

**For information  
September 2001**

## **Legislative Council Panel on Environmental Affairs**

### **Promoting Prevention and Recovery of Domestic Waste**

#### **Purpose**

This paper aims to inform Members of Government's new initiatives to further promote prevention and recovery of domestic waste in Hong Kong.

#### **Background**

2. At present, about 6.5 million tonnes of wastes<sup>1</sup> are disposed of in the three landfills at Tseung Kwan O, Nim Wan and Ta Kwu Ling each year. These three landfills occupy 270 hectares of land, cost \$6 billion to build and over \$400 million a year to operate. When planned in the 1980s, they were expected to serve our need for waste disposal till 2020. However, the quantity of waste continues to rise as population increases<sup>2</sup>. By 1998, it was projected that the landfills would only last until 2015. Another 860 hectares of land – equivalent to 70% of the new airport area – would be needed for new landfills between 2016 and 2045. Given the land constraints, it is not easy to identify sites for developing new landfills.

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<sup>1</sup> They comprise municipal solid waste (52%), construction and demolition waste (42%), and special wastes (6%).

<sup>2</sup> Trends of Major Waste Groups Requiring Disposal

	1986 (tonnes per day)	2000 (tonnes per day)	% increase over 1986	2015 (tonnes per day)	% increase on 2000
Municipal Solid Waste (Domestic/commercial/industrial)	5,860	9,340	60%	15,370	65%
Construction & Demolition Waste	2,850	7,470	162%	9,200	23%
Special waste (sludge, animal carcasses)	250	1,090	336%	4000	265%

3. The Waste Reduction Framework Plan published in 1998 sets out a number of Government measures to reduce the volume of solid waste in order to extend the life of existing landfills. As Members are aware, our work in the past two years has focused on the implementation of these measures. We have reviewed the current waste situation in Hong Kong, and conclude that further actions are required to give waste reduction and recovery a further impetus.

4. In the past five years, the overall volume of waste (which comprises mainly construction and demolition materials and domestic waste) has been increasing at an annual rate of 3.5%. For domestic waste alone, the average increase is 4% each year, which is significantly higher than the average population growth of 0.9%. As measures to deal with construction and demolition materials have been addressed in Paper CB(1)1414/00-01(3), this paper will only focus on issues related to domestic solid waste.

### Targets

5. We consider that the Government and the community together should do more to prevent and recover domestic waste. To provide a clearer benchmark against which we can measure the effectiveness of these actions, we have set the following targets : -

- (a) To limit the quantity of municipal solid waste requiring disposal to 3.4 million tonnes in 2004, and 3.7 million tonnes in 2007.
- (b) To raise the overall waste recovery rate from 34% in 2000 to 36% in 2004 and 40% in 2007.
- (c) Domestic waste accounts for over 70% of all municipal solid waste. To help focus attention on domestic waste where the current recovery rate is only 8%, a target should be set for domestic waste recovery. This will be to raise the recovery rate to 14% in 2004 and 20% in 2007.

## New Initiatives

6. To better manage and contain the increasingly serious problem on domestic waste, we decide to implement the following to further promote reduction in this regard : -

- (a) *provide long term land* for waste recovery and processing operations;
- (b) enhance *public education and community involvement* in waste prevention and separation;
- (c) *strengthen support* for waste separation and recovery;
- (d) *take the lead and set an example* in waste prevention and recovery; and
- (e) further develop *producer responsibility schemes* and involve the business community in waste prevention and recovery.

## Making Available Land for Waste Recovery and Processing Operations

7. Waste recovery requires land. Processing of recovered materials for recycling need space. Since 1998, we have allocated eight sites with a total area of 5.2 hectares through short-term tenancies for use by waste processing and recovery operations.<sup>3</sup> We will continue to identify suitable sites for this purpose.

8. Recognizing that long-term sites for primary processing of recovered materials will facilitate waste reduction and recycling, we plan to set up a Recovery Park. We have already set aside 20 hectares of industrial land<sup>4</sup> at Tuen Mun Area 38 for this purpose. The site would have its own waterfront access to facilitate export of processed materials to re-manufacturers. We expect that the first phase of the Park would be in operation in early 2004.

<sup>3</sup> They are located at Sheung Shui, Kai Tak, Tai Po, Chai Wan, Yau Tong and Cheung Chau.

<sup>4</sup> This is 1.2 times the area of the Victoria Park.

### Enhancing Public Education and Community Involvement

9. While the Administration is committed to tackling the waste problem, it is important to note that Government actions alone will be far from sufficient. Waste prevention and recovery requires the direct and active participation of the general public. However, overseas experience shows that it takes a long time to build up the habit of waste prevention and recovery in the community.

10. A long-term public education and community involvement programme is thus needed to ensure sustained participation of the public in waste prevention and recovery. As different localities (e.g. villages, old urban areas) may have different concerns and needs, we will closely cooperate with district councils, local organizations, green groups, schools and voluntary agencies in organizing community-based waste reduction and recycling projects.

11. Subject to the approval of the Finance Committee of this Council, we plan to inject \$100 million into the Environment and Conservation Fund primarily to support community-based waste prevention and recovery programmes. The Fund is open to application by district groups, green groups etc to carry out waste reduction work and activities.

12. To support our public education and publicity efforts, we have prepared a new Announcement of Public Interest on waste separation. A cartoon figure known as “Recycling Kid” and a special theme van on the waste problem will visit schools, shopping centres, and housing estates to spread the message of waste prevention and recovery. This will be supplemented by 5 000 voluntary Environmental Protection Ambassadors specially trained to carry out public education work. Exhibitions on the subject will be held in commercial centers on weekends. Posters and publicity materials, including “Waste Reduction Tips”, will be made available to various community organizations.

### Strengthening Support for Waste Separation and Recycling

13. Alongside community education and involvement programmes, we will provide sufficient facilities and services to foster public participation in waste separation. At present, all public housing blocks, over 700 private

housing estates, and all tertiary and vocational institutes have installed waste separation bins. Waste separation bins are also available at public places, such as country parks, kerbside and refuse collection points. Over 25% of primary and secondary schools are also provided with waste separation bins.

14. To further develop the existing community involvement efforts, we will double the number of bins from 8 000 to 16 000. This will cover parks, leisure venues, Government buildings, housing estates, and all primary and secondary schools. Collection services will also be arranged for all schools and public venues to ensure delivery of the recyclable materials to processors or recyclers.

15. These 8 000 separation bins are newly designed ones and made of fire-resistant fiberglass. There will be clear wordings and graphics on the bins to help users put the recyclable materials into the appropriate bins. The new bins will follow the existing colour scheme for the three types of recyclable materials that has been in place since 1998 – blue for waste paper, yellow for aluminium cans and brown for plastic bottles.

16. In addition, we will encourage managers and owners of private housing estates, shopping centers and commercial buildings etc. to provide waste separation facilities and services. A hotline (2755 2750) has been set up by the Environmental Protection Department (EPD) to provide professional advice on waste reduction and separation.

### Government Leadership

17. Government has been making progress in waste reduction. For example, the use of recycled paper by Government bureaux/departments has increased from 0% in 1998 to 37% in 2000; and the overall paper consumption has reduced by 8.3% between 1999 and 2000.

18. To demonstrate leadership and set a better example to the community, Government will continue to do more in this area. In the coming year, we will develop a procurement guideline that encourages waste prevention and recycling. Particular emphasis will be made on reducing the overall consumption of paper and phasing out the use of non-recycled paper. Where practicable, departments will use retreaded tyres in their heavy vehicle fleet and those involved in greening will use compost produced from

organic waste.

### Producer Responsibility Schemes

19. The business sector has a significant role to play in reducing and recycling municipal solid waste. Apart from addressing the wastes they produce, their actions, such as the use of packaging materials and facilitating the return of batteries, could help to reduce waste.

20. There has not been significant progress in developing producer responsibility schemes in which the supplier of goods would assume the responsibility for handling the waste generated by their products. Although some voluntary programmes are in the pipeline<sup>5</sup>, such initiatives are few and far between.

21. We consider that more could be done in this area, particularly in regard to wastes that are difficult or uneconomic to recycle, such as glass bottles, batteries, computers, and special packaging. We will continue to adopt a voluntary approach but would consider the need for mandatory schemes if such voluntary schemes are unsuccessful or not forthcoming.

### Other Key Waste Issues

22. No matter how good we are in dealing with waste prevention and recycling, we still need to handle large volumes of non-recyclable waste. New facilities to reduce their volume will have to be put in place accordingly. Such facilities would need to meet the highest international environmental standards and be cost-effective. We maintain an open mind on the type(s) of technologies that should be adopted, and will consult Members on the way forward in the coming months.

23. Landfills are still required for final waste disposal. Even with large-scale waste treatment facilities, there are residual wastes that must be handled safely. We have already commenced a study on extending the life of the existing landfills and identifying new landfill sites.

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<sup>5</sup> For example, a printer supplier has launched a print cartridges recycling programme. EPD is also working with mobile phone suppliers on a recycling programme for mobile phone batteries

24. To provide economic incentive for waste producers, particularly developers and contractors, to reduce waste, we have been consulting the relevant trades on a proposed landfill charging scheme. We will present details of a proposed scheme for consultation with Members soon.

### **Conclusion**

25. Members are requested to note the new initiatives to promote waste prevention and recovery outlined in paragraphs 6 - 21 above. If Members so wish, we will be pleased to give further details on these initiatives at a Panel meeting

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