

**Programme on Source Separation of Domestic Waste
and Government's Funding Support**

Purpose

This paper briefs Members about the current position of the Programme on Source Separation of Domestic Waste and the Government's support to participating housing estates through the Environment and Conservation Fund (ECF). Members are invited to comment on the proposed revision to the level of ECF funding support.

Background

2. The existing landfills in Hong Kong are filling up much faster than expected and it is estimated that they will be full in 5 to 9 years. Waste reduction and recycling is therefore crucial in minimizing the amount of waste requiring disposal. The Government has set a target to increase the domestic waste recovery rate from 14% in 2004 to 20% and 26% by 2007 and 2012 respectively. In parallel to developing mandatory economic measures such as waste disposal charges and producer responsibility schemes to create direct incentive for waste reduction, continuous promotion of voluntary public participation in waste reduction and recycling is necessary.

3. Besides the 3-coloured waste separation bins currently placed in housing estates, the Government has been testing out various forms of domestic waste separation and recovery with a view to identifying the modes that are convenient to residents, cost-effective and best suit local needs. In March 2003, the Environmental Protection Department (EPD) introduced a one-year Dry and Wet Waste Separation Pilot Programme at four housing estates in the Eastern District. The scheme concluded that it was not cost-effective for wastes to be collected to a centralized location for separation. It is also recognized that there may be different waste recovery modes for different types of buildings in Hong Kong.

Pilot Programme on Source Separation of Domestic Waste

4. In August 2004, the EPD launched the Pilot Programme on Source Separation of Domestic Waste at 13 housing estates in the Eastern District. This represented 37,000 households and a population of 120,000. Each participating housing estate adopted the best mode of waste separation and recovery tailor-made to suit its particular physical constraints and other characteristics, by setting up appropriate waste separation facilities on each building floor. The types of recyclables to be recovered were also broadened to include recyclables not covered by the 3-coloured waste separation bin system (i.e. waste paper, aluminium cans and plastic bottles), such as tin cans, plastic bags, other metal and plastic items, old clothing, computers and electrical appliances. Recyclables were separated within each estate and sold to recyclers directly without having to be transported to a centralised location for sorting.

Territory-wide roll-out

5. The Pilot Programme on Source Separation of Domestic Waste has produced encouraging results as the quantity of recyclables collected in some of the participating estates had doubled when compared to the 3-coloured bin system. In view of the encouraging results, the EPD rolled out a territory-wide programme in January 2005 to implement source separation of domestic waste. The overall target is to have 80% of the population implementing source separation of domestic waste by 2010. We hope that each housing estate/residential building participating in the programme can achieve a 50% increase in recovery quantity in the first year of implementation.

6. As at mid March 2006, a total of 254 housing estates have signed up to join the programme, out of which 110 housing estates have implemented or will shortly implement floor-to-floor waste separation. 42 of these estates have achieved some encouraging results, with an overall 58% increase in the quantity of recyclables collected and a 3-4% reduction in the waste disposed of.

Voluntary participation of housing estates/residential buildings

7. Under the programme, recyclables are separated within each estate and sold to recyclers directly. Management companies or cleansing contractors will be able to pass on to residents the benefits of the extra income.

For some housing estates with large quantities of recyclables collected, such extra income could allow them to purchase and set up or retrofit waste separation facilities on each building floor on a self-sustained basis. Some examples of such housing estates which have retrofitting programmes on each building floor for source separation of waste without the need for the Government's funding support are given in Annex 1.

8. Furthermore, in view of the forthcoming municipal solid waste (MSW) charging to be introduced in the next few years, where charges would only be imposed on mixed waste and not recyclables that are separately collected, more and more housing estates/residential buildings are willing to set up waste separation facilities (e.g. bins, racks, etc.) on each floor on a self-financing basis to facilitate residents to separate waste for reuse/recycling, thus possibly reducing the charges they would have to pay.

Government's funding support on source separation of domestic waste

9. Notwithstanding the above, some housing estates have encountered funding difficulties for setting up waste separation facilities on each building floor and are reluctant to join the programme. In order to encourage such housing estates to participate in source separation of waste, the Government has provided funding support to these estates through the ECF.

10. For the Pilot Programme carried out in the Eastern District (Para 4 refers), the participating estates have received a total of about \$1 million from the ECF for the acquisition of waste separation facilities on each floor of the buildings and the promotion of the programme. The amount of funding granted to these estates ranged from \$24,000 to \$350,000 for each estate (i.e. on average \$110,000 per estate).

11. For the territory-wide programme, the ECF Committee have allocated \$5 million to partially support housing estates/residential buildings to set up waste separation facilities/equipment on each building floor. Incorporated owners' committees, owners' committees or any residents' organizations of private housing estates/residential buildings are eligible to apply for the ECF. Property management companies acting on behalf of the residents' organizations of the private housing estates/residential buildings are also eligible for submission of applications. Funds will be granted for partial support to the set-up cost of the programme. The total grant for each project is

25% of the actual expenditure spent on the approved items and subject to a maximum amount of HK\$150,000. So far, 37 applications have been received out of which 12 were approved for a total funding of \$352,000. Some examples of housing estates which have retrofitting programmes on each building floor for source separation of waste with ECF funding support are given in Annex 2.

13. As many housing estates considered the funding level to be too low, the ECF application response is not as forthcoming as expected (many estates requested a 100% subsidy and some suggested an increase from 25% to at least 50% or more). A proposal to increase the amount of funding is therefore being prepared by the EPD for the consideration of the ECF Committee. The following scenarios are envisaged:

a) Scenario A - 50% subsidy

This increased level of subsidy would attract some more estates to apply although many estates may still consider it to be insufficient. The rationale of the subsidy level is that the Government is not subsidising a majority share of the cost for setting up waste separation facilities.

b) Scenario B - 75% subsidy

Increasing the level of subsidy to 75% would definitely attract more estates to join the programme. However, this would give an impression to the public that the Government has committed to shoulder the major responsibility of implementing waste recovery in private buildings. It would also demand for additional Government funding beyond the \$5 million allocation from ECF.

c) Scenario C - 100% subsidy

It is anticipated that 100% subsidy would be well received by housing estates. The demand for funding would be huge and some estates would not use the funding cautiously as they do not need to bear any capital cost.

14. A crucial issue in consideration of the appropriate funding level is the degree of commitment of the Government, through ECF or other channels, to help pay for the cost of setting up waste recovery facilities in private housing estates. The commitment would be very large if the funding level is high and apply to all housing estates / residential buildings for an extended period. The incomes of the estates from recovery of recyclables and the future avoided waste disposal charges are also issues that should be taken into consideration.

Physical constraints in setting up waste separation facilities on each floor

15. It should be noted that even with the Government's funding support, many housing estates have concerns in implementing source separation of waste because of physical constraints on their building floors. Of the 800+ housing estates that EPD has contacted for promotion of the programme, only about 330 estates (i.e. about 40%) have a refuse room on each floor; and of these 330 estates, many of them have the refuse rooms locked due to security and safety concerns. In most circumstances, staircase landings, where stringent fire safety requirements (e.g. using fire resistant bins which cost much higher than ordinary bins) have to be met, will need to be used for setting up the waste separation facilities.

16. To address the space constraint and fire safety concern on each building floor, EPD is preparing a Guidebook to provide advice on the feasible waste separation and recovery modes that could be practiced in different locations on each floor of different types of residential buildings, taking account of the various relevant buildings and fire safety regulations. It is planned that the Guidebook will be published in April 2006. EPD has also submitted a proposal to the Buildings Department to amend the Building (Refuse Storage and Material Recovery Chambers and Refuse Chutes) Regulations for the inclusion of a mandatory requirement on the provision of a refuse storage and material recovery room (with a minimum area of 1.5m x 1.5m) on each floor of new residential buildings to facilitate material recovery activities. The proposal was submitted to the Building Sub-Committee (BSC) of the Lands and Building Advisory Committee at its meeting on 11 November 2005 for consultation with the building industry. A BSC meeting will be held in April 2006 for further discussion on the proposal.

Advice sought

17. Members are invited to note the current position of the Programme on Source Separation of Domestic Waste and the Government's support to participating housing estates/residential buildings through the ECF, and comment on the proposed revision to the level of funding support.

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Environmental Protection Department
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Annex 1

Examples of housing estates which have retrofitting programmes on each building floor without the need for Government's funding support

1. Taikoo Shing (太古城)

District:	Eastern
No. of blocks	61
No. of households	12,698
Waste facility on each floor	Refuse storage room
Retrofitting programme for source separation of waste	<p>In the refuse storage room, a shelf was installed on the wall for stacking waste paper, and a plastic container was placed below the refuse chute inlet for collecting metals/plastics. The estate used their own funding for the above retrofitting works as well as expenses on the renovation of the refuse storage room including replacing a new fire resisting door at each refuse room.</p> <p>The renovation works of the refuse storage room on each floor was completed in early 2002 and the estate joined the Pilot Programme on Source Separation of Domestic Waste in August 2004.</p>



In the refuse storage room on each floor, a shelf was installed on the wall for stacking waste paper, and a plastic container was placed below the refuse chute inlet for collecting metals/plastics.

2. Heng Fa Chuen (杏花村)

District:	Eastern
No. of blocks	48
No. of households	6,504
Waste facility on each floor	Refuse storage room and associated lobby
Retrofitting programme for source separation of waste	<p>In the refuse storage room and its associated lobby on each floor, two rectangular containers were installed on the wall for collecting metals/plastics, while residents are asked to place waste paper next to the refuse bin. The estate used their own funding for the above retrofitting works as well as expenses on education & publicity to promote the programme at the estate.</p> <p>The estate joined the Pilot Programme on Source Separation of Domestic Waste in August 2004 and the renovation works of the refuse storage room for all building blocks will completed in late March 2006.</p>



In the lobby associated with the refuse storage room on each floor, two rectangular containers were installed on the wall for collecting metals/plastics, while residents are asked to place waste paper next to the refuse bin.

Annex 2

Examples of housing estates which have retrofitting programmes on each building floor with ECF funding support

1. Lei King Wan (鯉景灣)

District:	Eastern
No. of blocks	17
No. of households	2,295
Waste facility on each floor	Refuse storage room and associated lobby
Retrofitting programme for source separation of waste	<p>In the refuse storage room and its associated lobby on each floor, a shelf and rectangular containers were installed on the wall for stacking waste paper and collecting metals/plastics respectively. A total of \$347,650 ECF funding was approved for the above retrofitting works as well as expenses on education & publicity to promote the programme at the estate.</p> <p>In order to free up more space in the refuse storage room and its associated lobby for source separation of waste, the estate is planning to remove the door of the refuse storage room, and at the same time upgrading the door of the lobby to one hour Fire Resistance Period in order to fulfill buildings and fire safety requirements. They have estimated that the outer door upgrading work would cost about \$1 million and they are now considering to implement the scheme in phases over the next few years using the estate's own funding.</p> <p>The estate joined the Pilot Programme on Source Separation of Domestic Waste in August 2004.</p>



In the refuse storage room and its associated lobby on each floor, a shelf and rectangular containers were installed on the wall for stacking waste paper and collecting metals/plastics respectively.



The door of the refuse storage room could be removed to free up more space in the refuse storage room and its associated lobby for source separation of waste.

2. Cheung Wo Court (祥和苑)

District:	Kwun Tong
No. of blocks	6
No. of households	1,584
Waste facility on each floor	Refuse storage room
Retrofitting programme for source separation of waste	<p>In the refuse storage room on each floor, a rack was installed above the refuse chute inlet for placing three plastic containers for collecting waste paper, metals and plastics.</p> <p>Before implementing the Programme on Source Separation of Domestic Waste, floor refuse storage rooms were not open for residents because the design and position of the refuse chute inlets were regarded as having safety risk to residents. Therefore, the old refuse chute inlet doors were replaced with stainless steel ones so that locks could be added onto them. A total of \$89,110.6 ECF funding was approved for the above retrofitting works.</p> <p>The estate joined the Programme on Source Separation of Domestic Waste in March 2006.</p>



After retrofitting of the refuse storage room on each floor, a rack was installed above the refuse chute inlet for placing three plastic containers for collecting waste paper, metals and plastics.