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

PURPOSE

This paper presents an update on the progress of the key initiatives in the "Policy Framework for the Management of Municipal Solid Waste (2005-2014)" (Policy Framework).

BACKGROUND

- 2. In December 2005, the Administration published the Policy Framework to set out a comprehensive strategy to tackle our imminent waste problem in the next ten years. Enshrining the principle of "polluter-pays" and the element of "responsibility", the Policy Framework aims to create incentives for the community to recycle more and discard less. The Policy Framework also sets out the following targets:
 - (a) <u>Target 1 Waste Avoidance and Minimization:</u> Reduce the amount of MSW generated in Hong Kong by 1% per annum up to the year 2014, based on the 2003 levels.
 - (b) <u>Target 2 Reuse, Recovery and Recycling:</u> Increase the recovery rate of MSW to 45% by 2009 and 50% by 2014.
 - (c) <u>Target 3 Bulk Reduction and Disposal:</u> Reduce the total MSW disposed of at landfills to less than 25% by 2014.
- 3. The LegCo Panel on Environmental Affairs (EAP) discussed the Policy Framework on 15 December 2005, and a special meeting was convened by the EAP on 19 January 2006 to invite views from the deputations. The Advisory Council on the Environment (ACE) also discussed the Policy Framework at its meeting on 21 December 2005, and organized an Open Forum on 21 January 2006 to exchange views with stakeholders and the public on the key initiatives of the Policy Framework.

- 4. In order to widely disseminate the key message and policy initiatives of the Policy Framework, EPD has attended various seminars and fora organized by different sectors and organizations, and published feature articles in the trade journals and free newspapers. In addition to distribution of CD-ROMs, we also set up a dedicated website and an email account for the Policy Framework. The Policy Framework also featured as a key discussion topic in the Public Affairs Forum of the Home Affairs Bureau.
- 5. The community and the stakeholders are generally supportive to the Policy Framework. In particular, the public recognize the urgency of our waste problem and are willing to participate more in waste reduction, reuse and recovery. The concept of waste charging and producer responsibility schemes are also starting to take root.

KEY INITIATIVES IN THE POLICY FRAMEWORK

Source Separation of Domestic Waste Programme

- 6. As of mid November 2006, we have approached 1,172 housing estates out of which 434 housing estates have signed up to join the programme (covering 612,000 households and some 1,950,000 people). Out of the 434 estates, 194 housing estates have implemented or will soon implement a floor-to-floor mode of waste separation. The remaining 240 housing estates have set up waste separation facilities on ground floor to collect different types of recyclables. Among the housing estates that have implemented floor-to-floor waste separation, 71of them have reported encouraging results, with an overall 56% increase in the quantity of recyclables collected. Among the housing estates that have set up waste separation facilities on ground floor to collect different types of recyclables, 109 of them have reported encouraging results, with an overall 36% increase in the quantity of recyclables collected. In general, there is a 3 to 4% reduction in the waste disposed of in the estates that are participating in the source separation programme.
- 7. Our target is to have 470 and 700 housing estates participating in the programme by 2006 and 2007 respectively.

Producer Responsibility Schemes (PRSs)

8. PRS is a key policy tool for waste reduction, recovery and recycling. Under PRS, a host of stakeholders, who could be manufacturers, importers,

distributors, retailers or consumers, shall share the responsibility of handling end-of-life products so as to avoid and minimize the environmental impact of these products. We have proposed to introduce the Product Eco-responsibility Bill (PER Bill) to provide a legal framework for implementing PRSs. The proposed legislation was discussed at the Legislative Council (LegCo) Panel on Environmental Affairs in April 2006. While supporting the implementation of PRSs in principle, Members would like to consider the PER Bill together with individual schemes. To cater for Members' views, we are developing a number of PRSs in earnest, with a view to tabling the Bill together with at least one scheme in mid-2007.

- 9. With regards to the PRS on plastic shopping bags, we have engaged a consultant to develop the scheme and assess the costs and benefits of various options. The study should be completed within this year, and we will consult the public and the trade in due course. On the voluntary front, ten major retail chains ¹, including the three largest supermarkets in Hong Kong, have respectively entered into a Voluntary Agreement on Plastic Bag Reduction with the Government. So far, they have managed to reduce 83 million plastic shopping bags, well on their ways to over-achieve the 120 million reduction target. Separately, we have obtained the agreement of major supermarkets and retail chains to conduct "No Plastic Bag Day" at least once a month in 2007.
- 10. With regard to vehicle tyres, we intend to levy a fee to support waste tyre management and require the relevant industry to undertake recovery and recycling of waste tyres. We have been discussing with the industry to ensure their concern is duly considered while the PRS is developed. Concurrently, we are running a contract (commissioned in February 2006) to recycle the waste tyres currently handled by the Government so as to gradually establish such local recycling capability to complement the implementation of PRS.
- 11. For waste electrical and electronic equipment (WEEE), we are examining possible schemes and regulatory measures to introduce PRSs on WEEE and will seek views of the stakeholders on the feasible scheme. Since 2003, we have engaged two charitable organizations to recycle WEEE and computers. So far, over 150,000 items have been collected and processed under the programme. In addition, we engaged the Chamber of Hong Kong Computer Industry (CHKCI) early this year to organize a separate pilot computer recycling programme. The main purpose was to verify the cost of recycling computer under a commercial mode of operation. 8300 items have been collected and processed under the programme. The CHKCI is preparing

.

¹ Wellcome, PARKnSHOP, China Resources Vanguard, Watson's, Mannings, Pricerite, DCH Food Marts, A-1 Bakery, Circle-K and City' Super

the final report expecting completion by the end of the year.

12. The voluntary PRS programme in rechargeable Battery Recycling Programme has been implemented for about 19 months. Over the period, the number of participating companies has increased from 34 to 36 and the number of collection points expanded by more than 70%. The public can now return their used rechargeable batteries to more than 1,800 collection points. The first batch of 13 tonnes (320,000 pieces) of rechargeable batteries was sent to a recycling facility in South Korea in April 2006. The first annual report for the programme is published in November 2006. In the first seven months of the second year, more than 15 tonnes of rechargeable batteries have been collected. The batteries will be shipped out for recycling in December 2006

Municipal Solid Waste (MSW) Charging

- 13. The proposed MSW charging scheme is a key policy initiative for waste reduction. In accordance with the principle of "polluter pays", a variable rate charging scheme is preferred. We have launched a trial scheme to study the logistical arrangements for waste recovery and disposal in different housing settings for reference in the feasibility study of introducing a variable rate charging scheme. The trial scheme, which will last for 3 months, has commenced in mid November 2006. Twenty housing estates have been invited to join the trial scheme, and "designated bags" are distributed to the households for disposal of non-recyclable domestic waste. We have also included the use of "food waste bags" in the trial scheme for a few selected housing estates to examine the feasibility of source separation of food waste.
- 14. We will consider views from relevant stakeholders including the residents, property management companies and cleansing contractors, on the use of "designated bags" and "food waste bags", so that we can design a suitable variable rate charging scheme which suits the unique multi-occupant multi-storey living environment in Hong Kong. After we have completed the feasibility study, we will consult the public on the specific legislative proposal before we introduce a Bill into the Legislative Council.

EcoPark and Land Policy

15. The 20-hectare EcoPark site in Tuen Mun Area 38 was rezoned to "Other Specified Uses (Resource Recovery Park)" under the Town Planning Ordinance in February 2006. In March 2006, we invited expressions of interest from the recycling and environmental trade to set up their businesses in

the EcoPark. More than 50 submissions were received. They provided useful information for the detailed planning of the EcoPark. The construction of necessary infrastructure and common facilities for the EcoPark started in July 2006 under a contract of \$257 million in value. We appointed an operator in November 2006 for the management and maintenance of the EcoPark over the first 7 years. In addition, in December 2006 we will invite tenders for the tenancies for the first batch of 3 lots in Phase I of the EcoPark for the processing of a list of priority materials.

16. Regarding short-term tenancies (STT), seven more sites in East Kowloon and Tseung Kwan O have been leased to local recyclers, making a cumulative total of 36 STT sites with an aggregate area of 7.4 hectares leased exclusively to the recycling trade.

Green Procurement

17. The Government has long adopted a green procurement policy. early as year 2000, the Stores and Procurement Regulations were amended to require all bureaux and departments to take environmental consideration into account when making procurement decisions. Over the years, the Government has also adopted mandatory "green" specifications for some 30 types of products. More recently, the Government has also incorporated the requirements of "energy label" under the Energy Efficiency Labeling Scheme as part of our tender specifications for office equipment. In the arena of public works, the Government has placed primary emphasis on waste reduction, and recycled materials, such as recycled aggregates and recycled asphalt, are commonly used in public works contracts. The Government will further advance the practice of green procurement, particularly in the areas of energy-efficient office equipment, fuel-efficient vehicles and recycled construction materials.

Funding for Recycling Technology Projects

18. The Waste Management Subcommittee has issued letters to the vetting committees of the Small and Medium Enterprises Development Fund, the Innovation and Technology Fund, the Environment and Conservation Fund, the Sustainable Development Fund and the Quality Education Fund to appeal for their support on waste management projects. Some vetting committees have responded positively.

Landfill Extensions and Landfill Disposal Bans

19. The feasibility/EIA studies for North East New Territories (NENT) and South East New Territories (SENT) Landfill extensions are in progress. For NENT Landfill extension, the study is at its late stage and the EIA Report will be ready for public exhibition and ACE's consideration in early 2007. As regards the SENT Landfill extension, the EIA Report will be ready for public exhibition and ACE's consideration in mid-2007. The consultant selection exercise for the feasibility/EIA study for West New Territories (WENT) Landfill extensions has also commenced in September 2006. It is envisaged that the study can be commissioned in March 2007. The introduction of landfill disposal bans for specific types of waste and untreated municipal solid waste will tie in with the implementation of PRSs and the commissioning of the Integrated Waste Management Facilities respectively.

Integrated Waste Management Facilities (IWMF)

- 20. To achieve bulk reduction of unavoidable MSW, we propose to develop the IWMF in phases, with a view to commissioning the first phase in mid 2010s. A delegation of the ACE conducted a study tour in the Netherlands and Germany in March 2006 to obtain first hand knowledge on the experience of those countries in MSW management and treatment. Based on the recommendations of the delegation, we have refined the proposed technologies to be adopted for developing the IWMF. The treatment technologies will include biological treatment for source-separated biodegradable waste, mechanical sorting and recycling of clean mixed recyclables, and thermal treatment with state-of-the-art incineration possessing waste-to-energy opportunities.
- 21. In September 2006, we initiated a site search exercise to identify suitable sites for the IWMF on the basis of a phased development approach. We have adopted a minimum capacity of 3,600 tpd as the planning parameter for the first phase of the IWMF, comprising three component facilities as set out below –

Total Treatment capacity (tpd)	Capacity of the component facilities (tpd)		
	Biological	Mechanical Sorting	Thermal
	Treatment	and Recycling	Treatment
3 600	500	500	2 600

We envisage that the site search exercise will take some 12 months, and further feasibility and environmental impact assessment studies have to be carried out.

After suitable site(s) have been identified, we will consult the public.

Public Education Programme and Partnership

- 22. To promote government's initiatives on municipal solid waste management, we have been organizing a wide variety of publicity programmes and activities for different stakeholders. Roving exhibitions, talks, workshops, out-reach visits, and other publicity events such as the World Environment Day and the Hong Kong Environmental Protection Festival, etc. were held in the community to raise public awareness on various issues such as source separation of waste, recycling of waste electrical and electronic equipment, charging on municipal solid waste, landfill extension, etc. 'Waste Management' has also been adopted as one of themes of our major educational programmes for schools including the Student Environmental Protection Ambassador Scheme and the Hong Kong Green School Award where activities such as 'Stop Using Plastic Bags Campaign', 'Green Lunch Campaign', etc. were organized. We have also been promoting the public awareness on waste reduction through the Announcements in the Public Interests.
- 23. To encourage businesses in Hong Kong to voluntarily reduce the amount of waste generated within their establishments or through their services and products, we have launched the Wastewi\$e Scheme. Businesses participating in the Scheme have to set and implement waste prevention and reduction targets whereas Government give free technical advice and monitor the progress. Each year, we present Wastewi\$e logos to the participants to honor their contributions to waste reduction and recycling. The number of participating organizations has increased to over 1,300 since the establishment of the Scheme in 1999. Many large organizations, prominent listed companies and public utilities are members of the Scheme and recipients of Wastewi\$e logo.
- 24. In addition, we have been working closely with green groups and local organizations to organize specific waste reduction activities such as the 'No Plastic Bags Day' Campaign. We are also seeking \$10 million from the Environment and Conservation Fund to support a public education programme under the Policy Framework. We have identified PRSs and MSW Charging as the current themes for the public education programme. Subject to ECF Committee's agreement, we will be inviting funding applications from non-profit organizations in early 2007.
- 25. To reach out to the wider community, an on-line computer game is being developed to educate the public on the 4R's principle (Responsibility,

Reduction, Reuse & recovery) and the key policy initiatives of the Policy Framework. The computer game adopts the idea of a SimCity with 6 characters in a family setting, and through a series of mini-games, the public will be able to appreciate the growing waste problem and how they can play a role in addressing the problem through waste reduction, reuse and recovery. The mini-games will also be distributed in the form of CD-ROMs to all schools, youth centres and elderly centres, as well as through the district offices.

CONCLUSION

26. Members are invited to note the update on the progress of the key initiatives in the Policy Framework.

Environmental Protection Department December 2006