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(ACE Paper 27/97)
for discussion

PUBLIC CONSULTATION ON THE DRAFT WASTE REDUCTION PLAN

PURPOSE

This paper presents an outline of the draft Waste Reduction Plan and the proposed public consultation strategy.

BACKGROUND

2. To tackle the problem of escalating waste disposal costs and the sharp growth in waste generation, the Environmental Protection Department (EPD) commissioned Consultants to undertake a Waste Reduction Study in February 1994 to review existing waste management practices and waste generation, recovery and recycling activities; to explore means of reducing municipal solid wastes and formulate an integrated waste reduction strategy. The study was completed in late 1995. The Consultants recommended a combination of measures building on existing waste recovery and recycling activities.

3. The progress and preliminary findings of the study were reported to the ACE meeting on 25 March 1996.

4. A limited public consultation exercise commenced in April 1996 using the Study's recommendations as the basis. During the public consultation, EPD sought the views of major business and industrial sectors, relevant advisory bodies, the Municipal Councils, green groups and professional bodies/institutions on a Summary Document containing the Consultants' recommendations. The feedback from the first stage consultation was used to prepare the Government's draft Waste Reduction Plan for a second stage of public consultation.

FIRST STAGE CONSULTATION ON THE CONSULTANTS' WASTE REDUCTION PLAN

5. During the first stage consultation, 51 organisations/interest groups (Annex A) were provided with the Summary Document and invited to comment on the recommendations. The feedback from each category of organisations are summarised in Annex B. The integrated waste reduction strategy proposed by the Consultants was well received generally and most organisations supported the waste reduction programmes.

THE ADMINISTRATION'S DRAFT WASTE REDUCTION PLAN

6. A Steering Group on the Waste Reduction Plan, chaired by DS/E, PELB, was established to consider the feedback from the first stage consultation on the Consultants' Waste Reduction Study, and to prepare a draft Waste Reduction Plan for Hong Kong. The objectives of the draft Waste Reduction Plan are to reduce the amount of waste requiring disposal, to prolong the life of our landfills and to reduce the growing costs involved in transporting, treating and disposing of waste. The draft Waste Reduction Plan adopts a waste management hierarchy comprising, in order of desirability: avoid waste; minimise waste; maximise recovery, reuse and recycling of waste; reduce bulk; and finally dispose. It draws on overseas experience and builds on existing local experience. It aims to improve on many overseas schemes by ensuring that proper attention is given to providing outlets for recovered waste materials to encourage the development of a self-sustaining market driven solution to our waste problems. In keeping with the market-driven ideal, the policy approach is to encourage participation through government and non-government partnership, whenever possible. This partnership approach involves participation and contribution, either financial or by other forms of support, from both government and other sectors of the community. This will allow greater flexibility in implementing measures than would be allowed under mandatory systems. It is also important to note that partnership measures can often be implemented much quicker than mandatory controls, which could take years to put in place.

7. The overall waste reduction target for municipal waste is 40% in ten years which includes:

- 20% reduction through waste avoidance, minimisation and recycling;
and
- another 20% reduction through waste-to-energy incineration
and composting of organic waste.

Individual companies and sectors will be encouraged to set their own targets, in consultation with the EPD.

8. The draft Waste Reduction Plan which contains largely the same recommendations as the Consultants' report proposes the implementation of three major programmes.

(a) Waste Avoidance, Minimisation and Materials Recovery Programme

- Education and publicity to change social attitudes towards waste, such as the throw-away habit;
- Participation in WastewiSe and DEMOS Schemes by individual companies involving initiatives to adopt waste avoidance measures to meet specific reduction targets;
- Involvement by manufacturers and importers in producer responsibility schemes to manage the waste they generate;
- Government to contribute some funding to set up material recovery projects;

- Government to facilitate provision of land and space in new buildings to encourage waste recycling activities; and
- Further application of the polluter pays' principle, such as the landfill charging scheme.

(b) Institutional Programme

The institutional programme is designed to coordinate implementation of the waste reduction measures.

- Establishment of a core team within the Environmental Protection Department to drive the Waste Reduction Plan;
- Setting up task forces within various sectors of the community to coordinate waste reduction activities;
- Enhancing the roles of the Municipal Councils, the Housing Authority and the Housing Society in waste reduction; and
- Initiating any necessary legislative measures to support the waste reduction process.

(c) Bulk Waste Reduction Programme

- The programme will examine the introduction of modern waste-to-energy incinerators into Hong Kong. Consideration will also be given to composting of organic waste.

9. Regular evaluation and monitoring of progress will be a feature of the Plan. Apart from annual reports on progress in different sectors, major reviews are proposed in year four and year eight of the Plan to enable detailed evaluation to be done and, if necessary, to redirect and refocus efforts.

A COMPARISON OF THE CONSULTANTS' RECOMMENDATIONS AND THE DRAFT WASTE REDUCTION PLAN

10. The main differences between the Consultants' recommendations and the draft Waste Reduction Plan are as follows -

- (a) Institutional. For the time being we do not intend to take on the consultant's recommendation to set up a major advisory committee. We would prefer, initially, that EPD focus their resources on dealing with implementation of the draft WRP's proposals.
- (b) Construction and Demolition (C&D) Waste. The waste reduction aspects of C&D waste are dealt with more fully in the draft WRP than in the consultant's report.

- (c) Preferential Purchasing. Where the costs and benefits justify, the government will consider using 'green specifications' when inviting tenders for products, on a case by case basis. We are not recommending an agreed green purchasing policy yet because of insufficient market information and reference standards. Whilst not yet in line with the consultant's recommendation that government adopt a preferential purchasing scheme, we are taking a significant step in that direction.
- (d) Green Labelling. The consultant recommended that green labelling schemes be set up. Two separate consultancy studies (on ecolabelling and life cycle analysis) are due to be published shortly. There is little in either report to justify early introduction of green labelling schemes in Hong Kong. We would not wish to rule out the possibility at a later date but nor would we want to raise false expectations. We have, therefore, not included it in the draft WRP.
- (e) Recycling Credits. The consultants proposed the introduction of recycling credits with payments to charities, NGOs, statutory bodies and commercial companies alike. Careful examination of the subject raises many difficulties including subsidy policy, GATT/WTO implications, and prevention of fraud (how to prevent the recycled material re-entering the waste stream and being subject to a second or subsequent credit payment). We are examining arrangements for a pilot scheme. We have not yet been able to devise a workable scheme so the draft WRP leaves the question open.

THE NEXT STEPS - IMPLEMENTATION TIMETABLE AND SECOND STAGE PUBLIC CONSULTATION EXERCISE

11. Before starting the public consultation exercise, we propose to brief the LegCo Environmental Affairs (EA) Panel on 6 May 1997. The public consultation exercise will commence on 6 May 1997 after the LegCo briefing and will run till 30 August 1997. ACE would be consulted formally at the end of the consultation exercise.

12. The public consultation exercise will invite public comments on the draft Waste Reduction Plan before the Administration finalises its waste reduction policy. The draft Waste Reduction Plan will be published and distributed to various advisory bodies including the Municipal Councils, District Boards and other interest groups. Printed information leaflets will also be produced for the general public. An electronic version of the draft Waste Reduction Plan will be put on the internet for public reference. Further details are at Annex C.

COSTS OF THE PLAN

13. The costs of implementing the Plan are difficult to establish precisely because of the existence of many variables, including the timing of introducing various aspects of the Plan. The most expensive element of the Plan, the waste-to-energy incinerators, are the subject of a feasibility study which will commence shortly. The estimated costs of the plan are shown in the following table.

Waste Management Costs with WRP (in million HK\$ at 1996 prices)

	Year 1998	Year 1999	Year 2001	Year 2003	Year 2005	Year 2007
<i>Programme Cost</i>						
Waste Avoidance, Minimisation and Materials Recovery Programme	5	19	58	91	123	161
Bulk Waste Reduction Facilities	0	1	5	9	795 ¹	864
<i>Subtotal</i>	5	20	63	100	918	1,025
<i>Government Cost</i>						
Waste Avoidance, Minimisation and Materials Recovery Programme	17	18	22	26	26	26
Bulk Waste Reduction Facilities	0	0	5	5	10	10
<i>Subtotal</i>	17	18	27	31	36	36
<i>Total</i>	22	38	90	131	954 ²	1,061
Average Cost \$/tonne Reduced	596	292	249	229	586	559

¹ Figure includes capital cost of composting and waste-to-energy plants annualised over a design life of 20 years at 4% discount rate and annual operation cost (capital cost of composting plant and waste-to-energy plants estimated to be \$42 million and \$6,400 million respectively at 1996 prices).

² Waste-to-energy plants on line, raising overall WRP programme costs.

COST BENEFIT ANALYSIS

14. The benefits of the Plan are both tangible and intangible. The intangible benefits include a reduction in the utilisation of finite resources, and fewer vehicles transporting waste throughout Hong Kong with the consequential environmental impacts. Business and industry should benefit from savings arising from using less raw materials and by being encouraged to participate more fully in the rapidly growing world market that demands appreciation of the environmental impacts of products and production processes. The tangible benefits are the avoided costs of collection and disposing of waste, and the recovery of energy.

15. The table below compares the total cost of waste management with the WRP implemented with the total cost of waste management in its absence, that is, the landfill only option. Based on target reduction levels, the annual savings will approach \$250 million in 2007.

Comparison of Costs of Waste Management With and Without the WRP (in million dollars in 1996 prices)

Municipal Waste

	Year 1998	Year 1999	Year 2001	Year 2003	Year 2005	Year 2007
(i) Waste management without WRP (i.e. landfill only)						
Total cost	2,212	2,298	2,479	2,717	2,979	3,249
(ii) Waste management with WRP						
Total cost of WRP	22	38	90	131	954	1,061
Cost of Landfilling	2,187	2,209	2,223	2,325	1,863	1,937
Total cost	2,209	2,247	2,313	2,456	2,817	2,998
Savings (i)-(ii)	3	51	166	261	162	251

Notes: Costs are estimated based on target reduction level.

Planning, Environment and Lands Branch
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