

**Confirmed Minutes of the 238th Meeting
of the Advisory Council on the Environment (ACE)
held on 11 November 2019 at 2:30 pm**

Present:

Mr Stanley WONG, SBS, JP (Chairman)
Prof Nora TAM, BBS, JP (Deputy Chairman)
Ir Samantha KONG
Ms Julia LAU
Dr Michael LAU
Dr Winnie LAW
Mr Andrew LEE
Prof Kenneth LEUNG, JP
Ir MA Lee-tak, SBS
Dr SUNG Yik-hei
Ms Christina TANG
Mr Simon WONG, JP
Ir Conrad WONG, BBS, JP
Mr Owin FUNG (Secretary)

Absent with Apologies:

Ms Carmen CHAN, BBS, JP
Ms Sylvia CHAN
Ir Cary CHAN, JP
Mr Adam KOO
Miss LAM Chung-yan
Prof LAU Chi-pang, JP
Prof Albert LEE
Ir Prof Irene LO, JP
Prof WONG Sze-chun, BBS, JP

In Attendance:

Ms Maisie CHENG, JP	Permanent Secretary for the Environment / Director of Environmental Protection
Ms Maggie CHIN	Assistant Director of Planning / Technical Services (Acting), Planning Department (PlanD)

Mr Simon CHAN	Assistant Director (Conservation), Agriculture, Fisheries and Conservation Department (AFCD)
Ms Fanny HUI	Chief Information Officer, Environmental Protection Department (EPD)
Ms Becky LAM	Chief Executive Officer (CBD), EPD
Miss Carman LEUNG	Executive Officer (CBD) 2, EPD

In Attendance for Item 1:

Mr WONG Kam-sing, GBS, JP	Secretary for the Environment (SEN)
Mr TSE Chin-wan, BBS, JP	Under Secretary for the Environment (USEN)
Mr Patrick LEE	Administrative Assistant to Secretary for the Environment
Ms Elaine LI	Press Secretary to Secretary for the Environment

Action

The Chairman welcomed Ms Maggie Chin, Assistant Director of Planning/Technical Services (Acting), as the representative of the Planning Department at the ACE. He informed Members that apologies of absence had been received from Ms Carmen Chan, Ms Sylvia Chan, Ir Cary Chan, Mr Adam Koo, Miss Lam Chung-yan, Prof Lau Chi-pang, Prof Albert Lee, Ir Prof Irene Lo and Prof Wong Sze-chun.

Item 1 : Briefing by the Secretary for the Environment on 2019 Policy Address – Policy Initiatives of Environment Bureau: Environmental Protection
(ACE Paper 13/2019)

Presentation cum Question-and-Answer Session (Open session)

2. The Chairman welcomed Mr Wong Kam-sing, Secretary for the Environment (SEN), and Mr Tse Chin-wan, Under Secretary for the Environment (USEN), to the meeting.

3. With the aid of a PowerPoint presentation, Mr Wong Kam-sing, Mr Tse Chin-wan, Ms Maisie Cheng and Mr Owin Fung took turns to brief Members on the key environmental initiatives in the Chief Executive's 2019 Policy Address.

Waste reduction and recycling

4. A Member expressed support for the development of Organic Resources Recovery Centres (ORRCs) and the implementation of Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme to treat more than 900 tonnes of food waste per day, and appealed to the Government to install food waste composters in housing estates with a view to further reducing the food waste of more than 3,500 tonnes disposed of at landfills each day.

5. Mr Wong Kam-sing advised that the Government considered that it would be more effective to adopt a centralised Waste-to-Energy strategy for the treatment of food waste. This notwithstanding, education and publicity programmes would be carried out to support the installation of food waste composters in housing estates and schools for on-site treatment of food waste with a view to raising public awareness and participation for waste reduction.

6. In response to a Member's enquiry on whether the Government would support the installation of food waste disposer in households for grinding food waste that could be carried away by the kitchen drainage into the sewage treatment system, Mr Wong Kam-sing advised that the Government was open to any new technologies that could help reduce food waste if the applications would be suitable in the local context.

7. A Member observed that some Reverse Vending Machines (RVMs) were placed at the City University of Hong Kong and the Festival Walk to collect waste plastic beverage containers. The RVM at the Festival Walk offered cash rebate which attracted a much higher usage and she supported the provision of a standardised economic incentive by RVMs to enhance the recovery efficiency of plastic beverage containers.

8. Mr Wong Kam-sing advised that the Government would draw experience from the application of the RVMs in launching a producer responsibility scheme on plastic beverage containers to institutionalise the recycling system. He informed Members that the Government had been conducting trial at seven Community Green Stations and planned to launch a pilot scheme in 2020 on the application of RVMs to enhance recovery efficiency of used plastic beverage containers through a rebate system.

Climate change and energy efficiency

9. In view of the rapid technological advancement and the lower costs involved in generating renewable energy (RE) as evident in the production of 3D-printed solar panels, a Member suggested that the Government should strengthen the support to green industries to expedite the use of innovative technologies.

10. Mr Wong Kam-sing advised that the Government was highly supportive to the development of green technology. He mentioned that the Eco Expo Asia 2019 namely, “Less Carbon, Less Waste • Green Innovation” had been just held, and a Green I&T Day was organised to facilitate local and Mainland industries to share their experiences and achievements, and enhance regional cooperation in energy conservation and RE. Local universities would be engaged to conduct research projects on innovation and green technology.

11. In line with the rapid advancements in technology, a Member suggested that the Government should set a more ambitious target for reducing electricity consumption in government buildings which was currently pitched at 5%. Mr Wong Kam-sing responded that the Government had set a progressive Green Energy Target with a view to further improving the conservation of energy within the whole Government by 6% by 2024-25. The Green Energy Target would not only cover government buildings and infrastructure, but also for the first time required savings in the consumption of electricity and other forms of energy explicitly. The RE generated by the Government would also be taken into account.

12. A Member mentioned that many field experts considered that Hong Kong’s realisable RE potential should be higher than 3-4% of the total energy mix as set out in the Hong Kong’s Climate Action Plan 2030+. With reference to the RE targets of other countries, she suggested that the Government should encourage further studies and data sharing to support the setting of a more ambitious target for the ratio of RE contributing to the total energy mix for electricity generation. She further suggested that the local power companies should be encouraged to develop RE under the Scheme of Control Agreements.

13. Mr Wong Kam-sing pointed out that a study on the potential of installing solar photovoltaic (PV) panels on rooftops had been conducted by the Electrical and Mechanical Services Department (EMSD). The study results showed that the installation of solar PV panels was subject to various constraints. He stressed that the RE potential and targets were subject to the local circumstances and direct comparisons across different countries/cities might not be relevant. He reassured that the Government was committed to the development of RE and funding had been earmarked under the Environment and Conservation Fund to support research projects related to climate change. The Council for Sustainable Development was examining the views gathered from the public engagement on long-term decarbonisation strategy and would put forward recommendations for the Government's consideration.

14. A Member raised that many studies and petitions signed by scientists overseas had warned against the unprecedented threat posed by climate change on humanity. Given that there was a lack of local deliberation and media coverage, he suggested that the Government should enhance education and publicity efforts in this regard. He reiterated that repeated training should be provided to government employees to facilitate long-term planning and collaboration among relevant bureaux/departments (B/Ds) to combat climate change.

15. Mr Wong Kam-sing advised that the Steering Committee on Climate Change was chaired by the Chief Secretary for Administration to provide a platform for close communication and collaboration among different B/Ds. An Environmental Academy was set up to advance environmental professionalism through communications, experience sharing and learning among different divisions within the Environmental Protection Department (EPD).

Green buildings

16. Two Members considered that there was a need to establish policies and strategies in energy disclosure with a view to providing the relevant data for measuring energy consumption and efficiency. They expressed support to formulate the strategies and plans for promoting energy efficiency in buildings. Mr Wong Kam-sing said that the Government was working closely with the private sector to enhance the transparency of the release of the relevant data.

17. A Member mentioned that the Lower Ngau Tau Kok Estate was one of the first public housings to adopt an intelligent building façade for energy saving purposes. Considering the high building density in Hong Kong, the Member opined that there was a great potential for promoting energy saving by the development and adoption of intelligent building designs.

18. Given that the actual building performance might not be in line with the green design, a Member enquired whether the BEAM Plus certification had addressed the performance mismatch between building design and its operation. She said that the national green building certification standard of the Mainland, i.e. the “Three-Star Program”, would evaluate the operational performance of the green buildings in addition to its design.

19. A Member pointed out that the BEAM Plus provided assessment on both the design and operation of a building. The Hong Kong Green Building Council (HKGBC) was currently reviewing the assessment weightings for each performance aspect and the mechanism of granting gross floor area (GFA) concessions.

20. Ms Wong Kam-sing added that the BEAM Plus for Existing Buildings would assess the actual performance of a building. He advised that it was challenging to fulfill Hong Kong’s target of reducing energy intensity by 40% by 2025, which was higher than that set by the Asia-Pacific Economic Cooperation (APEC). Up till now, Hong Kong’s energy intensity had already been reduced by 30%, and green building development was one of the key actions for achieving energy intensity reduction. Compared with new buildings, it was even a greater challenge to achieve energy efficiency in existing buildings due to spatial and technical constraints. EMSD had been working closely with ENB to perform retro-commissioning in existing government buildings, which was a cost-effective solution for fine tuning building systems and equipment to achieve optimal operation efficiency and reduce operating costs. A memorandum of co-operation had been signed to promote the development and application of retro-commissioning of buildings in the Greater Bay Area and other major cities in the Mainland. As regards the private sector, the Government had established a partnership with major stakeholders in the built environment under the 4Ts framework, namely target, timeline, transparency and together. The 4T partners had been encouraged to set their energy saving targets and timelines and to share

their existing and planned energy saving measures.

Introducing economic incentives

21. A Member considered that economic incentives would be an effective tool in changing behaviours towards environmental conservation. He was delighted to see that a carbon emission trading scheme was being implemented by the Guangdong Province and cross-boundary cooperation between Guangdong, Hong Kong and Macao was being considered. He also acknowledged that the Government had issued green bonds to facilitate the development of green infrastructure. The Member suggested that the Government should consider reviewing the water charges in order to create a disincentive to deter inefficient water usage and reduce the amount of effluent discharge. He also suggested reinstating the full first registration tax (FRT) waiver for electric private cars (e-PCs) so as to promote wider use of EVs.

22. Mr Wong Kam-sing informed the meeting that the green bond issued under the Government Green Bond Programme received very positive responses from investors. The Government also supported the Hong Kong Quality Assurance Agency in developing standards and certification scheme on green finance such as green bond.

23. Mr Wong Kam-sing advised that since the launch of “One-for-One Replacement” Scheme (the Scheme), the average daily number of first registered e-PCs had increased significantly. Currently, there were ten brands of private cars which supplied electric models in Hong Kong, and more mass-market e-PCs models, of which the FRTs could be fully/partially waived under the Scheme would be available in the market. He said that currently about 1.8% of PCs in Hong Kong were EVs and such penetration rate was ranked second among large cities in Asia, only second to Beijing. Mr Wong added that the Government would continue to adopt a multi-pronged approach to support the use of different types of EVs, including ePCs and electric commercial vehicles.

Pilot scheme on new energy ferries

24. A Member expressed support towards the launch of a pilot scheme on new energy ferries. She considered that marine vessels running on diesel was a major

emission source of air pollutants. Subject to the experiences gained from the pilot scheme, she aspired that the existing diesel-driven ferries could be phased out in due course.

25. Mr Owin Fung said that EPD was currently discussing with the four ferry operators to replace diesel-driven ferries running in-harbour routes with electric ones. It was envisaged that vessel specifications could be drawn up and procurement tenders would be invited in due course. In collaboration with relevant B/Ds, it was preliminarily assessed that about half of the berthing locations were feasible for building shore-side charging facilities. As for outlying island routes, hybrid ferries were considered more suitable in view of the longer sailing distance and rougher conditions, and the trial programme would be undertaken by the Transport and Housing Bureau and the operators. Mr Fung remarked that if the trial programme was successful, there was aspiration that Hong Kong would be one of the leading cities in Asia to introduce electric ferries for passenger service.

26. Mr Wong Kam-sing added that the Government was committed to exploring different green technologies with a view to improving fuel efficiency and environmental effectiveness in the long run. Light-weighted and environmentally-friendly materials for the new electric/hybrid ferries would also be considered.

Public education and publicity

27. Two Members suggested that EPD should collaborate with the Education Bureau in promoting pro-environmental behaviours by stepping up environmental education. Drawing reference to the new education policy in Italy, a Member considered that environmental studies could be designated as a compulsory subject in the school curriculum in order to enhance students' awareness and knowledge on climate change and sustainability.

28. A Member concurred that education and publicity should be strengthened in schools and other circumstances as well. He further pointed out that the same should be done in order to help tackle the difficulties encountered in the course of enforcing motor vehicle idling.

29. A Member suggested that the Government should consider adopting a “bottom-up” approach by holding public engagement exercises to further enhance environmental protection.

30. The Chairman and a Member showed appreciation for a Government-led approach for major policy environmental initiatives, which could help keep the momentum and promote public participation. With reference to the efforts of the Hong Kong Housing Authority on waste management such as organic waste recycling in housing estates, the Member considered that education and publicity efforts should be stepped up with a view to motivating the public to sustain their efforts on waste reduction at source.

31. A Member expressed appreciation for ENB and EPD’s efforts in introducing various initiatives that covered a host of environmental issues. With a view to raising public awareness and comprehension, she suggested that the Government should publish the overall picture on the accrued and potential improvements and achievements of the various environmental initiatives with regard to public health, environmental benefits, economic gains, enhanced sustainability, etc. Enforcement action against illegal act should be taken promptly and the relevant penalty figures should be publicised regularly for public information, which could serve as a prompt and repeated reminder to sustain public awareness on various environmental initiatives like the plastic shopping bag charging and ban against idling motor vehicle engines.

32. To promote a green culture in the community, Mr Wong Kam-sing pointed out that priority would also be accorded to strengthening education and publicity through social media and establishing new outreaching teams under EPD to promote waste reduction and recycling.

Inter-departmental collaboration

33. A Member considered that inter-departmental collaboration was equally important and would strengthen and facilitate green concepts promotion in different policy areas. He suggested that EPD should collaborate with the Development Bureau in promulgating smart city concepts and designs, such as the installation of EV charging-enabling infrastructure in public car parks, as well as in the New Development Areas and urban redevelopment projects. The Chairman concurred

and welcomed the Government to work with the Housing Authority to develop low carbon and smart public housing estates.

34. Mr Wong Kam-sing said that EPD had been cooperating with different B/Ds in taking forward the environmental initiatives including those set out in the Policy Address. He also mentioned that an inter-departmental steering committee, chaired by the Chief Executive, had been established to steer Hong Kong's smart city development. The committee would provide a platform for closer communication and collaboration among different B/Ds.

Guangdong-Hong Kong-Macao Greater Bay Area

35. A Member considered that the strengthening of regional cooperation under the development of the Guangdong-Hong Kong-Macao Greater Bay Area (Greater Bay Area) would facilitate experience and information sharing, which would be beneficial to environmental conservation. The protection of Chinese White Dolphins and maintenance of wetland habitats for migratory bird species are cases in point. He sought information on the priorities of regional cooperation in the coming years.

36. Taking into account that the rapid development of the Greater Bay Area might pose impacts on the environment, a Member pointed out that a clear vision and objectives should be formulated, and the work progress and achievements should be disseminated regularly to the public to keep them informed and equally important, gain their support.

37. Mr Wong Kam-sing said that the Outline Development Plan for the Greater Bay Area promulgated earlier this year would provide a guide on the current and future cooperation amongst the Government of the Guangdong Province and Governments of the Hong Kong and Macao Special Administrative Regions (SARs). These governments would jointly formulate specific frameworks and plans, and report the progress to the public as appropriate.

38. Mr Tse Chin-wan supplemented that the Government was currently working with the Government of the Guangdong Province and Mainland experts in drafting a special plan on environmental protection with a view to developing the Greater Bay Area into a world-class city cluster. Although the plan was still under

drafting stage, it was envisaged that the plan would comprehensively cover major aspects of environmental protection including air and water quality, waste management, low carbon development and nature conservation.

Nature conservation

39. A Member expressed support for the government policy direction of making enhancements on the recreational and educational facilities in country parks and special areas. However, he was concerned about the hunting/capturing of non-protected animals which was not regarded as illegal act under the Wild Animals Protection Ordinance (WAPO), Cap. 170. He noticed that there was exchange of information through social media on the capturing of animals as pets or for other purposes, but such unregulated hunting/capturing of animals might lead to adverse impacts on the conservation of biodiversity.

40. Mr Simon Chan responded that the use of hunting or trapping appliances was forbidden within any country park or special area under the Country Park and Special Areas Regulations, Cap. 208A. The current legislation however did not prohibit the capturing of wild animals that were not listed as protected species under the WAPO when no hunting/trapping appliance was used. He assured Members that the Agriculture, Fisheries and Conservation Department (AFCD) would monitor the situation closely and conduct reviews on the need to strengthen enforcement as necessary.

41. A Member shared another Member's concern about the legislative loophole that the unregulated hunting/capturing of animals might have negative impacts on the conservation of biodiversity. Considering that Hong Kong took pride in its biodiversity with many rare, endemic and endangered species, the Member considered that it was vital to rectify the unregulated act as mentioned above as soon as possible. He suggested that the Government should address the issue under Action 1 of the Biodiversity Strategy and Action Plan, which was to maintain and enhance the management of protected areas.

Conclusion

42. The Chairman concluded that Members were in general supportive of the environmental initiatives of the 2019 Policy Address. He thanked Mr Wong

Kam-sing and Mr Tse Chin-wan for their detailed elaboration to address the questions and concerns raised by Members in the meeting.

[Mr Wong Kam-sing, Mr Tse Chin-wan and Ms Maisie Cheng left the meeting at this juncture.]

Item 2 : Matters arising (Closed-door session)

43. The Chairman advised that the minutes of the 231st meeting held on 8 July 2019 were confirmed by circulation with proposed textual amendments by a Member in paragraph 43. There were no matters arising from the minutes of the last meeting.

Item 3 : Any other business (Closed-door session)

HKBWS's letter regarding observations and concerns at Lok Ma Chau Loop

44. A Member referred a letter from the Hong Kong Bird Watching Society (HKBWS) regarding their observations and concerns at Lok Ma Chau Loop to Members via his email to the Secretariat on 6 November 2019. Upon the invitation of the Chairman, the Member briefed the meeting on the major concerns of HKBWS, which included possible impacts on the ecological connectivity due to the change in the green fence boundary and suspected construction activities within the fenced area.

45. The Chairman noted that a brief note which was a consolidated response from EPD and the project proponent, i.e. the Civil Engineering and Development Department (CEDD), had been circulated to Members for reference before the meeting on 7 November 2019. With reference to the note, the Chairman advised that CEDD had arranged a meeting with green groups on 28 October 2019 to explain in details the works progress and exchange views with the green groups on ways to further improve the implementation of ecological mitigation measures. Taking into account of the green groups' suggestion, CEDD agreed to realign the green fence to provide proper separation between the reed marsh habitat and construction activities.

46. Mr Owin Fung said that green groups were welcomed to report their observation and suspected cases of non-compliance to EPD which could help facilitate the department to monitor the work process and take appropriate enforcement actions.

Use and impact of tear gas and blue-dyed water

47. The Chairman informed the meeting that a Member had proposed to discuss the use and impact of tear gas and blue-dyed water under AOB. Upon invitation by the Chairman, the Member pointed out that the community was concerned about the impacts on public health and the environment from the use of tear gas and blue-dyed water, and did not know the proper way to clean up residues. Another Member, who was absent from the meeting, had emailed an article recently published by his colleagues to Members before the meeting on the impacts on health with regard to use of tear gas.

48. A Member said that laboratory tests should be conducted to ascertain the chemical composition of the tear gas and its residues. Making reference to the recent experience of Greenpeace in collecting tear gas samples on street for testing, another Member said that such testings involved complicated sample collecting process/analysis and thus appealed for the Government to consider taking the lead to do the laboratory testing and follow-up study.

49. Drawing from his own experience in conducting the study on the impact of palm stearin on planktons which took 18 months, a Member mentioned that comprehensive laboratory testing would require the investment of substantial resources and time. Another Member added that the dilution and dispersal of tear gas by air and water on site would further complicate sample collection and might render the test results futile.

50. A Member further said that the 24-hour median lethal concentration of the major component of tear gas (i.e. Chlorobenzalmalononitrile) to fish was 0.45 mg/L. However, it was unlikely for the concentration of the substance to reach this level given the dilution by seawater. In addition, there was no data available to show the impact of tear gas on planktons. He advised that the toxicity of other types of riot-control agents including pepper sprays was on the low side and methylene blue which was added to the liquid fired from water cannons was

typically used in recycled water to avoid misuse.

51. In view of the technical complexities and the time required for collecting relevant data and conducting detailed laboratory studies on the impact of the tear gas and its residues on human and the environment, a Member considered that the Government and the general public should accord top priority to stop violence in the community so that the use of tear gas would be minimised.

52. The Chairman concluded that Members were concerned about the prolonged social activities in the community and the associated implications on the public health and the environment from the use of tear gas. The Chairman invited Members to join the tea gathering right after the meeting with SEN and other senior officials of the Environment Bureau to discuss the topical issues and the latest development of Hong Kong in greater detail.

Item 4 : Date of next meeting (Closed-door session)

53. The next ACE meeting was scheduled for 9 December 2019 (Monday). Members would be advised on the agenda in due course.

[Post meeting note: As there was no proposed item for discussion at the ACE meeting in December, the meeting scheduled for 9 December 2019 was cancelled.]

ACE Secretariat
January 2020