



Response to LegCo on the Policy Framework for the Management of MSW

Response to the Legislative Council's Invitation for Submissions on the Policy Framework for the Management of Municipal Solid Waste (2005-2014) Published in December 2005.

1. This document presents the response of the Business Environment Council (BEC) to the Invitation for submissions on "the Policy Framework for the Management of Municipal Solid Waste" by the Legislative Council of the Hong Kong Special Administrative Region in December 2005.
2. Included are our views on key elements of the framework, namely the; Territory-wide Source Separation of Domestic Waste, Product Responsibility Scheme (PRS), MSW Charging, Green Procurement Policy and the commission of IWMMF, which should be addressed in developing such a comprehensive waste management policy framework for Hong Kong.

Background

3. Since the Waste Reduction Framework Plan (WRFP) issued in 1998, the government has adopted a number of measures to manage MSW, including the introduction of the construction waste disposal charging scheme, and the roll out of a territory-wide campaign on Source Separation of Waste. The overall MSW recovery rate has risen from 36% in 2002 to 41% in 2003, with domestic waste recovery rate increasing to 14% in 2004. In 2004, about 5.7 million tonnes of wastes were generated in Hong Kong, which amounts to 15,480 tonnes of Municipal Solid Waste (MSW) per day. Approximately 60% of this was disposed of at landfill.
4. At this current rate, the landfills are estimated to be full in 6 to 10 years. Therefore, it is essential to take action on this issue and we offer the following views on the steps proposed by government in its Policy Framework for the management of MSW over the next decade.

Territory-wide Source Separation of Domestic Waste

5. We support the government in implementing source separation of domestic waste in Hong Kong. However, based on our experience from developing a source separation guidebook for residential buildings for EPD, we have the following concerns on the planning and implementation of the scheme.
6. The placement of waste separation bins in a residential building has legislative concerns from government departments such as the Buildings Department and Fire Services Department. We encourage the government to take a proactive approach by conducting cross departmental consultations in seeking a consensus among all related departments to allow the placement of waste separation bins in the convenient locations, while maintaining basic fire safety and hygiene. It is our view that in the majority of cases provision for source separation can be made without compromising health and safety concerns by giving due

regard to the size and design of receptacles. Stackable units are currently available on the market, which offer adequate storage capacity without adding substantially to the footprint of existing waste receptacles.

7. The government should absorb overseas experience for source separation in high-rise buildings and get local waste separation bin manufacturers involved in order to balance fire safety and provision for source separation.
8. Installing new recycling facilities or making alterations to certain locations in residential buildings so as to fulfill statutory requirements while performing source separation may pose some financial burden onto property management or other implementation agents of source separation. Advisory consultations from the property management sector have suggested that the government should provide measures and facilitations to relieve such financial burden, so that the effectiveness of the source separation programme can be enhanced and the recycling rate can be increased. The cost could clearly be offset against the savings in construction and operation of waste disposal or treatment infrastructure in the longer term.
9. Education is also a crucial factor in ensuring the success of source separation. In formal interviews with property management and residents during the development of EPD's Source Separation Guidebook it was evident that awareness and involvement of residents in source separation is essential because they are the upstream and keystone player in the recycling chain. Competence from property management companies and developers for existing and new residential buildings respectively are equally important in providing sufficient features, programmes and infrastructures to facilitate source separation. It is our view that further investment in education and awareness will be required over the next decade in order to achieve a step change in source separation behavior.
10. With respect to the target of reducing MSW by 1% per annum – we believe that this target is too neat and convenient to be well considered, and not therefore effectively associated with the core elements in the 10-year policy framework. In this regard we encourage more work to be done in demonstrating the % contribution of each element of the strategy objective.

Product Responsibility Scheme (PRS)

11. BEC believes that "Shared Responsibility" is the correct basis on which to develop any PRS scheme, where responsibility is shared among government, consumers, and all industry actors in the product chain for all the environmental impacts of a product over its life cycle, with no emphasis on the producer's unique responsibilities or on the post-consumer stage.
12. As per our position paper on PRS in July 2003, we also believe that a voluntary participation and leadership from the industry is the first and most flexible step in introducing these schemes. We believe that the need for future legislation should be considered only after experience has been gained (and the success or failure demonstrated) of a voluntary approach.

13. To consider PRSs solely as a means to achieve reduction of waste is only scratching the surface of a deeper value, that PRS is a framework to ultimately put the concept of sustainable production and consumption into action. Certainly such schemes can be used to address waste reduction, but also other issues such as water conservation, energy efficiency, indoor air quality re-usability and dematerialization. Flexible approaches can allow for optimized products, which reduce wastes and increase recycle-ability or re-use. Green consumerism can both enhance recycling and product production cycle. Therefore, each party along the value chain should be encouraged to and recognized for minimizing waste generation and maximizing recycling and recovery. For more details, please refer to Appendix 1 for BEC's PRS position paper.

MSW Charging Scheme – Realization of the Polluter Pay Principle

14. BEC considers MSW charging as a sensitive issue, but view it as an essential tool for effective waste management. Clearly waste management services should be charged on an equitable basis, for example, based on the amount of waste produced, so that excessive waste producers are penalized and those that minimize their wastes are appropriately identified and accordingly have lower costs.
15. The method of calculating the waste management charge should be fair and create incentives for waste reduction and segregation.
16. BEC strongly encourages the provision of proper and effective channels/alternatives for waste producers to recover recyclables from their waste stream and thereby avoid undesirable waste generation and associated charges.
17. BEC is concerned about the means Government will use to collect the waste charges, particularly in regard to the administration needed to deal with individual waste producers and the overall cost effectiveness of the whole charging system. There needs to be a balance between being able to pinpoint individual waste producers and cost effectiveness of the whole charging system. Business leaders and environmentally conscious parties such as the panel speakers from our 2005 EnviroSeries Conference on Sustainable Waste Management, all urged the government to proceed with the "polluter pays" principle to charge for MSW (See the attached conference report in Annex 2 for more details).
18. Strong monitoring and enforcement measure must also be taken to prevent illegal dumping of waste by any parties that make such attempts to avoid paying the waste management service charge. The penalty must be heavy enough to deter such attempts.

Green Procurement Policy

19. BEC support the government's plans to formulate and implement green procurement policies. We believe that in conjunction with increased Product Responsibility from both local manufacturers and importers, that a significant step can be moves to assist Hong Kong adopt sustainable consumption and production practices. These measures address issues beyond waste management as mentioned above.
20. BEC also supports the development of a systematic approach towards green procurement in business, starting with the use of recyclable aggregates in public works and projects.
21. A timetable should be set up to compliment plans and to better implement the set policies for green procurement. Similarly a schedule for price preference should be established by Government to facilitate the purchase of products with significant environmental benefit. Experience from overseas demonstrates that price preferences for green products purchased by Government agencies may be 5-20% higher than standard products.
22. Government is encouraged to showcase successful stories and case studies from both local and oversea governments in order to share their experience in green procurement. Leading by example is an excellent way to encourage businesses in the community to participate in green procurement.

Development of Sustainable Waste Disposal Facilities

23. General public from EPD's Public Engagement Programme on MSW generally accept the idea of IWWMF and the panel speakers from the 2005 EnviroSeries Environmental Conference on Sustainable Waste Management all urge the government to seriously consider advanced approaches of incineration as a necessary means to complement waste management in Hong Kong.
24. The business community and the public are, however, concerned that IWWMF may pose some environmental and health impacts. Therefore, government should formulate a transparent and effective monitoring system as well as a stringent control mechanism to ease potential environmental and health issues that may arise.
25. BEC supports the government's proposal to develop IWWMF in Hong Kong as long as health and environmental concerns can be addressed.

Landfill Disposal Bans

26. It is our view that Landfill Disposal Bans should only be introduced where the additional cost of alternative treatment can be avoided or kept to a minimum. More information is required to explain the Government's policy in this area.

Landfill Extension

27. BEC does not support the extension of the existing landfills into the Country Park Areas. We do however support the extension of the landfills in areas where they do not impact upon country park areas, and where appropriate studies including EIA have been undertaken to determine the acceptability of impacts or requisite mitigation measures.

Conclusion

28. The Business Environment Council agrees with the Government that that sustainable waste management starts with reduction, segregation, and recovery and recycling of wastes.
29. We believe that further investment in public education, supported by provision of appropriate facilities and enabling systems such as the Polluters Pay System are the necessary cornerstones of an effective solution that will lead to increased waste recovery and growth of the local recycling industry.
30. Further efforts are required to resolve fire safety and hygiene related concerns with respect to source separation of waste and we encourage the establishment of a cross-departmental solution to this issue.
31. Clearly business must play its part in recycling and recovery, but also in adopting sound Product Responsibility. In this regard we advocate for a voluntary approach working in partnership with the government and the community to offer the most flexible solutions for Hong Kong.
32. We support in principle Landfill Bans for certain wastes to prevent undesirable impacts, but believe more information should be made available to explain the types of wastes, and the measures and costs of alternate disposal approaches.
33. We support as a matter of some urgency the implementation of an integrated waste management facility, and encourage the evaluation of potential options, sites and relative impacts to be undertaken in a transparent manner in consultation with the community.
34. We are supportive of measures to extend the life of the existing landfills and extension of the landfills, where the environmental impacts have been assessed and impacts deemed to be acceptable. In principle however, we are not supportive of extending the landfills into Country Park Areas.

Appendix 1

Business Environment Council (BEC) Position Paper on Product Responsibility Schemes (PRS) JULY 2003

BACKGROUND

1. This paper outlines BEC's position on a specific aspect of waste management – **Product Responsibility Schemes** (PRS) which are being piloted by the HKSAR government, with future plans for expansion. The basis for implementing Product Responsibility Schemes is the concept of "Extended Producer Responsibility" (EPR), which is defined as the extension of the responsibility of producers for the environmental impacts of their products to the entire product life cycle, and especially for their take-back, recycling, and disposal. However, PRS is defined much more broadly as the shared responsibility of government, consumers, and all industry actors in the product chain for all the environmental impacts of a product over its life cycle, with no emphasis on the producer's unique responsibilities or on the post-consumer stage.
2. In practice, the term has mostly been used to describe producer responsibility "post-consumer" - after products or packaging have been discarded at the end of their useful life. It should be noted that this paper also addresses issues of eco-efficiency, design for the environment and other issues related to the reduction of waste through product or packaging modification.
3. The primary local objective of PRS was set out to be the reduction of waste sent to landfill, however existing pilot schemes demonstrate limited effectiveness in achieving this objective, and that achieving such through PRS would be highly dependent on the product or packaging selected.
4. In some instances such schemes are better suited to removing toxic materials from the waste stream, as is the case with the on-going mobile telephone battery scheme. The mobile phone battery PRS pilot also indicates that the cost to producers is high, and that additional financial and other support is required.
5. In Hong Kong, PRS is one of the seven major initiatives on prevention and recycling of domestic waste announced by the Secretary for the Environment and Food in September 2001. The first product responsibility scheme in Hong Kong was the "Mobile Phone Battery Recovery and Recycling Programme" launched on 13 April 2002¹. The pilot programme is also the first recycling programme organized and funded by industry in Hong Kong on a voluntary basis.
6. The body of this position paper lays out areas that the BEC feels require further investigation prior to the establishment of further PRS, and outline BEC's suggestion of a shared Product

¹ 12-month programme organized by the telecommunication working group which consists of mobile phone battery manufacturers, network service providers, distributors, Consumer Council, Environmental Protection Department and the Office of the Telecommunications Authority under the chairmanship of the Internet and Telecom Association of Hong Kong.

Responsibility Scheme that will enable Hong Kong to best utilize PRS as a tool for reducing loadings both in volume and toxicity to landfills.

BEC's POSITION STATEMENT

1. The BEC supports the concept of "Shared Responsibility" with regard to waste management. This shifts responsibility to those with the greatest ability to trigger the actions needed to move toward a sustainable pattern of materials use.
2. In many European Union countries, each industry player, including retailer, distributor, packer and filler, converter and raw material processor, is allocated a specific percentage of the responsibility to share. When consumers purchase goods with packaging material, they become responsible to dispose of any packaging waste which they generate in a proper way. And the government plays a significant role too in building the supporting infrastructure for disposal, collection and recycling, and also for educating the public.
3. A narrowly-focused program which discriminates against only a single party in the community is ineffective, and BEC suggests a division of responsibilities should be encouraged at different stages in a product's life cycle as follows:

Player in the Life Cycle

Responsibility

- | | |
|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • raw material suppliers/ converters | <ul style="list-style-type: none"> ➢ minimize the use of packaging materials via innovative designs and materials selection ➢ select materials that are eco-friendly in nature ➢ accept recycled materials in the manufacturing process |
| <ul style="list-style-type: none"> • product fillers / importers / distributors | <ul style="list-style-type: none"> ➢ reduce volumes of packaging used per unit ➢ select packaging which is eco-friendly in nature |
| <ul style="list-style-type: none"> • retailers | <ul style="list-style-type: none"> ➢ recycle their wastes ➢ facilitate the collection of recyclable wastes by setting up channels to take back post-consumption packaging with recycling values |
| <ul style="list-style-type: none"> • consumers | <ul style="list-style-type: none"> ➢ separate household wastes ➢ directly responsible for product post-consumption handling ➢ support recycled products |
| <ul style="list-style-type: none"> • government | <ul style="list-style-type: none"> ➢ assist the division of responsibilities ➢ build/ support necessary infrastructure for recycling industry ➢ educate the public on waste separation and recycled products |

4. It is inequitable to introduce a PRS whereby a single player in the product's life cycle, such as the manufacturer, assumes total or disproportionate responsibility for the disposal of waste material.

5. We consider that only when all parties involved in the life cycle of a product are made accountable can a fair and efficient waste management plan be achieved.
6. The BEC believes that "Shared Responsibility" is the right basis on which to develop any PRS schemes.
7. BEC also believes that a voluntary participation and leadership from the industry is the first step in achieving these schemes.
8. With the experience in the implementation of the voluntary approach, the need for future legislation should be considered.

Further requirements

To facilitate successful Product Responsibility Schemes, BEC considers the following actions will be required from the HKSAR Government.

1. Development of the local recycling industry

Recycling is a key element in the reduction of waste. In Hong Kong the development of a recycling industry is still in its early stages. Without the Government's support, the recyclers are reluctant to collect and recycle certain types of recyclable materials.

The BEC believes that by transferring necessary technology from other countries and providing subsidies such as reduced-rent locations, on a mid to long term basis, the Government can support the growth of the recycling industry into an effective and self-sustainable one without distorting economic efficiency.

2. Education and Communication

Efficient recycling cannot be achieved if people in Hong Kong are not educated and encouraged to separate waste. As consumers, people need to acknowledge their responsibilities for waste handling. Without proper waste sorting, it will not be cost-effective to recycle materials. Public acceptance of recycled products is also a key part of environmental education. Similarly, efficient recycling requires a mature infrastructure to collect recyclable materials, and the private sector welcomes a partnership approach with the Government on waste management projects.

The BEC suggests the Government should provide additional funds to educate the public on the importance of waste minimization and increase public awareness on recycling, and to facilitate the construction/ development of necessary infrastructure for efficient and effective collection.

3. Facilitation of waste export for recycling purposes

The production, collection and sorting of waste in Hong Kong is not sufficient to justify the development of a sustainable recycling industry for all materials. Some of the recyclables, present in low percentages in the waste streams, would be economically easier to recycle out of Hong Kong than within HK. The BEC believes that the Government should facilitate the export of recyclable wastes when this is the case.

4. Liaison between the Government and the business sector

The Government's preceding liaison with the business sector when formulating any PRS is essential to ensure successful implementation, e.g. the collection and recycling of mobile phone batteries. The BEC is willing to act as a neutral facilitator between government and business in planning and implementing future PRS.

SUMMARY

The BEC believes that in the issue of waste management, no one individual industry, nor a specific player in a products life cycle should be singled out. A "Product Responsibility" program which builds around the theme of "Shared Responsibility" is the best way forward. While the BEC shall continue to endorse and encourage waste minimization initiatives in the business sector, it is also important for Hong Kong to have a developed and viable recycling industry and a sufficient collection and sorting infrastructure before executing any plans on waste management. Simultaneously, we also need a developed market for recycled materials, otherwise cost effectiveness cannot be attained in implementing any recycling plan. Public education on waste management is another key ingredient of a successful waste management policy.

Appendix 2

ENVIROSERIES CONFERENCE

SUSTAINABLE WASTE MANAGEMENT – POLICIES, PARTNERSHIPS AND PROSPECTS

8th June 2005

In 2004, Hong Kong produced about 3.4 million tonnes of solid municipal waste, which required disposal. The stresses on our landfill systems, into which the waste currently goes, are real and pressing. At the current rate of solid waste generation, our landfills will be full in 6-10 years. The Enviro-series Conference entitled “Sustainable Waste Management – Policies, Partnerships and Prospects” held on 8 June 2005 brought together a series of local and overseas speakers to present and debate the issues.

SCENE SETTING

The opening remarks were given by Mr. Raymond Fan of the Environmental Protection Department who reiterated Hong Kong’s solid waste problems and outlined how Hong Kong should handle this dilemma through waste avoidance as well as looking at alternatives to landfill for treatment and disposal of waste. Mr. Fan further stated that waste avoidance hinged on factors such as public education, source separation and financial instruments; the latter comprising waste charges and producer responsibility schemes (PRS). Use of thermal treatment i.e. incineration is a consideration, but would not be the only method for dealing with Hong Kong’s solid waste. Mr. Fan took the opportunity to announce the coming White Paper on Municipal Solid Waste Management and he invited members of the private sector to be part of a crucial partnership in tackling this problem.

Mr. Albert Lai, Chairman of the People’s Council on Sustainable Development, spoke next on the capital stock approach to sustainable development and how natural capital, man-made capital, intellectual capital and social capital formed important components of sustainable solid waste management in Hong Kong. Breakthroughs were called for in ideologies (e.g. more public support for waste industries and government intervention for recycled products), policy process (e.g. waste charges and rationale for treatment facilities) and governance (allowing more stakeholder participation in policy decisions for solid waste management).

CONSIDERATIONS ON THE SUSTAINABLE WASTE MANAGEMENT STRATEGY IN HONG KONG

In the first presentation of Session 1 entitled “Considerations on the Sustainable Waste Management Strategy in Hong Kong”, Professor C.S. Poon of the Hong Kong Polytechnic University explained at length the environmental impacts of existing and proposed technology underpinning the treatment of municipal solid waste in Hong Kong. In his comprehensive talk, Professor Poon compared landfill, material recycling facilities (MRF), mechanical biological treatment (MBT) facilities and thermal treatment methods (both incineration and gasification). Citing overseas cases (from Taiwan, Japan and Germany) as well as studies conducted locally, the case for locating incinerator plants within communities was made.

Mr. James Graham representing the Hong Kong General Chamber of Commerce spoke about industry’s wish for immediate action to tackle solid waste and warned that waiting for a “silver bullet” solution (i.e. the perfect solution) served only to prolong the delay. As long as business

and Government broadly agreed on the economic viability of certain measures, such as (waste charging and PRS), it was in the interests of everyone to move ahead. Examples taken from the construction sector were used to demonstrate how business initiatives aligned with Government goals could achieve notable outcomes.

Dr. Jonathan Wong provided a case study on the Un Chau Estate, a low income housing estate, where household source separation proved to be an effective means of waste reduction. Involving the community (through the District Councils, residential corporations, elderly centres and kindergartens) was key towards achieving a 42% participation rate and a 17% reduction in solid waste generation. Dr. Wong concluded that domestic source separation schemes work best when incentives are in place, residents take ownership of the schemes and the system is easy to access and use (e.g. door-to-door collection). An “informal administrative order” was also mentioned as an important step to ensure that public interests were kept in line with overall waste reduction goals.

Speaking from a policy maker’s perspective, Ms. Choy So-yuk, Chairperson of the Legislative Council’s Environmental Affairs Panel, talked about the readiness of the people and business to accept any tough measures needed to tackle waste. In her speech, she urged Government to adopt a more open mind set stating that waste treatment should not be the foremost course of action but rather waste avoidance and reduction should be pursued given the following: people are ready to pay; businesses will accept tough measures like PRS; and the Legislative Council is prepared to support charging for waste.

In the panel discussion that followed, Ms. Teresa Wong of the Environmental Protection Department repeated the message that, whilst Government could find ways to meet the land and capital costs for waste treatment and disposal facilities, coming up with a sustainable solution depended very much on the community. A specific question from the floor enquired about Government support to SMEs involved in the recycling industry. Ms. Wong replied that Government was considering the use of economic instruments, such as waste charging and PRS, to ensure that there was more waste being diverted from landfill for recycling; however she stressed the need to work with industry and to learn from the experience gained when introducing construction waste charges earlier this year. Other statements from the panelists concerned the importance of community based schemes (from Mr. Albert Lai), partnerships and incentives (from Dr. Jonathan Wong), and the need for action now so that the lead time for planning of major waste treatment facilities like incinerators could be put in place (from Mr. James Graham).

MUNICIPAL WASTE TREATMENT ALTERNATIVES

In the second session on municipal waste treatment alternatives, presentations on technology options being considered for Hong Kong and two overseas cases were provided.

In the first presentation of this session, Dr. Joseph Lee (representing the Technology Sub-Group of the Advisory Group to the Government on Waste Management Facilities) outlined how, through a two stage assessment and evaluation process, his team identified a short list of technology options that were suitable for Hong Kong. The list comprised incineration with energy recovery, gasification, co-combustion and mechanical and biological treatment.

Since 1999, Taipei has achieved a waste avoidance rate of 39%. Dr. Stephen Shen, formerly with the Taiwan Environmental Protection Department, talked about Taipei's experience from the launch of its recycling programme in 1992 to the "zero landfill" vision by 2010 through a seven step process. Taipei's waste reduction has been brought about as a result of reduction at source, waste charging (citizens are charged NT\$0.50 per litre), mandatory separation and application of technology (e.g. fly ash reduction). Taipei still has three incineration plants of 900, 1,500 and 1,800 tonne per day capacity.

Mr. Angelos Bacapolous of the Solid Waste Management Services, City of Toronto, provided a concise presentation on Toronto's quest to achieve zero landfill diversion by 2012. Mr. Bacapolous emphasized the importance of community involvement and, how through a comprehensive separation programme (i.e. a three coloured bin system), Toronto was able to obtain a 90% participation rate. Waste charging also played an important role based on charging apartments and single family households C\$3.10 per plastic waste bag, the proceeds of which went to a Waste Diversion Organisation. Other initiatives included: use of commercial bins; "pay as you throw" legislation; recycling carts for organic waste; and infrastructure and end markets for durable goods like furniture.

BEYOND INTEGRATED WASTE MANAGEMENT STRATEGY

In the final session, two representatives presented their views: Mr. Robin Chiu (Federation of Hong Kong Industries) and Mr. Joseph Lim (Onyx Hong Kong) both spoke on how industry could partner with Government to achieve sustainable results in waste management.

Mr. Chiu spoke on how the Federation was taking a lead in encouraging green procurement practices amongst its members, conducting the 1-1-1 programme in the PRD for factories belonging to some of its member companies and its support for the Government's Eco-Park; all of these measures being designed to encourage waste management and recycling. The key message to the audience was the willingness of industry to take advantage of the opportunities created by Government.

In Mr. Lim's experience, Government could leverage off the private sector's resources through better and more robust partnerships using performance-based waste management contracts. In the latter, the critical issue was to have clear long term waste disposal targets, as well as control of waste flow to run a successful business partnership. Mr. Lim used his speech to further highlight projects that his company had carried out in Hong Kong and the Mainland where the governments had taken on different roles to best suit the economic and political conditions.

The final panel session involved all the speakers from the last two sessions. Particular focus was on the overseas experience and how the two cities, Taipei and Toronto, managed to divert waste from landfill through a mix of stimulating outlets for recycled products and keeping landfill costs and charges high enough to deter waste producers. The use of deposit funds, the proceeds of which go to the recycling industry was also raised for both cities. In closing, the panel speakers all urged Government to implement recycling policies faster, to communicate the urgency of the situation to the public more clearly, to proceed with "polluter pays" principles i.e. charging for waste and to seriously consider incineration as a necessary means to complement the waste management in Hong Kong.

The closing remarks were given by Mr. Keith Kwok, Permanent Secretary for ETWB reinforcing the importance of financial instruments and partnerships for Hong Kong's waste management strategy.

BEC 13 June 2005