

For discussion on  
24 April 2006

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

### **Proposed Legislation for Implementation of Producer Responsibility Schemes**

#### **PURPOSE**

This paper sets out the Administration's proposal on new legislation for the implementation of producer responsibility schemes (PRS's) in Hong Kong. Members are invited to offer their views on the proposal.

#### **BACKGROUND**

2. We published "A Policy Framework for the Management of Municipal Solid Waste (2005-2014)" (Policy Framework) in December 2005 which sets out a comprehensive strategy to tackle our imminent waste problem. Enshrining the principle of "polluter pays" and the element of "responsibility", PRS is a key policy tool in the Policy Framework for waste reduction, recovery and recycling. Under PRS, a host of stakeholders, who can be manufacturers, importers, distributors, retailers and consumers, shall share the responsibility for the collection, recycling, treatment and disposal of end-of-life products, with a view to avoiding and reducing the environmental impact caused by such wastes.

3. In practice, PRS generally involves one or several of the following core elements:

(a) **Product take-back**

It is the most common form of PRS. Under a product take-back scheme, the producers, importers and/or retailers are required to take back the products they sell for proper waste management. They can fulfil the requirements either individually or collectively. For the latter case, it usually takes the form of an industry “organization” established by statute. A product take-back scheme has been applied successfully overseas to a wide range of products, including vehicle tyres, rechargeable batteries, electrical and electronic equipment and packaging materials.

(b) **Deposit-refund system**

Under a deposit-refund system, a consumer is required to pay a deposit when purchasing a product. The deposit will be refunded when the consumer returns the used product to designated collection points. This system ensures a reliable return of end-of-life products for recycling, and has been applied to beverage containers in Germany, Denmark, South Australia, Canada and several states in the United States.

(c) **Advanced recycling fee (ARF)**

ARF is levied on the sale of a product, and is usually channelled to a fund set up by the relevant statute to finance the post-consumption management of the product. ARF is often used in combination with other measures, such as a

take-back scheme. Overseas examples include a fee on electrical appliances to finance end-of-life management of electronic waste in California, and a fee on new tyres to finance a take-back scheme operated by the tyre industry in Sweden.

**(d) Product tax or levy**

The main objective of a product tax or levy is to discourage the use of a particular product, such as plastic bag, through economic disincentives. The tax or levy collected is usually used to support general waste management or other environmental causes. A levy on plastic bags has been implemented in Ireland, South Africa and Denmark.

The core elements above can be used either individually or in combination, and encouraging results have been achieved in some overseas jurisdictions. For instance, the levy on plastic bags in Ireland has successfully reduced the consumption of plastic bags by 90%.

4. Hong Kong has built up its own experience in PRS. In 2002, we launched a voluntary PRS for mobile phone rechargeable batteries, which was later extended to cover other types of rechargeable batteries. While the voluntary PRS has certain impact on waste reduction and recycling, we propose to introduce mandatory PRS's for the following products to achieve more substantial results:

- (a) Vehicle tyres;
- (b) Plastic shopping bags;
- (c) Electrical and electronic equipment;
- (d) Packaging materials;

- (e) Beverage containers; and
- (f) Rechargeable batteries.

These products are accorded priority because they could be a stable source of materials for developing our local recycling industry, and their diversion from landfills could help save landfill space. In addition, hazardous materials in some electrical and electronic equipment and rechargeable batteries should be recovered and properly treated instead of being disposed of at landfills. We note that overseas jurisdictions have successful experience on managing these products through PRS's.

## **THE LEGISLATIVE PROPOSAL**

5. We need to enact a new piece of legislation for the implementation of mandatory PRS's in Hong Kong. We note that all PRS's have the same objectives and share many core elements, such as take-back responsibility and mandatory tax or levy. An umbrella legislative approach, i.e. an enabling legislation with detailed regulatory requirements to be introduced through subsidiary legislation, is needed to implement PRS's. The umbrella legislative approach is universally adopted overseas in PRS legislation, with only a few exceptions (please see **Annex** for a brief review of overseas PRS legislation). It is also in line with the approach we adopted in our own environment-related ordinances<sup>1</sup>.

### **Regulatory Requirements**

---

<sup>1</sup> For instance, subsidiary legislation under the Waste Disposal Ordinance (Cap. 354) regulate livestock waste (Cap. 354A) and chemical waste (Cap. 354C).

6. The new legislation will cover all the core elements of PRS described in paragraph 3. Specifically, the new legislation will empower the Chief Executive in Council to introduce regulatory requirements, including:

- (a) imposition of take-back responsibility for the collection, recycling, treatment and disposal of end-of-life products (e.g. electrical and electronic equipment, packaging materials);
- (b) imposition of deposit and refund system on specific products (e.g. beverage containers) to ensure reliable return of end-of-life products;
- (c) imposition of fee, tax or levy on specific products (e.g. plastic bags, vehicle tyres, electrical and electronic equipment) to finance recycling programmes or to deter indiscriminate use;
- (d) restriction on free distribution of specific products (e.g. plastic bags) to reduce indiscriminate use;
- (e) labelling and disclosure requirements for specific products (e.g. hazardous component in electrical and electronic equipment) to facilitate recycling;
- (f) landfill disposal bans to complement take-back responsibility; and
- (g) registration and record-keeping requirements to ensure compliance.

## **Establishment of Organizations**

7. For certain PRS's, the industries concerned, instead of the Government, might be in a better position to operate recycling programmes of their own products, given their unique market knowledge. The new legislation will therefore empower the Chief Executive in Council to make regulations to establish industry organizations, which will be tasked to manage collection and recycling programmes of their own products.

## **Enforcement and Penalty**

8. The new legislation will authorize the Director of Environmental Protection (DEP) as the enforcement authority to ensure compliance of the regulatory requirements. DEP will have the power to enter and inspect, the power to obtain and analyze samples, and the power to request information and records. The legislation will also provide for penalties for violation of regulatory requirements.

## **FINANCIAL AND STAFFING IMPLICATIONS**

9. While the enactment of the proposed enabling legislation will not in itself have financial and staffing implications, we envisage that the introduction of PRS's for specific products subsequently through subsidiary legislation will involve additional resources and staff for schemes' administration and enforcement. The cost of implementing individual PRS's will be carefully assessed as we develop the schemes in detail. For PRS's that involve mandatory fee, levy or tax, the revenue so collected may help offset the Government's expenditure on waste

collection, recycling and other environmental causes.

## **PUBLIC CONSULTATION**

10. The Panel discussed the Policy Framework at its meetings on 15 December 2005 and 19 January 2006. While agreeing that PRS's should be implemented expeditiously, a few Members expressed concerns about the umbrella legislative approach to introduce an enabling legislation first and individual PRS's in the form of subsidiary legislation subsequently. Given the common objective and the shared core elements of PRS's, it would be difficult to justify the enactment of separate ordinances for individual PRS's. To address Members' concern, we will fully consult the Legislative Council on the subsidiary legislation, and each set of PRS regulation will be subject to the vetting of the Legislative Council under the established procedure.

11. The Advisory Council on the Environment (ACE) was consulted on the Policy Framework, as well as on the proposed legislation for implementing PRS's. The ACE fully endorsed the proposed legislation, and urged the Legislative Council to accord priority to the legislation, which would play a significant part in resolving our imminent and serious waste problem. The ACE also hosted an Open Forum on the Policy Framework to gather views from the trade, academics, green groups and the public. The views expressed at the Open Forum were generally supportive of PRS's and the umbrella legislation approach.

12. In addition, we have set up dedicated phone number, fax number and email for the public to express their views on the Policy Framework. We have also invited views from members of Home Affairs Bureau's

Public Affair Forum. Up to the end of March, we have received over 70 comments. Among those comments on PRS's, the majority of them are supportive.

## **IMPLEMENTATION PLAN**

13. Subject to Members' views, we plan to introduce the Bill into the Legislative Council in 2006. Besides the proposed legislation, we are developing PRS's on specific products, with priority given to vehicle tyres, plastic shopping bags and electrical and electronic equipment. We will consult the trade and the relevant stakeholders on these PRS's and seek Members' views in due course.

## **ADVICE SOUGHT**

14. Members are invited to note and comment on the proposed legislation.

Environmental Protection Department

April 2006



**A Brief Review of Overseas PRS Legislation**

<b>Country/Region</b>	<b>Umbrella/Enabling Legislation</b>	<b>Relevant Provisions</b>	<b>Product-specific Regulations</b>
<b>Australia</b> New South Wales	<ul style="list-style-type: none"><li>● Waste Avoidance and Resource Recovery Act 2001</li></ul>	<ul style="list-style-type: none"><li>● Provisions on PRS and regulation-making power in section 15 – 18 of the Act</li></ul>	
<b>Australia</b> Queensland	<ul style="list-style-type: none"><li>● Environment Protection (Waste Management) Policy 2000</li></ul>	<ul style="list-style-type: none"><li>● Waste management hierarchy, “polluter pays” principle, “user pays” principle in section 10-13 of the Policy</li></ul>	
<b>Australia</b> South Australia	<ul style="list-style-type: none"><li>● Environment Protection Act 1993</li></ul>	<ul style="list-style-type: none"><li>● Provisions on PRS for beverage containers in section 65 – 73 of the Act</li><li>● Regulation-making power in section 140 of the Act</li></ul>	<ul style="list-style-type: none"><li>● Environmental Protection (Beverage Container) Regulations 1995</li><li>● Environmental Protection (Used Packaging Materials) Policy 2001</li></ul>
<b>Australia</b> Victoria	<ul style="list-style-type: none"><li>● Environment Protection Act 1970</li></ul>	<ul style="list-style-type: none"><li>● Provisions on waste management and regulation-making power in section 16 – 17A of the Act</li></ul>	<ul style="list-style-type: none"><li>● State Environmental Protection Policy (Used Packaging Materials) 2000</li></ul>
<b>Canada</b> British Columbia	<ul style="list-style-type: none"><li>● Environmental Management Act</li></ul>	<ul style="list-style-type: none"><li>● Provisions on municipal solid waste management and regulation-making power in section 23 – 38 of the Act</li></ul>	<ul style="list-style-type: none"><li>● Recycling Regulation</li></ul>

<b>Country/Region</b>	<b>Umbrella/Enabling Legislation</b>	<b>Relevant Provisions</b>	<b>Product-specific Regulations</b>
<b>Canada</b> Manitoba	<ul style="list-style-type: none"> <li>● Waste Reduction and Prevention Act</li> </ul>	<ul style="list-style-type: none"> <li>● Regulation-making power in section 22 of the Act</li> </ul>	<ul style="list-style-type: none"> <li>● Tire Stewardship Regulation</li> <li>● Used Oil, Oil Filters and Containers Stewardship Regulation</li> </ul>
<b>Canada</b> Nova Scotia	<ul style="list-style-type: none"> <li>● Environment Act 1994-95</li> </ul>	<ul style="list-style-type: none"> <li>● Provisions on waste management and regulation-making power in section 92 – 102 of the Act</li> </ul>	<ul style="list-style-type: none"> <li>● Solid Waste-Resource Management Regulations</li> </ul>
<b>Canada</b> Ontario	<ul style="list-style-type: none"> <li>● Environmental Protection Act (EPA)</li> <li>● Waste Diversion Act (WDA)</li> </ul>	<ul style="list-style-type: none"> <li>● Provisions on waste management in section 25 – 47, 84 – 90 and regulation-making power in section 175 – 177 of EPA</li> <li>● The purpose of WDA is to establish a statutory non-profit-making body to administer the recycling in Ontario</li> </ul>	<ul style="list-style-type: none"> <li>● Used Tires Regulation</li> <li>● Containers Regulation</li> <li>● WEEE Regulation</li> </ul>
<b>Germany</b>	<ul style="list-style-type: none"> <li>● Act for Promoting Closed Substance Cycle Waste Management and Ensuring Environmentally Compatible Waste Disposal</li> </ul>	<ul style="list-style-type: none"> <li>● Provisions on PRS in article 22 – 26 of the Act</li> </ul>	<ul style="list-style-type: none"> <li>● Electrical and Electronic Equipment Act</li> <li>● Ordinance on the Return and Disposal of Used Batteries and Accumulators</li> <li>● Ordinance on the Transfer, Collection and Environmentally Sound Disposal of End-of-life Vehicle</li> </ul>

Country/Region	Umbrella/Enabling Legislation	Relevant Provisions	Product-specific Regulations
			<ul style="list-style-type: none"> <li>● Ordinance on the Avoidance and Recovery of Packaging Wastes</li> </ul>
<b>Ireland</b>	<ul style="list-style-type: none"> <li>● Waste Management Act, 1996</li> </ul>	<ul style="list-style-type: none"> <li>● Measures related to recovery of waste and regulation-making power under section 29 of the Act</li> </ul>	<ul style="list-style-type: none"> <li>● Waste Management (Environmental Levy) (Plastic Bag) Regulations, 2001</li> </ul>
<b>Japan</b>	<ul style="list-style-type: none"> <li>● The Basic Law for Establishing the Recycling-Based Society</li> <li>● Law for Promotion of Effective Utilization of Resources</li> </ul>	<ul style="list-style-type: none"> <li>● The Basic Law established the national waste management policy.</li> <li>● The Law specifies the product types to be managed using specific policy instruments.</li> </ul>	<ul style="list-style-type: none"> <li>● Law for the Recycling of Specified Kinds of Home Appliances</li> <li>● Law for the Recycling of End-of-Life Vehicles</li> <li>● Law for Promotion of Sorted Collection and Recycling Containers and Packaging</li> <li>● Law for Promotion of Recycling and Related Activities for Treatment of Cyclical Food Resources</li> </ul>
<b>The Netherlands</b>	<ul style="list-style-type: none"> <li>● Environmental Management Act</li> </ul>	<ul style="list-style-type: none"> <li>● Provisions on waste recovery and regulation-making power in section 10.15 – 10.20 of the Act</li> </ul>	<ul style="list-style-type: none"> <li>● Batteries Disposal Decree</li> <li>● WEEE Management Decree</li> <li>● Car Tyre (Disposal) Decree</li> <li>● Waste Oil (Collection) Decree</li> <li>● The Packaging and Packaging Waste Regulations</li> </ul>
<b>Norway</b>	<ul style="list-style-type: none"> <li>● Act Relating to the Control of Products and Consumer</li> </ul>	<ul style="list-style-type: none"> <li>● Regulation-making power in section 4 of the Act</li> </ul>	<ul style="list-style-type: none"> <li>● Regulations regarding Scrapped Electrical and Electronic Products</li> </ul>

Country/Region	Umbrella/Enabling Legislation	Relevant Provisions	Product-specific Regulations
	Service		
<b>Sweden</b>	<ul style="list-style-type: none"> <li>● Swedish Environmental Code</li> </ul>	<ul style="list-style-type: none"> <li>● Provisions on PRS and regulation-making power in chapter 15 section 6–7 of the Code.</li> </ul>	<ul style="list-style-type: none"> <li>● Ordinance on Producer Responsibility for Electrical and Electronic products</li> <li>● Regulations and General Guidelines on Vehicle Dismantling Operations</li> </ul>
<b>Switzerland</b>	<ul style="list-style-type: none"> <li>● Federal Law relating to the Protection of the Environment</li> </ul>	<ul style="list-style-type: none"> <li>● Provisions on waste management and regulation-making power in article 30 – 32 of the Federal Law</li> </ul>	<ul style="list-style-type: none"> <li>● Ordinance on the Return, the Taking Back and the Disposal of Electrical and Electronic Appliances</li> </ul>
<b>The United Kingdom</b>	<ul style="list-style-type: none"> <li>● Environment Act 1995</li> </ul>	<ul style="list-style-type: none"> <li>● Provisions on PRS and regulation-making power in section 92 – 95 of the Act</li> </ul>	<ul style="list-style-type: none"> <li>● Producer Responsibility Obligations (Packaging Waste) Regulations</li> <li>● End-of-Life Vehicles Regulations 2003</li> </ul>
<b>The United States</b> California			<ul style="list-style-type: none"> <li>● Electronic Waste Recycling Act 2003</li> <li>● California Beverage Container Recycling and Litter Reduction Act</li> </ul>