

For discussion on
23 July 2014

**LEGISLATIVE COUNCIL
PANEL ON ENVIRONMENTAL AFFAIRS**

**Measures to Promote the Recycling Industry and
Establishment of the Recycling Fund**

Purpose

This paper updates Members on the Administration's measures to promote the sustainable development of the recycling industry, and invites Members' support for the setting up of a Recycling Fund.

Background

2. The *Hong Kong Blueprint for Sustainable Use of Resources 2013-2022* ('the Blueprint') issued in May 2013 sets out a comprehensive strategy to reduce waste and increase recovery and recycling in Hong Kong. To achieve our target of 40% reduction in per capita municipal solid waste ('MSW') disposal by 2022, upgrading of the capabilities and efficiency of recycling operations is essential.

3. The Steering Committee to Promote the Sustainable Development of the Recycling Industry ('the Steering Committee'), which was set up in August 2013 under the chairmanship of the Chief Secretary for Administration, has studied policies and measures to reduce waste at source and promote the development of the recycling industry. In the process, the Steering Committee has maintained close liaison with the trade so that we could take into account their views when formulating new supporting policies and measures.

4. The Chief Executive announced in his 2014 Policy Address that \$1 billion had been earmarked for setting up a Recycling Fund. The Steering Committee has studied the specific uses of the fund, solicited views from the recycling trade in the process and drawn up a proposed framework for the operation of the fund. Subject to funding approval by the Legislative Council ('LegCo'), the Recycling Fund is expected to commence operation in the first half of 2015.

5. We briefed Members at the Panel's meetings of 16 December 2013 and 27 January 2014 on the basket of measures being pursued under the coordination of the Steering Committee in support of the sustainable development of the recycling industry (please refer to papers no. CB(1)500/13-14(03) and CB(1)787/13-14(03)). The proposed establishment of the Recycling Fund and the latest position of relevant support measures for the development of the recycling industry are set out in the ensuing paragraphs.

Recycling Fund

Objectives of the Fund

6. The primary objective of establishing the Recycling Fund is to promote the recovery and recycling of waste by facilitating the upgrading of the operational capabilities and efficiency of the recycling industry for sustainable development in order to achieve the policy objectives of waste reduction in Hong Kong as pledged in the Blueprint. Specifically, the anticipated deliverables are –

- (a) to raise the quantity and quality of recyclables recovered from the waste stream as well as those of recycled products from their treatment, thus reducing disposal at our landfills;
- (b) to promote markets for recycled products, thus providing greater impetus to local landfill diversion; and
- (c) to enhance the overall capability, capacity, efficiency and skills as well as market information of the recycling industry, thus facilitating its sustainable development.

Eligible Applicants

7. It is proposed that applications for grants from the Recycling Fund should be open to (i) enterprises with business registration in Hong Kong and with established track records in recycling operations, and (ii) non-profit organisations ('NPOs'), industrial support organisations and professional bodies registered in Hong Kong which are capable of conducting training or development projects for the recycling industry as a whole.

8. For enterprises, we propose to provide project-based matching funds for the upgrading and expansion of their waste recycling operations in Hong Kong. Applicants

should provide proposals for enhancing the source separation, collection and/or treatment of recyclables recovered from the waste stream to landfills, or commercialisation and marketing of recycled products made from these recyclables. Proposals must demonstrate the sustainability of the enhanced operation without further funding support after the project period, set at two years maximum.

9. For NPOs, professional bodies and industrial support organisations, we propose to subsidise non-profit making projects for enhancing the operational standards and productivity of the industry, such as upgrading the skills and safety of incumbent and potential employees of the recycling industry and/or expanding its potential workforce, developing certification schemes for recycling operations. Funded projects should be for the benefit of the industry as a whole rather than for individual enterprises, and the project outcome should be open for sharing with members of the industry.

Scope and Funding Limits

10. Grants for individual recyclers to undertake operations enhancement and/or commercialisation and marketing projects are generally set at 50% of approved expenditure items and capped at \$5 million per application. Eligible expenditure items may include capital costs in purchases of equipment, installations and vehicles to enable the addition of value-adding processes and/or to expand the capacity of operations, or operating costs such as additional costs of manpower, training, transportation and equipment rental, cost of promotion and publicity associated with the enhanced operation, expenses on commercialisation of recycled products, etc. The funding limit of \$5 million has been drawn up with reference to a number of factors, including the estimated cost of machinery and equipment for value-added recycling and related processes, manpower and logistics support to encourage source separation and collection of recyclables at source, the scope and limits of other Government funding support to relevant industries, etc. To cater for different operational circumstances of recyclers, we recommend that individual enterprises should be eligible for support to more than one application, subject to a cap of three applications and the cumulative funding cap of \$5 million overall.

11. Grants for NPOs and professional/trade associations to conduct programmes for the upgrading and development of the industry may cover up to 100% of approved expenditure items depending on the merits of the case. For example, training programmes on occupational safety for frontline workers could be considered for a 100% grant taking into account the nature and benefits of such training to the trade. Grants are proposed to be capped at \$15 million per project which may cover the costs of manpower and consumables, etc. The funding limit of \$15 million is considered appropriate having

regard to the estimated cost of manpower training programmes, technical research and promotion activities.

Review and Monitoring Mechanism

12. To ensure the proper use of public money, robust monitoring mechanisms would be in place which require, for example, the submission of progress reports and audited accounts by independent auditors, and spot checks and random inspections, etc. Disbursements to successful applicants will be made at designated stages of the projects on a milestone basis. The final payment will only be disbursed upon satisfactory completion of the project and checking of all the reports submitted. Government procurement procedures and open recruitment would need to be adopted by successful applicants as specified in the terms of grant to be signed with the applicant. Additional conditions specific to each project may be imposed as appropriate. Information on funded projects will be available to the public and the Panel on Environmental Affairs will be regularly briefed on the progress of the Fund.

13. To ensure that there is no duplication of public funding for any single project through different sources, the Recycling Fund would not consider any proposed project that has been funded or would be funded by other Government sources, or if there is/will be any duplication in terms of the work carried out by other institutions/applicants of Government funds. For completeness of information, the applicants will be required to declare whether their projects submitted to the Recycling Fund are being considered for other funding schemes supported by the Government or public bodies.

Advisory Committee on Recycling Fund

14. An Advisory Committee on Recycling Fund will be set up to advise and make recommendations to the Secretary for the Environment on –

- (a) matters relating to the overall administration of the Recycling Fund, including publicity and promotion, consultation and engagement of stakeholders, application and assessment arrangements, monitoring mechanism, consideration of plans, budgets and reports prepared by the Secretariat of the Recycling Fund, and evaluation of the effectiveness of the Recycling Fund;
- (b) matters relating to the operation of the Recycling Fund:
 - (i) application guidelines and procedures, assessment and funding criteria,

safeguard and control mechanisms;

- (ii) assessment of applications, terms and conditions to be imposed for each application recommended for approval by the Government and the amount of fund to be granted;
 - (iii) monitoring on progress of approved projects, project results and disbursement of fund; and
 - (iv) advising appropriate actions to be taken against non-compliance of approved projects; and
- (c) any other matters related to the Recycling Fund.

15. The Advisory Committee will seek the advice of Independent Commission Against Corruption in working out the details of the criteria and procedures to be adopted, as well as requirements relating to declaration of interest and other matters related to the operation of the Recycling Fund as appropriate.

16. Membership of the Committee will comprise persons with experience in different sectors relevant to the promotion of waste reduction and recycling, including management of housing estates and commercial venues, academics, representatives of trade and industry associations, relevant bureaux/departments etc. The Committee would be chaired by a non-official. The Government will consider and approve applications based on the advice of the Committee.

Implementation Partner

17. We plan to engage the Hong Kong Productivity Council ('HKPC') as partner in the implementation of the Fund. Partnership with an organisation familiar with commercial recycling operations is important because the vetting of applications from enterprises involves professional knowledge in different tiers of the industry's operations (e.g. technological choices of various recycling processes, potential of business process re-engineering to enhance productivity gains and product competitiveness etc.) HKPC is a statutory organisation specifically set up to provide technical support to Hong Kong industry and its mission is in line with the objective of the Recycling Fund in respect of enhancing the capability of the industry to achieve sustainable development. HKPC is also conversant with the operation of the recycling industry and its experience and knowledge of the trade enables it to communicate effectively and consider and evaluate critically the project proposals as well as to monitor effectively the execution of funded

projects. HKPC has a track record of managing Government support funds to the industry effectively. An example is the Cleaner Production Partnership Programme to support the Hong Kong owned factories in Guangdong Province to reduce emission and improve energy efficiency.

18. We have discussed with HKPC to work out a mode of operation with HKPC serving as the secretariat to the Advisory Committee on Recycling Fund, which will include tasks relating to promoting and publicising the Fund, conducting periodic market development and technological studies on matters relating to recycling industries and promoting the industry's knowledge on the latest developments, providing general advice on the application procedures to applicants, receiving and processing of applications, monitoring the progress of the approved projects and checking on compliance with the terms of grants, etc. HKPC would provide an in-kind contribution in terms of professional manpower support to supervise, monitor and review the work of the secretariat, venue rentals and other ancillary technical and support services, while other necessary expenses incurred by HKPC in implementing the Fund will be met by the Fund. In this connection, HKPC will be required to work out annual implementation plans and budgets for prior approval by the Environmental Protection Department ('EPD'). Funding from the Government will be disbursed to the HKPC annually, and the disbursement will be contingent upon submission and acceptance of the annual implementation plan and budget. HKPC will also be required to submit regular progress reports and evaluation on the operation of the Fund, as well as annual accounts audited independently.

19. To avoid conflict of interest, HKPC will not seek funding support from the Fund as an applicant and will not take part in the provision of consultancy service or the implementation of any approved project under the Fund.

Financial Implication

20. The establishment of the Recycling Fund will involve a total commitment of \$1 billion, which will cover grants up to \$5 million each for projects undertaken by individual enterprises, grants up to \$15 million each for projects undertaken by NPOs, professional bodies and industrial support organisations, and necessary administrative and monitoring costs incurred in operating the Fund. The actual funding allocation each year as well as the length of time the Fund will be in operation will depend on the number of applications and amounts of grants approved. For budgeting purpose, cost estimates have been worked out for implementing the Fund for five years and continuing monitoring of funded projects for two more years. For this period of operation, it is estimated that administrative and monitoring costs of \$84.1 million will be required for HKPC to set up a

dedicated team for programme management, technical evaluation and project monitoring. HKPC will provide an in-kind contribution of \$18.9 million in terms of professional manpower support to supervise, monitor and review the work of the secretariat, venue rentals and other ancillary technical and support services. Separately, \$15.8 million will be disbursed from the Fund to HKPC for publicity and promotion activities, briefings for applicants and seminars for experience sharing, as well as conducting periodic market development and technological studies on matters relating to recycling industries.

Consultation with the Trade

21. EPD has held meetings with representatives from different sub-sectors of the recycling industry to gather views on the proposed scope and operational framework of the Recycling Fund. The trade representatives are supportive and express their wish for the early establishment of the Fund.

Other Supporting Measures to the Recycling Industry

Registration Scheme for the Recycling Industry

22. EPD has explored with the trade the introduction of a registration scheme for recyclers, in order to establish and promote standards of practice in the industry and identify responsible recyclers. The trade is supportive and considers such a scheme helpful for the development of the recycling industry. Hong Kong Quality Assurance Agency ('HKQAA') has agreed to assist in developing the proposed registration scheme and is drawing up a detailed operational framework in consultation with the trade, which will entail different categories of registration for specific types of recycling operations. HKQAA aims to conduct the first pilot run for waste cooking oil recyclers in the third quarter of 2014. Their formal registration is expected to commence in the last quarter of the year. Another pilot run for recyclers of solid waste is tentatively scheduled to start in September/October 2014. Formal launch of the registration scheme will be in late 2014 or early 2015.

Occupational Safety and Health ('OSH') Star Enterprise Pilot Scheme

23. To enhance the safety standards and awareness of work safety measures for recyclers, EPD has been working in consultation with Occupational Safety and Health Council ('OSHC') on a proposal to develop an OSH Star Enterprise Pilot Scheme ('the Pilot Scheme') which covers safety training courses for practitioners in the recycling industry, subsidies for purchasing safety equipment, risk assessment and safety

consultancy service, and accreditation of ‘Star Enterprises’ meeting high standards of safety. The Employees’ Compensation Insurance Residual Scheme Bureau (‘ECIRSB’) is supportive of the proposed scheme and has agreed to provide premium discount on an incremental basis to Star Enterprises awarded under the Pilot Scheme when they purchase the employees’ compensation insurance policy provided by ECIRSB. OSHC is currently developing the detailed operational framework of the Pilot Scheme and will take forward the Pilot Scheme subject to successful application to the Recycling Fund.

Infrastructural Support for Recycling Operations

24. The EcoPark in Tuen Mun provides affordable land with longer tenure to encourage investment in higher value-added processing of recyclables. The EcoPark has a total land area of 20 hectares and a total rentable area of 14 hectares for accommodating recyclers of waste cooking oil, metals, plastics, wood, computer equipment and batteries. Separately, the Government has been providing short-term tenancy (‘STT’) sites for use by recycling operations. Following a review of the tendering arrangement in letting out these STT sites, an enhanced arrangement with the introduction of a marking scheme as well as provision of longer tenure of up to five to seven years as appropriate will be introduced to better support the recycling of wastes.

25. EPD will commission a consultancy study on the land requirements of the recycling industry, which will facilitate the Government in formulating land support measures for waste recovery and recycling activities. The study will review, analyse and provide recommendations on the land requirements for waste recycling in short, medium and long term, including exploring different options and feasible proposals in improving the land use efficiency of the waste recycling operations. Among other things, the viability of alternative types of accommodation for recycling operations will be examined. The study is expected to commence in the last quarter of 2014 and is scheduled to be completed in the last quarter of 2015.

26. To ensure a stable provision of export facilities for the recycling industry, suitable berths will be allocated in public cargo working areas (‘PCWAs’) for exclusive bidding by recyclers. We are gathering views from PCWA users on the proposed arrangements, which will be introduced before the current PCWA leases expire in 2016.

27. As part of the overall strategy to step up recovery and recycling of food waste, we are also pursuing the development of organic waste treatment facilities (‘OWTF’), of which phase 1 in Siu Ho Wan, North Lantau is expected to commence operation in 2017 to handle 200 tonnes of organic waste per day. For the second phase of OWTF at Sha Ling of the North District with a daily capacity of 300 tonnes, we have completed the

environmental impact assessment study and will commence the preparation works for tendering.

Funding Support for Research and Development

28. We encourage and support investments in research and development of new recycling technologies, as well as commercialisation of the products of these research and development projects. The Innovation and Technology Fund ('ITF'), administered by the Innovation and Technology Commission, provides funding support for research and development projects which could contribute to the promotion of innovation and upgrading of industries in Hong Kong. Recyclers and other parties interested in undertaking research and development projects on new recycling methods, e.g. more advanced processing of recyclables to produce new products, may seek support from various funding programmes under the ITF.

Community Mobilisation and Education

29. A territory-wide Source Separation of Waste Programme is in place to encourage the public to separate waste at source so as to increase the amount of recyclables available for collection and processing by recyclers. On top of the provision of waste separation bins by the Environmental Campaign Committee ('ECC') in common areas of residential, commercial and industrial buildings, the Environment and Conservation Fund ('ECF') subsidises the provision of waste separation bins at floor levels. To facilitate source separation at single-block buildings where recycling bins may not be conveniently accessible, a Community Recycling Network ('CRN') with over 530 collection points in districts is in place with the support of non-governmental organisations ('NGOs'), schools and housing estates.

30. The District Councils, ECC, Home Affairs Department and EPD rolled out a community participation programme in 2012 which includes promotion activities in all 18 districts on 'Community Waste Less Action: Waste Not, Re-Use More, Recycle Properly'. In 2014-15, half of the ECF's \$210 million allocation for new green projects will be used for waste reduction projects, covering community waste reduction, food waste reduction and Food Wise Campaign projects. Waste-related projects outside these categories may also seek ECF's support under the categories of research, education, demonstration and conference projects or ECC Programmes.

31. Following the Chief Executive's announcement in the 2014 Policy Address, the Government is taking actions to set up one community green station ('CGS') in each of the 18 districts. The CGSs will be operated by NPOs to be selected through open tender.

Aiming to supplement the existing services by private recyclers, they will enhance environmental education at the community level and provide logistics support in the collection of recyclables of lower market value, such as waste electrical and electronic equipment ('WEEE'), waste glass bottles, compact fluorescent lamps ('CFLs') and rechargeable batteries. We expect the first CGS in Sha Tin to be commissioned in late 2014. Furthermore, to facilitate members of the public to obtain information on waste reduction and recycling, EPD has launched 'Waste Less', a free mobile application which provides information on the locations of about 4 000 recyclable collection points in public places all over Hong Kong. Since its launch in March 2014, there have been over 4 000 downloads of the application.

Green Procurement

32. The Government is also taking the lead to adopt a green procurement policy to boost the demand for green and recycled products which is conducive to the development of the recycling industry. For instance, the use of eco-concrete pavers containing waste glass in public works projects has helped the recycling of waste glass. Use of biodiesel manufactured from used cooking oil in government vehicles, vessels and other machinery also helps the collection and recycling of used cooking oil. Moreover, a consultancy study is underway to review and expand the list of government procurement items with green specifications, as well as to improve the verification mechanism to facilitate green purchase by bureaux and departments.

Producer Responsibility Schemes ('PRSS')

33. We are preparing legislative proposals for a PRS on WEEE and another on glass beverage bottles. The relevant systems of collection and treatment are also undergoing enhancement –

- (a) In respect of the PRS on WEEE, we are seeking funding approval from LegCo for the development of a WEEE treatment and recycling facility at the EcoPark. It will have a handling capacity of 30 000 tonnes of WEEE per year.
- (b) For the PRS on glass beverage bottles, we are proactively expanding the glass bottle collection network, with the target of increasing the number of residential collection points from 311 in end-2013 to about 1 000 by end-2014.

34. When the two PRSs are fully implemented, we will be able to create a sustainable system for the proper recycling of washing machines, refrigerators, air conditioners, television sets, computer products and glass beverage bottles. In line with the ‘polluter pays’ principle, the costs of the PRSs will be recovered by charging recycling fees.

35. Pending the implementation of the mandatory PRSs, we encourage the public to participate in voluntary PRSs including those for CFLs and rechargeable batteries. We will continue to support them and consider the need for more mandatory PRSs in due course.

MSW Charging

36. MSW charging can create economic incentives to reduce waste through, amongst other things, enhanced waste recycling. Further to the public consultation in 2012 which revealed majority support for introducing quantity-based MSW charging in Hong Kong, the Council for Sustainable Development (‘SDC’) completed its public engagement exercise on the implementation details of MSW charging in January 2014. The SDC is analysing the feedback received and will draw up recommendations in due course. Besides, seven housing estates are participating in a pilot scheme on MSW charging which was rolled out in April 2014 with a view to collecting further public opinion and accumulating experience for the future implementation of MSW charging.

Way Forward

37. Subject to Members’ views, the proposal to set up the Recycling Fund will be submitted to the Finance Committee (FC) before end-2014. If approved by FC, the Recycling Fund will commence operation in the first half of 2015.

**Environment Bureau/Environmental Protection Department
July 2014**