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Waste Blueprint for Hong Kong 2035

PURPOSE

This paper briefs Members on the targets, strategies and key measures of the new “Waste Blueprint for Hong Kong 2035” (the new Blueprint), which sets out the long-term strategies on waste management.

BACKGROUND

2. In May 2013, the Environment Bureau (ENB) unveiled the “Hong Kong: Blueprint for Sustainable Use of Resources 2013–2022” (2013 Blueprint) to achieve the goal of “Use Less, Waste Less” through various initiatives in three main aspects, namely policies and legislation, social mobilisation and investing in infrastructure. Except for the Municipal Solid Waste (MSW) Charging Bill that is being examined by the Legislative Council (LegCo), we have made progress in all other key action items. For instance, we extended the Plastic Shopping Bag Charging Scheme to cover the entire retail sector and introduced the Producer Responsibility Scheme (PRS) on Waste Electrical and Electronic Equipment (WEEE); mobilised the trades and the community to reduce food waste with the Food Wise Hong Kong Campaign; established a community recycling network; developed T•PARK, WEEE•PARK and O•PARK1 for recycling sewage sludge, WEEE and food waste respectively; as well as planned for the development of I•PARK (integrated waste management facilities) and O•PARK2 to further our waste-to-energy journey.

3. Additional initiatives such as the setting up of Recycling Fund to assist the recycling trade; launch of Government-funded collection services for food waste, waste plastics and waste paper; enhancement to the community recycling network; the use of innovative technology to carry out pilot scheme on food waste/sewage sludge anaerobic co-digestion at sewage treatment works, etc. have also been taken forward.

4. When pressing ahead with various waste reduction and recycling measures, we have also encountered a number of new challenges. The recent downturn in global recycling market has resulted in substantial decline in the prices of and unstable market outlets for many recyclables such as waste plastics, affecting our recycling performance. In 2019, only about 30% of our MSW was recovered for recycling. We are also facing a rise in waste disposal due to economic development and changes in our lifestyles. Our per capita MSW disposal at landfills reached 1.47 kg per day in 2019. Furthermore, due to the scarcity of land resources and without sufficient infrastructural capacity to turn waste into resources/energy, we are still overly relying on using landfills, which require substantial land with limited service life and after-use, for waste disposal.

5. In view of the latest social needs and market changes, it is necessary for us to take a further step on our waste management strategies. From September last year to January this year, we exchanged views with various stakeholders, including the Waste Management Subcommittee under ACE, on the future strategies¹. Members were in support of the implementation of MSW charging with complementary measures to facilitate waste reduction and recycling, expansion of the recycling network across the territory as well as the need to move away from the reliance on landfills for direct waste disposal by developing more waste-to-energy/resources infrastructure to handle waste in a more efficient way.

¹ Other key stakeholders engaged include academics, chambers of commerce, operators of the community recycling network, waste management organisations, property management sector, architectural/engineering sector, food and beverage sector, green groups, etc., as well as government advisory committees and LegCo Panel on Environmental Affairs.

THE NEW BLUEPRINT

6. Facing the challenges of a downturn in the global recycling market, the current high level of waste disposal, and the scarcity of our land resources, we have to make greater efforts in mobilising the entire community to practise waste reduction and implement measures for achieving waste reduction and recycling on a considerably larger scale, thereby promoting transformation of waste into resources.

7. The Chief Executive announced in her 2020 Policy Address that a long-term strategy blueprint on waste management would be launched. Having consulted relevant stakeholders, and building on the 2013 Blueprint and the momentum of previous efforts in waste reduction and recycling, ENB announced the new Blueprint on 8 February this year (the new Blueprint and its pamphlet are enclosed at Annexes A and B²).

8. Advocating the vision of “Waste Reduction • Resources Circulation • Zero Landfill”, the new Blueprint outlines the strategies, goals and measures to tackle the challenge of waste management up to 2035. Under the vision, the Government will work with the recycling industry and the community to move towards two main targets, which will be supported by six major areas of action.

9. We briefed the Waste Management Subcommittee on the new Blueprint on 29 March this year. Members were in support of the targets, strategies and measures set out in the new Blueprint. Members also agreed with the need to expand our local recycling network as well as the waste-to-energy/resources infrastructural capacity for achieving the goal of “Zero Landfill”, and supported the Government’s efforts in driving waste reduction and recycling.

² They are also available on our website –

(Chinese version) https://www.epd.gov.hk/epd/tc_chi/resources_pub/policy_documents/index.html

(English version) https://www.epd.gov.hk/epd/english/resources_pub/policy_documents/index.html

Two Main Targets

Medium-term Target

10. Our medium-term target is to gradually reduce the per capita MSW disposal rate by 40-45% and raise the recovery rate to about 55% by implementing MSW charging. Bold policies and legislation as well as community-wide support are needed to effectively delink the close relationship between the amount of waste disposal and economic growth, thereby enhancing our performance on waste reduction and recycling. As MSW charging is the driving force behind waste reduction and recycling, we will continue to facilitate the LegCo to scrutinise the Bill and we hope that it can be passed as early as possible.

11. To achieve our medium-term target, it is important for the Government to take a proactive role to enhance the recyclables collection network as well as support the sustainable development of the recycling industry. We will thus expand the Government-funded collection services, the Green@Community recycling network, and the Green Outreach teams to extend their scope and coverage. We will also continue to provide the recycling trade with financial and land support through the Recycling Fund, the Green Tech Fund, as well as EcoPark to facilitate their upgrading through application of technologies and migration to producing higher value-added products. These will be complemented by our continuous efforts in relevant policies and legislation, publicity and education, as well as the further development of waste-to-resources/energy facilities.

Long-term Target (by around 2035)

12. Our long-term target is to move away from the reliance on landfills for direct waste disposal by developing adequate waste-to-resources/energy facilities. To achieve the goal of “Zero Landfill”, we will need to plan for the development of new waste-to-energy facility, and examine the feasibility of co-locating it with other waste management facilities to create a synergy effect, while reserving space for public enjoyment and environmental education. We will also enhance our capacity for treating food waste by sustaining our efforts in expanding O•PARKs, conducting food waste/sewage sludge anaerobic co-digestion at suitable sewage treatment works, and exploring other innovative technologies to handle food waste.

13. Assuming that aforementioned waste-to-energy infrastructure with adequate treatment capacity can be in place by around 2035, we will no longer need to rely on landfills for direct disposal of our MSW. By then, only a small amount of waste that is non-combustible and cannot be recycled or reused will be directly sent to the landfills. Therefore, support from the entire society is required for timely start of these waste-to-energy facilities, such that we can attain the target of “Zero Landfill”. For the treatment of construction waste, we should also develop screening and sorting facilities at an early date, with proactive efforts to promote waste separation at source, reuse/recycle of construction waste and wider use of modular integrated construction (MiC) and other innovative methods in the industry. We have to work on a multi-pronged approach for moving towards the goal of ceasing the development of new landfills.

14. Since it takes time for carrying out feasibility studies, environmental impact assessment and relevant construction works for developing waste-to-energy infrastructure, we still need to increase the capacity of our landfills on a limited scale to meet the actual demand in the coming decade as a stop-gap measure. If the development of new waste-to-energy facilities is well supported, we will have room to reduce the land requirement of the extension of the West New Territories Landfill by half from the original plan of about 200 hectares.

Six Major Areas of Action

(i) Waste Reduction

15. New policies and legislation will be implemented to guide and motivate waste reduction efforts. We will continue to proactively cooperate with the LegCo on the legislative work for MSW charging and prepare the public for its implementation before and after the MSW Charging Bill has been passed. The PRS on Glass Beverage Containers will be fully implemented subject to LegCo’s scrutiny of the relevant subsidiary legislation, and we are pressing ahead with launching a pilot scheme on reverse vending machines and the consultation on the introduction of the PRS on Plastic Beverage Containers in January and February 2021 respectively. We will also consult relevant stakeholders on the phased regulation of disposable plastic tableware, and explore the need to handle other single-use plastics.

(ii) Waste Separation

16. The Government's proactive role in enhancing the recyclables collection network enables more effective waste separation. The services provided by the community recycling network Green@Community, comprising Recycling Stations, Recycling Stores and Recycling Spots, will continue to be expanded to facilitate recycling in the community. The pilot scheme on collection of food waste will soon be expanded to also cover domestic food waste progressively; while that for waste plastics will be extended from the existing three districts to nine districts progressively in end 2021, which will be further extended to cover the entire territory in the long run. The territory-wide waste paper collection and recycling services will continue to enhance both the quantity and quality of waste paper collected.

(iii) Resources Circulation

17. To achieve "Zero Landfill", more waste-to-energy/resources facilities will be developed to transform waste into valuable resources. O•PARK and food waste/sewage sludge anaerobic co-digestion at sewage treatment works will be expanded for food waste recycling, and paper pulping facility and Y•PARK will be developed for recycling waste paper and yard waste respectively. We will examine the possibility of developing appropriate sorting facilities for construction waste, subject to availability of suitable conditions and technologies, in the long run. We will also plan for the development of a new waste-to-energy facility for handling non-recyclable MSW. Apart from enhancing resources circulation, transforming waste into energy can reduce the use of fossil fuels for electricity generation, thereby reducing carbon emissions to combat climate change.

(iv) Industry Support

18. The recycling trade is our important partner in promoting waste-to-resources transformation. To support the sustainable development of the recycling industry, and assist the trade to cope with the instability in international recycling market and upgrade their operation, we will enhance the operation of the Recycling Fund for continuing our financial support to them. In the 2021-22 Budget, the Government announced that it would inject an additional funding of \$1 billion to the Recycling Fund and extend the application period to 2027 so as to render continuous support to the trade, particularly the small to medium enterprises, in enhancing their operational capabilities and efficiency as well as coping with the latest needs of both the local and non-local markets. In the long run, more land will be identified for the

expansion of EcoPark for providing land support at affordable prices. As green procurement can help boost the demand for recycled products, we will expand the Government's green procurement list to cover more products and services, and encourage more organisations to formulate their green procurement policies. With the implementation of various green initiatives, we believe thousands of green job opportunities can be created to benefit the entire society.

(v) Innovation and Cooperation

19. Innovation brings efficiency while cooperation creates synergy. We welcome and encourage innovation to help enhance efficiency of waste reduction and recycling, and welcome collaboration in different forms and aspects as well as exchange of ideas. The newly established Green Tech Fund provides focused funding support to research and development projects covering environmental protection with its \$200 million commitment. We will also lead the society to adopt innovation and technology in waste reduction and recycling. The introduction of smart recycling system and application of reverse vending machines are some vivid examples. Other innovative ideas such as installation of food grinders in new development areas and housing projects will also be explored. While the Central Government is taking forward the pilot program on “zero waste city”, we will strengthen our exchanges with relevant Greater Bay Area cities to develop a regional “circular economy”.

(vi) Education and Publicity

20. Waste reduction and recycling require contribution and support from all members of the society. Education and publicity are therefore needed to help raise public awareness and encourage public engagement to complement and increase the effectiveness of our waste management initiatives. The Green Outreach teams of the Environmental Protection Department, which provide on-site support service and publicity on waste reduction and recycling, will be gradually expanded to cover all districts in 2021. “Plastic-free” culture will continue to be promoted, in particular on reducing the use of disposable plastic tableware. We will also continue to liaise with the retail industry and other key stakeholders to jointly explore and implement practical measures to promote the reduction of plastic packaging materials.

WAY FORWARD

21. The new Blueprint will serve as the guiding principle for Hong Kong up to 2035 to take forward further waste reduction and recycling initiatives, support the recycling trade and increase our local infrastructural capacity to transform waste into valuable resources, as well as seek concerted efforts from the entire society to realise the vision and achieve the targets.

22. The market, technologies and opportunities are ever-changing. We will thus review and update our strategies and targets roughly every five years to keep us on the right track towards the vision and keep abreast of the latest situation.

ADVICE SOUGHT

23. Members are invited to offer views on the new Blueprint.

Environmental Protection Department

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