

# LCQ15: Implementation of municipal solid waste charging

Following is a question by the Hon Wu Chi-wai and a written reply by the Secretary for the Environment, Mr Wong Kam-sing, in the Legislative Council today (June 19):

Question:

It has been reported that municipal solid waste (MSW) charging will be implemented next year the earliest. In this connection, will the Government inform this Council:

(1) given that the current population residing in public rental housing (PRH) estates exceeds two millions, whether the Government will discuss with the Hong Kong Housing Authority (HA) the implementation of a pilot scheme on MSW charging by amending the tenancy agreements signed with tenants, so as to grasp the actual situation of large-scale implementation of MSW charging;

(2) of the details of the preparatory work, undertaken by the HA up to April 30 this year, for the implementation of MSW charging at its PRH estates, e.g. formulating refuse collection procedure as well as modifying the design of and the usage arrangements for refuse stations and refuse chutes;

(3) given the absence of a domestic food waste collection system at present, of the measures to be put in place by the Government to facilitate the proper handling of domestic food waste by the public, so as to lower the impact of MSW charging on general households; and

(4) whether it will extensively set up closed circuit television systems in various districts to curb illegal dumping of domestic waste that may occur after the implementation of MSW charging?

Reply:

President,

Our responses to the question raised by the Hon Wu Chi-wai are as follows:

(1) Premised on the "polluter-pays" principle and built upon the existing municipal solid waste (MSW) collection and disposal system as well as the recommendations made by the Council for Sustainable Development (SDC) after conducting an extensive public engagement exercise, MSW charges are proposed to be levied across the territory through the dual modes of (i) charging by designated bags (DBs)/designated labels (DLs) and (ii) charging by weight-based "gate-fee". Specifically, charging by DBs/DLs requires members of the public to wrap MSW in pre-paid DBs properly or attach with pre-paid DLs before disposal. This charging mode is applicable to most residential

buildings, village houses, street-level shops, and institutional premises, accounting for some 80 per cent of the daily MSW disposed of at landfills. Charging by weight-based "gate-fee" is applicable to the remaining around 20 per cent of the daily MSW collected and disposed of by private waste collectors using waste collection vehicles without compactors (including grab lorries, demountable trucks, and tippers, etc.). Charges are calculated based on the weight of MSW disposed of at landfills or refuse transfer stations.

As most of the MSW from public rental housing (PRH) are generally collected by refuse collection vehicles with rear compactors (except for oversized waste subject to charging by DLs), charging by DBs will be applicable to PRH.

The Environmental Protection Department (EPD) has launched different pilot schemes and involvement projects to facilitate different stakeholders to try out MSW charging in actual settings. We launched a six-month pilot scheme in some PRH estates and private housing estates in 2014 to try out the effectiveness of different modes of quantity-based charging. The Environment and Conservation Fund (ECF) has been funding non-profit-making organisations and bodies since 2015 to carry out Community Involvement Projects (CIPs) in different types of premises to try out MSW charging and prepare for its implementation. As at today, more than 80 MSW charging CIPs have been sponsored, of which three of them are PRH estates.

In addition, to enable more stakeholders in PRH estates to try out MSW charging in actual settings in advance and help PRH residents to get prepared for the implementation of MSW charging, the EPD and the Housing Department (HD) have jointly commenced Trial Projects in ten PRH estates for a period of approximately six months each by batches in end 2018. The EPD provides free dummy DBs to PRH residents for on-site trial and simulating MSW charging arrangements during the trial period. The EPD also organises various publicity and public education activities to enrich participants' understanding of MSW charging, source separation of waste and clean recycling.

(2) Based on the recommendations made by the SDC, the proposed MSW charging implementation arrangements are built upon the existing MSW collection system. The EPD and HD have maintained close liaison on implementation of MSW charging. To ensure effective implementation of MSW charging, the EPD has taken into account the waste collection arrangements and relevant facilities in PRH such as waste chutes and waste collection rooms, etc. in devising the implementation arrangements.

Upon the passage of the Waste Disposal (Charging for Municipal Solid Waste) (Amendment) Bill 2018, the HD will consult the Subsidised Housing Committee of the Hong Kong Housing Authority (HA) on the implementation details of MSW charging at PRH having regard to the passed legal provisions and requirements. The HD will also provide clear guidelines to estate management staff including property management companies and cleansing service contractors to ensure that waste would be handled in accordance with the legal requirements.

(3) To promote proper recycling of food waste and make good use of innovation technology mainly on turning food waste into energy to suit the local situation in Hong Kong, the Chief Executive mentioned in her 2018 Policy Agenda that a pilot scheme would be introduced to examine the feasibility of implementing government-run free food waste collection services in the long run.

The EPD will allocate a portion of the treatment capacity of the Organic Resources Recovery Centre Phase 1 (O-PARK1) and the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po Sewage Treatment Works (STW) to provide free collection and recycling services for about 50 tonnes of domestic food waste per day (the total food waste treatment capacity of the two facilities will be 250 tonnes per day). We will liaise with the HD and the Hong Kong Housing Society (HS) to invite their participation in the pilot scheme. We will accord priority to and invite housing estates with experience in waste separation and/or handling food waste separation and recycling to join the pilot scheme. For example, housing estates that have participated in the food waste recovery trial under "Green Delight in Estates" programme organised by the HA, or those PRH estates who have participated in aforementioned CIPs funded by the ECF and Trial Projects etc.

We are planning to extend the "food waste / sewage sludge anaerobic co-digestion" technology to Sha Tin STW and seeking funding approval of the Legislative Council (LegCo) for the Organic Resources Recovery Centre Phase 2 (ORRC2). Upon commissioning of the two projects in 2022, we will allocate one-third of this treatment capacity to treat domestic food waste, which means the domestic food waste treatment capacity will be increased to around 200 tonnes per day.

We are conducting an engineering feasibility study and an Environmental Impact Assessment for the Organic Resources Recovery Centre Phase 3 (ORRC3). Depending on the progress in the preparation and subject to the approval of funds from the LegCo, we hope to commission the ORRC3 in 2026 with a daily food waste treatment capacity of 300 tonnes.

Subject to the progress and development of the remaining food waste treatment facilities (including other ORRCs and food waste / sewage sludge anaerobic co-digestion facilities which may be built in the future), we anticipate that Hong Kong's overall food waste treatment capacity will be increased to about 1 800 tonnes per day by around mid-2030s. This would amount to 50 per cent of food waste generated at present. According to overseas experience in food waste recycling, only around 50 per cent of food waste can be recycled even if comprehensive food waste recycling facilities are available.

(4) In order to step up efforts in combating offences of illegal land filling and fly-tipping of construction waste, the EPD has installed surveillance camera systems at about 80 locations, and plans to further extend with 35 sets of surveillance camera systems equipped with artificial intelligence by mid-2019, for enhancing the Department's enforcement tactics and mobility,

including deploying the installation of systems to new black spot locations flexibly with reference to public concern on illegal waste disposal and intelligence shared among relevant departments. We will also deploy manpower resources for inspection having regard to risk assessments and actual conditions of the locations being monitored, and adopt appropriate enforcement strategy, to enhance enforcement effectiveness and deterrent effect.

On the other hand, from June 2018 to May 2019, the Food and Environmental Hygiene Department (FEHD) installed surveillance cameras at 118 blackspots across the territory to curb the illegal dumping of waste. The surveillance cameras are used in conjunction with other enforcement strategies, including preliminary public education and targeted blitz operations, to achieve a deterrent effect on repeated offenders. The FEHD often reviews its enforcement approach in tackling illegal waste dumping blackspots in various districts. If frequent illegal dumping of waste is detected in the vicinity of the blackspots with surveillance cameras installed, the FEHD will plan and mount blitz enforcement operations.

The FEHD intends to extend the surveillance camera scheme for two years starting from the third quarter of 2019 in consultation with the District Councils (DCs). Surveillance cameras will be installed at some 150 illegal waste dumping blackspots in phases according to the locations and priorities proposed by the DCs. If the hygiene conditions of a particular blackspot show significant improvement after the installation of cameras, the cameras will be relocated to other blackspots. The FEHD will progressively extend the scope of the scheme to cover more than 300 locations.

The EPD and FEHD will continue to combat fly-tipping under a multi-pronged approach. Apart from installing more surveillance cameras having regard to the actual circumstances, the two departments will enhance enforcement actions against those who violate the law.