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**Update on the Progress of the Key Initiatives in the
“Policy Framework for the Management of Municipal Solid Waste
(2005-2014)”**

PURPOSE

This paper updates Members on the progress of the key initiatives in the “Policy Framework for the Management of Municipal Solid Waste (2005-2014)” (Policy Framework).

BACKGROUND

2. To address our serious and imminent waste problem in a holistic manner, the Administration published the Policy Framework in December 2005, which sets out a comprehensive waste management strategy for the next ten years. Encompassing initiatives on waste avoidance and reduction at source, waste recovery and recycling and bulk reduction of waste, the Policy Framework aims to achieve the following waste management targets -

- (a) to reduce the amount of municipal solid waste (MSW) (i.e. domestic and commercial and industrial (C&I) waste) generated in Hong Kong by 1% per annum up to the year 2014, based on the 2003 levels;
- (b) to increase the recovery rate of MSW to 45% by 2009 and 50% by 2014; and

- (c) to reduce the total MSW disposed of at landfills to less than 25% by 2014.

3. We have largely been achieving our targets progressively. In particular, with our continuing effort in waste recovery and recycling, the recovery rate of domestic waste almost doubled from 16% in 2005 to 31% in 2008. Meanwhile, the amount of domestic waste disposed of at landfills dropped by another 4.3% in 2008, as compared to 2007, to about 2.23 million tonnes. The reduction in domestic waste disposal was against an increase of about 0.7% in our local population and was the fourth consecutive year recording decrease. Since the launch of the Policy Framework, the cumulative decrease in landfill disposal of domestic waste has been about 11%. On the C&I side, the recovery rate of C&I waste also maintains at a relatively high level of 63%. Overall, we achieved an MSW recovery rate of 48% in 2008. However, the outlook of waste recovery in Hong Kong in the coming years may be influenced by the current economic downturn which could affect the global demands for recyclable materials. We will continue to strengthen the foundation and momentum for local recycling, including the support for recycling industry, and to explore possible outlets for recovered materials and recycled products.

4. While we will continue to work towards the targets laid down in the Policy Framework, the landfill disposal of C&I waste in 2008 has increased by about 11% to 1.23 million tonnes, as compared to that in 2007. Possible factors contributing to the trend may include the robust economic growth and strong tourism influx in the first three quarters of 2008. As a result, the overall landfill disposal of MSW has increased slightly by 0.5% to about 3.46 million tonnes.

5. Despite the good progress achieved for source separation and recycling, it is necessary for us to speed up the implementation of other waste reduction initiatives and the development of new waste treatment infrastructure to reduce the bulk of unavoidable waste. Against the above background, we set out below the implementation progress of the major initiatives under the Policy Framework.

KEY INITIATIVES IN THE POLICY FRAMEWORK

Waste Reduction at Source

6. As highlighted in the Policy Framework, we should adopt the

“polluter-pays principle” to provide economic incentives for the public to reduce and recycle waste. In line with this principle, producer responsibility schemes (PRSs) will enable manufacturers, importers, wholesalers, retailers and consumers to share the eco-responsibility of reducing, recovering and recycling certain products so as to minimise the environmental impact.

7. Enacting the Product Eco-responsibility Ordinance (Cap. 603) in July 2008 provides the legal basis for introducing PRSs in Hong Kong. In the light of the broad-based public support and consensus, the environmental levy scheme on plastic shopping bags is the first PRS introduced under the Ordinance. The Product Eco-responsibility (Plastic Shopping Bags) Regulation was approved by the Legislative Council on 22 April 2009 with a view to commencing the scheme in July 2009. We would closely monitor the effectiveness of the first phase of the scheme by conducting dedicated surveys on plastic shopping bags at refuse transfer stations and landfills before the commencement of the levy scheme and annually thereafter. In the meantime, we encourage retailers not yet covered by the environmental levy scheme (such as newspaper vendors) to work with green groups to launch voluntary reduction initiatives on plastic shopping bags.

8. Further to the environmental levy scheme, we pledged in the Policy Address 2008-09 to examine the feasibility of introducing mandatory PRS for used electrical and electronic products, including the scope of the PRS and the possible forms that it may take. We aim to consult the public and the trades on the feasible options within 2009.

9. MSW charging is considered another effective measure to promote waste reduction and recovery. Given Hong Kong’s multi-storey, multi-tenant household setting and the prevailing waste collection arrangements, we conducted a three-month trial scheme in 2007 to examine the logistical requirements for introducing a variable rate charging scheme under different domestic housing settings. Currently, we are conducting a territory-wide Baseline Study to collect key information on the waste generation and waste management practices of different C&I establishments. The information collected would provide a useful reference for the development of a practicable charging scheme for MSW.

MSW Recovery and Recycling

10. Launched in January 2005, the source separation of domestic waste programme is a territory-wide programme which aims at providing suitable

recycling facilities for domestic waste at locations as close as possible to their generation sources, and at the same time broadening the types of recyclables to be recovered. It encourages the community's participation in recycling and facilitates the provision of a reliable source of materials for the recycling industry.

11. As at March 2009, there were 1 071 housing estates participating in the programme, covering some 1.3 million households or 56% of the population. Around 30% of them have implemented a floor-to-floor mode of waste separation, while the remaining set up waste separation facilities on the ground floor to collect different types of recyclable materials, including paper, plastics, metals, used clothes, small electrical and electronic appliances, etc. We will continue to press ahead with the programme with a view to achieving the Policy Framework's target of covering 80% of the population by the end of 2010.

12. While source separation has proven to be effective in enhancing waste recovery and recycling, the Building (Refuse Storage and Material Recovery Chambers and Refuse Chutes) Regulation (Cap. 123H) was amended in 2007-08 to mandate the provision of refuse storage and material recovery room on every floor of new domestic buildings and the domestic part of composite buildings, with certain exemptions for small-scale developments and buildings intended for used as hotels, guest-houses, etc. The amended regulation came into effect on 1 December 2008.

13. As for C&I waste, the recovery rate has been maintained at a relatively high level of some 60% over the years. Notwithstanding, C&I waste disposed of at landfills continues to increase. In view of the trend, we see a strong case to stage targeted promotion on source separation for C&I buildings. Since the launch of a promotional programme in October 2007, some 460 buildings have signed up to the programme, covering commercial and institutional buildings, industrial buildings, shopping arcades, warehouses and car parks. The programme recognises and encourages the implementation of source separation practices in C&I buildings. As at March 2009, 423 of the 460 participating buildings have passed the assessment and were awarded a three-year certificate. We would continue to recruit participating buildings. With funding support from the Environment and Conservation Fund (ECF), the Environmental Campaign Committee (ECC) has been providing newly designed waste separation bins to housing estates, C&I buildings, schools, as well as recyclables collection points at public places.

14. In the course of pursuing PRSs under the Product Eco-responsibility

Ordinance, we continue to promote and support the voluntary recycling programmes to recover and recycle specific products. Further to the Rechargeable Battery Recycling Programme launched in 2005, three more voluntary programmes were implemented in 2008. Launched in January 2008, the Computer Recycling Programme targets to recover annually 50 000 units of used computer equipment in the first two years of its operation. The Fluorescent Lamp Recycling Programme followed in March 2008, with an annual recovery target of 400 000 pieces of fluorescent lamps. Furthermore, the Glass Container Recycling Programme for Hotel Sector commenced in November 2008. All three voluntary programmes are funded and administered by the respective trades. We will continue to promote the introduction of voluntary PRSs in light of the experience gained from the above-mentioned programmes.

15. The continual expansion of the source separation of MSW and the introduction of the voluntary PRSs would help lay a solid foundation for the recycling operations in Hong Kong, whereby our waste could be turned into useful products and channeled back to the economic chain. To add further impetus to the development of the recycling industry, the EcoPark in Tuen Mun provides long term land at affordable costs for the local environmental and recycling industries. The 20-hectare EcoPark is developed in two phases. In Phase I, all six lots have been leased. We are reviewing the leasing arrangements of Phase II in the light of the experience gained in Phase I, feedback from the stakeholders and the recycling trades as well as other relevant factors. The infrastructure works of Phase II started in December 2008 and are anticipated to be completed by end 2009.

Towards a More Sustainable Waste Management Approach

16. Notwithstanding our efforts and progress in waste reduction and recycling, there remains unavoidable waste that needs to be disposed of properly. Our three strategic landfills would start to approach their capacity one by one in the early to mid 2010s and their extension would be necessary to provide the final repository for our waste. In this connection, the feasibility and environmental impact assessment studies on the extension of the North East New Territories Landfill and the South East New Territories Landfill have been completed, while that for the extension of the West New Territories Landfill are in progress and will be completed later this year. As set out in the Policy Framework, our target is to commission the landfill extensions by early to mid 2010s.

17. Pursuing waste reduction and recycling and extending the landfills alone will not resolve our waste problem. We need to adopt a more sustainable approach to reduce the volume of waste that requires disposal and conserve our landfill space as the final repository for residue waste or inert waste that cannot be further treated. As laid out in the Policy Framework, we will develop the Integrated Waste Management Facilities (IWMF) with incineration as the core technology to substantially reduce the volume of unavoidable waste, thereby extending the life span of the existing landfills and their extension.

18. The IWMF will be developed in phases having regard to the size of the overall waste problem. The first phase will have a treatment capacity of about 3 000 tonnes per day (tpd). It will also incorporate a small scale sorting and recycling plant to recover recyclable materials from mixed MSW. The first phase of the IWMF will occupy a total area of about 10 hectares. The result of our comprehensive site search exercise concludes that the sites at Shek Kwu Chau and Tsang Tsui Ash Lagoons are suitable for consideration as potential sites for its development. We are conducting the detailed engineering and EIA studies for both sites to ascertain their ultimate suitability. Subject to the study findings to be available in 2010, we aim to make a final decision on the choice of site and to commence construction as soon as possible with a view to commissioning the facilities in mid-2010s.

19. Food waste constitutes some 28% of our C&I waste disposed of at our landfills. To gather experience and information on the collection and treatment of organic waste, we commissioned a pilot composting plant in mid-2008. The pilot composting plant is capable of receiving up to 4 tpd of source-separated food waste from C&I premises. Furthermore, as part of our long-term waste treatment strategy, we will develop the Organic Waste Treatment Facilities (OWTF) in two phases, with each phase handling about 200 tonnes of source-separated food waste from the C&I sector per day. Biological treatment technology, like composting or anaerobic digestion, will be adopted. The first phase of the OWTF is planned to be built in Siu Ho Wan on Lantau Island, and is targeted to be commissioned in mid 2010s. The second phase will be built in Sha Ling in the North District by late 2010s.

20. To encourage diversion of source-separated food waste from landfills to these waste treatment facilities, complementary measures shall be in place when these facilities are commissioned with a view to further promoting waste reduction and recycling. This may include creating economic incentives through appropriate MSW and food waste charging options to be identified under the proposed charging scheme for MSW.

Public Education and Partnership

21. The successful implementation of the initiatives under the Policy Framework ultimately hinges on public support and participation. We have therefore continued to press ahead with public education programmes on waste reduction and recovery. For example, through the Hong Kong Green School Award and the Student Environmental Protection Ambassador Scheme, training sessions, education programmes and topic specific seminars were organised to encourage teachers, students and parents to adopt a greener lifestyle, such as the use of reusable or recyclable lunch boxes and the reduction of plastic shopping bags.

22. In end 2006, the ECF Committee agreed to reserve \$10 million for a dedicated public education programme to promote environmental initiatives under the Policy Framework. So far, 16 applications with a total funding of about \$6.5 million have been approved. These projects cover a wide range of topics, including reduction of plastic shopping bags, green procurement, green festive packaging, and the recovery and recycling of waste electrical and electronic equipment (WEEE), etc.

23. As part of the Government's commitment to promote and support public engagement, we injected \$1 billion into the ECF to give new impetus to environmental education and research, including those on waste reduction and recovery. The ECC continues its partnership with the District Councils and non-governmental organisations in promoting waste reduction and recycling initiatives, and low-carbon lifestyle.

24. We have also been promoting general awareness on waste reduction and recovery through local media. In addition to a series of TV and radio announcements of public interests (APIs) under the theme of "I love Hong Kong, I love Green", other APIs on source separation, simple packaging and reduction of plastic shopping bags have also been rolled out. We will continue our publicity drive to enhance public awareness of the four Rs: Reduce, Reuse, Recycling and Responsibility. We also encourage the public and the business sector to practise waste reduction and recycling through the Hong Kong Awards for Environmental Excellence under which "Wastewi\$e Label" will be presented to companies/organisations.

ADVICE SOUGHT

25. Members are invited to note the progress of implementing the key initiatives under the Policy Framework.

Environmental Protection Department
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