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Panel on Environmental Affairs

Meeting on 24 January 2011

Updated background brief on management of municipal solid waste in Hong Kong (Position as at 18 January 2011)

Purpose

This paper sets out progress of management of municipal solid waste (MSW) in Hong Kong, and gives a brief account of the discussions at meeting of the Council and the Panel on Environmental Affairs (the Panel).

Background

2. MSW comprises domestic as well as commercial and industrial (C&I) waste. MSW is collected, transferred and disposed of at the three strategic landfills, namely, the West New Territories (WENT) Landfill at Nim Wan, the South-East New Territories (SENT) Landfill in Tseung Kwan O, and the North-East New Territories (NENT) Landfill at Ta Kwu Ling. These three strategic landfills take up in total 270 hectares of land, cost \$6 billion to construct and more than \$400 million to run annually. In 2008, a total of 6.6 million tonnes of MSW were generated. The average annual growth rate of MSW is about 3% which is much higher than that average population growth of 0.9%. Should this trend continue, the landfills will be full in 2010s, instead of 2015 as they were originally designed for.

Strategies on waste management

3. To develop a range of new initiatives that would work together to bring about a major reduction in the volume of waste requiring disposal, the Administration commissioned the Waste Reduction Study in 1994 and consulted the public on recommendations of the Study in mid-1997. On the basis of the public response and taking into account latest policy developments as well as technological renovation, the Administration issued the 10-year Waste Reduction Framework Plan (WRFP) in 1998 with the following objectives:

- to extend the useful life of existing landfills;
- to minimize the amount of waste produced that requires disposal;
- to increase the waste recycling rate;
- to promote education and awareness in the community of the true costs of waste management so that we can review how these costs are met;
- to encourage maximum efficiency in waste management operations and minimize the costs associated with the collection, treatment and disposal of wastes; and
- to help conserve the earth's non-renewable resources;

Policy Framework for the Management of Municipal Solid Waste (2005-2014)

4. To address the serious and imminent waste problem in a holistic manner, the Administration published the Policy Framework for the Management of Municipal Solid Waste (2005-2014) (Policy Framework) in December 2005, which set outs a comprehensive waste management strategy to tackle the waste problem ahead and to achieve the following targets -

- Target 1: *Waste avoidance and minimization* to reduce the amount of MSW generated in Hong Kong by 1% per annum up to the year 2014;
- Target 2: *Reuse, recovery and recycling* to increase the overall recovery rate of MSW to 45% by 2009 and 50% by 2014; and
- Target 3: *Bulk reduction and disposal of unavoidable waste* to reduce the total MSW disposed of in landfills to less than 25% by 2014.

5. The emphasis of the way forward on MSW management from 2005 to 2014 is on community participation and the "polluter-pays" principle. The key initiatives in the Policy Framework are as follows -

- (a) expedite the roll-out of territory-wide waste recovery programmes to increase the amount of local recyclables;
- (b) introduce mandatory producer responsibility schemes (PRSs) through new legislation upon completion of detailed studies on product-specific measures;
- (c) examine ways of introducing charging for MSW;
- (d) continue to encourage waste recycling through provision of short-term tenancies of suitable sites for longer duration with conditions for local waste recycling businesses on a case-by-case basis where circumstances warrant;
- (e) continue to develop the EcoPark exclusively for the environmental industry;
- (f) all Government departments to adopt a green procurement policy as far as practicable;
- (g) continue to encourage the development of recycling technology projects through the Environment and Conservation Fund, Innovation and Technology Fund and funds for small and medium enterprises;
- (h) introduce landfill disposal bans to complement PRSs; and
- (i) extend the existing strategic landfills.

Progress of the key initiatives in the Policy Framework

6. Issues relating to the pressing waste problem have been discussed at meetings of Council and the Panel, the latter has held various meetings to discuss the subject and invited relevant deputations to express their views where appropriate. In general, the Panel supports the "3R" principle (i.e. reduce, reuse and recycle) in managing MSW, and the development of the three inter-related components in a coordinate fashion.

Waste avoidance and minimization

7. While acknowledging that the target of reducing the amount of MSW generated in Hong Kong by 1% per annum up to the year 2014 has taken into account the annual growth rate of 3% for MSW generated in Hong Kong (i.e. the reduction target represents a total gross reduction of 4% of MSW per annum), the Panel has held the view that the target is too conservative. It has also pointed out that a drastic reduction in waste generation could be achieved once a proper waste reduction policy is put in place as in the case of Taiwan where the waste reduction rate has increased from 2.4% to 50% following the implementation of waste reduction measures.

Product Responsibility Schemes

8. As highlighted in the Policy Framework, the "polluter-pays" principle should be adopted to provide economic incentives for the public to reduce and recycle waste. In line with this principle, PRS will enable manufacturers, importers, retailers and consumers to share the eco-responsibility of reducing, recovering and recycling certain products so as to minimize the environmental impact. Voluntary PRS programmes have been rolled out progressively to recover rechargeable batteries, computer equipment, glass containers and fluorescent lamps. Regulatory Impact Assessment studies on PRS for electrical and electronic equipment, beverage containers and plastic bags have also been conducted.

The Panel generally supports the introduction of PRS since it is unfair to 9. require the public to shoulder waste charges while producers are not responsible for disposal of the products they produce. Besides, Hong Kong has already lagged behind many overseas countries on the implementation of PRS. As a result, the Product Eco-responsibility Ordinance (Cap. 603) was enacted in July 2008. The Ordinance is a piece of framework legislation which contains a purpose clause setting out its objectives and intended coverage. It also provides for enforcement powers and an appeal mechanism, which can be applied (with or without modification as appropriate) to other PRS when introduced under the primary legislation in future. Each and every new PRS must be implemented through amendments to the principal Ordinance. The legislative approach has been adopted taking into account the Panel's view. The report of the relevant Bills Committee is hyperlinked below.

10. The environmental levy on plastic shopping bags (PSB) is the first PRS under the Ordinance. The implementation details of the environmental levy scheme are set out in Product Eco-responsibility (Plastic Shopping Bags) Regulation which has come into operation on 1 July 2009. The report of the relevant Subcommittee is hyperlinked below. To ascertain the effectiveness of the levy scheme on PSB, some Panel members have suggested that a study on

the use of plastic bags, including garbage bags, should be conducted. Efforts should also be made to encourage retailers not yet covered by the environmental levy scheme to work with green groups to launch voluntary reduction initiatives on PSB.

11. In January 2010, the Administration launched a three-month public consultation exercise on the proposal to introduce a mandatory PRS for waste electrical and electronic equipment (WEEE). The proposed WEEE Scheme will cover television sets, washing machines, refrigerators, air conditioners, and computer products (including desktops, laptops, printers, scanners and monitors), which account for about 86% of WEEE generated in Hong Kong. When purchasing new regulated products, consumers will need to contribute to the costs of collecting and treating the regulated WEEE. An appropriate level of fee under the proposed WEEE Scheme will be worked out in the context of design of the Scheme. Importers, distributors or retailers will need to ensure that regulated products to be sold are affixed with specified labels, representing the contributions to the costs of WEEE Scheme. When a new regulated product is purchased by a consumer, retailers will need to take back their equivalent old equipment (including equipment bought before the introduction of the Scheme) free of charge on a "new for old" basis. The retailer's take-back obligation will deem to have discharged if consumers choose to keep the old equipment for continued use or dispose it through alternative means. The operational details of the labelling and charging system will be worked out in consultation with the trades. Permit controls will be applied to the import and export of used regulated products and regulated WEEE on environmental considerations. Licensing requirements for processing and storage of used regulated products and regulated WEEE will also be introduced to properly manage the potential environmental hazard arising from these activities. Details of the proposed WEEE Scheme are set out in the Consultation Document which is hyperlinked below. To ensure proper handling of the regulated WEEE, the Waste Disposal Ordinance (Cap. 354) will be amended to ban disposal of all regulated WEEE as ordinary trash. While supporting the need for proper handling of WEEE, the Panel has expressed concern about the lack of details in the Consultation Document, including the level of fees under the WEEE Scheme and the impacts on consumers, importers, distributors, retailers and second-hand dealers etc.

MSW charging

12. Given Hong Kong's multi-storey, multi-tenant household setting and the prevailing waste collection arrangement, the Administration conducted a three-month trial scheme in 2007 to examine the logistical requirements for introducing a viable rate charge scheme under different domestic housing settings. A territory-wide Baseline Study to collect key information on the waste generation and waste management of different C&I establishments is also

underway. The information collected will provide a useful reference for the development of a practicable charging scheme for MSW. The Panel has agreed that measures should be taken to reduce and recycle C&I waste which has been increasing over the years alongside the economic growth, particularly food waste which constitutes some 28% of C&I waste.

Reuse, recovery and recycling

13. To reverse the rising trend of waste requiring disposal, various measures have been taken to enhance source recovery of waste for recycling, which helps reduce the quantity of waste that requires disposal. As a result, the overall MSW recovery rate rose from 34% to 45% in 2007 and 48% in 2008. In particular, the domestic waste recovery rate has increased from 13% in 2002 to 16% in 2005 to 31% in 2008.

14. Back in 1998, following the publication of WRFP, the Administration commenced a programme of placing three-coloured separation bins at housing estates, schools and public places to collect waste paper, aluminum cans and plastic bottles for recycling. In 2004, 140 000 tonnes of waste were collected for recycling through this scheme. In parallel to placing three-coloured separation bins, a 16-month Wet/dry Waste Separation Pilot Programme was carried out in four housing estates from April 2003 to July 2004. Participating households separated wastes into wet and dry wastes which were then gathered at Refuse Collection Points of the estates by cleansing workers. Contractors of the Food and Environmental Hygiene Department then delivered the wastes to Island East Refuse Transfer Station for sorting. The sorted dry wastes were sold to recyclers. Revenue generated was used to offset the sorting cost. While the Programme in tandem with the three-coloured bin scheme in the four participating estates recovered 12% more recyclables than the three-coloured bin scheme alone in non-participating estates, it was considered not sustainable as the processing cost was high.

With the experience gained, a 12-month pilot programme on Source 15. Separation of Waste was launched in August 2004 in 13 housing estates in the Eastern District covering about 37 000 households and a population of about 120 000. The pilot programme aimed to make it more convenient for residents to separate domestic waste at source by encouraging and assisting property management companies to provide waste separation facilities on each It also aimed to expand the types of recyclables to be floor of the building. collected to include all plastics, all metals and other types of recyclables such as old clothing and waste electrical products. Under the pilot programme, recyclables were separated within each estate and sold to recyclers direct without having to be transported to a central location for additional sorting, which makes the operation more cost-effective. Initial results of the pilot scheme showed that the volume of recovered recyclables had increased

significantly. In view of the encouraging results, the Administration rolled out a territory-wide campaign in January 2005 to promote separation of domestic waste at source. The number of participating housing estates reached 833 housing estates in January 2008 and further increased to 1 071 housing estates in March 2009, covering about one million and 1.3 million households or some 45% and 56% of the population respectively. Of the participating housing estates, around 30% 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 recyclables. The target is to cover 80% of the population by the end of 2010.

In addition to the above programmes, three-coloured waste separation 16. bins are placed at public places and Government venues by a number of departments, including the Food and Environmental Hygiene Department, Leisure and Cultural Services Department, Agriculture, Fisheries and Conservation Department and Government Property Agency. As at November 2008, some 28 500 three-coloured waste separation bins have been placed at various locations. The Panel has expressed concern about the effectiveness of the three-coloured bin scheme. Some Panel members have opined that segregation of domestic waste at source cannot be further advanced given the space constraints of most households in Hong Kong. Consideration should be given to providing financial assistance to encourage more innovative recycling initiatives, such as incorporation of new features in building design to facilitate waste segregation. Legislation may also be required to mandate the provision of waste segregation facilities in new buildings.

17. According to the Administration, certain new building developments are required under the Building (Refuse Storage and Material Recovery Chambers and Refuse Chutes) Regulation (Cap. 123H) to provide refuse storage and material recovery chamber or material recovery chamber, and to specify the minimum floor space of such chamber based on the total usable floor space of To encourage developers to provide waste segregation facilities the building. on each floor of a building, the Building (Planning) Regulation was also amended to allow refuse storage and material recovery rooms to be disregarded in the gross floor area calculation. Subsequent to the rolling out of the territory-wide source separation of domestic waste programme, the Administration proposed to further amend Cap. 123H 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 to facilitate source separation for material recovery. When the legislative proposal was discussed by the Panel on 25 February 2008, members emphasized the need to ensure that the space allocated for refuge storage and material recovery facilities should be used for the said purpose and not other purposes for the benefit of developers. There was also a need for the owners' corporations and/or management companies to encourage residents to make better use of the segregation bins for

separation of waste. The amended Regulation was enacted in July 2008 and came into effect on 1 December 2008.

Making available land for waste recovery operations

The processes of collection, turning recovered materials into useable 18. products and the sale of these products not only add values to the recovered materials but also create a circular economy that brings business and job However, of the 2.4 million tonnes recyclable materials opportunities. recovered from MSW annually, over 90% are exported for recycling. The over-dependence on export as an outlet for recovered materials makes the recycling industry insecure in the long run as the market demand for recyclable materials is highly volatile and the international trend is to increasingly restrict trans-boundary movement of waste, even recyclable waste. To address these problems and to realize the full potential of recycling, there a need to promote the local recycling industry so that recyclable materials can be turned into products that have higher economic values and more stable and reliable markets.

19. As high land and labour costs as well as insufficient recyclable materials collected are the major barriers to the growth of recycling industry in Hong Kong, suitable land on short-term tenancies has been allocated to the recycling trade with a view to promoting the recycling industry in Hong Kong. As at May 2005, 29 sites totalling 5.6 hectares have been allocated to recyclers on To encourage long-term investments and provide short-term tenancies. incentives to establish higher end industries and downstream services, the Administration has set aside 20 hectares of permanent land in Tuen Mun Area 38 for setting up the EcoPark. The construction works of the 8-hectare Phase I commenced in early July 2006 for allocation to the first batch of prospective tenants in April 2007. The remaining 12-hectare Phase II site, which was being used by the Civil Engineering and Development Department as a fill bank, was anticipated to be available towards the end of 2008. Α management company has been engaged, through open tender, in November 2006, to maintain, manage and market the EcoPark at a monthly fee Apart from providing maintenance, cleaning, security of about \$600,000. control and marketing work, staff of the management company have also provided support and advisory services to the tenants for setting up their plants.

20. While supporting the establishment of EcoPark to help reduce waste, develop recycling industries and create job opportunities, some Panel members have expressed disappointment at the modus operandi of the EcoPark, which in their views is not able to attract potential tenants as evidenced by the withdrawal and termination of tenancies. The tenancy requirements, such as the provision of performance guarantee, are too stringent and have imposed excessive constraints on tenants' cash flow given the limited earnings from

recycling operations. Besides, the use of public tender for leasing of lots might not be appealing to the recycling trades as some of them might not be ready to participate in the public tender on the specified dates. Greater flexibility should be allowed in the leasing process to facilitate participation of interested recycling operators. Consideration should also be given to facilitating the development of small-scale waste recycling operations by making available smaller lots in the EcoPark. Apart from the provision of land, the Administration should also assist in identifying possible sources of recovered materials and outlets for recycled products, as recycling industries would not be viable in the absence of steady supply of waste materials and outlets for recycled products. To this end, consideration should be given to providing working areas within refuse transfer stations to facilitate waste recyclers in segregating and recycling waste.

At the Panel meeting on 22 November 2010, members were informed 21. that all six lots in Phase 1 had been leased out for recycling of waste cooking oil, waste metals, waste wood, waste computers, waste car batteries and waste At the end of September 2010, four tenants had commissioned their plastics. As for the remaining two tenants, one planned to commence initial operation. operation by October/November 2010 while the other would soon start the construction work. Meanwhile, the site formation and road works of the remaining Phase 2 area had been substantially completed and the lots would be available for leasing by end 2010/early 2011. With the experience gained in the tendering of six Phase 1 lots and taking into account the feedback from project stakeholders and the survey from the trade, adjustments to the types of waste to be processed, lot size, length of tenancy and tender assessment would be made to increase the attractiveness of Phase 2. Some members had reservation on the proposed leasing arrangement for Phase 2 as this had failed to take into account the recommendations in the Public Account Committee Report No. 54, particularly in respect of levels of rents. Other members stressed the need to ensure the viability of recycling operations, and that the Administration should put in place a waste recycling strategy and complementary policies.

Bulk reduction and disposal of unrecyclable waste

22. The quantity of MSW requiring disposal was maintained at about 3.4 million tonnes each year from 2000 to 2008, comparing favourably with the 3.5% annual growth rate in the years before 2000. Compared to 2007, the quantity of domestic waste disposed of at landfills in 2008 dropped by another 4.3% to about 2.23 million tonnes, representing a cumulative decrease by about 11% since the launch of the Policy Framework in 2005. However, the landfill disposal of C&I waste has a cumulative increase of about 10% to 1.08 million tonnes per year in 2008, which was probably driven by robust economic growth and strong tourism influx. Notwithstanding, there will still be large volumes of waste which cannot be recycled and need to be properly disposed of.

Maintaining the current manner of disposing of waste without treatment at landfills and using landfill as the only waste management is not sustainable. Hence, there is a need to explore new waste treatment technologies for the development of Integrated Waste Management Facilities (IWMF).

23. In late April 2002, the Administration launched an expression of interest (EoI) exercise to invite local and overseas suppliers and facility operators to propose waste treatment technologies for the development of IWMF in Hong A total of 59 submissions were received, in which six technology types, Kong. namely composting, anaerobic digestion, incineration, gasification, a combination of mechanical and biological treatment as well combustion of fuel derived from waste for the production of cement, were identified. Based on these technologies, the Advisory Group on Waste Management Facilities (AG) set up to assist in assessing EoI had further short-listed the following eight strategy options, some of which comprised more than one technology, that appeared to be suitable for Hong Kong -

Option 1 – Incineration with energy recovery;

Option 2 – Gasification;

Option 3 – Close-coupled gasification-combustion;

- Option 4 Material Recovery and combustion of refuse derived fuel for cement production;
- Option 5 Mechanical-Biological Treatment (MBT);

Option 6 – Composting and Incineration;

Option 7 – Anaerobic Digestion and Incineration; and

Option 8 – MBT and Gasification

Taking into account it's the strengths and weaknesses of each option, AG recommended that IWMF should adopt a multi-technology approach so that the most suitable technology could be applied to deal with different waste streams of MSW. Incineration was considered the preferred technology as it was a technologically well-proven method adopted by many advanced countries in Europe and Asia.

24. Some Panel members were skeptical that the Administration was trying to push forward incineration as the way forward for resolving the waste problem. They remained of the view that separation of waste at source and the development of recycling industry were best for Hong Kong. Other members

stressed the need to use the most advanced technology for incineration even if this might entail a higher cost. Efforts should also be made to reduce the amount of waste to be incinerated. As a consolidated view on the way forward for the management of MSW, the Panel passed the following motion in 2005 -

"That this Panel urges the Administration to include in parallel in the upcoming strategy document on municipal solid waste management a holistic and comprehensive plan, targets and timeframes for measures on waste avoidance and minimization; recovery, recycling and reuse; as well as bulk reduction and disposal of unrecyclable waste."

In March 2007, the Panel was informed that thermal treatment would be 25. adopted as the core technology for developing IWMF while biological treatment would be used for source-separated biodegradable waste and mechanical sorting and recycling for clean mixed recyclables. Following a site search exercise, two sites at Shek Kwu Chau and Tsang Tsui Ash Lagoons were identified as potentially suitable for IWMF, which would be developed in phases having regard to the size of the overall waste problem. The first phase would have a treatment capacity of about 3 000 tonnes per day. Detailed engineering and environmental impact assessment (EIA) studies for both sites would be carried out to ascertain their ultimate suitability. Subject to the study findings, a final decision on the choice of site would be made with a view to commencing construction as soon as practicable for commissioning in mid 2010. There were dissenting views on the use of thermal technologies for treatment of MSW. Some members opined that with the adoption of the incineration option, the Administration's efforts to reduce and recycle waste would be diminished. Other members however considered that more should be done to convince the public of the advantages of using non-polluting incinerators as a means of waste treatment, given that the use of landfills for disposal of MSW was not sustainable in the long run. There were also questions on the impacts on ash disposal and the drug rehabilitating centre in the event that Tsang Tsui Ash Lagoons and Shek Kwu Chau were chosen as the site for IWMF respectively. Some members expressed concern about the placing of a large share of obnoxious facilities in Tuen Mun. To this end, consideration should be given to providing facilities for the betterment of the district.

26. As food waste constitutes some 28% of C&I waste disposed of at landfills, a pilot composting plant was commissioned in mid-2008 to gather experience and information on the collection and treatment of organic waste. In view of the positive feedback on the use of compost for organic farming, and as a part of the long-term waste treatment strategy, the Administration 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 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 North District by late 2010s. Some members were concerned about the limited capacity of OWTF Phase I which could only handle about 200 tonnes of source-separated food waste from the C&I sector, as compared to daily generation of over 3 700 tonnes of organic fraction of MSW in Hong Kong. They also enquired about the means to reduce food waste from domestic source which accounted for over 70% of the total food waste generated.

27. According to the Administration, the three strategic landfills for final repository of non-recyclable and residual waste would start to approach their capacity one by one in the mid to late of 2010s and their extension would be necessary. As set out in the Policy Framework, the Administration's target is to commission the landfill extensions before the exhaustion of the existing In this connection, the engineering feasibility and EIA studies on the landfills. extension of the NENT Landfill, SENT Landfill and WENT Landfill have been When the environmental impacts associated with the proposed completed. extension of SENT Landfill to the Clear Water Bay Country Park (CWBCP) was discussed at the Panel meeting on 27 October 2008, members noted that the proposal did not have the support of the Sai Kung District Council (SKDC) or Tseung Kwan O (TKO) residents as the extension would further aggravate the They also found it difficult to accept that the extension of odour nuisance. SENT Landfill would encroach into CWBCP. The Administration was urged to work out a solution to tackle the waste management problem and odour On 4 June 2010, the Country Parks (Designation) nuisance at the same time. (Consolidation) (Amendment) Order 2010 was published in the Gazette to replace the original approved map in respect of CWBCP with a new approved map under which five hectares of land of would be used for the extension of Given the strong opposition from SKDC, and that the SENT Landfill. Administration was not able to address the odour problem, the Subcommittee formed to study the Order passed a resolution to move a motion to repeal the The motion was passed at the Council meeting on 13 October 2010. Order. The report of the Subcommittee is hyperlinked below for ease of reference.

28. On 4 January 2011, the Administration announced that it would scale down the SENT Landfill extension into TKO Area 137 to 13 hectares without encroaching into five hectares of CWBCP. The proposed extension might allow the lifespan of the SENT Landfill to last until 2020 to tie over the planning of new permanent waste transfer facility in South-East New Territories so that construction waste in this region could be sorted and bulk transferred to other landfills. The relevant Legislative Council Brief is hyperlinked below.

Enhancing publicity and education

29. The Panel has noted that publicity and public education programmes, including exhibitions, seminars, visits by a theme van on waste problems and solutions to shopping centres, schools and housing developments etc., have been organized to promote waste prevention and recovery. Workshops for teachers to enhance their knowledge and teaching skills in waste issues have also been organized. A hotline service has also been put in place to provide information and advice on waste reduction and separation.

Government to take a leading role

30. According to the Administration, all government bureaux and departments are urged to reduce photocopying paper consumption by 10% by 2006-07 i.e. an annual reduction of 2.5%, using 2002-03 as the base year. The recycled content required in the specification of recycled photocopying paper has also been revised from 50% to 80%. Also, the use of retreaded tyres has been extended to all government medium and heavy vehicles. Where practicable, departments involved in greening work are encouraged to use compost made from organic waste. In addition, the Government Logistics Department (GLD) has developed a set of guidelines on green procurement for government departments and the amount of purchases under the green procurement policy has amounted to over \$40 million per year. Apart from government departments, the Panel has opined that the guidelines should also be applied to public works projects so that more environment friendly materials could be used for construction works.

Closer cooperation with the business sector

31. The Panel has noted that business sector, particularly management companies, restaurants and hotels, are encouraged to take a more active role in waste prevention. Examples include leftover food donation programme, furniture and plastic bottles and textile recycling programmes specially designed for hotels, plastic bag recovery programmes involving supermarket chains and mooncake containers recovery trial involving property management companies and restaurants.

Closer cooperation with District Councils

32. According to the Administration, collaboration with District Councils in carrying out various types of district-based waste prevention and recovery will continue as they are in a better position to assess the needs of the districts, and at the same time can mobilize the support of local residents.

Latest development

33. The Administration proposes to update members on the progress of the key initiatives in the Policy Framework at the next Panel meeting on 24 January 2011

Relevant papers

Information paper provided by the Administration for the EA Panel meeting on 24 February 2003 http://www.legco.gov.hk/yr02-03/english/panels/ea/papers/ea0224cb1-958-3-e.pdf

<u>Minutes of the EA Panel meeting on 24 February 2003</u> http://www.legco.gov.hk/yr02-03/english/panels/ea/minutes/ea030224.pdf

Information paper provided by the Administration for the EA Panel meeting on 23 February 2004 http://www.legco.gov.hk/yr03-04/english/panels/ea/papers/ea0223cb1-1031-3-e.pdf

<u>Minutes of the EA Panel meeting on 23 February 2004</u> http://www.legco.gov.hk/yr03-04/english/panels/ea/minutes/ea040223.pdf

Information paper provided by the Administration for the EA Panel meeting on 28 February 2005 http://www.legco.gov.hk/yr04-05/english/panels/ea/papers/ea0228cb1-960-7-e.pdf

<u>Minutes of the EA Panel meeting on 28 February 2005</u> http://www.legco.gov.hk/yr04-05/english/panels/ea/minutes/ea050228.pdf

Information paper provided by the Administration for the EA Panel meeting on 23 May 2005 http://www.legco.gov.hk/yr04-05/english/panels/ea/papers/ea0523cb1-1544-15-e.pdf

<u>Minutes of the EA Panel meeting on 23 May 2005</u> http://www.legco.gov.hk/yr04-05/english/panels/ea/minutes/ea050523.pdf

Information paper provided by the Administration for the EA Panel meetings on 15 December 2005 and 19 January 2006 http://www.legco.gov.hk/yr05-06/english/panels/ea/papers/ea1215cb1-486-4-e.pdf

<u>Minutes of the EA Panel meeting on 15 December 2005</u> http://www.legco.gov.hk/yr05-06/english/panels/ea/minutes/ea051215.pdf - 15 -<u>Minutes of the EA Panel meeting on 19 January 2006</u> http://www.legco.gov.hk/yr05-06/english/panels/ea/minutes/ea060119.pdf

Information paper provided by the Administration for the EA Panel meeting on 26 March 2007

http://www.legco.gov.hk/yr06-07/english/panels/ea/papers/ea0326cb1-1182-6-e.pdf

Supplementary information paper provided by the Administration for the EA Panel meeting on 26 March 2007 http://www.legco.gov.hk/yr06-07/english/panels/ea/papers/ea0326cb1-2210-1-e.pdf

<u>Minutes of the EA Panel meeting on 26 March 2007</u> http://www.legco.gov.hk/yr06-07/english/panels/ea/minutes/ea070326.pdf

Information paper provided by the Administration for the EA Panel meeting on 25 February 2008 http://www.legco.gov.hk/yr07-08/english/panels/ea/papers/ea0225cb1-844-3-e.pdf

<u>Minutes of the EA Panel meeting on 25 February 2008</u> http://www.legco.gov.hk/yr07-08/english/panels/ea/minutes/ea080225.pdf

Report of the Bills Committee on Product Eco-responsibility Bill to the Council meeting on 9 July 2008 http://www.legco.gov.hk/yr07-08/english/bc/bc04/reports/bc040709cb1-2075-e.pdf

Information paper provided by the Administration for the EA Panel meeting on 27 October 2008 http://www.legco.gov.hk/yr08-09/english/panels/ea/papers/ea1027cb1-88-6-e.pdf

<u>Minutes of the EA Panel meeting on 27 October 2008</u> http://www.legco.gov.hk/yr08-09/english/panels/ea/minutes/ea20081027.pdf

Report of the Subcommittee on Product Eco-responsibility (Plastic Shopping Bags) Regulation to the House Committee issued on 2 April 2009 http://www.legco.gov.hk/yr08-09/english/hc/papers/hccb1-1218-e.pdf

Information paper provided by the Administration for the EA Panel meeting on 27 April 2009 http://www.legco.gov.hk/yr08-09/english/panels/ea/papers/ea0427cb1-1357-3-e.pdf

Minutes of the EA Panel meeting on 27 April 2009 http://www.legco.gov.hk/yr08-09/english/panels/ea/minutes/ea20090427.pdf

Question raised by Hon Jeffrey LAM at the Council meeting on 6 January 2010 http://www.legco.gov.hk/yr09-10/english/counmtg/agenda/cm20100106.htm#q_16 Administration reply to question raised by Hon Jeffrey LAM at the Council meeting on 6 January 2010 http://www.info.gov.hk/gia/general/201001/06/P201001060173.htm

Information paper provided by the Administration for the EA Panel meeting on 29 March 2010 http://www.legco.gov.hk/yr09-10/english/panels/ea/papers/ea0329cb1-1443-4-e.pdf

Minutes of the EA Panel meeting on 29 March 2010 http://www.legco.gov.hk/yr09-10/english/panels/ea/minutes/ea20100329.pdf

ReportoftheSubcommitteeonCountryParks(Designation)(Consolidation)(Amendment)Order2010totheCouncil meetingon13October2010Order2010totheCouncil meeting

http://www.legco.gov.hk/yr09-10/english/hc/sub_leg/sc09/reports/sc091013cb1-3017-e.pdf

Information papers provided by the Administration for the EA Panel meeting on 22 November 2010

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