## Bills Committee on Waste Disposal (Charging for Municipal Solid Waste) (Amendment) Bill 2018

### The Administration's response to Hon CHU Hoi-dick's letter dated 21 March 2019

## A. Quantity of waste disposed, paper consumed and recyclables collected by the Government

According to existing information available, the waste generated and disposed of by various Government bureaux and departments (B/Ds) is about 900 tonnes per day. The Government has always attached importance to the principle of "Use Less, Waste Less", B/Ds are committed to reducing waste. Leading by example in conserving energy, reducing waste and promoting environment-friendly culture, the Government has established internal guidelines on practicable environmental protection and waste avoidance measures covering various types of recyclables including metals, plastics, paper waste, glass bottles, ink and toner cartridges, etc., and has required B/Ds to enhance the implementation of environmental protection and waste avoidance measures. In terms of paper saving, waste reduction and recycling, the Government requires B/Ds should first strive to reduce paper consumption (such as receiving documents electronically to avoid unnecessary paper consumption) and adopt measures to recycle paper products in offices (such as printing on both sides of paper, reusing paper, file covers and envelopes) so as to reduce generation of waste paper. For paper management, B/Ds should comply with the relevant guidelines to use recycled paper instead of virgin paper. To ensure proper recovery of recyclable paper, there are facilities in government offices for the collection of recyclable paper. contractors will deliver collected recyclable paper to recyclers for The Environmental Protection Department (EPD) does not keep the record of quantity of paper consumed and recyclables collected by B/Ds.

## B. Manpower arrangements of the Food and Environmental Hygiene Department (FEHD) and EPD

2. As at December 2018, there were about 2 000 in-house cleansing workmen under FEHD's Cleansing Section and its contractors had about 7 300 outsourced cleansing workmen. Their main responsibilities include street sweeping, street washing, gully emptying, toilet cleansing, waste collection and other public cleansing services. The number of in-

house cleansing workmen and outsourced cleansing workmen with breakdown by districts is provided at **Annex I**.

- 3. After the implementation of municipal solid waste (MSW) charging, the duties of FEHD's Cleansing Section's in-house cleansing workmen and outsourced cleansing workmen in respect of handling waste collection are generally in line with the existing duties. Refuse collection point (RCP) attendants and refuse collection vehicle loaders at relevant RCPs will additionally conduct cursory visual screening to see if the waste handed over to them has been properly wrapped in designated bags or affixed with designated labels (for the case of oversized waste), and will reject any waste that does not comply with the requirements. Concerning the handling of recyclables, FEHD is currently engaging contractors to provide collection service for recycling bins placed at public places for recyclables including plastics, paper and metals. Subject to actual needs, the Government will consider adjusting the arrangements so as to further enhance recycling support in future.
- 4. As for enforcement manpower, the use of pre-paid designated bags/labels, which is required under MSW charging, having regard to some 22 000 waste reception points, over 45 000 buildings and considerable waste reception points across the territory, we plan to adopt a risk-based approach targeting at the list of black spots based on complaints and intelligence. EPD and FEHD may, according to preliminary estimation, require a few hundred enforcement staff.
- 5. We will further review and ascertain the actual manpower requirements having regard to the public response to public education and publicity work; the effectiveness of various waste reduction and recycling initiatives (including the establishment of new outreaching teams to provide on-site assistance and the pilot schemes for the provision of free collection service in respect of waste plastics from non-commercial and non-industrial (non-C&I) sources as well as food waste mainly from commercial and industrial (C&I) sources); and the effectiveness of FEHD's stepped-up efforts to deal with littering and fly-tipping problems (such as the effectiveness of applying IT initiatives to facilitate compliance).
- 6. As regards the division of labour in respect of enforcement duties between the two departments after the implementation of MSW charging, EPD will mainly conduct surveillance and enforcement actions at RCPs of residential and C&I premises such as RCPs located at individual floors of buildings and RCPs at ground floors. FEHD will mainly be responsible

for enforcement actions at RCPs under its management and enforcement actions against fly-tipping at public places. In addition, a dedicated hotline would be set up by EPD to answer enquiries, and accept complaints and reports on non-compliance. Under a risk-based approach, the complaints and reports on non-compliance will be used for analysis of black spots for planning of most effective enforcement strategies and immediate actions might not be taken, such that resources can be utilised more efficiently.

#### C. Work of EPD's outreaching teams

- 7. To strengthen on-site support to recycling, EPD is establishing outreaching teams to collaborate closely with community partners to educate the public on the importance of waste reduction at source and assist them to practise proper waste separation at source and clean recycling, and to identify proper outlets for recyclables. At the same time, the outreaching teams will also promote EPD's various waste reduction and recycling initiatives such as the producer responsibility scheme (PRS) on waste electrical and electronic equipment, the PRS on glass beverage containers and the proposed MSW charging, so as to raise public awareness and participation, and enhance stakeholders' understanding of the implementation details. The outreaching teams will strive to establish and maintain a direct communication network with different stakeholders such as property management companies (PMCs), cleansing workers, residents' organisations, District Council (DC) members and community Starting from December 2018, the outreaching representatives, etc. teams have kick-started pilot outreaching services in three districts (i.e. Eastern District, Kwun Tong and Sha Tin). Actual experiences gained will serve as reference for gradual expansion of outreaching services to all districts in Hong Kong in future.
- 8. The outreaching teams have been visiting public and private housing estates and residential buildings, including single block buildings and "three-nil" buildings, in the pilot districts; establishing and maintaining a direct and effective network with different stakeholders such as the PMCs, cleansing workers, residents' organisations, DC members and community representatives, etc. to understand the situation of the housing estates/buildings, provide recommendations on strengthening and enhancing waste reduction and recycling work; and assisting in improving and establishing an efficient system for collection of recyclables and identifying proper outlets for recyclables. The outreaching teams will maintain contact with staff of FEHD and suitably coordinate the arrangements relating to recycling facilities in public places in the districts

when necessary. It is understood that most scavengers usually resell their recyclables to nearby recycling shops as soon as possible after they collect the recyclables at locations such as supermarkets, dispensaries, shopping centres and markets. The outreaching teams will attempt to contact scavengers in the community and assist them to understand the latest requirements of the recycling market on recyclables so as to facilitate their work.

# D. Manpower, quantity of recyclables collected, contract requirements and penalties of various waste treatment and recycling contracts

9. For most of the outsourced service contracts, EPD only sets out the types of services to be provided by the contractors and the standards of service to be attained. Apart from some contracts which specified the number of key staff (such as person-in-charge of the project/ manager), the contracts do not specify the total number of staff required to be employed by the contractor. The contractors should flexibly allocate resources in response to the service needs according to the actual operation requirements. Details of individual contracts' treatment tonnage, contract requirements and penalties are tabulated below.

Contract(s)	Actual average daily treatment tonnage, minimum treatment tonnage required under contracts and relevant penalties				
Chemical Waste	46 tonnes per day (daily average of 2017-18				
Treatment Centre	financial year); the contract does not require a				
	minimum treatment tonnage and hence no				
	related penalty clause.				
Livestock Waste	64 tonnes per day (daily average of 2017-18				
Collection Service	financial year); the contract does not require a				
	minimum treatment tonnage and hence no				
	related penalty clause.				
Animal Waste	27 tonnes per day (daily average of 2017-18				
Composting Plant	financial year); the contract requires a minimum				
	treatment tonnage of 25 tonnes per day. If this				
	minimum treatment tonnage is not met, the				
	Government will deduct the operation fee				
	payable to the contractor in accordance with the				
	contractual terms.				

Contract(s)	Actual average daily treatment tonnage, minimum treatment tonnage required under contracts and relevant penalties
Organic Resources Recovery Centre Phase 1(O·PARK1) WEEE·PARK	100 tonnes per day; the contract does not require a minimum treatment tonnage and hence no related penalty clause <sup>1</sup> .  The target tonnage treated in the first year <sup>2</sup> of the contract was 6,000 tonnes, whereas the actual tonnage treated was 8,100 tonnes, equivalent to some 22 tonnes per day <sup>3</sup> . If the operating performance requirements in the contract are not met, the Government will deduct the service fee payable to the contractor in accordance with the contractual terms.
Glass management contract (GMC) for the Hong Kong Island region (including Islands District)	Based on the figures in January 2019, the average <sup>4</sup> daily tonnage processed was 21 tonnes. The minimum processing tonnage for the first contract year is 3,300 tonnes. If the operating performance requirements in the contract are not met, the Government will deduct the service fee payable to the contractor in accordance with the contractual terms.
GMC for the New Territories region	Based on the figures in January 2019, the average <sup>4</sup> daily tonnage processed was 18 tonnes. The minimum processing tonnage for the first contract year is 2,340 tonnes. If the operating performance requirements in the contract are not met, the Government will deduct the service fee payable to the contractor in accordance with the contractual terms.

The O·PARK1 is currently collecting source-separated food waste from 190 C&I establishments. The collection, source separation and delivery of these food waste are carried out by relevant organisations on a voluntary basis. The contract of O·PARK1 does not require the contractor to collect food waste. The minimum operation fee is 50 tonnes per day.

Refers to the first operating year from end October 2017 (the start of initial operation) to end October 2018. For the calendar year of 2018, the target tonnage was 9,000 tonnes whereas the actual tonnage treated was 10,830 tonnes, equivalent to some 30 tonnes per day.

Based on 365 days in a year, notwithstanding that some days in the year are non-working day for the facility.

<sup>4 31</sup> calendar days in January.

Contract(s)	Actual average daily treatment tonnage, minimum treatment tonnage required under contracts and relevant penalties				
GMC for the Kowloon region	Based on the figures in January 2019, the average <sup>4</sup> daily tonnage processed was 16 tonnes. The minimum processing tonnage for the first contract year is 3,330 tonnes. If the operating performance requirements in the contract are not met, the Government will deduct the service fee payable to the contractor in accordance with the contractual terms.				

10. As regards service contracts for collection of recyclables, FEHD, the Leisure and Cultural Services Department, the Agriculture, Fisheries and Conservation Department, Housing Department and Hong Kong Housing Society provide collection services of recyclables from recycling bins at public places, Government premises, country parks and public rental housing estates. The quantity of relevant recyclables collected is tabulated below. These contracts do not require a minimum collection tonnage.

Types of recyclables	Year		
	2017	20185	
	Quantity collected (tonnes)		
Plastics	2,708	2,661	
Paper	30,426	25,771	
Metals			
(including ferrous and non-	1,651	1,675	
ferrous metals)			

11. As regards manpower, as with the other contracts such as that for street cleansing administered by FEHD, its service contracts for collection of recyclables require a total of at least 14 supervisor-cum-drivers and 14 cleansing workmen. For other departments and agencies, the collection services of recyclables form part of their cleansing and/or property management contracts. There is no specific requirement in these contracts on the number of staff responsible for the collection services of recyclables.

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<sup>&</sup>lt;sup>5</sup> Data provided by Housing Department in 2018 covers the period from 1 January to 30 September 2018.

## E. Statistics for projects funded by the Environment and Conservation Fund (ECF)

12. Statistics for projects funded by ECF are at **Annex II**.

## F. Contract requirements, penalties and quantity of recyclables collected under EPD's funded projects

- 13. Statistics for various Community Green Stations (CGSs) in operation are at **Annex III**.
- 14. EPD has been encouraging the public to separate waste at source whether at home or at workplace through the Source Separation of Waste Programme (the Programme). As at the end of 2018, over 2 100 housing estates, some 700 rural villages and over 1 000 C&I buildings have participated in the Programme. We have now placed about 16 000 sets of recycling bins for waste separation at public places, schools, government office buildings, country parks, as well as housing estates and C&I buildings which have participated in the Programme to facilitate source separation of waste by the public. The provision of recycling bins covers over 80% of the places where Hong Kong people live and work.
- 15. As single block buildings in older districts usually do not have any PMC for implementing and managing recycling programmes or the space for setting up waste recovery facilities, the Government has established a Community Recycling Network (CRN) through ECF, including setting up the Community Recycling Centres (CRCs) in various districts to provide services for residents living in these buildings, so as to facilitate their separation of waste for recovery and to promote waste reduction and recycling activities at the community level. There are currently 17 CRCs, 2 mobile community recycling projects and 50 collection points under the According to ECF Guide to Application of Community Waste Reduction Projects, in vetting a project proposal, the Vetting Subcommittee will give due consideration to various factors, such as the past performance of the applicant including the effectiveness of past projects and the applicant's ability to comply with the funding conditions, and whether the application of project extension shows enhancement/improvement in different aspects such as strengthening the cost effectiveness of the project, enhancing the mode and arrangement of recycling, increasing the quantity and types of recyclables, etc. CRCs and mobile community recycling projects are operated by nongovernment organisations (NGOs). Details are set out at Annex IV.

- 16. As for the other 50 collection points operated by NGOs, most are set up under their community centres and service centres. Their main aim is to promote environmental education, publicise information on waste reduction and recycling, and collect low-value clean recyclables (including plastic bottles, glass bottles and small waste electrical and electronic equipment). In the past five years, a total of about 45 tonnes of waste plastics, 45 tonnes of waste glass and 10 tonnes of small waste electrical and electronic equipment were recovered.
- 17. With regard to the pilot scheme on free collection services of non-C&I waste plastics, EPD plans to roll out a two-year Pilot Scheme on Collection and Recycling Services of Waste Plastics (the Pilot Scheme) in three different districts (i.e. Eastern District, Kwun Tong and Sha Tin) to provide free collection service for waste plastics (including all types of waste plastics such as polyfoam) from non-C&I sources such as public and private housing estates, schools, public institutions, CRCs and CGSs in the districts for further treatment in recycling process, before processing into recycled raw materials or products.
- 18. EPD is tendering the waste plastics collection service contract of the Eastern District, with a view to rolling out the service this year. will also invite tenders for waste plastics collection services in Kwun Tong and Sha Tin progressively. As regards service indicators, with reference to the quantities of waste plastics collected from the existing recycling network (including the Programme on Source Separation of Domestic Waste, CRCs and CGSs) and the cyclical changes in the relevant data, we have set a baseline recycling quantity for each district under the Pilot Scheme as a target for processing. Besides, the service fee will be increased in tiers according to the quantity in excess of the baseline so as to encourage the contractors to proactively increase the quantities of waste plastics recovered and processed. As the Pilot Scheme is still at its preparatory / tendering stage, the collection quantity is not available for the time being.
- 19. To prepare for the aforementioned Pilot Scheme, EPD conducted a survey to gauge the interests of the market in the Pilot Scheme through EPD website, newspaper advertisements, and letters to relevant trade associations and waste plastics collectors / recyclers recorded under EPD's "Hong Kong Collector / Recycler Directory". EPD completed the survey in early August 2018. The response from the trade was positive and a

total of 17 recyclers and organisations have expressed interest in participating in the Pilot Scheme.

**Environmental Protection Department April 2019** 

Annex I

### Number of Food and Environmental Hygiene Department's Cleansing Workmen with Breakdown by Districts (As at December 2018)

	Number of in-house cleansing	Number of outsourced cleansing
District	workmen	workmen
Hong Kong Island	1	
Islands	151	271
Central & Western	82	635
Eastern	85	352
Southern	86	209
Wan Chai	81	506
Kowloon		
Kowloon City	76	433
Kwun Tong	55	374
Sham Shui Po	94	459
Wong Tai Sin	46	195
Mong Kok	61	408
Yau Tsim	107	291
New Territories		
Kwai Tsing	94	287
North	204	486
Sai Kung	138	344
Sha Tin	145	406
Tai Po	143	286
Tsuen Wan	86	340
Tuen Mun	129	268
Yuen Long	193	556
Cross-district	5	262

# Statistics for Projects Funded by the Environment and Conservation Fund (ECF)

#### (A) Community Waste Reduction Projects

In the past 5 years (as at 31 December 2018), 122 Community Waste Reduction Projects have been subsidised by ECF in total. One project officer and one project assistant are generally engaged for each project with the funding. Subject to the needs of individual projects, the recipient organisations may engage part-time staff and/or project ambassadors.

The distribution of the Community Waste Reduction Projects in various districts is tabulated below.

District	Community Waste Reduction Projects (No. of Projects)	District	Community Waste Reduction Projects (No. of Projects)
Central and	6	Kwai Tsing	10
Western			
Wan Chai	5	Tsueng Wan	6
Eastern	0	Tuen Mun	8
Southern	5	Yuen Long	3
Yau Tsim	4	North	11
Mong			
Sham Shui Po	7	Tai Po	4
Kowloon City	11	Sha Tin	4
Wong Tai Sin	3	Sai Kung	7
Kwun Tong	1	Islands	8
		Multi-district	19
		Total	122

The target amounts of recyclables to be collected in these projects total 16 530 tonnes.

### (B) Food Waste Recycling Projects in Housing Estates and On-site Meal Portioning Projects in Schools

Since 2011, 35 housing estates have been subsidised by ECF to install food waste treatment facilities and organise relevant educational and

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promotional activities under the Food Waste Recycling Projects in Housing Estates. Two workers are generally engaged for each participating estate to handle matters like collection and treatment of food waste and cleaning work with the funding.

Since 2009, 127 schools have been subsidised by ECF to carry out conversion works and install facilities for implementing the On-site Meal Portioning Projects in Schools. As the recipient schools are required to manage the approved projects with their existing resources, we do not have the relevant statistics on the manpower involved.

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The distribution of the Food Waste Recycling Projects in Housing Estates and the On-site Meal Portioning Projects in Schools in various districts is tabulated below.

District	Food Waste Recycling Projects in Housing Estates (No. of Projects)	On-site Meal Portioning Projects in Schools (No. of Projects)
Central and	-	-
Western		
Wan Chai	-	1
Eastern	3	3
Southern	1	3
Yau Tsim	-	2
Mong		
Sham Shui	1	6
Po		
Kowloon	1	8
City		
Wong Tai	5	9
Sin		
Kwun Tong	3	11
Kwai Tsing	3	12
Tsueng Wan	3	4
Tuen Mun	3	13
Yuen Long	5	18
North	2	7
Tai Po	2	7
Sha Tin	1	9
Sai Kung	1	10
Islands	1	4
Total	35	127

As at end of January 2019, the quantity of food waste recovered under the Food Waste Recycling Projects in Housing Estates in 2018-19 was 342 tonnes. The figures do not necessarily represent the amount of food waste collected in the approved projects for that year. Since housing estates had to make preparation, such as recruiting staff and arranging tenders for the rental of composters, after approval of the projects, food waste recovery activities might not be commenced in the same year. Moreover, the recipient housing estates had to carry on food waste recovery activities for 24 months, and the projects approved in earlier years would continue to recover food waste after commissioning. Hence, the relevant figures include those projects approved in earlier years and are still in operation.

#### Annex III

# Statistics for Various Community Green Stations (CGSs) in Operation

The minimum tonnage target under the current 3-year operation contracts and the quantity of recyclables collected in 2018 for various CGSs are tabulated below. If the operating performance requirements in the contract are not met, the Government will deduct the service fee payable to the contractor in accordance with the contractual terms.

Project	Minimum tonnage target under the 3- year operation contract (tonnes)	Quantity of recyclables collected in 2018 (tonnes)
Sha Tin CGS	1,310#	461
Eastern CGS	1,160#	437
Kwun Tong CGS		348
Yuen Long CGS	600	348
Sham Shui Po CGS	000	394
Tuen Mun CGS	900	70 <sup>@</sup>
Kwai Tsing CGS	900	40^

<sup>#</sup> Minimum tonnage target under the current contract. The respective target in the first 3-year contract for these two projects was 600 tonnes.

<sup>@</sup> Tuen Mun CGS commenced operation in September 2018.

<sup>^</sup> Kwai Tsing CGS commenced operation in November 2018.

### Required Quantity of Recyclables to be Recovered under Contracts and Quantity of Recyclables Recovered by Community Recycling Network from 2014 to 2018

Collection point in Community Recycling	2014 to 2018  Quantity of recyclables received (tonnes)			Current required quantity of different recyclables to be recovered under the funded project/as stated in the contract	
Network	Plastics	Glass	Electrical and electronic equipment	Plastics (tonnes/ month)	Electrical and electronic equipment (set/month)
Community Recycl	ing Centre				
Central & Western Mid- Levels Owners Association – 121C Plastic Recycling Centre	401.4	106.8	14.3	10.9	50
Fong Chung Social Service Centre – Dynamic Plastic Waste Collection Centre	405.7	85.6	3.3	9	20
121C Society For Recycling – Causeway Bay and Wan Chai Society For Recycling Project	202.4	27.7	7.5	7.5	40
121C Society For Recycling – Southern District Community Recycling Centre	134.2	0.4	1.2	4.8	40
Tai Kok Tsui Resources Centre Association – Meet Up Greens	296.6	2.6	6.3	6.3	20
Cheung Sha Wan Kai Fong Welfare Association – Eco-Community Recycling Centre	445.9	1.6	6.5	11	50

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	2014 to 2018			<b>Current</b> required	
Collection point in Community Recycling	Quantity of recyclables received (tonnes)			quantity of different recyclables to be recovered under the funded project/as stated in the contract	
Network	Plastics	Glass	Electrical and electronic equipment	Plastics (tonnes/ month)	Electrical and electronic equipment (set/month)
United Labour Chi Hong Association Limited – Community Recycling Center	337.5	2.4	3.2	8.4	35
Boys' Brigade – Hung Hom District Waste Recovery Centre	229.9	5.2	4.3	7	40
Boys' Brigade – To Kwa Wan District Waste Recovery Centre	516.0	7.0	7.4	10.9	50
East Kowloon District Residents' Committee Limited – Wong Tai Sin Community Recycling Center	485.8	13.8	38.1	10.9	100
Boys' Brigade – Kwai Tsing District Waste Recovery Centre	432.1	11.2	7.0	10.9	50
Boys' Brigade – Tsuen Wan District Waste Recovery Centre	425.4	4.9	6.5	10.9	50
New Opportunity Limited – Tuen Mun Environmental Centre	560.0	11.8	24.0	10.9	50
New Opportunity Limited – Yuen Long Environmental Education Centre	255.9	4.1	12.6	6	60

	2014 to 2018  Opentity of recyclobles received			<b>Current</b> quantity	required of different
	Quantity of recyclables received (tonnes)			recyclable	es to be
Collection point in Community				recovered funded p	under the roject/as stated
Recycling				in the contract	
Network	Plastics	Glass	Electrical and electronic equipment	Plastics (tonnes/ month)	Electrical and electronic equipment (set/month)
Action Health Limited – North District Recycling Centre	459.4	200.4	15.2	6.5	50
North District Residents Association Limited – North District Recycling Centre	172.1	Not applicable	2.8	6	15
Environmental Association – Ways for Plastic Recycling	682.3	208.7	16.5	10.9	50
Mobile community	recycling p	roject (Note)			
Ma On Shan Youth Association – Shatin Recycle Centre 2.0	172.4	6.7	7.7	4	40
Tseung Kwan O Kai Fong Joint Association Limited – Source Separation of Domestic Waste	322.2	Not applicable	Not applicable	8	-
Total	6937.2	700.9	184.4		

Note: The current community recycling projects in Sha Tin and Sai Kung districts operate by means of mobile recycling vehicles.