan Road	Austin Road
PITT STREET	Waterloo Road	Ferry Street
PRINCE EDWARD ROAD WEST	Yuen Ngai Street	La Salle Road
PRINCESS MARGARET ROAD & FLYOVER<K12>	Pui Ching Road<K14>	Argyle Street
PUBLIC SQUARE STREET	Nathan Road	Ferry Street
PUI CHING ROAD & SHEUNG HING STREET	Sheung Shing Street	Waterloo Road
RECLAMATION STREET	Mong Kok Road	Nanking Street

Road	From	To
SAI YEE STREET	Boundary Street	Soy Street
SAI YEUNG CHOI STREET NORTH	Poplar Street	Playing Field Road
SAI YEUNG CHOI STREET SOUTH	Prince Edward Road West	Dundas Street
SHANGHAI STREET	Lai Chi Kok Road	Austin Road
SHANTUNG STREET	Yim Po Fong Street	Ferry Street
SOY STREET	Yim Po Fong Street	Tak Cheong Street
SYCAMORE STREET	Tai Kok Tsui Road	Prince Edward Road West
TAI CHING STREET	Tai Tsun Street	Ivy Street
TAI KOK TSUI FLYOVER<K54> DOWN-RAMP	Yen Chow Street	Sham Shui Po Ferry Concourse
TAI KOK TSUI ROAD	Tung Chau Street	Cherry Street
TONG MI ROAD	Lai Chi Kok Road	Argyle Street
WESTERN KOWLOON CORRIDOR (ALONG TAI KOK TSUI ROAD)	Tai Kok Tsui Road	Cherry Street
WESTERN KOWLOON CORRIDOR (ALONG TONG MI ROAD)	Tung Chau Street	Argyle Street
WYLIE ROAD	Waterloo Road	Wylie Path
YIM PO FONG STREET	Argyle Street	Waterloo Road
Wong Tai Sin District		
CHING TAK STREET	Shatin Pass Road	Tung Tau Tsuen Road
CHOI HUNG ROAD	Ning Yuen Street	Ha Yuen Leng
CHOI HUNG ROAD FLYOVER<K10B>	Choi Hung Road	Prince Edward Road East
CHUK YUEN ROAD	Nga Chuk Street	Junction Road
CLEAR WATER BAY ROAD (KOWLOON)	Lung Cheung Road	Anderson Road
FU MEI STREET	Chuk Yuen Road	Fung Mo Street
FUNG MO STREET	Fu Mei Street	Tung Tau Tsuen Road
FUNG TAK ROAD	Shatin Pass Road	Hammer Hill Road
HAMMER HILL ROAD	Po Kong Village Road	Choi Hung Road
KWUN TONG ROAD FLYOVER	Kwun Tong Road	Wai Yip Street
LUK HOP STREET	Tai Yau Street	Sze Mei Street
LUNG CHEUNG ROAD (CHOI HUNG)	Hammer Hill Road	Clear Water Bay Road
LUNG CHEUNG ROAD (DIAMOND HILL)	Po Kong Village Road	Hammer Hill Road
LUNG CHEUNG ROAD (WANG TAU HOM)	Fung Mo Street	Chuk Yuen Road

<b>Road</b>	<b>From</b>	<b>To</b>
LUNG CHEUNG ROAD (WONG TAI SIN)	Fung Mo Street	Po Kong Village Road
LUNG CHEUNG ROAD FLYOVER<K79>	Hammer Hill Road Roundabout	Choi Hung Road
MA CHAI HANG ROAD	Chuk Yuen Road	Wong Tai Sin Road
NEW CLEAR WATER BAY ROAD	Clear Water Bay Road	San Lee Street
PO KONG VILLAGE ROAD	Choi Hung Road	King Tung Street
PO KONG VILLAGE ROAD & HAMMER HILL ROAD	Lung Cheung Road	Tsz Wan Shan Road
PRINCE EDWARD ROAD EAST & FLYOVER<K10A>	Choi Hung Road	Prince Edward Road West #456
PRINCE EDWARD ROAD INTERCHANGE<K78> SOUTHBOUND SLIP ROAD C	Kwun Tong By-pass	Kwun Tong Road
SHATIN PASS ROAD (TSZ WAN SHAN)	Tsz Wan Shan Road	Fung Tak Road
SHATIN PASS ROAD (WONG TAI SIN)	Ching Tak Street	Choi Hung Road
SHEUNG FUNG STREET	Ming Fung Street	Wan Wah Street
SHUNG WAH STREET & WAN WAH STREET	Sheung Fung Street	Sheung Fung Street
TSEUK LUK STREET	King Fuk Street	Choi Hung Road
TSZ WAN SHAN ROAD	Shatin Pass Road	Yuk Wah Street
WAN WAH STREET	Tsz Wan Shan Road	Po Tsz Lane
WANG TAU HOM EAST ROAD	Wang Tau Hom North Road	Junction Road
WONG TAI SIN ROAD & FUNG TAK ROAD	Ma Chai Hang Road	Sheung Fung Street
<b>Kwai Tsing District</b>		
CASTLE PEAK ROAD - KWAI CHUNG	Texaco Road	Off Chung Shan Terrace
CASTLE PEAK ROAD - KWAI CHUNG ACCESS ROADS A & B	Slip road to Texaco Road North	Slip road to Texaco Road
CHING HONG ROAD	Tsing Yi Road	Chung Mei Road
CHUNG MEI ROAD	Tsing Yi Heung Sze Wui Road	Ching Hong Road (eastbound)
FUNG SHUE WO ROAD	Tsing Yi Road West	Tsing Yi Heung Sze Wui Road
HING FONG ROAD	Kwai Chun Court - Hing Yat House	Kwai Tsing Interchange
HING FONG ROAD &	Wo Tong Tsui Street	Tai Wo Hau Road

<b>Road</b>	<b>From</b>	<b>To</b>
KWAI HING ROAD		
KO FONG STREET	Shing Fong Street	Hing Shing Road
KWAI LUEN ROAD	East junction of Kwai Shing Circuit	West junction of Kwai Shing Circuit
KWAI ON ROAD	Hing Fong Road	Kwai Chung Road
KWAI SHING CIRCUIT	Tai Wo Hau Road (north junction)	Tai Wo Hau Road (south junction)
KWAI CHUNG ROAD (KWAI FONG & KWAI HING)	Kwai Fuk Road	Castle Peak Road (Tsuen Wan)
KWAI CHUNG ROAD (LAI KING)	Lai Chi Kok Bridge	Kwai Fuk Road
KWAI FOO ROAD	Hing Fong Road	Kwai Chung Road
KWAI FUK ROAD	Texaco Road	Lai King Hill Road
KWAI YI ROAD	Kwai Fuk Road	Kwai Foo Road
KWAI SHING CIRCUIT & SHING FUK STREET	Kwai Luen Road	Kwai Fuk Road
LAI KING HILL ROAD	Joint Street	Section under Ching Cheung Road
LAI CHO ROAD	Joint Street	Lim Cho Street
LAI CHO ROAD, LAI YIU STREET & WAH YIU ROAD	Lai King Hill Road	Lai Chi Ling Road
LEI MUK ROAD	Tai Pak Tin Street	Kwai Chung Road
PRINCESS MARGARET HOSPITAL INTERCHANGE RAMPS A & B	Kwai Chung Road	Lai King Hill Road Interchange
PRINCESS MARGARET HOSPITAL INTERCHANGE RAMPS E & F	Kwai Chung Road	Lai King Hill Road Interchange
SHEK PAI STREET	Castle Peak Road – Kwai Chung	Tai Pak Tin Street
TAI LOONG STREET	Wo Yi Hop Road	Wo Yi Hop Road
TSING KING ROAD	Tam Kon Shan Interchange	Fung Shue Wo Road
TSING TSUEN BRIDGE	Riviera Gardens	Cheung On Estate
TSING YI HEUNG SZE WUI ROAD	Fung Shue Wo Road	Tsing Yi Bridge
TSING YI ROAD	Sai Shan Road	Tsing Yi Bridge
TSUEN WAN ROAD FLYOVER<N522> OVER KWAI TSING INTERCHANGE	Ramp from Tsuen Wan Road	Ramp to Tsuen Wan Road
WAH YIU ROAD	Wa Tai Road	Lai Yiu Estate - Wah Yiu

Road	From	To
		House
WO TONG TSUI STREET	Yiu Wing Street	Kwai Chung Road
WO YI HOP ROAD	Wo Yi Hop Interchange	Castle Peak Road (Kwai Chung)
TAM KON SHAN ROAD	On Hoi House	Tsing Yi Tam Kon Shan Interchange
North District		
CASTLE PEAK ROAD - KWU TUNG	Fan Kam Road	Kwu Tung Road
CHOI YUEN ROAD	Pak Wo Road	Choi Shun Street
FAN LENG LAU ROAD	Sha Tau Kok Road (Lung Yeuk Tau)	Wo Tai Street (northbound)
FANLING HIGHWAY (FANLING & SHEUNG SHUI)	Fanling	Sheung Shui
FANLING HIGHWAY (KWU TUNG & PAK SHEK)	Kwu Tung	Pak Shek
FANLING HIGHWAY (WO HOP SHEK & TAI HANG)	Wo Hop Shek Interchange	Lam Kam Road
FANLING HIGHWAY FLYOVER<N498> OVER FAN KAM ROAD INTERCHANGE	Choi Yuen Estate	Tai Tau Leng
FANLING HIGHWAY RAMPS A & B	So Kwun Po Interchange	Fanling Highway
FANLING HIGHWAY SLIP ROADS A & B	Fan Kam Road Interchange	Fanling Highway
JOCKEY CLUB ROAD	Sha Tau Kok Road	Po Wan Road
LUNG SUM AVENUE	San Wan Road	Jockey Club Road
MA SIK ROAD	On Kui Street	Jockey Club Road
ON KUI STREET	Sha Tau Kok Road (Lung Yeuk Tau)	Lok Yip Road
PIK FUNG ROAD	San Wan Road	Jockey Club Road
PO SHEK WU ROAD	Jockey Club Road	Fanling Highway
PO WAN ROAD	San Po Street	San Fung Avenue
SAN FUNG AVENUE	Lung Sum Avenue	Jockey Club Road
SAN WAN ROAD	Jockey Club Road	Lung Wan Street
SHA TAU KOK ROAD	Ping Che Road	Lung Ma Road
SHA TAU KOK ROAD - LUNG YEUK TAU	Ma Sik Road	Jockey Club Road
SO KWUN PO ROAD	Jockey Club Road	Pak Wo Road
TAI WO SERVICE ROAD WEST	Lam Kam Road	Wo Hing Road
TIN PING ROAD	Ma Sik Road	Jockey Club Road

Road	From	To
<b>Sai Kung District</b>		
CHIU SHUN ROAD	Po Ning Road	Wan Po Road
CLEAR WATER BAY ROAD (CLEAR WATER BAY PENINSULA)	Hang Hau	Tai Au Mun
CLEAR WATER BAY ROAD (TSENG LAN SHUE & PIK UK)	Anderson Road	Hiram's Highway
CLEAR WATER BAY ROAD (TSEUNG KWAN O)	Hiram's Highway	Hang Hau
HIRAM'S HIGHWAY	Marina Cove	Po Tung Road
PO FUNG ROAD	Po Hong Road	Po Lam Road
PO HONG ROAD	Wing Lai Road	Wan Lung Road
PO LAM ROAD	Anderson Road (east end)	Po Hong Road
PO LAM ROAD NORTH	Po Hong Road	Po Shun Road
PO NING ROAD	Po Lam Road North	Chiu Shun Road
PO TUNG ROAD & TAI MONG TSAI ROAD	Tai Mong Tsai Road	Hiram's Highway
SAI SHA ROAD (SHAP SZE HEUNG)	Lok Wo Sha	Hiram's Highway
TSUI LAM ROAD	Tseung Kwan O Tunnel	Po Lam Road North
YAN KING ROAD	Po Fung Road	Po Lam Road North
<b>Sha Tin District</b>		
CHAP WAI KON STREET	Siu Lek Yuen Road	Ngan Shing Street
CHE KUNG MIU ROAD	Hin Keng Estate (including Hin Keng Street to Lion Rock Tunnel Road)	Lion Rock Tunnel Road
CHUI TIN STREET	Che Kung Miu Road	Hung Mui Kuk Road
FO TAN ROAD	Tai Chung Kiu Road	Kwei Tei Street
HUNG MUI KUK ROAD	Che Kung Miu Road (including Che Kung Miu Road to Tin Sam Street)	Lion Rock Tunnel Road
KENG HAU ROAD & CHE KUNG MIU ROAD	Tai Po Road - Sha Tin Heights	Tin Sam Street
LION ROCK TUNNEL ROAD (HUNG MUI KUK TO SUN TIN WAI)	Hung Mui Kuk Road	Sha Tin Road
LION ROCK TUNNEL ROAD (HUNG MUI KUK TO TUNNEL)	Hung Mui Kuk Road	Lion Rock Tunnel
LION ROCK TUNNEL ROAD (SHA TIN TAU)	Sha Tin Road	Tai Po Road – Sha Tin
LOK SHING STREET	Po Shing Street	Pak Tak Street
LOK KING STREET	Fo Tan Road	Jubilee Garden



<b>Road</b>	<b>From</b>	<b>To</b>
MA ON SHAN ROAD	Heng On Estate (including the section off Heng On Estate & Yiu On Estate)	Sai Sha Road
MEI TIN ROAD	May Shing Court	Che Kung Miu Road
NGAN SHING STREET	Siu Lek Yuen Road	Chap Wai Kon Street
ON CHIU STREET	On Chun Street	Sai Sha Road
ON CHUN STREET	Around Bayshore Towers	Around Bayshore Towers
PAK HOK TING STREET	Sha Tin Centre Street	Sha Tin Centre Street
SAI SHA ROAD (MA ON SHAN)	Hang Hong Street	Off Lok Wo Sha
SHA KOK STREET	Tai Chung Kiu Road	Sha Tin Wai Road
SHA TIN CENTRE STREET	Tam Kon Po Street	Tai Po Road - Tai Wai
SHA TIN ROAD	Yuen Wo Road (including Ngan Shing Street to Tai Chung Kiu Road)	Lion Rock Tunnel Road
SHA TIN WAI ROAD	Sha Tin Road	Siu Lek Yuen Road
SHA TIN ROAD RAMPS	Tai Chung Kiu Road	Sha Tin Road
SHA TIN WAI ROAD FLYOVER<UR T5> NORTHBOUND SLIP ROAD C	Sha Tin Wai Road Flyover<UR T5> northbound	Tate's Cairn Highway slip road A
SHA TIN RURAL COMMITTEE ROAD	Tai Chung Kiu Road	Tai Po Road - Sha Tin
SIU LEK YUEN ROAD	Tate's Cairn Highway	Tai Chung Kiu Road
SUI WO ROAD	Ville de Jardin	Sui Wo Court
SUN TIN WAI ESTATE ACCESS ROAD	Sha Tin Tau Road	Sha Tin Tau Road
TAI CHUNG KIU ROAD	Jat Min Chuen (including the section off Jat Min Chuen & Yue Shing Court)	Shek Mun Interchange
TAI CHUNG KIU ROAD	Siu Lek Yuen Road	On Muk Street
TAI PO ROAD - SHA TIN	Tung Lo Wan	Sha Tin Racecourse
TAI PO ROAD - SHA TIN HEIGHTS	Keng Hau Road	West of Sha Tin Treatment Works
TAI PO ROAD - SHA TIN HEIGHTS & TAI WAI	Keng Hau Road	Tung Lo Wan
TAM KON PO STREET	Yuen Wo Road	Sha Tin Centre Street
TIN SAM STREET	Che Kung Miu Road	Hung Mui Kuk Road
TSUEN NAM ROAD, CHIK FUK STREET & SHING HO ROAD	Tai Po Road - Tai Wai	Tai Wai Road
YI SHING SQUARE	Kong Pui Street	Greenwood Garden
YUEN WO ROAD	Fo Tan Road (including Fo Tan Road to Wo Che Street)	Sha Tin Rural Committee Road

Road	From	To
<b>Tai Po District</b>		
HEUNG SZE WUI STREET	Po Heung Street	Wan Tau Street
KWONG FUK ROAD	Pak Shing Street	Nam Wan Road
NAM WAN ROAD	Ting Kok Road	Tat Wan Road
ON CHEUNG ROAD	Tai Po Road (Tai Wo)	Chung Nga Road
PO HEUNG STREET	On Cheung Road	Pan Chung Road
TAI PO ROAD - MA LIU SHUI	Sha Tin Racecourse	Lai Ping Road
TAI PO ROAD - TAI WO	Tai Po Tai Wo Road	Tai Po Tau Water Pumping Station
TAI PO ROAD - YUEN CHAU TSAI	Nam Wan Road	Tai Po Road
TAI PO ROAD - YUEN CHAU TSAI EASTBOUND	Kwong Wang Street	Ramp to Tai Po Road - Yuen Chau Tsai
TAI PO TAI WO ROAD	Tolo Highway	Yuen Shin Road
TAT WAN ROAD	Tai Po Market Station	Lam Tsuen River
TING KOK ROAD	Tai Po Road Tai Wo Road	Tai Mei Tuk
TING TAI ROAD	Tai Po Road (Tai Wo)	Ting Kok Road
TOLO HIGHWAY (MA LIU SHUI & TAI PO KAU)	Ma Liu Shui	Tai Po Kau
TOLO HIGHWAY (TAI PO & TAI WO)	Wang Fuk Court	Lam Kam Road Interchange
TOLO INTERCHANGE RAMP G	Tolo Highway Interchange ramp A	Kwong Wang Street
TOLO HIGHWAY INTERCHANGE SLIP ROAD	Slip roads to & from Tolo Highway	Slip roads to & from Tai Po Road - Yuen Chau Tsai
WAN TAU STREET	Kwong Fuk Road	Nam Shing Street
YUEN SHIN ROAD	Wang Fuk Court	Ting Kok Road
<b>Tsuen Wan District</b>		
CASTLE PEAK ROAD - TING KAU	Gemini Beaches	Po Fung Terrace
CASTLE PEAK ROAD - TSUEN WAN	Po Fung Terrace	Texaco Road
CASTLE PEAK ROAD - TSUEN WAN RAMPS A & B	Tuen Mun Road	Castle Peak Road - Tsuen Wan
CHEUNG PEI SHAN ROAD	Tsuen Kam Interchange	Wo Yip Hop Interchange
CHUNG ON STREET	Yeung Uk Road	Castle Peak Road (Tsuen Wan)
HOI KOK STREET	Hoi Hing Road	Hoi Shing Road
LO WAI ROAD	Yi Pei Chun Road	The Yuen Yuen Institute
MA TAU PA ROAD	Texaco Road	Yeung Uk Road
ROUTE TWISK	Tsuen Kam Interchange	Tso Kung Tam

Road	From	To
SHA TSUI ROAD	Tai Chung Road	Texaco Road
SHEK WAI KOK ROAD	Wai Tsuen Road	Cheung Pei Shan Road
SHING MUN ROAD	Castle Peak Road (Tsuen Wan)	Cheung Shan Estate Road West
TAI HO ROAD	Tsuen Wan Transport Complex	Castle Peak Road (Tsuen Wan)
TAI HO ROAD & FLYOVER<N484>	Hoi Pa Street	Castle Peak Road - Tsuen Wan
TAI HO ROAD NORTH	Tsuen Wan Market Street	Tsuen Kam Interchange
TAI WO HAU ROAD	Texaco Road	Hing Fong Road
TEXACO ROAD	Castle Peak Road - Tsuen Wan	Yeung Uk Road
TEXACO ROAD FLYOVER	Tak Tai Path	Tsuen Tsing Interchange
TEXACO ROAD NORTH	Tsuen Kam Interchange	Texaco Road Roundabout
TSUEN KING CIRCUIT	Castle Peak Road (Tsuen Wan)	Tsuen Tak Gardens
TSUEN WAN ROAD	Texaco Road (slip road)	Clague Garden Estate
TSUEN WAN ROAD NORTHBOUND RAMP	Kwai Chung Road	Tsuen Wan Road
TSUEN WAN ROAD SOUTHBOUND RAMP	Tsuen Wan Road	Kwai Chung Road
TUEN MUN ROAD (TING KAU BRIDGE - SHAM TSENG)	Rhine Terrace	Sea Crest Villa Phase 2
TUEN MUN ROAD (TSUEN WAN - TING KAU BRIDGE)	Chai Wan Kok	Ting Kau
WAI TSUEN ROAD	Tsuen Kam Interchange	Sai Lau Kok Road
WING SHUN STREET	Ma Tau Pa Road	Wing Yin Street
YEUNG UK ROAD	Tai Ho Road	Ma Tau Pa Road
HOI ON ROAD	Lai Shun Road	Hoi Hing Road
<b>Tuen Mun District</b>		
CASTLE PEAK ROAD - SO KWUN WAT	Tsing Lung Road	Hong Kong Gold Coast (Phase 1)
CASTLE PEAK ROAD - CASTLE PEAK BAY	Tuen Mun Heung Sze Wui Road	So Kwun Wat
CASTLE PEAK ROAD - LINGNAN	Lam Tei Interchange	Fu Tei Road
CASTLE PEAK ROAD - SAN HUI	Tuen Mun Heung Sze Wui Road	Fu Tei Road
CASTLE PEAK ROAD - SHAM TSENG & TSING LUNG TAU	Gemini Beaches	Ka Loon Tsuen
CASTLE PEAK ROAD - TAI LAM	Hong Kong Gold Coast (Phase 1)	Siu Lam Hospital

Road	From	To
HOI CHU ROAD	Hoi Wong Road	Tuen Mun Heung Sze Wui Road
MING KUM ROAD	Tsun Wen Road	Pui To Road
PUI TO ROAD	Tsun Wen Road	Tsing Wun Road
PUI TO ROAD<N503> OVER TUEN MUN ROAD	Castle Peak Road - San Hui	Kai Fat Path
SHEK PAI TAU ROAD	Tai Hing Street	Tsun Wen Road
TAI FONG STREET	Leung Choi Lane	Tsun Wen Road
TSENG CHOI STREET	Around Castle Peak Road (San Hui)	Around Castle Peak Road (San Hui)
TSING CHUNG KOON ROAD	San Fuk Road	Tai Fong Street
TSING LUN ROAD	Tsun Wen Road	Hong Po Road
TSING TIN ROAD	Ming Kum Road	Tsun Wen Road
TSING TIN ROAD INTERCHANGE	Tsun Wen Road	Tuen Mun Road
TSUN WEN ROAD	Ming Kum Road	Pui To Road
TUEN FAT ROAD	Tuen Yan Street	Tuen Lee Street
TUEN HING ROAD	Tuen Mun Road	Castle Peak Road
TUEN HING ROAD FLYOVER<N432> OVER TUEN MUN ROAD	New Town Mansion	Tuen Mun Government Offices
TUEN MUN HEUNG SZE WUI ROAD	San Hui Path	Hoi Wing Road
TUEN MUN ROAD - SIU LAM INTERCHANGE SLIP ROADS	Tuen Mun Road	Castle Peak Road
TUEN MUN ROAD (SHAM TSENG TO SIU LAM)	Sea Crest Villa Phase 2	Ka Loon Tsuen
TUEN MUN ROAD (SIU LAM TO TUEN MUN)	Brothers Point	Harvest Garden
TUEN MUN ROAD (TUEN MUN)	Harvest Garden	Tsing Tin Road
TUEN MUN ROAD RAMPS A & B	Wong Chu Road	Tuen Mun Road
WONG CHU ROAD	Hoi Wong Road	Tuen Mun Road
WU CHUI ROAD	Lung Mun Road	Wu Shan Road
WU SHAN ROAD	Lung Mun Road	Wu Chui Road
Yuen Long District		
CASTLE PEAK ROAD - TAM MI, MAI PO & SAN TIN	Fairview Park Boulevard	Lok Ma Chau Road
CASTLE PEAK ROAD - HUNG SHUI KIU	Hung Tin Road	Shun Tat Street
CASTLE PEAK ROAD -	Hung Tin Road	Ma Wang Road

Road	From	To
PING SHAN		
CASTLE PEAK ROAD - YUEN LONG	Ma Wang Road	Au Tau Interchange
FUNG CHEUNG ROAD	Castle Peak Road (Yuen Long)	Grand Del Sol
HOP YICK ROAD	Tai Tong Road	Fung Cheung Road
KAU YUK ROAD	Yuen Long Tai Yuk Road	Tai Tong Road
KIK YEUNG ROAD	Yuen Long On Ning Road	Castle Peak Road (Yuen Long)
KUK TING STREET	Sai Tai Street	Castle Peak Road - Yuen Long
LONG PING ROAD	Fuk Hi Street	Fung Chi Road
LONG TIN ROAD	Yuen Long Highway	Shui Pin Wai Interchange
LONG YAT ROAD	Castle Peak Road - Yuen Long	Castle Peak Road - Yuen Long
LONG YIP STREET & YUEN LONG ON LOK ROAD	Wang Lok Street	Castle Peak Road - Yuen Long
LONG YIP STREET FLYOVER<N192>	Long Yip Street	Castle Peak Road - Yuen Long
MA MIU ROAD	Ma Wang Road	Castle Peak Road (Yuen Long)
PING HA ROAD	Castle Peak Road	Tin Yiu Road
PING HA ROAD & LAU FAU SHAN ROAD	Tin Ha Road	Deep Bay Road
SAN TIN HIGHWAY, CASTLE PEAK ROAD & SAN TAM ROAD	Castle Peak Road - Mai Po	Sha Po Tsuen
SAU FU STREET	Yuen Long On Ning Road	Yuen Long Pau Cheung Square
TAI KIU ROAD	Yuen Long On Lok Road	Yuen Long On Ning Road
TAI TONG ROAD	Castle Peak Road (Yuen Long)	Tai Tong Tsuen
TIN HA ROAD	Ping Ha Road	Castle Peak Road (Hung Shui Kiu)
WANG LOK STREET	Daido Construction Materials Limited	Wang Tat Road
WANG CHAU ROAD	Yuen Long On Ning Road	Wang Kwong Road
WANG TAK ROAD, MA WANG ROAD, LONG YIP STREET & YUEN LONG ON LOK ROAD	Wang Lok Street	Ma Miu Road
WANG TAK ROAD & MA WANG ROAD	Ma Miu Road	Shui Pin Wai Road
YUEN LONG HONG LOK ROAD	Castle Peak Road (Yuen Long)	Kau Yuk Road

<b>Road</b>	<b>From</b>	<b>To</b>
YUEN LONG MAIN ROAD	Ma Miu Road	Yuen Long On Lok Road
YUEN LONG ON NING ROAD	Ma Miu Road	Sai Tai Street
YUEN LONG TAI YUK ROAD & KAU YUK ROAD	Castle Peak Road - Yuen Long	Tai Tong Road

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB251**

**(Question Serial No. 5702)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (5) Environmental Assessment and Planning

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

How many meetings were held by the Environmental Impact Assessment (EIA) Appeal Board Panel last year? What was the attendance of each member? Was there any additional expenditure other than the recurrent expenditure incurred by the Board Panel last year? Please provide the number of appeals handled and a summary of the appeal content including the EIA projects involved in the appeals in the past 3 years.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 233)

Reply:

In the past 3 years, the Environmental Impact Assessment (EIA) Appeal Board Panel (the Board Panel) did not need to handle any appeal applications on EIA projects. There was no additional expenditure other than the recurrent expenditure incurred by the Board Panel last year.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB252**

**(Question Serial No. 5703)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (5) Environmental Assessment and Planning

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Government released the Sustainable Lantau Blueprint in June 2017. Has the Environmental Protection Department provided technical environmental advice on this blueprint? If yes, please provide the text and outline of the technical environmental advice, as well as the relevant manpower and expenditure.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 234)

Reply:

The Environmental Protection Department (EPD) has provided technical advice on environmental issues involved in the Sustainable Lantau Blueprint. These advices in connection with the strategic positioning and planning principles of “Development in the North, Conservation for the South” and enhancing the preservation of Lantau’s ecological habitat are contained in the Sustainable Lantau Blueprint released by the Government in June 2017. For implementation of individual projects where the relevant departments need to conduct further assessment on environmental issues involved in the specific plans, the EPD will also provide further technical advice.

As the above work is part of the work of the EPD, we do not have a separate breakdown of the manpower and expenditure involved for such work.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB253**

**(Question Serial No. 5704)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (5) Environmental Assessment and Planning

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the major infrastructure projects in Hong Kong, including the Hong Kong - Zhuhai - Macao Bridge, has the Environmental Protection Department carried out continuous observation and assessment on the environmental implications of the project, or inspected independently the environmental monitoring and audit reports updated each month by the Highways Department's Environmental Project Office for the Hong Kong - Zhuhai - Macao Bridge works? If yes, what are the details, manpower and expenditure?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 235)

Reply:

Large-scale infrastructure projects, such as airports, railways, reclamations and major roads, etc. (including Hong Kong - Zhuhai - Macao Bridge Hong Kong Link Road), are generally designated projects under the control of the Environmental Impact Assessment Ordinance. The environmental permits issued under the Ordinance require permit holders to implement environmental monitoring and audit (EM&A) programmes; set up Environmental Teams and appoint Independent Environmental Checkers to consistently monitor the environmental conditions and audit the implementation of various environmental mitigation measures so as to avoid potential environmental problems arising from the projects; and submit EM&A reports to the Environmental Protection Department (EPD) on a regular basis. Apart from reviewing the EM&A reports to ensure that the specified environmental monitoring data meet the relevant standards, EPD staff also carry out surprise site inspections irregularly to ensure that the environmental mitigation measures are effectively implemented and the environmental impact of the works is under control.

The specific expenditure and number of staff involved in monitoring and following up on large-scale infrastructure designated projects form part of the establishment of EPD's routine handling of matters on designated projects and integrated enforcement practices. No separate information on work in this respect is available.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB254**

**(Question Serial No. 5705)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the country park enclaves:

- a) Please provide in table form the details of the remaining country park enclaves at present, including their locations, areas, and the summary of the Agriculture, Fisheries and Conservation Department's (AFCD) assessment conclusion as to whether such enclaves are suitable for incorporation into the country parks. When does the Administration plan to incorporate such enclaves into the country parks?
- b) What was the number of suspected cases of unauthorised development discovered in enclaves incorporated in the country parks during AFCD's inspections in each of the past 5 years? What was the number of enforcement actions taken by AFCD in accordance with the Country Parks Ordinance (Cap. 208)?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 236)

Reply:

(a) There are a total of 77 country park enclaves in Hong Kong, of which 23 were already covered by statutory town plans before 2010. The Government indicated that it would either include the remaining 54 enclaves into country parks, or determine their proper uses through statutory planning to meet conservation and social development needs.

The Planning Department (the PlanD) has completed the formulation of Development Permission Area (DPA) Plans for 30 enclaves, among which the enclave in Sai Wan has also been incorporated into the country park. For the remaining 29 enclaves, the PlanD has also completed the preparation of draft Outline Zoning Plans (OZPs) at the end of March 2017 to replace the DPA Plans.

It rests with the Agriculture, Fisheries and Conservation Department (AFCD) to assess whether the remaining 24 enclaves are suitable for incorporation into country parks for appropriate protection. 3 of the enclaves situated in Sai Wan, Kam Shan and Yuen Tun,

and another 3 enclaves situated in Fan Kei Tok, Sai Lau Kong and near Nam Shan were respectively incorporated into country parks with effect from 30 December 2013 and 1 December 2017.

AFCD will continue to assess the suitability for incorporating the remaining enclaves not covered by statutory town plans into country parks according to the established principles and criteria as well as relevant considerations, and will put forward proposals to incorporate suitable enclaves into country parks in accordance with the statutory procedures stipulated in the Country Parks Ordinance (Cap. 208). The information on the above enclaves not yet covered by statutory plans is tabulated below:

Name of enclave	Approx. area (in hectares)
Ping Shan Chai	15
Tei Tong Tsai	15
Tung Sam Kei	4
Nam Sham Tung	5
Lai Chi Chong	16
Tai Hom	5
Wong Chuk Long	4
Site near Wong Mau Kok	3
Hung Shek Mun Tsuen	10
Lai Tau Shek	10
Tsin Yue Wan	4
Yi Tung Shan	7
Man Cheung Po	2
Site near Peaked Hill	5
Site near Chuen Lung	10
Site near Tso Kung Tam	9
Tsing Fai Tong	26
Sheung Tong	10
Sheung Fa Shan	26

(b) AFCD conducts regular patrols in country parks including the enclaves. If suspected cases of unauthorised developments are detected in enclaves incorporated in the country parks, AFCD will take enforcement actions under the Country Parks Ordinance (Cap. 208) or refer such cases to the relevant departments as appropriate for follow-up actions to be taken in accordance with the relevant legislation or lease conditions. In the past 5 years, AFCD did not detect any cases of developments that contravened the Country Parks Ordinance (Cap. 208) in enclaves incorporated in country parks.

- End -

**CONTROLLING OFFICER'S REPLY****ENB255****(Question Serial No. 5706)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (6) Nature ConservationControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please provide in table form the estimated expenditure, work scope and conservation/revitalisation targets of various conservation projects under the Countryside Conservation Office in 2018-19.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 237)Reply:

The Chief Executive announced in her 2017 Policy Address that a Countryside Conservation Office (CCO) would be established to co-ordinate conservation projects that would promote sustainable development of remote countryside. The CCO will be set up in 2018-19, which is expected to comprise about 28 officers from various grades including 1 Administrative Officer Staff Grade C, 1 Senior Environmental Protection Officer, 3 Environmental Protection Officers/Assistant Environmental Protection Officers, 1 Senior Environmental Protection Inspector, 2 Environmental Protection Inspectors, 1 Chief Executive Officer, 1 Senior Executive Officer, 2 Executive Officer Is, 2 Executive Officer IIs, 2 Clerical Officers, 4 Assistant Clerical Officers, 1 Personal Secretary I, 1 Senior Engineer, 1 Engineer/Assistant Engineer, 1 Architect/Assistant Architect, 1 Town Planner/Assistant Town Planner, 1 Landscape Architect/Assistant Landscape Architect, 1 Forestry Officer/Assistant Forestry Officer and 1 Liaison Officer I. The increase in expenditure under the Programme mainly includes the staff costs of these officers (about \$19.61 million) and cashflow needs earmarked for launching conservation activities and projects mentioned in the paragraph below (about \$10 million) .

The Government has earmarked \$1 billion for such conservation and revitalisation efforts, as well as minor improvement works. The CCO will devise future specific work plans and projects upon establishment. On the whole, the CCO will co-ordinate collaboration of the departments concerned in regard to the conservation and revitalisation work, and provide an integrated and dedicated mechanism with resources for the conservation and sustainable development of the remote countryside in the long run. The CCO plans to support

collaboration of non-governmental organisations (NGOs) and villagers to organise diverse and innovative conservation activities and projects based on an interactive and co-operative approach with half of the \$1 billion mentioned above, i.e. \$500 million, under non-recurrent account. For instance, the long-term conservation and revitalisation of certain areas may be funded by an approach similar to that of the Nature Conservation Management Agreement Scheme under the Environment and Conservation Fund. Where circumstances permit, the rich natural and cultural resources in remote countryside can be utilised for planning some “in-depth” travel focusing on the ecological conservation, geological exploration and traditional cultural experience. The CCO also plans to spend the remaining \$500 million on suitable minor improvement works for public facilities, such as providing or improving walkways, piers, walkway lightings, toilets, thematic footpaths and trails, public transportation services and waste recycling and treatment facilities, and rehabilitating the existing architectural environment in the countryside like refurbishment of representative village houses. Moreover, the CCO will follow the Government’s established procurement procedures to engage contractors to take forward necessary conservation initiatives as necessary and appropriate.

We will set up an advisory committee (AC) comprising non-official members including non-government stakeholders such as scholars, professionals, rural/district stakeholders and green groups. The main duties of the AC are to examine applications on the relevant conservation and revitalisation projects (not including minor improvement works) submitted by NGOs and monitor the implementation of approved projects and proposals. The CCO will consult the AC on the scope of and application procedures for conservation and revitalisation projects.

As a priority, the CCO will enhance countryside revitalisation in Lai Chi Wo, as well as ecological conservation in Sha Lo Tung, and will keep under review the implementation of these initiatives and their effectiveness from time to time, with the aim of extending the initiatives progressively to other remote countryside areas.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB256**

**(Question Serial No. 3949)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the cooking fumes produced by restaurants and the food manufacturing sector, would the Administration provide the following:

1. The number of complaints received and substantiated in the past 5 years, with a breakdown by District Council district;
2. The number of cases in which notices were issued by the Environmental Protection Department (EPD) against excessive emission of cooking fumes to require necessary remedial actions to be taken;
3. The expenditure and establishment of the EPD in controlling emission of cooking fumes from restaurants and the food manufacturing sector in the past 5 years; and
4. Has the EPD proactively inspected restaurants on excessive emission of cooking fumes? If yes, what is the figure? If no, what are the reasons?

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 2704)

Reply:

1. The number of complaints received by the Environmental Protection Department (EPD) against the emission of oily fumes and cooking odour from restaurants and catering businesses in 2013-2017 is given in Annex 1.

In handling the complaints, the EPD will remind the operators of the restaurants and catering businesses to check their air pollution control equipment and carry out proper maintenance work, etc. Among all complaints, the number of those that required further

follow-up action by the EPD, such as giving warnings, issuing statutory notices to require improvement or referring the case to other departments for follow-up, is given in Annex 2.

2. The number of statutory notices issued by the EPD relating to the emission of oily fumes and cooking odour from restaurants and catering businesses in accordance with the Air Pollution Control Ordinance in 2013-2017 is as follows:

<b>Year</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Number of statutory notices	19	18	25	57	64

3. Handling of complaints against oily fumes from restaurants and catering businesses and taking follow-up actions are part of the routine pollution control duties of the EPD, and there is no breakdown on the manpower resources and expenditure involved.

4. Besides carrying out investigations in response to complaints, the EPD also conducts proactive inspections on restaurants and catering businesses. The number of inspections completed by the EPD in 2013-2017 is as follows:

<b>Year</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Number of inspections	3 309	3 323	3 230	3 735	4 021

**Complaints against emission of oily fumes and cooking odour  
from restaurants and catering businesses in 2013-2017**

<b>District Council District</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Central & Western	112	70	152	126	111
Wan Chai	73	100	81	59	93
Eastern	87	105	100	95	80
Southern	19	14	15	16	12
Yau Tsim Mong	168	169	140	110	102
Sham Shui Po	70	128	97	64	69
Kowloon City	83	78	124	97	106
Wong Tai Sin	14	24	37	30	38
Kwun Tong	31	29	57	47	51
Tsuen Wan	49	43	45	34	63
Tuen Mun	18	16	22	35	30
Yuen Long	81	59	32	61	49
North	20	24	13	21	20
Tai Po	31	34	33	33	36
Sai Kung	30	11	47	25	26
Sha Tin	61	39	79	60	51
Kwai Tsing	22	34	38	28	58
Islands	14	12	16	14	12
<b>Total</b>	<b>983</b>	<b>989</b>	<b>1 128</b>	<b>955</b>	<b>1 007</b>



**Complaints against emission of oily fumes and cooking odour  
from restaurants and catering businesses in 2013-2017 (follow-up action required)**

<b>District Council District</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Central & Western	24	26	53	22	30
Wan Chai	1	7	13	3	12
Eastern	4	8	10	20	14
Southern	1	3	1	4	3
Yau Tsim Mong	35	51	44	27	54
Sham Shui Po	8	6	10	13	4
Kowloon City	5	5	6	9	31
Wong Tai Sin	0	1	2	2	7
Kwun Tong	1	0	3	4	2
Tsuen Wan	11	13	20	13	27
Tuen Mun	1	2	5	15	7
Yuen Long	28	8	7	2	6
North	5	6	3	5	3
Tai Po	9	7	9	5	13
Sai Kung	2	1	16	5	4
Sha Tin	31	13	49	34	13
Kwai Tsing	2	6	7	8	11
Islands	7	5	8	5	1
<b>Total</b>	<b>175</b>	<b>168</b>	<b>266</b>	<b>196</b>	<b>242</b>

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB257**

**(Question Serial No. 4407)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme:

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

According to the 2011 Work Plan of the Framework Agreement on Hong Kong/Guangdong Co-operation, Guangdong and Hong Kong will “commence the establishment of a regional 400km long cross-boundary green corridor for the Bay Area at the Pearl River Estuary by phases and sections. The main sections are: Zhuhai Taipin Mountain Forest Park – Heibaimein General Mountain Country Park – Fenghuang Mountain Scenic Area – Zhongshan Wugui Mountain Forest Park – Guangzhou Shanwan Waterway – Haizhu Orchard Conservation Area – Dongguan Shuilian Mountain Forest Park – Dalin Mountain Forest Park – Shenzhen Luohu Forest Park – Tanglang Mountain – Muolin Forest Park – Yinhu Forest Park – Wutong Mountain Forest Park – Hong Kong Pat Sin Leng, Tai Lam Country Park.” Will land be reserved in the existing port and border areas of Hong Kong to build a green corridor intersection connected to the green corridor of the Guangdong province?

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 49)

Reply:

The Greenway, which generally comprises leisure and recreational spaces in cycle tracks, walking trails and hiking trails, enables the public to relax and get in touch with nature. The Agriculture, Fisheries and Conservation Department (AFCD) is conducting preparatory work to designate Robin's Nest as country park, with a view to designating about 500 hectares of land in the vicinity of Robin's Nest in Sha Tau Kok, New Territories, including part of the government land in the former Frontier Closed Area, as country park for conservation and recreation purposes. AFCD will construct hiking trails in the newly established country park to expand the existing hiking trail network in Hong Kong, which is similar to the concept of the green corridor of the Guangdong Province. The relevant hiking trail facilities will not involve additional land at Hong Kong's boundary control points and border areas, and the visitors will have to use existing cross-boundary facilities to travel between the two places.

- End -

**CONTROLLING OFFICER'S REPLY****ENB258****(Question Serial No. 4863)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

How many cases of illegal dumping of construction waste were there in each of the past 5 years? What were the numbers of prosecutions, persons involved and convictions by the court? What were the penalties imposed?

How many inspections were conducted by the Government on dumping of construction waste? What were the staffing and financial expenditure involved?

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 5534)

Reply:

Cases of dumping of construction waste may include illegal disposal of construction waste on government land and land filling of construction waste on private land. The number of public reports on illegal disposal of construction waste handled by the relevant government departments (including the Agriculture, Fisheries and Conservation Department, Buildings Department, Civil Engineering and Development Department, Drainage Services Department, Environmental Protection Department (EPD), Food and Environmental Hygiene Department, Home Affairs Department, Lands Department, Planning Department and Highways Department), as well as the number of inspections, number of prosecutions, persons involved, convictions by the court and total fine in the past 5 years are tabulated below:

**Illegal disposal of construction waste on government land**

Year	2013	2014	2015	2016	2017
Public reports*	8 335	7 565	6 499	8 225	10 507
Number of inspections	13 564	13 578	14 889	16 795	13 798
Number of prosecutions					
(1) Number of summonses	40	58	71	105	80
Summonses involving individuals	39	56	70	101	67
Summonses involving companies	1	2	1	4	13

(2) Number of convictions by the court	40	58	67	101	77
(3) Number of Fixed Penalty Notices (FPNs) issued **	47	35	32	45	33
Total fine (\$)	310,000	390,000	430,000	890,000	560,000

Notes:

\* Including repeated cases.

\*\* The fine level of the FPNs is \$1, 500.

#### Land filling of construction waste on private land

Year	2013	2014	2015	2016	2017
Public reports*	401	464	456	571	397
Number of inspections	1 110	1 257	1 455	1 622	1 662
Number of prosecutions					
(1) Number of summonses	27	5**	28	52	96
Summonses involving individuals	23	5	22	30	84
Summonses involving companies	4	0	6	22	12
(2) Number of convictions by the court	13	15**	25	41	69
Total fine (\$)	290,000	340,000	990,000	1,220,000	1,340,000

Notes:

\* Including repeated cases.

\*\* Prosecutions may not be concluded in the year when the summonses are issued, and therefore the number of convictions was larger than that of prosecutions in 2014.

The relevant enforcement work forms part of the routine duties of the EPD and the relevant government departments. We do not have separate figures for the manpower and expenditure involved.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB259**

**(Question Serial No. 5105)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Implementation of a number of major development projects in Hong Kong in recent years, such as in Hung Shui Kiu, Yuen Long South and Kam Tin South, will lead to development of large tracks of brownfield land. Many recyclers operate their recycling business on brownfield land and are facing eviction. Without a stable supply of recycling sites, long-term development will be difficult for the recycling industry and the waste problem in Hong Kong will become more serious. In this connection, please advise on the following:

1. The Environmental Protection Department (EPD) claimed that the Study on Land Requirement for Supporting the Waste Recycling Industry - Feasibility Study [contract no.: CE 39/2014(EP)] was completed at end of 2017. Can EPD make the tender invitation documents of the relevant feasibility study (note: information filled in by the successful applicant is not necessary) and the Final Report available to public? If no, what are the reasons?

2. Would the Government provide the number, area, average rentals and scope of the recycling sites facing eviction as involved in the initial feasibility studies on the development of Hung Shui Kiu New Town, Yuen Long South New Town, Phase 2 and Phase 3 of Wang Chau, North East New Territories New Town and New Territories North (by total number and types of recyclables processed)?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 230)

Reply:

1. The consultancy study on land requirement of the waste recycling industry commissioned by the Environmental Protection Department (EPD) is still in progress. Upon completion of all the work, the EPD will make the relevant information and findings of the study available through suitable channels in due course in accordance with the usual practice for public inspection.

2. The relevant departments are still conducting a number of surveys and studies on the development of Hung Shui Kiu New Town, Yuen Long South New Town, Phase 2 and Phase 3 of Wang Chau, New Territories North and North East New Territories New Town. We currently do not have information on the recycling sites which are likely to be affected by these developments and require relocation.

- End -

**CONTROLLING OFFICER'S REPLY****ENB260****(Question Serial No. 5109)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Would the Government provide the processing cost and land cost involved in each tonne of waste at Ngau Tam Mei Animal Waste Composting Plant, T-PARK, Chemical Waste Treatment Centre, Shek Kwu Chau Incinerator, and North East New Territories, West New Territories and South East New Territories strategic landfills?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 260)Reply:

In 2016-17, the costs for processing waste at the waste management facilities in operation are tabulated below:

<b>Waste Management Facilities</b>	<b>Processing cost (\$/tonne)</b>
Ngau Tam Mei Animal Waste Composting Plant	1,879
T-PARK	532
Chemical Waste Treatment Centre	1,439 - 19,251*
Three strategic landfills	194

\* The wastes processed by the Chemical Waste Treatment Centre include chemical waste, clinical waste and marine pollution waste. The processing cost of different wastes varies because of the different processing procedures required.

As for the Integrated Waste Management Facilities Phase 1 (IWMP Phase 1) at Shek Kwu Chau, we awarded the Design-Build-Operate contract for the project in November 2017. The contract includes a 15-year operation period and we expect that the facility will commence operation in 2024. According to the current information, we estimate that the cost for processing each tonne of waste at the facility is about \$600 (calculated at May 2017 price level).

The above costs for processing waste at the facilities do not include land cost.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB261**

**(Question Serial No. 6357)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

There are an increasing number of infrastructure projects in recent years, but the quantity of public fill received at public fill reception facilities has decreased from the actual quantity of 15 million tonnes in 2016 to the estimated quantity of 137 000 tonnes in 2018. Has the Department estimated the quantity of illegally dumped fill materials? What is the expenditure involved for handling illegal fill materials?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 46)

Reply:

The quantities of illegally dumped construction waste removed by the Government in 2016 and 2017 were about 8 000 tonnes and 9 000 tonnes respectively, equivalent to 0.033% and 0.047% of total construction waste respectively. As the handling of illegal disposal of construction waste is part of the routine duties of the Environmental Protection Department and the relevant government departments, there is no separate figure for the expenditure involved.

- End -

**CONTROLLING OFFICER'S REPLY****ENB262****(Question Serial No. 4195)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please list the numbers of automatic vending machines for drinks installed at government premises including the bureaux' offices and at the premises and sites under their purview, the electricity consumption involved, the actual costs of repair and maintenance and other actual operational costs incurred in the past 5 years, as well as estimates of the numbers of automatic vending machines for drinks at government departments and on government sites, the electricity consumption involved, the actual costs of repair and maintenance and other actual operational costs incurred in 2018-19.

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 91)Reply:

According to the information provided by various government bureaux and departments, there are currently a total of about 1 600 automatic vending machines for drinks installed at government premises. The number of automatic vending machines for drinks installed at government premises in the past 5 years and the estimated number in 2018-19 are as follows:

Year	Number of automatic vending machines for drinks
2013-14	Relevant statistics are not available.
2014-15	
2015-16	
2016-17	About 1 500
2017-18	About 1 600
2018-19	It is estimated that the number of automatic vending machines for drinks is similar to that of 2017-18.

Moreover, since the automatic vending machines for drinks are operated by the suppliers or contractors, the bureaux and departments do not have the figures on the operating expenditures, including the electricity consumption.

- End -

**CONTROLLING OFFICER'S REPLY****ENB263****(Question Serial No. 4198)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please list the numbers of water dispensers installed at government premises including the bureaux' offices and at the premises and sites under their purview, the electricity consumption involved, the actual costs of repair and maintenance and other actual operational costs incurred in the past 5 years, as well as estimates of the numbers of water dispensers at government departments and on government sites, the electricity consumption involved, the actual costs of repair and maintenance and other actual operational costs incurred in 2018-19.

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 95)Reply:

According to the information provided by various government bureaux and departments, there are currently a total of about 11 200 water dispensers at government premises. The number of water dispensers installed at government premises in the past 5 years and the estimated number in 2018-19 are as follows:

<b>Year</b>	<b>Number of waster dispensers</b>
2013-14	Relevant statistics are not available
2014-15	
2015-16	
2016-17	About 10 500
2017-18	About 11 200
2018-19	It is estimated that the number of water dispensers will not differ much from that in 2017-18, but the Government will, depending on needs, install water dispensers at new government premises and suitable existing government premises during renovation.

Besides, there are no separate meters installed to measure the electricity consumption of water dispensers by various bureaux and departments, and there is also no breakdown specifically for the relevant repair and maintenance and other operational costs.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB264**

**(Question Serial No. 4199)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Chief Secretary for Administration Matthew CHEUNG Kin-chung indicated that starting from late February, about 620 automatic vending machines at government premises, which accounted for over 40% of the overall vending machines, would stop selling some of the plastic bottled water. The remaining vending machines would also gradually stop the sale of such by renewing the relevant contracts or agreements, so as to encourage waste reduction at source. In this connection, would the Chief Secretary for Administration's Office reply on the following:

- (1) The details of the plan to stop the sale of plastic bottled water, and whether there is any plan to introduce a total ban on the sale of plastic bottled water at government premises. If yes, what is the expected date?
- (2) The types of premises where vending machines involved in the first stage of the stop-sale arrangement on plastic bottled water are located;
- (3) The percentage of government premises installed with both automatic vending machines and water dispensers; please list the government premises installed with automatic vending machines but not water dispensers;
- (4) Whether premises without water dispensers are also subject to the stop-sale arrangement on plastic bottled water;
- (5) Does the Administration have any plan to install water dispensers at premises without water dispensers? If yes, what is the expenditure involved? If no, what are the reasons?
- (6) What were the quantity of bottled water purchased by the Secretary's Office, the uses and expenditure involved in the past 5 years?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 97)

Reply:

The stop-sale measure introduced on automatic vending machines at government premises is applicable to plastic bottled water measuring 1 litre or less. The measure aims to create a social atmosphere which encourages the public to develop a habit of bringing their own water bottles and facilitate various sectors in the community and enterprises to work together to promote waste reduction at source.

At present, there are about 1 600 automatic vending machines at government premises, of which over 40% put in place the above stop-sale arrangement on 20 February 2018, and over 80% of the automatic vending machines would introduce this arrangement in mid-2019. These automatic vending machines are distributed across venues like sport complexes, performance venues, government offices, parks, country parks and community halls. The remaining automatic vending machines will gradually implement the stop-sale arrangement by renewing existing relevant contracts, lease/tenancy agreements or permissions, etc..

Currently, there are a total of over 10 000 water dispensers at government premises, of which about 2 700 mainly serve the public. These water dispensers are mostly installed at the active leisure facilities managed by the Leisure and Cultural Services Department, such as sport centres, sport grounds and swimming pools, etc. to provide drinking water for the public. We do not have statistics on the government premises installed with either automatic vending machines or water dispensers or installed with both of them. The Environmental Protection Department is now coordinating with various government bureaux/departments to, depending on needs, install water dispensers at new government premises and suitable existing government premises during renovation where it is physically and technically feasible.

The Chief Secretary for Administration's Private Office did not purchase any bottled water in the past 5 years.

- End -

**CONTROLLING OFFICER'S REPLY****ENB265****(Question Serial No. 4200)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Would the Department please reply in table form:

(1) the number of applications for the Environment and Conservation Fund (ECF), the amount of grants approved by the Department, the organisations, the types of recycling activities, and the quantities and types of waste recovered respectively in the past 5 years;

(2) the criteria of the Department for approving the applications, and whether the Department will review the effectiveness of the ECF;

(3) the budget of the ECF for 2018-19.

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 98)Reply:

1. The number of applications for the Environment and Conservation Fund (ECF) received, the organisations funded by the ECF and the amount of funding involved in the past 5 years are as follows:

	<b>Number of applications</b>	<b>Recipient organisations</b>	<b>Total amount for the year</b>
2013-14	947	Please refer to the Environment and Conservation Fund Trustee Report 2013-2014. The website is as follows: <a href="https://www.legco.gov.hk/yr14-15/english/counmtg/papers/cm20141029-sp016-e.pdf">https://www.legco.gov.hk/yr14-15/english/counmtg/papers/cm20141029-sp016-e.pdf</a>	\$204,756,220.30

	<b>Number of applications</b>	<b>Recipient organisations</b>	<b>Total amount for the year</b>
2014-15	797	Please refer to the Environment and Conservation Fund Trustee Report 2014-2015. The website is as follows: <a href="http://www.legco.gov.hk/yr15-16/english/counmtg/papers/cm20151104-sp018-e.pdf">http://www.legco.gov.hk/yr15-16/english/counmtg/papers/cm20151104-sp018-e.pdf</a>	\$232,588,037.36
2015-16	434	Please refer to the Environment and Conservation Fund Trustee Report 2015-2016. The website is as follows: <a href="http://www.legco.gov.hk/yr16-17/english/counmtg/papers/cm20161109-sp022-e.pdf">http://www.legco.gov.hk/yr16-17/english/counmtg/papers/cm20161109-sp022-e.pdf</a>	\$190,191,916.39
2016-17	465	Please refer to the Environment and Conservation Fund Trustee Report 2016-2017. The website is as follows: <a href="https://www.legco.gov.hk/yr17-18/english/counmtg/papers/cm20171115-sp022-e.pdf">https://www.legco.gov.hk/yr17-18/english/counmtg/papers/cm20171115-sp022-e.pdf</a>	\$242,420,752.91
2017-18	(Note 1)	(Note 1)	(Note 1)

(Note 1): As the information on the funding for the financial year 2017-18 is still being compiled, it is not available at this stage.

The waste recovery projects under the ECF include Community Waste Reduction Projects and Food Waste Recycling Projects in Housing Estates. In the past 5 years (as at end of December 2017), the ECF provided a total funding of about \$289 million to non-profit making organisations and community groups through the Community Waste Reduction Projects funding scheme to implement waste reduction projects, with a target of recovering a total of some 25 000 tonnes of recycled materials such as plastics, food waste, surplus food, glass, old electrical and electronic equipment, etc.. Meanwhile, the ECF also provided \$31.08 million of funding to housing estates through the Food Waste Recycling Projects in Housing Estates to promote food waste recovery, and recovered a total of 1 531 tonnes of food waste.

2. Applications from local non-profit making organisations and community groups will be considered for funding support. Generally, an application to be considered for ECF support should fulfill the following basic requirements:

- (i) The project must contribute to the overall environment of Hong Kong, or raise environmental awareness of the local community, or mobilise the community to take action to improve the environment;

- (ii) The benefits of the project must accrue to the local community as a whole, and not just to individuals, a single private organisation or a consortium of private companies; and
- (iii) The project must be non-profit making in nature.

We will review the effectiveness of the fund from time to time.

3. The budget of the ECF for 2018-19 is about \$291 million.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB266**

**(Question Serial No. 4201)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

One of the functions of the Environmental Protection Department (EPD) is to take actions to conduct regular inspections in the rural areas of the New Territories and on various black spots so as to detect illegal or unauthorised dumping of construction waste or landfilling. In this connection, would the Administration advise this Committee on the following:

a) The numbers of inspections conducted by the EPD on illegal dumping of construction waste in the New Territories (excluding Lantau), as well as the cases of successful prosecution in the past 5 years:

Year

Number of inspections conducted during office hours on weekdays

Number of inspections conducted during non-office hours on weekdays

Number of inspections conducted during weekends and holidays

Number of cases of successful prosecution

b) What were the staffing establishment and expenditure involved for the inspections conducted by the EPD on illegal dumping of construction waste in the New Territories (excluding Lantau) in the past 5 years?

c) How will the Administration formulate improvement measures and staffing establishment in response to the findings of the direct investigation conducted by The Ombudsman in January this year?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 99)

Reply:

a) The number of inspections conducted by the Environmental Protection Department (EPD) and the number of convictions on illegal disposal of construction waste in the New Territories (excluding Islands District and Lantau) in the past 5 years are as follows:

	<b>Year</b>				
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Number of inspections	4 192	4 118	4 293	4 206	3 081
Number of convictions	26	25	31	73	60

b) The inspections conducted on illegal disposal of construction waste are part of the EPD's routine work, and we do not have separate figures for the manpower and expenditure involved.

c) Regarding the recommendations in the investigation report of the Office of the Ombudsman, the EPD is following up on the implementation of the relevant measures, including flexible deployment of manpower resources to increase inspections of construction waste illegal disposal black spots during and outside office hours and on holidays according to specific needs, and increasing the frequency of regular liaison meetings with the relevant departments with a view to strengthening communication and coordination of efforts in combating illegal disposal of construction waste.

- End -

**CONTROLLING OFFICER'S REPLY****ENB267****(Question Serial No. 4283)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Would the Department please reply in table form:

(1) What were the expenditures on waste reduction at source and waste recovery respectively in the past 5 years?

(2) What are the expenditures on waste reduction at source and waste recovery respectively in 2018-2019?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 204)Reply:

- (1) Since the work on waste reduction at source and waste recovery is part of the routine waste management duties of the Environmental Protection Department (EPD), there is no separate breakdown of the expenditures involved. The total expenditure of the EPD on the Waste Programme in the past 5 years is tabulated below:

2013-2014	Actual expenditure	\$1.778 billion
2014-2015	Actual expenditure	\$2.015 billion
2015-2016	Actual expenditure	\$2.2204 billion
2016-2017	Actual expenditure	\$2.3559 billion
2017-2018	Revised estimates	\$2.6493 billion

- (2) In 2018-19, the total estimated expenditure of the EPD on waste management is \$3.664 billion.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB268**

**(Question Serial No. 4301)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

One of the functions of the Environmental Protection Department (EPD) is to take actions to conduct regular inspections in the rural areas of the New Territories and on various black spots so as to detect illegal or unauthorised dumping of construction waste or landfilling. In this connection, would the Administration advise this Committee on the following:

a) The numbers of inspections conducted by the EPD on illegal dumping of construction waste in Lantau, as well as the cases of successful prosecution in the past 5 years:

Year

Number of inspections conducted during office hours on weekdays

Number of inspections conducted during non-office hours on weekdays

Number of inspections conducted during weekends and holidays

Number of cases of successful prosecution

b) What were the staffing establishment and expenditure involved for the inspections conducted by the EPD on illegal dumping of construction waste in Lantau in the past 5 years?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 255)

Reply:

a) The number of inspections conducted by the Environmental Protection Department (EPD) and the number of convictions on illegal disposal of construction waste in Islands District (including Lantau) in the past 5 years are as follows:

	<b>Year</b>				
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Number of inspections	323	175	318	374	267
Number of convictions	0	0	0	0	0

b) The inspections conducted on illegal disposal of construction waste are part of the EPD's routine work, and we do not have separate figures for the manpower and expenditure involved.

- End -

**CONTROLLING OFFICER'S REPLY****ENB269****(Question Serial No. 4338)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Administration developed Community Green Stations (CGSs) in the 18 districts across the territory in the past 3 years. What were the timetable for the development of the CGSs and details of the publicity work? What were the manpower and expenditure involved?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 337)Reply:

The Environmental Protection Department (EPD) is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2017, 5 CGSs have progressively been in operation, namely the Sha Tin CGS and the Eastern CGS which commenced operation in 2015 and the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS which commenced operation in 2017. The latest development of individual CGSs is tabulated below:

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Sha Tin CGS	10 On Ping Street, Shek Mun	The CGS commenced operation in May 2015. In 2017, the CGS collected about 415 tonnes of recyclables, with operating expenditure of about \$4.22 million.
Eastern CGS	30 Oi Shun Road, Shau Kei Wan	The CGS commenced operation in August 2015. In 2017, the CGS collected about 395 tonnes of recyclables, with operating expenditure of about \$3.61 million.

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables, with operating expenditure of about \$4.69 million.
Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables, with operating expenditure of about \$3.98 million.
Sham Shui Po CGS	339 Tung Chau Street	The CGS commenced operation in October 2017. As at the end of 2017, the CGS collected about 17 tonnes of recyclables, with operating expenditure of about \$0.99 million.
Tuen Mun CGS	9 Tuen Yee Street	The tendering for the operation contract is underway. The CGSs are expected to commence operation in the second half of 2018.
Kwai Tsing CGS	12 Tam Kon Shan Road, Tsing Yi	
Tai Po CGS	Between Ting Kok Road and Dai Wah Street	Construction works are underway, which are expected to be completed in the second half of 2018.
Islands CGS	Junction of Yu Tung Road and Chung Mun Road, Tung Chung, Lantau	
Sai Kung CGS	Po Lam Lane, near Po Hong Road and Po Lam Road North, Tseung Kwan O	Design and construction works are in progress.
Wan Chai CGS	Junction of Wan Shing Street and Hung Hing Road	A design idea competition is underway. The design and construction works are expected to commence in the second half of 2018.
Tsuen Wan CGS	Hoi Shing Road, near Hoi Kok Street	Sites have been confirmed and planning of construction works is in progress.
Wong Tai Sin CGS	Junction of Yuk Wah Street and Po Leung Lane, Tsz Wan Shan	
Kowloon City CGS, Southern CGS, Yau Tsim Mong CGS, Central and Western CGS and North CGS	Site to be confirmed	We have been following up the views from District Councils. Taking into account the actual operating experience in other projects, we are continuing with site search and other associated preparation work.

The total cost for capital works is estimated to be about \$400 million. The operating expenditure of individual projects may vary, depending on the financial proposals submitted by individual operators in their open tender submissions. At present, there are a total of 17 posts tasked to implement this initiative and monitor the projects, including 16 permanent posts and 1 time-limited post (until 2020).

- End -



**CONTROLLING OFFICER'S REPLY****ENB270****(Question Serial No. 4339)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

What were the work details of the mandatory producer responsibility schemes on waste electrical and electronic equipment and glass beverage containers implemented by the Administration in the past 3 years? What were the manpower and expenditure involved?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 338)

Reply:

The Legislative Council (LegCo) passed the Promotion of Recycling and Proper Disposal (Electrical Equipment and Electronic Equipment) (Amendment) Ordinance 2016 in March 2016 to provide for a legal framework for the implementation of the producer responsibility scheme (PRS) on waste electrical and electronic equipment (WPRS). The relevant subsidiary legislation was passed in July 2017. The Government has been actively undertaking preparation work for full implementation of the scheme in phases in 2018. Among other things, we began to accept applications for e-waste disposal licences from 19 June 2017 onwards; a trial scheme was launched in November 2017 to help the trade familiarise themselves with the relevant legislative requirements and operation; and the Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE·PARK), which was built to underpin the implementation of the WPRS, commenced initial operation in late October 2017 and came into full operation in early March 2018. Moreover, starting from 1 August 2018, suppliers who distribute regulated electrical equipment (REE) are required to register with the Environmental Protection Department (EPD) as registered suppliers and pay a recycling levy for REE distributed in Hong Kong, whilst sellers of REE are required to arrange free statutory removal service for consumers to dispose of an equipment of the same class that they intend to abandon. The disposal licensing control, import and export permit control and landfill disposal ban in respect of e-waste will come into effect from 31 December 2018 onwards. The Government will also step up publicity efforts to inform the public of the impending implementation of the WPRS.

As for glass beverage containers, the LegCo passed the Promotion of Recycling and Proper Disposal (Product Container) (Amendment) Ordinance 2016 in May 2016 to provide for a statutory regulatory framework for the implementation of the PRS on glass beverage containers. We are actively undertaking the preparatory work for fully implementing the scheme in 2018-19. Among other things, the Government awarded two glass management contracts for Hong Kong Island (including Islands district) and the New Territories regions through open tender in November 2017 to provide glass container collection and treatment services for the two regions. Regarding the contract for the Kowloon region, the tendering exercise is underway and is expected to be completed with the contract awarded in the second quarter of 2018. We are in parallel drafting the relevant subsidiary legislation to provide for the operational details for the implementation of the scheme. We aim to submit the subsidiary legislation to the LegCo for scrutiny later this year.

The Waste Management Policy Division of the EPD is responsible for a number of waste management policies and initiatives, including the implementation of the two PRSs mentioned above. We do not have a breakdown on the manpower resources involved in the implementation of the two schemes. To meet the increased workload arising from the two schemes, the EPD created 6 permanent posts in 2016-17, and 9 permanent posts and 5 time-limited posts for 3 years in 2017-18 (which will be changed to permanent posts in 2020-21). Moreover, 12 permanent posts will be created in 2018-19.

The cost of designing, building and operating WEEE-PARK for 10 years is \$1.728 billion. The expenditure of the two mandatory PRSs will depend on the actual quantity of recyclables collected and treated after the implementation of the schemes.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB271**

**(Question Serial No. 4340)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Did the Administration send staff to monitor the EcoPark in Tuen Mun Area 38 in the past 3 years? If yes, what were the frequency and details of the inspections? What were the manpower and expenditure involved?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 339)

Reply:

To assist the daily management of the EcoPark, the Environmental Protection Department (EPD) has engaged a contractor to monitor the daily management and maintenance of the public areas of the EcoPark. Apart from the daily management and maintenance services, the contractor is also responsible for monitoring the daily operation of tenants, assisting the EcoPark tenants in developing their recycling business, operating the EcoPark Visitor Centre and a dedicated website, as well as implementing promotional and waste recovery activities. The expenditure involved is about \$1.25 million per month. The EPD has been closely supervising the work of the contractor, and will send staff to the EcoPark on a regular basis to conduct audits and monitor the management of the contractor, as well as liaise with the EcoPark tenants in order to understand and monitor whether their operation complies with the terms of tenancy. Managing and monitoring the operation of the EcoPark is part of the work of the Waste Reduction and Recycling Division of the EPD, and is absorbed by existing resources. We do not have breakdowns on the manpower resources and expenditure involved for such work.

- End -

**CONTROLLING OFFICER'S REPLY****ENB272****(Question Serial No. 4341)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

What were the details of the Administration's efforts in enhancing community participation in waste reduction, recovery and recycling in the past 3 years? What were the manpower and expenditure involved? Did the Administration carry out promotion jointly with the 18 District Councils? If yes, what were the details? If no, what were the reasons?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 340)Reply:

We extended the Source Separation of Waste Programme (the Programme) to encourage the public to practise source separation of waste at home or at workplace in the past 3 years. As at early 2018, over 2 000 housing estates, some 700 rural villages and over 1 000 industrial and commercial buildings have participated in the Programme. The Government has now placed about 16 000 sets of waste separation bins in public places, schools, office buildings, country parks, housing estates and buildings participating in the Programme to facilitate source separation of waste by the public. The provision of recycling bins covers over 80% of the places where Hong Kong people live and work.

On the other hand, recycling support for residential buildings without property management is being provided through a Community Recycling Network (CRN) funded by the Environment and Conservation Fund (ECF), which comprises 18 Community Recycling Centres set up and manned by non-governmental organisations and 1 community recycling project. They serve as collection outlets for recyclable waste at the community level. The ECF provided funding support totalling about \$97.8 million to finance the relevant projects in the past 3 years. We also extended the services area of CRN in early 2018 to receive waste plastic bottles delivered from those housing estates which participated in the Programme on a need basis, and transport them to suitable recyclers for recycling. The additional transportation expenses involved are absorbed by the ECF.

Moreover, the Environmental Protection Department (EPD) has collaborated with the Environmental Campaign Committee (ECC) to launch a Clean Recycling Campaign since

mid-2015, with a view to increasing the value and recyclability of the recyclables. The EPD launched a new round of clean recycling campaigns in December 2017, with focus on encouraging the public to mainly recover three types of paper (i.e. newspapers, office papers and paperboards), recycle plastic bottles first (plastic containers of beverages or personal care products) and practise clean separation and recycling. The EPD also collects clean non-bottle waste plastics through the Community Green Stations and CRN and send them to suitable recyclers for processing where there are viable outlets.

The EPD and the Business Environment Council jointly launched a guidance booklet on waste reduction for major community events in December 2017 to assist event organisers and related stakeholders in formulating waste management strategies to achieve waste reduction and promote clean recycling as well as to enhance environmental performance.

For cooperation with the District Councils (DCs), the EPD, the ECC and the Home Affairs Department have worked with the 18 DCs on the Community Participation Programme in Environmental Protection in Collaboration with District Councils since 2012 to jointly promote environmental education, waste reduction at source and recycling programmes and further cultivate the “use less, waste less” culture in the community. For the past 3 years, the total estimated expenditure of the above activities is \$10.7 million.

For the above projects, apart from allocation of fund by the ECF to DCs for promotional activities, other relevant preparation and promotion work is part of the work of the EPD. The manpower and expenditure involved are absorbed by the existing establishment and resources. There is no breakdown of manpower and expenditure involved in this aspect.

- End -

**CONTROLLING OFFICER'S REPLY****ENB273****(Question Serial No. 4342)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

What was the number of visitors to the Visitor Centre with the theme of waste management in the EcoPark in the past 3 years? What were the manpower and expenditure involved? Has the Administration invited groups or schools for visits? If yes, what are the details? If no, what are the reasons?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 341)Reply:

The Environmental Protection Department (EPD) has been inviting groups and schools to visit the EcoPark through outreach programmes, electronic communication and mails, etc., with a view to enhancing environmental awareness of the public and encouraging the groups and schools concerned to more proactively participate in and promote green work at community level. The numbers of visitors to the Visitor Centre of the EcoPark in the past 3 years are set in the table below:

Total number of visitors	Year		
	2015	2016	2017
	22 417	21 472	21 504

Managing the operation of the EcoPark (including its Visitor Centre) is part of the work of the Waste Reduction and Recycling Division of the EPD. We do not have breakdowns on the manpower and expenditure involved for such work. Besides, the EPD is engaging a contractor at a lump sum monthly fee of about \$1.25 million in managing the EcoPark. Apart from the manpower and expenditure involved in daily management of the public area and facilities of the EcoPark, the contractor should also be responsible for implementing promotional activities on waste recovery, as well as operating the Visitor Centre and a dedicated website of the EcoPark, etc.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB274**

**(Question Serial No. 4343)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

What are the details of the Administration's programme to work with the franchised bus companies to retrofit Euro II and III franchised buses with selective catalytic reduction devices? What are the details of the expenditure involved?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 342)

Reply:

Franchised bus companies are required to provide their franchised bus services with buses under the age of 18. Currently all pre-Euro and Euro I franchised buses have already been phased out. To improve roadside air quality, the Government has fully subsidised the franchised bus companies to retrofit eligible Euro II and III franchised buses with selective catalytic reduction devices (SCRs) to upgrade their emission performance to Euro IV or above level.

To be cost-effective, the retrofit programme only covered bus models with a remaining service life not less than 2 years and bus models that were technically feasible (such as the availability of sufficient room for retrofitting on the bus) and with a relatively large number (i.e. bus model with not less than 100 buses). The retrofit programme was completed at the end of 2017 with a total of 1 030 eligible Euro II and III franchised buses retrofitted with SCRs under the programme. The total expenditure was about \$197 million. As at the end of December 2017, 204 buses retrofitted with SCRs at an earlier stage have been retired or out of service due to traffic accidents.

The details of franchised buses retrofitted with SCRs as at the end of December 2017 are tabulated below:

	Euro II or III retrofitted with SCR	
	Euro II	Euro III
The Kowloon Motor Bus Company (1933) Limited	54	621
Citybus Limited	1	8
New World First Bus Services Limited	60	74
Long Win Bus Company Limited	0	8
New Lantao Bus Company (1973) Limited	0	0
Total	115	711
	826	

- End -



**CONTROLLING OFFICER'S REPLY****ENB275****(Question Serial No. 4344)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Administration's collaboration with franchised bus companies in the trial of hybrid buses and electric buses to assess the performance of these two types of buses under local conditions, what is the current situation of the trial? Will the Administration consider establishing a trial site where electric bus service will be used throughout the area in the next 3 years? Besides, does the Administration plan to introduce territory-wide electric bus service? If yes, what is the implementation schedule? If no, what are the reasons? (by District Council Constituency Areas)

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 343)

Reply:

The Government has fully subsidised the franchised bus companies to purchase 6 double-deck hybrid buses and 36 single-deck electric buses to conduct 2-year trials on different routes to assess their operational performance under local conditions. To effectively monitor and assess the operational efficiency and performance of the hybrid and electric buses, the Environmental Protection Department has set up two task forces to analyse the trial data. Members of the task forces comprise representatives from the franchised bus companies and the Transport Department, as well as local academics.

Trial of hybrid buses

The Government has allocated \$33 million to fully subsidise the franchised bus companies to purchase 6 double-deck hybrid buses. The trial of hybrid buses was fully commenced by the end of 2014 and completed by the end of 2016. We reported the trial results to the Panel on Environmental Affairs of the Legislative Council on 22 May 2017. In terms of driving performance, the hybrid buses are comparable with conventional diesel buses. However, the emission performance of hybrid buses over Euro VI conventional buses is not substantial and their fuel economy performance in the local operation environment fell far short of expectation. As such, there is no strong justification for promoting their use in the franchised bus operation until their fuel economy performance has been significantly improved and their price has become more competitive.

## Trial of electric buses

The Government has allocated \$180 million to fully subsidise the franchised bus companies to purchase 36 single-deck electric buses (including 8 supercapacitor buses and 28 battery-electric buses and related charging facilities). The average price of each single-deck electric bus with provision and installation of related charging facilities is about \$5 million. Currently, 24 battery-electric buses and 2 supercapacitor buses have come into operation, and it is anticipated that most of the remaining electric buses will be put into service progressively in 2018. Details of the trials are as follows:

<b>Franchised bus company</b>	<b>No. of single-deck electric bus</b>	<b>Manufacturer and model</b>	<b>Service route</b>	<b>Current status</b>
The Kowloon Motor Bus Company (1933) Limited (KMB)	8 supercapacitor buses	China Youngman Automobile Group Company Limited Model: JNP6122UC	284 [Sha Tin Central - Ravana Garden (Circular)]  5M [Kai Tak (Tak Long Estate) - Kowloon Bay Railway Station (Circular)]	2 supercapacitor buses commenced the trial on Route No. 284 in late March 2017. 2 more supercapacitor buses will commence services in the first half of 2018.  The remaining 4 supercapacitor buses will commence services in phases in the first half of 2018, subject to the progress of testing of the charging facilities.
	10 battery-electric buses	BYD Auto Industry Company Limited Model: K9R	5C [Star Ferry Pier - Tsz Wan Shan (Central)]  6C [Mei Foo - Kowloon City Ferry Pier]  35A [Tsim Sha Tsui East - On Yam]  42A [Jordan (To Wah Road) - Cheung Hang]  603 [Ping Tin - Central (Central Ferry Piers)]	10 battery-electric buses have commenced services in phases from July 2017 to January 2018.

<b>Franchised bus company</b>	<b>No. of single-deck electric bus</b>	<b>Manufacturer and model</b>	<b>Service route</b>	<b>Current status</b>
Long Win Bus Company Limited (LWB)	4 battery-electric buses	BYD Auto Industry Company Limited Model: K9R	E31 [Tung Chung (Yat Tung Estate Public Transport Terminus) - Tsuen Wan (Discovery Park Bus Terminus)]  S64 [Tung Chung (Yat Tung Estate Public Transport Terminus) - Airport (Passenger Terminal Building) (Circular)]	2 battery-electric buses commenced services in July 2017.  2 battery-electric buses commenced services in February 2018.
Citybus Limited (CTB)	6 battery-electric buses	BYD Auto Industry Company Limited Model: K9R  Great Dragon International Corporation Limited Model: LS-130-116  3 buses for each model	11 [Central (Central Ferry Piers) - Jardine's Lookout (Circular)]  12 [Central (Central Ferry Piers) - Robinson Road (Circular)]  25A [Wan Chai (Hong Kong Convention & Exhibition Centre Extension) - Braemar Hill (Circular)]	The first batch of 5 battery-electric buses from BYD commenced services on 5 routes on Hong Kong Island in December 2015.  5 battery-electric buses from Great Dragon also commenced services in June 2017.
New World First Bus Services Limited (NWFB)	4 battery-electric buses	BYD Auto Industry Company Limited Model: K9R  Great Dragon International Corporation Limited Model: LS-130-116	78 [Wong Chuk Hang Station - Wah Kwai Estate (Circular)]  81 [Lai Tak Tsuen - Chai Wan (Hing Wah Estate)]	

<b>Franchised bus company</b>	<b>No. of single-deck electric bus</b>	<b>Manufacturer and model</b>	<b>Service route</b>	<b>Current status</b>
		2 buses for each model		
New Lantao Bus Company (1973) Limited (NLB)	4 battery-electric buses	BYD Auto Industry Company Limited Model: K9R (2 buses)  The other 2 battery-electric buses have to be re-tendered.	38 [Tung Chung (Yat Tung Estate Public Transport Interchange) - Tung Chung Station Bus Terminus (Circular)]  B2 [Yuen Long Station - Shenzhen Bay Port]	2 battery-electric buses will commence services in the first half of 2018, subject to the progress of testing of the charging facilities.  It is anticipated that 2 battery-electric buses will commence services in 2019, subject to the progress of re-tendering.

The feasibility of promoting the implementation of electric bus services throughout or in individual areas of Hong Kong depends very much on the maturity of electric bus technologies, their prices and suitability for use in Hong Kong. Currently about 95% of the franchised buses in Hong Kong are double-deck buses. However, the technology of double-deck electric buses is still developing and there are very few models available in the international arena. Furthermore, their passenger carrying capacity and operational efficiency still fail to fulfill the local operational needs of franchised buses which include long daily service hours, high peak passenger loadings, the need to tackle hilly terrains as well as intense air-conditioning capability being required in hot and humid summer. As for single-deck electric buses, the Government will continue to monitor the trial of electric franchised buses through the above task force. If the trial results are satisfactory, the Government will promote wider use of single-deck electric buses by the franchised bus companies, taking into account the affordability of the companies and passengers.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB276**

**(Question Serial No. 4345)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

What were the details of the Administration's publicity and education programmes on switching off idling engines in the past 3 years? What were the manpower and expenditure involved? What was the number of prosecutions made? (by District Council Constituency Areas)

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 344)

Reply:

The Motor Vehicle Idling (Fixed Penalty) Ordinance (the Ordinance), which came into operation on 15 December 2011, prohibits drivers from idling vehicle engines for more than 3 minutes in any 60-minute period. The Ordinance empowers traffic wardens (TWs) of the Hong Kong Police Force and Environmental Protection Inspectors (EPIs) of the Environmental Protection Department (EPD) to issue fixed penalty notices (FPNs) to offending drivers. The TWs enforce the ban in their daily patrol duties and enforcement-cum-publicity activities are also conducted by the EPD with TWs. The EPD is responsible for co-ordinating publicity activities to help drivers foster a green driving habit of switching off idling engines and reduce the environmental nuisance caused by vehicles with idling engines.

We have stepped up the enforcement-cum-publicity activities in various districts of Hong Kong over the past 3 years, with the number of activities increased from 319 in 2015 to 429 in 2017. In the same period, the number of complaints against vehicles with idling engines dropped by about 30% from 1 580 in 2015 to 1 025 in 2017, and the number of FPNs issued also dropped from 53 in 2015 to 45 each in 2016 and 2017, indicating that the drivers in general were more self-disciplinary and paying more attention to switching off idling engines. The Government will continue the two-pronged approach, i.e. enforcement and publicity, to promote the green driving habit of switching off idling engines.

The relevant statistics in the past 3 years are as follows:

Year	No. of complaints against vehicles with idling engines	No. of enforcement-cum-publicity activities	No. of vehicles timed with idling engines	No. of FPNs issued
2015	1 580	319	840	53
2016	1 193	400	799	45
2017	1 025	429	1 164	45
Total:	3 798	1 148	2 803	143

The number of FPNs issued against vehicles with idling engines in the past 3 years with a breakdown by District Council Constituency Areas is as follows:

No. of FPNs issued			
Year	2017	2016	2015
Central & Western	9	2	4
Wan Chai	8	8	5
Eastern	4	3	3
Southern	9	6	7
Kwun Tong	3	3	9
Wong Tai Sin	1	2	2
Kowloon City	2	6	5
Yau Tsim Mong	2	2	7
Sham Shui Po	0	0	1
Sai Kung	1	0	0
North	3	1	1
Yuen Long	1	1	2
Tuen Mun	0	1	0
Tai Po	0	0	0
Sha Tin	1	0	2
Tsuen Wan	0	0	0
Kwai Tsing	0	0	1
Islands	1	10	4
Total	45	45	53

The details of the expenditure on promotion and publicity work conducted for the Ordinance in the past 3 years are as follows:

Financial year	Expenditure involved (\$) (Approximate)	Promotion and Publicity Work
2015-16	360,000	Posters, leaflets, banners, APIs on radio, displaying messages on parking meters, etc.
2016-17	330,000	
2017-18	230,000	

This area of work is undertaken with existing resources and manpower. As the relevant manpower is also responsible for the work in other areas, a separate breakdown of the manpower and expenditure (including a breakdown by District Council Constituency Areas) is not available.

- End -

**CONTROLLING OFFICER'S REPLY****ENB277****(Question Serial No. 4346)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

What were the average monthly arrival numbers of ocean-going vessels (OGVs) in Hong Kong in the past 3 years? What were the manpower and expenditure involved?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 345)Reply:

According to the port statistics in the past 3 years published by the Marine Department, the arrival numbers of ocean-going vessels (OGVs) are set out in the table below:

Year	Annual arrival number of OGVs	Average monthly arrival number of OGVs
2015	29 011	2 417
2016	27 642	2 303
2017	26 793	2 232

The Government introduced the Air Pollution Control (Ocean Going Vessels) (Fuel at Berth) Regulation (the Regulation) on 1 July 2015, mandating OGVs to switch to low sulphur fuel (with a sulphur content not exceeding 0.5%) while at berth. The Environmental Protection Department (EPD) is responsible for the enforcement of the Regulation. As at the end of February 2018, EPD conducted surprise inspections of 287 OGVs, and initiated prosecution against 4 non-compliance cases. Owners and masters of the OGVs concerned were convicted and fined.

As EPD implements the above control with the existing manpower and resources, we do not have a separate breakdown for this item.

- End -



**CONTROLLING OFFICER'S REPLY**

**ENB278**

**(Question Serial No. 4347)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

What was the effectiveness of the Administration's voluntary Indoor Air Quality Certification Scheme for Offices and Public Places (the certification scheme) in the past 3 years? Has the Administration conducted field measurement regularly at offices or public places? If yes, what was the frequency of field measurement? What were the manpower and expenditure involved? (by District Council Constituency Areas)

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 346)

Reply:

The Government is committed to promoting the work on improving indoor air quality (IAQ), including enhancing public understanding and awareness of IAQ. The Environmental Protection Department (EPD) launched a voluntary Indoor Air Quality Certification Scheme for Offices and Public Places (the Certification Scheme) in September 2003 to commend good IAQ management and encourage building/premises owners or property management companies to enhance the IAQ of their premises. Participating owners or property management companies are required to employ IAQ Certificate Issuing Bodies (CIBs) accredited by the Hong Kong Accreditation Service to assess the air quality in their premises every year. The CIBs will issue certificates to the premises where the indoor air quality complies with the prevailing IAQ objectives.

Premises participating in the Certification Scheme include offices, shopping malls, club houses, theatres/ halls, sports venues and libraries, etc. In the past 3 years, the number of registered certificates issued to premises participating in the Certification Scheme increased from about 1 100 in 2015 to about 1 500 in 2017. The detailed statistics are tabulated below:

<b>District (by District Council districts)</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Central & Western	172	169	191
Eastern	87	104	118
Southern	53	61	65
Wan Chai	114	114	124
Kowloon City	53	58	67
Kwun Tong	88	103	122
Sham Shui Po	53	57	59
Wong Tai Sin	17	29	32
Yau Tsim Mong	155	199	215
Islands	39	51	58
Kwai Tsing	44	51	58
North	33	40	53
Sai Kung	29	62	54
Sha Tin	80	83	112
Tai Po	19	21	30
Tsuen Wan	44	49	50
Tuen Mun	54	58	64
Yuen Long	26	23	22
Total number	1 160	1 332	1 494

The EPD has engaged the Hong Kong Productivity Council to operate the IAQ Information Centre for vetting applications and registering IAQ certificates under the Certification Scheme, providing information and technical support, as well as promoting the Certification Scheme through seminars. In addition, the EPD has carried out publicity on different media, such as broadcasting promotional messages on radio, television and trains, putting up posters on buses, trams and trains, as well as organising roving exhibitions, in order to enhance public awareness of IAQ and the Certification Scheme.

The EPD's expenditures on the operation of the IAQ Information Centre, and promotion and publicity in the past 3 years are tabulated below. As for the manpower of the EPD, it was absorbed by the Department's existing resources:

Financial Year	2015-16	2016-17	2017-18
Expenditure (\$million)	3.8	3.8	3.6

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB279**

**(Question Serial No. 4348)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Has the government planned to establish additional roadside air quality monitoring stations in districts with poorer air quality against the Air Quality Objectives (such as Tuen Mun, Tung Chung, Yuen Long and Tsuen Wan) to protect the health of local residents? If yes, what are the details and expenditure of the plan? If not, what are the reasons?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 347)

Reply:

At present, the air quality monitoring network of the Environmental Protection Department (EPD) in Hong Kong comprises 13 general air quality monitoring stations (AQMSs) and 3 roadside AQMSs. In setting up the air quality monitoring network, the primary objectives are to collect data for assessing the impact of air pollution on the public, facilitate the formulation of air quality management strategies and evaluate their effectiveness.

Given the small size of Hong Kong and the domination of residential and commercial land uses, the variation in air quality among districts is not significant. As for areas near the estuary of the Pearl River (such as Tung Chung, Yuen Long and Tuen Mun), they are more susceptible to the influence of regional ozone under northwesterly or northerly winds in Hong Kong. Therefore, the EPD has set up AQMSs in these districts to monitor the impacts on air quality due to regional pollutants and provide the public with information on air quality. The overall air quality in Hong Kong has been improving in recent years. In the past 10 years (from 2008 to 2017), except ozone which was on the rise due to regional photochemical smog, the concentrations of general and roadside major air pollutants such as nitrogen dioxide, sulphur dioxide, respirable and fine suspended particulates in Hong Kong fell by 12%-70%.

EPD reviews the air quality monitoring network annually according to an established mechanism and the international guidelines so as to ensure its representativeness and consider the need for additional AQMSs or adding new monitoring parameters. According to the latest review, the current air quality monitoring network already covers the majority

of Hong Kong's densely populated areas, and is adequate to provide representative air quality data for Hong Kong. Having considered the spatial distribution and the future development in the North and South Districts, we plan to set up general AQMSs in the 2 districts respectively, which are expected to be commissioned in 2019. When the AQMSs in the North and South Districts come into operation, the air quality monitoring network will cover about 90% of Hong Kong's population.

The 3 roadside AQMSs in Causeway Bay, Central and Mong Kok cover the urban high-density, commercial and commercial-cum-residential development areas, and are situated in places with heavy vehicular and pedestrian traffic. The data from these roadside AQMSs have effectively reflected the roadside air quality of highly polluted places in Hong Kong. As such, we have no plan to set up additional roadside AQMSs in other districts at present.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB280**

**(Question Serial No. 5526)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The document mentions that the Department will continue to support the Steering Committee to Promote Sustainable Development of Recycling Industry. The responsibility of the Steering Committee is to explore and formulate complementary measures such as manpower training, research and development of technology and products, and operational parameters. In this connection, would the Government tell this Committee how many meetings have been held since the establishment of the Steering Committee? Please set out by date of meeting the agenda of each discussion, and the follow-up action taken after the discussion.

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 48)

Reply:

The Steering Committee to Promote Sustainable Development of Recycling Industry (the Steering Committee) chaired by the Chief Secretary for Administration was established in August 2013. So far, 6 formal meetings have been convened.

The Steering Committee aims to promote the development of the recycling industry through coordinating the work of various bureaux and departments. The Steering Committee has discussed the local situation of collection and disposal of recyclables and the related policies and support measures, and has studied various positive and feasible approaches to facilitate the recycling industry. In order to collect views from the trades, the Steering Committee held 2 stakeholder engagement meetings to gauge views from the recycling trade and relevant stakeholders on ways to promote the sustainable development of Hong Kong's recycling industry. The stakeholders engaged in the meetings comprise representatives of the trade, green groups, non-governmental organisations, community groups, academia, and other committees.

The main work of the Steering Committee includes the establishment and review of the operation of the Recycling Fund, studying the land requirements and support measures for

the recycling industry, promoting green procurement, as well as advocating the government departments to take the lead to reduce the generation of waste, promote clean recycling, work on food waste recovery and adopt waste reduction and recycling measures at large-scale activities, etc.. In support of recycling, the Steering Committee has also reviewed the feasible options in areas of enhancing community recycling network, public education and community participation. The Environmental Protection Department and relevant bureaux and departments report the progress of various initiatives to the Steering Committee on a regular basis.

In the meeting held in March this year, the Steering Committee actively explored the measures and strategies to strengthen the promotion of inculcating the habit of wider and proper waste reduction and clean recycling among various sectors and enhance recycling support at the community level, with a view to enhancing the quality and quantity of the recyclables. In addition, in addressing the Mainland's tightening requirements on imports of recyclables and at the same time embracing opportunities to raise the operational capabilities and standards of local recycling, the Steering Committee has also explored the feasibility of incubating a local manufacturing industry using recycled materials to facilitate the creation of higher value for the industry and more stable and diverse outlets for local recyclables in the long run.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB281**

**(Question Serial No. 5528)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

In 2017, about 5.66 million tonnes of solid waste were disposed of at the 3 landfills. In this connection, would the Government advise this Committee on the following in respect of the landfills in the past 3 years:

1. the amount of waste recovered respectively;
2. the year of decommissioning;
3. the weight and proportion of various types of waste received by the landfills.

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 64)

Reply:

1. The Environmental Protection Department (EPD) has been actively taking forward various waste management measures to reduce waste at source and encourage reuse and recycling. However, as landfills are ultimate waste disposal facilities, waste recovery is not carried out there.
2. When estimating the serviceable lives of the landfills, we need to consider a wide range of factors including population growth, level of economic and construction activities, implementation of waste reduction initiatives, provision of other upstream waste treatment facilities (such as T-PARK, organic resources recovery centres, etc.), development of landfill design, mode of landfill operation and implementation of landfill extension schemes, etc. As most of these factors are dynamic in nature, we will continue to review the serviceable lives of the landfills in a timely manner, having regard to the latest available information. With the funding approval of the Legislative Council for implementing the South East New Territories Landfill Extension Scheme and the North East New Territories Landfill Extension Scheme in December 2014, the serviceable lives of the 3 landfills could be slightly extended and could cope with the local waste disposal need up to late 2020s, including disposal of non-recyclables, non-combustible waste, construction waste and post-treatment residues.

3. The quantities and proportions of various types of waste received by the 3 strategic landfills from 2015 to 2017 are tabulated below.

Year	NENT Landfill (tonnes per day on average)			SENT Landfill (tonnes per day on average)			WENT Landfill (tonnes per day on average)		
	Municipal Waste	Overall Construction Waste	Special Waste	Municipal Waste	Overall Construction Waste	Special Waste	Municipal Waste	Overall Construction Waste	Special Waste
2015	2 482 (73%)	735 (21%)	202 (6%)	1 507 (37%)	2 509 (61%)	82 (2%)	6 170 (81%)	956 (13%)	459 (6%)
2016	2 923 (73%)	920 (23%)	176 (4%)	17 <sup>(3)</sup> (1%)	2 482 (99%)	0 <sup>(3)</sup> (0%)	7 405 (84%)	1 020 (12%)	389 (4%)
2017	3 117 (69%)	1 160 (26%)	213 (5%)	0 <sup>(3)</sup> (0%)	2 300 (100%)	0 <sup>(3)</sup> (0%)	7 616 (87%)	747 (9%)	363 (4%)

Notes:

- (1) The percentage in bracket is the proportion of that type of waste in the total quantity of solid waste received by the landfill.
- (2) The figures in the table above have been rounded off and therefore the percentages may not add up to 100%. 0 means the quantity is less than 0.5 tonnes per day on average, and 0% means the percentage is less than 0.5%.
- (3) Since 6 January 2016, the SENT Landfill has only received construction waste. Therefore, the average daily quantity of municipal waste and special waste disposed of at the SENT Landfill in 2016 is calculated based on the 5-day intake records from 1 January 2016 to 5 January 2016.

- End -



**CONTROLLING OFFICER'S REPLY****ENB282****(Question Serial No. 5530)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Recycling Fund launched a number of new funding schemes in 2017. Please set out the details, targets, number of participants, duration, the funding used and the implementation locations of the new and old funding schemes in the past 3 years.

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 68)

Reply:

The Government launched the \$1 billion Recycling Fund in October 2015. Since its establishment, two funding schemes have been established under the Fund, namely the Enterprise Support Programme (ESP) and the Industry Support Programme (ISP). The ESP provides project-based matching funds for individual enterprises to upgrade and expand their waste recycling operations in Hong Kong locally, including enhancing collection and separation of recyclables, adopting value-added recycling processes as well as promoting the recycled products manufactured by recyclables through commercialisation and other marketing efforts. The project period is set at not less than 1 year and not more than 2 years. For the ISP, it has been established for non-profit distributing organisations such as professional bodies, trade and industry organisations, research institutes and other industry support organisations to undertake non-profit-making projects to enhance the overall capability and productivity of the recycling industry. There is no limit on the project period.

The Environmental Protection Department and the Advisory Committee on Recycling Fund (RFAC) have been striving to enhance the operation of the Recycling Fund so that it will better address the needs of the industry and support its development. Without compromising the need in safeguarding the use of the Recycling Fund and maintaining effective control on applicants, various facilitation measures have been introduced since the Fund's early stage of operation. These measures include providing partial reimbursement of expenses to successful applicants before the launch of the projects under the ESP and the ISP and establishing a category of Standard Projects under the ESP to minimise the

administrative workload of small and medium enterprises (SMEs) in making applications. The SMEs undertaking Standard Projects can also submit applications, report achievements and seek reimbursements in accordance with a set of streamlined procedures. Besides, the RFAC has approved the waiving of a condition on opening a designated project bank account for Standard Projects, and can provide interim reimbursement according to the progress of the projects.

To assist the recycling industry to address the Mainland's progressive tightening requirements on imports of recyclables, the Recycling Fund announced in September 2017 that \$20 million had been earmarked to expand the list of fundable equipment items under "Standard Projects" to help upgrade the recyclers' ability in turning waste plastics into plastic products or raw materials as well as processing waste paper. The Recycling Fund also earmarked \$50 million for encouraging recyclers to use compactor trucks for more effective and efficient transportation of waste plastics and waste paper and hence reduce the collection and transportation costs of recyclables.

As at 28 February 2018, the RFAC has received 382 applications (of which 101 had been withdrawn before vetting by the RFAC) and approved 163 applications. Excluding the projects which have been withdrawn by some applicant organisations after their applications were approved, a total of 128 funded projects have been or will soon be commenced, involving a total funding of about \$94 million, of which 24 are under the ESP, 97 are for Standard Projects and 7 are under the ISP.

The above projects aim to assist local recyclers to upgrade their operational capacities and expand their business in order to achieve a more solid and sustainable business target. Except one ISP project which includes arranging a visit for Hong Kong recyclers to the Mainland and South Korea to inspect various recycling projects there, other projects have been/will be carried out in Hong Kong.

Due to the different nature of these projects of which some provide assistance to individual enterprises while some benefit the entire industry, we do not have statistics on the number of participants.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB283**

**(Question Serial No. 5953)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the policy to promote electric vehicles (EVs), the Government announced back in 2010 that its policy objective was to have ultimately only zero-emission buses running in the territory and that it would use \$180 million to fully subsidise the purchase of 36 single-decker electric buses. In connection with these electric buses, would the Government advise this Committee on the following:

- (a) their routes, alignment length and service commencement date;
- (b) their functionality and performance, e.g. frequency of breakdown;
- (c) A company in the North America has launched air-conditioned double-decker electric buses which can run more than 300 kilometers after charging each time. To achieve its policy objective about zero-emission buses, does the Government have plans to procure double-decker electric buses? If yes, what are the details (including the action timetable)? If no, what are the reasons?
- (d) Has the Department assessed the emission reduction efficiency achieved by a complete electrification of buses, e.g. the total tonnage of air pollutants emitted and the percentage of reduction in roadside nitrogen dioxide? If yes, what are the details? If no, what are the reasons? Does the Department agree that improvement to air quality in Hong Kong will be compromised without the relevant assessments and studies?

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 17)

Reply:

(a) & (b)

Electric buses do not have tailpipe emissions, replacing conventional franchised buses with electric buses can help improve the roadside air quality, particularly the air quality along busy corridors. In this regard, the Government has allocated \$180 million to fully

subsidise the franchised bus companies to purchase 36 single-deck electric buses (including 8 supercapacitor buses and 28 battery-electric buses and related charging facilities) to conduct 2-year trials on different routes to assess their operational performance under local conditions. To effectively monitor and assess the operational efficiency and performance of electric buses, the Environmental Protection Department has set up a task force to analyse the trial data. Members of the task force comprise representatives from the franchised bus companies and the Transport Department, as well as local academics.

Currently, 24 battery-electric buses and 2 supercapacitor buses have come into operation, and it is anticipated that most of the remaining electric buses will be put into service progressively in 2018. The average price of each single-deck electric bus with provision and installation of related charging facilities is about \$5 million. Details of the trials are as follows:

<b>Franchised bus company</b>	<b>No. of single-deck electric bus</b>	<b>Manufacturer and model</b>	<b>Service route and route distance</b>	<b>Current status</b>
The Kowloon Motor Bus Company (1933) Limited (KMB)	8 supercapacitor buses	China Youngman Automobile Group Company Limited Model: JNP6122UC	284 [Sha Tin Central - Ravana Garden (Circular)]  Total distance 5.7 km  5M [Kai Tak (Tak Long Estate) - Kowloon Bay Railway Station (Circular)]  Total distance 6.6 km	2 supercapacitor buses commenced the trial on Route No. 284 in late March 2017. 2 more supercapacitor buses will commence services in the first half of 2018.  The remaining 4 supercapacitor buses will commence services in phases in the first half of 2018, subject to the progress of testing of the charging facilities.
	10 battery-electric buses	BYD Auto Industry Company Limited Model: K9R	5C [Star Ferry Pier - Tsz Wan Shan (Central)]  10.8 km for departure from Tsz Wan Shan 11.2 km for departure from Star Ferry Pier  6C [Mei Foo - Kowloon City Ferry Pier]  10.2 km both for departure and return	10 battery-electric buses have commenced services in phases from July 2017 to January 2018.

Franchised bus company	No. of single-deck electric bus	Manufacturer and model	Service route and route distance	Current status
			<p>35A [Tsim Sha Tsui East - On Yam]</p> <p>15.1 km both for departure and return</p> <p>42A [Jordan (To Wah Road) - Cheung Hang]</p> <p>14.6 km for departure from Cheung Hang 14.4 km for departure from Jordan</p> <p>603 [Ping Tin - Central (Central Ferry Piers)]</p> <p>16.2 km for departure from Ping Tin 18.1 km for departure from Central</p>	
Long Win Bus Company Limited (LWB)	4 battery-electric buses	BYD Auto Industry Company Limited Model: K9R	<p>E31 [Tung Chung (Yat Tung Estate Public Transport Terminus) - Tsuen Wan (Discovery Park Bus Terminus)]</p> <p>33.9 km for departure from Tsuen Wan 33.5 km for departure from Tung Chung</p>	2 battery-electric buses commenced services in July 2017.

<b>Franchised bus company</b>	<b>No. of single-deck electric bus</b>	<b>Manufacturer and model</b>	<b>Service route and route distance</b>	<b>Current status</b>
			S64 [Tung Chung (Yat Tung Estate Public Transport Terminus) - Airport (Passenger Terminal Building) (Circular)]  Total distance 22.5 km	2 battery-electric buses commenced services in February 2018.
Citybus Limited (CTB)	6 battery-electric buses	BYD Auto Industry Company Limited Model: K9R  Great Dragon International Corporation Limited Model: LS-130-116  3 buses for each model	11 [Central (Central Ferry Piers) - Jardine's Lookout (Circular)]  Total distance 15.7 km  12 [Central (Central Ferry Piers) - Robinson Road (Circular)]  Total distance 7.5 km  25A [Wan Chai (Hong Kong Convention & Exhibition Centre Extension) - Braemar Hill (Circular)]  Total distance 11.4 km	The first batch of 5 battery-electric buses from BYD commenced services on 5 routes on Hong Kong Island in December 2015.  5 battery-electric buses from Great Dragon also commenced services in June 2017.
New World First Bus Services Limited (NWFB)	4 battery-electric buses	BYD Auto Industry Company Limited Model: K9R	78 [Wong Chuk Hang Station - Wah Kwai Estate (Circular)]	

Franchised bus company	No. of single-deck electric bus	Manufacturer and model	Service route and route distance	Current status
		Great Dragon International Corporation Limited Model: LS-130-116  2 buses for each model	Total distance 8.9 km  81 [Lai Tak Tsuen - Chai Wan (Hing Wah Estate)]  11.2 km for departure from Lai Tak Tsuen 10.5 km for departure from Hing Wah Estate	
New Lantao Bus Company (1973) Limited (NLB)	4 battery-electric buses	BYD Auto Industry Company Limited Model: K9R (2 buses)     The other 2 battery-electric buses have to be re-tendered.	38 [Tung Chung (Yat Tung Estate Public Transport Terminus) - Tung Chung Station Bus Terminus (Circular)]  Total distance 4.2 km  B2 [Yuen Long Station - Shenzhen Bay Port]  20.4 km both for departure and return	2 battery-electric buses will commence services in the first half of 2018, subject to the progress of testing of the charging facilities.      It is anticipated that 2 battery-electric buses will commence services in 2019, subject to the progress of re-tendering.

The first batch of 5 battery-electric buses commenced operation by the end of 2015. At the early stage of the trials, there were incidents such as malfunction of bus doors, broken wheel bolts, and excessive regenerative braking torque affecting the braking performance of electric buses in rainy weather. For the second batch of 5 battery-electric buses, there was the problem of malfunction of doorbells. Regarding the above problems, the franchised bus companies immediately suspended the operation of concerned buses and requested the manufacturers to conduct detailed inspections. Trials for all electric buses were resumed after thorough repair and inspection. Preliminary trial results showed that the driving performance of the single-deck electric buses is comparable with that of conventional buses. However, when the ambient temperature is high, the driving range of battery-electric buses after a full charge is only about 110 to 150 km, which is lower than the daily mileage

requirement of general public buses for 200 to 300 km. The 2 supercapacitor buses commenced operation in March 2017. Preliminary trial results showed that the driving performance is comparable with that of conventional buses. However, when the ambient temperature is high, there has been unstable condition of the supercapacitors. After detailed inspection, the manufacturer carried out enhancement work for the supercapacitor system. Trials of the relevant supercapacitor buses were resumed after completion of the enhancement work and inspection.

The 2-year trial of the remaining 14 battery-electric buses commenced from July 2017 to February 2018. We will continue to monitor the performance of electric buses under the trials and publish the latest situation in due course.

(c) Currently about 95% of the franchised buses in Hong Kong are double-deck buses. However, the technology of double-deck electric buses is still developing and there are very few models available in the international arena. Furthermore, their passenger carrying capacity and operational efficiency still fail to fulfill the local operational needs of franchised buses which include long daily service hours, high peak passenger loadings, the need to tackle hilly terrains as well as intense air-conditioning capability being required in hot and humid summer. Taking the single-deck battery-electric buses under the trials as example, the manufacturer's information showed that the driving range of the battery-electric buses after a full charge can reach 250 km. However, under the local road condition and when the ambient temperature is high, their driving range is only about 110 to 150 km. Therefore, we have to test and prove that the relevant technology is suitable for the local environment and the actual modus operandi of the public transport sector before introduction of electric buses on a large scale. We will keep in view the technological development of double-deck electric buses and trials in other places so as to introduce suitable models for trial in due course.

We have also noticed that there is a North American electric bus manufacturer claiming that they have developed a double-deck electric bus that can contain over 100 seats and travel 300 miles (about 480 km) after charge. We are now liaising with the relevant manufacturer for more information on its technical specification.

(d) The emissions of respirable suspended particulates (RSP) and nitrogen oxides (NO<sub>x</sub>) from franchised buses and their percentage in the total vehicle emissions in 2015 are provided as follows:

<b>Air pollutants</b>	<b>Emissions (tonnes<sup>Note</sup>)</b>	<b>Percentage in the total vehicle emissions</b>
RSP	70	15%
NO <sub>x</sub>	3 600	22%

Note: The numbers between 10 and 1 000 are rounded to the nearest ten, and the numbers between 1 000 and 10 000 are rounded to the nearest hundred.

The impact on the air pollutant emissions and air quality as a result of replacement of conventional franchised buses with electric buses will depend on the type of emission standards of the conventional franchised buses that are to be replaced eventually. As franchised bus companies will replace older conventional franchised buses under an



established mechanism and the technology of electric buses (particularly double-deck electric buses) is still developing, we are unable to assess the timetable of replacing conventional franchised buses with electric buses and the type of emission standards of the conventional franchised buses that are to be replaced eventually. Therefore, we are unable to estimate the decrease in emissions and roadside concentrations of nitrogen dioxide as a result of replacement of conventional franchised buses with electric buses.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB284**

**(Question Serial No. 5958)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Environmental Protection Department (EPD) has adopted various measures to improve roadside air quality, including controlling the number of vehicles on the road, restricting emissions, etc. As far as private cars are concerned, please tabulate by emission standards the number of registered private cars and their year of registration as at March 2018, with statistics on their countries of origin.

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 29)

Reply:

Commercial vehicles (CVs) account for 95% of the vehicular emissions of respirable suspended particulates and nitrogen oxides, both major air pollutants. Hence, CVs have all along been a major target of the Government's measures to improve roadside air quality. To improve roadside air quality and better protect public health, the Environmental Protection Department (EPD) launched and continuously implemented in the past 3 years various major emission control measures, including phasing out pre-Euro IV diesel commercial vehicles, progressive tightening of emission standards of newly registered vehicles, strengthening the control of emissions from petrol and liquefied petroleum gas vehicles and retrofitting older franchised buses with emission control devices, etc. The concentrations of major roadside air pollutants have dropped by about 30% over the past 5 years. This reflects that the measures for reducing vehicle emissions have been taking effect.

According to the information provided by the Transport Department, the information on registered private cars as at 16 March 2018 is set out at Annex.

**The number of registered pre-Euro private cars by year of first registration and country of origin as at 16 March 2018**

Year of first registration	Country of origin													Sub-total
	Australia	Belgium	France	Germany	Italy	Japan	Korea	Netherlands	New Zealand	South Africa	Sweden	UK	USA	
1950	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1952	0	0	0	0	0	0	0	0	0	0	0	3	0	3
1953	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1954	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1955	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1958	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1960	0	0	0	1	0	0	0	0	0	0	0	1	0	2
1961	0	0	0	0	0	0	0	0	0	0	0	5	0	5
1962	0	0	0	2	0	0	0	0	0	0	0	2	0	4
1963	0	0	0	3	0	0	0	0	0	0	0	0	0	3
1964	0	0	0	2	0	0	0	0	0	0	0	1	0	3
1965	0	0	0	3	0	0	0	0	0	0	0	4	1	8
1966	0	0	0	3	1	0	0	0	0	0	1	0	0	5
1967	0	0	0	4	2	0	0	0	0	0	0	6	1	13
1968	0	0	0	6	0	0	0	0	0	0	0	3	0	9
1969	0	0	0	9	1	0	0	0	0	0	1	6	0	17
1970	0	0	0	22	1	0	0	0	0	0	0	17	0	40
1971	1	0	0	25	0	0	0	0	0	0	0	5	0	31
1972	1	0	1	28	6	0	0	0	0	0	1	14	0	51
1973	2	0	0	47	3	2	0	0	0	0	0	26	1	81
1974	1	0	0	18	3	0	0	0	0	0	0	22	0	44
1975	1	0	0	16	2	2	0	0	0	0	0	16	0	37
1976	0	0	1	15	1	8	0	0	0	0	0	20	0	45
1977	0	0	0	17	4	13	0	0	0	0	0	26	1	61
1978	3	0	0	27	2	15	0	0	0	0	1	12	0	60

Year of first registration	Country of origin													Sub-total
	Australia	Belgium	France	Germany	Italy	Japan	Korea	Netherlands	New Zealand	South Africa	Sweden	UK	USA	
1979	0	0	0	30	4	7	0	0	0	0	0	26	1	<b>68</b>
1980	0	0	0	36	3	18	0	0	0	0	0	37	2	<b>96</b>
1981	2	0	1	49	4	24	0	0	0	0	1	23	2	<b>106</b>
1982	0	0	0	53	3	13	0	0	0	0	0	14	0	<b>83</b>
1983	0	0	0	19	0	14	0	0	0	0	0	1	0	<b>34</b>
1984	0	0	0	18	6	16	0	0	0	0	0	5	1	<b>46</b>
1985	0	0	0	41	11	26	0	0	0	0	0	11	0	<b>89</b>
1986	0	1	0	69	12	67	0	0	0	2	0	21	0	<b>172</b>
1987	0	4	2	74	15	75	0	0	0	1	0	28	1	<b>200</b>
1988	0	2	1	109	10	125	0	0	0	0	2	30	0	<b>279</b>
1989	0	2	2	175	10	198	0	0	1	0	6	33	1	<b>428</b>
1990	0	1	2	168	9	320	0	0	0	0	3	36	0	<b>539</b>
1991	0	1	5	235	21	501	0	0	0	0	10	55	2	<b>830</b>
1992	0	0	4	288	11	453	0	0	0	0	23	40	1	<b>820</b>
1993	2	1	2	362	47	694	1	0	0	0	18	90	0	<b>1 217</b>
1994	1	5	2	686	47	853	0	1	0	0	14	98	1	<b>1 708</b>
1995	1	8	0	233	16	273	0	0	0	0	5	25	1	<b>562</b>
<b>Total</b>														<b>7 804</b>

**The number of registered Euro I private cars by year of first registration and country of origin as at 16 March 2018**

Year of first registration	Country of origin											Sub-total
	Belgium	France	Germany	Italy	Japan	Korea	Mexico	Spain	Sweden	UK	USA	
1995	8	1	372	30	620	0	0	0	6	83	1	<b>1 121</b>
1996	4	3	580	67	1 222	3	8	1	11	114	3	<b>2 016</b>
1997	1	1	241	17	781	2	1	0	3	39	25	<b>1 111</b>
1998	0	0	0	0	54	0	0	0	0	1	0	<b>55</b>
<b>Total</b>												<b>4 303</b>

**The number of registered Euro II private cars by year of first registration and country of origin as at 16 March 2018**

Year of first registration	Country of origin											
	Australia	Belgium	Denmark	France	Germany	Italy	Japan	Korea	Malaysia	Mexico	Netherlands	Portugal
1997	1	11	0	7	855	61	3 737	5	0	2	0	0
1998	0	8	0	12	1 190	46	4 872	2	0	2	5	0
1999	0	2	1	7	1 290	40	6 368	6	9	1	15	2
2000	0	43	0	63	2 394	64	9 142	24	1	54	30	1

Year of first registration	Country of origin							Sub-total
	Singapore	South Africa	Spain	Sweden	Thailand	UK	USA	
1997	1	0	2	5	0	136	123	<b>4 946</b>
1998	0	0	0	37	39	97	135	<b>6 445</b>
1999	0	54	1	25	0	88	156	<b>8 065</b>
2000	0	336	11	17	0	157	215	<b>12 552</b>
<b>Total</b>								<b>32 008</b>

**The number of registered Euro III private cars by year of first registration and country of origin as at 16 March 2018**

Year of first registration	Country of origin											
	Australia	Austria	Belgium	China	Finland	France	Germany	Italy	Japan	Korea	Malaysia	Mexico
2001	0	0	36	0	13	132	2 585	100	11 643	13	1	44
2002	0	0	42	0	38	140	2 723	106	12 378	28	1	15
2003	1	0	45	0	33	123	3 307	86	9 888	76	0	39
2004	0	127	95	1	11	118	4 194	120	13 592	241	0	43
2005	0	133	132	0	81	131	4 476	130	13 847	466	1	27

Year of first registration	Country of origin								Sub-total
	Netherlands	Portugal	Spain	South Africa	Sweden	Thailand	UK	USA	
2001	45	0	26	840	24	12	169	232	<b>15 915</b>
2002	85	4	60	806	43	12	452	351	<b>17 284</b>
2003	31	2	46	595	63	208	552	247	<b>15 342</b>
2004	5	3	38	1 026	201	313	775	366	<b>21 269</b>
2005	105	0	25	1 540	184	286	821	239	<b>22 624</b>
<b>Total</b>									<b>92 434</b>

**The number of registered Euro IV private cars by year of first registration and country of origin as at 16 March 2018**

Year of first registration	Country of origin												
	Australia	Austria	Belgium	Canada	China	Finland	France	Germany	Greece	India	Italy	Japan	Korea
2006	0	110	79	0	0	154	127	5 034	0	0	150	15 226	305
2007	2	74	115	1	0	168	165	6 637	0	0	343	19 622	195
2008	0	47	84	0	1	127	141	7 685	0	0	361	20 943	121
2009	7	13	84	1	0	79	98	8 402	1	11	453	15 092	95
2010	3	81	100	0	3	83	41	12 893	0	24	398	21 292	183
2011	2	411	77	0	8	27	200	14 569	0	8	446	20 540	222
2012	2	175	46	0	6	1	73	5 466	0	1	338	8 130	185

Year of first registration	Country of origin											Sub-total
	Malaysia	Mexico	Netherlands	Poland	New Zealand	South Africa	Spain	Sweden	Thailand	UK	USA	
2006	0	74	75	0	0	1 569	26	189	167	749	443	<b>24 477</b>
2007	1	84	41	0	0	1 226	23	324	129	919	630	<b>30 699</b>
2008	0	66	0	32	1	1 052	18	264	0	754	969	<b>32 666</b>
2009	0	12	0	50	0	675	28	266	0	674	784	<b>26 825</b>
2010	0	12	0	0	0	829	23	314	2	1 085	907	<b>38 273</b>
2011	0	190	0	144	0	879	57	301	74	1 222	1 065	<b>40 442</b>
2012	0	126	0	107	0	140	37	108	49	645	294	<b>15 929</b>
<b>Total</b>												<b>209 311</b>

**The number of registered Euro V private cars by year of first registration and country of origin as at 16 March 2018**

Year of first registration	Country of origin												
	Australia	Austria	Belgium	Brazil	China	Czech	Finland	France	Germany	Hungary	India	Italy	Japan
2012	3	348	190	1	2	0	0	161	9 423	0	2	388	12 170
2013	0	533	317	0	5	22	168	183	16 199	83	0	475	20 434
2014	0	387	339	0	2	45	496	164	13 895	1 317	0	508	22 426
2015	1	248	225	0	0	0	498	75	13 085	1 600	0	594	24 388
2016	1	161	188	0	4	0	266	87	9 944	669	1	387	19 133
2017 Note	15	10	93	0	4	0	123	120	6 295	212	0	316	9 256
2018 Note	0	0	0	0	0	0	0	0	1	0	0	0	0

Year of first registration	Country of origin										
	Korea	Malaysia	Mexico	Netherlands	Poland	Portugal	Singapore	Slovakia	Slovenia	South Africa	Spain
2012	314	0	539	0	69	0	0	0	0	627	45
2013	660	0	442	0	125	14	0	0	0	811	121
2014	709	1	228	3	113	259	0	254	0	626	581
2015	748	0	145	47	76	244	0	254	0	1 276	486
2016	846	0	41	58	62	235	1	349	16	1 039	627
2017 Note	1 284	0	23	112	5	88	0	116	4	458	408
2018 Note	130	0	0	0	0	0	0	0	0	0	21



Year of first registration	Country of origin						Sub-total
	Sweden	Switzerland	Thailand	Turkey	UK	USA	
2012	82	0	75	0	1 111	846	<b>26 396</b>
2013	142	0	86	0	1 533	1 473	<b>43 826</b>
2014	82	0	62	0	1 406	1 331	<b>45 234</b>
2015	96	1	74	7	1 719	1 488	<b>47 375</b>
2016	239	0	60	19	1 906	1 025	<b>37 364</b>
2017 Note	134	0	2	15	1 029	848	<b>20 970</b>
2018 Note	0	0	0	0	0	1	<b>153</b>
<b>Total</b>							<b>221 318</b>

Note: The number of vehicles includes Euro V diesel private cars which met the specified requirements under the transitional arrangement and were approved to be first registered after the implementation of the new emission standards (1 October 2017). (According to the established practice of tightening the exhaust emission standards of newly registered vehicles in the past, the EPD will provide a transitional arrangement under which car dealers can process the Euro V diesel private cars (unsold vehicles) which have arrived Hong Kong but have not yet been first registered before the implementation of new emission standards.)

#### The number of registered Euro VI private cars by year of first registration and country of origin as at 16 March 2018

Year of first registration	Country of origin												
	Austria	Belgium	China	Finland	France	Germany	Netherlands	Hungary	Italy	Japan	Korea	Mexico	Poland
2017	46	46	6	131	24	4 489	122	226	170	10 173	295	167	15
2018	7	14	1	36	4	1 578	35	76	97	4 275	96	58	3

Year of first registration	Country of origin										Sub-total
	Portugal	Slovakia	Slovenia	South Africa	Spain	Sweden	Thailand	Turkey	UK	USA	
2017	71	92	25	541	122	246	70	7	900	279	<b>18 263</b>
2018	22	42	3	224	26	124	90	7	493	133	<b>7 444</b>
<b>Total</b>											<b>25 707</b>

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB285**

**(Question Serial No. 5959)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Government implemented in December 2015 low emission zones (LEZs) in some sections of three streets in Causeway Bay, Mong Kok and Central, requiring that only Euro IV or above franchised buses could pass through these zones. The setting up of LEZs is also one of the measures identified by the Hong Kong Government for improving air quality under A Clean Air Plan for Hong Kong. In this connection, would the Administration advise on the following:

- (a) The assessment of the emission reduction effectiveness since the implementation of the LEZs, including setting out the emission reductions (gram) of nitrogen dioxide, PM2.5 and PM10 and the decrease in the concentrations of roadside air pollutants. If the relevant assessment was not made, what are the reasons?
- (b) With the introduction of more Euro VI buses by the bus companies, does the Government have a timetable for tightening the "low emission" standards to Euro VI? If yes, what are the details? If not, what are the reasons?
- (c) Has the Government planned to extend the scope of controlled vehicles to cover heavy goods vehicles and vans? If yes, what are the details? If not, what are the reasons?

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 30)

Reply:

(a)

At the end of 2015, the Government set up a total of 3 franchised bus low emission zones (FBLEZs) in Central, Causeway Bay and Mong Kok. The FBLEZs are all located at corridors with busy traffic and high pedestrian flow, where franchised buses can account for up to 40% of the traffic. Requesting franchised bus companies to deploy low emission buses (including buses of Euro IV or above, or Euro II and III buses retrofitted with selective catalytic reduction devices (SCRs) and diesel particulate filters to upgrade their

emissions performance comparable to that of Euro IV or above level) to ply the routes passing these FBLEZs can improve the roadside air quality.

Apart from setting up the FBLEZs and fully subsidising the franchised bus companies to retrofit eligible Euro II and III buses with SCRs, the Environmental Protection Department (EPD) has also implemented other vehicle emission control measures in parallel to improve roadside air quality in recent years, including phasing out progressively some 82 000 pre-Euro IV diesel commercial vehicles (DCVs) and strengthening emission control on petrol and liquefied petroleum gas vehicles. These measures also helped improve the roadside air quality in the FBLEZs and other areas.

EPD compiles the Hong Kong Air Pollutant Emission Inventory every year to assess the emission of air pollutants and formulate policies to reduce emissions. Hong Kong is small in size. There are different air pollution sources and vehicles are running around in different districts. Other air quality improvement measures are also implemented in parallel. Therefore, assessing air pollutant emissions within specific road sections cannot adequately reflect the importance and effectiveness of a particular improvement measure. EPD has been monitoring the roadside air quality. According to the monitoring data of the 3 roadside Air Quality Monitoring Stations (Central, Causeway Bay and Mong Kok), the average concentrations of major roadside air pollutants (including respirable suspended particulates, fine suspended particulates, nitrogen dioxide and sulphur dioxide) have dropped by 32%, 30%, 28% and 36% respectively over the past 5 years (i.e. from 2013 to 2017). This reflects that the measures for reducing vehicle emissions are effective.

(b)

The Air Pollution Control (Vehicle Design Standards) (Emission) (Amendment) Regulation 2017 and its amendment was passed by the Legislative Council in April 2017. The emission standards for newly registered vehicles have been tightened in phases by vehicle type from Euro V to Euro VI starting from 1 July 2017. The emission standards for newly registered franchised buses (with a design weight of more than 9 tonnes) will be tightened to Euro VI starting from 1 October 2018. Franchised bus companies are required to provide their franchised bus services with buses under the age of 18. Currently all pre-Euro and Euro I franchised buses have already been phased out. In the coming few years, the franchised bus companies will continue to phase out Euro II and III buses and procure Euro VI buses according to the above Regulation when replacing their buses.

Currently, only 12 Euro VI buses are owned by various franchised bus companies. The Government has no plan to tighten the emission standards for franchised buses running through the FBLEZs to Euro VI at this stage.

(c)

Through the above multi-pronged approach to improve the roadside air quality, particularly with the completion of phasing out pre-Euro IV DCVs by the end of 2019, all DCVs will meet the Euro IV or above emission standards. Therefore, we have no plan to extend the FBLEZs to cover heavy goods vehicles and vans.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB286**

**(Question Serial No. 5962)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Environmental Protection Department (EPD) implemented the ex-gratia payment scheme on 1 March 2014 to encourage owners of diesel commercial vehicles (DCVs) to replace their pre-Euro, Euro I, Euro II and Euro III vehicles. In this connection, please provide the following information:

(a) The respective numbers of DCVs replaced under the ex-gratia payment scheme, the Euro models they belonged to and the amount of ex-gratia payments granted each year from 1 March 2014 to 31 January 2018;

(b) The numbers of goods vehicles, light buses and non-franchised buses of various Euro models and their fine suspended particulates (PM<sub>2.5</sub>) and nitrogen oxides (NO<sub>x</sub>) emissions as at February 2018.

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 31)

Reply:

(a) Diesel commercial vehicles (DCVs) are a major source of roadside air pollution in Hong Kong. To improve roadside air quality and better protect public health, the Environmental Protection Department (EPD) launched an incentive-cum-regulatory scheme in March 2014 to phase out by end 2019 progressively some 82 000 pre-Euro IV DCVs with a funding of \$11.4 billion for offering ex-gratia payment to the affected vehicle owners. The ex-gratia payment applications for pre-Euro, Euro I and II DCVs have closed at the end of 2015, end of 2016 and end of 2017 respectively. The ex-gratia payment applications for Euro III DCVs will close at the end of 2019. As at the end of February 2018, about 60 500 DCVs (i.e. about 74% of the eligible vehicles) have been granted ex-gratia payment, involving a subsidy amount of about \$8.2 billion. The number of vehicles participating in the ex-gratia payment scheme and the subsidy amount involved are as follows:

Table 1: Distribution by vehicle emission standard of approved applications for ex-gratia payment and the subsidy amount involved (as at the end of February 2018)

	No. of approved applications for ex-gratia payment					
Emission standard	2014 (since 1 March 2014)	2015	2016	2017	2018 (as at 28 February 2018)	Total
Pre-Euro	6 969	8 677	668	0	0	16 314
Euro I	4 574	4 640	3 861	346	0	13 421
Euro II	3 353	4 271	3 961	6 219	677	18 481
Euro III	2 077	2 827	3 078	3 684	647	12 313
Total	16 973	20 415	11 568	10 249	1 324	60 529
Subsidy amount (\$million)	2,193	2,751	1,614	1,438	187	8,182

Note: The subsidy amount is rounded to the nearest million, so the figures may not add up to the total.

- (b) The number of licensed goods vehicles, light buses and non-franchised buses as at 28 February 2018 is set out by vehicle emission standard as follows:

Table 2: Number of licensed goods vehicles, light buses and non-franchised buses (as at the end of February 2018)

	No. of licensed vehicles		
Emission standard	Goods vehicle	Light bus	Non-franchised bus
Pre-Euro	32	0	0
Euro I	11	6	0
Euro II	111	729	59
Euro III	16 851	2 438	623
Euro IV	35 629	1 500	2 779
Euro V	60 350	2 772	4 205
Euro VI	578	0	0
Total	113 562	7 445	7 666

Note: Petrol, diesel and liquefied petroleum gas vehicles are included in the above figures.

The Environmental Protection Department (EPD) compiles the Hong Kong Air Pollutant Emission Inventory every year to analyse the distribution and trends of major air pollution sources in Hong Kong. The emission inventory for vehicles for 2016 is still under compilation. The emissions of fine suspended particulates (PM<sub>2.5</sub>) and nitrogen oxides (NO<sub>x</sub>) from goods vehicles, light buses and non-franchised buses in 2015 are set out by vehicle emissions standard as follows:

Table 3: PM<sub>2.5</sub> and NO<sub>x</sub> emissions from goods vehicles, light buses and non-franchised buses (in 2015)

Vehicle type	Emission standard	NO <sub>x</sub> (tonnes)	PM <sub>2.5</sub> (tonnes)
Goods vehicle	Pre-Euro	9	<5
	Euro I	420	30
	Euro II	1 700	50
	Euro III	2 000	90
	Euro IV	2 200	60
	Euro V	1 900	40
Light bus	Pre-Euro	<5	<5
	Euro I	90	10
	Euro II	240	20
	Euro III	470	10
	Euro IV	90	<5
	Euro V	60	<5
Non-franchised bus	Pre-Euro	<5	<5
	Euro I	20	<5
	Euro II	170	<5
	Euro III	410	10
	Euro IV	570	20
	Euro V	280	7

Note: The numbers smaller than 5 are shown as “<5”, the numbers between 5 and 10 are rounded to the nearest integer, the numbers between 10 and 1 000 are rounded to the nearest ten, and the numbers between 1 000 and 10 000 are rounded to the nearest hundred.

- End -

**CONTROLLING OFFICER'S REPLY****ENB287****(Question Serial No. 5963)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Department has set the target of percentage of hourly general and roadside Air Quality Health Index (AQHI) below 7 at 98% and 96% respectively. Although the Department has indicated that hourly general and roadside AQHI nearly or fully met the targets in 2016 and 2017, there are currently only 13 general monitoring stations and 3 roadside monitoring stations in Hong Kong. As the coverage of a monitoring station is only 1 square kilometre, the actual air quality of many places is hardly known. The monitoring stations in fact cannot fully reflect the air quality of the territory as a whole. Will the Administration study provision of additional fixed monitoring stations? If yes, what are the details (e.g. locations, the cost involved)? If not, what are the reasons?

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 32)

Reply:

At present, the air quality monitoring network of the Environmental Protection Department (EPD) in Hong Kong comprises 13 general air quality monitoring stations (AQMSs) and 3 roadside AQMSs. The primary objectives in setting up the air quality monitoring network are to collect data for assessing the impact of air pollution on the public, facilitate the formulation of air quality management strategies and evaluate their effectiveness.

Given the small size of Hong Kong and the domination of residential and commercial land uses, the variation in air quality among districts is not significant. As for areas near the estuary of the Pearl River (such as Tung Chung, Yuen Long and Tuen Mun), they are more susceptible to the influence of regional ozone under northwesterly or northerly winds in Hong Kong. Therefore, the EPD has set up AQMSs in these districts to monitor the impacts on air quality due to regional pollutants and provide the public with information on air quality. The overall air quality in Hong Kong has been improving in recent years. In the past 10 years (from 2008 to 2017), except ozone which was on the rise due to regional photochemical smog, the concentrations of general and roadside major air pollutants including nitrogen dioxide, sulphur dioxide, respirable suspended particulates and fine suspended particulates in Hong Kong fell by 12%-70%.

The EPD reviews the air quality monitoring network annually according to an established mechanism and the international guidelines so as to ensure its representativeness and consider the need for additional AQMSs or adding new monitoring parameters. According to the latest review, the current air quality monitoring network already covers the majority of Hong Kong's densely populated areas, and is adequate to provide representative air quality data for Hong Kong. Having considered the spatial distribution and the future development in the North District and Southern District, we plan to set up general AQMSs in the 2 districts respectively, which are expected to commence operation in 2019. After consultation with the relevant district councils, the siting of the proposed AQMSs is as follows:

Siting of the AQMSs	
North District	Southern District
Po Wing Road Sports Centre	Aberdeen Tennis and Squash Centre

When the above 2 new AQMSs come into operation, about 90% of Hong Kong's population will be covered by the air quality monitoring network.

The costs for construction and operation of an AQMS differ subject to the location and scale of and the equipment installed in the monitoring station. Taking the AQMSs to be set up in the Southern District and North District as examples, it is estimated that the costs for constructing and purchasing new monitoring equipment for each monitoring station is about \$7 million, and the annual operating cost is about \$450,000.

- End -



**CONTROLLING OFFICER'S REPLY****ENB288****(Question Serial No. 5965)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding roadside air quality, would the Administration advise this Committee on the following:

(a) Please set out, in accordance with the categories in the table, the number of various types of first registered vehicles in Hong Kong respectively in each of the past 5 years:

Vehicle type	Exhaust emission standard	Number of first registered vehicles				
		2013	2014	2015	2016	2017
Petrol private car	Euro III or before					
	Euro IV					
	Euro V					
	Euro VI					
	Electric vehicle (EV)					
	Sub-total					
Diesel private car	(same as the above categories)					
Taxi						
Motorcycle						
Public light bus						
Private light bus						
Light goods vehicle						
Medium goods						

vehicle						
Heavy goods vehicle						
Non-franchised public bus						
Private light bus						

(b) Please set out, in accordance with the categories in the table, the number and age of vehicles and the overall pollutant emissions of each vehicle type in Hong Kong respectively in each of the past 5 years. If the latest data of 2016 is not available, please set out the data of the most recent 5 years:

Vehicle type	Exhaust emission standard	Number of registered vehicles				
		2013	2014	2015	2016	2017
Petrol private car	Euro I					
	Euro II					
	Euro III					
	Euro IV					
	Euro V					
	Euro VI					
	EV					
	Sub-total					
	Average age					
Diesel private car	(same as the above categories)					
Taxi						
Motorcycle						
Public light bus						
Private light bus						
Light goods vehicle						
Medium goods vehicle						
Heavy goods vehicle						
Non-franchised public bus						
Private light bus						

Vehicle type	Exhaust emission standard	Air pollutant emissions
		Respirable suspended particulates (RSP)(tonnes)

		2013	2014	2015	2016	2017
Petrol private car	Euro I					
	Euro II					
	Euro III					
	Euro IV					
	Euro V					
	Euro VI					
Diesel private car	(same as the above categories)					
Taxi						
Motorcycle						
Public light bus						
Private light bus						
Light goods vehicle						
Medium goods vehicle						
Heavy goods vehicle						
Non-franchised public bus						
Private light bus						

Vehicle type	Exhaust emission standard	Air pollutant emissions				
		Nitrogen oxides (NOx)(tonnes)				
		2013	2014	2015	2016	2017
Petrol private car	Euro I					
	Euro II					
	Euro III					
	Euro IV					
	Euro V					
	Euro VI					
Diesel private car	(same as the above categories)					
Taxi						
Motorcycle						
Public light bus						
Private light bus						
Light goods vehicle						
Medium goods vehicle						
Heavy goods						

vehicle						
Non-franchised public bus						
Private light bus						

Vehicle type	Exhaust emission standard	Air pollutant emissions				
		Volatile organic compounds (VOC)(tonnes)				
		2013	2014	2015	2016	2017
Petrol private car	Euro I					
	Euro II					
	Euro III					
	Euro IV					
	Euro V					
	Euro VI					
Diesel private car	(same as the above categories)					
Taxi						
Motorcycle						
Public light bus						
Private light bus						
Light goods vehicle						
Medium goods vehicle						
Heavy goods vehicle						
Non-franchised public bus						
Private light bus						

Vehicle type	Exhaust emission standard	Air pollutant emissions				
		Carbon monoxide (CO)(tonnes)				
		2013	2014	2015	2016	2017
Petrol private car	Euro I					
	Euro II					
	Euro III					
	Euro IV					
	Euro V					
	Euro VI					
Diesel private car	(same as the above categories)					
Taxi						
Motorcycle						

Public light bus						
Private light bus						
Light goods vehicle						
Medium goods vehicle						
Heavy goods vehicle						
Non-franchised public bus						
Private light bus						

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 34)

Reply:

(a) The number of various types of first registered vehicles in Hong Kong by exhaust emission standard in the past 5 years is tabulated as follows.

Vehicle type	Exhaust emission standard	No. of first registered vehicles				
		2013	2014	2015	2016	2017
Petrol private car	Euro III or before	0	0	0	0	0
	Euro IV	0	0	0	0	0
	Euro V	44 998	44 245	46 122	36 266	17 006
	Euro VI	0	0	0	0	18 530
	<b>Sub-total</b>	<b>44 998</b>	<b>44 245</b>	<b>46 122</b>	<b>36 266</b>	<b>35 536</b>
Diesel private car	Euro III or before	0	0	0	0	0
	Euro IV	0	0	0	0	0
	Euro V (Note 1)	349	1 546	1 593	1 896	4 246
	<b>Sub-total</b>	<b>349</b>	<b>1 546</b>	<b>1 593</b>	<b>1 896</b>	<b>4 246</b>
Electric private car	-	35	845	2 607	3 020	3 860
Taxi	Euro III or before	0	0	0	0	0
	Euro IV	0	0	0	0	0
	Euro V	732	1 699	2 340	1 821	979
	Euro VI	0	0	0	0	968
	Electric vehicle (EV)	33	15	0	1	0
	<b>Sub-total</b>	<b>765</b>	<b>1 714</b>	<b>2 340</b>	<b>1 822</b>	<b>1 947</b>
Motorcycle	Euro III or before	4 346	5 126	6 037	5 542	5 801
	EV	14	8	0	2	2

Vehicle type	Exhaust emission standard	No. of first registered vehicles				
		2013	2014	2015	2016	2017
	<b>Sub-total</b>	<b>4 360</b>	<b>5 134</b>	<b>6 037</b>	<b>5 544</b>	<b>5 803</b>
Public light bus	Euro III or before	0	0	0	0	0
	Euro IV	0	0	0	0	0
	Euro V	47	92	164	214	222
	EV	0	0	0	0	0
	<b>Sub-total</b>	<b>47</b>	<b>92</b>	<b>164</b>	<b>214</b>	<b>222</b>
Private light bus	Euro III or before	0	0	0	0	0
	Euro IV	0	0	0	0	0
	Euro V	338	437	404	319	269
	EV	0	0	0	4	1
	<b>Sub-total</b>	<b>338</b>	<b>437</b>	<b>404</b>	<b>323</b>	<b>270</b>
Light goods vehicle	Euro III or before	0	0	0	0	0
	Euro IV	0	0	0	0	0
	Euro V	5 769	8 276	8 706	6 726	6 607
	EV	24	21	11	11	12
	<b>Sub-total</b>	<b>5 793</b>	<b>8 297</b>	<b>8 717</b>	<b>6 737</b>	<b>6 619</b>
Medium goods vehicle	Euro III or before	0	0	0	0	0
	Euro IV	0	0	0	0	0
	Euro V	2 776	4 260	4 729	3 270	3 267
	EV	1	0	0	0	0
	<b>Sub-total</b>	<b>2 777</b>	<b>4 260</b>	<b>4 729</b>	<b>3 270</b>	<b>3 267</b>
Heavy goods vehicle	Euro III or before	0	0	0	0	0
	Euro IV	0	0	0	0	0
	Euro V	679	714	1 021	791	688
	EV	0	0	0	0	0
	<b>Sub-total</b>	<b>679</b>	<b>714</b>	<b>1 021</b>	<b>791</b>	<b>688</b>
Non-franchised public bus	Euro III or before	0	0	0	0	0
	Euro IV	0	0	0	0	0
	Euro V	497	712	737	803	648
	EV	0	4	3	0	2
	<b>Sub-total</b>	<b>497</b>	<b>716</b>	<b>740</b>	<b>803</b>	<b>650</b>

Note 1: The number of vehicles includes Euro V diesel private cars which met the specified requirements under the transitional arrangement and were approved to be first registered after the implementation of new emission standards (1 October 2017). (According to the established practice of tightening the exhaust emission standards of newly registered vehicles in the past, the EPD will provide a transitional arrangement under which car dealers can process the Euro V diesel private cars (unsold vehicles) which have arrived Hong Kong but not yet first registered before the implementation of new emission standards.)

(b) The number and average age of various types of vehicles by exhaust emission standard in the past 5 years are tabulated as follows.

Vehicle type	Exhaust emission standard	No. of registered vehicles				
		2013	2014	2015	2016	2017
Petrol private car	Euro I	12 311	9 320	6 904	5 105	3 857
	Euro II	75 888	64 961	53 660	42 934	33 431
	Euro III	126 511	121 235	114 082	104 941	94 324
	Euro IV	216 545	215 812	214 714	212 658	209 639
	Euro V	70 356	114 190	159 968	195 256	211 617
	Euro VI	0	0	0	0	18 280
	<b>Sub-total</b>	<b>501 611</b>	<b>525 518</b>	<b>549 328</b>	<b>560 894</b>	<b>571 148</b>
	<b>Average age (Note 2)</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>8</b>
Diesel private car	Euro I	663	648	633	623	617
	Euro II	70	66	65	63	64
	Euro III	3	3	3	3	3
	Euro IV	358	359	358	357	357
	Euro V (Note 3)	385	1 936	3 523	5 418	9 661
	<b>Sub-total</b>	<b>1 479</b>	<b>3 012</b>	<b>4 582</b>	<b>6 464</b>	<b>10 702</b>
	<b>Average age (Note 2)</b>	<b>14</b>	<b>9</b>	<b>7</b>	<b>6</b>	<b>5</b>
Electric private car	-	317	1 160	3 806	6 829	10 666
	<b>Average age (Note 4)</b>	<b>1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>1</b>	<b>1</b>
Taxi	Euro I	7 372	6 120	4 768	3 693	2 770
	Euro II	5 880	5 462	4 714	4 062	3 190
	Euro III	1 510	1 488	1 415	1 360	1 298
	Euro IV	2 452	2 447	2 394	2 385	2 332
	Euro V	890	2 573	4 839	6 662	7 604
	Euro VI	0	0	0	0	968
	EV	33	48	8	1	1
	<b>Sub-total</b>	<b>18 137</b>	<b>18 138</b>	<b>18 138</b>	<b>18 163</b>	<b>18 163</b>
	<b>Average age (Note 2)</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>8</b>
Motorcycle (Note 5)	Euro I	23 396	22 544	21 663	20 814	19 950
	Euro III	23 488	28 411	34 122	39 256	44 539
	EV	42	50	50	45	45
	<b>Sub-total</b>	<b>46 926</b>	<b>51 005</b>	<b>55 835</b>	<b>60 115</b>	<b>64 534</b>
	<b>Average age (Note 2)</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>10</b>
Public light bus	Euro I	292	232	151	5	1
	Euro II	1 025	1 003	952	901	703
	Euro III	2 285	2 281	2 262	2 260	2 255
	Euro IV	657	655	653	639	626
	Euro V	76	168	332	545	765
	EV	0	0	0	0	0

Vehicle type	Exhaust emission standard	No. of registered vehicles				
		2013	2014	2015	2016	2017
	<b>Sub-total</b>	<b>4 335</b>	<b>4 339</b>	<b>4 350</b>	<b>4 350</b>	<b>4 350</b>
	<b>Average age (Note 2)</b>	<b>9</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
Private light bus	Euro I	362	305	204	33	7
	Euro II	476	459	419	333	107
	Euro III	260	252	232	216	193
	Euro IV	914	914	915	914	896
	Euro V	463	892	1 296	1 614	1 883
	EV	4	4	4	7	7
	<b>Sub-total</b>	<b>2 479</b>	<b>2 826</b>	<b>3 070</b>	<b>3 117</b>	<b>3 093</b>
	<b>Average age (Note 2)</b>	<b>9</b>	<b>8</b>	<b>6</b>	<b>6</b>	<b>5</b>
Light goods vehicle	Euro I	9 376	5 232	2 587	67	29
	Euro II	12 356	9 177	6 705	3 989	132
	Euro III	17 774	16 362	15 097	13 606	11 561
	Euro IV	24 220	24 145	24 087	24 011	23 914
	Euro V	6 342	14 614	23 314	30 031	36 609
	EV	34	54	65	74	84
	<b>Sub-total</b>	<b>70 102</b>	<b>69 584</b>	<b>71 855</b>	<b>71 778</b>	<b>72 329</b>
	<b>Average age (Note 2)</b>	<b>10</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>6</b>
Medium goods vehicle	Euro I	2 389	1 293	653	5	3
	Euro II	6 071	4 533	3 308	2 096	19
	Euro III	9 648	8 786	8 162	7 084	5 840
	Euro IV	11 593	11 574	11 576	11 564	11 534
	Euro V	3 993	8 252	12 980	16 245	19 499
	EV	2	2	2	2	2
	<b>Sub-total</b>	<b>33 696</b>	<b>34 440</b>	<b>36 681</b>	<b>36 996</b>	<b>36 897</b>
	<b>Average age (Note 2)</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>6</b>
Heavy goods vehicle	Euro I	312	242	163	0	0
	Euro II	783	645	524	348	4
	Euro III	513	456	428	388	332
	Euro IV	1 503	1 503	1 503	1 501	1 501
	Euro V	1 128	1 841	2 862	3 651	4 341
	EV	0	0	0	0	0
	<b>Sub-total</b>	<b>4 239</b>	<b>4 687</b>	<b>5 480</b>	<b>5 888</b>	<b>6 178</b>
	<b>Average age (Note 2)</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>4</b>
Non-franchised public bus	Euro I	111	72	34	2	0
	Euro II	522	415	321	143	46
	Euro III	2 487	1 982	1 489	987	605
	Euro IV	2 889	2 868	2 824	2 737	2 592
	Euro V	928	1 635	2 367	3 165	3 786



Vehicle type	Exhaust emission standard	No. of registered vehicles				
		2013	2014	2015	2016	2017
	EV	0	4	7	7	9
	<b>Sub-total</b>	<b>6 937</b>	<b>6 976</b>	<b>7 042</b>	<b>7 041</b>	<b>7 038</b>
	<b>Average age (Note 2)</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>5</b>

Note 2: Counting from the dates of first registration of the vehicles, including registered pre-Euro vehicles.

Note 3: The number of vehicles includes Euro V diesel private cars which met the specified requirements under the transitional arrangement and were approved to be first registered after the implementation of new emission standards (1 October 2017). (According to the established practice of tightening the exhaust emission standards of newly registered vehicles in the past, the EPD will provide a transitional arrangement under which car dealers can process the Euro V diesel private cars (unsold vehicles) which have arrived Hong Kong but not yet first registered before the implementation of new emission standards.)

Note 4: Counting from the dates of first registration of the vehicles.

Note 5: The exhaust emission standard for motorcycles was upgraded to Euro III from Euro I on 1 January 2007 in Hong Kong.

The Hong Kong Air Pollutant Emission Inventory is compiled by the Environmental Protection Department (EPD) every year to analyse the distribution and trend of major emission sources in Hong Kong. The vehicle emission inventory for 2016 is still under compilation. The estimated overall air pollutant emissions of various types of vehicles in Hong Kong from 2011 to 2015 are tabulated as follows.

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 6)				
		Respirable suspended particulates (RSP)(tonnes)				
		2011	2012	2013	2014	2015
Petrol private car	Pre-Euro	1	1	1	1	1
	Euro I	1	1	0	0	0
	Euro II	4	4	3	3	2
	Euro III	5	5	5	5	5
	Euro IV	5	5	6	6	7
	Euro V	0	0	1	2	3
Diesel private car	Pre-Euro	2	2	2	2	2
	Euro I	2	1	1	1	1
	Euro IV	0	0	0	0	0
	Euro V	0	0	0	0	0
Taxi (Note 7)	Pre-Euro	0	0	0	0	0
	Euro I	0	0	0	0	0
	Euro II and III	0	0	0	0	0
	Euro IV	0	0	0	0	0
	Euro V	0	0	0	0	0

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 6)				
		Respirable suspended particulates (RSP)(tonnes)				
		2011	2012	2013	2014	2015
Motorcycle	Pre-Euro	1	1	1	1	1
	Euro I	7	6	5	5	4
	Euro III	0	0	0	0	1
Public light bus	Pre-Euro	2	2	1	1	0
	Euro I	34	32	27	21	12
	Euro II	45	45	38	36	24
	Euro III	18	23	21	24	10
	Euro IV	1	1	1	1	1
	Euro V	0	0	0	0	1
Private light bus	Pre-Euro	2	2	2	1	0
	Euro I	2	2	2	1	1
	Euro II	2	1	1	1	1
	Euro III	1	1	1	1	0
	Euro IV	2	2	1	1	1
	Euro V	0	1	1	2	3
Light goods vehicle	Pre-Euro	74	64	51	27	0
	Euro I	55	51	44	27	13
	Euro II	44	41	34	27	18
	Euro III	24	24	21	21	17
	Euro IV	22	24	22	22	22
	Euro V	0	2	6	13	20
Medium goods vehicle (Note 8)	Pre-Euro	18	16	17	10	0
	Euro I	4	4	4	3	2
	Euro II	5	4	5	5	4
	Euro III	3	3	4	5	5
	Euro IV	3	4	4	4	5
	Euro V	0	1	2	4	6
Heavy goods vehicle (Note 9)	Pre-Euro	180	152	166	92	0
	Euro I	49	43	48	32	15
	Euro II	60	53	61	53	37
	Euro III	42	45	61	66	70
	Euro IV	12	13	15	18	33
	Euro V	0	2	6	12	21
Non-franchised public/private	Pre-Euro	7	8	7	6	0
	Euro I	3	2	2	1	1

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 6)				
		Respirable suspended particulates (RSP)(tonnes)				
		2011	2012	2013	2014	2015
bus (Note 10)	Euro II	12	8	5	5	5
	Euro III	23	22	22	18	14
	Euro IV	10	12	13	14	17
	Euro V	0	1	3	6	7

Note 6: Numbers are rounded to the nearest integer.

Note 7: Vehicles using liquefied petroleum gas as fuel hardly emit RSP. Their RSP emissions are generally estimated as “0”.

Note 8: Medium goods vehicle refers to goods vehicles with gross vehicle weight of 5.5 tonnes to 15 tonnes.

Note 9: Heavy goods vehicle refers to goods vehicles with gross vehicle weight greater than 15 tonnes.

Note 10: There are no separate emission calculations for non-franchised public and private buses.

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 11)				
		Nitrogen oxides (NOx)(tonnes)				
		2011	2012	2013	2014	2015
Petrol private car	Pre-Euro	360	250	200	150	130
	Euro I	100	70	50	40	20
	Euro II	400	320	270	220	150
	Euro III	120	110	100	90	70
	Euro IV	70	70	60	60	60
	Euro V	0	<5	7	10	20
Diesel private car	Pre-Euro	10	10	8	6	7
	Euro I	7	6	<5	<5	<5
	Euro IV	<5	<5	<5	<5	<5
	Euro V	0	<5	<5	<5	7
Taxi	Pre-Euro	0	0	0	0	0
	Euro I	0	0	0	0	0
	Euro II and III	8 200	7 800	4 700	2 800	1 100
	Euro IV	220	290	270	140	50
	Euro V	0	<5	120	160	150
Motorcycle	Pre-Euro	30	20	20	10	10
	Euro I	130	100	90	80	60
	Euro III	30	40	50	60	70
Public light bus	Pre-Euro	20	10	9	7	0
	Euro I	200	190	160	120	80

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 11)				
		Nitrogen oxides (NOx)(tonnes)				
		2011	2012	2013	2014	2015
	Euro II	310	300	260	240	210
	Euro III	960	940	650	520	460
	Euro IV	60	70	60	50	50
	Euro V	0	<5	<5	6	10
Private light bus	Pre-Euro	50	40	40	20	<5
	Euro I	40	40	30	30	20
	Euro II	40	40	40	30	30
	Euro III	40	30	30	20	10
	Euro IV	70	60	50	40	40
	Euro V	0	10	30	40	50
Light goods vehicle	Pre-Euro	1 200	960	790	440	<5
	Euro I	630	570	510	330	160
	Euro II	930	840	720	590	420
	Euro III	790	760	690	660	590
	Euro IV	810	840	750	740	700
	Euro V	0	40	200	430	660
Medium goods vehicle (Note 12)	Pre-Euro	520	440	450	260	<5
	Euro I	110	100	110	80	40
	Euro II	240	210	230	190	160
	Euro III	260	250	280	280	280
	Euro IV	220	230	260	270	290
	Euro V	0	20	70	150	260
Heavy goods vehicle (Note 13)	Pre-Euro	1 700	1 400	1 400	740	<5
	Euro I	630	540	560	350	210
	Euro II	2 300	1 900	1 800	1 400	1 100
	Euro III	1 100	1 000	1 100	1 100	1 100
	Euro IV	880	940	1 100	1 100	1 300
	Euro V	0	80	290	570	970
Non-franchised public/private bus (Note 14)	Pre-Euro	110	110	100	80	<5
	Euro I	70	50	50	40	20
	Euro II	550	340	190	170	170
	Euro III	790	730	710	570	410
	Euro IV	550	580	580	590	570
	Euro V	0	50	120	200	280

Note 11: The numbers smaller than 5 are shown as “<5”, the numbers between 5 and 10 are rounded to the nearest integer, the numbers between 10 and 1 000 are rounded to the nearest ten, the numbers between 1 000 and 10 000 are rounded to the nearest hundred, and three significant figures are retained for the numbers greater than 10 000.

Note 12: Medium goods vehicle refers to goods vehicles with gross vehicle weight of 5.5 tonnes to 15 tonnes.

Note 13: Heavy goods vehicle refers to goods vehicles with gross vehicle weight greater than 15 tonnes.

Note 14: There are no separate emission calculations for non-franchised public and private buses.

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 15)				
		Volatile organic compounds (VOC)(tonnes)				
		2011	2012	2013	2014	2015
Petrol private car	Pre-Euro	140	110	90	70	60
	Euro I	50	40	30	20	10
	Euro II	180	160	130	110	70
	Euro III	60	50	50	50	40
	Euro IV	10	10	10	10	10
	Euro V	0	<5	<5	7	10
	Evaporative emission (Note 16)	700	700	650	590	580
Diesel private car	Pre-Euro	<5	<5	<5	<5	<5
	Euro I	<5	<5	<5	<5	<5
	Euro IV	<5	<5	<5	<5	<5
	Euro V	0	<5	<5	<5	<5
Taxi	Pre-Euro	0	0	0	0	0
	Euro I	0	0	0	0	0
	Euro II and III	650	700	350	200	140
	Euro IV	20	20	10	10	9
	Euro V	0	<5	7	10	20
Motorcycle	Pre-Euro	120	100	90	80	70
	Euro I	640	550	460	410	360
	Euro III	30	40	50	60	70
	Evaporative emission (Note 16)	2 000	2 100	2 200	2 300	2 500
Public light bus	Pre-Euro	<5	<5	<5	<5	0
	Euro I	10	10	8	7	<5

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 15)				
		Volatile organic compounds (VOC)(tonnes)				
		2011	2012	2013	2014	2015
	Euro II	20	20	10	10	10
	Euro III	420	470	290	220	210
	Euro IV	40	40	40	40	40
	Euro V	0	<5	<5	<5	<5
Private light bus	Pre-Euro	<5	<5	<5	<5	<5
	Euro I	<5	<5	<5	<5	<5
	Euro II	<5	<5	<5	<5	<5
	Euro III	20	10	10	10	6
	Euro IV	10	10	10	10	9
	Euro V	0	<5	6	10	10
	Evaporative emission (Note 16)	<5	<5	<5	<5	<5
Light goods vehicle	Pre-Euro	40	30	30	10	<5
	Euro I	60	60	50	30	20
	Euro II	70	60	50	40	30
	Euro III	60	60	60	50	50
	Euro IV	20	20	20	10	10
	Euro V	0	<5	5	10	20
	Evaporative emission (Note 16)	8	7	6	<5	<5
Medium goods vehicle (Note 17)	Pre-Euro	40	30	30	20	<5
	Euro I	9	8	8	6	<5
	Euro II	20	20	20	20	10
	Euro III	20	20	20	20	20
	Euro IV	<5	<5	<5	6	7
	Euro V	0	<5	<5	5	10
Heavy goods vehicle (Note 18)	Pre-Euro	110	90	90	50	<5
	Euro I	50	40	40	30	20
	Euro II	70	60	60	50	40
	Euro III	80	80	90	80	80
	Euro IV	20	20	20	20	30
	Euro V	0	<5	8	10	30

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 15)				
		Volatile organic compounds (VOC)(tonnes)				
		2011	2012	2013	2014	2015
Non-franchised public/private bus (Note 19)	Pre-Euro	9	9	9	7	<5
	Euro I	5	<5	<5	<5	<5
	Euro II	30	20	10	9	8
	Euro III	50	50	40	30	30
	Euro IV	20	30	20	20	20
	Euro V	0	5	10	20	20

Note 15: The numbers smaller than 5 are shown as “<5”, the numbers between 5 and 10 are rounded to the nearest integer, the numbers between 10 and 1 000 are rounded to the nearest ten, the numbers between 1 000 and 10 000 are rounded to the nearest hundred, and three significant figures are retained for the numbers greater than 10 000.

Note 16: Since evaporative emission standard is different from tailpipe emission standard, the figures are set out separately for easy identification.

Note 17: Medium goods vehicle refers to goods vehicles with gross vehicle weight of 5.5 tonnes to 15 tonnes.

Note 18: Heavy goods vehicle refers to goods vehicles with gross vehicle weight greater than 15 tonnes.

Note 19: There are no separate emission calculations for non-franchised public and private buses.

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 20)				
		Carbon monoxide (CO)(tonnes)				
		2011	2012	2013	2014	2015
Petrol private car	Pre-Euro	1 600	1 200	930	770	680
	Euro I	540	400	290	210	160
	Euro II	3 000	2 500	2 100	1 700	1 400
	Euro III	3 800	3 500	3 300	3 000	3 100
	Euro IV	810	810	760	750	840
	Euro V	0	130	300	460	730
Diesel private car	Pre-Euro	10	10	7	6	7
	Euro I	6	5	<5	<5	<5
	Euro IV	<5	<5	<5	<5	<5
	Euro V	0	<5	<5	10	20
Taxi	Pre-Euro	0	0	0	0	0
	Euro I	0	0	0	0	0
	Euro II and III	22 500	23 700	12 900	7 500	7 500
	Euro IV	930	1 100	650	320	350
	Euro V	0	40	690	860	1 300

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 20)				
		Carbon monoxide (CO)(tonnes)				
		2011	2012	2013	2014	2015
Motorcycle	Pre-Euro	870	730	590	510	450
	Euro I	4 800	4 100	3 400	3 000	2 600
	Euro III	340	430	510	630	760
Public light bus	Pre-Euro	<5	<5	<5	<5	0
	Euro I	30	30	20	20	10
	Euro II	50	50	40	40	30
	Euro III	9 500	9 900	6 500	4 800	4 000
	Euro IV	940	1 200	1 100	1 100	1 000
	Euro V	0	<5	<5	<5	7
Private light bus	Pre-Euro	10	10	7	<5	<5
	Euro I	20	10	10	9	<5
	Euro II	90	30	20	10	5
	Euro III	350	250	220	180	100
	Euro IV	310	290	250	240	200
	Euro V	0	50	110	170	210
Light goods vehicle	Pre-Euro	310	270	210	130	10
	Euro I	320	280	230	140	80
	Euro II	240	200	160	130	100
	Euro III	270	250	220	210	190
	Euro IV	230	260	240	250	260
	Euro V	0	10	70	150	240
Medium goods vehicle (Note:21)	Pre-Euro	110	90	100	60	<5
	Euro I	20	10	20	10	7
	Euro II	40	30	40	30	30
	Euro III	50	50	50	50	50
	Euro IV	30	40	50	60	80
	Euro V	0	<5	10	30	60
Heavy goods vehicle (Note 22)	Pre-Euro	310	260	260	140	<5
	Euro I	250	220	220	140	80
	Euro II	450	380	370	290	240
	Euro III	590	580	640	610	620
	Euro IV	290	320	390	430	500
	Euro V	0	20	60	120	210
Non-franchised public/private	Pre-Euro	40	30	30	20	<5
	Euro I	30	20	20	20	8



Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 20)				
		Carbon monoxide (CO)(tonnes)				
		2011	2012	2013	2014	2015
bus (Note 23)	Euro II	150	100	50	40	30
	Euro III	230	240	230	190	140
	Euro IV	150	170	190	210	210
	Euro V	0	20	40	80	120

Note 20: The numbers smaller than 5 are shown as “<5”, the numbers between 5 and 10 are rounded to the nearest integer, the numbers between 10 and 1 000 are rounded to the nearest ten, the numbers between 1 000 and 10 000 are rounded to the nearest hundred, and three significant figures are retained for the numbers greater than 10 000.

Note 21: Medium goods vehicle refers to goods vehicles with gross vehicle weight of 5.5 tonnes to 15 tonnes.

Note 22: Heavy goods vehicle refers to goods vehicles with gross vehicle weight greater than 15 tonnes.

Note 23: There are no separate emission calculations for non-franchised public and private buses.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB289**

**(Question Serial No. 5966)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

In 2017, the Environmental Protection Department published Hong Kong's Climate Action Plan 2030+ (the Plan), which sets out mitigation, adaptation and resilience measures to combat climate change. Would the Administration advise on the following:

(a) Please set out in table form the content, progress, period, and the staff and expenditure involved of the measures launched and implemented in the past year as a result of the Plan.

(b) The paragraph on "controlling rate of private car growth" in the Plan points out that "the annual private vehicle growth rate from 2010 to 2015 has surged to about 5% and this is clearly unsustainable by any measure in terms of land requirements, supporting infrastructure, car parking facilities, added traffic and the consequential environmental and climate impacts." Has a specific target been set to fulfil the responsibility of "achieving and maintaining satisfactory air quality"? If yes, what are the details? If no, what are the reasons?

(c) The Plan sets out a clear target for per capita carbon emissions level, which is to reduce the per capital contribution by 20% to less than 4.5 tonnes by 2020 and by 26-36% to 3.3-3.8 tonnes by 2030 as compared with 2005. Has the Government worked out the corresponding per capita carbon emissions targets from the energy and traffic perspectives? If yes, what are the details? If no, what are the reasons?

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use):43)

Reply:

(a) As electricity generation accounts for almost 70% of our carbon emissions, to achieve the carbon reduction target for 2030, we will phase down coal-fired electricity generation, i.e. replace the majority of the coal-fired generation units which are due to retire by cleaner energy sources by 2030 to reduce carbon emissions.

Apart from optimising the fuel mix, the Environment Bureau has also implemented a number of energy saving and energy efficiency enhancement measures to reduce carbon emissions so as to mitigate climate change. These measures include:

1. upgrading the target of renewable energy (RE) provision in new schools and educational buildings as well as new open space and public park projects;
2. granting \$88 million out of the \$200 million funding that has been earmarked in 2017-18 for the provision of RE installations at a number of government venues, which include combined heat and power, biogas and solar power systems;
3. installing solar power devices at two reservoirs to conduct pilot tests;
4. reducing electricity consumption by 5% for government buildings from 2015-16 to 2019-20, using the electricity consumption in 2013-14 as the baseline. In this connection, we have earmarked at least \$600 million to help bureaux and departments implement electricity saving targets identified in the energy audits;
5. discussing with the two power companies the implementation of new measures to further promote energy efficiency and conservation as well as the development of RE in the community under the Scheme of Control Agreements which will take effect in October 2018 and January 2019 respectively; and
6. supporting bureaux and departments to start conducting regular carbon audits on major government buildings.

At the same time, other bureaux and departments are also continuing to implement various measures on mitigation, adaptation and resilience to tackle possible impacts of climate change. The relevant measures have been absorbed as part of the related work programmes or projects. The expenditure and manpower involved are met by the recurrent expenditure of the bureaux and departments concerned or the expenditure of relevant projects.

(b) Around 95% of the vehicular emissions of major air pollutants (i.e. respirable suspended particulates and nitrogen oxides) came from commercial vehicles (CVs). Hence, CVs have all along been a major target of the Government's measures to improve roadside air quality. To improve roadside air quality and better protect public health, the Environmental Protection Department (EPD) launched and continuously implemented in the past 3 years various major emission control measures, including phasing out pre-Euro IV diesel commercial vehicles, progressive tightening of emission standards of newly registered vehicles, strengthening the control of emissions from petrol and liquefied petroleum gas vehicles and retrofitting older franchised buses with emission control devices, etc. Moreover, the Government has been promoting the use of green transport technologies by CVs. Apart from continuing to waive in full the first registration tax (FRT) for electric CVs (e-CVs) until the end of March 2021, EPD also continued to implement the Pilot Green Transport Fund to encourage the public transport sector, goods vehicle operators and charitable/non-profit making organisations to try out green innovative transport technologies, including e-CVs. Meanwhile, EPD has also fully subsidised franchised bus

companies to conduct trials of double-deck hybrid buses and single-deck electric buses. The concentrations of major roadside air pollutants have dropped by about 30% over the past 5 years. This reflects that the measures for reducing vehicle emissions have been taking effect.

As for electric private cars (e-PCs), the Government's standing policy is to encourage the public to use public transport as far as possible, and should they need to acquire private cars, choose e-PCs. The Government's main supporting measures include offering economic incentives such as tax concession and lower annual vehicle licence fee, and facilitating the development and enhancement of charging networks for e-PCs. On the provision of tax concession, taking into account factors such as the technological development and market situation of e-PCs, road traffic conditions and views of stakeholders, the Government considers that on one hand, it has to control the growth of PCs to avoid causing traffic congestion and aggravating roadside air pollution, and on the other hand, it also hopes to encourage car owners to go for e-PCs as far as possible when purchasing PCs. As such, apart from continuing with the current FRT concession up to \$97,500 from 28 February 2018 to 31 March 2021, the Government has also introduced the new "One-for-One Replacement" Scheme in the above-mentioned period to allow eligible existing car owners who buy a new e-PC and scrap their own eligible old PC to enjoy a higher FRT concession of up to \$250,000. The Government believes the new scheme will provide greater economic incentives to encourage eligible existing car owners to purchase e-PCs when replacing their cars.

(c) The Government's carbon reduction targets are to reduce Hong Kong's carbon intensity by 50% to 60% by 2020 and by 65% to 70% by 2030 using 2005 as the base. At the same time, we will release the estimated figures for the corresponding absolute carbon emissions reduction and per capita carbon emissions for reference.

As the carbon emissions from sectors such as energy and transport, etc. are affected by various factors, the changes in the proportion of carbon emissions from different sectors in future remain uncertain. Therefore, we have only set an overall carbon reduction target for Hong Kong instead of separate targets for individual sectors.

- End -

**CONTROLLING OFFICER'S REPLY****ENB290****(Question Serial No. 5967)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Improving roadside air quality has been a priority task of the Environmental Protection Department (EPD). EPD pointed out in a LegCo paper last year that many liquefied petroleum gas (LPG) taxis currently running on the roads were found to have excessive emissions of nitrogen dioxide (NO<sub>2</sub>). Some tests showed that the emissions of all Euro III and Euro IV taxis under inspection exceeded the NO<sub>2</sub> level by 4.5 to 49 times. Although the Department said that the number of LPG taxis with excessive emissions has decreased from 80% of the total vehicles monitored to 20% after implementation of the roadside remote sensing scheme, the roadside air pollution problem caused by as many as 18 000 taxis as the transport mode for long distance journeys in Hong Kong is still worrisome. In this connection, please advise this Committee:

(a) The Strengthened Emission Control of Petrol and Liquefied Petroleum Gas Vehicles Programme (the roadside remote sensing scheme) was introduced on 1 September 2014. EPD uses roadside remote sensing equipment to detect petrol and LPG vehicles with excessive emissions on the roads. What is the breakdown of the expenditure involved in the scheme since its implementation? Please give the details in table form.

(b) Since the implementation of the roadside remote sensing scheme, how many LPG and petrol taxis and public light buses (based on the same vehicle registration mark) have been detected by the Department? What is the number of vehicles with excessive emissions of NO<sub>2</sub>?

(c) Please set out in the table below the number of taxis and public light buses inspected by the Department each year under the roadside remote sensing scheme, as well as the relevant types:

	LPG taxis		Petrol taxis		LPG light buses		Petrol light buses	
	Retrofitted with catalytic	Not yet retrofitted with CC	Retrofitted with CC	Not yet retrofitted with CC	Retrofitted with CC	Not yet retrofitted with CC	Retrofitted with CC	Not yet retrofitted with CC

	converters (CC)							
Euro III								
Euro IV								
Euro V								
Total number of vehicles with excessive emissions								
Total number of vehicles inspected								

(d) Other than the roadside remote sensing scheme, what measures does the Administration have to detect the NO<sub>2</sub> emission levels of taxis and public light buses not monitored in the scheme? If yes, what are the details? If not, what are the reasons?

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 51)

Reply:

(a) The Strengthened Emission Control of Petrol and Liquefied Petroleum Gas (LPG) Vehicles Programme is part of the Environmental Protection Department's (EPD) regular work on improving the air quality and is absorbed by existing resources. There is no separate breakdown of expenditure in this area.

(b)&(c)

EPD has been using roadside remote sensing equipment to monitor emissions of carbon monoxide, hydrocarbons and nitrogen oxides (NO<sub>x</sub>) from petrol and LPG vehicles since 1 September 2014. If one of the pollutants emitted by a vehicle exceeds the relevant emission standards, the vehicle will be defined as having excessive emissions and EPD will issue an Emission Testing Notice (ETN) to its owner. There is no breakdown of the number of vehicles according to each pollutant exceeded. As at the end of 2017, the number of LPG and petrol taxis and public light buses (based on the same vehicle registration mark) monitored by EPD's roadside remote sensing equipment is as follows:

2014*	Taxi				Light bus			
	LPG		Petrol		LPG		Petrol	
	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter
Euro I	0	0	0	0	0	0	0	1
Euro II	8 601	1 781	0	0	154	56	0	0
Euro III	570	237	0	0	655	85	0	0
Euro IV	1 192	1 079	6	0	224	104	0	0
Euro V	44	1 295	8	4	13	44	0	0
No. of vehicles monitored**	10 407	4 392	14	4	1 046	289	0	1
No. of ETNs issued	347	311	0	0	57	20	0	0

Note: \* Figures from September to December 2014

\*\* The number of vehicles detected in the year is based on the same vehicle registration mark.

2015	Taxi				Light bus			
	LPG		Petrol		LPG		Petrol	
	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter
Euro II	8 737	1 804	0	0	157	23	0	1
Euro III	1 638	575	0	0	1 261	186	0	0
Euro IV	1 394	1 242	6	0	419	211	0	0
Euro V	50	3 527	8	4	17	146	0	0
No. of vehicles monitored**	11 819	7 148	14	4	1 854	566	0	1
No. of ETNs issued	1 542	934	0	0	170	25	0	0

Note: \*\* The number of vehicles detected in the year is based on the same vehicle registration mark.

2016	Taxi				Light bus			
	LPG		Petrol		LPG		Petrol	
	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter
Euro II	6 646	1 456	0	0	110	17	0	0
Euro III	1 496	533	0	0	755	111	0	0
Euro IV	1 314	1 194	4	0	315	156	0	0
Euro V	44	5 281	4	4	16	169	0	0
No. of vehicles monitored**	9 500	8 464	8	4	1 196	453	0	0
No. of ETNs issued	1 252	619	0	0	115	11	0	0

Note: \*\* The number of vehicles detected in the year is based on the same vehicle registration mark.

2017	Taxi				Light bus			
	LPG		Petrol		LPG		Petrol	
	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter	Taking part in the government subsidy programme to replace catalytic converter	Not taking part in the government subsidy programme to replace catalytic converter
Euro II	5 760	1 191	0	0	112	19	0	0
Euro III	1 495	516	0	0	983	140	0	0
Euro IV	1 368	1 218	4	0	340	173	0	0
Euro V	48	7 112	3	3	17	327	0	0
No. of vehicles monitored**	8 671	10 037	7	3	1 452	659	0	0
No. of ETNs issued	1 413	604	0	0	160	17	0	0

Note: \*\* The number of vehicles detected in the year is based on the same vehicle registration mark.

- (d) From 2014 to 2017, EPD's roadside remote sensing equipment monitored a total of some 2 million petrol or LPG vehicles counts. About 10 600 ETNs were issued. As compared to the figures before the implementation of the roadside remote sensing scheme, the percentage of petrol vehicles with excessive emissions has dropped from about 10% to 5% while that of LPG vehicles with excessive emissions has dropped from about 80% to 20%. The concentrations of NO<sub>x</sub> emission from LPG taxis and light buses have dropped by 68%. Moreover, the roadside NO<sub>2</sub> concentrations have also dropped by 28% over the past 5 years (i.e. 2013-2017). These data indicate that the roadside remote sensing equipment was effective in monitoring the emissions from LPG and petrol vehicles in Hong Kong, and coupled with other vehicle emission control measures (such as phasing out progressively pre-Euro IV diesel commercial vehicles), has effectively improved the roadside air quality.

We are planning to increase the number of remote sensing monitoring points from 3 to 5 this year to further enhance the effectiveness of the Programme.

- End -



**CONTROLLING OFFICER'S REPLY****ENB291****(Question Serial No. 5969)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding roadside air quality, would the Administration advise this Committee on the following:

a) Please set out respectively by emission standard the number, age and overall pollutant emissions of buses owned by each franchised bus company in each of the past 5 years.

b) What are the respective numbers of each type of franchised buses which have been and have not yet been retrofitted with selective catalytic reduction devices (SCRs) as tabulated below?

	Euro II		Euro III		Euro IV		Euro V		Euro VI/hybrid/electric bus	
	Retrofitted with catalytic reduction devices	Not yet retrofitted with catalytic reduction devices	Retrofitted with catalytic reduction devices	Not yet retrofitted with catalytic reduction devices	Retrofitted with catalytic reduction devices	Not yet retrofitted with catalytic reduction devices	Retrofitted with catalytic reduction devices	Not yet retrofitted with catalytic reduction devices	Retrofitted with catalytic reduction devices	Not yet retrofitted with catalytic reduction devices
KMB										
Citybus										
NWFB										
LWB										
NLB										
Sub-total										
% in all buses										

Asked by: Hon KWOK Wing-hang, Dennis

(Member Question No. (LegCo use): 59)

Reply:

- (a) The number and average age of licensed buses owned by each franchised bus company in Hong Kong in the past 5 years are tabulated by vehicle emission standard as follows:

Table 1 The number of buses owned by each franchised bus company and the average age of their fleets

Bus company	Category	End 2013	End 2014	End 2015	End 2016	End 2017
		Number of buses	Number of buses	Number of buses	Number of buses	Number of buses
The Kowloon Motor Bus Company (1933) Limited	Pre-Euro	0	0	0	0	0
	Euro I	423	161	0	0	0
	Euro II	1 539	1 546	1 157	705	395
	Euro III	1 097	1 097	1 097	1 096	1 092
	Euro IV	106	106	106	106	93
	Euro V	679	939	1 522	2 003	2 369
	Euro VI (including hybrid bus)	-	3	3	3	4
	Electric bus	-	-	3	3	14
	<b>Sub-total</b>	<b>3 844</b>	<b>3 852</b>	<b>3 888</b>	<b>3 916</b>	<b>3 967</b>
	<b>Average age</b>	<b>11.2</b>	<b>11.0</b>	<b>9.3</b>	<b>8.1</b>	<b>7.5</b>
Citybus Limited (Franchise for Hong Kong Island and Cross-Harbour Bus Network)	Pre-Euro	0	0	0	0	0
	Euro I	44	12	0	0	0
	Euro II	341	270	170	50	9
	Euro III	9	9	9	9	23
	Euro IV	28	28	28	28	698
	Euro V	355	460	550	672	0
	Euro VI (including hybrid bus)	-	2	2	2	2
	Electric bus	-	-	3	6	6
	<b>Sub-total</b>	<b>777</b>	<b>781</b>	<b>762</b>	<b>767</b>	<b>738</b>
	<b>Average age</b>	<b>8.9</b>	<b>7.6</b>	<b>6.2</b>	<b>4.4</b>	<b>4.1</b>
Citybus Limited (Franchise for the Airport and North Lantau Bus Network)	Pre-Euro	0	0	0	0	0
	Euro I	0	0	0	0	0
	Euro II	133	105	81	26	1
	Euro III	0	0	0	0	0
	Euro IV	0	0	0	0	0
	Euro V	42	71	101	153	205
	Euro VI (including hybrid bus)	-	-	-	-	-
	Electric bus	-	-	-	-	-
	<b>Sub-total</b>	<b>175</b>	<b>176</b>	<b>182</b>	<b>179</b>	<b>206</b>
	<b>Average age</b>	<b>11.7</b>	<b>10.1</b>	<b>8.5</b>	<b>4.3</b>	<b>2.5</b>

Bus company	Category	End 2013	End 2014	End 2015	End 2016	End 2017
		Number of buses	Number of buses	Number of buses	Number of buses	Number of buses
New World First Bus Services Limited	Pre-Euro	0	0	0	0	0
	Euro I	35	13	0	0	0
	Euro II	479	487	388	267	84
	Euro III	75	75	75	74	74
	Euro IV	38	38	38	38	38
	Euro V	88	97	216	307	496
	Euro VI (including hybrid bus)	-	1	1	1	6
	Electric bus	-	-	2	4	4
	<b>Sub-total</b>	<b>715</b>	<b>711</b>	<b>720</b>	<b>691</b>	<b>702</b>
	<b>Average age</b>	<b>12.4</b>	<b>13.1</b>	<b>11.3</b>	<b>9.7</b>	<b>5.9</b>
Long Win Bus Company Limited	Pre-Euro	0	0	0	0	0
	Euro I	0	0	0	0	0
	Euro II	79	46	31	1	0
	Euro III	18	18	18	18	18
	Euro IV	32	32	32	32	31
	Euro V	43	83	109	191	192
	Euro VI (including hybrid bus)	-	-	-	-	-
	Electric bus	-	-	0	0	4
	<b>Sub-total</b>	<b>172</b>	<b>179</b>	<b>190</b>	<b>242</b>	<b>245</b>
	<b>Average age</b>	<b>9.0</b>	<b>6.7</b>	<b>5.9</b>	<b>3.3</b>	<b>4.1</b>
New Lantao Bus Company (1973) Limited	Pre-Euro	0	0	0	0	0
	Euro I	0	0	0	0	0
	Euro II	0	2	2	0	0
	Euro III	62	61	54	38	31
	Euro IV	17	17	26	26	23
	Euro V	29	31	41	57	70
	Euro VI (including hybrid bus)	-	-	-	-	-
	Electric bus	-	-	0	0	0
	<b>Sub-total</b>	<b>108</b>	<b>111</b>	<b>123</b>	<b>121</b>	<b>124</b>
	<b>Average age</b>	<b>6.4</b>	<b>7.5</b>	<b>7.6</b>	<b>7.4</b>	<b>7.8</b>

The Environmental Protection Department (EPD) compiles the Hong Kong Air Pollutant Emission Inventory every year to analyse the distribution and trend of major emission sources in Hong Kong. The vehicle emission inventory for 2016 is still under compilation. Besides, as we have not estimated the emissions from franchised buses according to individual franchised bus companies, we are not able to provide the relevant emission data. The estimated air pollutant emissions from franchised buses and their percentage in total vehicle emissions in Hong Kong in the 5 years from 2011 to 2015 are as follows:

Table 2 Air pollutant emissions from franchised buses

Air pollutant	Air pollutant emissions from franchised buses (tonnes) <sup>(Note)</sup> [ ] Percentage in total vehicle emissions				
	2011	2012	2013	2014	2015
Respirable suspended particulates (RSP)	110 [12%]	100 [12%]	90 [11%]	80 [12%]	70 [15%]
Nitrogen oxides (NO <sub>x</sub> )	5 800 [19%]	5 500 [19%]	4 900 [19%]	4 500 [21%]	3 600 [22%]

Note: The numbers between 10 and 1 000 are rounded to the nearest ten, the numbers between 1 000 and 10 000 are rounded to the nearest hundred.

- (b) The Government has fully subsidised the franchised bus companies to retrofit on a large scale Euro II and III franchised buses with selective catalytic reduction devices (SCRs) to upgrade their emission performance to Euro IV or above level. To be cost-effective, the retrofit programme only covered bus models with a remaining service life not less than 2 years and bus models that were technically feasible (such as the availability of sufficient room for retrofitting on the bus) and with a relatively large number (i.e. bus model with not less than 100 buses). The retrofit programme was completed at the end of 2017 with a total of 1 030 eligible Euro II and III franchised buses retrofitted with SCRs under the programme. As at the end of December 2017, 204 buses retrofitted with SCRs at an earlier stage have been retired or out of service due to traffic accidents, while a total of 878 Euro II and III franchised buses were not eligible for retrofitting.

The number of Euro II and III franchised buses retrofitted and not retrofitted with SCRs as at the end of December 2017 is as follows:

	Without SCR		Retrofitted with SCR	
	Euro II	Euro III	Euro II	Euro III
The Kowloon Motor Bus Company (1933) Limited	341	471	54	621
Citybus Limited	0	1	1	8
New World First Bus Services Limited	24	0	60	74
Long Win Bus Company Limited	0	10	0	8
New Lantao Bus Company (1973) Limited	0	31	0	0
Sub-total	365	513	115	711
Total	878		826	

- End -

**CONTROLLING OFFICER'S REPLY****ENB292****(Question Serial No. 6018)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding indoor air quality certification for offices and public places, the Environmental Protection Department formulated indoor air quality practice notes for professional public transport facilities years ago, including the "Practice Note for Managing Air Quality in Air-conditioned Public Transport Facilities – Buses" and the "Control of Air Pollution in Semi-Confined Public Transport Interchanges". Would the Administration advise on the following:

- a) How does the Department inspect the air quality of buses and public transport interchanges under the requirements of the above guidelines? What are the frequency, locations and items of inspection, the results, and the staff and expenditure involved? Please set out in table form.
- b) Out of the total number of inspections, on how many occasions was exceedance of the air quality indicators in the guidelines found? Please set out the details by year and month since the commencement of the measure, with the prevailing air quality standard specified, and indicate in table form the relevant results and whether there is exceedance of the indicators.
- (c) When exceedance of the indicators is found, how will the Department handle it?
- (d) Since the guidelines have been in use for some time, in particular the "Control of Air Pollution in Semi-Confined Public Transport Interchanges", in which the air quality indicators have not been updated since 1998, and the 1-hour average concentration limit of nitrogen dioxide (NO<sub>2</sub>) is 300 µg/m<sup>3</sup>, will the relevant guidelines be revised and reviewed to meet the 1-hour concentration limit of NO<sub>2</sub> under the statutory Air Quality Objectives, i.e. 200 µg/m<sup>3</sup>, with a view to protecting public health? If yes, what are the details? If not, what are the reasons?
- (e) Quite a number of press reports have revealed that the ventilation at many existing semi-confined public transport interchanges is very poor, leading to accumulation of

emissions which cannot dissipate. In view of this situation, what measures does the Administration have to ensure that “fresh air inlets should be away from busy roads or polluted air outlets, etc.” as stated in the “Control of Air Pollution in Semi-Confined Public Transport Interchanges”?

(f) Regarding the “Practice Note for Managing Air Quality in Air-conditioned Public Transport Facilities – Buses”, why has the Administration only chosen CO<sub>2</sub> instead of major roadside pollutants like NO<sub>2</sub> to be the measurement indicator of air pollution? Why are health impacts of the relevant pollutants not a consideration in choosing measurement indicators?

(g) With the wider application of the technology of portable air monitoring devices, has the Administration considered amending the relevant guidelines and incorporating NO<sub>2</sub> as one of the measurement indicators? If yes, what are the details? If not, what are the reasons?

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 69)

Reply:

(a), (b), (c) and (e)

The Transport Department (TD) is responsible for monitoring the air quality of public transport interchanges (PTIs). The TD mainly commissions the Electrical and Mechanical Services Department (EMSD) to conduct air quality measurements in covered PTIs managed by the TD at least more or less biannually to monitor the air quality, and will increase the frequency of the measurements according to actual needs. Besides, the EMSD inspects the ventilation systems once every 3 months to ensure proper operation of the equipment.

Air quality measurements at PTIs are conducted in accordance with the Practice Note on “Control of Air Pollution in Semi-Confined Public Transport Interchanges” (the PN) formulated by the Environmental Protection Department (EPD) to collect concentration data of carbon monoxide (CO), sulphur dioxide (SO<sub>2</sub>) and nitrogen dioxide (NO<sub>2</sub>) (including 5-minute and 1-hour average). Every air quality survey covers all time slots round the clock, including peak hours in the morning and evening.

In designing semi-confined PTIs, fresh air inlets of the ventilation systems should be located away from busy roads or polluted air outlets, etc. as far as possible subject to actual circumstances, but the actual operating environment may vary in future. The EMSD has been closely monitoring the operation of the ventilation systems of all PTIs.

The findings of the air quality measurements recently conducted on the 64 covered PTIs managed by the TD are set out at Annex 1. According to the above air quality measurements, the 1-hour average of CO and SO<sub>2</sub> concentrations of all PTIs met the standards in the PN. As for the 1-hour average of NO<sub>2</sub> concentration, the findings showed that most of the PTIs met the standards, and only individual PTIs had records of non-compliance. According to our understanding, the results of the measurements were affected not only by the emissions of buses, but also by the actual varying operating environment, e.g. the surrounding developments, nearby construction/road projects and the

increased use of the PTIs, etc.. The TD, EMSD and the relevant government departments have taken a series of improvement measures including arranging to extend the operating hours of the ventilation systems, increasing air volume, replacing the ventilation system components, strengthening the management of switching off idling engines at PTIs, and requiring the bus companies to deploy buses with greener models (including Euro IV and V) to ply the routes involved. The Government will continue to closely monitor the air quality and the operation of the ventilation systems in the PTIs, examine the causes of the unsatisfactory air quality and look into further measures that can be taken based on the actual situation so as to enhance the air quality of PTIs.

The above work is undertaken by the existing staff of the TD and EMSD, and the relevant departments do not have a breakdown on the manpower resources and expenditure involved in individual work items.

(d) The existing PN stipulates the air quality guidelines for semi-confined PTIs as well as the design and the operation and maintenance of the systems required to meet the air quality guidelines for reference by the relevant professionals. In general, the public will only have a short stay in the PTIs. As such, the PN only provides air quality guidelines for those air pollutants which may constitute health impacts with short exposure, including the short-term average of CO, NO<sub>2</sub> and SO<sub>2</sub> concentrations. In light of the latest development of air quality standards, the EPD is now liaising with the relevant departments to recommend the review of the PN according to the actual operating conditions of PTIs and the needs.

(f) and (g)

The EPD issued the Practice Note for Managing Air Quality in Air-conditioned Public Transport Facilities – Buses (Practice Note) in 2003, setting out the requirements on the design, operation and maintenance of the ventilation systems as well as the monitoring of air quality in the public transport facilities (including bus compartments), to help bus operators enhance management of their transport facilities and provide good indoor air quality to passengers on a self-regulatory basis.

The passenger density in Hong Kong's public transport facilities is high. Maintaining good ventilation and providing sufficient fresh air help prevent accumulation of air pollutants and spread of respiratory diseases (e.g. influenza) in the facilities, hence protect the health of passengers. The level of carbon dioxide (CO<sub>2</sub>) in the premises is widely used as an effective indicator for assessing the adequacy of ventilation and fresh air supply in the premises. Therefore, the Practice Note requires bus operators to monitor the level of CO<sub>2</sub> in their public transport facilities and ensure that good air quality is maintained in the facilities.

The level of NO<sub>2</sub> in a bus compartment is mainly affected by the roadside NO<sub>2</sub> level and may vary with different bus routes, time and places. Comparing with monitoring the NO<sub>2</sub> level in the compartment, the monitoring of CO<sub>2</sub> level can more effectively reflect the adequacy of ventilation in the compartment, and thus CO<sub>2</sub> is a more appropriate indicator. The most effective method to tackle the problem of NO<sub>2</sub> is to address it at source to reduce the nitrogen oxides emitted by vehicles. In order to improve roadside air quality and protect public health, the EPD has implemented various major emission reduction measures

in recent years, including phasing out progressively pre-Euro IV diesel commercial vehicles, progressively tightening of emission standards for newly registered vehicles, strengthening the control of emissions from petrol and liquefied petroleum gas vehicles, retrofitting franchised buses of earlier models with emission reduction devices, etc. The roadside concentrations of major air pollutants dropped by around 30% in the past 5 years, reflecting that the overall measures for reducing vehicle emissions have been taking effect.



**The findings of the air quality measurements recently conducted on the 64 covered PTIs managed by the TD**

PTI/Bus Terminus	Measurement Date (Month/Year)	The Highest 1-hour Average Concentration		
		NO <sub>2</sub> (µg/m <sup>3</sup> ) Objective: 300 µg/m <sup>3</sup>	SO <sub>2</sub> (µg/m <sup>3</sup> ) Objective: 800 µg/m <sup>3</sup>	CO (µg/m <sup>3</sup> ) Objective: 30 000 µg/m <sup>3</sup>
South Horizons PTI	2/2018	197	- #	1 792
Admiralty Station (East) Bus Terminus	1/2017	246	19	1 072
Central (Exchange Square) Bus Terminus - Bus	10/2016	241	21	350
Central (Exchange Square) Bus Terminus - GMB	10/2016	111	79	2 202
Central (Hong Kong Station) PTI - GMB	9/2017	96	31	14 804
Central (Hong Kong Station) PTI - Bus	9/2017	184	39	813
Cyberport PTI	3/2016	211	21	2 720
Sai Wan Ho (Grand Promenade) PTI	10/2015	117	7	2 057
Shau Kei Wan Station PTI	4/2016	127	8	4 406
Shum Wan Road Public Transport Terminus	7/2017	168	18	718
Siu Sai Wan (Island Resort) PTI - Bus	8/2015	287	20	447
Siu Sai Wan (Island Resort) PTI - Taxi	7/2015	231	9	3 925
The Peak Public Transport Terminus	11/2016	119	23	1 341
Tin Hau Station PTI	1/2017	287	33	2 854
Tin Wan PTI	4/2016	142	11	315
Cheung Sha Wan Plaza PTI	2/2017	288	18	2 642
Diamond Hill Station PTI - Bus	3/2016	174	22	2 078
Diamond Hill Station PTI - Taxi	3/2016	168	50	2 603
Island Harbourview PTI - Point A	8/2017	109	22	1 990

PTI/Bus Terminus	Measurement Date (Month/Year)	The Highest 1-hour Average Concentration		
		NO <sub>2</sub> (µg/m <sup>3</sup> ) Objective: 300 µg/m <sup>3</sup>	SO <sub>2</sub> (µg/m <sup>3</sup> ) Objective: 800 µg/m <sup>3</sup>	CO (µg/m <sup>3</sup> ) Objective: 30 000 µg/m <sup>3</sup>
Island Harbourview PTI - Point B	8/2017	106	28	4 828
Kau Wa Keng PTI (Lai Chi Kok Bus Terminus)	12/2015	163	21	965
Kowloon Bay PTI	7/2016	122	17	7 390
Kowloon Station PTI - Bus	2/2016	235	40	1 047
Kowloon Station PTI - GMB	2/2016	86	13	8 351
Kowloon Tong (Festival Walk) PTI	5/2017	197	28	6 097
Kowloon Tong (Suffolk Road) PTI	8/2016	169	93	562
Lam Tin Station PTI	9/2017	646	45	1 795
Laguna City PTI	5/2017	127	17	456
Laguna Verde Public Transport Terminus	11/2016	174	13	1 725
Langham Place Public Light Bus Terminus	4/2017	146	41	29 741
Lok Fu Bus Terminus	8/2016	288	37	1 186
Olympic Station PTI	1/2018	173	32	747
Park Avenue PTI	5/2016	235	20	1 295
Ping Shek PTI - Bus	6/2017	400	24	1 796
Ping Shek PTI - GMB	6/2017	198	29	7 256
Tsim Sha Tsui East Bus Terminus (Concordia Plaza)	1/2017	257	14	950
Tsim Sha Tsui East (Mody Road) Bus Terminus	11/2016	293	23	596
Whampoa Garden PTI - Bus	3/2017	233	33	1 102
Whampoa Garden PTI - GMB	3/2017	438	21	3 434
Yen Chow Street PTI	5/2016	224	23	1 427
Bayshore Towers PTI	9/2017	127	15	2 760

PTI/Bus Terminus	Measurement Date (Month/Year)	The Highest 1-hour Average Concentration		
		NO <sub>2</sub> (µg/m <sup>3</sup> ) Objective: 300 µg/m <sup>3</sup>	SO <sub>2</sub> (µg/m <sup>3</sup> ) Objective: 800 µg/m <sup>3</sup>	CO (µg/m <sup>3</sup> ) Objective: 30 000 µg/m <sup>3</sup>
Bayview Garden Bus Terminus	1/2017	601	20	953
Discovery Park PTI	1/2018	493	71	1 213
Hang Hau Station PTI	3/2017	230	13	7 401
Kwai Fong Station Bus Terminus	11/2016	541	55	1 164
Kwai Hing Station Bus Terminus	8/2017	180	39	4 171
Kwai Shing (East) Bus Terminus	6/2016	169	4	256
Luen Wo Hui Public Transport Terminus*	5/2014*	284	30	2 000
Lung Mun Oasis Bus Terminus	6/2017	280	23	1 057
Ma On Shan Town Centre Public Transport Terminus	4/2017	319	33	1 534
Nina Tower Bus Terminus	5/2017	268	32	982
Po Lam PTI	12/2016	130	13	2 698
Sai Lau Kok PTI	4/2017	110	41	8 317
Sam Shing Bus Terminus	2/2016	148	17	1 776
Sha Tin Central Bus Terminus	6/2017	617	41	1 948
Sheung Shui Bus Terminus	7/2016	297	49	1 778
Sheung Tak Public Transport Terminus	12/2015	206	25	1 003
Tai Po Market Station Bus Terminus	5/2017	246	16	390
Tai Wai Station PTI - Bus	2/2017	260	13	1 765
Tai Wai Station PTI - GMB	2/2017	211	7	1 798
Tin Shui Wai Town Centre PTI	8/2016	196	309	2 065
Tiu Keng Leng Station PTI - Bus	7/2014*	297	59	695
Tiu Keng Leng	9/2014*	264	43	2 238

PTI/Bus Terminus	Measurement Date (Month/Year)	The Highest 1-hour Average Concentration		
		NO <sub>2</sub> (µg/m <sup>3</sup> ) Objective: 300 µg/m <sup>3</sup>	SO <sub>2</sub> (µg/m <sup>3</sup> ) Objective: 800 µg/m <sup>3</sup>	CO (µg/m <sup>3</sup> ) Objective: 30 000 µg/m <sup>3</sup>
Station PTI - Shuttle Bus				
Tsuen Wan Station PTI	1/2016	279	28	993
Tsuen Wan West Station PTI	3/2017	269	23	844
Tseung Kwan O Station PTI	6/2015	251	19	934
Tsui Lam Bus Terminus	10/2016	116	10	3 253
Tuen Mun Central Bus Terminus	7/2017	122	54	1 142
Tuen Mun Pierhead Bus Terminus	9/2016	279	41	1 188
Tuen Mun Station PTI - Taxi	7/2017	234	25	4 758
Tuen Mun Station PTI - Bus	7/2017	84	27	833
Tung Chung Station Bus Terminus	12/2016	526	64	782
Yuen Long Station (North) PTI	6/2016	124	16	894
Vision City Public Light Bus Terminus	10/2016	115	17	19 339
Wu Kai Sha Station PTI - Bus	1/2018	245	32	508
Wu Kai Sha Station PTI - GMB	11/2015	66	5	1 452

Note:

# No measurement for the concentration of SO<sub>2</sub>.

\* Due to ventilation system fault, air quality measurements for Luen Wo Hui PTI and Tiu Keng Leng PTI were suspended in 2016 and 2017. The air quality measurements for the PTIs will resume in 2018.

- End -

**CONTROLLING OFFICER'S REPLY****ENB293****(Question Serial No. 6019)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the measures implemented to improve roadside air quality, from 2013 to 2015, the Environmental Protection Department installed diffusion tubes at 172 locations where pedestrian and vehicular traffic were heavy or air dispersion conditions were poor and 3 roadside monitoring stations to measure the levels of nitrogen dioxide (NO<sub>2</sub>). The Department also provided this Committee with the number of the above 4 types of locations and average NO<sub>2</sub> concentrations during summer and winter. Please give us in table form the following information in greater detail:

- (a) a breakdown of expenditure involved in the implementation of the above measure each year;
- (b) the actual address/place/location of each monitoring point set up under the above measure, the date, time and method of measurement, the measurement results of average NO<sub>2</sub> concentrations, as well as the follow-up measures taken by the Department.

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 106)Reply:

The Environmental Protection Department (EPD) conducted a short-term air quality monitoring study from 2013 to 2015 by installing diffusion tubes at 172 roadside monitoring points across the territory where pedestrian and vehicular traffic were heavy or air dispersion conditions were poor to measure the nitrogen dioxide (NO<sub>2</sub>) levels at these monitoring points. Diffusion tube is a kind of simple instrument which can be used to measure the average air pollutant levels within a certain period of time. While diffusion tubes in general cannot achieve the same level of accuracy attained by the instrument deployed in the air quality monitoring stations, their measured results could roughly reflect the relative pollution level and they are commonly used for studying the broad spatial distribution of air pollutants within a specific area.

The measurement periods of the monitoring study were December 2013 to January 2014, April to May 2014 and January 2015. Each measurement period lasted for 21 days. The purpose of the study was to examine roadside NO<sub>2</sub> levels on busy roads in various districts by using simple monitoring equipment, thereby ascertaining whether the existing roadside air quality monitoring stations could represent the situations at roadsides where air pollution was high.

The results of the study showed that the overall NO<sub>2</sub> levels measured next to the 3 existing roadside air quality monitoring stations were higher than the average NO<sub>2</sub> level recorded at different types of roadside monitoring points, indicating that the data collected by the existing roadside air quality monitoring stations could represent the situations at roadsides with high air pollution level (see Table 1). Detailed locations of all the monitoring points under the study and the NO<sub>2</sub> levels recorded are at Table 2. As the measurement period only lasted for 21 days, and diffusion tubes in general cannot achieve the same level of accuracy attained by the instrument deployed in the air quality monitoring stations, and are more susceptible to influence by nearby environmental factors, the monitored data by diffusion tubes should be used for general reference only.

The above short-term roadside air quality monitoring study was conducted by a consultant commissioned by the EPD. The total expenditure of the study was \$1 million. EPD plans to conduct another short-term roadside air quality monitoring study in 2018 to 2019 to update the roadside air quality conditions in various districts. The estimated expenditure involved is about \$1 million.

**Table 1: Summary of average NO<sub>2</sub> concentrations at different types of roadside monitoring points**

Types of Roadside Monitoring Point		Number of Monitoring points	Average NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )
A	Heavy Vehicular Traffic	65	90
B	Heavy Pedestrian Traffic	48	85
C	Poor Dispersion of Vehicular Emission	56	97
	Next to the three existing Roadside Air Quality Monitoring Stations (Heavy Vehicular Traffic)	3	127

**Table 2: Detailed locations of all the monitoring points under the study and the NO<sub>2</sub> levels recorded**

	Diffusion Tube Installation Location	Type of Roadside Monitoring Point	Average NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )
<b>Island District</b>			
1	North Lantau Highway (from Tung Chung Eastern Interchange to Western End at Chek Lap Kok)	A	83
2	North Lantau Highway (from Tung Chung Eastern Interchange to Western End at Chek Lap Kok)	A	76
3	North Lantau Highway (Ngong Shuen Au to Tung Chung Eastern Interchange)	A	75
4	North Lantau Highway (Ngong Shuen Au to Tung Chung Eastern Interchange)	A	80
5	Tat Tung Road (close to Fu Tung Plaza)	B	65
6	Tat Tung Road (close to Ngong Ping Cable Car Terminal)	B	99
7	North Lantau Highway (close to Tung Chung Eastern Interchange)	C	96
8	North Lantau Highway (close to Tung Chung Eastern Interchange)	C	93
<b>Kwai Tsing District</b>			
1	Kwai Chung Road (from Princess Margaret Hospital Interchange Slip Road to Kwai Chung Road to Tsuen Wan Road)	A	112
2	Kwai Chung Road (from Princess Margaret Hospital Interchange Slip Road to Kwai Chung Road to Tsuen Wan Road)	A	106
3	Tsuen Wan Road (from Kwai Tsing Road Roundabout to Texaco Road Roundabout)	A	109
4	Tsuen Wan Road (from Kwai Tsing Road Roundabout to Texaco Road Roundabout)	A	130
5	Hing Ning Road (close to Kwai Fong MTR)	B	84
6	Hing Ning Road (close to Kwai Fong MTR)	B	93
7	Container Port Road South	C	119
8	Container Port Road South	C	114
9	Kwai King Road	C	105
10	Kwai King Road	C	96
11	Kwai Chung Road (under Tsing Kwai Highway)	C	122
12	Kwai Chung Road (under Tsing Kwai Highway)	C	119
<b>Tsuen Wan District</b>			
1	Tuen Mun Road (from Sham Tseng to Tsing Long Highway – Ting Kau Bridge)	A	82

	Diffusion Tube Installation Location	Type of Roadside Monitoring Point	Average NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )
2	Tuen Mun Road (from Sham Tseng to Tsing Long Highway – Ting Kau Bridge)	A	98
3	Tsuen Wan Road (close to Kerry Warehouse [Tsuen Wan])	A	95
4	Texaco Road (close to Lung Shing Factory Building)	A	97
5	Sha Tsui Road (from Wo Tik Street to Ham Tin Street)	B	75
6	Sha Tsui Road (from Wo Tik Street to Ham Tin Street)	B	139
7	Chung On Street	B	87
8	Cheung Pei Shan Road (under Tsuen Kam Interchange)	C	91
9	Cheung Pei Shan Road (close to Tsuen Tak Gardens)	C	113
10	Cheung Pei Shan Road (close to Octagon)	C	92
<b>Yuen Long District</b>			
1	San Tin Highway (from Kam Tin Road to Fairview Park Boulevard)	A	93
2	San Tin Highway (from Kam Tin Road to Fairview Park Boulevard)	A	81
3	Yuen Long Highway (from Shap Pat Heung Interchange to Tong Yan San Tsuen Interchange)	A	85
4	Yuen Long Highway (from Shap Pat Heung Interchange to Tong Yan San Tsuen Interchange)	A	88
5	Castle Peak Road (close to Tai Tong Road)	B	79
6	Castle Peak Road (close to Tai Tong Road)	B	96
7	Yuen Long On Lok Road (under Long Ping MTR)	C	68
8	Yuen Long On Lok Road (under Long Ping MTR)	C	83
<b>North District</b>			
1	Fanling Highway (close to Kau Lung Hang Lo Wai)	A	71
2	Fanling Highway (from Wo Hop Shek Interchange to Kau Lung Hang Lo Wai)	A	60
3	Fanling Highway (from Wo Hop Shek Interchange to Kau Lung Hang Lo Wai)	A	78
4	San Wan Road	B	93
5	San Wan Road	B	74
6	Lung Sum Avenue	B	83
7	Lung Sum Avenue	B	57



	Diffusion Tube Installation Location	Type of Roadside Monitoring Point	Average NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )
8	Lung Wan Street	B	57
9	Lung Wan Street	B	77
10	Fanling Highway Interchange	C	100
11	Fanling Highway Interchange	C	103
12	Fanling Highway (close to Fanling MTR)	C	100
13	Fanling Highway (close to Fanling MTR)	C	98
<b>Tuen Mun District</b>			
1	Tuen Mun Road (close to Yuk Hong Street)	A	94
2	Tuen Mun Road (close to Tsing Hang Path)	A	100
3	Tuen Mun Road (close to Tsing Tin Road)	A	98
4	Tuen Mun Road (close to Footbridge to Tuen Mun Hospital)	A	96
5	Tuen Shing Street	B	83
6	Tuen Shing Street	B	68
7	Tuen Shun Street	B	79
8	Tuen Shun Street	B	79
9	Tuen Fat Road (under Tuen Mun Town Plaza)	C	101
10	Tuen Hi Road (under Tuen Mun Town Plaza)	C	116
<b>Shatin District</b>			
1	Tai Po Road - Shatin (from Shatin Rural Committee Road to Fo Tan Road)	A	90
2	Tai Po Road - Shatin (from Shatin Rural Committee Road to Fo Tan Road)	A	80
3	Lion Rock Tunnel Road (from Hung Mui Kuk Road to Lion Rock Tunnel)	A	92
4	Lion Rock Tunnel Road (from Hung Mui Kuk Road to Lion Rock Tunnel)	A	95
5	Tai Wai Road	B	61
6	Tai Wai Road	B	59
7	Tsuen Nam Road	B	64
8	Tsuen Nam Road	B	61
9	Mei Tin Road (under Tai Wai MTR)	C	99
10	Mei Tin Road (under Tai Wai MTR)	C	88
11	Shatin Centre Street (close to New Town Plaza)	C	91
12	Shatin Centre Street (close to New Town Plaza)	C	94
<b>Tai Po District</b>			
1	Tolo Highway (from north of Ma Liu Shui Interchange to Yuen Shin Road Interchange)	A	88
2	Tolo Highway (from north of Ma Liu Shui Interchange to Yuen Shin Road Interchange)	A	101
3	Fanling Highway (from Lam Kam Road Roundabout to Kau Lung Hang Lo Wai)	A	77
4	Fanling Highway (from Lam Kam Road	A	82

	Diffusion Tube Installation Location	Type of Roadside Monitoring Point	Average NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )
	Roundabout to Kau Lung Hang Lo Wai)		
5	Kwong Fuk Road (close to Kwong Fuk Lane)	B	95
6	Nam Wan Road (close to Elegance Garden)	B	63
7	Po Nga Road (close to Tai Wo MTR)	C	76
8	Po Nga Road (close to Tai Wo MTR)	C	70
9	Kwong Fuk Road (close to Po Heung Street)	C	75
10	Kwong Fuk Road (close to Po Heung Street)	C	93
<b>Sai Kung District</b>			
1	Wan Po Road (from Chiu Shun Road to Chun Yat Street)	A	53
2	Po Ning Road (from Ying Yip Road to Po Lam Road North)	A	77
3	Chui Ling Road (close to Hong Kong Design Institute)	A	57
4	Tseung Kwan O Tunnel Road (close to Tseung Kwan O Sports Centre)	A	54
5	Po Shun Road (from Tseung Kwan O Tunnel Road Roundabout to Po Ning Road)	A	52
6	Wan Po Road (close to LOHAS Park)	A	65
7	Wan Lung Road (close to Tseung Kwan O Sports Centre)	A	51
8	Slip Road from Po Shun Road to Po Hong Road	A	65
9	Po Tung Road (close to Man Nin Street)	A	68
10	Sheung Ning Road (close to Hau Tak Shopping Centre)	B	63
11	Fuk Man Road	B	61
12	Ming Shing Street	C	69
13	Po Shun Road (close to Chung Ming Court)	C	59
14	Mau Yip Road (close to Po Lam MTR)	C	56
<b>Kwun Tong District</b>			
1	Kwun Tong Road (from Ping Shek Estate Eastern to Wai Yip Street Flyover)	A	92
2	Kwun Tong Road (from Ping Shek Estate Eastern to Wai Yip Street Flyover)	A	88
3	Tseung Kwan O Road (Lei Yue Mun Road to Sau Mau Ping Road)	A	118
4	Tseung Kwan O Road (Lei Yue Mun Road to Sau Mau Ping Road)	A	144
5	Lin Tak Road (Tseung Kwan O Road Entrance)	A	108
6	Yue Man Square	B	90
7	Ngau Tau Kok Road (close to Amoy Garden)	B	87
8	Ngau Tau Kok Road (close to Amoy Garden)	B	84
9	Kwun Tong Road (close to APM)	C	75

	Diffusion Tube Installation Location	Type of Roadside Monitoring Point	Average NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )
10	Kwun Tong Road (close to APM)	C	74
11	Lei Yue Mun Road (under Sceneway Garden)	C	137
12	Lei Yue Mun Road (under Sceneway Garden)	C	168
<b>Sham Shui Po District</b>			
1	Ching Cheung Road (from Castle Peak Road to Tai Po Road Interchange)	A	77
2	Ching Cheung Road (from Castle Peak Road to Tai Po Road Interchange)	A	91
3	Tsing Kwai Highway (from Mei Foo Sun Tsuen Phase 1 Western Slip Road to/from Mei Foo Roundabout to Ching Lai Court Slip Road to/from Ching Cheung Road)	A	107
4	Un Chau Street	A	95
5	Cheung Sha Wan Road (close to Sham Shui Po MTR)	B	107
6	Junction of Cheung Sha Wan Rd and Yen Chow Street (close to Sham Shui Po MTR)	B	142
7	Fuk Wah Street (between Kweilin Street and Nam Cheong Street)	B	61
8	Tung Chau Street (under West Kowloon Corridor)	C	81
9	Cheung Sha Wan Road (close to Lai Chi Kok MTR)	C	129
10	Cheung Sha Wan Road (close to Lai Chi Kok MTR)	C	96
<b>Kowloon City District</b>			
1	Prince Edward Road East (from the Nullah to Prince Edward Road West)	A	113
2	Prince Edward Road East (from the Nullah to Prince Edward Road West)	A	122
3	Chatham Road North (from Wuhu Street to Hong Chong Road)	A	106
4	Chatham Road North (from Wuhu Street to Hong Chong Road)	A	119
5	Tak On Street (Whampoa Garden)	B	104
6	Shung King Street (Whampoa Garden)	B	61
7	Ma Tau Chung Road	B	143
8	Ma Tau Kok Road	B	102
9	Hung Hom Bypass (under Harbour Place)	C	75
10	Hung Hom Bypass (under Harbour Place)	C	87
11	Fat Kwong Flyover	C	91
12	Fat Kwong Flyover	C	77
13	Chatham Road North (under East Kowloon	C	107

	Diffusion Tube Installation Location	Type of Roadside Monitoring Point	Average NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )
	Corridor)		
14	Chatham Road North (under East Kowloon Corridor)	C	109
<b>Wong Tai Sin District</b>			
1	Prince Edward Road East (from Choi Hung Bus Terminus to Eastern Road)	A	105
2	Prince Edward Road East (from Choi Hung Bus Terminus to Eastern Road)	A	74
3	Lung Cheung Road (from Hammer Hill Road to Wong Kuk Avenue)	A	82
4	Lung Cheung Road (from Hammer Hill Road to Wong Kuk Avenue)	A	103
5	Lung Cheung Road (close to Wong Tai Sin MTR)	B	101
6	Lung Cheung Road (close to Wong Tai Sin MTR)	B	117
7	Wang Tau Hom South Road	C	70
8	Wang Tau Hom South Road	C	93
9	Chuk Yuen Road (close to Chuk Yuen Sports Centre)	C	67
10	Chuk Yuen Road (close to Chuk Yuen Sports Centre)	C	73
11	Lung Cheung Road (under Po Kong Village Road)	C	125
12	Lung Cheung Road (under Po Kong Village Road)	C	105
<b>Eastern District</b>			
1	Gloucester Road/Victoria Park Road (from Cross Harbour Tunnel South Interchange to Houston Street)	A	82
2	Gloucester Road/Victoria Park Road (from Cross Harbour Tunnel South Interchange to Houston Street)	A	135
3	Island Eastern Corridor (from Hing Fat Street Interchange to Tong Shui Road Interchange)	A	77
4	Island Eastern Corridor (from Hing Fat Street Interchange to Tong Shui Road Interchange)	A	81
5	King's Road (close to North Point MTR)	B	152
6	King's Road (close to Ming Yuen Western Street)	B	77
7	King's Road (close to Fortress Hill MTR)	B	117
8	King's Road (close to Fortress Hill MTR)	B	88
9	King's Road (between North Point MTR and Fortress Hill MTR)	C	133

	Diffusion Tube Installation Location	Type of Roadside Monitoring Point	Average NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )
10	King's Road (between North Point MTR and Fortress Hill MTR)	C	154
<b>Southern District</b>			
1	Wong Chuk Hang Road (from Nam Long Shan Road to Nam Fung Road)	A	75
2	Wong Chuk Hang Road (from Nam Long Shan Road to Nam Fung Road)	A	90
3	Wong Chuk Hang Road (from Nam Long Shan Road to Ap Lei Chau Bridge)	A	86
4	Wong Chuk Hang Road (from Nam Long Shan Road to Ap Lei Chau Bridge)	A	149
5	Nam Ning Street (close to Hoi Wu Court, Aberdeen Centre)	B	75
6	Nam Ning Street (close to Hoi Wu Court, Aberdeen Centre)	B	79
7	Wong Chuk Hang Road (between Yip Fat Street and Tong Bin Lane)	C	117
8	Wong Chuk Hang Road (between Yip Fat Street and Tong Bin Lane)	C	111
<b>Yau Tsim Mong District</b>			
1	Close to Mong Kok Air Quality Monitoring Station (Junction of Nathan Road and Lai Chi Kok Road)	A	141
2	Bute Street (close to Fa Yuen Street)	B	78
3	Sai Yee Street	C	99
<b>Wan Chai District</b>			
1	Close to Causeway Bay Air Quality Monitoring Station (1 Yee Wo Street, Causeway Bay)	A	134
2	Paterson Street	B	73
3	Paterson Street	C	78
<b>Central &amp; Western District</b>			
1	Close to Central Air Quality Monitoring Station (Junction of Des Voeux Road Central & Chater Road)	A	106
2	D'Aguilar Street (close to Lan Kwai Fong)	B	82
3	D'Aguilar Street (close to Entertainment Building)	C	115

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB294**

**(Question Serial No. 6020)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The Government set up low emission zones (LEZs) in Causeway Bay, Central and Mong Kok in late 2016 to reduce emission of pollutants from franchised buses. Setting up LEZs is one of the initiatives mapped out by the Hong Kong Government in A Clean Air Plan for Hong Kong to improve air quality. What were the monthly average emissions of various pollutants in the above three LEZs since the implementation of this measure? What were the percentages of increase/reduction?

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 110)

Reply:

At the end of 2015, the Government set up a total of 3 franchised bus low emission zones (FBLEZs) in Central, Causeway Bay and Mong Kok. The FBLEZs are all located at corridors with busy traffic and high pedestrian flow, where franchised buses can account for up to 40% of the traffic. Requesting franchised bus companies to deploy low emission buses (including buses of Euro IV or above, or Euro II and III buses retrofitted with selective catalytic reduction devices (SCRs) and diesel particulate filters to upgrade their emissions performance comparable to that of Euro IV or above level) to ply the routes passing these FBLEZs can improve the roadside air quality.

Apart from setting up the FBLEZs and fully subsidising the franchised bus companies to retrofit eligible Euro II and III buses with SCRs, the Environmental Protection Department (EPD) has also implemented other vehicle emission control measures in parallel to improve roadside air quality in recent years, including phasing out progressively some 82 000 pre-Euro IV diesel commercial vehicles and strengthening emission control on petrol and liquefied petroleum gas vehicles. These measures also helped improve the roadside air quality in the FBLEZs and other areas.

EPD compiles the Hong Kong Air Pollutant Emission Inventory every year to assess the emission of air pollutants and formulate policies to reduce emissions. Hong Kong is small in size. There are different air pollution sources and vehicles are running around in

different districts. Other air quality improvement measures are also implemented in parallel. Therefore, assessing air pollutant emissions within specific road sections cannot adequately reflect the importance and effectiveness of a particular improvement measure. However, EPD has been monitoring the roadside air quality. According to the monitoring data of the 3 roadside Air Quality Monitoring Stations (Central, Causeway Bay and Mong Kok), the average concentrations of major roadside air pollutants (including respirable suspended particulates, fine suspended particulates, nitrogen dioxide and sulphur dioxide) have dropped by 32%, 30%, 28% and 36% respectively over the past 5 years (i.e. from 2013 to 2017). This reflects that the measures for reducing vehicle emissions are effective.

- End -

**CONTROLLING OFFICER'S REPLY****ENB295****(Question Serial No. 6025)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Government will continue to develop the Community Green Stations (CGSs) in each of the 18 districts this year. Would the government please provide in table form:

- a) the breakdowns of expenditure and current progress of the various CGSs since their launch by year;
- b) the utilisation rates of CGSs that have been commissioned and their effectiveness.

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 144)Reply:

The Environmental Protection Department (EPD) is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. The total cost for capital works is estimated to be about \$400 million. The operating expenditure of individual projects may vary, depending on the financial proposals submitted by individual operators in their open tender submissions. As at the end of 2017, 5 CGSs have progressively been in operation, namely the Sha Tin CGS and the Eastern CGS which commenced operation in 2015 and the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS which commenced operation in 2017. The latest development of individual CGSs is tabulated below:

Project	Site	Latest Development and Schedule
Sha Tin CGS	10 On Ping Street, Shek Mun	The CGS commenced operation in May 2015. In 2017, the CGS collected about 415 tonnes of recyclables, with operating expenditure of about \$4.22 million.



<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Eastern CGS	30 Oi Shun Road, Shau Kei Wan	The CGS commenced operation in August 2015. In 2017, the CGS collected about 395 tonnes of recyclables, with operating expenditure of about \$3.61 million.
Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables, with operating expenditure of about \$4.69 million.
Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables, with operating expenditure of about \$3.98 million.
Sham Shui Po CGS	339 Tung Chau Street	The CGS commenced operation in October 2017. As at the end of 2017, the CGS collected about 17 tonnes of recyclables, with operating expenditure of about \$0.99 million.
Tuen Mun CGS	9 Tuen Yee Street	The tendering for the operation contract is underway. The CGSs are expected to commence operation in the second half of 2018.
Kwai Tsing CGS	12 Tam Kon Shan Road, Tsing Yi	
Tai Po CGS	Between Ting Kok Road and Dai Wah Street	
Islands CGS	Junction of Yu Tung Road and Chung Mun Road, Tung Chung, Lantau	Construction works are underway, which are expected to be completed in the second half of 2018.
Sai Kung CGS	Po Lam Lane, near Po Hong Road and Po Lam Road North, Tseung Kwan O	
Wan Chai CGS	Junction of Wan Shing Street and Hung Hing Road	A design idea competition is underway. The design and construction works are expected to commence in the second half of 2018.
Tsuen Wan CGS	Hoi Shing Road, near Hoi Kok Street	Sites have been confirmed and planning of construction works is in progress.
Wong Tai Sin CGS	Junction of Yuk Wah Street and Po Leung Lane, Tsz Wan Shan	

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Kowloon City CGS, Southern CGS, Yau Tsim Mong CGS, Central and Western CGS and North CGS	Site to be confirmed	We have been following up the views from District Councils. Taking into account the actual operating experience in other projects, we are continuing with site search and other associated preparation work.

Since inception the CGSs have been running smoothly. We will take into account their operation statistics to evaluate the effectiveness of each of the CGSs. During their first three-year contract period, both the Sha Tin CGS and the Eastern CGS have exceeded the key performance indicator for collecting not less than 600 tonnes of recyclables, and also fulfilled the requirements in respect of the number and types of educational activities organised. Besides, the Kwun Tong CGS and the Yuen Long CGS have also been operating well, and are expected to be able to meet or even exceed the relevant requirement during the three-year contract period. The Sham Shui Po CGS commenced operation just in October 2017. We will continue to monitor its operation performance. Besides, we will continue to take into account views from various stakeholders and make suitable adjustment to the work of the CGSs on environmental education and recycling support as and when necessary.

- End -

**CONTROLLING OFFICER'S REPLY****ENB296****(Question Serial No. 6031)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please provide the emissions of roadside air pollutants on the roads below (i.e. suspended particulates PM2.5 and nitrogen dioxide <NO2>) (Note: the total emissions generated by the relevant traffic flow (in grams), the percentage of the air pollutants in the overall total vehicle emissions in Hong Kong) and the concentration unit (by hour under weekday and weekend periods):

Cheung Sha Wan Road (from Hing Wah Street to Tonkin Street)

	Week -day (010- 010)	Week -day (010- 020)	Week -day (020- 030)	Week -day (030- 040)	Week -day (040- 050)	Week -day (050- 060)	Week -day (060- 070)	Week -day (070- 080)	Week -day (080- 090)	Week -day (090- 100)	Week -day (100- 110)	Week -day (110- 120)	Week -day (120- 130)	Week -day (130- 140)	Week -day (140- 150)	Week -day (150- 160)	Week -day (160- 170)	Week -day (170- 180)	Week -day (180- 190)	Week -day (190- 200)	Week -day (200- 210)	Week -day (210- 220)	Week -day (220- 230)	Week -day (230- 000)
Suspended particulates PM2.5																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

	Week -end (010- 010)	Week -end (010- 020)	Week -end (020- 030)	Week -end (030- 040)	Week -end (040- 050)	Week -end (050- 060)	Week -end (060- 070)	Week -end (070- 080)	Week -end (080- 090)	Week -end (090- 100)	Week -end (100- 110)	Week -end (110- 120)	Week -end (120- 130)	Week -end (130- 140)	Week -end (140- 150)	Week -end (150- 160)	Week -end (160- 170)	Week -end (170- 180)	Week -end (180- 190)	Week -end (190- 200)	Week -end (200- 210)	Week -end (210- 220)	Week -end (220- 230)	Week -end (230- 000)
Suspended particulates PM2.5																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle																								

emissions in Hong Kong																									
Concentration unit																									

Cheung Sha Wan Road (from Tonkin Street to Yen Chow Street)

	Week -day (010- 010)	Week -day (010- 020)	Week -day (020- 030)	Week -day (030- 040)	Week -day (040- 050)	Week -day (050- 060)	Week -day (060- 070)	Week -day (070- 080)	Week -day (080- 090)	Week -day (090- 100)	Week -day (100- 110)	Week -day (110- 120)	Week -day (120- 130)	Week -day (130- 140)	Week -day (140- 150)	Week -day (150- 160)	Week -day (160- 170)	Week -day (170- 180)	Week -day (180- 190)	Week -day (190- 200)	Week -day (200- 210)	Week -day (210- 220)	Week -day (220- 230)	Week -day (230- 000)
Suspended particulates PM2.5																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

	Week -nd (010- 010)	Week -nd (010- 020)	Week -nd (020- 030)	Week -nd (030- 040)	Week -nd (040- 050)	Week -nd (050- 060)	Week -nd (060- 070)	Week -nd (070- 080)	Week -nd (080- 090)	Week -nd (090- 100)	Week -nd (100- 110)	Week -nd (110- 120)	Week -nd (120- 130)	Week -nd (130- 140)	Week -nd (140- 150)	Week -nd (150- 160)	Week -nd (160- 170)	Week -nd (170- 180)	Week -nd (180- 190)	Week -nd (190- 200)	Week -nd (200- 210)	Week -nd (210- 220)	Week -nd (220- 230)	Week -nd (230- 000)
Suspended particulates PM2.5																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

Cheung Sha Wan Road (from Yen Chow Street to Nam Cheong Street)

	Week -day 000- 010	Week -day 010- 020	Week -day 020- 030	Week -day 030- 040	Week -day 040- 050	Week -day 050- 060	Week -day 060- 070	Week -day 070- 080	Week -day 080- 090	Week -day 090- 100	Week -day 100- 110	Week -day 110- 120	Week -day 120- 130	Week -day 130- 140	Week -day 140- 150	Week -day 150- 160	Week -day 160- 170	Week -day 170- 180	Week -day 180- 190	Week -day 190- 200	Week -day 200- 210	Week -day 210- 220	Week -day 220- 230	Week -day 230- 000
Suspended particulates PM2.5																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

	Week -nd (010- 010)	Week -nd (010- 020)	Week -nd (020- 030)	Week -nd (030- 040)	Week -nd (040- 050)	Week -nd (050- 060)	Week -nd (060- 070)	Week -nd (070- 080)	Week -nd (080- 090)	Week -nd (090- 100)	Week -nd (100- 110)	Week -nd (110- 120)	Week -nd (120- 130)	Week -nd (130- 140)	Week -nd (140- 150)	Week -nd (150- 160)	Week -nd (160- 170)	Week -nd (170- 180)	Week -nd (180- 190)	Week -nd (190- 200)	Week -nd (200- 210)	Week -nd (210- 220)	Week -nd (220- 230)	Week -nd (230- 000)
Suspended																								

particulates PM2.5																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

Yen Chow Street (from Castle Peak Road to Cheung Sha Wan Road)

	Week -dy (010- 010)	Week -dy (010- 020)	Week -dy (020- 030)	Week -dy (030- 040)	Week -dy (040- 050)	Week -dy (050- 060)	Week -dy (060- 070)	Week -dy (070- 080)	Week -dy (080- 090)	Week -dy (090- 100)	Week -dy (100- 110)	Week -dy (110- 120)	Week -dy (120- 130)	Week -dy (130- 140)	Week -dy (140- 150)	Week -dy (150- 160)	Week -dy (160- 170)	Week -dy (170- 180)	Week -dy (180- 190)	Week -dy (190- 200)	Week -dy (200- 210)	Week -dy (210- 220)	Week -dy (220- 230)	Week -dy (230- 000)
Suspended particulates PM2.5																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

	Week -end (010- 010)	Week -end (010- 020)	Week -end (020- 030)	Week -end (030- 040)	Week -end (040- 050)	Week -end (050- 060)	Week -end (060- 070)	Week -end (070- 080)	Week -end (080- 090)	Week -end (090- 100)	Week -end (100- 110)	Week -end (110- 120)	Week -end (120- 130)	Week -end (130- 140)	Week -end (140- 150)	Week -end (150- 160)	Week -end (160- 170)	Week -end (170- 180)	Week -end (180- 190)	Week -end (190- 200)	Week -end (200- 210)	Week -end (210- 220)	Week -end (220- 230)	Week -end (230- 000)
Suspended particulates PM2.5																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

Yen Chow Street (from Cheung Sha Wan Road to Lai Chi Kok Road)

	Week -dy (010- 010)	Week -dy (010- 020)	Week -dy (020- 030)	Week -dy (030- 040)	Week -dy (040- 050)	Week -dy (050- 060)	Week -dy (060- 070)	Week -dy (070- 080)	Week -dy (080- 090)	Week -dy (090- 100)	Week -dy (100- 110)	Week -dy (110- 120)	Week -dy (120- 130)	Week -dy (130- 140)	Week -dy (140- 150)	Week -dy (150- 160)	Week -dy (160- 170)	Week -dy (170- 180)	Week -dy (180- 190)	Week -dy (190- 200)	Week -dy (200- 210)	Week -dy (210- 220)	Week -dy (220- 230)	Week -dy (230- 000)
Suspended particulates PM2.5																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in																								

Hong Kong																								
Concentration unit																								

	Week -end (000- 010)	Week -end (010- 020)	Week -end (020- 030)	Week -end (030- 040)	Week -end (040- 050)	Week -end (050- 060)	Week -end (060- 070)	Week -end (070- 080)	Week -end (080- 090)	Week -end (090- 100)	Week -end (100- 110)	Week -end (110- 120)	Week -end (120- 130)	Week -end (130- 140)	Week -end (140- 150)	Week -end (150- 160)	Week -end (160- 170)	Week -end (170- 180)	Week -end (180- 190)	Week -end (190- 200)	Week -end (200- 210)	Week -end (210- 220)	Week -end (220- 230)	Week -end (230- 000)
Suspended particulates PM25																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

Tonkin Street (from Castle Peak Road to Cheung Sha Wan Road)

	Week -day (000- 010)	Week -day (010- 020)	Week -day (020- 030)	Week -day (030- 040)	Week -day (040- 050)	Week -day (050- 060)	Week -day (060- 070)	Week -day (070- 080)	Week -day (080- 090)	Week -day (090- 100)	Week -day (100- 110)	Week -day (110- 120)	Week -day (120- 130)	Week -day (130- 140)	Week -day (140- 150)	Week -day (150- 160)	Week -day (160- 170)	Week -day (170- 180)	Week -day (180- 190)	Week -day (190- 200)	Week -day (200- 210)	Week -day (210- 220)	Week -day (220- 230)	Week -day (230- 000)
Suspended particulates PM25																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

	Week -end (000- 010)	Week -end (010- 020)	Week -end (020- 030)	Week -end (030- 040)	Week -end (040- 050)	Week -end (050- 060)	Week -end (060- 070)	Week -end (070- 080)	Week -end (080- 090)	Week -end (090- 100)	Week -end (100- 110)	Week -end (110- 120)	Week -end (120- 130)	Week -end (130- 140)	Week -end (140- 150)	Week -end (150- 160)	Week -end (160- 170)	Week -end (170- 180)	Week -end (180- 190)	Week -end (190- 200)	Week -end (200- 210)	Week -end (210- 220)	Week -end (220- 230)	Week -end (230- 000)
Suspended particulates PM25																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

Tonkin Street (from Cheung Sha Wan Road to Lai Chi Kok Road)

	Week -day (000- 010)	Week -day (010- 020)	Week -day (020- 030)	Week -day (030- 040)	Week -day (040- 050)	Week -day (050- 060)	Week -day (060- 070)	Week -day (070- 080)	Week -day (080- 090)	Week -day (090- 100)	Week -day (100- 110)	Week -day (110- 120)	Week -day (120- 130)	Week -day (130- 140)	Week -day (140- 150)	Week -day (150- 160)	Week -day (160- 170)	Week -day (170- 180)	Week -day (180- 190)	Week -day (190- 200)	Week -day (200- 210)	Week -day (210- 220)	Week -day (220- 230)	Week -day (230- 000)
Suspended particulates																								

PM25																									
Nitrogen dioxide <NO2>																									
% of air pollutants in the overall total vehicle emissions in Hong Kong																									
Concentration unit																									

	Week -end 0100- 0100	Week -end 0100- 0200	Week -end 0200- 0300	Week -end 0300- 0400	Week -end 0400- 0500	Week -end 0500- 0600	Week -end 0600- 0700	Week -end 0700- 0800	Week -end 0800- 0900	Week -end 0900- 1000	Week -end 1000- 1100	Week -end 1100- 1200	Week -end 1200- 1300	Week -end 1300- 1400	Week -end 1400- 1500	Week -end 1500- 1600	Week -end 1600- 1700	Week -end 1700- 1800	Week -end 1800- 1900	Week -end 1900- 2000	Week -end 2000- 2100	Week -end 2100- 2200	Week -end 2200- 2300	Week -end 2300- 0000
Suspended particulates PM2.5																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

Nam Cheong Street (from Tai Po Road to Cheung Sha Wan)

	Week -day 0100-0100	Week -day 0100-0200	Week -day 0200-0300	Week -day 0300-0400	Week -day 0400-0500	Week -day 0500-0600	Week -day 0600-0700	Week -day 0700-0800	Week -day 0800-0900	Week -day 0900-1000	Week -day 1000-1100	Week -day 1100-1200	Week -day 1200-1300	Week -day 1300-1400	Week -day 1400-1500	Week -day 1500-1600	Week -day 1600-1700	Week -day 1700-1800	Week -day 1800-1900	Week -day 1900-2000	Week -day 2000-2100	Week -day 2100-2200	Week -day 2200-2300	Week -day 2300-0000
Suspended particulates PM2.5																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

	Week -end 0100- 0100	Week -end 0100- 0200	Week -end 0200- 0300	Week -end 0300- 0400	Week -end 0400- 0500	Week -end 0500- 0600	Week -end 0600- 0700	Week -end 0700- 0800	Week -end 0800- 0900	Week -end 0900- 1000	Week -end 1000- 1100	Week -end 1100- 1200	Week -end 1200- 1300	Week -end 1300- 1400	Week -end 1400- 1500	Week -end 1500- 1600	Week -end 1600- 1700	Week -end 1700- 1800	Week -end 1800- 1900	Week -end 1900- 2000	Week -end 2000- 2100	Week -end 2100- 2200	Week -end 2200- 2300	Week -end 2300- 0000
Suspended particulates PM2.5																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

## Nam Cheong Street (from Tai Po Road to Cheung Sha Wan)

	Week -day 0100- 0100	Week -day 0100- 0200	Week -day 0200- 0300	Week -day 0300- 0400	Week -day 0400- 0500	Week -day 0500- 0600	Week -day 0600- 0700	Week -day 0700- 0800	Week -day 0800- 0900	Week -day 0900- 1000	Week -day 1000- 1100	Week -day 1100- 1200	Week -day 1200- 1300	Week -day 1300- 1400	Week -day 1400- 1500	Week -day 1500- 1600	Week -day 1600- 1700	Week -day 1700- 1800	Week -day 1800- 1900	Week -day 1900- 2000	Week -day 2000- 2100	Week -day 2100- 2200	Week -day 2200- 2300	Week -day 2300- 0000
Suspended particulates PM25																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

	Week -end 0100- 0100	Week -end 0100- 0200	Week -end 0200- 0300	Week -end 0300- 0400	Week -end 0400- 0500	Week -end 0500- 0600	Week -end 0600- 0700	Week -end 0700- 0800	Week -end 0800- 0900	Week -end 0900- 1000	Week -end 1000- 1100	Week -end 1100- 1200	Week -end 1200- 1300	Week -end 1300- 1400	Week -end 1400- 1500	Week -end 1500- 1600	Week -end 1600- 1700	Week -end 1700- 1800	Week -end 1800- 1900	Week -end 1900- 2000	Week -end 2000- 2100	Week -end 2100- 2200	Week -end 2200- 2300	Week -end 2300- 0000
Suspended particulates PM25																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

## Nam Cheong Street (from Cheung Sha Wan Road to Lai Chi Kok Road)

	Week -day 0100- 0100	Week -day 0100- 0200	Week -day 0200- 0300	Week -day 0300- 0400	Week -day 0400- 0500	Week -day 0500- 0600	Week -day 0600- 0700	Week -day 0700- 0800	Week -day 0800- 0900	Week -day 0900- 1000	Week -day 1000- 1100	Week -day 1100- 1200	Week -day 1200- 1300	Week -day 1300- 1400	Week -day 1400- 1500	Week -day 1500- 1600	Week -day 1600- 1700	Week -day 1700- 1800	Week -day 1800- 1900	Week -day 1900- 2000	Week -day 2000- 2100	Week -day 2100- 2200	Week -day 2200- 2300	Week -day 2300- 0000
Suspended particulates PM25																								
Nitrogen dioxide <NO2>																								
% of air pollutants in the overall total vehicle emissions in Hong Kong																								
Concentration unit																								

	Week -end 0100- 0100	Week -end 0100- 0200	Week -end 0200- 0300	Week -end 0300- 0400	Week -end 0400- 0500	Week -end 0500- 0600	Week -end 0600- 0700	Week -end 0700- 0800	Week -end 0800- 0900	Week -end 0900- 1000	Week -end 1000- 1100	Week -end 1100- 1200	Week -end 1200- 1300	Week -end 1300- 1400	Week -end 1400- 1500	Week -end 1500- 1600	Week -end 1600- 1700	Week -end 1700- 1800	Week -end 1800- 1900	Week -end 1900- 2000	Week -end 2000- 2100	Week -end 2100- 2200	Week -end 2200- 2300	Week -end 2300- 0000
Suspended particulates PM25																								
Nitrogen																								





	Suspended particulates PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Nitrogen dioxide (NO <sub>2</sub> ) (µg/m <sup>3</sup> )
Weekday 1300-1400	28	100
Weekday 1400-1500	28	99
Weekday 1500-1600	28	104
Weekday 1600-1700	28	110
Weekday 1700-1800	28	112
Weekday 1800-1900	29	114
Weekday 1900-2000	32	103
Weekday 2000-2100	33	92
Weekday 2100-2200	31	87
Weekday 2200-2300	28	83
Weekday 2300-0000	26	77

Table 2: The change in hourly concentrations of pollutants recorded at the Mongkok Roadside AQMS in a day in 2017 (weekend and holiday)

	Suspended particulates PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Nitrogen dioxide (NO <sub>2</sub> ) (µg/m <sup>3</sup> )
Weekend and holiday 0000-0100	27	71
Weekend and holiday 0100-0200	25	57
Weekend and holiday 0200-0300	24	51
Weekend and holiday 0300-0400	23	49
Weekend and holiday 0400-0500	23	48
Weekend and holiday 0500-0600	22	47
Weekend and holiday 0600-0700	24	58
Weekend and holiday 0700-0800	26	68
Weekend and holiday 0800-0900	27	72
Weekend and holiday 0900-1000	28	78
Weekend and holiday 1000-1100	28	82
Weekend and holiday 1100-1200	28	85
Weekend and holiday 1200-1300	29	91
Weekend and holiday 1300-1400	31	99
Weekend and holiday 1400-1500	32	105
Weekend and holiday 1500-1600	32	107
Weekend and holiday 1600-1700	32	113
Weekend and holiday 1700-1800	32	113
Weekend and holiday 1800-1900	33	110
Weekend and holiday 1900-2000	35	101
Weekend and holiday 2000-2100	36	93
Weekend and holiday 2100-2200	34	89
Weekend and holiday 2200-2300	31	85
Weekend and holiday 2300-0000	29	81

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB297**

**(Question Serial No. 5925)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Municipal Solid Waste (MSW) Charging Scheme which is soon to be implemented:

What preparatory work does the Administration have in 2018-19? What are the specific work schedule, estimated expenditure and manpower arrangement involved?

What was the amount of MSW generated, disposed of, disposed of per capita and recovered in each of the past 5 years? Has the Administration assessed the effectiveness in MSW reduction after the MSW Charging Scheme is introduced in future?

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.13)

Reply:

The Municipal Solid Waste (MSW) charging aims to create financial incentives to drive behavioural changes in waste generation and hence reducing the overall waste disposal, which is a major policy to promote waste reduction at source and recycling.

In October 2017, the Environment Bureau announced the proposed modifications to the implementation arrangements for MSW charging, to expand the scope of application of pre-paid designated garbage bags as a charging tool, thereby enabling the charging regime to achieve the polluter-pays principle to a greater extent and responding to the views of the relevant industries. The community and various stakeholders responded positively in general to the modified arrangements.

We have been proactively undertaking relevant preparatory work, including drafting of the relevant bill, maintaining close communication with the stakeholders of various sectors to formulate specific implementation details, planning the production and sales arrangements of the designated garbage bags, implementing a waste reduction and recycling promotional campaign under the central theme of "Dump Less, Save More", etc. Meanwhile, the Environment and Conservation Fund has since 2015 provided funding support of about \$55

million to non-profit-making organisations and bodies for organising community involvement projects in different types of premises to try out MSW charging in actual settings. The relevant experiences can provide useful references for us to develop the best practice guides on the implementation of MSW charging. As at March 2018, more than 50 community involvement projects on MSW charging have been funded. We are proactively taking forward the above preparatory work and seeking to introduce the relevant bill to the Legislative Council as soon as possible. Experiences of other cities show that the implementation of quantity-based waste charging can effectively reduce the overall waste disposal by more than 30%.

The Environmental Protection Department has 49 posts and has earmarked about \$32 million in 2018-19 for the preparation work of MSW charging.

The statistics on the quantity of MSW disposed of, recovered and generated from 2012 to 2016 are tabulated below. The relevant 2017 waste statistics are still being compiled.

<b>Year</b>	<b>MSW</b>			
	<b>Quantity disposed of (million tonnes)</b> <b>(a)</b>	<b>Quantity recovered (million tonnes)</b> <b>(b)</b>	<b>Quantity generated (million tonnes)</b> <b>(c) = (a) + (b)</b>	<b>Quantity disposed of on a per capita basis (daily per capita (kg))</b> <b>(d)</b>
2012	3.40	2.16	5.56	1.30
2013	3.48	2.01	5.49	1.33
2014	3.57	2.05	5.62	1.35
2015	3.71	2.03	5.74	1.39
2016	3.79	1.91	5.70	1.41

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB298**

**(Question Serial No. 5364)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Matters Requiring Special Attention in 2018-19 in the 2018-19 Controlling Officer's Report include introducing a new pilot district collection service for waste plastic bottles. To advocate environmental protection and to encourage the public to use less disposable items and bring their own reusable water bottles, the Government has installed water dispensers in public places. Please advise this Committee how much public resources the Administration allocated for the installation of water dispensers in public places in the past 3 years. If there was any, what were the details? Will additional resources be allocated for expanding the scope of installation of water dispensers at government sites from mainly the Leisure and Cultural Services Department venues to other departments, such as public housing estates under the Housing Department, government buildings under the Government Property Agency and public transport interchanges under the Transport Department? If yes? If no, what are the reasons?

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use): 47)

Reply:

To create a social atmosphere which encourages the public to develop a habit of bringing their own reusable water bottles with a view to promoting waste reduction at source, the Environmental Protection Department is now coordinating with various government bureaux/departments to, depending on needs, install water dispensers at new government premises and suitable existing government premises during renovation where it is physically and technically feasible.

Currently, there are a total of over 10 000 water dispensers at government premises, of which about 2 700 mainly serve the public. In general, installation of water dispensers is part of the construction of new government premises and renovation of existing government premises, and the resources involved have already been included in the total expenditure of the relevant projects. We do not have a statistical breakdown on the resources allocated to the installation of water dispensers at government premises in the past 3 years.

- End -

**CONTROLLING OFFICER'S REPLY****ENB299****(Question Serial No. 5871)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Department has pointed out that it will continue with the trial of electric light buses. Please advise on the following:

- a. What were the number of light buses, expenditure and relevant details involved in the trial of electric light buses in the past 3 years? What is the estimated expenditure for this year?
- b. How was the performance of the electric light buses on trial in the past 3 years? Please reply in the tables below.

Brand of electric light bus	Number of maintenance days	Operation downtime	Utilisation rate	Level of subsidy	Average fuel economy	Average fuel cost	Average total operating cost

Brand of diesel light bus	Number of maintenance days	Operation downtime	Utilisation rate	Level of subsidy	Average fuel economy	Average fuel cost	Average total operating cost

- c. How will the Department evaluate the results of the trial of electric light buses? Does the Department have any indicators to evaluate the relevant schemes?

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 76)

Reply:

To encourage the transport sectors to try out green innovative transport technologies, the Government has put in place a \$300 million Pilot Green Transport Fund (the Fund) since March 2011. Recipients of the Fund will have to record the trial data for evaluating the performance of the transport technologies concerned and to share their trial experiences with the peers and others for promoting a wider use of successful technologies.

As at the end of February 2018, the Fund approved 118 trial projects of which two involve the testing of 3 electric light buses in total. These 2 projects commenced a 24-month trial in January 2017 and December 2017 respectively. During the trial period, the subsidy recipients will have to record the operation data of these electric light buses and those of the diesel light buses operated by them for comparison.

The Environmental Protection Department (EPD) has commissioned an assessor to analyse the trial results of green innovative transport products subsidised by the Fund and evaluate their environmental performance, as well as to submit the trial reports. After completion of the analysis by the assessor, the EPD will upload these trial reports to its website for sharing their findings with the sectors and others.

In order not to hinder successful applicants from obtaining competitive bids during the tender exercise, we will not announce the subsidy amount for individual approved projects.

- End -

**CONTROLLING OFFICER'S REPLY****ENB300****(Question Serial No. 6095)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Department has pointed out that it will continue to encourage franchised bus companies to deploy environment-friendly buses at busy corridors and continue to support the Environmental Protection Department to carry out environmental initiatives including retrofitting selective catalytic reduction devices (SCRs) on eligible in-service franchised buses, as well as trial of hybrid buses and electric buses. Please advise on the following:

- The number of eligible in-service franchised buses retrofitted with SCRs and the expenditure and relevant details involved in the past 3 years. What is the estimated expenditure for this year?
- The number of hybrid buses and electric buses on trial and the expenditure and relevant details involved in the past 3 years. What is the estimated expenditure for this year?
- How was the performance of the hybrid buses and electric buses on trial in the past 3 years? Please reply in the tables below:

Brand of hybrid bus	Number of maintenance days	Operation downtime	Utilisation rate	Level of subsidy	Average fuel economy	Average fuel cost	Average total operating cost

Brand of battery-electric bus	Number of maintenance days	Operation downtime	Utilisation rate	Level of subsidy	Average fuel economy	Average fuel cost	Average total operating cost



Brand of supercapacitor bus	Number of maintenance days	Operation downtime	Utilisation rate	Level of subsidy	Average fuel economy	Average fuel cost	Average total operating cost

Brand of diesel bus	Number of maintenance days	Operation downtime	Utilisation rate	Average fuel economy	Average fuel cost	Average total operating cost

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 113)

Reply:

a. The Government has fully subsidised franchised bus companies to retrofit on a large scale Euro II and III franchised buses with selective catalytic reduction devices (SCRs) to upgrade their emission performance to Euro IV or above level. To be cost-effective, the retrofit programme only covered bus models with a remaining service life not less than 2 years and bus models that were technically feasible (such as the availability of sufficient room for retrofitting on the bus) and with a relatively large number (i.e. bus model with not less than 100 buses). The retrofit programme was completed at the end of 2017 with a total of 1 030 eligible Euro II and III franchised buses retrofitted with SCRs under the programme. The total expenditure of the retrofit programme was about \$197 million while the expenditure in 2017-18 was about \$109 million.

The number of Euro II and III buses retrofitted with SCRs in the past 3 years is as follows:

	2015	2016	2017
No. of Euro II and III buses retrofitted with SCRs	338	363	1 030 <sup>(1)</sup>

Note:

(1) As at the end of December 2017, 204 Euro II/III buses retrofitted with SCRs at an earlier stage have been retired or out of service due to traffic accidents.

b. & c.

The Government has fully subsidised franchised bus companies to purchase 6 double-deck hybrid buses and 36 single-deck electric buses to conduct 2-year trials on different routes to assess their operational performance under local conditions. To effectively monitor and assess the operational efficiency and performance of the hybrid and electric buses, the Environmental Protection Department (EPD) has set up 2 task forces to analyse the trial data. Members of the task forces comprise representatives from the franchised bus companies and the Transport Department (TD), as well as local academics.

#### Hybrid buses

The Government has allocated \$33 million to fully subsidise the franchised bus companies to purchase 6 double-deck hybrid buses. The buses are Enviro E500H Hybrid

manufactured by Alexander Dennis (Asia Pacific) Limited and the price of each bus is about \$5.5 million. Their distribution is as follows:

Franchised bus company	No. of double-deck hybrid buses <sup>(2)</sup>
The Kowloon Motor Bus Company (1933) Limited	3 (for trial on 3 routes during trial period)
Citybus Limited	2 (for trial on 2 routes during trial period)
New World First Bus Services Limited	1 (for trial on 1 route during trial period)
New Lantau Bus Company (1973) Limited	--
Long Win Bus Company Limited	--

Note:

(2) The 2-year trials were completed by the end of 2016. According to the subsidy agreements signed between the Government and the franchised bus companies, the franchised bus companies are required to continue to deploy these hybrid buses for providing franchised bus service on suitable routes until the end of the economical service life of the buses or until they reach the age of 18 years.

The trial was fully commenced by the end of 2014 and completed by the end of 2016. We reported the trial results to the Panel on Environmental Affairs of the Legislative Council on 22 May 2017. In terms of driving performance, the hybrid buses are comparable with conventional diesel buses. However, the emission performance of hybrid buses over Euro VI conventional buses is not substantial and their fuel economy performance in the local operation environment fell far short of expectation. As such, there is no strong justification for promoting their use in the franchised bus operation until their fuel economy performance has been significantly improved and their price has become more competitive. The relevant data are summarised as follows:

Monitoring Parameters	Hybrid Buses	Diesel Control Buses	Hybrid Buses	Diesel Control Buses	Hybrid Buses	Diesel Control Buses
	First Year Results (November 2014 to November 2015)		Second Year Results (December 2015 to November 2016)		Overall 2-year Results (November 2014 to November 2016)	
Relative Fuel Consumption (as compared to diesel control bus)	1.034	1	0.982	1	1.008	1

Relative Fuel Consumption (as compared to diesel control bus) (Excluding data affected by intercooler fault)	1.019	1	0.984	1	1.004	1
Urea Consumption Rate (% of fuel consumption)	4.5	5.2	4.5	5.1	4.5	5.1
Daily Bus Availability (%) (Excluding outage unrelated to malfunctions of the buses <sup>(3)</sup> )	82.6	94.9	85.7	92.4	84.1	93.6
Average Number of On-Road Breakdowns / Month	0.32	0.04	0.13	0.08	0.22	0.06

Note:

(3) The outages could be for inspections for Certificate of Road Worthiness / Certificate of Fitness, monthly inspections, routine maintenance/checking, cleaning, emission tests by Portable Emission Measurement Systems, etc.

We have absorbed the relevant workload on the trial of hybrid buses from 2014-15 to 2016-17 by deploying existing resources.

### Electric buses

The Government has allocated \$180 million to fully subsidise the franchised bus companies to purchase 36 single-deck electric buses (including 8 supercapacitor buses and 28 battery-electric buses and related charging facilities). Currently, 24 single-deck battery-electric buses and 2 single-deck supercapacitor buses have come into operation, and it is anticipated that most of the remaining electric buses will be put into service progressively in 2018. The average price of each single-deck electric bus with provision and installation of related charging facilities is about \$5 million. Preliminary trial results showed that the driving performance of the single-deck electric buses is comparable with that of conventional buses. However, when the ambient temperature is high, the driving range of battery-electric buses after a full charge is only about 110 to 150 km, which is lower than the daily mileage requirement of general public buses for 200 to 300 km.

The progress of the trial of electric buses is as follows:

<b>Franchised bus company</b>	<b>No. of single-deck electric bus</b>	<b>Manufacturer and model</b>	<b>Service route</b>	<b>Current status</b>
The Kowloon Motor Bus Company (1933) Limited (KMB)	8 supercapacitor buses	China Youngman Automobile Group Company Limited Model: JNP6122UC	284 [Sha Tin Central - Ravana Garden (Circular)]  5M [Kai Tak (Tak Long Estate) - Kowloon Bay Railway Station (Circular)]	2 supercapacitor buses commenced the trial on Route No. 284 in late March 2017. Two more supercapacitor buses will commence services in the first half of 2018.  The remaining 4 supercapacitor buses will commence services in phases in the first half of 2018, subject to the progress of testing of the charging facilities.
	10 battery-electric buses	BYD Auto Industry Company Limited Model: K9R	5C [Star Ferry Pier - Tsz Wan Shan (Central)]  6C [Mei Foo - Kowloon City Ferry Pier]  35A [Tsim Sha Tsui East - On Yam]  42A [Jordan (To Wah Road) - Cheung Hang]  603 [Ping Tin - Central (Central Ferry Piers)]	10 battery-electric buses have commenced services in phases from July 2017 to January 2018.
Long Win Bus Company Limited (LWB)	4 battery-electric buses	BYD Auto Industry Company Limited Model: K9R	E31 [Tung Chung (Yat Tung Estate Public Transport Terminus) - Tsuen Wan (Discovery Park Bus Terminus)]	2 battery-electric buses commenced services in July 2017.

<b>Franchised bus company</b>	<b>No. of single-deck electric bus</b>	<b>Manufacturer and model</b>	<b>Service route</b>	<b>Current status</b>
			S64 [Tung Chung (Yat Tung Estate Public Transport Terminus) - Airport (Passenger Terminal Building) (Circular)]	2 battery-electric buses commenced services in February 2018.
Citybus Limited (CTB)	6 battery-electric buses	BYD Auto Industry Company Limited Model: K9R	11 [Central (Central Ferry Piers) - Jardine's Lookout (Circular)]	The first batch of 5 battery-electric buses from BYD commenced services on 5 routes on Hong Kong Island in December 2015.  5 battery-electric buses from Great Dragon also commenced services in June 2017.
		Great Dragon International Corporation Limited Model: LS-130-116  3 buses for each model	12 [Central (Central Ferry Piers) - Robinson Road (Circular)]  25A [Wan Chai (Hong Kong Convention & Exhibition Centre Extension) - Braemar Hill (Circular)]	
New World First Bus Services Limited (NWFB)	4 battery-electric buses	BYD Auto Industry Company Limited Model: K9R  Great Dragon International Corporation Limited Model: LS-130-116  2 buses for each model	78 [Wong Chuk Hang Station - Wah Kwai Estate (Circular)]  81 [Lai Tak Tsuen - Chai Wan (Hing Wah Estate)]	

<b>Franchised bus company</b>	<b>No. of single-deck electric bus</b>	<b>Manufacturer and model</b>	<b>Service route</b>	<b>Current status</b>
New Lantao Bus Company (1973) Limited (NLB)	4 battery-electric buses	BYD Auto Industry Company Limited Model: K9R (2 buses)	38 [Tung Chung (Yat Tung Estate Public Transport Interchange) - Tung Chung Station Bus Terminus (Circular)]	2 battery-electric buses will commence services in the first half of 2018, subject to the progress of testing of the charging facilities.
		The other 2 battery-electric buses have to be re-tendered.	B2 [Yuen Long Station - Shenzhen Bay Port]	It is anticipated that 2 battery-electric buses will commence services in 2019, subject to the progress of re-tendering.

We will continue to monitor the performance of electric buses under the trials, collect and analyse the trial data, and report the latest situation to the Panel on Environmental Affairs in due course.

The EPD has absorbed the relevant workload on the trial of electric buses by deploying existing resources over the past 3 years. Moreover, the TD has created a three-year (until end of 2019) time-limited Transport Officer I post to cope with the relevant work.

- End -

**CONTROLLING OFFICER'S REPLY****ENB301****(Question Serial No. 6109)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Environmental Protection Department has pointed out that it will continue to encourage the transport sectors to make use of the Pilot Green Transport Fund to try out green innovative transport technologies. How effective is the scheme? Please reply in the table below:

Name of trial	Product on trial	Trial period	Project cost	Average fuel economy	Average fuel economy of the vehicle for comparison	Average fuel cost/ (\$/kilometre)	Average fuel cost of the vehicle for comparison/ (\$/kilometre)

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 101)Reply:

To encourage the transport sectors to try out green innovative transport technologies, the Government has put in place a \$300 million Pilot Green Transport Fund (the Fund) since March 2011. Recipients of the Fund will have to record the trial data for evaluating the performance of the transport technologies concerned and to share their trial experiences with the peers and others for promoting a wider use of successful technologies.

As at the end of February 2018, the Fund has approved 118 trials with a total subsidy of about \$131 million. They included 56 trials of electric vehicles (EVs) and 54 trials of hybrid vehicles, involving 81 EVs (including 3 taxis, 3 light buses, 21 single-deck buses and 54 light goods vehicles (van type)) and 85 hybrid vehicles (44 light goods vehicles (non-van type), 28 medium goods vehicles, 11 light buses and 2 single-deck buses). Moreover, the Fund has subsidised the trials of a solar air-conditioning system for a bus, 4 electric inverter air-conditioning systems for buses, and the retrofitting of 3 in-use ferries with diesel-electric

propulsion systems to replace their old systems and 1 in-use ferry with a seawater scrubber. The Environmental Protection Department (EPD) has commissioned an assessor to analyse the data gathered from the various trials. The EPD will upload the trial reports to its website for sharing their findings with the sectors and others in due course.

As at the end of February 2018, a total of 46 interim or final trial reports were completed and uploaded to the EPD website. The results of these trials are as follows:

Technology under trial	No. of models	Fuel economy	Fuel saving (%)
Electric light goods vehicle (van type) (a total of 32 vehicles)	3 (No longer available in the market)	1.1 – 5.5 km/kWh	52 - 90*
	2 (Still available in the market)		79^
		3.1 – 5.6 km/kWh	69 – 90*
	83 – 91^		
Electric taxi (3 vehicles)	1	3.3 – 3.8 km/kWh	31 – 40 <sup>&amp;</sup>
Single-deck electric bus (4 vehicles)	2	0.58 - 0.64 km/kWh	69 - 76*
Hybrid light goods vehicle (20 vehicles)	2	3.0 - 7.7 km/L	1 -26*
Hybrid medium goods vehicle (12 vehicles)	2	4.1 – 7.0 km/L	-2 <sup>#</sup> - 32*
Hybrid light bus (2 vehicles)	1	4.3 – 4.5 km/L	-9 <sup>@</sup> - 4*
Solar air-conditioning system for bus (1 system)	1	7.2 km/L	10*

\* Compared with conventional diesel counterparts

^ Compared with conventional petrol counterparts

& Compared with conventional liquefied petroleum gas counterparts

# The hybrid vehicles travelled more on highways, and hence were unable to achieve the best fuel saving performance because of less start-stops to recover the energy by the electric generators.

@ Higher fuel consumption due to temperature effect on battery charging system in summer time. Additional weight of batteries and motor also increased the fuel consumption.

Results of trials are summarised as follows:

### EVs

High production cost, limited service life, long charging time and low energy density of EV batteries are the key constraints for electric commercial vehicles (e-CVs) to become popular. The hilly terrain in Hong Kong and the need to provide air-conditioning during summer driving require batteries of EVs to have higher driving range. Therefore, the existing e-CV technologies are yet to be able to cope with the operational needs of local taxis, light buses and single-deck buses. All the 3 electric taxis that were once trialed under the Fund have been re-registered as private cars because taxis generally run almost a whole day and under normal operation cannot spare 4 hours a day for charging. Electric light buses and single-deck coaches also have experienced similar problems. The electric light buses trialed under the Fund, after a full charge taking 2 hours, could only sustain a driving range of 180 km, lower than the daily mileage of a typical public light bus. In the



case of the electric single-deck buses under trial, the driving range varies from 200 km to 280 km after a full charge, which takes as long as 4 hours.

In comparison, electric light goods vehicles (van type) (e-LGVs) are more likely to prevail and are suitable for operators who require relatively lower daily mileage and payload because batteries of these vehicles can be topped up outside operation hours. However, they might not be suitable for the transport trades requiring higher mileage. We have organised experience sharing workshops for the transport trades suitable for adopting this vehicle type to promote the use of e-LGVs.

For those e-CVs trialed under the Fund, they could save 31% to 91% of their energy cost on an individual vehicle basis as compared with their conventional counterparts.

#### Hybrid vehicles

Hybrid vehicles could operate without charging up their batteries by an external source. Their operation is thus similar to that of conventional vehicles. The transport sectors have thus less doubt about trialing hybrid commercial vehicles under the Fund. However, the hybrid commercial vehicle models on the local market are limited, with only 2 light goods vehicle models, 2 medium goods vehicle models, 1 hybrid light bus model and 1 single-deck hybrid bus model, all of which have already been trialed under the Fund.

Higher fuel economy is the major merit of hybrid vehicles over the conventional vehicles, thereby reducing operating cost and air pollutant emissions. However, the fuel economy of a hybrid vehicle depends on the operation routes. A route requiring frequent start-stop will harness better the hybrid drive-train. If a route is dominated by highway driving, a hybrid vehicle can hardly outperform its conventional counterpart in fuel economy.

Because of the above reasons, the trial results found that the hybrid goods vehicles incurred fuel expense saving ranging from negligible to 32% as compared with their conventional counterparts whilst the corresponding figure for the hybrid light buses was not more than 4%. The latter had a poorer fuel economy performance which might be caused by inadequate cooling for their batteries.

As hybrid vehicles are more likely to take up local commercial transportation duties, we will also step up our efforts to promote their trials under the Fund.

#### Other technologies

The trial of a solar air-conditioning system for bus was also completed under the Fund, with the result indicating a 10% saving of fuel cost.

In order not to hinder successful applicants from obtaining competitive bids during the tender exercise, we will not announce the subsidy amount and the cost of the trial product for individual approved cases.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB302**

**(Question Serial No. 6137)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

a) The Environmental Protection Department is developing Community Green Stations (CGSs) across the territory. At present, 5 CGSs have commenced operation.

- Regarding this, would the Administration advise on the amount of subsidy granted for each CGSs? For the relevant CGSs, has the Administration conducted value-for-money evaluation on their effectiveness? If yes, what are the details?
- Secondly, when are the uncommenced CGSs in other districts expected to be completed? Is there any specific timetable?

b) What is the Administration's budget for waste recovery and reduction projects in this financial year?

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 115)

Reply:

a) The Environmental Protection Department (EPD) is continuing to take forward the Community Green Stations (CGSs) projects to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. The total cost for capital works is estimated to be about \$400 million. The operating expenditure of individual projects may vary, depending on the financial proposals submitted by individual operators in their open tender submissions. As at the end of 2017, 5 CGSs have progressively been in operation, namely the Sha Tin CGS and the Eastern CGS which commenced operation in 2015 and the Kwun Tong CGS, the Yuen Long CGS and the Sham Shui Po CGS which commenced operation in 2017. The latest development of individual CGSs is tabulated below:

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Sha Tin CGS	10 On Ping Street, Shek Mun	The CGS commenced operation in May 2015. In 2017, the CGS collected about 415 tonnes of recyclables.
Eastern CGS	30 Oi Shun Road, Shau Kei Wan	The CGS commenced operation in August 2015. In 2017, the CGS collected about 395 tonnes of recyclables.
Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables.
Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai	The CGS commenced operation in January 2017. As at the end of 2017, the CGS collected about 290 tonnes of recyclables.
Sham Shui Po CGS	339 Tung Chau Street	The CGS commenced operation in October 2017. As at the end of 2017, the CGS collected about 17 tonnes of recyclables.
Tuen Mun CGS	9 Tuen Yee Street	The tendering for the operation contract is underway. The CGSs are expected to commence operation in the second half of 2018.
Kwai Tsing CGS	12 Tam Kon Shan Road, Tsing Yi	
Tai Po CGS	Between Ting Kok Road and Dai Wah Street	Construction works are underway, which are expected to be completed in the second half of 2018.
Islands CGS	Junction of Yu Tung Road and Chung Mun Road, Tung Chung, Lantau	
Sai Kung CGS	Po Lam Lane, near Po Hong Road and Po Lam Road North, Tseung Kwan O	Design and construction works are in progress.
Wan Chai CGS	Junction of Wan Shing Street and Hung Hing Road	A design idea competition is underway. The design and construction works are expected to commence in the second half of 2018.
Tsuen Wan CGS	Hoi Shing Road, near Hoi Kok Street	Sites have been confirmed and planning of construction works is in progress.
Wong Tai Sin CGS	Junction of Yuk Wah Street and Po Leung Lane, Tsz Wan Shan	

<b>Project</b>	<b>Site</b>	<b>Latest Development and Schedule</b>
Kowloon City CGS, Southern CGS, Yau Tsim Mong CGS, Central and Western CGS and North CGS	Site to be confirmed	We have been following up the views from District Councils. Taking into account the actual operating experience in other projects, we are continuing with site search and other associated preparation work.

Since inception the CGSs have been running smoothly. We will take into account their operation statistics to evaluate the effectiveness of each of the CGSs. During their first three-year contract period, both the Sha Tin CGS and the Eastern CGS have exceeded the key performance indicator for collecting not less than 600 tonnes of recyclables, and also fulfilled the requirements in respect of the number and types of educational activities organised. Besides, the Kwun Tong CGS and the Yuen Long CGS have also been operating well, and are expected to be able to meet or even exceed the relevant requirement during the three-year contract period. The Sham Shui Po CGS commenced operation just in October 2017. We will continue to monitor its operation performance. Besides, we will continue to take into account views from various stakeholders and make suitable adjustment to the work of the CGSs on environmental education and recycling support as and when necessary.

- b) Since the work on reducing waste at source and waste recycling is part of the routine waste management duties of the EPD, there is no separate breakdown of the expenditure involved. In 2018-19, the total estimated expenditure of the EPD on waste management is \$3.664 billion.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB303**

**(Question Serial No. 6139)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Provision for this financial year is \$32.4 million higher than the estimate for the past financial year. What are the details of the operation expenses and non-recurrent expenditure involved?

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 116)

Reply:

The Chief Executive announced in her 2017 Policy Address that a Countryside Conservation Office (CCO) would be established to co-ordinate conservation projects that would promote sustainable development of remote countryside. The CCO will be set up in 2018-19, which is expected to comprise about 28 officers from various grades including 1 Administrative Officer Staff Grade C, 1 Senior Environmental Protection Officer, 3 Environmental Protection Officers/Assistant Environmental Protection Officers, 1 Senior Environmental Protection Inspector, 2 Environmental Protection Inspectors, 1 Chief Executive Officer, 1 Senior Executive Officer, 2 Executive Officer Is, 2 Executive Officer IIs, 2 Clerical Officers, 4 Assistant Clerical Officers, 1 Personal Secretary I, 1 Senior Engineer, 1 Engineer/Assistant Engineer, 1 Architect/Assistant Architect, 1 Town Planner/Assistant Town Planner, 1 Landscape Architect/Assistant Landscape Architect, 1 Forestry Officer/Assistant Forestry Officer and 1 Liaison Officer I. The increase in expenditure under the Programme is mainly for the staff costs of these officers (about \$19.61 million) and cashflow needs earmarked for launching conservation activities and projects after establishment of the CCO (about \$10 million).

- End -

**CONTROLLING OFFICER'S REPLY****ENB304****(Question Serial No. 6144)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (3) NoiseControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Would the Department inform this Committee of the audit evaluation of the Environmental Protection Department's handling of complaint cases about noises from neighbours or living environment in various districts it received in 2017? Please reply using the table below.

Administrative district	Total number of complaints	Number of cases being handled	Number of cases that were unsubstantiated	Number of cases that were substantiated	Average handling time	Cost(\$)

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 62)Reply:

The figures regarding the handling of noise complaints by the Environmental Protection Department (EPD) in 2017 are as follows:

Administrative district	Total number of complaints <sup>1</sup>	Number of cases being handled	Number of cases that were unsubstantiated/ Number of cases where the noise nuisance was yet to be confirmed <sup>2</sup> (Number of cases where guidance and advice were provided <sup>3</sup> )	Number of cases that were substantiated/ Number of cases where the noise nuisance was confirmed <sup>4</sup>	Average handling time	Cost(\$)
Central & Western	485	0	387 (380)	98	95% of the cases with initial response provided in 3 working days	As the handling of and follow up on the complaints as well as prosecution actions are part of the regular integrated work of EPD, there is no separate breakdown on the manpower and expenditure involved.
Wan Chai	338	5	315 (310)	18		
Eastern	335	0	270 (267)	65		
Southern	88	0	76 (42)	12		
Yau Tsim Mong	461	0	304 (301)	157		
Sham Shui Po	322	13	293 (291)	16		
Kowloon City	397	2	353 (346)	42		
Wong Tai Sin	139	0	117 (116)	22		
Kwun Tong	277	5	251 (250)	21		
Tsuen Wan	198	0	123 (120)	75		
Tuen Mun	205	3	158 (158)	44		
Yuen Long	422	7	315 (307)	100		
North	157	5	124 (123)	28		
Tai Po	201	0	130 (100)	71		
Sai Kung	249	8	187 (185)	54		
Sha Tin	323	5	224 (183)	94		
Kwai Tsing	134	12	83 (80)	39		
Islands	54	0	43 (41)	11		
Total number	4 785	65	3 753 (3 600)	967	-	-

<sup>1</sup> Including complaints about noise from the transport, industrial and commercial sectors, construction activity, neighbourhood (neighbours) and in public places. EPD will carry out investigation and follow-up action for each complaint.

<sup>2</sup> Including complaints that were withdrawn by the complainants, cases that were outside EPD's purview and required referral to other departments for follow-up and cases where the situation reported in the complaints was not found after investigation.

<sup>3</sup> Cases where guidance and advice were provided by EPD to the person being complained against to reduce the possibility of recurrence of noises despite no noise problem found during the investigation.

<sup>4</sup> Including cases where the noise problem was confirmed after investigation and was resolved after advice was provided or enforcement action was taken.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB305**

**(Question Serial No. 6378)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (3) Noise

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

- a. Has the Environmental Protection Department planned to retrofit all major roads near residential dwellings, such as the East Kowloon Corridor and the West Kowloon Corridor, with noise barriers? If yes, what is the timetable? If no, what are the reasons?
- b. Please list the locations of roads currently paved with noise-reducing asphalt. What is its effectiveness in noise reduction? Has the Government planned to increase the use of noise-reducing asphalt? If yes, what is the timetable? If no, what are the reasons?

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 108)

Reply:

- a. We have studied, in collaboration with relevant departments (e.g. the Highways Department), the technical feasibility of retrofitting noise barriers and noise enclosures on some existing roads (including major roads such as the East Kowloon Corridor and the West Kowloon Corridor, etc.) with a view to reducing the traffic noise experienced by neighbouring residents to a level below relevant standards/guidelines. The findings indicate that it is technically feasible to retrofit noise-reduction facilities on 41 road sections. It is expected that some 100 000 residents will be benefited upon implementation of retrofitting measures on these road sections. So far, we have completed the retrofitting works on 17 road sections with that on 2 other road sections in progress. Currently, we are also preparing the funding submission for that on another road section to the Legislative Council. We will also continue to review the retrofitting works on the remaining 21 road sections.

As for the East Kowloon Corridor and the West Kowloon Corridor, our study reveals that as these flyovers were built many years ago, their structure does not have any extra supporting capability to support noise barriers or noise enclosures. Also, there is not enough space on the ground along the flyovers for accommodating the construction of independent structures to support the noise barriers. Therefore, it is not technically



feasible to retrofit noise barriers or noise enclosures on these flyovers. Nevertheless, the Highways Department has already applied low-noise road surfacing materials on these flyovers to mitigate traffic noise nuisances.

- b. Noise-reducing asphalt, which can effectively reduce noise by a maximum of 5 dB(A), has already been widely applied as standard road surfacing material for high speed roads across the territory. For other roads, we have also applied different kinds of noise-reducing asphalt on 73 local road sections to study in detail the feasibility of applying low-noise road surfacing materials on these roads. According to the data collected, although the application of certain types of noise-reducing asphalt may achieve noise reduction of up to about 3 dB(A) on local roads, it is also found that situations which commonly occur on local roads (such as frequent acceleration, braking, turning and parking of vehicles) will cause damage to such noise-reducing asphalt more easily, thus affecting its noise-reducing effect and leading to maintenance problem. We will continue to conduct similar tests for different materials and review the way forward of applying low-noise road surfacing materials on local roads. The above-mentioned road sections where noise-reducing asphalt has been applied are as follows:

<b>Road Section</b>	<b>From</b>	<b>To</b>
Queen's Road West	Western Street	Water Street
Whitty Street	Des Voeux Road West	Queen's Road West
Electric Road	Gordon Road	Tsing Fung Street
Java Road	Tong Shui Road	Tin Chiu Street
Kornhill Road	King's Road (east junction)	King's Road (west junction)
Wong Nai Chung Road	Sing Woo Road	Broadwood Road
Wong Nai Chung Road	Sports Road	Broadwood Road
Kingston Street	Paterson Street	Gloucester Road
Johnston Road	Luard Road	Fleming Road
Hennessy Road	Fleming Road	Stewart Road
Pik Wan Road	Tak Shing House	Tak Shui House
Lei Yue Mun Road	Ko Chiu Road (north junction)	Ko Chiu Road (south junction)
Embankment Road	Prince Edward Road West	Boundary Street
Lomond Road	Argyle Street	Prince Edward Road West
Ma Tau Kok Road	Kowloon City Road	Ma Tau Chung Road
Long Yuet Street	San Ma Tau Street	Kwei Chow Street
Tai Hang Tung Road	Tong Yam Street	Tat Chee Avenue
Shek Kip Mei Street	Woh Chai Street	Tai Po Road
Hing Wah Street	Cheung Sha Wan Road	Un Chau Street
Un Chau Street	Hing Wah Street	Tonkin Street
Tonkin Street	Cheung Sha Wan Road	Un Chau Street
Un Chau Street	Tonkin Street	Yen Chow Street
Lai Chi Kok Road (Westbound)	Tai Nan West Street	Cheung Mou Street
Sai Chuen Road	Fu Sing House	Fu Wen House
Fung Tak Road	Lung Poon Street	Sheung Yuen Street
Chuk Yuen Road	Ma Chai Hang Playground	Nga Chuk Street

Road Section	From	To
Tung Tau Tsuen Road	Shatin Pass Road	Ching Tak Street
Oak Street	Cherry Street	Ivy Street
Cox's Road	Austin Road	Jordan Road
Kimberley Road	Nathan Road	Observatory Road
Public Square Street	Ferry Street	Canton Road
Fa Yuen Street	Prince Edward Road West	Boundary Street
Mong Kok Road	Shanghai Street	Tong Mei Road
Portland Street	Waterloo Road	Changsha Street
Sai Yee Street	Prince Edward Road West	Boundary Street
Shanghai Street	Dundas Street	Shantung Street
Yim Po Fong Street	Shantung Street	Soy Street
Tai Po Tai Wo Road	On Cheung Road	Nam Wan Road
Tai Po Tai Wo Road	Ting Kok Road	Ting Tai Road
Ma Miu Road	Yuen Long On Ning Road	Ma Wang Road
Castle Peak Road	Ping Ha Road	Tin Ha Road
Long Ping Road	Fung Chi Road	Long Ping Road Interchange
Wang Tat Road	Wang Lok Street	Chun Hing San Tsuen
Castle Peak Road	Tuen Mun Heung Sze Wui Road	Hing Ping Road
Tuen Mun Heung Sze Wui Road	Siu Lun Street	Hoi Chu Road
Wu Shan Road	Lung Mun Road	Wu King Road
Tuen Mun Heung Sze Wui Road	Tuen Hing Road	Siu Lun Street
Castle Peak Road	Pui To Road	Tuen Mun Heung Sze Wui Road
Jockey Club Road	Lung Sum Avenue	San Fung Avenue
Ma Sik Road	Jockey Club Road	Tin Ping Road
Pak Wo Road	So Kwun Po Road	Pak Wo Road Roundabout
Pak Wo Road	Choi Yuen Road	Po Wing Road
Chiu Shun Road	Po Ning Road	Ngan O Road
Ngan O Road	Pui Shing Road	Chiu Shun Road
Tai Chung Kiu Road	Sha Kok Street	Sha Tin Wai Road
Chui Tin Street	Che Kung Miu Road	Cul-de-sac
Sha Tin Wai Road	Ngau Pei Sha Street	Ngan Shing Street
Siu Lek Yuen Road	Chap Wai Kon Street	Tai Chung Kiu Road
Ngan Shing Street	Siu Lek Yuen Road	Tak Wing Street
Texaco Road	Kwok Shui Road	Tsuen Kam Interchange
Yeung Uk Road	Tai Ho Road	Chung On Street
Kwai Yik Road	Kwai Chung Road	Hing Fong Road
Junction Road	Boundary Street	Carpenter Road
Texaco Road Flyover	Castle Peak Road	Sha Tsui Road
Hung Mui Kuk Road Flyover	Tin Sam Street	Chung Pak Road
San Wan Road	Fanling Swimming Pool	Pik Fung Road

<b>Road Section</b>	<b>From</b>	<b>To</b>
Ting Kok Road	Tai Po Tai Wo Road	Ting Tai Road
Chung Hau Street	Oi Man Estate Bus Terminus	Hau Man Street
Sha Tin Wai Road	Sha Kok Street	Tai Chung Kiu Road
Harcourt Road	Lamp Post 39261	Admiralty Centre
Victoria Road	Lamp Post 39660	Lamp Post 39670
Fo Tan Road	Lamp Post BE0299	Lamp Post BE0302
Yuen Long On Lok Road	Castle Peak Road – Yuen Long Section	Shui Mun Tau Rest Garden

- End -

**CONTROLLING OFFICER'S REPLY****ENB306****(Question Serial No. 5309)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the policy on electric vehicles (EVs), the Budget only made fine-tuning in respect of electric private cars. Apart from continuing with the current First Registration Tax concession of up to \$97,500, the Government will also launch a new “one-for-one replacement” scheme to encourage existing vehicle owners to replace their vehicles with electric private cars.

It should be noted that clean energy used by EVs is the general trend in the future development of vehicles. Major vehicle-producing countries worldwide have made strenuous efforts to promote the market share of EVs. However, the Government has all along been evading the issues of long-term planning for EVs and how to increase charging facilities correspondingly.

Would the Government re-establish the Steering Committee on Electric Vehicles to conduct a comprehensive review on the EV policy and to carry out long-term planning so that the number of EVs will increase significantly to a cost-effective level and a new industrial chain evolving the business ecology of EVs will come into being? If yes, what are the details? If no, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 13)Reply:

Commercial vehicles (CVs) account for 95% of the vehicular emissions of respirable suspended particulates and nitrogen oxides, both major air pollutants. Hence, CVs have all along been a major target of the Government's measures to improve roadside air quality. Electric vehicles (EVs) have no tailpipe emissions and are efficient in converting energy from the grid to power at the wheels. Replacing conventional vehicles, especially CVs, with EVs can help improve roadside air quality and reduce greenhouse gas emissions.

The Government currently focus on promoting electric CVs (e-CVs) through various measures: the first registration tax (FRT) of e-CVs is fully waived; since 2010, enterprises

which procure environment-friendly vehicles including EVs are allowed full profit tax deduction for the capital expenditure on the vehicle in the first year of procurement; a \$300 million Pilot Green Transport Fund (PGTF) has been put in place since March 2011 to encourage the public transport sectors, goods vehicle operators and non-profit-making organisations to test out green innovative transport technologies, including e-CVs; and \$180 million was set aside to fully subsidise the franchised bus companies to purchase 36 single-deck electric buses for trial.

The effectiveness of our policies on promoting the use of e-CVs depends very much on the maturity of e-CV technologies, their prices and suitability for use in Hong Kong (including their ability to suit the modus operandi of local transport sectors). However, existing e-CV technologies are yet to fully meet the operational needs of the local transport sectors. As at the end of January 2018, the trials on e-CVs approved by PGTF covered various types of vehicles (including taxis, light buses, single-deck buses and goods vehicles). Results of the trials have reflected that high production cost, limited service life, long charging time and low energy density of EV batteries are the key constraints for e-CVs to become popular. The driving range and charging time of most e-CVs currently available in the local market are yet to completely cope with the requirements of the local transport sectors. Besides, prices of e-CVs are not as competitive as their conventional counterparts, and inadequate maintenance services are also not uncommon. The trial results have also revealed that electric light goods vehicles (e-LGVs) are more likely to prevail and are suitable for operators who require relatively lower daily mileage and payload. Looking ahead, we will promote the use of e-LGVs, continue to keep in view the technological developments of e-CVs, and encourage the transport sectors to make use of the PGTF to try out other green innovative transport technologies and their suppliers to introduce more products for use by the local transport sectors.

As mentioned above, to promote the use of electric franchised buses, the Government is fully subsidising the franchised bus companies to purchase 36 single-deck electric buses and their charging facilities for trial on a number of routes to assess their operational efficiency and performance under local conditions. At present, 26 electric buses have commenced operations. It is expected that most of the remaining electric buses will progressively commence operation in 2018. The Government will explore how to promote wider use of single-deck electric buses by the franchised bus companies, subject to the outcome of the trials as well as the affordability of the franchised bus companies and passengers. As for double-deck electric buses, their technology is still developing and there are very few models available in the international arena. Although about 95% of the franchised buses in Hong Kong are double-deck buses, double-deck electric buses that can carry a large number of passengers and are suitable for use in local environment are still lacking in the market. We will keep in view the development in other places and introduce double-deck electric buses for trial in due course.

As for e-PCs, the Government's standing policy is to encourage the public to use public transport as far as possible, and should they need to acquire private cars, choose e-PCs. The Government's main supporting measures include offering financial incentives such as tax concession and lower annual vehicle licence fee, and facilitating the development and improvement of charging networks for e-PCs. Through these measures, and coupled with the significant technology advancement for e-PCs in recent years, the number of e-PCs in Hong Kong has substantially increased to 10 997 as at the end of March 2017 from less than

100 at the end of 2010. After capping the FRT concessions for e-PCs at \$97,500 in 2017-18, the Government has been closely monitoring the latest situation. Taking into account factors such as the technological development and market situation of EVs, road traffic conditions and views of stakeholders, the Government considers that on one hand, it has to control the growth of PCs to avoid causing traffic congestion and aggravating roadside air pollution, and on the other hand, it also hopes to encourage car owners to go for EVs as far as possible when purchasing PCs. As such, apart from continuing with the current FRT concession up to \$97,500 from 28 February 2018 to 31 March 2021, the Government has introduced the new “One-for-One Replacement” Scheme (Scheme) in the above period to allow eligible existing car owners who buy a new e-PC and scrap their own eligible old PC to enjoy a higher FRT concession of up to \$250,000. The Government believes that the new Scheme will provide greater economic incentives to encourage eligible existing PC owners to purchase e-PCs when replacing their cars.

Regarding the charging arrangements for e-PCs, it has always been the Government's policy direction that e-PC owners should perform daily charging of their e-PCs by using charging facilities at their home, workplace or other suitable places (including charging facilities provided by e-PC suppliers). Public charging facilities in Hong Kong are supplementary in nature, set up for EVs to top up their batteries at times of occasional needs. They do not serve as daily charging facilities or their alternatives. Potential buyers of e-PCs should fully consider the daily charging arrangements required and should not rely on public charging facilities for daily charging of their e-PCs.

Given the above policy direction, the Government's priority is to facilitate and encourage the installation of charging facilities in private premises when planning for the development of charging facilities for e-PCs. These measures include the Environmental Protection Department's (EPD) establishment in 2011 of a dedicated team and a hotline to provide information and technical support for the installation of EV charging facilities, and the Government's tightening of gross floor area concessions for private car parks in new buildings in April 2011 to encourage developers to provide the EV charging-enabling infrastructure, including provision of sufficient power supply, cabling and conduits for all parking spaces in the buildings concerned. On the development of public charging networks as supplementary facilities, the Government not only takes the lead in providing and enhancing its public charging facilities in government car parks but also supports private establishments to set up and enhance non-governmental public charging networks.

As at the end of 2017, the number of public chargers provided in government and private car parks open for public use in Hong Kong was 1 862, including 931 standard chargers, 605 medium chargers and 326 quick chargers. To improve the charging efficiency, EPD has progressively upgraded standard chargers to medium chargers in the past few years (as compared with standard chargers, medium chargers can reduce the charging time by up to 60%). As at the end of 2017, EPD has installed 519 chargers, among which 268 are medium chargers, in 425 parking spaces (representing 7% of the relevant parking spaces) in the government car parks managed by the Transport Department and Government Property Agency which are open for public use.

The Steering Committee on the Promotion of Electric Vehicles (the Committee) has given advice on various strategies and measures in promoting the use of EVs in Hong Kong for

the Government's careful consideration and implementation. Key measures implemented include the following:

- i. setting up the PGTF to try out green transport technologies. As at the end of 2017, the PGTF approved 109 trials, including different types of e-CVs (e.g. taxis, coaches, light buses and goods vehicles);
- ii. various measures mentioned above for increasing and enhancing charging facilities, including the promotion of the use of EVs in the public transport sector. The Government is fully subsidising the franchised bus companies to purchase 36 single-deck electric buses and related charging facilities for trial on a number of routes to assess their operational efficiency and performance under the local conditions; and
- iii. subject to the operational requirements of the departments and the supply of EV models in the market, the Government takes the lead in using more EVs. As at the end of 2017, there are 254 EVs in the Government fleet.

In the light of the rapid changes in the usage of EVs, the Government is reviewing the various policies and measures on promoting the use of EVs. Our efforts include exploring ways to encourage installation of charging facilities to tie in with the usage of EVs and retrofitting existing car parks with charging facilities.

- End -

**CONTROLLING OFFICER'S REPLY****ENB307****(Question Serial No. 5881)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the “provision of air quality information and air quality health index (AQHI) to the public” as mentioned in the Estimates,

please advise:

What were the numbers of days on which AQHI in Hong Kong was at the “Low (1-3)” category in each of the past 5 years?

What is the expenditure earmarked by the Government this year for the maintenance or improvement of air quality?

Asked by: Hon OR Chong-shing, Wilson (Member Question No. (LegCo use): 58)

Reply:

The Environmental Protection Department (EPD) launched the Air Quality Health Index (AQHI) on 30 December 2013 to replace the Air Pollution Index (API) adopted in the past. The AQHI is a health risk based system which builds on the correlation between local hospital admission data for heart or respiratory illnesses and the concentration levels of air pollutants, and therefore can more accurately reflect the impact of air quality on public health.

Since the implementation of the AQHI, the numbers of days on which the daily maximum AQHI reached the “Low (1-3)” category at EPD’s general and roadside air quality monitoring stations (AQMSs) from 2014 to 2017 are set out respectively in the following table:

<b>Year</b>	<b>General AQMSs</b>	<b>Roadside AQMSs</b>
2014	57	1
2015	51	7
2016	70	31
2017	89	23

\*Based on the daily maximum AQHI recorded at the AQMSs



In 2018-19, the total estimated expenditure under the Air Programme is \$1.889 billion. Most of the estimated expenditure is for some non-recurrent items for improving the air quality, including the provision of ex-gratia payment to phase out pre-Euro IV diesel commercial vehicles by stages, subsidising franchised bus companies in full to conduct trials of electric buses, supporting testing of green transport technologies by the public transport sector through the Pilot Green Transport Fund, and promoting the Cleaner Production Partnership Programme. The rest of the estimated expenditure is for monitoring the air quality and implementing measures to control emissions from various air pollution sources, so as to improve the air quality. This includes expenditure for the operation and maintenance of AQMSs, deploying roadside remote sensing equipment to detect the emissions of petrol and liquefied petroleum gas vehicles, regulating vessels to use compliant fuel while at berth in Hong Kong and preparing for legislation to require vessels to use compliant fuel within Hong Kong waters starting from 2019, reviewing the Air Quality Objectives and the continuous collaboration with the Guangdong Provincial Government on the implementation of the Pearl River Delta Regional Air Quality Management Plan.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB308**

**(Question Serial No. 4972)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

How many cases of illegal dumping of construction waste were there in each of the past 5 years? What were the numbers of prosecutions, persons involved and convictions by the court? What were the penalties imposed?

Asked by: Hon SHIU Ka-chun (Member Question No. (LegCo use): 164)

Reply:

Cases of dumping of construction waste may include illegal disposal of construction waste on government land and land filling of construction waste on private land. The number of public reports on illegal disposal of construction waste handled by the relevant government departments (including the Agriculture, Fisheries and Conservation Department, Buildings Department, Civil Engineering and Development Department, Drainage Services Department, Environmental Protection Department, Food and Environmental Hygiene Department, Home Affairs Department, Lands Department, Planning Department and Highways Department), as well as the number of prosecutions, persons involved, convictions by the court and total fine in the past 5 years are tabulated below:

### Illegal disposal of construction waste on government land

Year	2013	2014	2015	2016	2017
Public reports*	8 335	7 565	6 499	8 225	10 507
Number of prosecutions					
(1) Number of summonses	40	58	71	105	80
Summonses involving individuals	39	56	70	101	67
Summonses involving companies	1	2	1	4	13
(2) Number of convictions by the court	40	58	67	101	77
(3) Number of Fixed Penalty Notices (FPNs) issued **	47	35	32	45	33
Total fine (\$)	310,000	390,000	430,000	890,000	560,000

Notes:

\* Including repeated cases.

\*\* The fine level of the FPNs is \$1, 500.

### Land filling of construction waste on private land

Year	2013	2014	2015	2016	2017
Public reports *	401	464	456	571	397
Number of prosecutions					
(1) Number of summonses	27	5**	28	52	96
Summonses involving individuals	23	5	22	30	84
Summonses involving companies	4	0	6	22	12
(2) Number of convictions by the court	13	15**	25	41	69
Total fine (\$)	290,000	340,000	990,000	1,220,000	1,340,000

Notes:

\* Including repeated cases.

\*\* Prosecutions may not be concluded in the year when the summonses are issued, and therefore the number of convictions was larger than that of prosecutions in 2014.

- End -

**CONTROLLING OFFICER'S REPLY****ENB309****(Question Serial No. 4973)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

How many inspections were conducted by the Government on dumping of construction waste in each of the past 5 years? What were the staffing and financial expenditure involved?

Asked by: Hon SHIU Ka-chun (Member Question No. (LegCo use): 165)Reply:

Cases of dumping of construction waste may include illegal disposal of construction waste on government land and land filling of construction waste on private land. The respective numbers of inspections conducted by the relevant government departments (including the Agriculture, Fisheries and Conservation Department, Buildings Department, Civil Engineering and Development Department, Drainage Services Department, Environmental Protection Department, Food and Environmental Hygiene Department, Home Affairs Department, Lands Department, Planning Department and Highways Department) in the past 5 years are tabulated below:

**Illegal disposal of construction waste on government land**

	Year				
	2013	2014	2015	2016	2017
Number of inspections	13 564	13 578	14 889	16 795	13 798

**Land filling of construction waste on private land**

	Year				
	2013	2014	2015	2016	2017
Number of inspections	1 110	1 257	1 455	1 622	1 662

The above inspections form part of the routine enforcement work of the relevant departments. We do not have separate figures for the manpower and expenditure involved.

- End -

**CONTROLLING OFFICER'S REPLY****ENB310****(Question Serial No. 5194)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (6) Nature ConservationControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

To further promote the revitalisation of remote rural areas, the Government will establish a preparatory committee for a conservation fund. Please set out the scope of work of the committee, as well as the expenditure and manpower involved.

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 588)Reply:

The Chief Executive announced in her 2017 Policy Address that a Countryside Conservation Office (CCO) would be established to co-ordinate conservation projects that would promote sustainable development of remote countryside. The CCO will be set up in 2018-19, which is expected to comprise about 28 officers from various grades including 1 Administrative Officer Staff Grade C, 1 Senior Environmental Protection Officer, 3 Environmental Protection Officers/Assistant Environmental Protection Officers, 1 Senior Environmental Protection Inspector, 2 Environmental Protection Inspectors, 1 Chief Executive Officer, 1 Senior Executive Officer, 2 Executive Officer Is, 2 Executive Officer IIs, 2 Clerical Officers, 4 Assistant Clerical Officers, 1 Personal Secretary I, 1 Senior Engineer, 1 Engineer/Assistant Engineer, 1 Architect/Assistant Architect, 1 Town Planner/Assistant Town Planner, 1 Landscape Architect/Assistant Landscape Architect, 1 Forestry Officer/Assistant Forestry Officer and 1 Liaison Officer I. The increase in expenditure under the Programme mainly includes the staff costs of these officers (about \$19.61 million) and cashflow needs earmarked for launching conservation activities and projects after establishment of the CCO (about \$10 million).

We will set up an advisory committee (AC) comprising non-official members including non-government stakeholders such as scholars, professionals, rural/district stakeholders and green groups. The main duties of the AC are to examine applications on the relevant conservation and revitalisation projects (not including minor improvement works) submitted by non-governmental organisations and monitor the implementation of approved projects

and proposals. The CCO will consult the AC on the scope of and application procedures for conservation and revitalisation projects.

After detailed consideration, we consider that the CCO and setting aside the provision of \$1 billion to carry out conservation and revitalisation work as well as minor works in remote rural areas can promote the sustainable development and conservation of remote countryside more directly and effectively. Therefore, there is no need to set up a conservation fund preparatory committee at the same time.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB311**

**(Question Serial No. 3605)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding support for the recycling industry, please advise this Committee on the following:

- 1) The information of the land provided for use by the recycling industry through short-term tenancy up to 31 December 2017; please list each tenancy by a) area of the land, b) rentals;
- 2) The information of the land provided for use by the recycling industry through short-term tenancy up to 31 December 2017; please list each tenancy by a) remainder of the term of the tenancy (e.g. remainder of 12, 24 or 36 months), b) the respective district of the short-term tenancy;
- 3) In 2017-18, what measures does the Environmental Protection Department have to help recyclers whose short-term tenancies were terminated to look for a new site?
- 4) How many additional sites to be leased out on short-term tenancy will be reserved for the recycling industry in 2018-19?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 153)

Reply:

While the recycling industry may bid for suitable short-term tenancy (STT) sites for general uses, the Government has been allocating suitable land through STT for exclusive bidding by the recycling industry. As at 31 December 2017, there were 32 STT sites dedicated to the recycling industry, occupying a total area of 4.8 hectares. The fixed term of tenancy ranged from 6 months to 7 years. The site areas ranged from about 70 square metres to 5 000 square metres. The details of the 32 STT sites for exclusive use by the recycling industry are provided in the following Table 1 to Table 4.

Table 1: By site area

Site area (m <sup>2</sup> )	Number of sites (no.)	Monthly rent* (HK\$/m <sup>2</sup> )
Less than 1 000	17	15 – 217
1 000 – 4 000	9	3 – 135
More than 4 000	6	11 – 52

Table 2: By rentals

Monthly rent* (HK\$/m <sup>2</sup> )	Number of sites (no.)	Site area (m <sup>2</sup> )
Less than 15	3	1 000 – 4 140
15 – 45	17	70 – 5 300
46 – 90	5	240 – 4 730
91 – 110	3	590 – 1 480
More than 110	4	520 – 1 400

Table 3: By remaining period of the tenancy term

Remaining period of the tenancy term	Number of sites (no.)	Remarks
Less than 12 months	2	
12 – 36 months	0	
More than 36 months	3	
Renewal on a monthly/quarterly basis and Tendering process in planning/progress	27	<p>1) 15 sites are renewed on a monthly/quarterly basis until they are taken back for long term development.</p> <p>2) 12 sites currently allocated to recycling industry are being re-tendered/planned for re-tendering to recycling industry again at the expiry of the fixed term period.</p>



Table 4: By the respective district of the STTs

<b>Districts</b>	<b>Number of sites (no.)</b>	<b>Area (m<sup>2</sup>)</b>	<b>Average monthly rent* (HK\$/m<sup>2</sup>)</b>
Kowloon City	4	1 000 – 1 480	112
Sham Shui Po	1	590	98
Kwun Tong	2	240 – 730	77
Eastern	1	2 530	48
Tai Po	3	4 300 – 5 300	33
Yuen Long	1	4 140	11
North	4	1 990 – 4 730	44
Sai Kung	10	200 – 270	15
Kwai Tsing	3	520 – 1 590	145
Islands	3	70 – 1 000	12

\* Based on the rental level in December 2017

We have been working with the Lands Department and the Planning Department in searching more suitable STT sites for bidding by the recycling industry. Apart from the above-mentioned 32 sites, we have been working with the above departments to identify a few potential STT sites which are likely to be suitable for waste recycling purpose. The total area of the relevant land is about 0.7 hectares. We are conducting evaluation on the sites and consulting the local stakeholders, so as to ascertain the suitability of the relevant sites for waste recycling purpose, determine the types of recyclable materials that can be handled, the pollution control requirements and the term of tenancy, etc.. Upon completion, suitable STT sites will be let out as soon as possible through open bidding by the recycling industry.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB312**

**(Question Serial No. 3607)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding food waste reduction and recycling, please advise this Committee:

- 1) Since the Organic Resources Recovery Centres (ORRCs) will mainly handle commercial and industrial food waste, what measures does the Government have to promote recovery and recycling of domestic food waste in 2018-19 and 2019-20?
- 2) Did the Government study the implementation of food waste recycling schemes in all housing estates in Hong Kong in the past 3 years? If yes, what are the details?
- 3) As food waste recovery and recycling need to be complemented by building design and temporary food waste storage facilities, please advise this Committee whether the Environmental Protection Department requested other government departments (e.g. Planning Department, Food and Environmental Hygiene Department, etc.) in the past 3 years to interface with the implementation of food waste recycling schemes in all housing estates in Hong Kong in future.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 155)

Reply:

The Government launched the Funding Scheme for Food Waste Recycling Projects in Housing Estates in July 2011 under the Environment and Conservation Fund (ECF) to fund private housing estates to install on-site food waste treatment facilities and organise relevant educational and promotional activities in order to encourage the residents to participate in domestic food waste recovery and raise their awareness on food waste reduction and recycling, to gradually build up the habit of food waste avoidance in daily lives and to practise source separation for recycling. The Environmental Protection Department (EPD) has also set up a help-desk service to help housing estates which are interested in joining the scheme to make applications, and to provide technical support to them, as well as provide professional advice to the ECF for supporting suitable housing estates to install food waste treatment facilities. In addition, under the Food Wise Hong Kong Campaign, we have drawn up a good practice guide for the residential sector, and shared the relevant experience through channels such as seminars, so as to encourage the participation of residents and

property management organisations in domestic food waste recovery and recycling. In 2018-19 and 2019-20, the EPD will continue to implement the above work to promote domestic food waste recovery and recycling.

According to “A Food Waste & Yard Waste Plan for Hong Kong 2014–2022” announced in 2014, the Government will gradually develop a network comprising 5 to 6 organic resources recovery centres (ORRCs). ORRC Phase 1 will be located at Siu Ho Wan of Lantau with a daily capacity of 200 tonnes of food waste, which is scheduled to be commissioned in 2018. ORRC Phase 2 will be located at Sha Ling of the North District with a daily capacity of 300 tonnes of food waste. We have completed the tender exercise for Phase 2, and will seek funding approval from the Legislative Council as soon as possible so as to commence the construction early. We have identified a site at Shek Kong of Yuen Long to develop ORRC Phase 3 with a daily capacity of 300 tonnes of food waste. We will take forward the environmental impact assessment and engineering feasibility study for Phase 3 in 2018.

In addition, we will commission the “Food Waste/Sewage Sludge Anaerobic Co-digestion” Trial Scheme at Tai Po Sewage Treatment Works (STW) in 2019 to study and establish the technical feasibility and installation requirements of using existing sewage treatment facilities for food waste/sewage sludge anaerobic co-digestion, to help raise Hong Kong’s overall food waste treatment capability. Under the Trial Scheme, we will construct Food Waste Pre-treatment Facilities at the existing Shuen Wan Leachate Pre-treatment Works in Tai Po to treat up to 50 tonnes of food waste per day, and then transport it to the existing sewage sludge anaerobic digestion system at the Tai Po STW for food waste/sewage sludge anaerobic co-digestion. The biogas so generated will be turned into electricity for use by the Tai Po STW.

Since food waste from the commercial and industrial (C&I) establishments can be more easily separated, ORRC Phase 1 and ORRC Phase 2, as well as the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at Tai Po STW will mainly handle food waste from the C&I sectors. Domestic food waste recycling will gradually be increased following the commissioning of ORRC Phase 3.

The Government commenced the “Organic waste collection and delivery to organic resources recovery centre - feasibility study” in March 2017 to review the current collection and delivery arrangements for organic waste generated by households, C&I establishments, educational institutions and government organisations. A feasible and effective proposal on collection and delivery of organic waste will be formulated according to the actual situation in Hong Kong. The study is expected to be completed in 2018.

Moreover, to tie in with the establishment of the ORRC network, the EPD will set up a new Food Waste Recycling Group to, among other things, conduct the feasibility study on the implementation of a food waste source separation scheme in Hong Kong, including exploring its impacts on the industry, economy and people’s livelihood, and studying the legislative procedures that the scheme may involve. The Food Waste Recycling Group will also endeavour to promote the Food Wise Hong Kong Campaign with a view to further enhancing the community’s understanding of and participation in food waste separation and recycling.

- End -

**CONTROLLING OFFICER'S REPLY****ENB313****(Question Serial No. 3608)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (6) Nature ConservationControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please advise this Committee on:

1) details of the implementation of various measures by the Environmental Protection Department for protection of country park enclaves in 2016-17 and 2017-18, particularly the work relating to enclaves suitable for incorporation into country parks, including whether regular inspections are conducted, as well as the number of complaints against offences received, prosecutions and convictions made;

2) the estimated manpower and expenditure for this area of work in 2018-19.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 156)Reply:

1. &amp; 2.

The Environmental Protection Department, through the Agriculture, Fisheries and Conservation Department (AFCD), conducts regular patrols in country parks and enclaves. The expenditure and manpower involved in the past 2 financial years are shown in the table below:

Financial Year	Expenditure (\$ million)	No. of staff
2016-17	54.5	140
2017-18	52.5 (revised estimate)	133

The resources earmarked by AFCD for this purpose for 2018-19 are comparable to those for 2017-18.

AFCD conducts regular patrols in country parks including the enclaves. If suspected cases of unauthorised developments are detected in enclaves incorporated in the country parks, AFCD will take enforcement actions under the Country Parks Ordinance (Cap. 208) or refer such cases to the relevant departments as appropriate for follow-up actions to be taken in

accordance with the relevant legislation or lease conditions. In the past 2 financial years, AFCD did not receive or detect any cases of unauthorised developments in enclaves incorporated in the country parks. As monitoring enclaves is part of the patrolling duties of the frontline staff, AFCD does not have breakdown in respect of the patrolling of enclaves.

Moreover, AFCD has completed the relevant statutory procedures in December 2017 to incorporate 3 of the enclaves situated in Fan Kei Tok, Sai Lau Kong and near Nam Shan into country parks. AFCD will continue to assess the suitability for incorporating the remaining enclaves not covered by statutory town plans into country parks according to the established principles and criteria as well as relevant considerations, and will put forward proposals to incorporate suitable enclaves into country parks in accordance with the statutory procedures stipulated in the Country Parks Ordinance (Cap. 208). As assessing the suitability for enclaves to be incorporated into country parks and incorporating suitable sites into relevant country parks are part of the routine work of AFCD, we do not have separate breakdown on the relevant expenditure and manpower.

- End -

**CONTROLLING OFFICER'S REPLY****ENB314****(Question Serial No. 3609)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please advise this Committee on:

- 1) How many projects have been funded by the Recycling Fund so far? What are the processed quantities involved for various types of recyclables?
- 2) What is the number of applications being processed at present?
- 3) What are the details of the measures to monitor and enhance the operation of the Recycling Fund to facilitate the upgrading of the operational capabilities and efficiencies of the recycling industry?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 157)Reply:

- 1) The Recycling Fund was launched and opened for applications in October 2015. As at 28 February 2018, approval has been granted by the Advisory Committee on Recycling Fund (RFAC) to 163 projects. Excluding the projects which have been withdrawn by some applicant organisations after their applications were approved, a total of 128 funded projects have been or will soon be commenced, of which 24 are under the Enterprise Support Programme (ESP), 97 are for Standard Projects and 7 are under the Industry Support Programme (ISP). The processed quantities of recyclables involved in these projects are set out in the table below.

<b>Types of recyclables</b>	<b>Processed quantities of approved projects (tonnes)</b>
Construction waste	55 300
Food waste/Waste cooking oil	21 700

<b>Types of recyclables</b>	<b>Processed quantities of approved projects (tonnes)</b>
Waste Electrical and Electronic Equipment	9 600
Waste plastics	8 700
Waste metals	3 700
Waste tyres	2 800
Waste paper	2 800
Used furniture	1 000
Waste styrofoam	300
Others (including used clothes, compact discs, toner cartridges, beverage cartons and spent lubrication oil)	1 600
<b>Total</b>	<b>107 500</b>

Note: The figures are rounded to the nearest hundred.

- 2) There are 46 applications being processed at present.
- 3) The Environmental Protection Department and the RFAC have been striving to enhance the operation of the Recycling Fund so that it will better address the needs of the industry and support its development. Without compromising the need in safeguarding the use of the Recycling Fund and maintaining effective control on applicants, various facilitation measures have been introduced since the Fund's early stage of operation. These measures include providing partial reimbursement of expenses to successful applicants before the launch of the projects under the ESP and the ISP and establishing a category of Standard Projects under the ESP to minimise the administrative workload of small and medium enterprises (SMEs) in making applications. The SMEs undertaking Standard Projects can also submit applications, report achievements and seek reimbursements in accordance with a set of streamlined procedures. Besides, the RFAC has approved the waiving of a condition on opening a designated project bank account for Standard Projects, and can provide interim reimbursement according to the progress of the projects.

In addition, to assist the recycling industry to address the Mainland's progressive tightening requirements on imports of recyclables, the Recycling Fund announced in September 2017 that \$20 million had been earmarked to expand the list of fundable items under "Standard Projects" to help upgrade the recyclers' ability in turning waste plastics into plastic products or raw materials as well as processing waste paper. The Recycling Fund also earmarked \$50 million for encouraging recyclers to use compactor trucks for more effective and efficient transportation of waste plastics and waste paper and hence reduce the collection and transportation costs of recyclables.

- End -

**CONTROLLING OFFICER'S REPLY****ENB315****(Question Serial No. 3610)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please advise this Committee on the following:

1) How many cases of dumping of construction waste and disposal of waste were there in each of the past 3 years? What were the numbers of prosecutions, persons involved and convictions by the court? What were the penalties imposed?

2) In 2018-19, what measures are in place to strengthen the control and handling of illegal dumping in remote locations and rural areas?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 158)Reply:

1) The number of reported cases on illegal disposal of waste handled by the Environmental Protection Department (EPD), as well as the number of prosecutions, number of convictions, number of offenders and total amount of fines in the past 3 years are as follows:

	Year		
	2015	2016	2017
Number of reported cases*	2 649	2 702	2 962
Number of prosecutions			
(1) Number of summonses issued	96	397	198
(2) Number of convictions	92	394	194
(3) Number of Fixed Penalty Notices (FPNs) issued**	112	195	177
(4) Number of offenders	208	592	375
Total amount of fines (\$)	837,400	3,309,400	1,282,900

Notes:

\* Include repeated cases.

\*\* The fine level of the FPNs is \$1,500.



2) In order to step up efforts in combating illegal disposal of waste, the EPD has progressively installed surveillance camera systems at illegal disposal black spots on government land and public places since 2016 to facilitate enforcement and enhance the deterrence against illegal disposal of waste. In 2017, 48 successful prosecutions were made with the information captured by the surveillance camera systems. In 2018-19, the EPD will continue to procure and install surveillance camera systems with enhanced and more advanced technical specifications, for more effectively capturing images of registration marks of vehicles under different circumstances to facilitate combating illegal disposal of waste. We will also make use of different channels to enhance the deterrent effect. These include issuing press releases to raise public awareness of environmental protection, encouraging the public to report illegal waste disposal activities, collaborating with relevant stakeholders, installing surveillance camera systems at black spots of illegal waste disposal, displaying warning posters at prominent places, etc. Moreover, the EPD will continue to flexibly deploy manpower, including mobilising the special operation units to combat illegal waste disposal at black spots across the territory, including those in the remote rural areas. The EPD will continue to closely monitor the situation of the black spots and flexibly adjust the strategies or deploy the surveillance camera systems as appropriate to achieve effective enforcement and deter illegal waste disposal. The EPD will also continue to strengthen collaboration with other relevant departments to jointly carry out monitoring and enforcement work.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB316**

**(Question Serial No. 5142)**

Head: (48) Government Laboratory

Subhead (No. & title): (-) Not Specified

Programme: (2) Advisory and Investigative Services

Controlling Officer: Government Chemist (Dr SIN Wai-mei)

Director of Bureau: Secretary for the Environment

Question:

The Administration mentioned that the estimate for advisory and investigative services for 2018-19 is 8.6% lower than the revised estimate for 2017-18, which is mainly due to decreased requirement for procurement of equipment and specialist supplies. In this connection, would the Administration please advise this Committee of:

1. the estimated expenditures for various items of advisory and investigative services; and the magnitude of increase/decrease?

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 197)

Reply:

The Government Laboratory does not make separate expenditure estimates for the various items of advisory and investigative services. The overall estimate for advisory and investigative services for 2018-19 is 8.6% lower than the revised estimate for 2017-18. This is mainly due to decreased requirement for procurement of equipment and specialist supplies. The Government Laboratory's expenditure in this aspect varies from year to year, depending on the need for replacing the existing testing equipment and the demand for new testing services.

- End -

**CONTROLLING OFFICER'S REPLY****ENB317****(Question Serial No. 5674)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the target of reducing the electricity consumption of the Government:

- a) Please list the total electricity consumption of buildings of various bureaux and the departments under their purview since 2013-14.
- b) Please list the details, electricity consumption and electricity costs of the 10 government buildings with the highest electricity consumption since 2013-14.
- c) The Government has earmarked \$ 200 million since the financial year 2017-18 and will earmark \$800 million in 2018-19 (paragraph 168) for the provision of renewable energy (RE) installations at suitable existing government buildings, venues and community facilities, etc. Please list the details of each individual approved project for the provision of RE installations at government buildings, venues and community facilities, etc., including the location, details of the facilities, price, power generation, the electricity and cost saving in 2017-18 and 2018-19. In addition, please list the estimated expenditure and manpower arrangements involved in 2018-19.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 205)Reply:

- a) The total electricity consumption of government buildings in the 4 financial years from 2013-14 to 2016-17 is as follows:

Year	Total electricity consumption of government buildings (kWh)
2013-14	1.419 billion
2014-15	1.460 billion
2015-16	1.476 billion
2016-17	(relevant data are still being collected)

- b) The details of the 10 government buildings with the highest electricity consumption since 2013-14 are as follows:

2015-16

	Name of building	Total electricity consumption of government buildings (kWh)
1	Immigration Tower	33.4 million
2	Central Government Offices	29 million
3	Public Health Laboratory Centre	21.4 million
4	High Block, Police Headquarters	21.2 million
5	Revenue Tower	20.4 million
6	Queensway Government Offices	16.3 million
7	Civil Aviation Department Headquarters	16.2 million
8	Wanchai Tower	15.7 million
9	Tai Po Complex	14.6 million
10	Hong Kong Cultural Centre	13.8 million

2014-15

	Name of building	Total electricity consumption of government buildings (kWh)
1	Immigration Tower	32.6 million
2	Central Government Offices	29.3 million
3	Revenue Tower	20.9 million
4	High Block, Police Headquarters	20.8 million
5	Public Health Laboratory Centre	20.5 million
6	Civil Aviation Department Headquarters	17 million
7	Queensway Government Offices	16.9 million
8	Wanchai Tower	16 million
9	Hong Kong Cultural Centre	15.2 million
10	Tai Po Complex	14.8 million

2013-14

	Name of building	Total electricity consumption of government buildings (kWh)
1	Immigration Tower	31.8 million
2	Central Government Offices	28.4 million
3	Revenue Tower	21 million
4	Public Health Laboratory Centre	19.9 million
5	High Block, Police Headquarters	19.1 million
6	Civil Aviation Department Headquarters	16.7 million
7	Wanchai Tower	16.6 million
8	Queensway Government Offices	16.4 million
9	Hong Kong Cultural Centre	16 million
10	Tai Po Complex	14.2 million

The energy-saving target of government buildings is benchmarked against the electricity consumption of the buildings, so the Electrical and Mechanical Services Department only

collects data of electricity consumption and not that of electricity costs when gathering the relevant data. Thus, we are not able to provide the relevant electricity cost data.

c) The Government has reserved funding for provision of renewable energy (RE) installation in government buildings and venues, as well as community facilities since the financial year 2017-18. The projects for which reserved funding has been approved are as follows:

<b>Project</b>	<b>Reserved funding (\$ million)</b>	<b>Estimated installed capacity (kW)</b>	<b>Estimated annual power generation (kWh)</b>
Installation of an additional combined heat and power generation system and re-installation of an electricity distribution network at Tai Po Sewage Treatment Works	29.8	630.0	2 000 000
Installation of an additional mini-turbine at Yuen Long Sewage Treatment Works	6.2	60.0	180 000
Provision of a grid-connected solar energy system at Stonecutters Island Sewage Treatment Works	10.0	100.0	73 000
Provision of solar energy systems at some rainwater and sewage treatment facilities	30.0	300.0	284 700
Installation of solar energy systems at the Hoi Ha Wan Marine Park Visitor Centre, Tai Mo Shan Country Park Visitor Centre and Aberdeen Tree Centre	7.5	37.5	4 500
Installation of a solar energy system at the Hong Kong Wetland Park	4.5	22.5	2 700

The above projects are expected to be completed between 2019-20 and 2021-22, so there is no record on power generation at present. As for projects in 2018-19, as individual project proposals are being considered by the relevant policy bureaux and government departments, details of these projects are not yet available at this stage.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB318**

**(Question Serial No. 5676)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

What were the work details of the Energy Advisory Committee last year? How many meetings were held last year? What was the attendance rate of each member?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 207)

Reply:

The Energy Advisory Committee (EnAC) was set up to advise the Government on energy policy, including policy matters concerning energy supply and demand, energy conservation and efficiency, and other related matters referred to it by the Government. The EnAC held 4 meetings in 2017 and the overall attendance rate of the meetings was about 70%. The meetings covered issues including combating climate change, future development of the electricity market, briefings on the power companies' business and tariff proposals, etc.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB319**

**(Question Serial No. 5677)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (3) Sustainable Development

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the work of the Council for Sustainable Development (SDC) and the Sustainable Development Fund (the Fund):

- a) What were the work details of the SDC last year? How many meetings were held last year? What was the attendance rate of each member?
- b) What is the provision earmarked for the education and publicity programmes of the SDC in 2018-19? What are the details of these programmes?
- c) What was the amount of total funding granted for the approved projects under the Fund in each of the past 5 years? What is the current balance of the Fund?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 208)

Reply:

a) In 2017-18, the Council for Sustainable Development (SDC) completed the public engagement on the theme of "Promotion of Sustainable Consumption of Biological Resources" and submitted a report to the Government. The SDC also put forward 20 recommendations under 4 aspects, namely fostering a culture of sustainable consumption of biological resources, facilitating smart choices for consumers, promoting best practices among businesses and showing leadership on the part of the Government. In addition, the SDC decided to conduct a new round of public engagement on the new theme of "Long-term Decarbonisation Strategy" in 2018 and has commenced initial preparatory work.

The SDC also organised various education and publicity programmes including the School Outreach Programme, the School Award Programme, the Sustainable Development Promotion Award for Students of Higher Education Institutions, etc. to promote public understanding of the concepts of sustainable development and to encourage the application of sustainability practices in daily lives.

In 2017-18, the SDC held 2 meetings. The average attendance rate of SDC members was 71%.

b) The SDC earmarked about \$3 million for education and publicity programmes in 2018-19. The details of the programmes are as follows:

Sustainable Development School Outreach Programme

This programme aims at promoting the concepts and practices of sustainable development among secondary school students through organising talks, workshops and drama performances in schools.

Sustainable Development School Award Programme

This programme aims at encouraging schools to participate in and organise sustainable development related activities so that students can put sustainable development concepts into practice in schools and in the community.

Sustainable Development Promotion Award for Students of Higher Education Institutions

This award aims at encouraging students of tertiary institutions to organise and implement projects to apply sustainable development practices in daily lives and promote the relevant messages in the community.

Public Engagement on Long-term Decarbonisation Strategy

The SDC will pursue a number of education and publicity initiatives for this public engagement, including producing television and radio announcements of public interests and posters, posting advertisements, and arranging roving exhibitions, etc.

c) In the past 5 years (2013 to 2017), the Sustainable Development Fund has approved 3 rounds of funding including the tenth round of applications in 2013 (a total grant of \$6.4 million), the eleventh round of applications in 2014 (a total grant of \$8.2 million) and the twelfth round of applications in 2016 (a total grant of \$5.1 million). Since its establishment, the Sustainable Development Fund has approved a total amount of about \$69 million of funding and its current balance is about \$31 million.

- End -



**CONTROLLING OFFICER'S REPLY****ENB320****(Question Serial No. 5679)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (1) Director of Bureau's OfficeControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

What was the total amount of funding for projects funded by the Environment and Conservation Fund (ECF) in the past 5 years? What is the current balance of the ECF? Please list out the name of the projects funded, the organisations, the brief description and amount of funding for the projects in each of the past 5 years. How many meetings were held by the ECF Committee last year? What was the attendance rate of each member?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 210)Reply:

The total amount of funding for projects funded by the Environment and Conservation Fund (ECF), the names of these projects, as well as the organisations and amount of funding involved in each of the past 5 years are as follows:

	<b>Names of projects funded/organisations/amount of funding</b>	<b>Total amount for the year</b>
2013-14	Please refer to the Environment and Conservation Fund Trustee Report 2013-2014. The website is as follows: <a href="https://www.legco.gov.hk/yr14-15/english/counmtg/papers/cm20141029-sp016-e.pdf">https://www.legco.gov.hk/yr14-15/english/counmtg/papers/cm20141029-sp016-e.pdf</a>	\$204,756,220.30
2014-15	Please refer to the Environment and Conservation Fund Trustee Report 2014-2015. The website is as follows: <a href="http://www.legco.gov.hk/yr15-16/english/counmtg/papers/cm20151104-sp018-e.pdf">http://www.legco.gov.hk/yr15-16/english/counmtg/papers/cm20151104-sp018-e.pdf</a>	\$232,588,037.36
2015-16	Please refer to the Environment and Conservation Fund Trustee Report 2015-2016. The website is as follows: <a href="http://www.legco.gov.hk/yr16-17/english/counmtg/papers/cm20161109-sp022-e.pdf">http://www.legco.gov.hk/yr16-17/english/counmtg/papers/cm20161109-sp022-e.pdf</a>	\$190,191,916.39
2016-17	Please refer to the Environment and Conservation Fund Trustee Report 2016-2017. The website is as follows: <a href="https://www.legco.gov.hk/yr17-18/english/counmtg/papers/cm20171115-sp022-e.pdf">https://www.legco.gov.hk/yr17-18/english/counmtg/papers/cm20171115-sp022-e.pdf</a>	\$242,420,752.91

	<b>Names of projects funded/organisations/amount of funding</b>	<b>Total amount for the year</b>
2017-18	[Note 1]	[Note 1]

[Note 1]: As the information on the funding for the financial year 2017-18 is still being compiled, it is not available at this stage.

As at 28 February 2018, the balance of the ECF is \$5.897 billion. A summary of the projects funded in each of the past 5 years is as follows:

	<b>Funding Scheme</b>	<b>Project Summary</b>
(i)	Environmental Education and Community Action (EE&CA) Projects – General Projects / Projects without Demonstration Facilities [Note 2]	Environmental educational programmes and activities include seminars and workshops, exhibitions, eco-tours, competitions, etc. for a wide spectrum of audience, such as the general public, youth, women groups, business sector, etc. to enhance community awareness and knowledge of environmental issues and induce behavioural change towards a green lifestyle.
(ii)	EE&CA Projects – Minor Works Projects / Demonstration Projects [Note 2]	Schools and non-governmental organisations (NGOs) set up environmental facilities such as green roofs, renewable energy and energy efficiency installations and waste reduction facilities, etc. Funding recipients also organised educational activities riding on the facilities for their students and service recipients to promote awareness of these green technologies and induce behavioural change towards a green lifestyle.
(iii)	Community Waste Reduction and Source Separation Projects	Programmes include reduction and recovery of waste plastics, food waste, surplus food, glass, waste electrical and electronic equipment, etc. to promote waste reduction at source and recovery in the community; and setting up waste separation facilities on floors of buildings to facilitate waste separation at source.
(iv)	On-site Meal Portioning Projects in Schools	Schools carry out basic conversion works and install facilities for implementing on-site meal portioning to reduce food waste and avoid the use of disposable lunch boxes and cutleries.
(v)	Food Waste Recycling Projects in Housing Estates	Housing estates implement food waste recovery by setting up composters and organise education programmes on food waste reduction and separation at source.

	<b>Funding Scheme</b>	<b>Project Summary</b>
(vi)	Community Involvement Projects for Waste Reduction through Municipal Solid Waste (MSW) Charging	Simulating the actual scenario of MSW charging in the community, compiling statistics on the quantity of waste, installing waste separation facilities, etc., organising educational activities on waste reduction and recycling to enable the waste producers to better understand the type and quantity of wastes they generate and dispose of, developing practices to help the waste producers get prepared for complying with MSW charging and formulating measures to reduce waste in order to pay less.
(vii)	Nature Conservation Management Agreement Projects	Under the management agreements, NGOs cooperate with landowners/their tenants in enhancing conservation of priority sites of ecological importance.
(viii)	Large-scale Environmental Education and Awareness Projects coordinated by the Environmental Campaign Committee	Major programmes include “Student Environmental Protection Ambassador Scheme” and “Hong Kong Green School Award” for the school sector; “Hong Kong Awards for Environmental Excellence” and “Hong Kong Green Organisation Certification” for the business sector; as well as community-wide programmes such as World Environment Day, etc.
(ix)	Buildings Energy Efficiency Funding Schemes and Energy Conservation Projects for NGOs (Note: The above two funding schemes, with three-year implementation period, were closed in April and October 2012 respectively as scheduled.)	The funding schemes provide funding support for residential, commercial, industrial buildings, or composite buildings comprising any two of these three types of establishments, and the premises of NGOs, to carry out energy-cum-carbon audits to review the use of energy and quantify greenhouse gas emissions and carry out improvement works to upgrade the energy efficiency performance; and organise educational activities to promote energy conservation and carbon reduction.

	<b>Funding Scheme</b>	<b>Project Summary</b>
(x)	Environmental Research, Technology Demonstration and Conference Projects	Tertiary institutions and non-profit-making organisations carry out research on environment-related topics to build up research capacity and knowledge base, with a view to developing or introducing new and innovative technologies and practices to protect our environment and conserve resources. They also organise conferences to facilitate knowledge exchange on major environment-related issues.

[Note 2]: Starting from 2017-18, EE&CA Projects are no longer categorised as “General Projects” and “Demonstration Projects”.

The current-term ECF Committee has held 4 meetings since October 2016. The average attendance rate of members is 86%.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB321**

**(Question Serial No. 5680)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding light pollution, what is the effectiveness of the Charter on External Lighting (the Charter)?

- a) How many external lighting installation owners or responsible persons have signed up to the Charter so far? How many external lighting installations in total do they own? What is its percentage in the total number of external lighting installations in Hong Kong? What is the amount of electricity reduced as a result of signatories' compliance with the advices of the Charter? How much provision will be earmarked for the promotion of the Charter and the Guidelines on Industry Best Practices for External Lighting Installations in 2018-19?
- b) Please set out the number of light pollution complaints handled by the Bureau in the past 5 years and the expenditure involved. How much provision will be earmarked in 2018-19 for handling light pollution complaints?
- c) Has the Environment Bureau earmarked provision for conducting a study on legislating for regulating light pollution in 2018-19?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 211)

Reply:

a) The Environment Bureau (ENB) launched the Charter on External Lighting (the Charter) in April 2016. As at the end of February 2018, over 4 800 participants from different sectors, including property development, building management, hotels and catering, retail, banking, laundry, travel and cinemas, etc., as well as schools, public utilities and non-governmental organisations, have signed up to the Charter. Since there are many different types of external lighting installations, including decorative lights comprising multiple lamps or illuminated signboards, etc., it is difficult to devise a uniform standard for

counting the number of installations. Therefore, we do not oblige the Charter participants to provide such figures. Since there are numerous external lighting installations and the number of installations may change quickly, we do not have data of the total number of external lighting installations in Hong Kong.

As at the end of February 2018, the expenditure involved in implementing the Charter and the Guidelines was about \$5 million. The relevant work is undertaken by the existing staff of the ENB. As the staff concerned have other responsibilities, we do not have a separate breakdown of the resources involved for the above work. The relevant estimated expenditure of ENB in 2018-19 is about \$1.5 million.

b) The number of complaints about external lighting received by the Environmental Protection Department (EPD) in the past 5 years is as follows:

Year	2013	2014	2015	2016	2017
No. of complaints	259	229	256	335	355

As nearly 40% of the complaints involved lighting installations for safety, security and operational purposes, they were not covered by the Charter.

The above work is undertaken by the existing staff of the EPD. As the staff members concerned have other responsibilities, we do not have a separate breakdown of the resources involved for such work. The EPD will continue to follow up on the complaints with existing staff.

c) In 2018-19, the Government will conduct a review of the Charter and assess its effectiveness, including the conduct of survey on public opinion of light nuisance, their response to the Charter, and how the business establishments respond to complaints from the public, etc. The Government will also study the overseas regimes and experiences in regulating external lighting, and assess whether those benchmarks and practices are applicable to Hong Kong. With reference to the outcome of the assessment, we will consider the next stage of work and whether there is a need for legislation.

- End -

**CONTROLLING OFFICER'S REPLY****ENB322****(Question Serial No. 5683)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (1) Director of Bureau's OfficeControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please list the respective expenditures on air tickets and related carbon offsetting for the overseas duty visits of all Secretaries of Departments (SoDs) and Directors of Bureaux (DoBs) in the past 5 years, as well as the provision for the same for 2018-19.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 214)Reply:

The expenditures on air-travelling for duty visits by the Secretary for the Environment in the past 5 years are as follows:

<b>Year</b>	<b>Expenditure on Air-travelling (\$'000)</b>
2013-14	107
2014-15	99
2015-16	160
2016-17	120
2017-18 (up to mid-March)	139

As duty visits are arranged on a need basis, we have not separately budgeted for air-travelling for such visits in 2018-19. Currently, the Government does not require officials making duty visits outside Hong Kong to arrange carbon offsetting for such visits.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB323**

**(Question Serial No. 5684)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

1. Please inform this Committee of the number of complaints about light pollution handled by the Bureau and the expenditure involved in the past 5 years. What is the expenditure earmarked for handling complaints about light pollution in 2018-19?
2. What are the number of officers involved, the estimated expenditure and details regarding the consultation on the future fuel mix for power generation in 2018-19? When will the Administration complete and publish the report on the above consultation? What are the number of officers involved, the estimated expenditure and details?
3. In 2018-19, will the Administration discuss with the two power companies how to reform the electricity market in order to materialise the segregation of the generation sector from the network sector eventually? If yes, what are the details and expenditure involved?
4. In 2018-19, will the Administration study the feasibility of gradually opening up Hong Kong's electricity market? If yes, what are the details and expenditure involved?
5. In 2018-19, will the Administration study the feasibility of allowing free market pricing to replace the current Scheme of Control Agreements (SCAs)? If yes, what are the details and expenditure involved?
6. In 2018-19, will the Administration request the two power companies to disclose their electricity generation cost and electricity supply cost so that the public can monitor their performance? If yes, what are the details and expenditure involved?
7. In 2018-19, will the Administration conduct studies in areas such as reduction of the ratio of nuclear power, development of renewable energy and promotion of energy saving and put forward specific roadmaps and timetables for implementation through the SCAs entered into with the two power companies? If yes, what are the details and expenditure involved?



8. In 2018-19, will the Administration study the feasibility of introducing a progressive tariff structure to avoid the situation of “the community indirectly subsidising the commercial sector”? If yes, what are the details and expenditure involved?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 215)

Reply:

1. The number of complaints about external lighting received by the Environmental Protection Department (EPD) in the past 5 years is as follows.

Year	2013	2014	2015	2016	2017
No. of complaints	259	229	256	335	355

The above work is undertaken by the existing staff of the EPD. As the staff members concerned have other responsibilities, we do not have a separate breakdown of the resources involved for the above work.

2. The Government conducted the Public Consultation on Future Fuel Mix for Electricity Generation in 2014. Having regard to the views received, we have determined the fuel mix for electricity generation for 2020. The fuel mix as well as the outcome of the Public Consultation on Future Fuel Mix for Electricity Generation were announced when we launched the Public Consultation on the Future Development of the Electricity Market (the Public Consultation) in March 2015.

3. to 7.

Having regard to the expiry of the existing Scheme of Control Agreements (SCAs) signed between the Government and the two power companies at the end of 2018, the Government conducted the Public Consultation in 2015. The consultation document set out an analysis of the market readiness to introduce competition in the electricity market and the preparatory work required to pave the way for introducing competition. It also proposed possible options to improve the current regulatory arrangements.

Regarding the regulatory arrangement, the majority of the views received during the Public Consultation considered that the current regulatory arrangement by way of the SCAs was largely effective and allowed us to achieve the four energy policy objectives of safety, reliability, affordability and environmental protection. As regards affordability, the current electricity tariff in Hong Kong is lower than that in many other major cities and the overall electricity tariff has been maintained at a relatively stable level in recent years. Hence, we consider the existing arrangement of regulating the power companies through contractual agreements appropriate. The Government, in April 2017, signed with the two power companies the SCAs which would take effect in October 2018 and January 2019 respectively and has made improvements in different areas when formulating the above SCAs in light of the views received during the Public Consultation.

On opening up the electricity market, while different stakeholders had different views on whether competition should be introduced, most of the respondents considered that the current electricity supply in Hong Kong was safe, reliable and affordable, and there was no need for introducing competition for the sake of bringing in choices. Some views considered that while introducing competition had its merits, the requisite conditions for introducing competition were not present in Hong Kong. Although we currently do not have the requisite conditions for introducing substantial competition in the electricity market in 2018, having regard to the long-term development of the electricity market, we consider that preparatory work to pave the way for introducing competition should be undertaken so that we may introduce competition in the electricity market in future when the requisite market conditions are present. To achieve the objective of introducing competition, we consider that our priority task is to open up the power grids and introduce new suppliers. Under the SCAs to take effect in October 2018 and January 2019, the power companies have agreed to discuss and jointly conduct a study with the Government during the next regulatory period to look into the detailed arrangements for strengthening the interconnection between the power grids of the Mainland and Hong Kong as well as that between the existing grids in Hong Kong, and the arrangements to enable access to the power grids by new players, such that new suppliers, when available, may participate in the electricity supply market. The two power companies have also agreed to publish their segregated cost data to the public during the next SCA period to enhance transparency after taking into consideration the protection of commercially-sensitive information, disclosure of which may undermine consumers' interest. As for the segregation of electricity generation from the power grid, since making such an arrangement before new suppliers become available will increase the operating costs of the power companies and create pressure on tariff increase, we consider that we can as the first step complete the work on opening up the power grids and introducing new suppliers before proceeding with the segregation of electricity generation from the power grid.

Regarding the use of nuclear power, having regard to the outcome of the Public Consultation on Future Fuel Mix for Electricity Generation conducted in 2014, for the fuel mix in 2020, we plan to maintain the current interim measure to import 80% of the nuclear output from the Daya Bay Nuclear Power Station, such that nuclear import will account for around 25% of the total fuel mix in 2020. As regards the development of renewable energy (RE), the outcome of the Public Consultation conducted in 2015 showed that the public attitude towards the development of RE was generally positive. Therefore, we will introduce new measures to promote the development of RE during the next SCA period, including Feed-in Tariff and RE Certificates, etc. The power companies will also facilitate and improve the grid connection arrangements for distributed RE. In addition, the Government will also put in place incentive schemes to encourage the power companies to develop RE and facilitate the development of distributed RE. Besides, the consultation outcome showed that the public had a clear consensus on the need for more effective terms in the future SCAs in order to facilitate promotion of energy saving. Having regard to these views, we will introduce further measures to promote energy efficiency and conservation (EE&C) during the next SCA period, including expanding existing incentive schemes in relation to the promotion of EE&C and the energy efficiency funds of the power companies, as well as introducing new energy saving funds.

To discuss the implementation details of the abovementioned SCAs with the two power companies and to take forward tasks in relation to the future development of the electricity market, we have earmarked an expenditure of \$8.38 million for 2018-19.

8. According to our understanding, there is no cross-subsidisation of electricity charges between residential customers and non-residential customers of the two power companies. The two power companies would make reference to factors such as the cost of electricity supply in serving different groups of customers, international tariff structures, environmental consideration, etc. in working out their tariff structures and avoid cross-subsidisation among different groups of customers. Therefore, we have no plan to conduct a feasibility study on this subject.

- End -

**CONTROLLING OFFICER'S REPLY****ENB324****(Question Serial No. 4869)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

(a) Please advise this Committee on the complaints about light pollution received by the Administration in the past year. Please set out the numbers for 18 districts in table form.

(b) What are the promotion plans for the Charter on External Lighting and the Guidelines on Industry Best Practices for External Lighting Installations? What are the manpower and resources to be allocated?

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 5540)

Reply:

(a) The statistics of breakdowns by district on the complaints about external lighting received by the Environmental Protection Department (EPD) in the past year are shown in the table below.

<b>District</b>	<b>2017</b>
Central & Western	30
Wan Chai	51
Eastern	28
Southern	5
Yau Tsim Mong	53
Sham Shui Po	19
Kowloon City	39
Wong Tai Sin	8
Kwun Tong	10
Tsuen Wan	1
Tuen Mun	13
Yuen Long	17
North	8

<b>District</b>	<b>2017</b>
Tai Po	8
Sai Kung	27
Sha Tin	14
Kwai Tsing	20
Islands	4
<b>Total</b>	<b>355</b>

(b) The Environment Bureau (ENB) launched the Charter on External Lighting (the Charter) in April 2016. As at the end of February 2018, over 4 800 participants from different sectors, including property development, building management, hotels and catering, retail, banking, laundry, travel and cinemas, as well as schools, public utilities and non-governmental organisations, have signed up to the Charter. Participants who have signed up to the Charter will switch off lighting installations of decorative, promotional or advertising purposes which affect the outdoor environment from 11 p.m. or midnight to 7 a.m. on the following day, so as to minimise light nuisance to the public caused by external lighting.

The Working Group on the Promotion of the Charter on External Lighting (the Working Group) was set up in June 2015 to plan and promote the Charter. The ENB has been working closely with the Working Group and liaising with the relevant trade associations and non-governmental organisations to invite owners or responsible persons of external lighting installations to sign up to the Charter. The ENB has also invited shopping malls, advertising companies, trade associations, professional bodies, etc. to encourage, through their network, other companies, business contacts and partners, clients, etc. to sign up their premises with external lighting installations to the Charter. We have also sent letters to invite premises with external lighting installations or signs to sign up to the Charter. We will continue to proactively invite organisations and business establishments that have not yet participated to sign up to the Charter.

With respect to the promotion of the Guidelines on Industry Best Practices for External Lighting Installations (the Guidelines), the ENB held a total of 30 discussion sessions between May 2016 and February 2018 to appeal to Charter participants and members of the relevant professional bodies, trade associations and public organisations to comply with the Guidelines when planning for or managing their external lighting installations, and to adopt the good practices stated in the Guidelines. The content of discussion included operating hours for lighting, control on lighting, light nuisance control measures, energy efficiency measures, lighting project design planning and glare prevention.

As at the end of February 2018, the expenditure involved in implementing the Charter and the Guidelines was about \$5 million. The relevant work is undertaken by the existing staff of the ENB. As the staff concerned have other responsibilities, we do not have a separate breakdown of the resources involved for the above work.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB325**

**(Question Serial No. 4870)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

1. The numbers of dedicated staff for records management and their ranks. If there is no dedicated staff for records management, please provide the numbers of staff involved in records management, the numbers of hours spent on records management and the information on the additional duties that the staff need to handle.

2. Please provide information on closed programme records and administrative records pending transfer to the Government Records Service (GRS) for appraisal in the following table:

Type of records

Years covered by the records

Number of the records and their linear metres

Retention period of the records approved by the GRS

Are these confidential records?

Reasons for being not yet transferred

3. Please provide information on the programme records and administrative records transferred to the GRS for retention in the following table:

Type of records

Years covered by the records

Number of the records and their linear metres

Year of transfer to the GRS

Retention period of the records approved by the GRS

Are these confidential records?

4. Please provide information on the records approved for destruction by the GRS in the following table:

Type of records

Years covered by the records

Number of the records and their linear metres

Year of transfer to the GRS

Retention period of the records approved by the GRS

Are these confidential records?

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 5541)

Reply:

1. Records management duties in the Environment Bureau and Environmental Protection Department are overseen by a Departmental Records Manager and an Assistant Departmental Records Manager. They are officers at the rank of Chief Executive Officer and Senior Executive Officer respectively. They are assisted by about 280 secretarial and clerical staff whose duties may include records management. The proportion of their time engaged in records management varied according to different operational functions.

2. During the past year, we had no closed programme records and administrative records pending transfer to the Government Records Service (GRS) for appraisal.

3. During the past year, we had no programme records and administrative records transferred to the GRS for retention.

4. Information on the records approved for destruction by the GRS in the past year is provided in the table below:

Type of records	Years covered by the records	Number of the records and their linear metres (LM)	Year of transfer to the GRS	Retention period of the records approved by the GRS	Are these confidential records?
Administrative	2002-2012	73 nos. 4.52 LM	Transfer not required	2-4 years	Yes
	1970-2016	25 680 nos. 128.17 LM	Transfer not required	1-7 years	No
Programme	1982-2012	8 449 nos. 56.05 LM	Transfer not required	5-15 years	No

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB326**

**(Question Serial No. 4871)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Please give details of the Department's meetings, visits or exchanges with relevant Mainland authorities in the past year and set out in chronological order the following information for each visit: (a) purpose and place of visit; (b) titles of officials met; (c) size of entourage and post titles; (d) days of visit; and (e) total expenditure involved, including expenses on (i) transportation (air tickets and local transportation); (ii) accommodation; (iii) meals; (iv) banquets or entertainment; (v) gifts.

Date

- (a)
- (b)
- (c)
- (d)
- (e)
- (i)
- (ii)
- (iii)
- (iv)

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 5542)



Reply:

Information on duty visits to the Mainland carried out by officers of the Environment Bureau on environmental protection, energy and related matters in the past year is provided below:

<b>Year</b>	<b>Purposes of visits</b>	<b>Places</b>	<b>No. of days</b>	<b>No. of visits</b>	<b>No. of officials</b> (Note 1)	<b>Transportation (not including local transportation)</b> ( <b>\$</b> )	<b>Total expenditure</b> (Note 2) ( <b>\$</b> )
2017-18 (Up to mid-March)	Experience sharing and liaison on environmental protection, energy and related policies.	Beijing, Chengdu, Guangzhou, Foshan, Zhaoqing, Jiangmen, Zhongshan, Zhuhai, Shenzhen, Macao	1-3 days for each visit	15	22	70,443 (Note 3)	91,570 (Note 3)

Note 1: Officers of different ranks per duty visit and led by the Secretary for the Environment or senior officials.

Note 2: Expenses include travelling and accommodation fees, subsistence allowance for duty outside Hong Kong and sundry expenses (where applicable).

Note 3: Information is provided up to mid-March 2018 and it does not include the remaining expenditure.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB327**

**(Question Serial No. 4872)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Please give details of the Secretary's and the Under Secretary's duty visits in each of the past 5 years and set out in chronological order the following information for each visit: (a) purpose and place of visit; (b) titles of officials met; (c) size of entourage and post titles; (d) days of visit; and (e) total expenditure involved, including expenses on (i) transportation (air tickets and local transportation); (ii) accommodation; (iii) meals; (iv) banquets or entertainment; and (v) gifts.

Date

- (a)
- (b)
- (c)
- (d)
- (e)
- (i)
- (ii)
- (iii)
- (iv)

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 5543)

Reply:

Date	(a)		(b)	(c) (Note 1)	(d)	(e) (i)+(ii)+(iii) (Note 2 and Note 3) (\$)	(i) (Note 2, Note 3 and Note 4) (\$)	(ii) (Note 2 and Note 3) (\$)	(iii) (Note 2, Note 3 and Note 5) (\$)	(iv) (\$)	(v)
	Purposes	Places									
2013-14 (22)	Experience sharing and liaison on environmental protection, energy and related policies	Mainland China, South Korea, Singapore, Taiwan, Macao, UK, Netherlands, Denmark, Sweden, South Africa	Met with different individuals, including local officials, professional organisations and local personalities according to the purpose of visit	0-3 persons	See Note 6	687,000	502,000	98,000	87,000	61,000	See Note 7
2014-15 (20)	Same as above	Mainland China, USA, Italy, Spain, Japan, Macao	Same as above	0-2 persons	Same as above	656,000	436,000	84,000	136,000	2,000	Same as above
2015-16 (16)	Same as above	Mainland China, France, Italy, Philippines, Germany, Macao	Same as above	0-3 persons	Same as above	1,012,000	629,000	187,000	196,000	400	Same as above
2016-17 (20)	Same as above	Mainland China, Japan, Mexico, USA, Turkey, Denmark, France, Spain, Macao	Same as above	0-2 persons	Same as above	899,000	580,000	92,000	227,000	0	Same as above
2017-18 (Up to mid-March) (14)	Same as above	Mainland China, France, Germany	Same as above	0-2 persons	Same as above	562,000	386,000	69,000	107,000	0	Same as above

Note 1: Number of accompanying officers from the Director of Bureau's Office.

Note 2: Expenses include those of accompanying officers from the Director of Bureau's Office.

Note 3: Information provided up to mid-March 2018. The remaining expenses are not included.

Note 4: Expenses only include air ticket expenses.

Note 5: Other expenses include meals, local transportation and other miscellaneous expenses reimbursable under the Civil Service Regulations.

Note 6: The days of visit range from 1 to 10 days.

Note 7: In line with the Government's green policy, public officers should as far as possible refrain from bestowing gifts/souvenirs to others during the conduct of official activities. According to the existing guidelines, where bestowal of gifts/souvenirs is necessary or unavoidable due to operational, protocol or other reasons, the gift/souvenir items should not be lavish or extravagant and the number should be kept to a minimum. Also, the exchange of gifts/souvenirs should only be made from organisation to organisation.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB328**

**(Question Serial No. 4873)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the monitoring of the two power companies, please advise on the expenditure and establishment for the past financial year and the budget and establishment for the next financial year in respect of the review of the regulatory framework for the electricity market.

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 5544)

Reply:

To take forward tasks in relation to the future development of the electricity market and discuss with the two power companies the relevant arrangements in respect of the Scheme of Control Agreements which will take effect in October 2018 and January 2019 respectively, our estimated expenditures for 2017-18 and 2018-19 are \$8.26 million and \$8.38 million respectively. The civil servants undertaking the relevant tasks include 1 Administrative Officer Staff Grade C, 2 Senior Administrative Officers, 1 Senior Executive Officer and 1 Personal Secretary I.

- End -

**CONTROLLING OFFICER'S REPLY****ENB329****(Question Serial No. 4897)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (3) Sustainable DevelopmentControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Content of question

(a) Regarding the studies (if any) commissioned by the Bureau and the departments under its purview for the purpose of formulating and assessing policies, please provide information in the following format. (a) Using the table below, please provide information on studies on public policy and strategic public policy for which funds were allocated in the past 2 financial years:

Name of Consultant

Mode of award (open auction/tender/others (please specify))

Title, content and objective of project

Consultancy fee (\$)

Start date

Progress of study (under planning/in progress/completed)

The Administration's follow-ups to the study reports and their progress (if any)

For completed studies, have they been made public? If yes, through what channel(s)? If no, why?

(b) Are there any projects for which funds have been reserved for conducting internal studies this year? If yes, please provide the following information:

Title, content and objective of project

Start date

Progress of study (under planning/in progress/completed)

The Administration's follow-ups to the study reports and their progress (if any)

For the projects that are expected to be completed this year, is there any plan to make them public? If yes, through what channel(s)? If no, why?

(c) Are there any projects for which funds have been reserved for conducting consultancy studies this year? If yes, please provide the following information:

Name of consultant

Mode of award (open auction/tender/others (please specify))

Title, content and objective of project

Consultancy fee (\$)

Start date

Progress of study (under planning/in progress/completed)

The Administration's follow-ups to the study reports and their progress (if any)

For the projects that are expected to be completed this year, is there any plan to make them public? If yes, through what channel(s)? If no, why?

(d) What are the criteria for considering the award of consultancy projects to the research institutions concerned?

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 7046)

Reply:

(a) Information on the studies on public policy and strategic public policy undertaken in 2016-17 and 2017-18 is provided in the table below.

Name of consultant	Mode of Award (open auction/tender/others (please specify))	Title, content and objective of project	Consultancy fee (\$)	Start date	Progress of study (under planning/in progress/completed)	The Administration's follow-ups to the study report and their progress (if any)	For completed studies, have they been made public? If yes, through what channel(s)? If no, why?
Social Sciences Research Centre, The University of Hong Kong	Tender	Independent analysis of the public views received during the Public Engagement on Promotion of Sustainable Consumption of Biological Resources conducted by the Council for Sustainable Development (SDC)	940,000	Oct 2015	Completed	The SDC has taken into account the findings of the study when drawing up recommendations for the Administration's consideration.	The findings of the study have been uploaded onto the SDC's website.

(b) Currently, we have no projects which are planned for internal studies to be conducted by the Sustainable Development Division in 2018-19.

(c) For projects for which funds have been reserved for conducting consultancy studies in 2018-19, the details are provided in the table below.

Name of consultant	Mode of Award (open auction/ tender/ others (please specify))	Title, content and objective of project	Consultancy fee (\$)	Start date	Progress of study (under planning/in progress/ completed)	The Administration's follow-ups to the study report and their progress (if any)	For the projects that are expected to be completed this year, is there any plan to make them public? If yes, through what channel(s)? If no, why?
(Not applicable)	Tender	Independent analysis of the public views received during the Public Engagement on Long-term Decarbonisation Strategy conducted by the SDC	To be determined	Expected to start in the second quarter of 2018	Under planning	Not applicable	Not applicable

(d) Tendering, selection and award of studies are carried out according to the relevant procedures of the Stores and Procurement Regulations with due consideration of the technical criteria including expertise and experience of consultants and resources to be committed for the study by the consultants.

- End -

**CONTROLLING OFFICER'S REPLY****ENB330****(Question Serial No. 5338)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding “continuing to follow up on the implementation of the Memorandum of Understanding on Energy Cooperation”:

1. What are the staff establishment and expenditure for this task?
2. What work needs to be followed up currently? And what are the estimated work plans for 2018-19?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 55)Reply:

1. Following up on the relevant work of the “Memorandum of Understanding on Energy Cooperation” is part of the duties of the Financial Monitoring Division (FMD), and therefore we cannot identify the actual expenses for this work separately. The establishment of FMD is as follows:

Rank	Number
1 Assistant Director of Accounting Services	9
2 Senior Treasury Accountants	
2 Treasury Accountants	
2 Accounting Officers I	
1 Personal Secretary I	
1 Personal Secretary II	

2. After the signing of the “Memorandum of Understanding on Energy Cooperation”, the HKSAR Government has set up a working group with local power companies to follow up on the implementation work, including matters on the electricity supply from Daya Bay Nuclear Power Station and gas supply from the Second West-East Natural Gas Pipeline, etc.



We understand that the two power companies are currently looking for new gas sources to meet the fuel mix target for 2020. We will continue to assess other proposals from the power companies for ensuring the long-term and stable supply of clean energy to Hong Kong.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB331**

**(Question Serial No. 5339)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

The two power companies are carrying out relevant statutory procedures for the offshore liquefied natural gas (LNG) terminal, and it is anticipated that result will be available this year:

1. Has the Environment Bureau liaised with the two power companies to understand the progress of the plan? If yes, what are the details?
2. Has the impact of construction of such terminal on electricity tariff been assessed? Will the Government consider financing the construction of such terminal itself?
3. As the use of natural gas by the two power companies for electricity generation will be gradually increased to 50% in 2020, does the Government have any plans to alleviate the tariff increase pressure brought about by increased use of natural gas?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 56)

Reply:

1.&2. We understand that the two power companies are studying the construction of a floating storage and regasification unit (FSRU) within Hong Kong waters and expect to submit the environmental impact assessment report in the first half of this year. Under the Scheme of Control Agreements, the two power companies are responsible for procuring their own fuels for electricity generation. The FSRU is one of the sources for the two power companies to procure natural gas. The Government has no plan to finance the construction of the FSRU. After receiving concrete proposals from the two power companies, we will critically examine the tariff implications of the proposals in accordance with the established mechanism.

3. In view of the need to combat global climate change and improve local air quality, the power companies will have to change their fuel mix starting from 2020 by switching to greater use of cleaner but more expensive natural gas for electricity generation. This will

benefit the public by reducing carbon emissions and improving the air quality, but will also inevitably exert an upward pressure on tariffs. The Government will proactively implement various energy saving measures in future. An overall decrease in electricity consumption will reduce demand for fuels and lower fuel costs, and in the long run, will even defer the tariff pressure brought by adding or replacing electricity generating units. Besides, the construction of a FSRU, which is being considered by the two power companies, will enable the power companies to procure more price-competitive natural gas in the market, so as to alleviate the pressure on tariff increase caused by increased use of natural gas.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB332**

**(Question Serial No. 5340)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the initiative of Feed-in Tariff (FiT) introduced under the new Scheme of Control Agreements:

1. What are the current staffing establishment, ranks and expenditure involved for the staff responsible for FiT?
2. What is the current progress of FiT? What is the preliminary level of FiT? Will different tariff levels be set for different types of facilities?
3. What is the specific effectiveness the Government expects of FiT after its launch? For example, what is the expected number of participants? What is the expected number of enterprises that are willing to purchase the "renewable energy certificates"?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 57)

Reply:

The Government, in April 2017, signed with the two power companies the Scheme of Control Agreements (SCAs) which will take effect in October 2018 and January 2019 respectively. We will introduce Feed-in Tariff and Renewable Energy Certificates Schemes under the said SCAs to promote the development of distributed renewable energy.

We will use existing manpower and resources to handle the relevant work. We are now in discussion with the two power companies on details of the above schemes, and we plan to report details of the relevant measures under the SCAs to the Legislative Council in due course.

- End -

**CONTROLLING OFFICER'S REPLY****ENB333****(Question Serial No. 4302)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Administration will continue to discuss with the two power companies the terms of the new Scheme of Control Agreements (SCAs) in the coming year. Would the Administration advise this Committee on the following:

1. Please set out by post, salary, scope of work and duties the staffing establishment used by the Administration in monitoring the Fuel Clause Recovery Account balance of the two power companies;
2. Please set out by post, salary, scope of work and duties the staffing establishment responsible for discussing the terms of the new SCAs with the two power companies.

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 256)Reply:

1. The Financial Monitoring Division is responsible for reviewing the periodic development plans submitted by the power companies, undertaking interim reviews and conducting annual auditing review of the power companies' actual performance, as well as examining the annual tariff adjustment proposals of the power companies, in accordance with the terms of the Scheme of Control Agreements (SCAs). Such work includes monitoring the Fuel Clause Recovery Account balance. The establishment of the Financial Monitoring Division is as follows:

Rank (Note)	No.
1 Assistant Director of Accounting Services	9
2 Senior Treasury Accountants	
2 Treasury Accountants	
2 Accounting Officers I	
1 Personal Secretary I	
1 Personal Secretary II	

2. In April 2017, the Government signed with the two power companies the SCAs which would take effect in October 2018 and January 2019 respectively. At present, the main scope of work and duties of the Electricity Reviews Division include discussing with the two power companies the implementation details of the above-mentioned SCAs and taking forward tasks in relation to the future development of the electricity market. The establishment of the Electricity Reviews Division is as follows:

Rank (Note)	No.
1 Administrative Officer Staff Grade C	5
2 Senior Administrative Officers	
1 Senior Executive Officer	
1 Personal Secretary I	

Note: The pay scale of the relevant posts is as follows:

<u>Post</u>	<u>Pay scale</u>
Assistant Director of Accounting Services	Directorate Pay Scale Point 2
Administrative Officer Staff Grade C	Directorate Pay Scale Point 2
Senior Treasury Accountant	Master Pay Scale Point 45-49
Senior Administrative Officer	Master Pay Scale Point 45-49
Senior Executive Officer	Master Pay Scale Point 34-44
Treasury Accountant	Master Pay Scale Point 30-44
Accounting Officer I	Master Pay Scale Point 28-33
Personal Secretary I	Master Pay Scale Point 16-21
Personal Secretary II	Master Pay Scale Point 4-15

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB334**

**(Question Serial No. 4303)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

One of the objectives of the Administration's energy policy is to ensure safe, reliable and efficient energy supply at reasonable prices while minimising the environmental impact caused by the production and use of energy through the established monitoring arrangements for the operation of the two power companies and the town gas supply company. In this connection, would the Administration advise this Committee on the following:

1. What mechanism does the Administration have currently to ensure that the electricity tariffs remain at "reasonable prices"?
2. What are the current fuel mix and costs of various fuels of the two power companies?
3. What were the fuel mix and costs of various fuels of the two power companies in the past 5 years?
4. What are the staff establishment and expenditure allocated currently by the Administration for overseeing fuel procurement of the power companies?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use):257)

Reply:

1. Under the Scheme of Control Agreements (SCAs), the two power companies have to submit development plans to the Government regularly for approval of their capital expenditures. With the support of an independent energy consultant, the Government will critically examine the need, timing and cost effectiveness of the capital investment proposals in order to ensure that there are genuine needs for these projects and to avoid excessive, premature, unnecessary or unreasonable investments.

In determining the annual tariff adjustments with the two power companies, the Government will critically examine the tariff proposals of the two power companies in order to ensure that the electricity tariffs are maintained at a reasonable level. The Government will review with the two power companies whether their projected electricity sales, capital expenditures and operating expenditures, etc. are reasonable, and will compare them with the projections made for the relevant year in the latest approved development plans.

Regarding fuel costs, the Government will also examine the fuel prices in the tariff proposals and analyse whether the projections of the two power companies are reasonable and in line with the trend in the international market with the support of an independent energy consultant.

The Government will act as a stringent gatekeeper under the framework of the SCAs to ensure that the electricity tariffs are maintained at a reasonable level so as to safeguard the interests of consumers.

2. & 3. We cannot disclose the breakdown of fuel costs of the two power companies since it may weaken their bargaining power in purchasing fuels from suppliers, resulting in higher fuel costs to be borne by the public. Regarding the information on the fuel mix and actual total fuel costs at present and in the past 5 years, please refer to the Annex.

4. Overseeing the fuel procurement of power companies is part of the duties of the Financial Monitoring Division (FMD), and therefore we cannot identify the actual expenses for this work separately. The establishment of FMD is as follows:

Rank	Number
1 Assistant Director of Accounting Services	9
2 Senior Treasury Accountants	
2 Treasury Accountants	
2 Accounting Officers I	
1 Personal Secretary I	
1 Personal Secretary II	



## Fuel mix and actual total fuel costs in terms of electricity output

Year	2012		2013		2014		2015		2016		2017	
	CLP Power Hong Kong Limited (CLP)	The Hongkong Electric Company, Limited (HKE)	CLP	HKE	CLP	HKE	CLP	HKE	CLP	HKE	CLP	HKE
<u>Fuel type</u>												
Coal	49%	68%	54%	65%	56%	67%	42%	65%	41%	66%	38%	66%
Natural gas	18%	32%	17%	35%	15%	33%	25%	35%	26%	34%	26%	34%
Nuclear	31%	-	28%	-	28%	-	32%	-	32%	-	35%	-
Oil and renewable energy	2%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%
	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Actual total fuel costs (\$ million) (Note 1)	10,061	5,673	9,645	5,271	10,375	4,818	12,682	3,697	10,978	3,105	11,901	Note 2

Note 1: The actual total fuel costs of CLP include fuel costs incurred in local and Mainland sales

Note 2: To be announced in April 2018

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB335**

**(Question Serial No. 5912)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the implementation of green building by the Administration,

what are the estimated expenditure for implementing green building by the Administration in 2018-19 and the details?

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.11)

Reply:

The Government is committed to promoting green building. Regarding existing government buildings, we have set the target of 5% reduction in the electricity consumption in the financial years from 2015-16 to 2019-20, under comparable operating conditions in the financial year 2013-14. In this connection, we have completed energy audits on about 350 government buildings and earmarked at least \$600 million for the gradual implementation of energy saving projects. The relevant work is undertaken by the existing staff of the Electrical and Mechanical Services Department and Architectural Services Department.

In addition, to enhance building energy efficiency, the Government will tighten the statutory requirements on building energy efficiency, including undertaking a review on the Building Energy Code every 3 years. To further encourage energy efficiency and conservation in private buildings, we have proposed an enhanced tax incentive for using energy efficient building installations that help outperform the statutory standards and meet specified energy efficiency benchmarks. The capital expenditure concerned can be fully deducted in 1 year instead of the current time frame of 5 years. We will also continue to promote retro-commissioning and other energy saving measures to promote green building. The relevant work will be undertaken by existing staff.

- End -

**CONTROLLING OFFICER'S REPLY****ENB336****(Question Serial No. 5924)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding light pollution and energy wastage problems, please advise on the following:

The number of complaints about light pollution received in each of the past 5 years, as well as the number of cases with the problems complained of successfully resolved;

the work progress and future plans of the Task Force on External Lighting, as well as the expenditure and staff establishment involved and the estimated expenditure for 2018-19.

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.12)Reply:

The statistics on the complaints about external lighting received by the Environmental Protection Department (EPD) in the past 5 years are as follows.

Year	2013	2014	2015	2016	2017
No. of complaints	259	229	256	335	355

Upon receipt of complaints about light nuisance caused by external lighting, EPD would relay the complainants' concerns and requests to the persons responsible for the lighting installations in question, and advise them to refer to the Guidelines on Industry Best Practices for External Lighting Installations (the Guidelines) and take appropriate measures to minimise the impact of the lighting installations on the residents in the vicinity. Most of the persons responsible for the lighting installations would, upon receipt of complaints, adopt measures to minimise light nuisance as far as practicable.

The Task Force on External Lighting (the Task Force) was set up by the Government in August 2011 to advise the Government on the appropriate strategies and measures to tackle potential nuisance and energy wastage problems caused by external lighting. The Task Force conducted a three-month public engagement exercise in 2013 to understand and assess the impact of the switch-off requirement on stakeholders and the public. The Task

Force was of the view that the divergent views received during the public engagement exercise, ranging from calls for immediate legislation to objection to any form of regulation (including voluntary measures), reflected a wide spectrum of opinions on the issue of external lighting across different sectors of the community and showed that the community was not ready for the introduction of more rigorous regulation (such as statutory control) of external lighting.

Having thoroughly considered the views and comments received during the public engagement exercise, the Task Force submitted its report to the Government in April 2015 and recommended that the Government adopt a multi-pronged approach in addressing the issue, including introducing the voluntary Charter on External Lighting (the Charter) to encourage owners of and responsible persons for external lighting installations to switch off lighting installations of decorative, promotional or advertising purposes that affect the outdoor environment during the preset time and re-launching the Guidelines issued by the Government in 2012 to promote good practices on the design, installation and operation of external lighting installations for reference by property developers, architects, engineers, lighting designers, contractors, owners and users. The Task Force was dissolved upon completion of the report.

The Government is committed to the implementation of the multi-pronged approach recommended by the Task Force. The Environment Bureau (ENB) launched the Charter in April 2016. As at the end of February 2018, over 4 800 participants from different sectors, including property development, building management, hotels and catering, retail, banking, laundry, travel and cinemas, as well as schools, public utilities and non-governmental organisations, have signed up to the Charter. Participants who have signed up to the Charter will switch off lighting installations of decorative, promotional or advertising purposes which affect the outdoor environment from 11 p.m. or midnight to 7 a.m. on the following day, so as to minimise light nuisance to the public caused by external lighting.

The Working Group on the Promotion of the Charter on External Lighting (the Working Group) was set up in June 2015 to plan and promote the Charter. The ENB has been working closely with the Working Group and liaising with the relevant trade associations and non-governmental organisations to invite owners or responsible persons of external lighting installations to sign up to the Charter. The ENB has also invited shopping malls, advertising companies, trade associations, professional bodies, etc. to encourage, through their network, other companies, business contacts and partners, clients, etc. to sign up their premises with external lighting installations to the Charter. We have also sent letters to invite premises with external lighting installations or signs to sign up to the Charter. We will continue to proactively invite organisations and business establishments that have not yet participated to sign up to the Charter.

In 2017, we arranged site visits to all Charter participants to check if the lighting installations had indeed been switched off during the preset time as pledged. When non-compliance cases were found, we reminded the concerned participants to adhere to their pledge to switch off the relevant lighting during the preset time. If these participants were found not to have followed the advice to switch off the lighting during the preset time, we would remove their names from the list of participants of the Charter. After site visits and follow-up, 99% of the participants have fulfilled their pledge to switch off the lighting.

We have also removed the names of a few participants who could not fulfill the requirement.

In 2018-19, the Government will conduct a review of the Charter and assess its effectiveness, including the conduct of survey on public opinion of light nuisance, their response to the Charter, and how the business establishments respond to complaints from the public, etc. The Government will also study the overseas regimes and experiences in regulating external lighting, and assess whether those benchmarks and practices are applicable to Hong Kong. With reference to the outcome of the assessment, we will consider the next stage of work and whether there is a need for legislation.

With respect to the promotion of the Guidelines, the ENB held a total of 30 discussion sessions between May 2016 and February 2018 to appeal to Charter participants and members of the relevant professional bodies, trade associations and public organisations to comply with the Guidelines when planning for or managing their external lighting installations, and to adopt the good practices stated in the Guidelines. The content of discussion included operating hours for lighting installations, control on lighting, light nuisance control measures, energy efficiency measures, lighting installation project design planning and glare prevention. As at the end of February 2018, the expenditure involved in implementing the Charter and the Guidelines was about \$5 million. The relevant work is undertaken by the existing staff of the ENB. As the staff concerned have other responsibilities, we do not have a separate breakdown of the resources involved for the above work.

- End -

**CONTROLLING OFFICER'S REPLY****ENB337****(Question Serial No. 5928)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

According to the Energy Saving Plan for Hong Kong's Built Environment, the Government has set the target of 5% saving in the electricity consumption of government buildings by 2019-20 under comparable operating conditions, using 2013-14 as the base year. In this connection, please advise:

What is the specific target of "comparable operating conditions"? For example, what is the average electricity consumption for each square metre and for each full-time employee respectively?

What is the exact figure in the 2013-14 base year?

What was the total electricity consumption of government buildings in each of the past 5 years?

Please set out in specific figures the difference between the above electricity consumption data and the 2013-14 benchmark.

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.20)

Reply:

The total electricity consumption of government buildings in 2013-14 was 1 419 million kilowatt hours (kWh). The total electricity consumption of government buildings in the past 5 financial years is as follows:

Year	Total electricity consumption of government buildings (kWh)
2012-13	1 422 million
2013-14	1 419 million
2014-15	1 460 million
2015-16	1 476 million
2016-17	(the relevant data are still being collected)

When calculating the amount of electricity savings of government buildings, the relevant departments will make reference to the measurement methodology of the International Performance Measurement and Verification Protocol (Protocol) and will carry out estimation with reference to the electricity consumption of the buildings under “comparable operating conditions” in the base year. The Protocol stipulates detailed technical components and principles. Generally speaking, when calculating and comparing the amount of electricity savings, the electricity consumption levels in different years should not be compared directly, as the scope of service, service hours, changes in demand for public services and newly added services, etc. will affect the electricity consumption level. For example, if the area of an office has increased in a particular year, comparison with the base year should be made with corresponding adjustments to take into account the impact of the increased area on the electricity consumption of the office. Only then can we make an objective comparison of the electricity consumption of the same office in different years under comparable operating conditions. Using 2015-16 as an example, according to the estimation under “comparable operating conditions”, the electricity saved was equivalent to 14 million kWh when compared with the base year 2013-14.

We did not collect data of the average electricity consumption for each square metre and for each full-time employee, and therefore we cannot provide the relevant data.

- End -

**CONTROLLING OFFICER'S REPLY****ENB338****(Question Serial No. 5930)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Donald TONG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Environment and Conservation Fund (ECF) has supported over 3 900 projects since its launch in 1994. Through subsidising projects and activities initiated by eligible non-profit-making organisations, ECF promotes behavioural and lifestyle changes for protecting the environment and achieving sustainable development. The subsidised projects include renewable energy (RE) projects at schools. The Feed-in Tariff (FiT) scheme will be implemented at the end of 2018. In this connection, please advise on the following:

The respective numbers of government schools, aided schools, schools under Direct Subsidy Scheme (DSS schools) and government-funded universities installed with solar power generation facilities that are connected to the power grid in Hong Kong at present, as well as the total installed capacity and annual power generation for each of the above categories;

Please list in the table below the detailed information of the grid-connected solar power generation facilities installed at each government school, aided school, DSS school and government-funded university;

Name of school	Category (government/ aided/ DSS/ government-funded university)	Cost	Installed capacity	Average annual power generation	Estimated payback period	System efficiency	Average annual cost of inspection and repair	Operation of the system (proper functioning in whole/ proper functioning in part/ damage in whole)



Can the existing RE projects at schools participate in the FiT scheme by selling electricity to the two power companies at a price higher than the average tariff, so as to sustain the expenditure on maintenance and repair? If no, what are the reasons?

Asked by: Hon LEUNG Kenneth (Member Question No. (LegCo use): 3.21)

Reply:

At present, a total of 242 government schools, aided schools and DSS schools in Hong Kong have been granted funding by the Environmental Education and Community Action Projects funding scheme under the Environment and Conservation Fund (ECF) and are installed with solar power generation facilities. Among them, 228 are government and aided schools while the remaining 14 are DSS schools.

The ECF did not mandatorily require schools to declare whether the solar power generation facilities installed are connected to the power grid, and therefore there is no breakdown on grid-connection.

Regarding the environmental education demonstration projects installed with solar power generation facilities, breakdowns on the facilities are listed in the table below:

Category of school (government/ aided/ DSS/ government-funded university)	Cost	Installed capacity	Average annual power generation/ Estimated payback period/ System efficiency	Average annual cost of inspection and repair	Operation of the system (proper functioning in whole/ proper functioning in part/ damage in whole)
There are a total of 242 government schools, aided schools and DSS schools installed with solar power generation facilities in Hong Kong with funding support by the ECF. Among them, 228 are government and aided schools while the remaining 14 are DSS schools.	<p>The cost of installing 1 set of 2 000 watt photovoltaic (PV) panels is about \$180,000.</p> <p>The cost of installing 1 set of 6 000 watt PV panels is about \$200,000.</p>	The generating capacity of subsidised PV systems varies, ranging generally from 1 000 watt to 6 000 watt for each system.	No relevant breakdown is available.	The funding of the subsidised projects already includes the cost of inspection and repair for 1 year. After the 1-year warranty period ends, the installations will be returned to the schools for their own management, so there is no information on this item.	All subsidised projects have been functioning properly in whole during the 1-year monitoring period. The ECF will evaluate the operation of the systems and the relevant educational activities organised by the schools.

As for the FiT scheme, we are discussing with the power companies the details of the scheme, and we plan to report the details of the relevant measures under the Scheme of Control Agreements to the Legislative Council in due course.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB339**

**(Question Serial No. 5440)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

Would the Bureau please provide the balance, government injection, investment or other income as well as total expenditure for the following funds in each year of 2016-17 and 2017-18? Please also provide such information of any other funds that are not included but under the purview of the Bureau.

1. Environment and Conservation Fund
2. Pilot Green Transport Fund
3. Sustainable Development Fund
4. Recycling Fund

Asked by: Hon MA Fung-kwok (Member Question No. (LegCo use): 104)

Reply:

For funds under the purview of the Environment Bureau, the amount of capital injection as at 28 February 2018, the balances in 2016-17 and 2017-18, the investment or other income and total expenditure in 2016-17 and 2017-18 are set out in the following table:

Name of the fund	Total capital injection (\$ million) (Note 1)	Balance (\$ million)		Investment or other income (\$ million)		Total expenditure (\$ million)
		2016-17	2017-18	2016-17	2017-18	
Environment and Conservation Fund	6,735 (Note 2)	5,974	5,891 (Note 3)	179	119 (Note 4)	(Note 5)
Pilot Green Transport Fund	300	254	251 (Note 6)	(Note 7)		49
Sustainable Development Fund	100	45	41 (Note 6)	(Note 7)		59
Recycling Fund	1,000	934	910 (Note 6)	(Note 8)		90

Note 1: All capital injections are government injections. Except for the Environment and Conservation Fund, the figures shown are the capital injections at the time of the establishment of the funds.

Note 2: The amount of government injection at the time of the establishment of the fund was \$50 million. 6 additional government injections have been made subsequently. As at the end of February 2018, the total amount of capital injection was \$6.735 billion.

Note 3: Balance as at the end of December 2017.

Note 4: Income as at the end of December 2017.

Note 5: In 2016-17, the Environment and Conservation Fund approved a total grant of \$240 million.

Note 6: Balance as at the end of February 2018.

Note 7: Balance was kept in the General Revenue Account, and the investment was not carried out by the Environment Bureau.

Note 8: Balance was kept in the General Revenue Account, and the investment was not carried out by the Environment Bureau. In addition, a small amount of interest derived from the funding for the year deposited in a specific bank account for the Recycling Fund would be appropriated to the Recycling Fund for operational use.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB340**

**(Question Serial No. 6082)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

In 2017-18, the Environment Bureau reviewed the scope of the Mandatory Energy Efficiency Labelling Scheme (MEELS) and introduced legislative amendments to the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598) to include five additional categories of products under MEELS. Would the Administration advise on the details and timetable of the Scheme, and whether there is a need to reserve funds for conducting the Scheme?

Asked by: Hon SHIU Ka-fai (Member Question No. (LegCo use): 66)

Reply:

To encourage the public to use energy saving electrical appliances, we are amending the legislation to include televisions, electric storage water heaters, induction cookers, washing machines (with a rated washing capacity exceeding 7 kilograms (kg) but not exceeding 10 kg), and room air conditioners of reverse cycle type (i.e. air conditioners with both heating and cooling functions) under the third phase of the Mandatory Energy Efficiency Labelling Scheme (MEELS). The Government introduced the Energy Efficiency (Labelling of Products) Ordinance (Amendment of Schedules) Order 2018 to the Legislative Council (LegCo) following the negative vetting procedure on 24 January 2018. After completion of the relevant procedures, the Government will publish in the Gazette the commencement notices of the relevant amendment orders and table the commencement notices to LegCo for scrutiny and passage. Taking into account the steps involved, we envisage that the third phase of MEELS would commence in mid-2018 at the earliest. We estimate that the total amount of energy to be saved from the expanded MEELS is around 600 million kilowatt-hours per annum. The relevant work has been absorbed by existing resources. As the review mentioned above has been completed, there is no need to reserve additional funds.

- End -

**CONTROLLING OFFICER'S REPLY**

**ENB341**

**(Question Serial No. 6097)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Donald TONG)

Director of Bureau: Secretary for the Environment

Question:

In 2018-19, the Environment Bureau will continue to oversee the expansion of the Mandatory Energy Efficiency Labelling Scheme to cover additional types of products. Would the Administration advise on the details, stages and timetable of the future expansion of the Scheme, and whether there is a need to reserve funds for the expansion?

Asked by: Hon SHIU Ka-fai (Member Question No. (LegCo use): 67)

Reply:

According to the Energy Saving Plan for Hong Kong's Built Environment 2015~2025+, the Government plans to review the Mandatory Energy Efficiency Labelling Scheme (MEELS) twice by end of 2025 to include more types of products for further promotion of energy saving. In considering products for inclusion in MEELS, the Environment Bureau and the Electrical and Mechanical Services Department (EMSD) will take into account various factors, including overseas experience, international testing standards, estimated electricity consumption of the relevant products, potential energy savings and stakeholders' views, etc.. In early 2018, EMSD started to examine products that may be considered for inclusion in the next phase of MEELS, including some of the products and equipment under the Voluntary Energy Efficiency Labelling Scheme. The relevant work will be absorbed by existing manpower and resources.

- End -