

**For discussion on
24 April 2017**

**LEGISLATIVE COUNCIL
PANEL ON ENVIRONMENTAL AFFAIRS**

**Manpower Arrangements for Implementation of
Measures on Waste Reduction and Recycling**

PURPOSE

This paper seeks Members' views on a staffing proposal to create a permanent Assistant Director of Environmental Protection (ADEP) (D2) post in the Environmental Protection Department (EPD), with immediate effect upon approval by the Finance Committee (FC) of the Legislative Council (LegCo), to lead the Waste Reduction and Recycling Division (WRD) to implement on-going measures and formulate new initiatives to promote waste reduction and recycling as well as the sustainable development of the recycling industry.

BACKGROUND AND JUSTIFICATIONS

2. As outlined in the "Hong Kong Blueprint for Sustainable Use of Resources 2013-2022" (the Blueprint) published in May 2013, the Government is determined to proactively engage the community in tackling the waste challenges in Hong Kong. We have laid out a clear strategy for taking multiple and concurrent actions to encourage waste reduction at source, enhance reuse and recovery of resources as well as promote clean recycling. With a view to achieving the target to reduce per capita waste disposal by 40% by 2022 as set out in the Blueprint, the EPD has rolled out a number of initiatives on multiple fronts to drive waste separation and clean recycling at source in the community, as well as to facilitate the recycling industry to upgrade its operational standard and efficiency.

3. The need to strengthen recycling support for the community has become ever more imminent as we are to implement the Municipal Solid Waste (MSW) charging, which sits at the centre of the Blueprint. The Government has been actively undertaking preparatory work for implementing MSW charging. Subject to the passage of the enabling legislation which the Government plans to introduce later this year, it is expected that MSW charging would be implemented in the second half of 2019 at the earliest. Overseas experiences showed that the introduction of MSW charging would provide greater incentives to the community to practise recycling at source, and the Government fully recognises the importance of enhancing support for waste reduction and recycling in parallel in order to complement the introduction of MSW charging.

Manpower support in EPD to promote waste reduction and recycling

4. In order to strengthen the manpower support in the EPD to take forward various programmes and initiatives to promote waste reduction and recycling, as well as the sustainable development of the recycling industry, the EPD set up the WRD in April 2014 through temporary redeployment of 33 existing permanent non-directorate civil service staff and creation of 22 time-limited non-directorate civil service posts for three years. On 6 June 2014, the LegCo FC approved the creation of a supernumerary ADEP (Waste Reduction and Recycling) post for three years to lead the WRD.

5. The EPD has examined the situation critically and considered it necessary to retain the ADEP (Waste Reduction & Recycling) post on a permanent basis to continue and enhance the policy inputs to the long-term work as elaborated in paragraphs 7 to 32 below.

Government's work on waste reduction and recycling

6. Promoting waste reduction and recycling falls under the purview of the WRD under the steer of ADEP (Waste Reduction and Recycling). Over the years, progress has been made on various fronts, as elaborated below.

Promotion of waste reduction and recycling in the community

7. The EPD has been encouraging and promoting public participation in waste reduction and source separation through the Source Separation of Waste Programme (the SSW Programme) launched in 2005. Over 2 000 housing estates and residential buildings have joined the SSW Programme, covering over 80% of Hong Kong population. The SSW Programme has also been extended to cover commercial and industrial (C&I) buildings since 2008. So far, over 950 C&I buildings have participated in the SSW Programme. Through the Environmental Campaign Committee (ECC), EPD has been providing free recycling bins to the housing estates and C&I buildings joining the SSW Programme. Currently, upon receipt of applications, one set of tri-colour recycling bins will be provided to each building block in a private housing estate, or every 50 households served for villa-type residential developments; and a maximum of five sets of bins for each C&I development. These recycling bins are to be placed at suitable common area such as ground floor lobby, podium and carpark area. As at March 2017, we have received a total of 2 400 applications from housing estates, residential and C&I buildings, and have given out 7 400 sets of recycling bins in total, costing around \$18 million¹. In addition, under the SSW Programme, we give commendation to buildings with good recycling performance, provide support to participating buildings in displaying publicity materials such as posters and banners, and organise recycling workshops, forums, exhibitions, game booths and talks.

8. To facilitate waste source separation by residents of single-block buildings particularly those in older districts which are in lack of any management by property management companies (PMCs) or owners/residents' associations, or sufficient space for provision of recycling facilities, a Community Recycling Network (CRN), comprising 18 Community Recycling Centres (CRCs) funded by the Environment and

¹ In each of 2015/16 and 2016/17, around 230 sets of new bins costing around \$0.5 million were given out. Besides, the participating buildings in the SSW Programme may also apply for funding from the Environment and Conservation Fund (ECF) to install separation facilities on each building floor on a 50% matching basis and subject to a ceiling of \$1 000 per floor. As at March 2017, over 110 buildings have been awarded grants at a total of about \$5 million.

Conservation Fund (ECF) and about 60 collection points managed by Non-Governmental Organisations (NGOs), has been set up covering various districts in the territory. Through waste-gift exchanges and face-to-face education efforts, the CRN aims at arousing public awareness about recycling and encouraging public participation in waste reduction and recovery. The CRCs have also been equipped with balers to facilitate the collection and recycling of waste plastic bottles received mainly from residential buildings without proper building management, and have been receiving funding support from the ECF to transport the waste plastic bottles received to suitable recycling outlets.

9. Since 2012, the 18 District Councils (DCs), Home Affairs Department, ECC and EPD have been collaborating to implement the Community Participation Programme to jointly promote environmental awareness in the districts and engage the public to adopt green practices in their daily lives. In 2016/17, EPD provided \$3.6 million to the DCs for implementing district promotional programmes on waste reduction and recycling. It is estimated that the activities organised in 2016/17 have reached more than 90 000 participants in various districts. EPD will continue this Programme with \$3.6 million to DCs in 2017/18.

Promotion of clean recycling

10. The EPD has collaborated with the ECC to launch a Clean Recycling Campaign since mid-2015 to drive home the significance of keeping recyclables clean which has an important bearing on their recycling value and recyclability. The primary objective of the Campaign is to promote behavioural change towards clean recycling, with a view to increasing the quality and quantity and in turn the value of the recyclables, thereby recovering more useful resources from waste. Under the Campaign, apart from roving exhibitions, publicity programmes and an Announcement in the Public Interest (API) in local TV, we have also arranged a media guided tour to show proper practices of clean recycling. The EPD has also participated in various environmental activities organised by different local groups and organisations to promote clean recycling. In addition, three non-profit making organisations engaged by the ECC have since late 2016 rolled out education and promotional activities on clean recycling in more than 100

private housing estates. Two more non-profit making organisations have just been engaged in April 2017 to reach out to another 100 private housing estates.

Land support for recycling industry

11. The EcoPark has been providing the recycling industry with long-term affordable land and associated communal facilities to encourage investment in high value-added recycling processes. At present, a total of 12 lots of land with a total area of about 8.5 hectares in the EcoPark have been leased to private recyclers for different recycling processes covering waste cooking oil (WCO), metals, wood, waste electric and electronic equipment (WEEE), plastics, batteries, construction materials, glass, rubber tyres and food waste. Among the 12 tenants, 10 have progressively commenced their testing and recycling operations, one is working on plant construction, and the remaining one has just been awarded the lease. Besides, the leases of two other lots covering a total area of about 1.3 hectares have just ended and the lots concerned will be put out to tender once they have been reinstated.

12. The EPD has also been working with relevant bureaux and departments to search for suitable short-term tenancy (STT) sites for exclusive use and bidding by the recycling operators. Subject to land use compatibility, suitable STT sites for recycling operations will continue to be made available with a tenancy length of no more than seven years for recyclers. As at April 2017, a total of 32 STT sites have been leased out for recycling operations, occupying a total area of 4.8 hectares.

13. Apart from the above-mentioned sites, in conjunction with the Lands Department and the Planning Department, we have managed to identify in extra a few potential STT sites (with a total area of about 0.8 hectares) which might be suitable for recycling operations. We are carrying out assessments to ascertain the suitability of these sites for recycling operations, the types of recyclables that could be handled, the pollution control requirements and the length of tenancy, etc. Suitable STT sites will be let out as soon as possible through open bidding by the recycling operators.

14. The EPD and the Marine Department (MD) have also made

available some Public Cargo Working Area (PCWA) berth length for exclusive bidding by paper recyclers to facilitate the latter's operation². A total of 16 berths measuring 638 metres of sea frontage had been made available for two rounds of tendering by paper recyclers from April to July 2016, and 13 of them were allocated to competent paper recyclers pursuant to the tender exercises. Subject to the need of the paper recycling operators, EPD will work with MD on putting out to tender the three unallocated paper berths as and when necessary.

Recycling Fund

15. The \$1 billion Recycling Fund was established in October 2015 to provide funding support to enhance the overall operational capability, capacity, efficiency and standards of the local recycling industry. The Enterprise Support Programme (ESP) provides matching funds capped at \$5 million each for individual enterprises to upgrade and expand their waste recycling operations in Hong Kong. The Industry Support Programme (ISP) provides funding support capped at \$15 million each for professional bodies, trade and industry organisations, research institutes and other industrial support organisations to undertake not-for-profit projects which can assist the local recycling industry to upgrade its operational standards and productivity.

16. EPD and the Advisory Committee on Recycling Fund (RFAC) have been keeping the operation of the Recycling Fund under close review so as to introduce enhancement and facilitation measures timely to better respond to the needs and aspirations of the industry. In this regard, a series of measures have been implemented to facilitate the industry practitioners to apply for and make good use of the Fund. To minimise the administrative workload of small and medium enterprises (SMEs) in making applications, a category of Small-scale Standard Projects (SSPs) has been created under the ESP. SMEs undertaking SSPs may submit applications, report achievements and seek reimbursements in accordance with a set of streamlined rules and procedures.

² Unlike other recycling operations, paper recyclers rely heavily on the provision of PCWA berths for handling and exporting of waste papers from Hong Kong to the Pearl River Delta and other locations in the Mainland.

17. Other facilitation measures introduced include provision of partial reimbursement of expenses midway through the project period of SSPs, establishment of a new category of SSPs to facilitate recyclers to procure equipment for efficiency upgrading or for minimising nuisances to the neighbourhood, and counting, as fundable items, the cost for third-party liability insurance and a portion of the rental expenses required for carrying out additional recycling business or activities.

18. As at March 2017, a total of 242 applications were received. The RFAC has approved 85 applications, of which 23 were under the ESP, 55 were SSPs and 7 were under the ISP, involving a total funding of about \$70 million while 43 applications are being processed. The total amount of recyclables to be processed under the approved applications is expected to exceed 100 000 tonnes.

Promotion of local market for recycled products

19. The Government is committed to green procurement practice as far as practicable with a view to promoting the development of a local market for recycled products. With the concerted efforts of various Government departments, the Government's green procurement list has been expanded to 150 items of products and services with updated technical specifications.

20. To demonstrate our commitment to green procurement, the Government has procured over 3 800 tonnes of B5 diesel (involving recycling of around 200 tonnes of local WCO) in replacement of conventional diesel in 2015. The Development Bureau has also included, in public works contracts tendered on or after 1 March 2016, a provision on the mandatory use of B5 diesel in operating non-road mobile machinery in construction sites.

21. Different works departments have also been actively promoting the use of recycled materials in public works projects where practicable. The Highways Department has made it mandatory to use paving materials with 10% to 30% of reclaimed asphalts pavement by weight for road pavement applications.

22. The EPD has also been actively promoting green procurement practice to the C&I sectors through organising experience sharing forums and disseminating green procurement pamphlets widely to trade associations, professional bodies and other organisations.

23. To safeguard public health and promote recycling of WCO, the EPD and the Food and Environmental Hygiene Department (FEHD) have jointly implemented an administrative scheme to regulate the collection, handling, processing and recycling of WCO. Under the scheme, the registered WCO collectors, processors and exporters are required to comply with a set of good practice guidelines which involve, among other things, passing WCO to registered parties only and keeping proper transaction records for at least 12 months. As at end of March 2017, EPD has approved 142 registration applications, covering 86 regular collectors, 36 property managers, 12 processors and 8 exporters, which represent a good majority of relevant industry practitioners. We will monitor their operations closely through surveillance visits, as well as checking of transaction records and summary documents. In parallel, the FEHD has imposed suitable conditions in relevant licences for food and restaurant operators to require them to only pass the WCO to parties registered under the above administrative scheme. The relevant conditions being introduced by FEHD will come into effect in November 2017.

24. In addition to the above, the Producer Responsibility Scheme (PRS) on Glass Beverage Containers will be implemented by phases in 2017/18. We expect that the amount of glass containers recovered and recycled will increase over time to ultimately a territory-wide total of about 50 000 tonnes per year. At present, works departments have been using eco-pavers in public works. Apart from the production of eco-pavers and other construction materials, waste glass containers with suitable crushing could be used as fill materials in reclamation and other earthworks. We would also encourage the private sector to similarly adopt such practice in their works projects.

New initiatives on waste reduction and recycling

25. In order to promote waste recycling as part of our overall waste management strategy and in order to better prepare the community for the implementation of MSW charging, the Government will be undertaking the initiatives below, including many which would be spearheaded by the WRD under the steer of the ADEP (Waste Reduction and Recycling) proposed to be created.

Enhanced recycling support for waste plastic bottles

26. The low economic value and recyclability of waste plastics have always been a concern in the community. Amid the sharp drop in market prices of recycled plastic materials, the amount of waste plastics recovered and recycled dropped significantly in the past few years, e.g. from 243 000 tonnes in 2013 to 94 000 tonnes in 2015 while the amount of waste plastics disposed of at landfills increased from 681 000 tonnes to 797 000 tonnes during the corresponding period.

27. As part of our plan to address the waste plastic challenge, the EPD and ECC will step up the current promotional and public education efforts on clean recycling. This new round of promotional campaign will focus on educating the public on how to minimise “contaminants” and “impurities” in waste plastic bottles, in particular plastic containers carrying beverages or personal care products, with a view to enhancing their recyclability and recycling value. We will soon mount a targeted publicity and public education programme which on one hand includes reader-friendly instruction that members of the public could easily follow and on the other hand carefully-crafted PR message to advise the general public why we need to focus on recycling waste plastic bottles and importance of clean recycling. We estimate that the new promotional campaign could roll out around the turn of 2017.

28. In parallel, we will explore ways to strengthen the support for collection and recycling of waste plastics bottles that have been properly separated at source. As mentioned above, the CRCs have been supporting the collection and recycling of waste plastic bottles generated from residential buildings without proper building management. Our current plan is to, by early 2018, expand the scope of service of these CRCs to receive also waste plastic bottles delivered from other private

housing estates and residential buildings (i.e. buildings with some form of property management) on a need basis. The CRCs will continue to receive subsidies from the ECF to transport the waste plastic bottles collected to suitable recycling outlets. In the longer term, to achieve better operational efficiency and cost effectiveness, we are examining the possibility for introducing a service to centrally collect the waste plastic bottles received by the CRCs across the territory for delivery to competent recyclers for onward processing, having regard to the prevailing circumstances including the volume of waste plastic bottles to be received from various residential buildings. The Government will soon commission a study to examine the feasibility for introducing of a possible PRS on suitable waste plastic containers, mainly those carrying beverages or personal care products. The development of this recycling service for waste plastic containers would also give some practical experience for the formulation of the collection and treatment arrangements for this possible PRS.

Enhanced outreach service by EPD's outreaching team

29. To strengthen recycling support on the ground, EPD has plans to enhance its outreach service at the community level to render assistance and support to the PMCs and residents to practise proper waste source separation and clean recycling. In essence, we are considering setting up of outreaching teams to help step up our education efforts on the spot and render outreach service and assistance to the PMCs and residents to practise proper waste source separation and clean recycling through regular site visits. These teams would strive to establish and maintain a direct and effective liaison network with the PMCs and residents, monitor the waste separation and clean recycling work and offer practical tips to enhance such practices including funding sources for recycling programmes, and provide suitable assistance in identifying suitable and proper recycling outlets. In the long run, these teams could also render support to residential estates on food waste recycling (such as assisting them to overcome the various space and technical constraints), and collection and recycling of other recyclables. The teams could also render assistance to the C&I sectors on general waste reduction and recycling. These teams could also provide assistance and support, to both domestic and C&I sectors, relevant to education/publicity on and

compliance with the future laws e.g. those governing waste electrical and electronic equipment and MSW charging.

Additional Recycling Bins

30. As mentioned above, we have been providing, through the ECC, recycling bins free-of-charge to private housing estates and C&I buildings under the SSW Programme since 2008. In response to the suggestions of some stakeholders, EPD has sought ECC's support to relax the rules of "one set of recycling bin per residential block" and "five sets per C&I development" to strengthen recycling support at common areas including carparks, podium gardens or sitting-out areas within the compound of the housing estates or C&I developments concerned. Under the new arrangements, which are expected to take effect in the second half of 2017, as long as the applicants are able to demonstrate that the additional recycling bins are to be placed at suitable common areas, there will not be any limit on the number of sets of bins to be provided to each estate/development. To ensure that these recycling bins would be put to good use and the recyclables so collected be channeled to proper outlets, applications will continue to be subject to assessment as per established procedures, and applicants will be required to provide information on where the recycling bins being applied for will be placed and how they will be used to encourage recycling. EPD will work out the detailed arrangements and inform all participating residential buildings/estates and C&I developments in the second/third quarter of 2017 of the enhancement measures. We will also appeal to the PMCs to join the enhanced SSW Programme in conjunction with the residents' or owners' associations concerned.

31. At present, a total of 2 700 recycling bins are provided in public places to provide recycling support to pedestrians including tourists as well as buildings which have space constraints in placing recycling facilities (e.g. single block buildings), and to promote public awareness of waste separation and recycling. Existing recycling bins in public places in Hong Kong have separate compartments for collecting waste plastics, metals and papers, while mixed recycling bins (i.e. bins with one single compartment to collect all recyclables) are adopted in other cities. Having regard to successful experience in mixed recycling bins outside

Hong Kong, the Steering Group on the Modification of Recycling and Refuse Collection Facilities in Public Places chaired by the Secretary for the Environment will conduct a trial on using mixed recycling bins in selected areas of Hong Kong around the turn of 2017. This will help us assess the effectiveness of such bins in facilitating waste source separation by the public particularly tourists who may not be accustomed to such practice in Hong Kong, whilst reducing the demand for space on public streets/areas, thereby enhancing the general recovery rate of the recyclables so collected.

32. Apart from the new initiatives set out in paragraphs 25 to 31 above, the WRD will continue to implement the initiatives and measures as outlined in paragraphs 7 to 24 above, in striving to meet the target as set out in the Blueprint. In particular, the WRD will continue to work closely with RFAC to keep in view the needs and concerns of the recycling industry and consider introduction of facilitating measures as necessary. Among other things, we will examine with the RFAC the feasibility of introducing “theme-based schemes” under the Recycling Fund for the recycling operators to apply, one of which could be relevant to supporting the trade to gear up for food waste source separation and collection business, after completion of the testing and commissioning of the Organic Waste Treatment Facilities Phase 1 in end 2017. Besides, WRD will continue to formulate suitable land support measures for waste recovery and recycling activities, and to work with relevant Government departments to identify suitable STT sites and berthing facilities for recycling operations. We will also continue to manage the EcoPark, monitor the lease agreements with the tenants therein, arrange open tenders for lots upon expiry of existing tenancies, and provide assistance to tenants in the design, construction and operation of recycling plants as well as in sourcing suitable recyclables. On WCO, we will continue to work with the FEHD in operating the administrative scheme. We are also carrying out preparatory work for the legislative exercise to amend the Waste Disposal Ordinance (WDO), Cap. 354 to introduce a licensing system on the collection, disposal, import and export of WCO, as undertaken in the 2016 Policy Address, with a view to strengthening the regulation of WCO recycling. We will also strengthen our collaboration with organisers of major local events (e.g. Hong Kong Sevens and Lunar New Year Fair) to encourage event organisers and participants to practise

better waste source separation and recycling, such as to minimise food waste generated, donate surplus food, separate recyclables at source, dismantle and recycle the stages.

Proposed creation of the post of ADEP (Waste Reduction & Recycling)

33. Promotion of waste reduction and recycling as well as facilitating upgrading of the recycling industry warrant on-going efforts and professional inputs from the EPD. Besides, the upcoming MSW charging has also called for the need to strengthen waste reduction promotion as well as recycling support for different sectors of the community. The on-going and new initiatives as set out in the paragraphs above require long-term professional inputs, management and steer at the directorate level to ensure effective planning and implementation of policies and initiatives as well as vigilant monitoring of the results. The tasks also involve continuous and increasing coordination/liaison with relevant Government bureaux and departments, public organisations, green groups and NGOs, community representatives, EcoPark tenants, RFAC and grantees of Recycling Fund as well as various stakeholders in the recycling industry.

34. The proposed permanent ADEP post will report to Deputy Director of Environmental Protection (2). The proposed job description of the post is at Annex I.

Non-directorate support

35. The proposed permanent post of ADEP will be supported by a team of 44 non-directorate officers, comprising 33 staff internally redeployed from other divisions since April 2014 as mentioned in paragraph 4 above and 11 new posts created since April 2017³.

³ The 11 new posts, including 10 permanent and one time-limited for one year non-directorate posts, were created in April 2017 upon the lapse of the 22 time-limited posts in the WRD mentioned in paragraph 4 above.

ALTERNATIVES CONSIDERED

36. We have evaluated critically whether the duties of the proposed directorate post could be absorbed by existing ADEPs within EPD and concluded that it will not be viable to redeploy these existing directorate officers to take up additional duties in relation to waste reduction and recycling without prejudicing the delivery of policy initiatives under their respective heavy portfolios. The organization chart of the EPD after creation of the proposed post is at Annex II.

FINANCIAL IMPLICATIONS

37. The proposed creation of the permanent ADEP (D2) post will bring about an additional notional annual salary cost at mid-point of \$2,056,200. The additional full annual average staff cost, including salaries and staff on-cost, is \$3,033,000.

38. For the 11 new non-directorate civil service posts mentioned in paragraph 35 above, the notional annual salary cost at mid-point is \$7,095,330 and the full annual average staff cost, including salaries and staff on-cost, is \$9,869,000. This does not include the staff costs for the permanent civil service posts internally redeployed in April 2014 as mentioned in paragraphs 4 and 35 above.

39. We have included/will include sufficient provision in the draft Estimates of the relevant financial years to meet the cost of the proposal.

ADVICE SOUGHT

40. Members are invited to offer views on the proposal to create a new permanent ADEP (D2) post to lead the WRD in EPD. Subject to Members' views, we plan to seek the recommendation of the LegCo Establishment Subcommittee in May 2017 and funding approval from the FC in June 2017 for the creation of the post.

Environment Bureau/Environmental Protection Department
April 2017

**Job Description of
Assistant Director of Environmental Protection (Waste Reduction & Recycling)**

Rank : Assistant Director of Environmental Protection (D2)
Responsible to : Deputy Director of Environmental Protection (2) (D3)

Main Duties and Responsibilities:

1. To head the Waste Reduction and Recycling Division;
2. To coordinate research and conduct policy analyses for promoting the sustainable development of the recycling industry;
3. To support the recycling industry by promoting green procurement and the provision of infrastructural support for recycling operations, including land in the EcoPark, short-term tenancy sites and berthing spaces in Public Cargo Working Areas;
4. To oversee the development and implementation of policies and initiatives relating to source separation of waste and clean recycling, coordinate public education efforts on source separation of waste and clean recycling, and enhance relevant outreach service at the community level;
5. To liaise and coordinate with Government bureaux and departments, other organizations as well as relevant trades and stakeholders, in formulating measures and initiatives to reduce waste and promote clean recycling and to promote the development of the recycling industry;
6. To oversee and review the existing operation of the Recycling Fund, and examine feasible measures to streamline the application procedures and to address the needs of the recycling industry; and
7. To coordinate preparatory work for the drafting of the legislative amendment to the Waste Disposal Ordinance, Cap. 354 in connection with the control of waste cooking oils.

Existing and Proposed Organisation Chart of Environmental Protection Department

