

**Confirmed Minutes of the 39<sup>th</sup> Meeting of  
the Waste Management Subcommittee  
held on 20 January 2020 at 10:30 am**

**Present:**

Ir Prof Irene LO, JP (Chairperson)  
Ms Carmen CHAN, BBS, JP  
Ms Sylvia CHAN, MH  
Ir Samantha KONG  
Mr Adam KOO  
Miss LAM Chung-yan  
Ms Julia LAU  
Prof Albert LEE  
Ir MA Lee-tak, SBS  
Mr Simon WONG, JP  
Prof WONG Sze-chun, BBS, JP  
Ms Becky LAM (Secretary)

**Absent with Apologies:**

Mr Andrew LEE  
Ms Christina TANG  
Ir Conrad WONG, BBS, JP

**In Attendance:**

Mrs Vicki KWOK, JP	Deputy Director of Environmental Protection (2), Environmental Protection Department (EPD)
Mr FONG Kin-wa	Assistant Director (Waste Reduction and Recycling), EPD
Mr CHENG Tak-kuen	Assistant Director (Waste Infrastructure Planning), EPD
Mr Michael LUI	Principal Environmental Protection Officer (Biochar Application), EPD
Ms Shirley CHEUNG	Senior Statistician, EPD
Ms Miranda CHIANG	Senior Environmental Protection Officer (Waste Reduction and Recycling)6 (Acting), EPD
Miss Dora CHU	Executive Officer (CBD) 1, EPD
Miss Carman LEUNG	Executive Officer (CBD) 2, EPD

\*\*\*\*\*

The Chairperson welcomed Members to the meeting and informed that apologies of absence had been received from Mr Andrew Lee, Ms Christina Tang and Ir Conrad Wong.

**Item 1 : Matters arising**

2. The Chairperson advised that the minutes of the last meeting held on 19 March 2019 were confirmed by circulation on 11 April 2019. There were no matters arising from the minutes of the last meeting.

**Item 2 : Pilot Scheme on Collection of Food Waste**  
*(ACE-WM Paper 1/2020)*

3. The Chairperson informed that the paper briefed Members on the findings of the consultancy study on food waste collection and delivery, as well as the progress of the pilot scheme on collection of food waste.

4. There was no declaration of interests by Members.

5. At the invitation of the Chairperson, Mrs Vicki Kwok briefed Members on the overall strategies and measures on waste management. She highlighted that the Government attached high importance to strengthening the operation of recycling chain through the implementation of two pilot schemes on collection of food waste and waste plastics.

6. Mr Cheng Tak-kuen followed to brief Members on the background of food waste management, and with the aid of a PowerPoint presentation, Mr Michael Lui briefed Members on the key findings and recommendations of the consultancy study on food waste collection and delivery, pilot scheme on food waste collection and the way forward.

*Implementation of MSW Charging*

7. A Member enquired on the implementation progress of the municipal solid waste (MSW) charging. He remarked that the implementation schedule of the Government-run free food waste collection services should be dovetailed with that of the MSW charging with a view to reducing waste disposal at landfills and

encouraging food waste recycling.

8. Mrs Vicki Kwok explained that the Waste Disposal (Charging for Municipal Solid Waste) (Amendment) Bill 2018 had been introduced into the Legislative Council and under scrutiny by the relevant Bills Committee. She advised that the Government had adopted a multi-pronged approach to reduce waste disposal through the implementation of MSW charging and producers responsibilities schemes and developing enhancing waste collection network and recovery infrastructure to support waste recycling. These measures might not necessarily be implemented at the same timeframe according to overseas experiences. She also pointed out that due to land constraint and technological requirements in developing the food waste recycling facilities, extra time would be required to build a territorial-wide food waste recycling system vis-a-vis the time needed to incubate local recycling and re-manufacturing industries involving waste plastics.

9. In view that the proposed food waste collection service would be free of charge, two Members were concerned about the misuse of the service by some members of the public to mix other types of MSW with food waste. A Member further enquired if the smart waste collection bins could help detect contamination.

10. Mr Cheng Tak-kuen advised that the use of semi-transparent or transparent plastic bags to contain food waste for disposal would allow inspection of any contamination. The smart food waste collection bins equipped with CCTV cameras could also trace contamination for monitoring purpose.

#### *Food Waste Collection*

11. A Member shared that he had been giving advice to the Government on waste management and observed that there was a positive attitude and behavioural change in the public, such as minimising the use of plastic bottles. He was optimistic about food waste collection from domestic source with the implementation of MSW charging and installation of smart food waste collection bins in housing estates. However, he raised concerns about food waste collection from commercial and industrial (C&I) source as different stakeholders, including consumers, staff and waste collectors were involved. While various promotion

programmes had been organised, such as Food Wise Hong Kong Campaign and FoodSmart Partnership Programme, he considered that tackling food waste problem from C&I source was still challenging. Drawing from his own experience in inviting tenders to provide waste collection services in restaurants, he observed that there was single tenderer despite the implementation of the Competition Ordinance. Under this circumstance, he was worried that the waste collector would increase the service cost substantially when the food waste collection scheme was fully implemented. With reference to the collection of waste cooking oils, he considered that a registration scheme might be effective in strengthening the handling of food waste.

12. A Member concurred and opined that with education and collaboration among schools and homes, food waste collection from domestic source should be more effective than that from C&I source. As such, more housing estates should be invited to join the second phase of the pilot scheme for food waste collection. She also shared that she had been practising source separation of food waste in the household and remarked on the importance of the use of proper means, such as plastic bags, to contain food waste for disposal to minimise hygiene problem. She enquired whether the plastic bags were biodegradable and provided by the Government.

13. Mrs Vicki Kwok advised that the progress on food waste collection service would be highly dependent on the food waste treatment capacity of the facilities, which was currently 250 tonnes per day and would increase to 600 tonnes per day by 2022. Food waste generated from C&I source would be the initial target of the scheme given that it was of larger quantities and lower level of contamination than that from domestic source. The Government would review the readiness of different sectors in food waste recycling through the pilot scheme and modify the scheme flexibly when necessary. Mrs Kwok clarified that the Government would arrange vehicle fleet for free collection of food waste and collaborate with the property management companies (PMCs) for the proper arrangement. No additional burden would be added to the owners from C&I sector but they were encouraged to motivate the staff to separate food waste for collection. Having regard to hygiene and odour concerns, she said that under the pilot scheme, plastic bags would be one of the options to carry food waste for disposal in order to encourage households to recycle food waste. The Government would not provide biodegradable plastic bags since the plastic bags would be separated from the food

waste before treatment. The pilot scheme would also examine the use of other types of environmentally friendly means, such as reusable containers and newspapers, for carrying the separated food waste, to help evaluate the effectiveness of different options from the perspectives of environmental hygiene and public acceptance etc.

14. Mr Michael Lui supplemented that the Government had been liaising with different stakeholders in the C&I sector, including PMCs, waste collectors and restaurant owners for food waste collection and a platform was established for this purpose. Funding support under the Recycling Fund and Environment and Conservation Fund (ECF) was provided to about 100 restaurants in selected shopping centres for a project on food waste collection with a view to evaluating the effectiveness and identifying a suitable mode of food waste collection for C&I sector.

#### *Waste to Energy*

15. A Member considered that the strategy to turn food waste into energy would encourage the public to reduce and recycle food waste, and support the development of the new industry.

16. Mr Michael Lui advised that Phase 1 of the Organic Resources Recovery Centre (ORRC) (O·PARK1), which adopted anaerobic digestion and composting technologies to recycle source separated food waste into biogas and compost, was in operation. The biogas would be used to generate electricity as a form of renewable energy to support the operation and the surplus was exported to the grid, while the compost would be used for agriculture and landscaping applications. Phase 2 of the ORRC (O·PARK2), which was expected to be commissioned in 2022 would apply similar technologies. While the Government was at the same time engaging different universities and research institutions to explore advanced technologies to treat food waste, the strategy of Waste-to-Energy would be the main focus.

#### *Targets on Food Waste Management*

17. A Member enquired on the blueprint of the food waste management, including reduction and recycling targets. She opined that the coverage of pilot

scheme for housing estates should be expanded to cover 18 districts and suggested the Government provide subsidies for installation of food waste composters in housing estates for on-site treatment of food waste.

18. Mrs Vicki Kwok advised that there was currently about 3,600 tonnes of food waste disposed of at landfills each day and the existing food waste recycling facilities treated about 250 tonnes of food waste per day, representing a recovery rate of about 5%. Taking into account overseas experience and the level of contamination of food waste, the Government would set a target to collect and recycle half of the food waste that would otherwise be disposed of at landfills. With education programmes and the continuous development of ORRCs and food waste/sewage sludge co-digesting facilities in sewage treatment works, it was expected that the target could be achieved by mid-2030s.

#### *Education and Promotion*

19. While expressing appreciation on the efforts made by the Government in tackling food waste problem, a Member considered that clear message on whether to prevent or reduce food waste should be disseminated to the public. Apart from housewives, she suggested that advice on how to practise source separation of food waste should be provided to foreign domestic helpers.

20. Mrs Vicki Kwok said that reducing food waste at source was of the first priority in food waste management. The Government had implemented various programmes, including On-site Meal Portioning Funding Scheme in schools and Food Wise Hong Kong Campaign, with the aim of promoting the "food wise" culture.

21. A Member suggested the Government provide subsidies to support the installation of food waste composters in schools with a view to raising the awareness and participation of students in food waste reduction and recycling at source.

22. Mr Cheng Tak-kuen said that a project, namely "Pilot Programme on Provision of Small Food Waste Composters at School" had been implemented under ECF to provide funding support to schools for encouraging the installation of food waste composters. The compost produced from the food waste could be

used for planting in schools.

23. A Member suggested that financial incentive, such as coupons should be provided to consumers if they made no leftovers in order to encourage them to minimise food waste in the community.

24. The Chairperson expressed support for the Government's overall strategy in food waste management, including the trial programme to test the use of smart food waste collection bins. She suggested strengthening the publicity on food waste collection and the strategy to turn food waste into energy to encourage different sectors and the public to participate in the voluntary pilot scheme.

#### *Conclusion*

25. The Chairperson thanked the subject team for their detailed presentation. She summarised the views of Members and concluded that Members were in general supportive of the pilot scheme on food waste collection.

#### **Item 3 : Pilot Scheme on Collection of Waste Plastics** *(ACE-WM Paper 2/2020)*

26. The Chairperson informed that the paper briefed Members on the progress of implementation of the pilot scheme on collection of non-commercial and non-industrial (non-C&I) waste plastics.

27. There was no declaration of interests by Members.

28. At the invitation of the Chairperson, Mr Fong Kin-wa gave an opening remark and with the aid of a PowerPoint presentation, Ms Miranda Chiang briefed Members on the background, implementation details of the pilot scheme and the way forward.

#### *The Pilot Scheme*

29. In response to the Chairperson's enquiries on the projected volume and wastage rate of plastic materials to be collected under the pilot scheme, Mr Fong Kin-wa advised that the amount of non-C&I waste plastics collected within the

Eastern District was about 200 tonnes per annum and it was our target to increase the recovery rate by about 50% in the respective areas after the comprehensive launch of the pilot scheme. As for the wastage rate, Mr Fong advised that an allowable wastage rate of around ten percent was specified. According to the pilot scheme, all types of waste plastics would be collected including low-value plastics such as styrofoam. The actual wastage rate would be subject to the types, quality and cleanliness of the waste plastics collected.

*Waste Reduction at Source*

30. A Member pointed out that the C&I sectors highly contributed to the generation of waste plastics and suggested the Government devise strategies to encourage reduction in plastic use.

31. A Member remarked that while the widespread introduction of plastic packaging in the 1960s had provided much convenience, it was important to raise public awareness in waste reduction and recycling by stepping up education and promotion efforts.

32. Apart from waste plastics recovery, a Member followed that greater priority should be accorded to waste reduction at source. She considered that the application of reverse vending machines (RVMs) was counterintuitive and might lead to confusion given that it provided economic incentive for the consumption of plastic beverages. She suggested the Government provide a roadmap to the public on waste management to enhance public understanding on the policy directions being undertaken by the Government.

33. A Member suggested the Government encourage the private sector to adopt product packaging designs that were environmentally-friendly, such as refillable packaging with a view to achieving waste reduction at source.

34. Mr Fong Kin-wa advised that the Government had adopted a multi-pronged approach by taking forward initiatives on various fronts to promote waste reduction at source. They included:-

- (i) a study to investigate the feasibility of introducing legislation to control the use of one-off disposable plastics. Given that Hong Kong mainly



imported goods from other countries and assumed a more passive role with regard to the use of product packaging, the Government would keep in view of the timetable of the European Union (EU) and other jurisdictions in controlling the use of one-off disposable plastics as well as measures to promote a circular economy for plastic materials;

- (ii) under the green procurement policy, the Government required all bureaux and departments (B/Ds) to take into account environmental considerations when procuring goods and services. The green specifications were reviewed from time to time to include the latest technologies and substitutes and promote the procurement of products manufactured by the local recycling industry; and
- (iii) priority was accorded to public education and promotion. In this connection, contractors under the pilot scheme were required to help promote reduction at source, clean recycling and reuse in the pilot districts.

#### *Waste Plastics from the Medical Field*

35. A Member commented that the medical/healthcare sector generated large amounts of waste plastics which were difficult to recover due to their classification as hazardous waste. He suggested that consideration should be given to boosting the recovery rates of waste plastics in the medical/healthcare sector.

#### *Conclusion*

36. The Chairperson concluded that Members were supportive of the implementation of the pilot scheme on collection of waste plastics and thanked the subject team for their detailed presentation.

#### **Item 4 : Monitoring of Solid Waste in Hong Kong 2018** *(ACE-WM Paper 3/2020)*

37. The Chairperson informed that the paper updated Members on the statistics on disposal and recovery/recycling of solid waste generated in Hong Kong in 2018.

38. There was no declaration of interests by Members.
39. With the aid of a PowerPoint presentation, Ms Shirley Cheung briefed Members on the statistics of solid waste in Hong Kong in 2018.
40. The Chairperson informed that the waste statistics of 2014 to 2018 that she requested would provide a better picture on the trends of solid waste generation and disposal. The information was passed to Members for reference before the meeting.

*Waste Disposal at Landfills*

41. The Chairperson recalled that there was a drop in the quantity of the overall construction waste disposed of at landfills when the construction waste disposal charges were first introduced in 2006. However, there was only a three percent decrease recorded in 2018, she questioned whether the extent of the upward adjustment of the fee level of construction waste disposal charges in 2017 was too insignificant to drive the reduction, reuse and recycling of construction waste.
42. A Member followed that alternative economic incentives and innovative ideas should be explored to reduce the quantity of the overall construction waste disposed of at landfills. Acknowledging that all works departments were committed to reducing the generation of construction waste in public works, he suggested that non-works department could also help to reduce, reuse and recycle construction wastes generated from minor works.
43. Mrs Vicki Kwok pointed out that there had been an increasing number of construction projects in Hong Kong. Considering that there was a rising trend in the quantity of the overall construction waste disposed of at landfills over the past few years, a three percent decrease in 2018 showed that the upward adjustment of the fee level of construction waste disposal charges in 2017 was effective in driving the reduction, reuse and recycling of construction waste. The charging levels of construction waste disposal charges would be reviewed upon the introduction of MSW charging. Monitoring and enforcement efforts would be stepped up to combat fly-tipping activities. In this connection, the Government would take the lead, and had required contractors to install Global Positioning System (GPS)

tracking devices in their construction waste collection vehicles in larger-scale public works contracts.

44. With the observation that the special waste disposed of at landfills included sludge, the Chairperson enquired the reason for disposing of sludge at landfills when the maximum capacity of the Sludge Treatment Facility (STF) at T-PARK had yet to be reached.

45. Mr Michael Lui advised that sludge from all major sewage treatment works throughout the territory, amounting to around 1,000 tonnes per day, were delivered to the STF for treatment by incineration. He explained that only a small amount of sludge generated by small sewage treatment works, water treatment works by Water Supplies Department and industrial wastewater treatment plants was disposed of at landfills. It was anticipated that sludge from small sewage treatment works in the outlying islands would also be transferred to the STF. Owing to the sludge generated by the water treatment works and industrial wastewater treatment plants could not be incinerated at the STF, alternative ways for re-use of the sludge would be explored.

46. Noting that there was a significant increase in the rate of disposal of waste categorized under “Others” from 2014 to 2018, a Member considered that further screening of the wastes into more specific categories could help facilitate the devising of waste management strategies.

47. A Member opined that online shopping had been generating enormous amounts of packaging waste, including cardboard boxes, plastic bags and protective wrappings. She considered that there was a need to publish relevant data, such as the percentage contribution to the total amount of MSW, with a view of enhancing public awareness on the severity of the situation and inspiring changes in behaviour and lifestyle.

48. Mr Fong Kin-wa explained that there were technical difficulties to separate and compute data on packaging waste arising from online shopping. Given that cross-border sales took up a significant share of local online purchases, the Government had been keeping in view the policies of the Mainland in regulating the packaging standards. He advised that the State Post Bureau had issued new packaging standards with a view to promoting sustainable packaging materials.

In collaboration with local retailers, the Government was also exploring ways to reduce packaging waste.

#### *Waste Recovery*

49. In response to a Member's enquiry on the fallen trees caused by the Typhoon Mangkhut in 2018, Mrs Vicki Kwok advised that the Agriculture, Fisheries and Conservation Department (AFCD) had adopted the practice to treat yard waste on-site as far as possible, including stockpiling on-site to provide niches for wildlife and release nutrients to the nature when they decompose. Mr Michael Lui supplemented that EPD had also received yard waste from works departments and the private sector and turned them into mulch or compost for landscaping use. To encourage the community to participate in reuse and recycle of yard waste, interested parties or members of public were welcome to collect fallen trees, logs and shredded wood for free. It was understood that various usages, like landscaping and horticulture, upcycling into souvenirs, reuse as furniture and sculpture, were applied. The subject team would brief this Subcommittee on the detailed proposed management of yard waste in due course.

50. In response to a Member's question on the reduction in the recovery rate of waste paper, Mr Fong Kin-wa explained that majority of the recyclables locally recovered were exported to the Mainland for recycling, and thus it was inevitable that the tightening of import control regime of recyclables by the Mainland in 2018 would impact on the local recycling industry severely. The Government had been taking forward various initiatives to support the development of the local recycling industry, which included the aforementioned central collection of waste plastics, and it was anticipated that a similar Government-led central collection system would be implemented for waste paper. EPD had already awarded lease for lots in the EcoPark to develop a local waste paper recycling and manufacturing plant, and support would be provided to the industry to explore more effective and diversified outlets for the recycled paper.

#### *Waste Management Targets*

51. While expressing appreciation towards EPD efforts, the Chairperson questioned the efficiency of ongoing waste management initiatives. With reference to the 2014 to 2018 waste statistics, she pointed out that the per capita

disposal rate and quantity of MSW disposal were both increasing, and there was a decreasing trend in the quantity of recyclables recovered from MSW. She was concerned that it might not be able to reach the target to reduce the per capita disposal rate of MSW by 40% by 2022 as set out in the “Hong Kong Blueprint for Sustainable Use of Resources 2013–2022” (the Blueprint).

52. Mrs Vicki Kwok explained that the target set out in the Blueprint was based on various assumptions including the timely implementation of MSW charging and commissioning of the Organic Resources Recovery Centres (ORRCs). Due to the delay in the legislative process and facilities’ development programme, as well as the tightening of import control regimes of recyclables by the Mainland and other jurisdictions which had affected the global market, Hong Kong had been lagging behind the set target. Mrs Kwok considered that the challenges presented an opportunity for Hong Kong to upgrade its own recycling industry. Among others, she mentioned that the quantity of plastic recyclables recycled locally had increased by threefold in the past one year. Other key initiatives were also underway, which included:-

- (i) establishing local waste paper recycling and manufacturing plants and food waste recycling facilities;
- (ii) commissioning a study on the feasibility of controlling the use of one-off disposable plastics; and
- (iii) introducing a producer responsibility scheme (PRS) on plastic beverage containers.

Given that it would take time for the planned initiatives to be implemented and to take effect, she agreed that there was a need to clearly disseminate to the public the visions of the Government and a comprehensive roadmap in tackling the waste crisis.

#### **Item 5 : Any other business**

53. There was no other business for discussion at the meeting. The Chairperson closed the meeting by wishing all Members a Prosperous and Green Year of the Rat.

**Item 6 : Date of next meeting**

54. Members will be advised on the date and agenda for the next meeting in due course.

**Waste Management Subcommittee Secretariat  
March 2020**