

LCQ19: Waste separation and recycling

Following is a question by the Hon Yim Kong and a written reply by the Secretary for Environment and Ecology, Mr Tse Chin-wan, in the Legislative Council today (February 21):

Question:

Hong Kong has introduced the voluntary three-coloured separation bin scheme (the Scheme) since the 1990s, with three-coloured waste separation bins being placed in public places such as roadsides. However, there are views that Hong Kong's waste separation policy has long lagged behind developed countries such as Japan and Mainland cities such as Shenzhen and Tianjin. Moreover, it is learnt that 14 600 tonnes of food waste were recovered in 2017, accounting for only 1 per cent of the total quantity of food waste, while Hong Kong currently generates over 10 000 tonnes of municipal solid waste daily, but 13 out of the 16 landfills have been closed, and the remaining three landfills are also expected to be exhausted by 2030. There are views that the Government should optimise the waste separation measures to enhance the effectiveness of Municipal Solid Waste Charging (MSW charging) to be implemented in August this year. In this connection, will the Government inform this Council:

- (1) whether it has assessed the effectiveness of the Scheme that has been in place for many years; if so, whether it will adjust the Scheme on the basis of the assessment outcomes;
- (2) whether it will adjust the existing waste separation arrangements in the light of the implementation of MSW charging; and
- (3) whether it has actively considered creating more favourable conditions for the implementation of waste separation, e.g. stepping up efforts to promote the community recycling network GREEN@COMMUNITY?

Reply:

President,

Currently, about 11 100 tonnes of municipal solid waste (MSW) are generated in Hong Kong per day, with food waste (30 per cent), waste plastics (21 per cent) and waste paper (20 per cent) comprising 70 per cent of MSW. To improve the recycling network progressively, the Environmental Protection Department (EPD) has rolled out a number of waste reduction and recycling schemes, thereby helping the public practise waste reduction at source. These schemes include the Programme on Source Separation of Waste (PSSW), which provides waste separation bins (commonly known as three-colour bins) for free to over 2 700 housing estates/residential buildings and commercial and industrial (C&I) buildings, as well as providing about 1 100 sets of roadside recycling bins to rural areas to assist the public in recycling plastics,

waste paper and metals. Besides, the EPD is continuously expanding GREEN@COMMUNITY, which is a community recycling network covering over 180 (Note 1) public collection points to specifically support residents living in the clusters of residential buildings (including single-block residential buildings and "three-nil" buildings) that are lacking the space for setting up recycling facilities on their own to participate in separation at source and clean recycling. The EPD is also setting up 50 small-scale Recycling Stores in public rental housing (PRH) estates progressively in order to strengthen recycling facilities at district level. The types of recyclables have also been expanded to nine types including plastics, waste paper, metals, glass containers, small electrical appliances, regulated electrical equipment, fluorescent lamps/tubes, rechargeable batteries and beverage cartons. The recycling network comprising PSSW and GREEN@COMMUNITY has already covered over 80 per cent of the population in various districts of Hong Kong.

On food waste recycling, the EPD launched a large-scale Pilot Scheme on Food Waste Collection in 2021 and has currently provided point-to-point food waste collection services at 860 premises (Note 2) which generate larger quantities of food waste. Additional fixed or mobile food waste collection points are also installed at suitable premises (such as public markets, refuse collection points and locations packed with eateries, as well as locations in the vicinity of village houses or single-block buildings). Free food waste collection services to all shopping centres in Hong Kong will also be provided. On domestic food waste recycling, the EPD is working at full steam to extend the smart food waste recycling services at PRH estates and, at the same time, also assisting the installation of Food Waste Smart Recycling Bins (FWSRBs) for food waste collection in private residential buildings and villages through the Recycling Fund and the Environment and Conservation Fund (ECF). The EPD reviews the positioning and effectiveness of various recycling measures from time to time and makes timely adjustments. The reply to the question raised by Hon Yim Kong is as follows:

(1) and (2) The EPD launched the PSSW in 2005 under which the Environmental Campaign Committee (ECC) provides participating housing estates/residential buildings and C&I buildings with waste separation bins for free, thereby facilitating the residents to make use of the separation bins in their vicinity for waste separation and clean recycling. The Government has so far provided a total of about 8 000 sets (Note 3) of waste separation bins for free to the participating housing estates/residential buildings. In fact, some of the housing estates/residential buildings have purchased recycling bins on their own. In addition, the Green Outreach of EPD offers assistance to participating residential premises in identifying reliable downstream recyclers and improving their recycling facilities. The GREEN@COMMUNITY operators also provide registered housing estates with collection-at-door service mainly for collecting recyclables of low commercial value, such as glass and plastics.

To strengthen the recycling facilities at district level, the EPD has been expanding the community recycling network, GREEN@COMMUNITY. At present, there are over 180 public collection points under GREEN@COMMUNITY throughout

the territory. The recyclables received will be delivered to suitable downstream recyclers for proper treatment, turning waste into resources. GREEN@COMMUNITY has all along been well received by the public. Last year, it received over five million visits for clean recycling, collected over 25 000 tonnes of recyclables and held over 2 200 environmental educational activities. Besides, the EPD is setting up small-scale Recycling Stores in 50 PRH estates progressively, thereby providing a more convenient means for residents of the PRH estates and in the neighbourhood to practise clean recycling. Four of them have already been put into service while another four have commenced operation in February. The remaining 42 Recycling Stores will also commence operation gradually from the first quarter of this year onwards.

As regards roadside recycling bins, the EPD reviewed the policy positioning and the way forward of roadside recycling bins in response to the recommendations made by the Office of the Ombudsman following the completion of its direct investigation into the management and effectiveness of waste separation bins in April 2022. The findings of the review show that the amount of recyclables collected from roadside recycling bins accounts for only less than 0.1 per cent of the total amount of recyclables in Hong Kong. Moreover, these bins are prone to be misused by passers-by who mistakenly put in rubbish, litter and containers with leftover food or drinks, etc., thereby affecting the downstream treatment process and causing environmental hygiene problems. With the development and continuous enhancement in the services of the community recycling network of GREEN@COMMUNITY, coupled with the implementation of various waste reduction and recycling programmes, the role of roadside recycling bins in community recycling support in urban areas has gradually decreased. Therefore, the EPD had removed about 800 sets of roadside recycling bins placed in urban areas (including new towns) in 2022. In view of the better quality of recyclables collected from roadside recycling bins in rural areas, the EPD has retained about 1 100 sets of roadside recycling bins in rural areas to facilitate residents to practice recycling in their daily lives. In the fourth quarter of 2023, the roadside recycling bins in rural areas collected about 39 tonnes (Note 4) of recyclables per month on average. In addition, the EPD is stepping up various measures on waste reduction and recycling support for rural areas on a trial basis, including setting up trial designated recycling spots to extend the recycling services of GREEN@COMMUNITY to rural areas with relatively dense population, and installing smart recycling bins in six rural locations. The ECF has also provided funding to non-governmental organisations to recruit local residents as Green Outreach Volunteers in 20 villages in the North East New Territories to carry out recycling, publicity and educational activities in the villages, thereby encouraging the residents in rural areas to practise waste reduction and recycling at source.

For domestic food waste recycling, the EPD is working with the Housing Department and the Hong Kong Housing Society in full steam to extend the smart food waste recycling services to all PRH estates in Hong Kong. As at January 2024, the EPD has completed the installation of more than 380 FWSRBs in 91 PRH estates. We anticipate to substantially complete the installation of more than 700 FWSRBs in 213 PRH estates in Hong Kong by August this year,

accounting for about one-third of the household population in Hong Kong.

For private residential buildings, the EPD assist, through the Recycling Fund and the ECF, private residential buildings and villages to install FWSRBs for food waste collection. The aforementioned scheme has currently covered a total of 30 private housing estates and three villages, with a total of about 100 FWSRBs installed. Moreover, the ECC has rolled out the Pilot Scheme on Food Waste Smart Recycling Bins in Private Housing Estates, which has just started to accept applications since December 29 last year, to assist at least 1 000 households of private housing estates to install FWSRBs and arrange related repair services. As at January 30, 2024, the ECC has received a total of 41 applications, and anticipates to start the installation of FWSRBs in the funded private housing estates in the first quarter of this year. Furthermore, the EPD had installed FWSRBs at two recycling stations in the vicinity of residential areas, namely GREEN@SHAM SHUI PO and GREEN@EASTERN, in September and December last year respectively to conduct trial domestic food waste collection from the neighbourhood (including single-block buildings and "three-nil" buildings) as public collection points. The trial has received positive responses from the public, with the recorded usage of over 27 300 individuals as at January this year. The current daily average quantity of food waste recycled is about 250 kilograms, with an accumulative total of about 16 tonnes of food waste collected. The EPD will continue to explore setting up more mobile or fixed public food waste collection points in suitable premises (such as public markets and refuse collection points) so as to provide the public with more convenient recycling channels. In 2022, about 71 800 tonnes of food waste were recovered locally and the recovery rate was increased to about 6 per cent.

(3) It is impossible to achieve waste reduction and recycling by the Government alone. The active participation by the public and various sectors is required.

On promoting the publicity and education efforts of waste reduction and recycling, the Green Outreach will continue to provide outreaching services to the community. Through on-site guidance and hands-on demonstrations, the Green Outreach encourages the public to practise waste separation at source and clean recycling. The Green Outreach also promotes the services of GREEN@COMMUNITY to the public and disseminates the latest information on waste management to the community. Since its establishment in late 2018, the Green Outreach has conducted about 153 000 community visits, established connections with more than 4 500 property management companies and residents' organisations, which altogether provided waste reduction and recycling support to about 70 per cent of housing estates/residential buildings and villages in Hong Kong. In addition, the Green Outreach has also organised more than 4 300 publicity and promotion activities in different forms, which attracted the participation of about 323 000 people.

To support of the sustainable development of the recycling industry, the EPD set up the Recycling Fund in 2015, which has so far received an allocation of \$2 billion. Through various funding programmes, the Recycling

Fund assists the recycling industry to enhance the overall operational capabilities and productivity of the local recycling industry and help enterprises to upgrade and expand their recycling operation. The EPD and the Advisory Committee on Recycling Fund have been reviewing the operation of the Recycling Fund from time to time, so as to timely implement different enhancement measures to meet the needs of the recycling industry in its operation, upgrading and transformation.

Note 1: They include 11 Recycling Stations, 40 Recycling Stores, and over 130 roadside Recycling Spots operating weekly at fixed time and locations.

Note 2: They include food factories, public markets, cooked food centres, wholesale markets, hospitals, government facilities, tertiary institutions, hotels, clubs, shopping malls, restaurants, PRH estates and private housing estates, etc.

Note 3: Including the 1 600 sets of waste separation bins set up at PRH estates by the Housing Department.

Note 4: Including 12 tonnes of paper, 25 tonnes of plastics and 2 tonnes of metals.