

Panel on Environmental Affairs
Subcommittee on Refuse Collection and Resource Recovery

Government's response to items (a) to (e) of the list of follow-up actions arising from the discussion at the meeting on 13 December 2016 and items (a) and (d)(iv) of the list of follow-up actions arising from the discussion at the meeting on 16 January 2017:

Meeting on 13 December 2016

Composition of municipal solid waste

- (a) *composition of municipal solid waste disposed of at landfills from 2010 to 2015 based on the Government's annual waste statistics published in "Monitoring of Solid Waste in Hong Kong", with breakdown of the major components (e.g. glass, metals, paper, plastics and putrescibles (including food waste and yard waste)) by quantities and percentages by weight;*

The composition of municipal solid waste disposed of at landfills from 2010 to 2015 with breakdown of their quantity and percentage share by major waste type is at **Annex A**.

Waste plastics

- (b) *types and quantities of waste plastics imported to or exported/re-exported from Hong Kong in 2010 to 2015, with breakdown by the outlets for the imported waste plastics (e.g. exported, recycled locally for re-export, disposed of illegally in Hong Kong);*

The requested statistics regarding waste plastics from 2010 to 2015 are at **Annex B**. Members may wish to note that the quantities of imports and re-exports of plastic recyclables were broadly balanced at around 3 000 000 tonnes each year from 2012 to 2015. This indicates that most of the imported plastic recyclables had been re-exported. As regards the small quantities of imported recyclables in excess of re-exports at around 200 000 tonnes each year, it is believed that the local recycling industry should have been capable of consuming them for the production of raw materials with recycled plastics or recycled products for either local consumption or export (as domestic export). While importers are not required to declare the outlets of the imported recyclables, under the Waste Disposal Ordinance (Section 20DA and 20E), they are strictly prohibited from disposing of them at local landfills. The EPD has been vigilantly monitoring and inspecting waste delivered to landfills and refuse transfer stations for this purpose. In addition, the EPD and the Customs and Excise Department (C&ED) conduct random check on imported recyclables on a risk-based approach. This arrangement aims to monitor and prevent illegal disposal of imported recyclables at local landfills.

With respect to the quantities of re-export of plastic recyclables in years 2010 and 2011, according to the consultancy study commissioned by the EPD, they might not have fully reflected the overall re-export volume as some traders might have mixed up domestic exports and re-exports of plastic recyclables when lodging trade declarations. As recommended by the consultant, the EPD has implemented measures with the Census and Statistics Department and the C&ED since 2014 to enhance the accuracy of the export statistics of local recyclables to ensure that they closely reflect the recovery situation in Hong Kong.

(c) types and quantities of locally generated waste plastics, with breakdown by their movements/outlets (e.g. disposed of at landfills, recovered/recycled for export or local consumption, recovered/recycled but disposed of at landfills ultimately);

The requested statistics regarding local waste plastics from 2010 to 2015 are at **Annex C**.

(d) market prices of different types of plastic recyclables, including polyethylene ("PE"), polypropylene ("PP"), phenol formaldehyde ("PF") and polyethylene terephthalate ("PET");

The Government does not compile official statistics on market prices of plastic recyclables, but we will maintain close contact with the recycling trade and keep a close watch on the market price movements of various recyclables, to ensure that appropriate and timely measures would be provided to address the needs of the trade.

Recycling network

(e) information on the Community Recycling Network, which included 18 Community Recycling Centres and 60 collection points at present, and whether and how it could facilitate the collection, on-site preliminary treatment and bulk transport of waste plastics and other recyclables; and

Under the Source Separation of Waste Programme (the Programme), the Environment and Conservation Fund (ECF) subsidises installation of recycling bins near residence and workplace. While over 80% of Hong Kong's population is covered by the Programme, some single-block residential buildings in older districts do not have property management companies to oversee any recycling programme. Some buildings may also lack the space for installation of any waste recovery facilities. To address this, we rolled out the Community Recycling Network (CRN) in 2011 (details at **Annex D**) with a view to cultivating a habit of source separation of waste for residents not covered by the Programme by providing them with convenient recyclables collection outlets.

The main function of the CRN is to disseminate information on waste reduction and clean recycling to the public. The ECF subsidises non-profit making organisations (NPOs) to recruit staff to promote relevant messages to members of the public and answer their questions on proper recycling.

Moreover, the 18 Community Recycling Centres (CRCs) also plays an important role to assist the community in recycling recyclables of low commercial value, such as waste plastics, glass bottles and small waste electrical and electronic equipment. To help relieve recyclers' transportation and handling costs and enhance their operation efficiency, most CRCs are currently equipped with balers to process preliminary on-site sorting, compressing and baling of recyclables before passing them to downstream recyclers. We are also planning to expand 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. The CRCs will continue to receive subsidies from the ECF to transport the waste plastic bottles collected to suitable recycling outlets. In the longer term, to achieve better operational efficiency and cost effectiveness, we are examining the possibility for introducing a service to centrally collect the waste plastic bottles received by the CRCs across the territory for delivery to competent recyclers for onward processing, having regard to the prevailing circumstances including the volume of waste plastic bottles to be received from various residential buildings.

Meeting on 16 January 2017

Food waste

- (a) ***concerns arising from media reports that some 80% of the food waste collected by a recycling plant at Ecopark was disposed of at landfills, and how the Administration will follow up with the Ecopark tenant concerned to raise the rate of food waste recovery/recycling by the recycling plant;***

Based on findings of EPD's continuous monitoring work, all food waste collected by the concerned Ecopark's tenant will be delivered to the recycling plant at EcoPark for processing into high protein supplement for fish feed. The food waste collected will firstly be preliminarily screened during which materials unsuitable for fish feed production (such as debris, plastic bags, broken containers, cutlery and food waste of low protein content eg orange peel) are screened out and disposed of. As food waste is naturally high in water content, after screening and dewatering, about 20% of the collected food waste are suitable for further processing into high protein supplement for fish feed.

With a view to improving the recovery rate, EPD is working with the concerned tenant to articulate the feedstock requirement to its customers and to educate them on better source separation of food waste so that they could help in delivering more “useful and high-quality” feedstock for recycling.

Refuse collection and resource recovery

- (d) *whether the Administration will consider:*
(iv) *making reference to Taiwan to provide price subsidies to recyclables in Hong Kong;*

A ‘pay-per-tonne’ kind of subsidy would require the determination of the price baseline and the appropriate level of subsidy. Due to the changing market situations as well as the variation in the costs of collection and recycling, it is difficult to determine such level of subsidy. In fact, the Government has set up a \$1 billion Recycling Fund, which aims to upgrade the operational capabilities and efficiency of the recycling industry, with a view to increasing the quality and quantity and in turn the value of the recyclables, thereby recovering more useful resources from waste.

**Quantity and percentage share of municipal solid waste
disposed of at landfills**

Waste type	Quantity (tonnes per day)	Percentage share (%)
Glass		
2010	374	4%
2011	278	3%
2012	289	3%
2013	353	4%
2014	285	3%
2015	367	4%
Metals		
2010	176	2%
2011	182	2%
2012	239	3%
2013	177	2%
2014	209	2%
2015	236	2%
Paper		
2010	2,004	22%
2011	1,931	21%
2012	1,905	21%
2013	1,823	19%
2014	1,922	20%
2015	2,257	22%
Plastics		
2010	1,941	21%
2011	1,694	19%
2012	1,826	20%
2013	1,866	20%
2014	2,015	21%
2015	2,183	21%
Food Waste		
2010	3,237	36%
2011	3,584	40%
2012	3,337	36%
2013	3,648	38%
2014	3,640	37%
2015	3,382	33%

Other Putrescibles⁽¹⁾		
2010	432	5%
2011	410	5%
2012	528	6%
2013	541	6%
2014	516	5%
2015	535	5%
Others⁽²⁾		
2010	951	10%
2011	917	10%
2012	1,154	12%
2013	1,138	12%
2014	1,194	12%
2015	1,197	12%
Total		
2010	9,114	100%
2011	8,996	100%
2012	9,278	100%
2013	9,547	100%
2014	9,782	100%
2015	10,159	100%

Note:

1. Other putrescibles include yard waste (yard waste not disposed of at landfills is not included. For example, part of the yard waste collected by AFCD is treated in country parks managed by the Department).
2. Others include textiles, wood/rattan, household hazardous wastes, bulky items directly disposed of at landfills and other miscellaneous waste materials.

Trade statistics on plastic recyclables

Unit: Thousand tonnes

Year	Import of plastic recyclables	Domestic export of plastic recyclables	Re-export of plastic recyclables	Total export of plastic recyclables
	(a)	(b)	(c)	(d) = (b)+(c)
2010	4,795	1,573	2,644	4,217
2011	3,960	839	2,608	3,447
2012	3,200	308	2,929	3,237
2013	2,506	191	2,223	2,414
2014	3,078	83	2,965	3,048
2015	2,861	90	2,734	2,824

Note: Plastic recyclables covered in trade statistics include polyethylene (PE), polystyrene & copolymers (PS), polyvinyl chloride (PVC), polypropylene (PP), polyethylene terephthalate (PET) and other waste, parings and scrap of plastics.

**Statistics on disposal, recovery and generation of
local waste plastics**

Unit: Thousand tonnes

Year	Waste plastics disposed of at landfills	Waste plastics recovered and exported for recycling	Waste plastics recovered and recycled locally	Waste plastics generated
	(a)	(b)	(c)	(d) = (a)+(b)+(c)
2010	708	1,573	4	2,285
2011	618	839	4	1,461
2012	668	308	9	985
2013	681	191	52	924
2014	736	83	16	834
2015	797	88	5	891

Note: The EPD does not have detailed information on the material types of waste plastics disposed of or recovered.

Information about Community Recycling Network

Region	District	Community Recycling Centres	Address
Hong Kong Island	Central & Western	Central & Western Mid-Levels Owners Association – 121C Plastic Recycling Centre	121C Second St., Sai Ying Poon
Hong Kong Island	Central & Western	Fong Chung Social Service Centre – Dynamic Plastic Waste Collection Centre	Shop A, 466 Des Voeux Road West, Sai Wan
Hong Kong Island	Southern	121C Society For Recycling – Southern District Community Recycling Centre	Shop A, G/F. No. 41 San Shi Street, Ap Lei Chau
Hong Kong Island	Wan Chai	121C Society For Recycling – Causeway Bay and Wan Chai Society For Recycling Project	G/F, 11 Watson Road, North Point, Hong Kong
Kowloon	Kowloon City	Boys' Brigade – To Kwan Wan District Waste Recovery Centre	12 Tsun Fat St., Ma Tau Kok, To Kwa Wan
Kowloon	Kowloon City	Boys' Brigade – Hung Hom District Waste Recovery Centre	Shop 2, G/F, Po Yuen Mansion, 28Bulkeley Street, Hung Hom
Kowloon	Sham Shui Po	Cheung Sha Wan Kai Fong Welfare Association	Shop B, 550 Fuk Wa Street, Cheung Sha Wan
Kowloon	Sham Shui Po	United Labour Chi Hong Association Limited - Community Recycling Center	G/F, No. 49 Fuk Wing Street, Sham Shui Po
Kowloon	Wong Tai Sin	East Kowloon District Residents' Committee Limited	G/F, Wing Wah Building, 51 Ming Fung Street, Fung Wong San Tsuen, Wong Tai Sin
Kowloon	Yau Tsim Mong	Tai Kok Tsui Resources Centre Association - Green Point	G/F, 35 Fuk Chak Street (Fuk Cheung Building G/F No.7)

Region	District	Community Recycling Centres	Address
New Territories	Kwai Tsing	Boys' Brigade – Kwai Tsing District Waste Recovery Centre	Flat 45, G/F, Bank Building, 23-51 Tai Loong Street, Kwai Chung
New Territories	North	Action Health Limited – North District Recycling Centre	Ex-Luen Wo Market, Luen Wo Hui, Luen Wo Road, Fanling
New Territories	North	North District Residents Association Limited - North District Recycling Centre	Shop 6A, G/F., Sunningdale Garden, 8 Chi Cheong Road, Sheung Shui
New Territories	Sha Tin	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
New Territories	Tai Po	Environmental Association – Ways for Plastic Recycling	G/F, 16 Sui On Street, Tai Po
New Territories	Tsuen Wan	Boys' Brigade – Tsuen Wan District Waste Recovery Centre	Shop 8B, G/F., Po Yip Building, 62-70 Texaco Road, Tsuen Wan
New Territories	Tuen Mun	New Opportunity Limited – Tuen Mun Environmental Centre	Shop F2, Ground Floor, Tuen King Building, 8, Tsing Hoi Circuit, Tuen Mun
New Territories	Yuen Long	New Opportunity Limited – Yuen Long Environmental Education Centre	Shop 2, G/F., Hing Fook Building (Phase 4), 75 Ma Wang Road, Yuen Long

Region	District	Collection Point	Address
Hong Kong Island	Central & Western	Central District Kai Fong Welfare Association Ltd	1 Gough Street, Central, Hong Kong
Hong Kong Island	Central & Western	Hong Kong Young Women's Christian Association - Western District Integrated Social Service Centre	Flat A, 1/F, Block 1, Centenary Mansion, 9-15 Victoria Road, Sai Wan, Hong Kong
Hong Kong Island	Central & Western	Po Leung Kuk - Chan Au Big Yan Home for the Elderly	12 Belcher's Street, Western District, Hong Kong
Hong Kong Island	Central & Western	The Neighbourhood Advice - Action Council - Nga Yin Association Neighbourhood Elderly Centre	1/F, Lung Cheung Garden, 26 Kennedy Town Praya, Hong Kong
Hong Kong Island	Central & Western	Hong Kong Baptist Church - Good Neighbour Chapel	2/F, 15 Hill Road, Western District, Hong Kong
Hong Kong Island	Central & Western	The Conservancy Association - Centre for Heritage	Annex Block, 36A Western Street, Sai Ying Pun, Hong Kong
Hong Kong Island	Central & Western	Tung Sin Tan	2/F and 3/F, 75-77 Wellington Street, Central
Hong Kong Island	Central & Western	Hong Kong Sheng Kung Hui - St. Luke's Settlement Neighbourhood Elderly Centre	Room B, G/F, Block 2, Kwun Lung Lau, 20 Lung Wah St., Kennedy Town, Hong Kong
Hong Kong Island	Central & Western	Caritas Community Centre - Caine Road	Room 235, Caritas House, 2 Caine Road, Hong Kong
Hong Kong Island	Central & Western	Tsung Tsin Mission of Hong Kong Kau Yan Church	97A High Street, Sai Ying Pun, Hong Kong
Hong Kong Island	Central & Western	Agency for Volunteer Service	G/F & 1/F Yuen Fai Court, 6 Sai Yuen Lane, Sai Ying Pun, Hong Kong

Region	District	Collection Point	Address
Hong Kong Island	Central & Western	Caritas Mok Cheung Sui Kin Community Centre	27 Pokfield Road, Kennedy Town, Hong Kong
Hong Kong Island	Central & Western	Fong Chung Social Service Centre	Stall No. 26, Kwan Yick Building Phase 3, 275 Des Voeux Road West, Hong Kong
Hong Kong Island	Central & Western	Joint Committee for The Promotion of Basic Law of Hong Kong	Room 13A, Kennedy Town Community Complex, 12 Rock Hill Street, Kennedy Town, Hong Kong
Hong Kong Island	Central & Western	The Hong Kong Swatow Christian Church	20 Shelley Street, Central, Hong Kong
Hong Kong Island	Central & Western	H.K.S.K.H. St. Matthew's Neighbourhood Elderly Centre	Room B, 2/F, 38 Des Voeux Road West, Sheung Wan, Hong Kong
Hong Kong Island	Central & Western	Evangelical Church Of All Blessings	1-3/F, Ken Bo Commercial Building, 335-339 Queen's Road West, Hong Kong
Hong Kong Island	Central & Western	Hong Kong Chin Chow Chamber of Commerce Ltd.	9/F, 81-85 Des Voeux Road West, Hong Kong
Hong Kong Island	Central & Western	H.K.S.K.H. Western District Elderly Community Centre	Room A-E, G/F, Hill Court, 28 Hill Road, Sai Wan, Hong Kong
Hong Kong Island	Central & Western	Assemblies of God West Point Church	2 Catchick Street, Kennedy Town, Hong Kong
Hong Kong Island	Eastern	The Hong Kong Federation of Youth Groups – Heng Fa Chuen Youth S.P.O.T.	G/F, Carpark Block West, 100 Shing Tai Road, Heng Fa Chuen, Chai Wan, H.K.
Hong Kong Island	Eastern	The Hong Kong Federation of Youth Groups - Jockey Club Shaukiwan Youth S.P.O.T.	1-2/F, Perfect Mount Garden, 1 Po Man Street, Shaukiwan, H.K.
Hong Kong Island	Eastern	The Praise Assembly 6th District	Shop 1, G/F, Victoria Centre, 15 Watson Road, North Point, Hong Kong

Region	District	Collection Point	Address
Hong Kong Island	Wan Chai	Po Leung Kuk – Family and Children Integrated Services Centre	66 Leighton Road, Causeway Bay, H.K.
Hong Kong Island	Wan Chai	Wan Chai Baptist Church	G/F, Wah To Building, 42 Wood Road, Wan Chai, H.K.
Hong Kong Island	Wan Chai	Baptist Oi Kwan Social Service - Rehabilitation Services (Services Development)	7/F, 36 Oi Kwan Road, Wan Chai, Hong Kong
Hong Kong Island	Wan Chai	Baptist Oi Kwan Social Service - Vocational Rehabilitation Services	2/F, 36 Oi Kwan Road, Wan Chai, Hong Kong
Hong Kong Island	Wan Chai	Wanchai District Women's Association	Moreton Terrace, Causeway Bay, Hong Kong
Hong Kong Island	Wan Chai	The Salvation Army Education and Employment Service	6 Salvation Army Street, Wan Chai, Hong Kong
Hong Kong Island	Wan Chai	The Hong Kong Tuberculosis Association Chinese Medicine Clinic cum Training Centre of the University of Hong Kong	2/F, Tang Shiu Kin Hospital Community Ambulatory Care Centre, 282 Queen's Road East, Wan Chai, Hong Kong
Hong Kong Island	Southern	Caritas Aberdeen Social Centre	2/F, 20 Tin Wan Street, Aberdeen, Hong Kong
Hong Kong Island	Southern	The New Life Psychiatric Rehabilitation Association – Shek Pai Wan Integrated Work Centre	Unit 1, LG3/F, Pik Fai House, Shek Pai Wan Estate, Hong Kong

Region	District	Collection Point	Address
Hong Kong Island	Southern	The Warehouse Teenage Club	116 Aberdeen Main Road, Aberdeen, Hong Kong
Hong Kong Island	Southern	Tung Wah Group of Hospitals – Ngai Chun Integrated Vocational Rehabilitation Centre	G/F, Block B, 4 Welfare Road, Aberdeen, Hong Kong
Hong Kong Island	Southern	The Hong Kong Tuberculosis Association - The University of Hong Kong Chinese Medicine Centre for Training and Research (Aberdeen)	2/F, 10 Aberdeen Reservoir Road, Aberdeen, Hong Kong
Kowloon	Kowloon City	The Hong Kong Federation of Youth Groups – Jockey Club Hung Hom Youth S.P.O.T.	3-5/F, Ka Hing Lau, Ka Wai Chuen, 48 Ma Tau Wai Road, Hung Hom, Kowloon
Kowloon	Kowloon City	The Hong Kong Federation of Youth Groups – Jockey Club Farm Road Youth S.P.O.T.	G/F, 11 Farm Road, Tokwawan, Kowloon
Kowloon	Kowloon City	Po Leung Kuk - Wan Lam May Yin Shirely Neighbourhood Elderly Centre	Shop A206, 2/F, Ching Long Shopping Centre, Kai Ching Estate, Kowloon City, Kowloon
Kowloon	Kwun Tong	Po Leung Kuk – Lau Chan Siu Po Neighbourhood Elderly Centre	Rm 109-120, G/F, Fai Wah House, Lok Wah South Estate, Kwun Tong and Rm 101-102, 105-108, G/F, Lap Wah House, Lok Wah North Estate, Kwun Tong Kowloon
Kowloon	Kwun Tong	The Hong Kong Federation of Youth Groups – Jockey Club Ping Shek Youth S.P.O.T.	G/F, Restaurant block, Ping Shek Estate, Kwun Tong, Kowloon
Kowloon	Sham Shui Po	Po Leung Kuk – Shek Kip Mei Vocational Services Centre	Podium Floor, Blocks 42 and 43, Shek Kip Mei Estate, Berwick Street, Sham Shui Po, Kowloon

Region	District	Collection Point	Address
Kowloon	Wong Tai Sin	The Hong Kong Federation of Youth Groups - Jockey Club Wang Tau Hom Youth S.P.O.T.	Shop 101-105 and 110-112,G/F, Wang Kwong House, Wang Tau Hom Estate,Wong Tai Sin Kowloon
New Territories	Kwai Tsing	The Hong Kong Federation of Youth Groups - Jockey Club Kwai Fong Youth S.P.O.T.	G/F, Kwai Ching House, Kwai Fong Estate, Kwai Chung, N.T.
New Territories	Sai Kung	The Hong Kong Federation of Youth Groups - Jockey Club Tseung Kwan O Youth S.P.O.T.	G/F, Ming Kok House, Ming Tak Estate, Tseung Kwan O, N.T.
New Territories	Sai Kung	The Hong Kong Federation of Youth Groups - Lohas Youth S.P.O.T.	The Capitol, LOHAS Park, 1 LOHAS Park Road, Sai Kung, N.T.
New Territories	Sai Kung	The Hong Kong Federation of Youth Groups - Felix Wong Youth S.P.O.T.	G/F, Tak On House, Hau Tak Estate, Tseung Kwan O, N.T.
New Territories	Sai Kung	Po Leung Kuk - Yue Yiu Sun Memorial Workshop	G/F, King Yu House, King Lam Estate, Tsueng Kwan O, N.T.
New Territories	Sha Tin	The Hong Kong Federation of Youth Groups - Jockey Club Jat Min Youth S.P.O.T.	G/F - 1/F., 13 Jat Min Chuen Street, Jat Min Chuen, Shatin, N.T.
New Territories	Sha Tin	The Hong Kong Federation of Youth Groups - Lung Hang Youth S.P.O.T	3/F & 5/F, Lung Hang Estate Community Centre, Lung Hang Estate, Shatin, N.T.
New Territories	Sha Tin	Po Leung Kuk Tin Ka Ping Family Joy Centre	No.2, G/F, Shek Fai House, Chun Shek Estate, Shatin, N.T.
New Territories	Tuen Mun	The Hong Kong Federation of Youth Groups - Jockey Club Kin Sang Youth S.P.O.T.	G/F, Shun Sang House, Siu Hin Court, Tuen Mun, N.T.
New Territories	Yuen Long	The Hong Kong Federation of Youth Groups - Tin Shui Youth S.P.O.T.	G/F, Shui Fung House, Tin Shui Estate, Tin Shui Wai, Yuen Long, N.T.