

立法會

Legislative Council

LC Paper No. CB(1)800/19-20

Ref : CB1/PL/EA

Report of the Panel on Environmental Affairs for submission to the Legislative Council

Purpose

This report gives an account of the work of the Panel on Environmental Affairs ("the Panel") during the 2019-2020 Legislative Council ("LegCo") session. It will be tabled at the meeting of 8 July 2020 of the Council in accordance with Rule 77(14) of the Rules of Procedure of the Council.

The Panel

2. The Panel was formed by a resolution passed by the Council on 8 July 1998 and as amended on 20 December 2000, 9 October 2002, 11 July 2007 and 2 July 2008 for the purpose of monitoring and examining Government policies and issues of public concern relating to environmental and conservation matters. The terms of reference of the Panel are given in **Appendix I**.

3. The Panel comprises 18 members, with Dr Hon Junius HO Kwan-yiu and Hon Steven HO Chun-yin elected as Chairman and Deputy Chairman respectively. The membership list of the Panel is in **Appendix II**.

Major Work

Air quality

4. At the meetings on 16 December 2019 and 22 January 2020, the Administration briefed the Panel on the progress of improving local and regional air quality, major air quality-related measures for meeting the challenges ahead,¹

¹ These measures involved six areas of work, namely, reducing emissions of vehicles, promoting the use of electric vehicles, reducing emissions of marine vessels, emission control of power plants, review of Air Quality Objectives, and regional collaboration.

and the findings of a public consultation relating to the review of the Air Quality Objectives ("AQOs"). According to the Administration, the ambient concentrations of major air pollutants, including respirable suspended particulates ("PM10"), fine suspended particulates ("PM2.5"), nitrogen dioxide ("NO_x") and sulphur dioxide ("SO₂"), have dropped by 28% to 54% from 2013 to 2018, whereas roadside concentrations of such air pollutants have also dropped by 32% to 36%. The major views and concerns expressed by members on air quality-related measures are set out in paragraphs 5 to 27 below.

Review of Air Quality Objectives

5. Regarding the review of AQOs, the Administration recommended to tighten the 24-hour AQO of SO₂ and the annual and 24-hour AQOs of PM2.5 after taking into account the various factors and views gathered,² the protection of public health and the principle of progressively tightening AQOs thus improving air quality on sustainable basis. Some members queried the rationale for increasing the number of annual allowable exceedances for the 24-hour AQO for PM2.5. There was also a suggestion that the Air Pollution Control Ordinance (Cap. 311) ("APCO") should be amended to the effect that protection of public health would take priority over other considerations during each review of AQOs. Some other members, however, opined that it might be technically difficult to quantify the effect of air quality improvement measures on public health. Besides, if protection of public health became the primary consideration, the costs of the air quality improvement measures to attain the relevant AQOs might increase substantially.

6. The Administration emphasized that Hong Kong's air quality management policy aimed to protect public health, and the Administration's approach to the setting and review of AQOs was in strict accordance with the guidelines promulgated by the World Health Organization.³ To ascertain whether it was practicable to tighten the various AQOs, the Administration conducted an air quality assessment for 2025, which was based on the outcome of territory-wide air quality modelling, projected emission reductions arising from the implementation of ongoing and committed measures, etc. According to the assessment results, if the 24-hour AQO for PM2.5 was to be tightened from the current Interim Target-1 level to Interim Target-2 level, the annual number of exceedances (which were expected to be mainly caused by uncontrollable factors including regional influence and unfavourable weather conditions) would be increased. Therefore, the tightened AQO would not be

² The Administration conducted a public consultation and consultation forums in 2019 regarding the AQO review.

³ The prevailing AQOs are benchmarked against the interim targets and ultimate targets of the World Health Organization Air Quality Guidelines.

met unless there was a corresponding adjustment to the number of allowable exceedances. Although about a quarter of the respondents of the public consultation in 2019 did not support the proposed adjustment to the number of allowable exceedances, the Administration considered that it would be in the public interest to take the proposal forward instead of maintaining the status quo. Meanwhile, the Administration would expedite the next review of AQOs.

7. At the meeting on 16 December 2019, the Panel passed a motion expressing regret that the Administration had not heeded the Panel's views to withdraw its proposal of relaxing the allowable exceedances for 24-hour average concentration of PM_{2.5} to 35 times, and to tighten the AQOs for PM₁₀ and ozone ("O₃") at the same time; and urging the Administration to, among other things, include in the scope of review in the next AQOs review cycle (2019-2023) an accountability mechanism through which air pollutant exceedances would give rise to legal or executive responsibilities, and amend APCO to make protecting public health the primary objective.

Phasing out Euro IV diesel commercial vehicles

8. To further improve roadside air quality, the Chief Executive proposed in the 2018 Policy Address the introduction of a new incentive-cum-regulatory scheme to phase out about 40 000 Euro IV diesel commercial vehicles ("DCVs") in phases ("the Euro IV programme").⁴

9. Members noted that the relevant trades generally welcomed the extension of the application deadline for ex-gratia payment for Euro III DCVs under the incentive-cum-regulatory programme to phase out pre-Euro IV DCVs ("the pre-Euro IV programme"). The Administration was requested to announce as early as possible the implementation timetable for the Euro IV programme so that the automotive trade could make timely preparations.

10. The Administration advised that its aim was to launch the Euro IV programme expeditiously in 2020 but the actual implementation timetable would be subject to the timing of approval of the relevant financial proposal by LegCo. The Administration pointed out that the extension of the ex-gratia payment application deadline under the pre-Euro IV programme would narrow or even close the gap between the implementation schedules of the two said programmes, thereby helping reduce the impact of the expiry of the pre-Euro IV programme on the relevant trades including the vehicle repair industry.

⁴ The relevant legislative amendments that sought to set age limits for Euro IV DCVs were made under the Air Pollution Control (Air Pollutant Emission) (Controlled Vehicles) (Amendment) Regulation 2020 and introduced into LegCo at the Council meeting of 27 May 2020. No subcommittee was formed to study this piece of subsidiary legislation.

Trial schemes on electric light buses and electric ferries

11. To promote the development of electric public light buses ("e-PLBs"), the Administration engaged a consultant in 2019 to formulate the basic technical requirements and specifications of e-PLBs and associated charging facilities that suited Hong Kong's operating conditions, and is making preparations for the implementation of a trial scheme on e-PLBs. To reduce emissions from ferries, the Administration also plans to launch a pilot scheme on electric ferries serving in-harbour routes of the Victoria Harbour in order to test their operation on such routes.

12. Members urged the Administration to implement the pilot scheme for e-PLBs expeditiously. They sought explanation on the major factors constraining the earlier adoption of e-PLBs, and how the Administration would overcome these challenges in future; and the timetable, if any, for replacing conventional PLBs with e-PLBs on a large scale if the outcomes of the pilot scheme were favourable. Members also noted that PLB operators were generally interested in trying out e-PLBs but they were discouraged from doing so in the past by the administrative burdens relating to the installation of charging facilities at PLB termini or other public places.

13. The Administration advised that the major reason that e-PLBs had not been adopted in Hong Kong yet was that there was no suitable model in the local market. There were a few manufacturers of electric light buses in the Mainland and Europe. However, the driving ranges of the developed models were less than 200 km after a full charge, which fell short of the usual daily mileage of over 300 km of Hong Kong's PLBs. Moreover, those models only supported standard charging (commonly known as "slow charging"), but most PLBs did not have dedicated parking spaces for overnight charging. In other words, only models that supported quick charging could cope with the operational pattern of Hong Kong's PLBs. To tackle these issues, the Administration had engaged the Hong Kong Productivity Council for a study to develop the basic specifications and requirements for e-PLBs and associated quick charging facilities. Upon completion of the study, the Administration would invite manufacturers to develop e-PLBs and associated charging facilities according to the specifications and put them on trial.

14. Members expressed support for the pilot scheme on electric ferries, and asked about other new measures to be launched for reducing marine emissions. As it was technically and financially difficult for small-scale operators of local vessels (such as work boats and fishing vessels) to upgrade the engines of such vessels, and the operators might not be eligible for funding support under the Pilot Green Transport Fund ("PGTF"), some members suggested the

Administration explore ways to assist the operators in improving the environmental performance of their vessels.

15. The Administration advised that through controlling the sulphur content of locally-supplied marine light diesel, the Administration had been mandating the use of cleaner fuels to reduce marine emissions. Ferry operators could apply for subsidies under PGTF for testing of engines using green and innovative technologies. The Administration would also explore ways to encourage small-scale operators to improve the environmental performance of their vessels, and would discuss related issues with relevant stakeholders.

Pilot Green Transport Fund and the proposed Green Tech Fund

16. Members noted that the Administration proposed renaming PGTF to "the New Energy Transport Fund" and extending the scope of the Fund as follows:

- (a) applications under the original scope of PGTF would be categorized as "Applications for Trial" and detailed conditions of subsidy would also be refined; and
- (b) creation of a new section of "Applications for Use" which would subsidize transport trades and charitable/non-profit making organizations to directly procure products of the technologies that had been proved under the Fund to be relatively mature and suitable for local use.

The Administration also proposed setting up a Green Tech Fund to further promote green technologies and deep decarbonization.

17. Members welcomed the proposed enhancements to PGTF and asked about how the Administration would avoid duplication of resources between the proposed Green Tech Fund and other funds.

18. The Administration advised that it was consulting stakeholders on the implementation details of the Green Tech Fund, and the size of the fund would be determined later having regard to the views of different sectors. As existing funds like the Environment and Conservation Fund ("ECF") and the Innovation and Technology Fund ("ITF") had relatively wider funding scopes, only portions of the funds could be allocated to research and development ("R&D") projects relating to green technologies. Based on the Administration's experience in running ECF, the R&D trade and profession aspired to more generous and focused funding support for the development and application of green technologies. The Administration therefore proposed setting up the Green Tech Fund with a focused funding scope to fill the gap in the existing funds. The

Administration pointed out that there was an existing interdepartmental platform for coordination between the administrative offices of various related funds, including ECF and ITF. If the Green Tech Fund was set up, the Administration would, through interdepartmental coordination, ensure that there would be no duplication of resources.

Promoting the use of electric vehicles

19. The Panel discussed matters related to promoting the use of electric vehicles ("EVs") with the Administration at the meetings on 16 December 2019 and 22 January 2020 and received public views on the subject at the meeting on 22 January 2020. Among other measures to encourage wider use of EVs, members noted that the Administration would launch a pilot subsidy scheme of \$2 billion to subsidize installation of EV charging-enabling infrastructure in the car parks of the existing private residential buildings.

20. Members expressed concern that the number of newly registered electric private cars ("e-PCs") remained small compared with the total number of private cars ("PCs") in Hong Kong. They suggested that the Administration should set specific targets when formulating a long-term action plan for promoting EVs, covering various aspects such as the first registration tax ("FRT") concessions for EVs, charging facilities and electric public transport. Some members opined that the Administration should also set a target year for phasing out conventional vehicles powered by fossil fuels.

21. As the supply of EV charging facilities was one of the most important factors bolstering the adoption of EVs, members urged the Administration to expand the EV charging network. For instance, the Administration might consider providing subsidies and/or technical assistance to the Hong Kong Housing Authority ("HA") and the Hong Kong Housing Society ("HKHS") for increasing the number of EV charging facilities in their car parks and upgrading the existing charging facilities thereat to medium chargers.

22. The Administration advised that:

- (a) when the full waiver of FRT for EVs (including both e-PCs and electric commercial vehicles) was introduced in 1994, there was no EV in the local market. The purpose of the waiver was to encourage the introduction and trial of first-generation EV products by narrowing the price gaps between such products and conventional vehicles;
- (b) as it was observed that some EV technologies had become more mature, the Administration adjusted the gross floor area ("GFA")

concession mechanism in 2011 to encourage developers to provide EV charging-enabling infrastructure in car parks of new buildings, so as to prepare for a wider take-up of EVs in future;

- (c) few years ago, with the full FRT waiver for e-PCs still in force, there was a surge in the number of newly registered e-PCs, but they were mostly expensive models. To promote a healthier development of the local EV market and to contain the number of PCs, the Administration subsequently decided to cap the FRT concessions for e-PCs and implement the "One-for-One Replacement" Scheme. Thereafter, the number of mass-market e-PC models had significantly increased, and most of them had a driving range of over 300 km, with a few even beyond 400 km. In view of the above, the Administration expected that there would be a steady supply of more affordable e-PCs under the current FRT concession arrangements;
- (d) another key issue concerning the wider adoption of e-PCs was to enhance the infrastructure of existing private car parks, so that they would become EV charging enabled and EV users could install chargers at individual parking spaces in future. The Administration would consider setting a long-term implementation timetable for upgrading car park infrastructure;
- (e) in tandem with the preparatory work on the pilot subsidy scheme of \$2 billion for installation of EV charging-enabling infrastructure in the car parks of private residential buildings, the Administration had been discussing with HA, HKHS and the Link Real Estate Investment Trust (which would not be covered by the pilot subsidy scheme) how to enhance the provision of EV charging facilities in their car parks. The three organizations were supportive of the general direction of the initiative. With the existing GFA concession mechanism and the launch of the pilot subsidy scheme, the Administration expected that some 80 000 parking spaces in private buildings (i.e. about a quarter of all parking spaces in private buildings) would be EV charging enabled in about three to four years; and the charging network in Hong Kong in about 15 to 20 years would be able to support a large-scale adoption of EVs and other new energy vehicles, when such vehicles would become mainstream products in the market; and
- (f) the Administration would explain its position on phasing out conventional vehicles in the public engagement report of Long-term Decarbonisation Strategy. Meanwhile, the Administration would

update the Clean Air Plan for Hong Kong and release it in 2021 to set out in detail the various measures, including those on land transport, to tackle air pollution.

Technical Memorandum for Allocation of Emission Allowances for Power Plants

23. To progressively reduce the emissions from power generation, the Administration has been issuing Technical Memoranda ("TMs") under section 26G of APCO to allocate emission allowances for SO₂, NO_x and PM₁₀. At the meeting on 28 October 2019, the Administration consulted the Panel on the proposal to further reduce emission allowances for power plants starting from 1 January 2024 by way of issuing the Eighth TM. Compared to the Seventh TM, the Eighth TM would bring about a reduction of 40%, 29% and 20% of the emission allowances for SO₂, NO_x and PM₁₀ respectively.

24. Members did not raise objection to the Eighth TM and requested the Administration to keep in view the international developments in fuel technologies, with a view to identifying suitable unconventional energy sources (such as natural gas hydrates) to diversify Hong Kong's energy supply. Some members suggested the Administration provide information comparing different scenarios of fuel mix, emission reduction targets, emission allowances for power plants and the estimated tariff implications concerned, so that LegCo Members and members of the public could better assess and weigh the benefits of pursuing environmental goals against the costs.

25. The Administration advised that although technological advances had enabled the utilization of formerly-untapped fossil fuels such as natural gas hydrates, the use of fossil fuels was considered unsustainable in the long run due to their limited reserves and the greenhouse gases ("GHG") emissions involved in the production, transportation and consumption of such fuels. Broadly speaking, as far as the fuel mix for power generation was concerned, the most important factors were impact on local air quality, implications on GHG emissions, and sustainability and reliability of the energy sources. Hong Kong's current fuel mix plan was to gradually increase the proportion of gas generation and phase down coal generation to help achieve the carbon intensity reduction target for 2030 stipulated in the Hong Kong's Climate Action Plan 2030+. The Administration believed that with the increasing availability of unconventional natural gas sources in the world, natural gas would remain a reliable energy option within the time frame of the current fuel mix plan. Moreover, the offshore liquefied natural gas terminal under construction by the two power companies was expected to enhance the security and diversity of natural gas supply, thereby enabling more stable power supply in Hong Kong.

26. Members enquired about the potential impact on electricity tariffs arising from the construction and operation of new gas-fired units by the two power companies for the purpose of complying with the Eighth TM, including whether the expiry of the current electricity charges relief scheme (on 31 December 2023) immediately before the inauguration of the proposed new emission allowances would exert heavy pressure on electricity tariffs.

27. The Administration advised that it was premature at this stage to make any meaningful assessment for 2024 and beyond. This was because how the increase in the power companies' capital investments would be reflected in electricity tariffs would depend on a host of factors, including future fuel costs, pace of capital investments, operating costs, sales volumes, etc. As common households as well as commercial and industrial establishments could normally reduce energy consumption by 20% to 30% through the use of energy-efficient equipment and electrical appliances, it was expected that the resultant cost savings could offset the increase in electricity tariffs by that time.

Nature conservation

Holistic fisheries management strategy in marine parks

28. The existing fisheries management system in marine parks was established in accordance with the Marine Parks and Marine Reserves Regulation (Cap. 476A) ("the Regulation"). Under the Regulation, only holder of a valid marine park fishing permit granted in accordance with the Regulation may fish in the marine park. The Director of Agriculture, Fisheries and Conservation, pursuant to the power granted to him under the Regulation, would only issue a fishing permit to a bona fide fisherman or a person who ordinarily resides near the marine park. The permit allows the holder to continue fishing activities in the specific marine park. Under the existing marine park fishing permit system, only a bona fide fisherman from an eligible homeport would be granted a marine park fishing permit.

29. The Agriculture, Fisheries and Conservation Department ("AFCD") commissioned a consultancy study in 2017 to review the existing fisheries management system in marine parks with a view to identifying enhancement measures which would promote marine conservation and sustainable fisheries development more effectively, as well as address concerns from fishermen organizations that the existing marine park fishing permit system might divide the fishermen community. Taking into account the findings of the consultancy study and views gathered from major stakeholders, AFCD proposed that commercial fishing by local fishing vessels registered under the Fisheries Protection Ordinance (Cap. 171) should continue to be allowed in The Brothers Marine Park and new marine parks to be designated in the western waters. To

protect coral communities as well as to enhance the overall fisheries resources in Hong Kong, commercial fishing should be banned in four marine parks, namely the Hoi Ha Wan Marine Park ("HHWMP"), Yan Chau Tong Marine Park ("YCTMP") and Tung Ping Chau Marine Park ("TPCMP") in the eastern waters and the Sha Chau and Lung Kwu Chau Marine Park ("SCLKCMP") in the western waters.

30. At the meeting on 25 November 2019, the Administration briefed members on the proposed holistic fisheries management strategy in marine parks, the formula for calculating the ex-gratia allowance ("EGA") to affected fishermen, arrangements for processing EGA applications and appeals, and the legislative proposal to provide that:⁵

- (a) with effect from April 2020, no fishing permit of the four marine parks (viz. HHWMP, YCTMP and TPCMP in the eastern waters and SCLKCMP in the western waters) would be granted; and
- (b) the validity period of fishing permits of the four marine parks already granted would not be extended beyond end March 2022.

31. Some members observed that in the past few years, relevant stakeholders had been discussing with AFCD how to enhance the fisheries management strategy in marine parks, with a view to ensuring that fishermen could benefit from an increase in fisheries resources without compromising the conservation objectives of marine parks. The relevant trade organizations generally supported the direction of the proposed new strategy, under which commercial fishing would be allowed in new marine parks to be designated in the western waters and only a relatively small number of fishermen would face permanent loss in fishing ground due to the commercial fishing ban in four existing marine parks.

32. Some other members, however, considered that the scope of fishing ban under the proposed new strategy was rather limited from the conservation perspective. They enquired whether the Administration would consider prohibiting all fishing activities in the four marine parks concerned and/or imposing commercial fishing ban in all existing and new marine parks, and granting higher levels of EGA to affected permit holders correspondingly.

⁵ The relevant legislative amendments were made under the Marine Parks and Marine Reserves (Amendment) Regulation 2019 and introduced into LegCo at the Council meeting of 18 December 2019. No subcommittee was formed to study this piece of subsidiary legislation.

33. The Administration advised that issues relating to commercial fishing ban in marine parks had been discussed by the Panel in 2009. At that time, some members expressed concern that banning commercial fishing in all existing and new marine parks would hinder the sustainable development of the fisheries industry. If commercial fishing ban was imposed in all marine parks, over 4 000 owners of registered local fishing vessels would be affected, compared to only some 360 affected permit holders under the proposed new strategy.

34. The Administration further advised that marine parks in the eastern waters were set up mainly for conservation of mangroves, corals and associated marine fishes, while those in the western waters were set up mainly for conservation of marine mammals, which included Chinese white dolphins and finless porpoises. According to the findings of the aforesaid consultancy study, fishing operations within and near marine parks were not major threats to marine mammals in Hong Kong. The Administration therefore considered it unnecessary to ban commercial fishing in existing and new marine parks in the western waters for conservation purposes, except for SCLKCMP, which was an important fish spawning and nursery ground.

Enhancing the recreation and education potential of country parks

35. AFCD commissioned a consultancy study in January 2017 to explore opportunities for enhancing the recreation and education potential of country parks and special areas, so as to enrich visitors' experience and meet the growing demand for countryside recreation from the public. With reference to opinions collected in a series of public engagement activities, and having considered factors of the environment, planning, design and operation, the consultants formulated four enhancement proposals as follows:

- (a) enhancement of existing facilities (e.g. one-stop services visitor hub, advance booking system for campsites, new viewing platforms, improvement of hiking trails with natural materials, etc.);
- (b) open museums for historical relics appreciation;
- (c) tree top adventure (e.g. canopy walk, tree climbing and ziplining);
and
- (d) glamping sites and eco-lodges (e.g. to offer convenient, comfortable and diversified overnight facilities or experience).

36. At the meeting on 27 April 2020, the Administration briefed the Panel on the results of the said consultancy study, and the plan to take forward the related enhancement proposals.

37. Members in general welcomed the projects on enhancing the recreation and education potential of country parks and considered that the Administration should set targets and implementation timetables for the projects, with a view to ensuring their timely and effective implementation. Some members expressed reservation about the proposal of installing tree top adventure facilities in country parks as the vegetation of Hong Kong's country parks might not be suitable for installation of large-scale tree top adventure facilities. If only small-scale facilities were provided, they might appear to be less attractive than other similar adventure facilities in Hong Kong. There were also concerns about the potential impact of tree top adventure facilities on country parks' ecological environment; and how the Administration would ensure the safe operation of such facilities.

38. The Administration explained that suggestions related to installing tree top adventure facilities in country parks were raised by many members of the public during the public engagement activities organized for the consultancy study. The Administration noted that there was a wide variety of tree top adventure facilities. During the MacLehose Trail 40th Anniversary Celebration Programme organized in 2019, AFCD provided small-scale tree climbing and ziplining facilities at Shing Mun Country Park, and they were well received. AFCD would take forward the proposal of installing tree top adventure facilities in country parks prudently. Feasibility studies would be carried out to study the ecological impact, mode of operation, safety measures, etc. of such facilities.

39. The Administration also took note of the following suggestions from individual members on enhancing country parks' potential:

- (a) enhancing the control and management of country parks and manpower training in relation to country park management and guided tour services;
- (b) expanding guided tour services in country parks for attracting more visitors and creating job opportunities;
- (c) improving the environmental hygiene conditions of country parks and enhancing public awareness of the importance of taking their own litter away after visiting country parks, in particular to correct the popular misconception that organic waste (such as food waste) was not harmful to natural environment;

- (d) enhancing the designs of toilet facilities in country parks and converting existing aqua privies or portable toilets to flushing toilets if feasible;
- (e) widening some existing roads in country parks and building new roads to increase the carrying capacities of country parks and enable quicker hill fire response;
- (f) exploring the feasibility of designating new mountain bike trails in country parks;
- (g) introducing a park-and-ride system for some country parks so that people with special needs could visit them more conveniently. Such a system might comprise a large-scale underground car park near a country park, and a fleet of small environmentally-friendly vehicles for public use within the country park;
- (h) building a new road to enhance the connection between Tai Mo Shan and the area around Lam Tsuen in Tai Po; and
- (i) using natural-looking materials as far as practicable for the construction of new facilities in country parks to harmonize with the setting thereat; and adopting innovative designs for visitor centres.

Control of invasive alien species

40. Invasive alien species ("IAS") refer to non-native species that have been established in the local natural environment, and caused adverse impact on natural ecology, society or economy. Under the Hong Kong Biodiversity Strategy and Action Plan 2016-2021, the Administration aims to, among others, enhance management of IAS with a comprehensive strategy to prevent their adverse impact on local ecology. The comprehensive management strategy includes:

- (a) reviewing the situation of alien species in Hong Kong, collecting data and carrying out risk assessments to prioritize management efforts;
- (b) implementing prevention, early detection and rapid response measures for the target IAS identified;

- (c) controlling and managing target IAS with established population if practicable;
- (d) encouraging more local researches on IAS; and
- (e) enhancing public education.

41. At the meeting on 27 April 2020, the Panel discussed the Administration's measures to manage IAS in Hong Kong. Members asked about how the effectiveness of such measures was evaluated and whether there were timetables for eradicating IAS.

42. The Administration advised that most alien species did not cause significant impact on local ecology. For the few alien species causing impact on local ecology or nuisance to people (i.e. IAS), the Administration had been taking control measures based on actual circumstances to minimize their impact. The effectiveness of IAS control measures was evaluated on a species-by-species basis, and experiences of other places showed that it was generally very difficult to eradicate IAS once they were established. Take the *Sonneratia* species as an example, they were first detected in Inner Deep Bay in 2000. They grew rapidly and were established in the local natural environment. Each year, AFCD removed about 10 000 to 15 000 *Sonneratia* trees in the mangroves and mudflats in Inner Deep Bay.

43. Members expressed concerns about the ecological impact of *Mikania micrantha* in particular, which obstructed the growth of or even killed other plants. The Administration advised that:

- (a) AFCD would utilize its available resources efficiently for IAS control, with a view to minimizing the impacts of individual IAS on natural habitats;
- (b) in Hong Kong, *Mikania micrantha* was usually cleared manually by using hand tools or mechanically by using brush cutters. While these were effective methods for controlling the population of *Mikania micrantha*, repeated clearing was generally necessary due to the fast-growing nature of the plant;
- (c) AFCD regularly monitored country parks, special areas and Sites of Special Scientific Interest, and removed any *Mikania micrantha* upon detection. Other government departments, such as the Lands Department and Leisure and Cultural Services Department, also carried out appropriate vegetation maintenance measures, including removal of *Mikania micrantha*, for plants located in premises under

their respective purviews. On private land, the responsibilities of *Mikania micrantha* removal rested with the relevant owners and property managers; and

- (d) AFCD had issued a practice note to relevant government departments, landscape contractors and interested parties to provide them with technical guidance on the clearing of *Mikania micrantha*.

Waste management

44. At the meeting on 25 May 2020, the Administration updated the Panel on the progress of its work on the management of waste plastics, which included taking forward relevant producer responsibility schemes, reducing the use of disposable plastic products, enhancing support for recycling plastics, phasing out microbeads-containing products, and relevant public education and publicity work. The Panel also exchanged views with the Administration on the overall strategy and measures to promote reuse/recycling of yard waste, and food waste collection and delivery arrangements at the meeting on 22 June 2020.

45. Members supported the general direction of reducing the disposal of waste plastics at landfills and promoting a "plastic-free" culture. They considered that the effectiveness of relevant measures should be evaluated against the disposal and recycling rates of all waste types comprehensively because reduction of waste plastics could potentially give rise to an increase in other waste types due to a switch to alternative products (e.g. the use of paper bags in place of plastic bags). Some members considered that Administration's measures for waste plastics management were piecemeal. They urged the Administration to set targets and timetables for banning the use of plastic shopping bags and disposable tableware, and to enhance support for the local recycling chain of waste plastics, so as to increase the recycling outlets for waste plastics and enhance the viability of related recycling businesses.

46. The Administration advised that there had been a change in the waste management and recycling policies around the world in the past decade. One of the most notable developments was the imposition of more stringent import and export control on waste plastics by many jurisdictions. The Administration had been monitoring the disposal and recycling situations of all types of waste, with a view to implementing targeted measures to enhance Hong Kong's waste management. Particular focus was given to reducing the disposal of waste plastics, which posed significant threat to the ecology and marine environment, with measures comprehensively covering all major types of waste plastics, such as plastic bags, plastic cutleries, plastic beverage containers and microbead-containing products. The Administration had planned the time frames for completing relevant studies or conducting public engagement

exercises for various measures to reduce waste plastics disposal. For instance, the study on the feasibility, scope and mechanism of controlling or banning disposable plastic tableware was scheduled for completion in 2020. It was envisaged that the study could provide insights into the relevant measures adopted by other advanced economies, the potential scope of a regulatory regime for disposable plastic tableware, feasible substitutes, etc..

Implementation of the Minamata Convention in Hong Kong

47. Recognizing the detrimental and long-lasting effects of mercury on human health and the environment, the United Nations Environment Programme decided in 2009 to develop a global legally binding instrument on mercury.⁶ In October 2013, the Minamata Convention on Mercury ("the Minamata Convention"), an international treaty with the objective to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds, was adopted by 128 signatory nations at a Diplomatic Conference held in Kumamoto, Japan.⁷ The Convention entered into force in China (including Hong Kong) on 16 August 2017.

48. In August 2018, the Government released a consultation document setting out the proposed scope and approach of a new legislation for regulating mercury, mercury compounds and mercury-added products in Hong Kong, with a view to fulfilling its obligations under the Convention. On 25 May 2020, the Administration briefed the Panel on the strategy for implementing the Minamata Convention in Hong Kong, including the legislative proposal on regulation of mercury, mercury compounds and mercury-added products for fulfilling Hong Kong's relevant obligations effectively.

49. Members noted that some obligations under the Minamata Convention were enforceable under the existing administrative and regulatory frameworks or there was de facto compliance by the Government. However, there were four obligations of the Convention that were not enforceable under the existing regulatory or administrative frameworks of Hong Kong:

- (a) to restrict import and export of mercury;
- (b) to prohibit the manufacture, import and export of mercury-added products required to be phased out by the Convention, prevent the incorporation into assembled products of the said mercury-added

⁶ The United Nations Environment Programme is an organization established in 1972 to guide and coordinate environmental activities within the United Nations system.

⁷ In the mid-20th century, thousands of people in Minamata, Japan were poisoned by mercury-contaminated industrial wastewater.

products, and discourage the manufacture and the distribution in commerce of mercury-added products not covered by any known use of mercury-added products prior to the date of entry into force of the Convention for it;

- (c) to phase out or restrict manufacturing processes in which mercury or mercury compounds are used; and
- (d) to store mercury and mercury compounds in an environmentally sound manner.

50. In order to regulate mercury trading as soon as possible for the purpose of implementing the Minamata Convention in Hong Kong, the Administration proposed a two-phase approach to introduce new regulation. Phase One involved amending the the relevant schedules of the Import and Export (General) Regulations (Cap. 60A) to impose immediate control of import and export of mercury trading, while Phase Two would introduce a new piece of legislation to deal with all obligations under the Convention. Members did not raise any objection to the proposed two-phase approach and supported early introduction of the new regulation.

Other issues

Public works/establishment proposals

51. During the session, the Panel was also consulted on the following public works/establishment proposals:

- (a) provision of sewerage network in North District, Tseung Kwan O and Tuen Mun; and
- (b) creation of a permanent directorate post (Chief Building Services Engineer) to oversee district cooling system projects.

Subcommittee to Study Issues Relating to the Development of Electric Vehicles

52. The Subcommittee to Study Issues Relating to the Development of Electric Vehicles, which was formed under the Panel, has been activated to commence work in March 2020.⁸ The Subcommittee is tasked to review and study Hong Kong's policies on electric vehicles, including policy implementation, target setting, support measures and other related matters.

⁸ Since its appointment by the Panel in November 2018, the Subcommittee had been put on the waiting list under the queuing system for activation of policy subcommittees of LegCo.

Up to 12 June 2020, the Subcommittee has held three meetings.

Meetings held

53. From 17 October 2019 to 22 June 2020, the Panel held a total of 8 meetings.

Council Business Division 1
Legislative Council Secretariat
26 June 2020

Legislative Council

Panel on Environmental Affairs

Terms of Reference

1. To monitor and examine Government policies and issues of public concern relating to environmental matters (including those on energy), conservation and sustainable development.
2. To provide a forum for the exchange and dissemination of views on the above policy matters.
3. To receive briefings and to formulate views on any major legislative or financial proposals in respect of the above policy areas prior to their formal introduction to the Council or Finance Committee.
4. To monitor and examine, to the extent it considers necessary, the above policy matters referred to it by a member of the Panel or by the House Committee.
5. To make reports to the Council or to the House Committee as required by the Rules of Procedure.

Panel on Environmental Affairs

Membership list for 2019-2020 session*

Chairman Dr Hon Junius HO Kwan-yiu, JP

Deputy Chairman Hon Steven HO Chun-yin, BBS

Members Hon CHAN Hak-kan, BBS, JP
Dr Hon Priscilla LEUNG Mei-fun, SBS, JP
Hon Frankie YICK Chi-ming, SBS, JP
Hon WU Chi-wai, MH
Hon CHAN Chi-chuen
Hon Kenneth LEUNG
Hon KWOK Wai-keung, JP
Hon Dennis KWOK Wing-hang
Hon Elizabeth QUAT, BBS, JP
Ir Dr Hon LO Wai-kwok, SBS, MH, JP
Hon CHU Hoi-dick
Hon SHIU Ka-fai, JP
Hon Tanya CHAN
Hon HUI Chi-fung
Hon Kenneth LAU Ip-keung, BBS, MH, JP
Hon Tony TSE Wai-chuen, BBS

(Total: 18 members)

Clerk Ms Angel SHEK

Legal Adviser Mr Cliff IP

* Changes in membership are shown in Annex.

Annex to Appendix II

Panel on Environmental Affairs

Changes in membership

Member	Relevant date
Hon Jimmy NG Wing-ka, BBS, JP	Up to 17 October 2019
Hon Jeffrey LAM Kin-fung, GBS, JP	Up to 24 October 2019
Hon WONG Ting-kwong, GBS, JP	Up to 24 October 2019
Hon Starry LEE Wai-king, SBS, JP	Up to 24 October 2019
Hon WONG Kwok-kin, SBS, JP	Up to 24 October 2019
Hon Paul TSE Wai-chun, JP	Up to 24 October 2019
Hon Alice MAK Mei-kuen, BBS, JP	Up to 24 October 2019
Hon LAU Kwok-fan, MH	Up to 24 October 2019
Hon Vincent CHENG Wing-shun, MH, JP	Up to 24 October 2019
Hon Tommy CHEUNG Yu-yan, GBS, JP	Up to 27 October 2019
Hon Wilson OR Chong-shing, MH	Up to 27 October 2019
Hon CHAN Han-pan, BBS, JP	Up to 28 October 2019
Hon CHAN Kin-por, GBS, JP	Up to 15 November 2019
Hon Martin LIAO Cheung-kong, GBS, JP	Up to 19 November 2019
Hon CHAN Hoi-yan	Up to 28 November 2019
Hon Mrs Regina IP LAU Suk-yea, GBS, JP	Up to 18 December 2019
Hon YUNG Hoi-yan, JP	Up to 20 December 2019