

**Confirmed Minutes of the 237th Meeting
of the Advisory Council on the Environment (ACE)
held on 8 July 2019 at 2:30 pm**

Present:

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

Absent with Apologies:

Ms Carmen CHAN, BBS, JP
Ir Cary CHAN, JP
Ir Samantha KONG
Mr Adam KOO
Prof LAU Chi-pang, JP
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 Lily YAM	Assistant Director of Planning / Technical Services, 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 Dora CHU	Executive Officer (CBD) 1, EPD
Miss Carman LEUNG	Executive Officer (CBD) 2, EPD

In Attendance for Item 3:

Ms Joyce CHOW	Senior Project Manager, Policy for Sustainability Lab, Centre for Civil Society and Governance, The University of Hong Kong (HKU)
Mr Darwin LEUNG	Assistant Project Manager, Policy for Sustainability Lab, Centre for Civil Society and Governance, HKU
Mr LAM Chiu-ying, SBS	Convenor, Support Group on Long-term Decarbonisation Strategy
Mr D C CHEUNG	Secretary, Council for Sustainable Development
Miss Joanne KAM	Assistant Secretary for the Environment (Sustainable Development) 1, Environment Bureau (ENB)

In Attendance for Item 4:

Mr Francis CHENG	Assistant Director (Cross-Boundary & International), EPD
Mr Daniel TANG	Principal Environmental Protection Officer (Cross-Boundary & International), EPD
Dr Sam CHOI	Senior Environmental Protection Officer (Territorial Control)2, EPD
Mr Patrick TSANG	Acting Senior Environmental Protection Officer (Cross-Boundary & International)1, EPD

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The Chairman informed Members that apologies of absence had been received from Ms Carmen Chan, Ir Cary Chan, Ir Samantha Kong, Mr Adam Koo, Prof Lau Chi-pang, Ir Prof Irene Lo and Prof Wong Sze-chun.

Item 1 : Confirmation of the draft minutes of the 236th meeting held on 10 June 2019 (Closed-door session)

2. The draft minutes were confirmed without amendments.

Item 2 : Matters arising (Closed-door session)

3. There were no matters arising from the minutes of the last meeting.

Item 3 : Council for Sustainable Development's Public Engagement on Long-term Decarbonisation Strategy (ACE Paper 10/2019)

4. The Chairman informed Members that *ACE Paper 10/2019* briefed Members on the public engagement (PE) on long-term decarbonisation strategy conducted by the Council for Sustainable Development (SDC). The SDC released the PE document and launched a three-month public interaction phase starting from 14 June to 20 September 2019.

5. A Member declared that she was one of the members on the team of The University of Hong Kong (HKU) commissioned by the SDC to carry out the PE on long-term decarbonisation strategy. The meeting agreed that she could stay on and continue participating in the discussion.

[The presentation team joined the meeting at this juncture.]

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

6. Mr Lam Chiu-ying started the presentation by introducing that the PE had adopted a bottom-up approach to gauge public views in formulating Hong Kong's long-term decarbonisation strategy without pre-set standpoints. Remarking that it would be challenging to promote decarbonisation in Hong Kong as it was a city of commerce and consumerism, he highlighted the need to re-define the meaning of prosperity and quality of life and stressed the importance of full community involvement in order to achieve the decarbonisation target. With the aid of a PowerPoint presentation, Ms Joyce Chow followed to brief Members on the objectives and process of the PE, key issues addressed in the PE document and the

way forward.

Transition towards a low-carbon society

7. Considering the increasing green awareness and positive public responses to green initiatives and environmental protection issues in the community, the Chairman was optimistic about Hong Kong's transition towards a low carbon economy. He aspired that the PE could help build consensus in the community and draw up effective means on the decarbonisation strategy with a view to ultimately achieving the target under the Paris Agreement (PA) and contributing to global decarbonisation efforts. Two Members shared the Chairman's views and aspirations.

8. A Member mentioned that a World Forum on Climate Justice was held recently in Glasgow and he suggested drawing on international experience on ways to cut carbon emissions.

9. A Member suggested communicating closely and collaborating with property management companies to promote a low-carbon lifestyle and offer green solutions such as arranging for car sharing services for residents. Mr Lam Chiu-ying advised that property management companies had been invited to participate and offer their views in focus group meetings held by the Support Group on Long-term Decarbonisation Strategy (SG) last year.

10. A Member suggested making reference to the handful of states in the United States and Seoul which had provided support to encourage car sharing at the state/government level.

11. A Member opined that when evaluating whether certain new policies and initiatives should be launched, for instance the introduction of renewable energy, a basket of factors should be taken into account, including but not limited to the costs, public health benefits and improvements to the quality of life. She further suggested that the Government should review the prevailing legislation and amend/repeal the outdated laws if needed. As an example, she pointed out that for Hong Kong to become a bicycle-friendly city, the law that forbade cyclists from carrying passengers should be reviewed.

Education and public awareness

12. A Member said that the PE should be commended for its efforts in raising public awareness and knowledge on the adoption of a low-carbon lifestyle, which encouraged conscious efforts to changing the dietary patterns and reducing food waste with a view to reducing the carbon footprint on an individual level. He suggested with the support of another Member that such efforts should be stepped up in order to drive changes in public attitude and behaviour. A Member remarked that apart from reducing the carbon footprint, changing the dietary patterns could bring about health benefits and reducing food waste might help combat malnutrition in the developing and least developed countries.

13. Considering that the majority of the general public failed to see the relevance of climate change to their daily lives, a Member pointed out that it was important to demonstrate to the public the negative impact of climate change, convey the message that their participation was vital for combating climate change, and define concrete actions that could be undertaken by every member of the public. She suggested that the SG should collaborate with District Councils (DCs) and their committees and working groups so that they could help reach out and promote to the wider public. The Government could also help facilitate the public to adopt a low-carbon lifestyle by providing relevant policy support, which could at the same time demonstrate its commitment towards decarbonisation.

14. A Member concurred and said that the Government should take a leading role to drive changes in public attitude and behaviour, for instance by trying to recognize difficulties faced by individuals when transitioning to a low-carbon lifestyle and proactively find ways to help them resolve the problems. Echoing Mr Lam Chiu-ying's views that there was a need to reshape public perception on the meaning of prosperity and quality of life, she pointed out that there were various on-going initiatives that could help achieve the goal (e.g. the "Towards 2025 Strategy and Action Plan to Prevent and Control Non-Communicable Diseases in Hong Kong" and "Hong Kong Smart City Blueprint"). She opined that a concerted effort should be adopted by relevant government bureaux/departments (B/Ds) in order to create synergy among different policies and initiatives. She further suggested that consideration should be given to invite the younger generation to submit creative/innovative proposals with a view to generating public sentiment towards a low-carbon lifestyle which would be

considered stylish, attractive and sustainable.

15. A Member observed that the recent minimalism-inspired approach, with Marie Kondo as one of the leading figures, had inspired many youngsters to pursue a simplistic lifestyle. She considered that this was a good opportunity to change the public mindset and advocate a green and sustainable lifestyle. She also pointed out that many people preferred natural ventilation than air-conditioning due to the latter's high carbon footprint and adverse impact on skin. However, natural ventilation was sometimes not an option due to constraints in the building design as well as noise and air pollution problems in the surrounding environment. She suggested that the Government should identify solutions such as planting tree buffers for noise reduction and imposing tighter car speed limits on roads next to residential buildings.

16. A Member shared the challenges in promoting and sustaining public engagement. Considering that some individuals might not associate themselves with the need for the low-carbon strategy in the community, she suggested that it might be more practical and effective to enhance public awareness on the relevancy of climate change to their daily lives. The provision of economic incentives could also be considered to expedite carbon reduction efforts made by the public. She also observed that a significant part of the PE was held during the summer holidays and hence this might adversely affect the extent of public outreach. In this connection, she suggested that the Government should consider using more social media platforms frequently used by the younger generation for better dissemination of information and encourage them to actively participate in the PE.

17. A Member also stressed the difficulty in changing public values, attitude and behaviour and shared the challenges he encountered when trying to promote energy saving in one of the student halls previously. He noted that a bill requiring all students to each plant ten trees before his/her college graduation had recently been passed in the Philippines. In addition to enlarge the forest coverage to enhance carbon sequestration, the Philippine Government considered that such measure would effectively raise students' awareness of climate change so that they would take responsibility to join hands with the government to tackle the problem. He suggested that the Hong Kong Government should give consideration to introduce similar initiative so as to help educate students the need for taking immediate actions to tackle the problem of climate change. To create a sense of

urgency, the Member further suggested that relevant information and data regarding the negative impacts brought about by climate change should be publicised. He advised that many local studies on the relationship between the outdoor temperature and mortality rate had already shown a cumulative increase in mortality of 1.8% for every increase of one degree Celsius (°C) above 28°C in mean daily outdoor temperature. He suggested that a mobile application (mobile app) should be developed and launched in order to allow individuals to track their carbon footprints and competitions could be held to incentivise carbon reduction efforts by individuals.

18. Concurring that 28°C was a critical threshold, Mr Lam Chiu-ying advised that the Hong Kong Observatory would keep the Very Hot Weather Warning in force if the temperature did not fall below 28°C during the night time to remind the public to take appropriate measures against heat. He agreed that the Government should make known to the public the adverse impacts of the climate change to help the public recognise its imminent threat.

19. A Member suggested that the impact of extreme weather in monetary terms, for instance, the financial loss due to the super typhoon Mangkhut should also be covered. He added that a pilot scheme to show the carbon footprint of products through product labelling should be launched, thereby facilitating consumers to make informed spending decisions.

Promoting green transport

20. A Member opined that priority should be accorded to the development of rail system to form the backbone of passenger transport system. In-depth discussions should be made with DCs and relevant B/Ds to facilitate a coordinated development. Considering that the infrastructure and support facilities for electric vehicles would still contribute to carbon emissions, he was of the view that the use of all types of private cars, including electric vehicles, should be discouraged. While noting that the number of locally registered private cars had been on a rising trend in recent years, the Member considered that the number of parking spaces should be reduced in order to discourage people to own private vehicles, eventually containing the growth in the numbers of private cars.

21. A Member suggested that the Government should enhance the walkability on both inter- and intra-district levels alongside sustainable efforts in developing a comprehensive public transportation system.

22. A Member remarked that cycling had always been a leisure activity in the city, rather than a means of transport. She considered that policy support from the Government was crucial for improving the connectivity of cycling paths, thereby enabling cycling to become a possible means of transport.

23. A Member supplemented that building design and land-use development should also be taken into consideration and synchronised with the development of cycling paths/networks, so as to provide the necessary infrastructure such as shower, changing and parking facilities to facilitate the development of cycling as one of the viable means of transportation.

24. A Member pointed out that Norway had required all passenger and cargo ferries travelling along its coastline to be powered by electric. With a view to cutting down carbon emissions from the maritime sector, she suggested that the Government should give consideration to offering incentives and/or imposing new terms/requirements on ferry operators at the time of contract renewal.

Enhancing energy efficiency

25. In view of the relatively high fiscal reserves, a Member considered that Hong Kong had the resources to proactively reduce carbon emissions through funding more research and development (R&D) projects, developing green industries, promoting green buildings, introducing new technologies, etc.

26. A Member opined that the key to Hong Kong's successful transition towards a low-carbon society might rest with translating carbon reduction targets into practicable actions, such as adopting the latest technologies to improve energy efficiency, promoting green shopping and prohibiting the use of energy inefficient products such as incandescent light bulbs. He was optimistic that with the necessary funding and Government policy support, Hong Kong had the potential of becoming a leading carbon neutral city and could serve as an example for overseas economies. Making reference to the existing scheme on phasing out pre-Euro IV diesel commercial vehicles, the Member suggested that the Government should

consider providing subsidies for replacing the energy inefficient machineries and mechanical equipment.

27. The Chairman opined that for new buildings, the Government might consider mandating the fulfilment of new environmental performance requirements during the period of construction instead of providing subsidies to developers.

Decarbonisation in the energy sector

28. To further reduce carbon emissions from the energy sector, a Member opined that nuclear power and renewable energy should account for a higher share of the total local electricity supply. Given that tidal/wave energy generation was also proved to be technically feasible in some overseas places, he suggested that studies should be commissioned to explore the feasibility of generating and using tidal/wave energy in Hong Kong. He further recommended that the Government should make reference to successful overseas applications with a view to introducing carbon capping and/or trading systems in Hong Kong.

29. Mr Lam Chiu-ying agreed that the use of zero-carbon energy was a feasible option, and shared that new technology was also emerging that would enable importing geothermal power from overseas places like New Zealand.

Creation and conservation of carbon sinks

30. Addressing a Member's remark on the importance of establishing and conserving urban greenery, Mr Lam Chiu-ying agreed that urban greening would not only help offset carbon emissions, but also create a more comfortable environment to improve the urban living conditions and enhance public health.

31. Given the ability of trees and soil on carbon sequestration, a Member considered that it was of paramount importance to conserve the natural environment, in particular the country parks in Hong Kong, regardless of any development needs.

32. A Member informed the meeting that there was an on-going eco-shoreline project which aimed to increase the ecological value of artificial seawalls, such as by planting mangroves along the seawalls. He advised that there were studies

which indicated that mangroves could sequester three times more carbon than forests and, at the same time, protect the seawalls from storms.

33. A Member remarked that coastal and marine systems also served as effective carbon sinks, and stressed that it was important to conserve both terrestrial and coastal ecosystems in combating climate change. She further pointed out that while tree planting might offer a quick solution for offsetting carbon emissions, Hong Kong had limited space for tree planting and the improper tree planting and/or management might lead to other problems.

Development of green industries

34. A Member suggested that a green business hub should be established via the development of green industries as a new economic pillar in Hong Kong. The Chairman concurred and opined that new business models should be introduced to support the development of sustainable green industries.

Way forward

35. Ms Joyce Chow advised that the Social Sciences Research Centre of HKU would collate views and responses from the public and stakeholders which would be taken into account by the SDC in preparing a report with recommendations to the Government in formulating the long-term decarbonisation strategy.

36. A Member opined that a plan should be drawn up and the roles of different parties in the public and private sectors should be identified to take forward the recommendations raised by the SDC. He considered that it would be equally important to formulate implementable measures to be undertaken by different B/Ds and strengthen collaboration among them to ensure that progress could be made with regard to the long-term decarbonisation.

37. Mr Lam Chiu-ying responded that the Steering Committee on Climate Change which was chaired by the Chief Secretary for Administration provided a platform for close communication and collaboration among different B/Ds to promote green building and energy efficiency, and reduce carbon emissions.

Conclusion

38. Mr Lam Chiu-ying thanked Members for their comments and suggestions. Having regard to the discussion at the meeting, he acknowledged that the formulation of the long-term decarbonisation strategy called for a multi-dimensional approach for coordination of different actions at various levels.

39. The Chairman also pointed out that it was sometimes difficult to solicit support from other people to share similar values on environmental protection. He shared with the meeting his unsuccessful experience in convincing other residents in his community to turn off air-conditioning at lift lobbies for energy saving as they placed comfort and the image of a luxurious residential estate as their priority. He echoed the general views of Members that it was important to reshape public perception and attitude, and different approaches might have to be adopted to target different groups of the public. He concluded that Members were supportive of the formulation of the long-term decarbonisation strategy and thanked the presentation team for its detailed presentation.

[The presentation team left the meeting at this juncture.]

Internal Discussion Session (Closed-door session)

40. A Member stressed that it was vital to encourage public involvement by increasing the relevancy of climate change to their daily lives. With reference to another Member's suggestion, she considered it feasible to introduce incentives on the mobile app for individuals to track their carbon footprints so as to encourage wider public participation.

41. The Chairman pointed out that it was encouraging to see that some members of the private sector had been providing monetary incentives as part of their corporate social responsibility efforts to encourage their customers to adopt a low-carbon lifestyle. For instance, Café de Coral would make a donation of three dollars when a customer opted for “less rice” and Starbucks offered discounts to customers who brought their own reusable tumblers or mugs for each beverage purchase. There were also mobile apps that encouraged walking by logging the number of steps users took every day.

42. To strike a balance between achieving thermal comfort and energy saving, a Member suggested that sensors could be installed at lift lobbies to detect the presence of people which would be linked to an algorithm to automatically adjust the temperature of the air-conditioner. He opined that the Government should enhance public knowledge on the available technologies and technical solutions, and encourage the society to devote resources for adopting these energy saving solutions through policy support and incentives. The Member added that the Government should consider requiring building owners to disclose their energy consumption and carbon emissions which would enable comparisons and motivate carbon reduction actions as a whole.

43. Given that Hong Kong had no significant manufacturing industries and relied very heavily on import goods, a Member highlighted that Hong Kong's per capita carbon emissions of 5.7 tonnes in 2016 was considered extremely high as the figure excluded emissions generated from the production of imported goods. She also pointed out that in order to achieve a carbon reduction target of well below 2°C in 2050 for compliance with the PA, it was estimated that about 80% of the electricity would have to come from zero carbon energy sources, such as renewable energy and nuclear power. She stressed that while some possible solutions in the PE document, such as importing clean energy from the region and other overseas places, had been covered, they were more of illustrative purpose and thorough public discussion and engagement were encouraged before the final recommendations could be made and presented to the SDC.

Item 4 : Implementation of the Minamata Convention on Mercury in the Hong Kong Special Administrative Region
(ACE Paper 11/2019)

44. The Chairman informed Members that *ACE Paper 11/2019* sought Members' views on the Government's plan to implement the Minamata Convention on Mercury (the Convention) in Hong Kong.

45. There was no declaration of interest by Members.

[The presentation team joined the meeting at this juncture.]

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

46. Mr Francis Cheng gave opening remarks and with the aid of a PowerPoint presentation, Mr Daniel Tang briefed Members on the background, legislative proposals and details of the public consultation on the implementation of the Convention in Hong Kong.

Controlling mercury-added products

47. In reply to the Chairman's enquiry on whether the mercury content limit of 70 parts per million (ppm) for eye area cosmetics would pose compliance difficulties to the cosmetic sector, Mr Daniel Tang advised that other jurisdictions including Mainland China, the European Union and Singapore had also adopted a 70 ppm limit, and the United States of America had adopted a stricter limit of 65 ppm. As such, the proposed 70 ppm limit would generally align with the international standards. He further advised that the trade was consulted and generally supportive of the legislative proposal.

48. In response to a Member's question on whether the use of mercury-containing mirrors would be restricted, Mr Daniel Tang advised that as mirrors were not among the Convention-listed mercury-added products, there was no need to control their import, export and manufacture.

49. A Member expressed support towards the implementation of the Convention in Hong Kong with a view to protecting the marine environment and human health. Addressing the Member's concern on the difficulty of finding substitutes for mercury-added products such as compact and linear fluorescent lamps, Mr Daniel Tang clarified that instead of banning the mercury-added products entirely, a limit of mercury content was generally made for each type of the mercury-added products listed in the Convention. For instance, only compact fluorescent lamps with mercury content exceeding 5 milligrams (mg) per lamp would be phased out. He assured Members that most, if not all, of the existing mercury-added products on the market could comply with the requirements listed in the Convention.

Exemption for laboratory-scale research use

50. A Member sought clarification regarding the entitlement to exemptions given to the storage of quantities of mercury and mercury compounds for research use in laboratories when there was more than one laboratory in the same building. He was also concerned that some kinds of research such as chemical synthesis might require laboratory to store mercury beyond the proposed exemption quantity of 500 grams (g).

51. With a view to minimising the potential danger arising from the shared use of mercury, Mr Daniel Tang explained that a laboratory occupying two or more rooms on the same floor of a building owned by or under the management of the same company, organisation or institution would be considered as one laboratory. For laboratories under the management of different companies, each laboratory would be entitled to its own exemption quantity for mercury storage. He advised that a permit issued by the Director of Environmental Protection would be applied should there be a need to store mercury over the exemption limit of 500 g in a laboratory.

52. The Chairman enquired and Mr Daniel Tang explained that, in the case of import/export of mercury for laboratory use or as a reference standard, exemption would be granted if the total weight of mercury in a single shipment did not exceed 5 kilograms (kg) and the weight of individual packages of mercury did not exceed 250 g. A permit would be applied should there be a need for importing or exporting mercury weighing over the exemption limits. Mr Tang further advised that the exemption quantity of 250 g for individual packages of mercury was made with reference to the average weight of mercury supplied by overseas chemical sample suppliers to laboratories for use as a reference standard. Granting an exemption quantity of 5 kg for a single shipment would allow flexibility for handling shipping orders from different laboratories at the same time.

Controlling mercury-containing Chinese herbal medicines

53. A Member mentioned that, with reference to Section 109 of the Chinese Medicine Ordinance (Cap. 549), no person shall sell by retail or dispense to another person any Chinese herbal medicine specified in Schedule 1 of Cap. 549 except in accordance with a prescription given by a registered Chinese medicine practitioner.

He suggested that the Government should liaise with the Chinese Medicine Council of Hong Kong to establish a register on mercury-containing Chinese herbal medicines listed in Schedule 1 for recording and monitoring purposes. Mr Daniel Tang thanked the Member for the suggestion and advised that the import, export, use and storage of mercury-containing Chinese herbal medicines would not be controlled under the proposed legislation but were regulated under the existing control regime for Chinese medicines.

Disposal and transportation of mercury waste

54. In response to a Member's enquiry on whether the disposal and transportation of mercury waste would be controlled under the proposed legislation, Mr Daniel Tang mentioned that the disposal and transportation of mercury waste were regulated under the Waste Disposal Ordinance (Cap. 354).

Conclusion

55. The Chairman thanked the subject team of EPD for their presentation. He summarised the views of Members and concluded that Members were supportive of the proposed implementation of the Convention in Hong Kong.

[The presentation team left the meeting at this juncture.]

Internal Discussion Session (Closed-door session)

56. The Chairman shared that consuming seafood containing mercury might increase the risk of Parkinson's disease. As such, he opined that there was a need to implement the Convention with a view to protecting human health.

Item 5 : Any other business (Closed-door session)

57. There was no other business for discussion at the meeting.

Item 6 : Date of next meeting (Closed-door session)

58. As there was no urgent item requiring the deliberation of ACE, the Chairman said that ACE would take a summer break in August. The next meeting

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was scheduled for 9 September 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 September, the meeting scheduled on 9 September 2019 was cancelled.]

**ACE Secretariat
September 2019**