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Replies to initial questions raised by Legislative Council Members in examining the Estimates of Expenditure 2023-24

Director of Bureau : Secretary for Environment and Ecology Session No. : 11

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Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)034

(Question Serial No. 0472)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding promoting the use of electric vehicles (EVs), please inform this Committee of the following:

1. Please list in tabular form the types and numbers of buses (including electric buses) owned by various franchised bus companies on a yearly basis.

2. How many vehicle owners have enjoyed the first registration tax (FRT) concessions in the past 3 years? What is the amount of the concessions? Please set out the number of vehicles granted with the FRT concessions by make.

3. How many vehicle owners have enjoyed the FRT concessions granted under the "One-for-One Replacement" Scheme in the past 3 years?

4. How many vehicles are owned by government departments? What is the percentage share of EVs? How many vehicles will be procured by government departments this year? Among them, what is the percentage share of EVs? What is the average price of the vehicles?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 23)

<u>Reply</u>:

1. The numbers of licensed buses owned by each franchised bus company in Hong Kong in the past 3 years are tabulated by vehicle emission standard as follows:

Dus compony	Dus Catagony	Number of buses				
Bus company	Bus Category	End of 2020	End of 2021	End of 2022		
	Euro III	595	368	161		
	Euro IV	107	115	116		
The Kowloon	Euro V	2 846	2 923	2 828		
Motor Bus Company	Euro VI (including hybrid	442	584	772		
(1933) Limited	bus)					
	Electric bus	18	11	24		
	Sub-total	4 008	4 001	3 901		

D		Number of buses				
Bus company	Bus Category	End of 2020	End of 2021	End of 2022		
	Euro III	0	0	0		
Citybus	Euro IV	28	28	0		
Limited	Euro V	626	633	585		
(Franchise for	Euro VI					
Hong Kong Island and	(including hybrid	86	106	121		
Cross-Harbour	bus)					
Bus Network)	Electric bus	4	4	4		
Bus network)	Sub-total	744	771	710		
	Euro III	0	0	0		
Citybus	Euro IV	0	0	0		
Limited	Euro V	183	149	151		
(Franchise for	Euro VI					
the Airport and	(including hybrid	40	39	29		
North Lantau	bus)					
Bus Network)	Electric bus	0	0	0		
	Sub-total	223	188	180		
	Euro III	0	0	0		
	Euro IV	38	38	13		
New World	Euro V	533	533	514		
First Bus	Euro VI					
Services	(including hybrid	115	114	112		
Limited	bus)					
	Electric bus	4	3	1		
	Sub-total	690	688	640		
	Euro III	10	10	8		
	Euro IV	18	6	5		
Lang Win Dug	Euro V	206	118	115		
Long Win Bus	Euro VI					
Company Limited	(including hybrid	0	119	132		
Linnied	bus)					
	Electric bus	4	4	4		
	Sub-total	238	257	264		
	Euro III	12	9	6		
	Euro IV	18	31	13		
Now Lonton	Euro V	113	88	104		
New Lantao	Euro VI					
Bus Company	(including hybrid	5	5	5		
(1973) Limited	bus)					
	Electric bus	2	2	4		
	Sub-total	150	135	132		

2. & 3. Over the past 3 years (i.e. from 2020 to 2022), there were a total of 34 445 cases that first registration tax (FRT) concessions were granted for electric vehicles (EVs), involving a total amount of \$8.75 billion. Among them, 32 946 were cases under the "One-for-One Replacement" Scheme.

Make	Number of EVs granted with the FRT concessions*
AIDEA	5
AUDI	196
B.M.W.	1 750
BMW I	101
BYD	523
CARVER	1
СҒМОТО	36
DAYANG	75
DFSK	18
ENERGICA	5
EVOKE	1
FIAT	2
HORWIN	19
HYUNDAI	967
JAC	12
JAGUAR	8
JOYLONG	26
KIA	901
KOMATSU	1
KUMPAN ELECTRIC	1
LEXUS	16
LINDE	3
LINDE	1
MAXUS	7
MAXUS MERCEDES BENZ	,
	3 174
MG	323
MINI	186
NISSAN	759
NIU	19
PEUGEOT	3
POLESTAR	145
PORSCHE	748
RENAULT	43
RIEJU	12
SHUI CHEONG	3
SILENCE	63
SMART	37
STILL	5
SUITONG	2
SUMITOMO	2
SUPER SOCO	2
SURRON	1
TAYLOR DUNN	5
ТСМ	1

The number of EVs granted with the FRT concessions by make is tabulated below:

Make	Number of EVs granted with the FRT concessions*
TESLA	23 820
ΤΟΥΟΤΑ	12
TROMOX	9
UGBEST	7
VMAX	1
VOLKSWAGEN	88
VOLVO	300
Total	34 445

* FRT is not required for vehicles owned by Consulates and Officially Recognised Bodies, as well as franchised buses, therefore figures of such EVs and electric buses are excluded.

4. According to the information provided by the Government Logistics Department, there was a total of 7 108 vehicles in various government departments as at end-January 2023. Among them, there was a total of 2 523 specialised vehicles (such as refuse collection vehicles), accounting for about one-third of the overall government fleet. However, as the choices of electric specialised vehicle models in the market were limited, the Government has not procured such vehicles. In respect of cars, there was a total of 1 857 cars in the establishment of the government fleet, among which 132 were EVs, accounting for 7.1% of the total number of cars in the Government.

The various government departments procured a total of 368 vehicles (excluding specialised vehicles) in 2022, among which 141 were cars, including 55 EVs, accounting for 39.0% of the total number of cars procured or 14.9% of the total number of vehicles procured. The average price of the EVs was \$315,000 each.

CONTROLLING OFFICER'S REPLY

EEB(E)035

(Question Serial No. 0473)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding vehicle emissions, please inform this Committee of the following:

1. What is the percentage of vehicle emissions in the total air pollution emissions of Hong Kong?

2. What are the percentages of the emissions from different types of vehicles (buses, taxis, light buses, goods vehicles, private cars, etc.) in the total vehicle emissions? What are the respective percentages of sulphur dioxide (SO2), nitrogen oxides (NOx), respirable suspended particulates (RSP or PM10), fine suspended particulates (FSP or PM5), volatile organic compounds (VOC) and carbon monoxide (CO) emissions from these vehicle types? 3. Ever since the Environmental Protection Department used roadside remote sensing equipment to detect vehicle emissions, what was the average number of vehicles issued with an Emission Testing Notice each month? Please provide a breakdown of figures by vehicle type.

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 24)

Reply:

1. The Environmental Protection Department (EPD) compiles the Hong Kong Air Pollutant Emission Inventory every year to analyse the distribution and trends of major air pollution sources in Hong Kong. The percentages of emissions from vehicles in the total local emissions (except emissions from hill fires) from 2018 to 2020 are tabulated as follows:

Year	Sulphur dioxide (SO ₂)	Nitrogen oxides (NOx)	Respirable suspended particulates (RSP)	Fine suspended particulates (FSP)	Volatile organic compounds (VOC)	Carbon monoxide (CO)
2018	<1%	18%	9%	11%	21%	49%
2019	<1%	17%	9%	11%	22%	47%
2020	<1%	19%	9%	11%	23%	47%

2. The percentages of emissions from different types of vehicles in the total vehicle emissions from 2018 to 2020 are tabulated as follows:

	Vehicle type	Percentage of air pollutant emissions from vehicles in the total vehicle emissions [#]						
Year		Sulphur dioxide (SO2)	Respirable suspended particulates (RSP /PM ₁₀)	Fine suspended particulates (FSP /PM _{2.5})	Nitrogen oxides (NOx)	Volatile organic compounds (VOC)	Carbon monoxide (CO)	
2018	Motorcycle	1%	1%	1%	1%	69%	10%	
	Taxi	8%	0%	0%	16%	4%	34%	
	Private car	28%	6%	6%	2%	14%	24%	
	Light goods vehicle	11%	19%	19%	19%	2%	3%	
	Medium & heavy goods vehicle	31%	38%	38%	30%	3%	5%	
	Private light bus	1%	1%	1%	1%	1%	2%	
	Public light bus	3%	3%	3%	3%	6%	17%	
	Non- franchised bus	5%	12%	12%	10%	2%	2%	
	Franchised bus	12%	20%	20%	17%	1%	4%	
To	otal in 2018	100%	100%	100%	100%	100%	100%	
2010		10/	10/	10/	10/	50 0/	100/	
2019	Motorcycle	1%	1%	1%	1%	72%	10%	
	Taxi	8%	0%	0%	16%	4%	34%	
	Private car Light goods	29%	7%	7%	2%	13%	24%	
	vehicle Medium &	11%	21%	21%	21%	1%	3%	
	heavy goods vehicle	30%	33%	33%	28%	2%	4%	
	Private light bus	1%	2%	2%	1%	1%	3%	
	Public light bus	3%	1%	1%	3%	5%	16%	
	Non- franchised bus	5%	12%	12%	10%	1%	2%	
	Franchised bus	11%	22%	22%	18%	1%	4%	
То	tal in 2019	100%	100%	100%	100%	100%	100%	
2020		107	2 0 /	10/	10/	750/	110/	
2020	Motorcycle	1%	2%	1%	1%	75%	11%	
	Taxi Privata cor	10%	0%	0%	15%	3%	31%	
	Private car Light goods vehicle	29% 11%	<u>8%</u> 25%	8% 25%	3% 24%	13% 1%	25% 4%	
	Medium & heavy goods vehicle	30%	29%	29%	27%	1%	4%	
	Private light bus	1%	2%	2%	1%	1%	2%	

Percentage of air pollutant emissions from ve in the total vehicle emissions [#]							
Year	Vehicle type	Sulphur dioxide (SO2)	Respirable suspended particulates (RSP /PM ₁₀)	Fine suspended particulates (FSP /PM _{2.5})	Nitrogen oxides (NOx)	Volatile organic compounds (VOC)	Carbon monoxide (CO)
	Public light bus	4%	1%	1%	3%	5%	18%
	Non- franchised bus	3%	7%	7%	7%	1%	1%
	Franchised bus	11%	26%	26%	20%	1%	4%
To	otal in 2020	100%	100%	100%	100%	100%	100%

May not add up to 100 due to rounding.

3. The EPD has been using mobile roadside remote sensing equipment to identify petrol and liquefied petroleum gas vehicles emitting excessively since 1 September 2014. As at the end of January 2023, some 6.38 million vehicle counts have been monitored under the scheme and the average monthly number of emission testing notices (ETNs) issued is tabulated by vehicle type as follows:

Vehicle type	Average monthly no. of ETNs issued since the implementation of the scheme
Light goods vehicle	<1
Private car	About 80
Light bus	About 18
Taxi	About 192

CONTROLLING OFFICER'S REPLY

EEB(E)036

(Question Serial No. 0475)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Government has set aside \$350 million for subsidising in-harbour ferry operators to construct and test out electric ferries (e-ferries) and related charging facilities. In this connection, please inform this Committee of the following:

1. What is the timetable for testing e-ferries?

2. What are the operational, maintenance and repair expenditures involved for operating eferries during the trial period?

3. Will the Administration consider extending the subsidy scheme to cover other new energy ferries? If yes, what are the details? If no, what are the details?

4. What are the application and approval procedures?

5. How does the Administration assess the effectiveness of the scheme?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 26)

<u>Reply</u>:

- 1, 2 & 4 The Government is preparing to launch the Pilot Scheme for Electric Ferries (Pilot Scheme) in 4 in-harbour ferry routes, with a view to testing out the technical viability of adopting electric ferries (e-ferries) in Hong Kong. The Government has earmarked \$350 million to provide full subsidies to ferry operators for constructing 4 e-ferries and the associated charging facilities, as well as the operational, maintenance and repair expenditures incurred for operating the e-ferries during the 24-month trial period. The costs involved will be calculated based on the actual operation. The Environmental Protection Department has entered into subsidy agreements with 4 in-harbour ferry operators, among which 3 of them have commenced the open tendering processes for the procurement of e-ferries and are evaluating the tenders received. Taking into account the lead time to construct the e-ferries and the associated charging facilities, we anticipate that the Pilot Scheme would commence by 2024 at the earliest.
- 3 & 5 The Government has established an inter-departmental working group to work out the details of the Pilot Scheme, oversee its progress and evaluate the performance of the e-ferries. We will engage a consultant to collect and analyse the operational data of the e-ferries so as to evaluate their effectiveness and

performance in terms of operation and environmental protection. Subject to the trial results and relevant technological development, the Government will explore with the ferry operators the possibility of progressively replacing conventional ferries with new energy ferries before 2035.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)037

(Question Serial No. 2808)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The O·PARK has a design treatment capacity of 200 tonnes of food waste per day or up to about 70 000 tonnes per year. However, the amount of food waste treated was less than 50 000 tonnes in 2021 and 2022. What is the operating cost of O·PARK each year? What is the treatment cost per tonne of food waste? What measures will the Government take to continue to increase the recovery rate of food waste?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 42)

<u>Reply</u>:

The operating cost of O·PARK1 was about \$77 million and \$74 million in 2021 and 2022 respectively, and the treatment cost per tonne of food waste was \$1,710 and \$1,620 in 2021 and 2022 respectively.

To promote food waste recycling, the Environmental Protection Department (EPD) launched the Pilot Scheme on Food Waste Collection on a larger scale in 2021 by providing a door-todoor collection service for relatively clustered premises that generate larger quantities of food Through the operation of 2 food waste collection service waste with less impurities. contracts covering the New Territories commencing in April this year, we will continue to enhance the food waste collection network, including the extension of food waste collection service to cover more types of public premises (such as shopping centres of public rental housing estates, cooked food centres and public markets, catering facilities of social service organisations, canteens in tertiary institutions and hospitals, etc.) as well as private commercial & industrial premises (such as food factories, hotels, large shopping malls, airline To further assist the catering sector in food waste collection, we will set up caterers, etc.). collection points at refuse collection points and restaurants concentrated districts to collect food waste generated in "restaurant clusters" on a trial basis. The EPD will progressively extend the trial scheme on food waste collection in public rental housing estates to cover up to 100 blocks this year, with GREEN\$ points awarded to encourage residents to actively participate in food waste recycling.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)038

(Question Serial No. 2810)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The EV-charging at Home Subsidy Scheme (EHSS) has been repeatedly criticised for its slow implementation progress and inability to catch up with the increase in electric vehicles (EVs). What is the progress of the EHSS? How many residential estates and EV charging posts have been approved under the EHSS? How many of the installation works have been completed? Will the Government step up the promotion and provide greater incentives to encourage more residential buildings to install EV charging facilities?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 44)

Reply:

The Government launched the EV-charging at Home Subsidy Scheme (EHSS) in October 2020 to promote installation of electric vehicle charging-enabling infrastructure (EVCEI) in car parks of existing private residential buildings and estates. The response to the EHSS was overwhelming after its launch. Over 300 applications were received as at mid-May 2021 and the total amount of subsidy earmarked for these applications had reached the original funding ceiling of \$2 billion under the EHSS. As such, the Environmental Protection Department (EPD) had to suspend processing of the applications received after mid-May 2021 and put them on waiting list. The EPD had also notified the relevant applicants of the arrangements and made announcement on the dedicated website of the EHSS. Apart from those cases that supplementary information has not been provided as required, the EPD has completed in 2022 the processing of all applications received before mid-May 2021.

The Government injected an additional funding of \$1.5 billion into the EHSS in the 2022-23 Budget with the scheme extended to 2027-28. After reviewing the implementation details of the EHSS, the EPD resumed the processing of applications on the waiting list in batches in August 2022. It is expected that the processing of some 300 applications received as at January this year can be completed within 2023. The EPD will review the processing procedures and optimise the vetting arrangements, with a view to further shortening the time required for vetting and approval of applications. Upon EPD's approval of the EHSS applications, applicants are required to engage consultants and contractors to design and install EVCEI through open tendering. It takes time for the applicants to conduct the tendering exercise, resolve the technical issues related to the installation works, as well as liaising with parking space owners to reach consensus over the detailed design of the installation. As at the end of January 2023, 11 car parks of residential estates, covering about 1 400 parking spaces, have commenced or completed the installation works, which involve mainly car parks of relatively small scale with less technical problems. For these car parks, the time between approval of the EHSS applications and completion of the installation works ranges from around 18 to 30 months. The time required depends on the actual circumstances of each case. According to the current progress, with the progressive completion of the tendering exercise and commencement of the design and installations works of other approved applications, it is anticipated that the target of completing the installation of EVCEI for some 140 000 parking spaces in about 700 car parks of residential estates can be achieved in 2027-28 as planned.

The application of the EHSS will close later this year and the EPD will evaluate the effectiveness of the scheme. The Government has no plan to provide car parks of residential buildings with greater incentives for installing charging facilities at this stage. That said, subject to the availability of fund after completing the assessment on the required amount of subsidy earmarked for the received applications, we will consider reopening the application to some of the car parks previously not covered by the scheme. The assessment is expected to be completed in 2023. We will announce in due course the eligibility and implementation details on the dedicated website of the EHSS after the review.

CONTROLLING OFFICER'S REPLY

EEB(E)039

(Question Serial No. 2671)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Matters Requiring Special Attention in 2023-24 includes the continuation to implement the pilot scheme on free collection of food waste for public premises and commercial & industrial premises, and gradually expand the scheme to collect food waste from domestic sources, including implementation of a trial scheme on food waste collection in public rental housing estates (trial scheme). In this connection, please advise:

(1) An 18-month trial scheme was launched in 5 public rental housing (PRH) estates last year. It is expected that smart recycling bins would be gradually installed in about 30 blocks initially to collect food waste. Please tabulate all the locations, implementation timetable, and expenditure involved;

(2) Has the Government assessed the effectiveness of the trial scheme currently being implemented at the 5 PRH estates? How does the Administration collect views from users? If yes, what are the manpower involved in conducting the above survey?

Asked by: Hon CHAN Hok-fung (LegCo internal reference no.: 40)

Reply:

(1) The Environmental Protection Department (EPD), in collaboration with the Housing Department and the Hong Kong Housing Society, launched an 18-month trial scheme on food waste collection in public rental housing estates (trial scheme) in October 2022 to promote domestic food waste recycling. The first phase of the trial scheme covers a total of 34 blocks in 5 public rental housing (PRH) estates, in which smart recycling bins have been installed to collect food waste. The expenditure involved in the trial scheme in 2022-23 is about \$3.5 million.

The PRH estates participating in the first phase of the trial scheme, the implementation schedule and the number of blocks involved are tabulated below.

PRH estate	Implementation schedule	No. of blocks [Note 1]
Shek Pai Wan Estate	October 2022	9
Choi Tak Estate	November 2022	8
Lin Tsui Estate	November 2022	1
Sheung Tak Estate	November 2022	8

PRH estate	Implementation schedule	No. of blocks [Note 1]
Kwun Lung Lau	November 2022	8
	Total	34

Note 1: All blocks in the PRH estates listed above are participating in the trial scheme.

(2) More than 240 tonnes of food waste have been collected since the launch of the trial scheme in late October 2022. The response has been positive and about 40% of the households in the participating PRH estates have used the smart recycling bins in the first 3 months. The EPD regularly arranges green ambassadors to step up publicity and education of the trial scheme in the participating PRH estates, and collect views from the residents. The manpower involved is absorbed by the existing staff establishment of the EPD.

CONTROLLING OFFICER'S REPLY

EEB(E)040

(Question Serial No. 2600)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Please advise this Committee of the following: (1) the respective units, manpower and resources involved, the details of the work, the number of applications received, as well as the respective numbers of applications approved and rejected regarding "continue to monitor the operation of the Recycling Fund to provide support to the recycling industry" in the past 3 years; and (2) the effectiveness and expenditure involved since the launch of the Pilot Programme on Smart Recycling Systems, and the specific initiatives to be implemented in 2023-24 to expand the Programme and the estimated expenditure involved.

Asked by: Hon CHAN Kapui, Judy (LegCo internal reference no.: 18)

Reply:

(1) In the past 3 years (i.e. the financial years from 2020-21 to 2022-23 (as at 28 February 2023)), the Recycling Fund (the Fund) processed a total of 2 686 applications, among which 2 144 were approved. Apart from the 20 projects withdrawn by the applicant organisations, a total of 2 124 projects have commenced or will soon commence, involving a total funding of about \$490 million. 542 applications were not approved by the Fund.

The Environmental Protection Department (EPD) and the Advisory Committee on Recycling Fund (RFAC) have kept under review the operation of the Fund, and have been actively collecting and responding to the views of the recycling industry through various channels such as meetings with the industry, seminars, briefing sessions, etc., so as to timely introduce different enhancement measures and expand the scope of subsidy. Various new solicitation themes have been introduced to meet the needs of the recycling industry in its operation, upgrading and transformation, including adopting a smart system to collect and recycle construction and demolition waste generated from small-scale renovation works, and supporting residential buildings to adopt smart recycling bin technologies for collecting and recycling food waste, etc. in 2020. Moreover, the Government injected an additional funding of \$1 billion to the Fund in 2021 and extended the application period of the Fund to 2027, with a view to rendering continuous assistance to the recycling industry, particularly the small and medium enterprises, in enhancing their operational capabilities and efficiency to cope with the

latest needs of both the local and non-local markets. We have been actively encouraging them to upgrade and transform their operations as well as facilitating them to apply technologies to produce higher value-added products for achieving reindustrialisation, so as to reduce waste disposal at landfills and foster the development of a circular economy.

In addition, the One-off Frontline Recycling Staff Support Scheme was launched under the Fund in 2022 to provide financial support to frontline staff of the recycling business in support and recognition of their anti-epidemic efforts. Afterwards, the Fund extended the scope of rental expenses subsidy under the Enterprise Support Programme in February 2023. The EPD and the RFAC will continue to review the work and introduce enhancement measures in a timely manner to provide more appropriate support for the industry.

Managing and monitoring the implementation of the Fund and undertaking the work to enhance the Fund are part of the work of the Environmental Infrastructure Division (the work was undertaken by the Waste Reduction and Recycling Division in or before 2022) of the EPD, and are absorbed by the existing resources. In addition, the Secretariat of the Fund (i.e. the Hong Kong Productivity Council) has a dedicated team for project management and technical assessment to offer inputs on general application procedures to applicant organisations, accept and process applications, monitor the progress of approved projects and check on compliance with the funding conditions, etc. Since the preparation for the establishment of the Fund in September 2015 till March 2022, the Secretariat's expenditure on processing applications, monitoring approved projects and checking on compliance for the Fund was about \$89 million (not including the in-kind contribution of about \$31 million from the Hong Kong Productivity Council).

To enhance the community recycling services and efficiency through application of (2)technology, the EPD launched the Pilot Programme on Smart Recycling Systems (the Pilot Programme) in the fourth quarter of 2020 to test in phases smart recycling systems employing Internet of Things technology for local application. In view of the positive responses received for the initial phase of testing, we are now implementing the second phase of the Pilot Programme with the number of application points being increased extensively from 4 locations in the initial phase to about 100 locations in the second phase, covering the GREEN@COMMUNITY facilities, large housing estates and public rental housing estates, villages, shopping malls, universities, etc. The scope of technical trials has also been expanded so as to accumulate more experience. The expenditure incurred since the launch of the Pilot Programme in the fourth quarter of 2020 to the 2022-23 financial year was about \$11 million, mainly for conducting preliminary technical trials and engaging contractors for provision of equipment, as well as the repair, maintenance and back-end system operation services under the second phase of the Pilot Programme. The estimated expenditure to be incurred by the smart recycling system contracts in the 2023-24 financial year is about \$18 million. We will review the effectiveness of the Pilot Programme when adequate operational data have been collected from the smart recycling facilities, and formulate the direction for the long-term development of local application of smart recycling systems.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)041

(Question Serial No. 2601)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Please inform this Committee of: (1) the operational expenses involved and the latest planning and development regarding "continue to take forward the two landfill extension projects"; and (2) the details and expenditure involved regarding the Restored Landfill Revitalisation Funding Scheme in the past 3 years; the specific details and estimated expenditure regarding how to "continue to develop the beneficial facilities at restored landfills" in 2023-24.

Asked by: Hon CHAN Kapui, Judy (LegCo internal reference no.: 20)

Reply:

(1) The contract for the extension of the North East New Territories (NENT) Landfill was awarded in January 2022 and the site formation and construction works had commenced on 1 December 2022, with a view to starting waste intake on the same day when the existing NENT Landfill becomes exhausted in 2026. Funding for the extension works of the West New Territories Landfill was approved by the Finance Committee of the Legislative Council (LegCo) in September 2021. Tenders for the works contract were invited in August 2022, with a view to awarding the contract and commencing the works in the third quarter of 2023, and starting waste intake in 2026.

As the operation of the above 2 landfill extension projects has yet to commence, information on their operational expenses is not available.

(2) The Environmental Protection Department (EPD) is providing non-profit-making organisations and sports associations with funding support for the development of recreational facilities or other beneficial uses at restored landfills via the Restored Landfill Revitalisation Funding Scheme. Under the Funding Scheme, the E-Co Village project put forward by the Tung Wah Group of Hospitals was approved by the Finance Committee of the LegCo in June 2021. The project proposal is to develop a camp site-cum-green education ground called the E-Co Village at the restored Tseung Kwan O Stage I Landfill, to provide diversified recreational facilities for camping, green education, outdoor recreation, adventure training, farming, morning exercise, etc. to the community. The works commenced in May 2022 and the E-Co Village is expected to come into operation by end-2023. The total capital expenditure incurred by the project

over the past 3 financial years was about \$27 million and the total estimated capital expenditure and grant for operation of the project in the 2023-24 financial year is about \$62 million.

The EPD has commissioned a consultancy study in February 2021 to explore the provision of necessary infrastructure to facilitate the development of suitable beneficial uses on restored landfills more effectively in the future, having regard to the surrounding environment and site constraints of these sites. The estimated expenditure for the consultancy study, which is expected to complete by end-2023, in the 2023-24 financial year is \$4.12 million.

In addition, if organisations or groups have any suitable proposals to develop self-funded recreational or sports facilities on restored landfills and operate the facilities on a non-profit-making and self-financing basis with the support/consent of relevant policy bureaux and departments, we will actively consider and provide assistance as usual so that the restored landfills can be gainfully used and contribute to the community as soon as possible.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)042

(Question Serial No. 2603)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste (2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Please advise this Committee: (1) of the existing number of electric vehicles (EVs) in Hong Kong and its percentage in the total number of vehicles in Hong Kong; (2) of the quantities of waste EV batteries collected over the past 5 years, the measures for handling waste EV batteries and the financial commitments involved; and (3) whether the Administration has explored new measures to handle waste EV batteries; if yes, of the details.

Asked by: Hon CHAN Kapui, Judy (LegCo internal reference no.: 22)

Reply:

- (1) As at the end of December 2022, the total number of electric vehicles (EVs) registered in Hong Kong was 47 468, representing about 5.1% of the total number of vehicles.
- In general, retired EV batteries will go through preliminary treatment locally before (2)being exported to authorised treatment facilities overseas for recycling. Retired EV batteries (or waste EV batteries) are chemical waste, and have to be properly handled under the Waste Disposal Ordinance (Cap. 354) and its subsidiary legislation, Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). EV suppliers and designated maintenance workshops are required to register as chemical waste producers with the Environmental Protection Department (EPD) and arrange for proper packaging, labelling and storage of retired batteries that need to be handled. The retired batteries should then be sent to licensed chemical waste disposal facilities for preliminary treatment (including sorting, discharging and insulating) before being exported overseas In Hong Kong, all the delivery and treatment processes should be for recycling. handled by licensed chemical waste collectors and carried out at licensed disposal facilities. Besides, the export of retired batteries overseas for recycling is subject to waste import/export permit control under the Waste Disposal Ordinance. The EPD will issue the permit provided that consent from the state of import and confirmation for the retired batteries to be recycled in an environmentally sound manner can be obtained. The disposal cost of retired batteries is borne by waste producers based on the "polluterpays" principle, and the charging levels of individual collectors and disposal facilities are determined by supply and demand in the market.

Year	Total quantity
	(tonnes)
2018	17.0
2019	16.3
2020	37.9
2021	32.4
2022	69.5

The breakdown of retired lithium batteries from vehicles collected by local licensed disposal facilities for exporting to appropriate authorised treatment facilities overseas (such as South Korea and Belgium) for recycling over the past 5 years is as follows:

(3) The Hong Kong Roadmap on Popularisation of Electric Vehicles sets the policy direction for the introduction of a producer responsibility scheme (PRS) to further ensure the proper collection and handling of retired EV batteries. We are liaising with the trade and stakeholders and are conducting a business impact assessment. We will conduct a consultation on the detailed proposal of the PRS in 2023.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)043

(Question Serial No. 2746)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding the promotion of food waste reduction and recycling, please inform this Committee of: (1) the disposal and recovery rates of commercial & industrial and domestic food waste in the past 3 years; (2) the progress, the number of participating merchants, the manpower and expenditure involved, and the effectiveness of the Food Wise Hong Kong Campaign in the past 3 years, as well as the specific initiatives to be implemented under the Campaign in 2023-24 to promote food waste reduction at source and the estimated expenditure involved; (3) the progress of the "trial scheme on food waste collection in public rental housing estates" (trial scheme) since its launch, the number of participating public rental housing estates, the manpower and expenditure involved, its effectiveness, as well as the specific initiatives to be implemented under the trial scheme in 2023-24 to promote food waste reduction at source and the estimated expenditure involved, its effectiveness, as well as the specific initiatives to be implemented under the trial scheme in 2023-24 to promote food waste reduction at source and the estimated expenditure involved, its effectiveness, as well as the specific initiatives to be implemented under the trial scheme in 2023-24 to promote food waste reduction at source and the estimated expenditure involved; and (4) the details for continuing "to take forward the development of O·PARKs and food waste/sewage sludge anaerobic co-digestion facilities for the treatment of source-separated food waste" and the manpower and expenditure involved.

Asked by: Hon CHAN Kapui, Judy (LegCo internal reference no.: 17)

Reply:

(1) According to the reports on "Monitoring of Solid Waste in Hong Kong" compiled by the Environmental Protection Department (EPD), the statistics on food waste (including domestic and commercial & industrial food waste) disposed of at landfills and their recovery rates from 2019 to 2021 are tabulated below. The EPD does not have a breakdown of the recovery rates of food waste from the domestic and commercial & industrial sectors. The relevant statistics for 2022 are under compilation.

Year	Domestic food waste			ipal food waste	
Disposal quantity (tonnes/day)		Disposal quantity (tonnes/day)	Disposal quantity (tonnes/day) (c)=(a)+(b)	Recovery rate	
2019	(a) 2 286	(b) 1 067	<u> </u>	3.6%	
2020	2 477	778	3 255	4.4%	
2021	2 342	1 095	3 437	5.0%	

Note 1: The above figures may not add up to the total due to rounding

(2) The Food Wise Hong Kong Campaign (the Campaign) has been promoting a "Food Wise and Waste Less" culture and encouraging behavioural change to reduce food waste at source in the community through various schemes and activities since its launch in 2013. The major schemes and activities of the Campaign include: the "Food Wise Charter", the "Food Wise Eateries" Scheme, the "Big Waster" Facebook and Instagram pages, and the publicity activities promoting food waste reduction at source through online platforms and mobile applications, public transport network, television and radio stations, etc.

In the past 3 years, the manpower involved in the implementation of the Campaign was absorbed by the existing staff establishment of the EPD, the expenditures involved and the participation statistics are tabulated below:

Item	Expenditure involved (\$million) [Note 1]					
	2020-21	2021-22	2022-23 (Estimate)			
 Promoting the "Food Wise Charter" and the "Food Wise Eateries" Scheme Organising "Food Wise" talks 	1.54	0.86	0.47			
• The "Big Waster" Facebook and Instagram pages	0.84	1.41	1.39			
 Publicity activities 	1.07	2.13	2.02			
Total	3.45	4.40	3.88			

Table 1 Expenditures involved in the Campaign

Table 2	Partici	nation	statistics	of the	Campaign
	1 articip	Janon	statistics	or the	Campaign

	Accumulated number of participants								
Year	No. of signees of the "Food Wise Charter"	No. of eateries participating in the "Food Wise	No. of "Food Wise" talks organised and no. of attendees						
	Charter	Eateries" Scheme	[Note 2]	Facebook	Instagram				
2020	965	1 124	126 (11 627 attendees)	69 589	10 350				
2021	1 080	1 176	136 (12 257 attendees)	74 657	13 000				
2022	1 142	1 305	142 (12 594 attendees)	93 904	16 680				

Notes 1&2: Due to the COVID-19 epidemic, we have organised less promotional visits to eateries and on-site seminars, but stepped up the promotion of the "Food

Wise and Waste Less" culture through online platforms and television stations.

Since the launch of the Campaign, the per capita disposal rate of domestic food waste in Hong Kong has decreased by about 14% from 0.37 kg per day in 2013 to 0.32 kg per day in 2021. The EPD will continue to reinforce the "Food Wise and Waste Less" culture by promotion through the above-mentioned schemes and activities in 2023-24. The estimated expenditure is about \$4 million.

(3) The EPD, in collaboration with the Housing Department and the Hong Kong Housing Society, launched an 18-month trial scheme on food waste collection in public rental housing estates (trial scheme) in October 2022 to promote domestic food waste recycling. The first phase of the trial scheme covers a total of 34 blocks in 5 public rental housing (PRH) estates, in which smart recycling bins have been installed to collect food waste, with GREEN\$ points awarded to encourage residents to actively participate in food waste recycling. The estimated expenditure of the trial scheme in 2022-23 is about \$3.5 million and the manpower involved is absorbed by the existing staff establishment of the EPD. More than 240 tonnes of food waste have been collected since the launch of the trial scheme in late October 2022. The response has been positive and about 40% of the households in the participating PRH estates have used the smart recycling bins in the first 3 months.

With additional funding allocated in the 2023-24 financial year, the trial scheme will be further extended to 4 other PRH estates in the New Territories and Kowloon, including Tin Heng Estate in Tin Shui Wai, Lee On Estate in Ma On Shan, On Yam Estate in Kwai Chung and Tsz Hong Estate in Wong Tai Sin, covering 32 blocks starting from March 2023. We will continue to liaise with the Housing Department and the Hong Kong Housing Society for site selection with an aim to extending the trial scheme to cover up to 100 blocks of PRH estates in 2023-24. The EPD will closely monitor the trend of food waste collection quantity and collaborate with local groups and organisations to step up the publicity and promotion of food waste reduction and recycling in PRH estates. The estimated expenditure to be involved for extension of the trial scheme in 2023-24 is about \$13 million.

The Government is continuously expanding the food waste recycling infrastructure with (4) advanced technologies to convert unavoidable food waste into renewable energy and composting material. Organic Resources Recovery Centre Phase 1 (O·PARK1) commenced operation in 2018 and can convert 200 tonnes of food waste into electricity each day. Organic Resources Recovery Centre Phase 2 (O·PARK2) is scheduled for commissioning in 2024 with a design treatment capacity of 300 tonnes of food waste Meanwhile, the first trial scheme utilising food waste/sewage sludge each day. anaerobic co-digestion technology has commenced operation at the Tai Po Sewage Treatment Works since 2019 with a daily treatment capacity of about 50 tonnes of food The trial scheme will be extended to the Sha Tin Sewage Treatment Works for waste. commencing operation in 2023 with a daily treatment capacity of about 50 tonnes of food waste.

The manpower involved regarding the O·PARKs and the food waste/sewage sludge anaerobic co-digestion facilities is absorbed by the existing staff establishment of the

EPD and the operating costs of the existing facilities (i.e. O·PARK1 and the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po Sewage Treatment Works) in the past 3 years are tabulated below:

Financial year	Operating expenditure (\$ million)					
	O·PARK1	Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po Sewage Treatment Works				
2020-21	58	10				
2021-22	75	11				
2022-23	81	11				
(Revised Estimate)						

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)044

(Question Serial No. 2747)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(1) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Please advise this Committee of the following for the past 5 years: (1) the effectiveness of the Plastic Shopping Bag (PSB) Charging Scheme; (2) the details and effectiveness of promoting the reduction of plastic packaging materials to the relevant trade and stakeholders; and (3) the number of staff involved in the inspections for enforcing the legislation related to the PSB Charging Scheme, the number of inspections conducted and the expenditure involved; the percentage in the overall expenditure of the Department; the numbers of warnings and fixed penalty notices issued, prosecutions instituted by summons, convictions, as well as the total fines imposed each year.

Asked by: Hon CHAN Kapui, Judy (LegCo internal reference no.: 19)

Reply:

The Government implemented the first phase of the Plastic Shopping Bag (PSB) (1)Charging Scheme (the Scheme) in July 2009. The Environmental Protection Department (EPD) has been conducting PSB disposal surveys annually since 2009 in order to monitor the disposal rates of PSBs originating from various retail categories. As estimated from the landfill disposal survey, the total number of PSBs disposed of in the first year of the full implementation of the Scheme (i.e. 2015) reduced significantly by about 25%. However, we note that there was a rebound of PSB disposal in the following years. For example, the total number of PSBs disposed of in 2021 was about 4.65 billion, which is about 11% less than the disposal rate in the year before the full implementation of the Scheme (i.e. 2014), but about 11% more than the disposal rate in To maintain the effectiveness of the Scheme, we introduced enhancement 2020. measures on 31 December 2022 to increase the minimum charge per PSB from \$0.5 to \$1, remove the exemption for PSBs carrying frozen or chilled foodstuff items, and tighten the scope of exemption for PSBs carrying foodstuff items in non-airtight packaging, subject to the basic principle of 1 free PSB per single transaction.

Relevant statistics of the PSB disposal surveys conducted in the past 5 years are tabulated in the Annex.

- (2) Regarding the promotion of reducing the use of packaging materials, we have been liaising with different sectors and other key stakeholders to jointly explore and implement some practical measures. At the same time, we will continue to promote simple packaging, waste reduction at source, green business and green consumption through publicity, education and other various means. In addition, the Government is formulating Practical Guides on Packaging Reduction and Management for specific sectors. The first practical guide for the supermarket and grocery store sector was published on the Waste Reduction website of the EPD in May 2022. We are also preparing practical guides for other sectors, including the logistics and e-commerce sectors, etc., and will share them with the industry as soon as possible.
- (3) The Scheme was fully implemented on 1 April 2015 to cover all retailing businesses in the territory. The number of inspections conducted by the EPD and the enforcement statistics under the Product Eco-responsibility Ordinance (Cap. 603) in the past 5 years are as follows:

Year	No. of inspections conducted	No. of warnings issued	No. of fixed penalty notices issued ^(Note 1)	No. of prosecutions instituted by summons	No. of convictions	Total fines imposed (Note 2)
2018	21 480	0	122	5	5	\$255,900
2019	20 480	0	59	2	2	\$121,000
2020	10 653	0	62	0	0	\$124,000
2021	15 407	0	86	0	0	\$172,000
2022	15 887	0	70	0	0	\$140,000
Total (2018- 2022)	83 907	0	399	7	7	\$812,900

Note 1: The fixed penalty system was introduced in April 2015.

Note 2: The total fines include fixed penalties and penalties for convictions by summons.

In the first 2 months (as at 28 February 2023) of the implementation of the Enhanced PSB Charging Scheme (Enhanced Scheme), we had inspected about 4 100 retail points and issued a total of 7 verbal warnings. During this period, no fixed penalty notice had been issued due to non-compliance with the requirements of the Enhanced Scheme. At the same time, we had visited some 650 supermarkets or food shops in the 18 districts of the territory and found that the implementation of the Enhanced Scheme had been smooth in general. We had also arranged our staff to visit over 27 600 retail shops (including 14 200 market stalls) to promote and publicise the enhanced measures.

The relevant law enforcement is part of the integrated enforcement work of the EPD. We will arrange our law enforcement officers to conduct inspection and law enforcement work in accordance with the actual circumstances and deploy contract staff to assist with inspections and spot checks. We do not have a separate breakdown of the expenditure involved.

	2017	7	2018	8	2019)	2020		2021		
Retail categories ⁽²⁾	Million/year	%	Million/year	%	Million/year	%	Million/year	%	Million/year	%	
Supermarkets	36.78	0.83%	49.35	1.09%	52.17	1.28%					
Convenience stores	40.44	0.92%	55.80	1.24%	4.37	0.11%]				
Medicare and cosmetic stores	35.23	0.80%	45.23	1.00%	37.28	0.92%	The EPD has streamlined the waste classification since 2020. The landfill disposal surveys on PSBs have combined various retail categories.				
Sub-total Retail categories in the first phase	112.45	2.55%	150.39	3.33%	93.82	2.30%					
Other retail categories	793.79	17.96%	934.24	20.71%	775.63	19.04%					
Sub-total All retail categories	906.24	20.51%	1 084.62	24.05%	869.45	21.34%					
Source unidentified ⁽³⁾	3 512.26	79.49%	3 425.42	75.95%	3 204.17	78.66%					
Total	4 418.50	100%	4 510.04	100%	4 073.62	100%	4 175.46	100%	4 647.27	100%	

Findings of plastic shopping bag (PSB) disposal surveys⁽¹⁾ – Estimated annual disposal (by number of PSBs)

(The figures may not add up to the total due to rounding)

Notes:

1. The disposal of flat-top bags is not included.

2. The first phase of the PSB Charging Scheme, which was implemented from 7 July 2009 to 31 March 2015, was applicable to registered retailers, covering mostly large chain supermarkets, convenience stores and medicare and cosmetic stores. However, it is also possible that the PSBs bearing distinguishing features of such retailers as found in the disposal surveys might be distributed by supermarkets, convenience stores or medicare and cosmetic stores or medicare and cosmetic stores which were not registered retailers.

3. PSBs bearing no logos or signs that show their sources or PSBs that cannot be categorised.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)045

(Question Serial No. 2647)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

It is noted in Programme (1) that the Environmental Protection Department will continue to implement the pilot scheme on free collection of food waste for public premises and commercial & industrial premises, and gradually expand the scheme to collect food waste from domestic sources including implementation of a trial scheme on food waste collection in public rental housing (PRH) estates. In this connection, please advise this Committee of the following:

1) the work progress and effectiveness of the pilot scheme on free collection of food waste in 2022-23;

2) the specific details and schedule of the expansion of the scheme to collect food waste from the domestic sector in the coming year; and

3) the specific details and expected results of the implementation of the trial scheme on food waste collection in PRH estates.

<u>Asked by</u>: Hon CHAN Kin-por (LegCo internal reference no.: 30)

<u>Reply</u>:

The Environmental Protection Department (EPD) extended the scale of the Pilot Scheme on Food Waste Collection (Pilot Scheme) in 2021 by rolling out 4 two-year service contracts in phases, covering relatively clustered premises in different districts of Hong Kong, which generate larger quantities of food waste with less impurities, including public premises (such as shopping centres of public rental housing (PRH) estates, cooked food centres and public markets, catering facilities of social service organisations, canteens in tertiary institutions and hospitals, etc.) as well as private commercial & industrial premises (such as food factories, hotels, large shopping malls, airline caterers, etc.). At the same time, domestic food waste is being collected on a trial basis. The 2 contracts covering Hong Kong Island, Kowloon and Islands Districts have been rolled out, while the other 2 contracts covering the New Territories are expected to commence in April this year. The quantity of food waste collected through different channels in Hong Kong is increasing progressively, going beyond 150 tonnes per day on average. More than 450 public and private premises have participated in the Pilot Scheme. Due to the tightening of control measures during the fifth wave of the epidemic in early 2022, the food waste recovery rate under the Pilot Scheme was also affected to some extent.

The EPD, in collaboration with the Housing Department and the Hong Kong Housing Society, launched an 18-month trial scheme on food waste collection in PRH estates (trial scheme) in October 2022 to promote domestic food waste recycling. The first phase of the trial scheme covers a total of 34 blocks in 5 PRH estates, including Shek Pai Wan Estate in Aberdeen, Choi Tak Estate in Ngau Tau Kok, Sheung Tak Estate in Tseung Kwan O, Kwun Lung Lau in Kennedy Town and Lin Tsui Estate in Chai Wan, in which smart recycling bins have been installed to collect food waste. As at February 2023, a total of about 240 tonnes of food waste have been collected.

With additional funding allocated in the 2023-24 financial year, the trial scheme will be further extended to 4 other PRH estates in the New Territories and Kowloon, including Tin Heng Estate in Tin Shui Wai, Lee On Estate in Ma On Shan, On Yam Estate in Kwai Chung and Tsz Hong Estate in Wong Tai Sin, covering 32 blocks starting from March 2023. We will continue to liaise with the Housing Department and the Hong Kong Housing Society for site selection with an aim to extending the trial scheme to cover up to 100 blocks of PRH estates in 2023-24, and it is estimated that more than 1 000 tonnes of food waste can be collected.

To encourage members of the public and housing estates to participate in domestic food waste recycling, the Recycling Fund launched a solicitation scheme in 2020 for food waste recycling projects, focusing on supporting and subsidising private residential buildings to collect food waste using smart recycling bins, with a view to further enhancing the effectiveness and raising public awareness of food waste recycling.

CONTROLLING OFFICER'S REPLY

EEB(E)046

(Question Serial No. 0370)

(44) Environmental Protection Department
(700) General non-recurrent
(2) Air
Director of Environmental Protection (Samuel CHUI)
Secretary for Environment and Ecology

Question:

In Matters Requiring Special Attention in 2023-24, the Administration mentioned that it would continue to implement the EV-charging at Home Subsidy Scheme (EHSS) to promote installation of electric vehicle charging-enabling infrastructure in car parks of existing private residential buildings. Regarding the implementation of the EHSS, please inform this Committee of the following:

1. The Administration stated that more than 650 applications covering over 133 000 parking spaces had been received under the EHSS by the end of 2022. Please set out as per the table below details of the applications:

		11					
Administrative	Applicat-	Progress of	Reason(s)	Number	Estimated	Progress of	Estimated
District	ions	application	for	of	subsidy	facility	commencement
			rejection	parking	amount	installation	time of installation
	Time of	Approved		spaces		Installation	Estimated
	application	or not		applied		completed	completion time of
						or not	installation
Central and							
Western							
Wan Chai							

2. The Government launched the "EV-Charging Easy" Mobile App in June 2022 to facilitate electric vehicle drivers to search for available public chargers in real time. Please provide up-to-date information on the total number of electric private cars registered in the territory, the number of downloads of the mobile app, as well as the number of public chargers available in the territory at present: i) distribution by district and their numbers; ii) the respective average usage. Will the number of public chargers continue to increase in the future?

3. The approved commitment for the EHSS is \$3.5 billion and the revised estimated expenditure for 2022-23 is \$22 million. With the EHSS being extended to 2027-28, it is expected that whole scheme can cover about 140 000 parking spaces in some 700 car parks of the existing private residential buildings. In view of the application response, will the Administration consider requesting for further funding injection in the future? Has the Administration assessed the current effectiveness of the EHSS? If yes, what are the details? If no, what are the reasons?

Asked by: Hon CHAN Pui-leung (LegCo internal reference no.: 10)

Reply:

1. As at the end of 2022, more than 650 applications had been received under the EVcharging at Home Subsidy Scheme (EHSS). The progress of the vetting and approval of the applications and installation of electric vehicle charging-enabling infrastructure (EVCEI) are tabulated below:

/	are tabulate	1	Deces ()	N1	Estim 4 1	Dura and	E-time t 1
Administrative District	Applications	Progress of	Reason(s)	Number	Estimated Subsidy	Progress of installation	Estimated
District	(car park)	application ²	for rejection ³	of parking	Subsidy amount	of EVCEI	commence- ment time of
			rejection		(\$ million)	OIEVCEI	installation
				spaces applied	(\$ 11111011)		works
	Time of	Approved		applied		Installation	Estimated
	application ¹	or not				completed	completion
	application	01 1101				or not	time of
						01 1101	installation
							works
Central and	105	Approved: 54	(A)	10 066	301.20	Upon approv	al of the EHSS
Western	105	Rejected: 1	(11)	10 000	501.20	applications	by the
	10	Withdrawn: 0		10 754	270.40		tal Protection
Eastern	48	Approved: 31 Rejected: 0	Not	10 754	270.48	Department	(EPD),
		Withdrawn: 1	applicable			-	re required to
Southern	55	Approved: 22	Not	7 603	167.13	engage con	
		Rejected: 0 Withdrawn: 0	applicable			contractors	to design and
Wan Chai	82	Approved: 30	Not	9 341	269.49	install EV	CEI through
Wan Char	02	Rejected: 0	applicable	7 5 11	209.49	open tender	ing. It takes
		Withdrawn: 1				time for the	applicants to
Kowloon City	93	Approved: 28 Rejected: 2	(A)(B)	13 420	333.51	conduct th	ne tendering
		Withdrawn: 1				,	resolve the
Kwun Tong	9	Approved: 5	Not	3 595	53.82		sues related to
U		Rejected: 0	applicable				ion works, as
Sham Shui Po	17	Withdrawn: 0 Approved: 5	(A)	2 861	62.94		liaising with
Shahi Shui Fo	1/	Rejected: 1	(A)	2 801	02.94		ce owners to
		Withdrawn: 0					nsus over the
Yau Tsim Mong	24	Approved: 18	Not	10 027	224.31		sign of the
		Rejected: 0 Withdrawn: 0	applicable			installation.	The time
Wong Tai Sin	4	Approved: 4	Not	917	27.51		pends on the
8		Rejected: 0	applicable			actual circ	umstances of
Islands	5	Withdrawn: 0 Approved: 4	Not	2 331	54.09	each case.	
Islands	5	Rejected: 0	applicable	2 3 3 1	54.09	The EUSS 1	vas launched in
		Withdrawn: 0				October	2020 for
Kwai Tsing	6	Approved: 4	Not	1 674	44.22		As at the end
		Rejected: 0 Withdrawn: 0	applicable				2023, 11 car
North	8	Approved: 3	Not	1 933	48.63		dential estates,
	-	Rejected: 0	applicable			· .	about 1 400
Cal Vara	20	Withdrawn: 0 Approved: 9	Not	6 241	149.88	-	paces, have
Sai Kung	20	Rejected: 0		0 241	149.88		or completed
		Withdrawn: 0	applicable			the install	1
Sha Tin	49	Approved: 24	Not	17 926	364.98		to the current
		Rejected: 0 Withdrawn: 0	applicable				is anticipated
Tai Po	25	Approved: 12	(A)	5 297	146.82		of some 7 000
		Rejected: 1	()	5 257	110.02		es in about 60
T W	21	Withdrawn: 0	N-4	10 704	170.27	car parks wi	ll have EVCEI
Tsuen Wan	31	Approved: 21 Rejected: 0	Not	12 784	179.37		2023, and the
		Withdrawn: 0	applicable				ompleting the
Tuen Mun	36	Approved: 15	Not	9 002	235.35		of EVCEI for
		Rejected: 0 Withdrawn: 0	applicable			some 140	1 0
Yuen Long	35	Approved: 21	Not	7 789	172.92		bout 700 car
I wen Dong		Rejected: 0	applicable	, 10)	1,2.72		idential estates
		Withdrawn: 0		100			ved in 2027-28
Total	652	Approved: 310 Rejected: 5	Not	133 561	3,106.65	as planned.	
	<u> </u>	Withdrawn: 3	applicable				

- Note 1: Applications received from 21 October 2020 to the end of December 2022 are included.
- Note 2: The response to the EHSS was overwhelming after its launch on 21 October 2020. Over 300 applications were received as at mid-May 2021 and the total amount of subsidy earmarked for these applications had reached the original funding ceiling of \$2 billion under the EHSS. As such, the EPD had to suspend processing of the applications received after mid-May 2021 and put them on waiting list. The EPD had also notified the relevant applicants of the arrangements and made announcement on the dedicated website of the EHSS. Apart from those cases that supplementary information has not been provided as required, the EPD has completed in 2022 the processing of all applications received before mid-May The Government injected an additional funding of \$1.5 billion into the 2021. EHSS in the 2022-23 Budget with the scheme extended to 2027-28. After reviewing the implementation details of the EHSS, the EPD resumed the processing of applications on the waiting list in batches in August 2022. It is expected that the processing of some 300 applications received as at January this year can be completed within 2023.
- Note 3: Reasons for rejection:
 - (A) Applicants had already entered into contracts or agreements with third parties for the provision of EV-charging services to car park users.
 - (B) More than 60% of the total number of the eligible parking spaces are in open area.
- 2. As at the end of December 2022, the number of electric private cars registered in Hong Kong was 46 682. The Government launched the "EV-Charging Easy" Mobile App in June 2022 to provide information on real-time availabilities of public electric vehicle (EV) chargers. As at February 2023, the mobile app has recorded 7 981 downloads. Currently, only the information of EV chargers on government premises is available on the "EV-Charging Easy". We are exploring with the industry to include progressively the information of the public chargers of different parties in the mobile app to extend its coverage. On the other hand, we will further optimise its functions and promote the mobile app to the public through relevant channels such as the Internet, social media and promotional materials.

The numbers of public EV chargers by the 18 districts of Hong Kong as at the end of December 2022 are tabulated below. The Government does not have the data on the usage of public EV chargers.

	Number of chargers				
District	Standard	Medium	Quick	Sub-total	
Central and Western	46	299	47	392	
Eastern	21	227	69	317	
Southern	6	192	42	240	
Wan Chai	67	266	47	380	
Kowloon City	95	45	36	176	
Kwun Tong	561	322	108	991	
Sham Shui Po	29	182	97	308	

Total	1 453	2 983	998	5 434
Islands	16	162	46	224
Tuen Mun	14	52	30	96
Yuen Long	54	114	60	228
Sha Tin	118	314	94	526
Tai Po	30	20	17	67
North	169	136	31	336
Sai Kung	121	83	71	275
Tsuen Wan	20	201	25	246
Kwai Tsing	9	129	53	191
Yau Tsim Mong	54	180	100	334
Wong Tai Sin	23	59	25	107

To provide impetus for the market development of public charging services, the Government is preparing for the conversion of suitable petrol filling stations into quick charging stations, and the marketisation of charging services. Besides, the Hong Kong Roadmap on Popularisation of Electric Vehicles promulgated in 2021 has laid down various concrete targets for the popularisation of EVs to encourage the private sectors such as property developers, private operators of public car parks, charging service providers, etc. to proactively develop their EV charging networks and related infrastructure. We expect that the number of EV charging facilities will continue to increase in the future.

3. The application of the EHSS will close later this year and the EPD will evaluate the effectiveness of the scheme. The Government has no plan to inject additional funding into the scheme at this stage. That said, subject to the availability of fund after completing the assessment on the required amount of subsidy earmarked for the received applications, we will consider reopening the application to some of the car parks previously not covered by the scheme. The assessment is expected to be completed in 2023. We will announce in due course the eligibility and implementation details on the dedicated website of the EHSS after the review.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)047

(Question Serial No. 0371)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(000) Operational expenses
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

It is stated in the Matters Requiring Special Attention in 2023-24 that the Department will continue to prepare a pilot trial scheme for electric public light buses (e-PLBs). As indicated in Subhead 700 under Head 44, both the approved commitment of the scheme and the current balance stood at \$80 million. In this connection, please advise this Committee of the following:

1. What is the number of public light buses currently in operation across the territory? Of which, what are the respective numbers of (i) liquefied petroleum gas light buses; (ii) diesel light buses; (iii) electric light buses; (iv) petrol light buses and (v) hybrid light buses?

2. As shown in the website of the Environmental Protection Department, there are currently 6 suppliers under the List of Prequalified Suppliers of e-PLBs. What are the criteria for scrutinising eligible suppliers? Why did one of the suppliers withdraw? If yes, what are the details? If no, what are the reasons?

3. What is the latest progress of the pilot trial scheme for e-PLBs? What are the details of the use of the \$80 million approved commitment?

4. When is the pilot scheme expected to end? When are e-PLBs expected to commence operation? Has the Administration assessed the number of charging stations for light buses to be required across the territory and the relevant expenditure to be involved with the full implementation of electrification? If yes, what are the details? If no, what are the reasons?

Asked by: Hon CHAN Pui-leung (LegCo internal reference no.: 11)

<u>Reply</u>:

- 1. As at January 2023, the numbers of licensed public light buses by fuel type in Hong Kong are as follows: i) liquefied petroleum gas light buses: 3 622; ii) diesel light buses: 702; iii) electric light buses: 0; iv) petrol light buses: 0; and v) hybrid light buses: 25.
- 2. The Environmental Protection Department (EPD) engaged the Hong Kong Productivity Council to study and develop the basic technical requirements and specifications for electric public light buses (e-PLBs) and the associated charging facilities that are suitable for application in the local environment. Based on the recommendations of the study, the EPD issued the Technical Guidelines for Electric Public Light Buses and the Associated Charging Facilities (the Technical Guidelines). With reference to the

Technical Guidelines, the EPD openly invited interested electric vehicle suppliers for submitting proposals for selection as "prequalified suppliers" to supply e-PLBs under the Pilot Scheme for e-PLBs (the Pilot Scheme). After assessing the proposals received, a total of 7 suppliers were found to be in compliance with the Technical Guidelines and other prequalification requirements set out in the invitation. They have entered into agreements with the EPD in May 2022 to become "prequalified suppliers" for supplying e-PLBs for trials under the Pilot Scheme. One of the suppliers withdrew voluntarily in September 2022 due to encountering difficulties in procurement of batteries. Currently, there are a total of 6 suppliers on the list complying with the prequalification requirements.

- 3. The Government has earmarked \$80 million for the Pilot Scheme, mainly for providing quick charging services for e-PLBs under the Pilot Scheme and subsidising the operators The EPD conducted 2 briefing sessions in May and September to purchase e-PLBs. 2022 respectively and briefed the relevant public light bus operators on the details and progress of the Pilot Scheme. Positive responses were received from the public light bus operators attending the briefing sessions. Pending the type approval from the Transport Department to be obtained by the "prequalified suppliers" and verification by an independent assessor engaged by the EPD, the operators concerned will be invited to They can then choose the appropriate e-PLBs from the join the Pilot Scheme. confirmation list and apply for subsidy from the EPD to purchase the e-PLBs. We are pressing ahead with the preparatory work concerned. It is expected that the Pilot Scheme can be rolled out in the second half of 2023.
- 4. Hilly terrains, high daily mileage, high air-conditioning demand in all seasons, long charging time, as well as space and power requirements for installation of chargers all make application of e-PLBs in Hong Kong challenging. The EPD will test out the respective technologies and arrangements for the operation of e-PLBs (including comparing the performance of different models), and will collect the operational data of the e-PLBs so as to evaluate the feasibility of its application in the local context.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)048

(Question Serial No. 0372)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Administration launched an 18-month trial scheme on food waste collection in public rental housing estates (trial scheme) covering about 30 blocks at the end of October 2022. In paragraph 162 of the Budget Speech, it is stated that the trial scheme will be extended to cover up to 100 blocks of public rental housing (PRH) estates, involving about 150 000 residents. In this connection, please advise this Committee of the following:

1. Is the Administration aware of the current progress of the trial scheme in 5 PRH estates, including Shek Pai Wan Estate of Aberdeen? Please set out in details for each PRH estate: i) the blocks participating in the trial scheme and the number of households involved; ii) the number of food waste smart recycling bins to the number of blocks served; iii) the number of registered members of the GREEN\$ Electronic Participation Incentive Scheme in each block; iv) the monthly quantity (in tonnes) of food waste collected from each block; and v) the expenditure involved.

2. What is the key performance indicator (KPI) of this trial scheme? Has the Administration assessed whether the current work progress will achieve the KPI? Is the Administration aware that a similar scheme was implemented in 14 housing estates 10 years ago? Has the Administration summarised and followed up the effectiveness of the previous scheme? If yes, what are the details? If no, what are the reasons?

3. The Administration is preparing to extend the trial scheme to cover a total of 100 blocks. When is this expected to commence and which estates will be involved?

4. As some members of the public have criticised the complicated procedures (the requirements of prior registration as GREEN\$ members, scanning GREEN\$ QR code, etc.) for using the food waste smart recycling bins, will the Administration review and optimise the relevant procedures? If yes, what are the details? If no, what are the reasons?

Asked by: Hon CHAN Pui-leung (LegCo internal reference no.: 12)

Reply:

1. The Environmental Protection Department (EPD), in collaboration with the Housing Department and the Hong Kong Housing Society, launched an 18-month trial scheme on food waste collection in public rental housing estates (trial scheme) in October 2022 to promote domestic food waste recycling. The first phase of the trial scheme covers a total of 34 blocks in 5 public rental housing (PRH) estates, in which smart recycling

bins have been installed to collect food waste. The expenditure involved in the trial scheme in 2022-23 is about \$3.5 million.

PRH estate (commencement date)	No. of blocks [Note 1]	No. of households	No. of smart recycling bins	Accumulated no. of participating households [Note 2]	Average no. of participating households per day [Note 2]	Average quantity of food waste collected per month (tonnes/ month)
Shek Pai Wan Estate (30 October 2022)	9	5 200	9	2 411	936	24.3
Choi Tak Estate (6 November 2022)	8	5 700	8	1 974	594	12.9
Lin Tsui Estate (12 November 2022)	1	288	1	108	28	0.6
Sheung Tak Estate (13 November 2022)	8	5 300	8	2 099	689	17.4
Kwun Lung Lau (20 November 2022)	8	2 300	3	981	359	8.4
Total	34	18 788	29	7 573	2 606	63.6

The number of households participating in the trial scheme and the amount of food waste collected are tabulated below:

Note 1: All blocks in the PRH estates listed above are participating in the trial scheme.

Note 2: Equivalent to the number of GREEN\$ members (assuming that each participating household only uses 1 GREEN\$ account).

2&3. Starting from March 2023, the trial scheme will be further extended to 32 blocks of 4 other PRH estates, including Tin Heng Estate in Tin Shui Wai, Lee On Estate in Ma On Shan, On Yam Estate in Kwai Chung and Tsz Hong Estate in Wong Tai Sin. We will continue to liaise with the Housing Department and the Hong Kong Housing Society with an aim to extending the trial scheme to cover up to 100 blocks of PRH estates in 2023-24. In view of the current progress, we are confident that the target can be achieved in 2023-24.

The food waste recycling scheme involving 14 PRH estates launched by the Housing Department 10 years ago was experimental in nature, with the main objectives of enhancing residents' understanding of food waste recycling and exploring the effectiveness of on-site and off-site food waste treatment in PRH estates. The experience gained and the post-scheme review have facilitated the Government to plan the complementary measures for food waste recycling, mode of collection, publicity and promotion activities, etc. in an effective manner, with a view to providing a more cost-Compared with the previous food waste recycling effective service in the future. scheme, the current trial scheme provides enhanced complementary measures and rewards to encourage residents to participate in food waste recycling. The measures include the use of smart recycling bins equipped with overflow prevention and odour abatement devices to maintain environmental hygiene, coupled with the GREEN\$ points as incentives. Residents can use the GREEN\$ points to redeem gifts through the gift redemption machines installed in designated PRH estates or any recycling points of GREEN@COMMUNITY. More than 240 tonnes of food waste have been collected since the launch of the trial scheme in late October 2022. The response has been positive and about 40% of the households in the participating PRH estates have used the smart recycling bins in the first 3 months, which is 5 times higher than the participation rate of the previous scheme implemented by the Housing Department.

4. The EPD regularly arranges green ambassadors to step up the publicity and education of the trial scheme in the participating PRH estates, showing residents how to use smart recycling bins, as well as assisting them to download the GREEN\$ Mobile App and register as members so that they can earn GREEN\$ points and redeem gifts by recycling We are also distributing GREEN\$ cards to those in need, such as the food waste. elderly and residents who do not have smartphones, in the 5 PRH estates under the first phase of the trial scheme. Besides, residents can borrow communal GREEN\$ cards from the information counters of the participating blocks to activate the smart recycling The process of food waste recycling is in fact very simple. Residents can bins. activate the smart recycling bin by simply scanning the QR code on the GREEN\$ Mobile App or GREEN\$ card. They can deposit food waste into the bin after the top cover is open. The cover will then close automatically and the GREEN\$ points will be credited to the GREEN\$ account of the residents instantly.

EEB(E)049

(Question Serial No. 0403)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

It is stated in the Matters Requiring Special Attention in 2023-24 that the Department will introduce the legislative proposal for the Producer Responsibility Scheme on plastic beverage containers and beverage cartons, and continue to implement the pilot scheme on reverse vending machines (RVMs) to assist in recovery of suitable beverage containers. Please advise this Committee of the following:

1. What are the implementation progress and effectiveness of the pilot scheme on RVMs launched in the first quarter of 2021 and the second quarter of 2022? What are the expenditure and manpower involved?

2. What are the specific plan, the expenditure and manpower involved, as well as the expected results of the pilot scheme on RVMs in the next year?

3. To enhance the recovery rate of plastic beverage containers, will the Administration consider increasing the amount of instant rebate of RVMs?

4. Which recyclers are the recovered plastic beverage containers handed over to? How are they charged? What specific measures have the recyclers adopted to ensure that the transformation of waste into resources can achieve the expected targets?

5. Has the Administration considered any plans to reduce the use of plastic beverage containers and beverage cartons at source? If yes, what are the details?

Asked by: Hon CHAN Pui-leung (LegCo internal reference no.: 28)

<u>Reply</u>:

1 to 4. The Environmental Protection Department (EPD) launched the Reverse Vending Machine (RVM) Pilot Scheme (Stage 1) in the first quarter of 2021 to test out their application in Hong Kong. A total of 60 RVMs were set up at locations with suitable foot traffic with an instant rebate (\$0.1 per plastic beverage container) provided via e-payment platforms to encourage the public to recycle plastic beverage containers. Stage 2 of the RVM Pilot Scheme was launched in the second quarter of 2022 with the number of RVMs increased to 120. Positive responses have been received so far since the launch of the RVM Pilot Scheme, and the Government has no intention at this stage to increase the amount of rebate. As at the end of February 2023, over 46 million plastic beverage containers have been collected for delivery to local recyclers for recycling.

The daily operation and management of the RVM Pilot Scheme is undertaken by the Government-appointed contractor. According to the contract terms, the contractor is required to collect the plastic beverage containers stored inside RVMs, and then deliver them to suitable local recyclers as consented by the Government for proper treatment and recycling. The contractor is also required to submit to the EPD statistics on the plastic beverage containers collected by RVMs and quantities of the plastic beverage containers delivered to recyclers, together with relevant documents for verification. The EPD will also deploy staff to carry out inspections at the facilities concerned from time to time to ensure that the plastic beverage containers collected under the RVM Pilot Scheme are properly treated and recycled, thereby turning waste into resources.

As regards the expenditure, the actual or estimated expenditure for the RVM Pilot Scheme in the 2021-22, 2022-23 and 2023-24 financial years are about \$16 million, \$30 million and \$34 million respectively, mainly for engaging a contractor to operate the Scheme (the Government did not pay any fees to recyclers). As the running of the RVM Pilot Scheme is an integral part of the work of the Waste Management Division under the EPD, there is no separate breakdown of the manpower involved.

5. To reduce the consumption of plastic bottled water and plastic waste generation at source and to inculcate the "bring your own bottle" culture, the Government takes the lead in ceasing the sale of plastic bottled water measuring 1 litre or less in the automatic vending machines in government premises. Besides, the EPD is conducting a pilot scheme to encourage students to nurture the "bring your own bottle" culture in daily lives. We provide smart water dispensers with exteriors designed by students to about 100 primary and secondary school campuses via contractors, and support the schools to carry out relevant education and experiential activities, such as signing a charter to cease the sale of bottled water, for conveying green messages such as waste reduction at source and clean recycling to students in an interactive approach. Meanwhile, about 500 water dispensers will be installed progressively at government premises to encourage the public to bring their own bottles with drinking water before going out and refill water from water dispensers at nearby government premises or other places. The Government aims to take the lead by implementing the above measures to encourage enterprises and public organisations to set up water dispensers at their own premises for public use and join hands with the Government to promote waste reduction at source. In addition, we plan to adopt a "market-based model" for the implementation of the Producer Responsibility Scheme on Plastic Beverage Containers and Beverage Cartons under which suppliers can make their own arrangement for the recovery of both products for proper recycling or engage scheme operators providing recycling service in the market and pay recycling fees Such arrangement can enshrine the "polluter-pays" principle on one to them. hand and encourage suppliers to use beverage packaging which is relatively easy to recycle on the other, with a view to reducing the use of plastic beverage containers and beverage cartons at source.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)050

(Question Serial No. 1890)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(603) Plant, vehicles and equipment
Programme:	(4) Water
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Under Sub-head 603, one of the items is to procure one marine water quality monitoring vessel for replacement of "Dr Catherine Lam". The revised estimated expenditure for 2022-23 is \$87,000 and the balance is \$123,171,000. In this connection, please advise this Committee of the following:

1. The procurement plan for the marine water quality monitoring vessel, the work progress and the expected completion time of the replacement;

2. The spending details of the revised estimated expenditure of \$87,000 for 2022-23; and

3. The operating condition of "Dr Catherine Lam", and whether the effectiveness of the existing marine water quality monitoring work has been affected.

Asked by: Hon CHAN Pui-leung (LegCo internal reference no.: 36)

<u>Reply</u>:

- 1. The Marine Department has engaged a design consultant to prepare the technical documents, which are expected to be ready in the third quarter of this year for the tender exercise to commence. The two-year procurement and construction process for the new vessel is scheduled to commence in the third quarter of 2024, with delivery expected in the fourth quarter of 2026.
- 2. The revised estimated expenditure of \$87,000 for 2022-23 is part of the payment for the design consultancy services, which is expected to be settled within this financial year.
- 3. The hull of "Dr Catherine Lam" is made of steel. Since 1993, the vessel has been in service for over 30 years, exceeding the expected service life of 20 years in general. After long years of service, the repair and maintenance frequency required for the vessel has increased. When "Dr Catherine Lam" was out-of-service for machinery inspection and repair, the Environmental Protection Department would charter other suitable vessels temporarily for monitoring marine water quality to ensure that our work would not be interrupted.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)051

(Question Serial No. 2492)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(000) Operational expenses
Programme:	(-) Not specified
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Administration stated that the establishment as at 31 March 2023 will be 2 156 posts including 2 supernumerary posts. It is expected that there will be a net decrease of 11 posts in 2023-24. Please advise this Committee of the details of the net decrease of the posts concerned, including the post titles, ranks, salaries, job duties and areas of work, as well as whether these posts are permanent or supernumerary. The Administration also stated that there is an increase of \$392,795,000 (11.6%) in the provision under Subhead 000 "Operational expenses" over the revised estimate for 2022-23, which is mainly due to increased requirement for departmental expenses in connection with measures on waste reduction. Please provide the details and expenditures of the relevant waste reduction initiatives.

Asked by: Hon CHAN Pui-leung (LegCo internal reference no.: 41)

Reply:

There will be a net decrease of 11 time-limited posts under the Environmental Protection Department (EPD) in 2023-24, which are mainly responsible for the work related to air science, waste management, waste reduction and recycling at community level, water quality management and the development of electric vehicle charging network. Details of the posts concerned are as follows:

Post title	Rank	Salary	Net decrease of post(s)
Senior Project Manager 134	Senior Architect	Master Pay Scale (MPS) Point 45 to 49	-1
Electrical and Mechanical Engineer (Electric Vehicle)12	Electrical and Mechanical Engineer / Assistant Electrical and Mechanical Engineer	MPS Point 32 to 44 (Electrical and Mechanical Engineer) MPS Point 18 to 27 (Assistant Electrical and Mechanical Engineer)	-1
Assistant Environmental Protection Officer (Air Science and Modelling)64 Assistant Environmental Protection Officer (Restored Landfills)31 Assistant Environmental Protection Officer (Waste Management and Strategy)33	Environmental Protection Officer / Assistant Environmental Protection Officer	MPS Point 27 to 44 (Environmental Protection Officer) MPS Point 16 to 21 (Assistant Environmental Protection Officer)	-3
Senior Environmental Protection Inspector (Resources Recovery)12 Senior Environmental	Senior Environmental Protection Inspector	MPS Point 22 to 28	-2
Protection Inspector (Resources Recovery)31 Environmental Protection	Environmental Protection	MPS Point 8 to 21	-3
Inspector (Air Science and Modelling)63 Environmental Protection Inspector (Resources Recovery)13 Environmental Protection Inspector (Water Quality Management)35	Inspector		
Personal Secretary II	Personal Secretary II	MPS Point 4 to 15	-1
<i>y</i>	5	Total	-11

The estimate for operational expenses of the EPD for 2023-24 is higher than the revised estimate for 2022-23 by 390 million (11.6%), which is mainly due to the increased provision for waste management initiatives, including the implementation of municipal solid waste

charging, extension of food waste collection service and launching of the Pilot Programme on Smart Recycling Systems.

The above increase in expenses is partly offset by the reduction of provision for operating expenses arising from the re-organisation of the Environment Branch of the Environment and Ecology Bureau and the EPD with effect from 1 January 2023.

EEB(E)052

(Question Serial No. 1365)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Administration stated that it would continue to implement the pilot scheme on free food waste collection for public and commercial & industrial premises. It is also stated in the Budget Speech that an additional funding of \$62 million will be allocated to expand the scope of food waste collection to cover more public and private premises in 2023-24. The trial scheme on food waste collection in public rental housing estates will also be extended to cover a total of 100 blocks. In this connection, please advise this Committee of the following:

(1) What were the total expenditures for free food waste collection for public and commercial & industrial premises in the past 3 years? What were the quantities of food waste recovered? In which districts were those public and commercial & industrial premises located? Please tabulate the breakdown by the types and numbers of the participating premises in each of the 18 districts in Hong Kong.

(2) The Administration will extend the trial scheme on food waste collection in public rental housing estates to cover a total of 100 blocks. Please list out the blocks involved. What is the total expenditure for extending the trial scheme?

Asked by: Hon CHAN Siu-hung (LegCo internal reference no.: 1)

Reply:

(1) To promote food waste recycling, the Environmental Protection Department (EPD) extended the scale of the Pilot Scheme on Food Waste Collection (Pilot Scheme) in 2021 by rolling out 4 two-year service contracts in phases, covering relatively clustered premises in different districts of Hong Kong, which generate larger quantities of food waste with less impurities, including public premises (such as shopping centres of public rental housing (PRH) estates, cooked food centres and public markets, catering facilities of social service organisations, canteens in tertiary institutions and hospitals, etc.) as well as private commercial & industrial premises (such as food factories, hotels, large shopping malls, airline caterers, etc.). The first food waste collection service contract covering Hong Kong Island (including Islands District) and the second one covering Kowloon (including Tsuen Wan, Kwai Tsing and Tseung Kwan O) have come into operation in September 2021 and February 2022 respectively. The other 2 contracts covering New Territories East (including Sha Tin, Tai Po and North District) and New Territories West (including Tuen Mun and Yuen Long) are expected to commerce in

April this year. Please refer to Tables 1 and 2 for the expenditure involved, quantity of food waste recovered and number of participating premises in various districts under the Pilot Scheme.

Table 1 The expenditure involved and quantity of food waste recovered from public and	
commercial & industrial premises under the Pilot Scheme	

Financial year	Expenditure involved (\$ million)	Year	Quantity of food waste recovered from public and commercial & industrial premises (tonnes/year) [Note 1]
2020-21	35.1	2020	36 133
2021-22	39.9	2021	48 986
2022-23	67.0 [Note 2]	2022	48 648 [Note 3]
	(estimated expenditure)		

Note 1: Quantity of food waste recovered refers to the total amount of food waste collected from public and commercial & industrial premises and treated by O·PARK1 and the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po Sewage Treatment Works in the respective year. Organisations subsidised by the Government and voluntarily participated in source separation and collection of food waste have been covered.

- Note 2: The EPD has rolled out 4 food waste collection service contracts in phases. The contracts covering Hong Kong Island (including Islands District) and Kowloon (including Tsuen Wan, Kwai Tsing and Tseung Kwan O) commenced in September 2021 and February 2022 respectively.
- Note 3: The overall quantity of food waste recovered from commercial & industrial premises was lower than that of 2021. This was due to the fifth wave of the epidemic in 2022, during which the catering industry had suspended their business or shortened their business hours and some markets with confirmed cases detected had to be closed for cleaning and disinfection.

District	No. of public and commercial & industrial premises [Note 4]				
District -	2020	2021	2022		
Kowloon City	9	10	18		
Tai Po	32	26	27		
Central & Western	20	33	54		
Yuen Long	14	12	9		
Tuen Mun	15	11	17		
North	11	9	9		
Sai Kung	6	7	12		
Sha Tin	22	20	23		
Eastern	17	22	25		
Yau Tsim Mong	28	26	43		
Southern	14	21	25		
Tsuen Wan	13	12	21		
Sham Shui Po	9	8	17		

Table 2 The number of participating public and commercial & industrial premises in various districts

District	No. of public and commercial & industrial premises [Note 4]			
District	2020	2021	2022	
Wong Tai Sin	7	7	10	
Kwai Tsing	18	17	33	
Islands	7	15	16	
Wan Chai	21	25	34	
Kwun Tong	20	19	30	
Total	283	300	423	

Note 4: Premises subsidised by the Government and voluntarily participated in source separation and collection of food waste have been covered. The EPD does not have a breakdown by the types of participating premises in each district.

(2) The EPD, in collaboration with the Housing Department and the Hong Kong Housing Society, launched an 18-month trial scheme on food waste collection in PRH estates (trial scheme) in October 2022 to promote domestic food waste recycling. The first phase of the trial scheme covers a total of 34 blocks in 5 PRH estates, including Shek Pai Wan Estate in Aberdeen, Choi Tak Estate in Ngau Tau Kok, Sheung Tak Estate in Tseung Kwan O, Kwun Lung Lau in Kennedy Town and Lin Tsui Estate in Chai Wan, in which smart recycling bins have been installed to collect food waste. GREEN\$ points are awarded under the scheme to encourage residents to actively participate in food waste recycling. The estimated expenditure of the trial scheme in 2022-23 is about \$3.5 million.

With additional funding allocated in the 2023-24 financial year, the trial scheme will be further extended to 4 other PRH estates in the New Territories and Kowloon, including Tin Heng Estate in Tin Shui Wai, Lee On Estate in Ma On Shan, On Yam Estate in Kwai Chung and Tsz Hong Estate in Wong Tai Sin, covering 32 blocks starting from March 2023. We will continue to liaise with the Housing Department and the Hong Kong Housing Society for site selection with an aim to extending the trial scheme to cover up to 100 blocks of PRH estates in 2023-24. The estimated expenditure to be involved for extension of the trial scheme in 2023-24 is about \$13 million.

EEB(E)053

(Question Serial No. 1366)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Environmental Protection Department stated that it would continue to implement the territory-wide waste paper collection and recycling services to collect waste paper for further processing and selling to various markets for recycling, and continue to take forward the development of a modern pulping facility in EcoPark, Tuen Mun to diversify outlets for our local waste paper. In this connection, please advise this Committee of the following:

(1) What is the progress of the development of a modern pulping facility in EcoPark, Tuen Mun?

(2) It is noted that the Administration has earmarked \$300 million a year for supporting local waste paper recycling since 2020-21. Please set out the total expenditure incurred for supporting local paper recycling and the amount of waste paper recovered in each fiscal year since 2020-21.

<u>Asked by</u>: Hon CHAN Siu-hung (LegCo internal reference no.: 2)

<u>Reply</u>:

- (1) The Environmental Protection Department (EPD) has awarded a tenancy agreement for the development of a large-scale modern pulping facility in EcoPark, Tuen Mun in 2022. Advance site investigation has been completed and the tenant is currently working on the detailed design of the facility. Construction work is expected to begin in the second quarter of this year for the facility to commence operation in 2025. There will then be more diversified outlets for local waste paper.
- (2) The EPD has engaged a number of contractors to commence territory-wide waste paper collection and recycling services in September 2020. The expenditure incurred and quantity of waste paper recovered in each financial year are tabulated below:

Financial Year	Actual expenditure ⁽²⁾	Quantity of waste paper
	(\$ million)	recovered
		(thousand tonnes)
2020-21	127	295
2021-22	325	593
2022-23 ⁽¹⁾	320	585

Note

1: Evaluated based on the actual and estimated quantity recovered.

2: Operation fee for the service contractors would be verified and paid after the waste paper has been processed and sold to the destinations.

EEB(E)054

(Question Serial No. 1367)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Government launched the \$2 billion EV-charging at Home Subsidy Scheme (EHSS) in October 2020 and injected an additional funding of \$1,500 million in 2022-23. More than 650 applications covering over 133 000 parking spaces were received by the end of 2022. In this connection, please advise this Committee of the following:

(1) the number of applications of which the installation works of electric vehicle chargingenabling infrastructure have been completed for operation since the launch of the EHSS, the number of parking spaces involved and the amount of subsidy granted; and

(2) the latest progress of the conversion of petrol filling stations to quick charging stations and the marketisation of charging services.

<u>Asked by</u>: Hon CHAN Siu-hung (LegCo internal reference no.: 3)

<u>Reply</u>:

- (1) The EV-charging at Home Subsidy Scheme (EHSS) was launched in October 2020 for application. Upon approval of the EHSS applications by the Environmental Protection Department (EPD), applicants are required to engage consultants and contractors to design and install electric vehicle charging-enabling infrastructure (EVCEI) through open tendering. It takes time for the applicants to conduct the tendering exercise, resolve the technical issues related to the installation works, as well as liaising with parking space owners to reach consensus over the detailed design of the installation. As at the end of January 2023, a total of 315 applications were approved by the EPD and the applicants have started engaging consultants and contractors progressively to arrange for the installation of EVCEI. Among them, 11 car parks of residential estates, covering about 1 400 parking spaces, have commenced or completed the installation works, involving a total subsidy of more than \$40 million.
- (2) The Government is exploring the feasibility of converting progressively some of the existing petrol filling stations to quick charging stations in the medium to long term for charging various types of vehicles, so as to support a more diversified charging infrastructure to cope with different needs. To this end, we are liaising with the relevant government departments regarding site selection and tenancy arrangements of

the sites etc. We plan to invite tenders in 2023-24 for the conversion of the first petrol filling station site to a quick charging station.

As for bringing forward the marketisation of EV charging services, the Government is installing self-service payment kiosks for EV chargers and updating related software system at several government car parks in phases to prepare for the marketisation of EV charging services. The first phase of installation works has commenced in the Kwai Fong Car Park for testing in the first half of this year to tie in with the imposition of EV charging fees in government car parks progressively from the second half of this year. This is ahead of schedule the target of imposing EV charging fees in government car parks in around 2025 as set out in the Hong Kong Roadmap on Popularisation of Electric Vehicles, with a view to expediting the marketisation of EV charging its sustainable development in the long term.

EEB(E)055

(Question Serial No. 1368)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

As stated by the Administration, the "EV-Charging Easy" Mobile App was launched in June 2022 to facilitate electric vehicle (EV) drivers to search for available public chargers in real time. In this connection, please advise this Committee of the following:

(1) What is the current number of public EV charging facilities in Hong Kong? Of which, what are the respective numbers and charging speed of those installed in car parks managed by the Government and other organisations? Please provide a breakdown by the 18 districts of Hong Kong.

(2) What is the expenditure involved in developing the "EV-Charging Easy" Mobile App?

(3) Which organisations are providing information on public chargers to the "EV-Charging Easy" Mobile App? Please list out the relevant organisations and the number of chargers involved.

(4) Will the information on public chargers provided by the relevant organisations be directly uploaded to the "EV-Charging Easy" Mobile App or submitted to the Environmental Protection Department or other government departments before being uploaded to the mobile app? If it is the latter case, how to ensure that the information is released in real time?

<u>Asked by</u>: Hon CHAN Siu-hung (LegCo internal reference no.: 4)

<u>Reply</u>:

(1) The number of public electric vehicle (EV) chargers managed by the Government and other organisations by the 18 districts of Hong Kong as at the end of December 2022 are tabulated below:

		Number of chargers								
	Standard			Medium			Quick			
District	Government	Other organisations	Government		Other organisations	Sub- total	Government	Other organisations	Sub- total	Total
Central and Western	35	11	46	273	26	299	0	47	47	392
Eastern	5	16	21	179	48	227	0	69	69	317
Southern	0	6	6	57	135	192	0	42	42	240
Wan Chai	18	49	67	192	74	266	0	47	47	380

	Number of chargers									
	S	standard		Medium			Quick			
District	Government	Other organisations	Sub- total	Government	Other organisations	Sub- total	Government	Other organisations	Sub- total	Total
Kowloon City	63	32	95	24	21	45	0	36	36	176
Kwun Tong	59	502	561	43	279	322	3	105	108	991
Sham Shui Po	23	6	29	94	88	182	0	97	97	308
Wong Tai Sin	5	18	23	41	18	59	0	25	25	107
Yau Tsim Mong	0	54	54	9	171	180	0	100	100	334
Kwai Tsing	5	4	9	112	17	129	6	47	53	191
Tsuen Wan	7	13	20	178	23	201	0	25	25	246
Sai Kung	14	107	121	35	48	83	0	71	71	275
North	130	39	169	49	87	136	0	31	31	336
Tai Po	28	2	30	16	4	20	0	17	17	67
Sha Tin	103	15	118	141	173	314	0	94	94	526
Yuen Long	14	40	54	77	37	114	0	60	60	228
Tuen Mun	3	11	14	37	15	52	0	30	30	96
Islands	11	5	16	117	45	162	4	42	46	224
Total	523	930	1 453	1 674	1 309	2 983	13	985	998	5 434

(2) The expenditure involved in developing the "EV-Charging Easy" Mobile App is about \$482,000, which includes the development cost of the app and maintenance cost for the first 2 years.

(3)&(4) Currently, the "EV-Charging Easy" Mobile App only provides information of EV chargers on government premises, involving about 1 600 chargers. We are exploring with the industry to include progressively the information of the public EV chargers of different parties in the mobile app to extend its coverage. In future, the information of the public EV chargers provided by these organisations will be directly uploaded to the "EV-Charging Easy" Mobile App, so as to ensure the information is released in real time.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)056

(Question Serial No. 1369)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(700) General non-recurrent
Programme:	(-) Not specified
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

It is revealed in the Budget that the \$80 million earmarked for the Pilot Scheme for Electric Public Light Buses (e-PLBs) has remained unused over the past 2 financial years. Also, it is noted that the Environmental Protection Department (EPD) has granted approval to 6 prequalified suppliers of e-PLBs. In this connection, please advise this Committee of the following:

(1) What is the latest progress of the Pilot Scheme for e-PLBs? What is the number of suppliers whose e-PLBs have obtained vehicle type approval from the Transport Department and confirmation from independent assessors engaged by the EPD?

(2) How many public light bus operators have applied for subsidy to purchase e-PLBs?

(3) As shown in the website of the EPD, one of the prequalified suppliers of e-PLBs with approval granted has withdrawn from the Pilot Scheme. What are the reasons?

<u>Asked by</u>: Hon CHAN Siu-hung (LegCo internal reference no.: 5)

<u>Reply</u>:

(1) & (3)The Environmental Protection Department (EPD) engaged the Hong Kong Productivity Council to study and develop the basic technical requirements and specifications for electric public light buses (e-PLBs) and the associated charging facilities that are suitable for application in the local environment. Based on the recommendations of the study, the EPD issued the Technical Guidelines for Electric Public Light Buses and the Associated Charging Facilities (the Technical With reference to the Technical Guidelines, the EPD openly Guidelines). invited interested electric vehicle suppliers for submitting proposals for selection as "prequalified suppliers" to supply e-PLBs under the Pilot Scheme for e-PLBs (the Pilot Scheme). After assessing the proposals received, a total of 7 suppliers were found to be in compliance with the Technical Guidelines and other prequalification requirements set out in the invitation. They have entered into agreements with the EPD in May 2022 to become "prequalified suppliers" for supplying e-PLBs for trials under the Pilot Scheme. One of the suppliers withdrew voluntarily in September 2022 due to encountering difficulties in procurement of batteries. Currently, there are a total of 6 suppliers on the list complying with the prequalification requirements.

(2) The Government has earmarked \$80 million for the Pilot Scheme, mainly for providing quick charging services for e-PLBs under the scheme and subsidising public light bus operators to purchase e-PLBs. The EPD conducted 2 briefing sessions in May and September 2022 respectively and briefed the relevant public light bus operators on the details and progress of the Pilot Scheme. Positive responses were received from the public light bus operators attending the briefing sessions. Pending the type approval from the Transport Department to be obtained by the "prequalified suppliers" and verification by an independent assessor engaged by the EPD, the operators concerned will be invited to join the They can then choose the appropriate e-PLBs from the Pilot Scheme. confirmation list and apply for subsidy from the EPD to purchase the e-PLBs. We are pressing ahead with the preparatory work concerned. It is expected that the Pilot Scheme can be rolled out in the second half of 2023.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)057

(Question Serial No. 1370)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(297) Fees for operation of waste management facilities
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

It is revealed in the Budget that there will be an increase of more than \$479 million in the estimated expenditure regarding the "Fees for operation of waste management facilities" for contract payments for the operation of waste management facilities. In this connection, please advise this Committee of the following:

(1) What are the breakdown of fees for waste management facilities, including the Chemical Waste Treatment Centre, refuse transfer stations, landfills, T·PARK, WEEE·PARK, O·PARK1 and Y·PARK in 2021-22 and 2022-23?

(2) What are the increase in the estimated expenditure for each waste management facility in 2023-24?

Asked by: Hon CHAN Siu-hung (LegCo internal reference no.: 6)

<u>Reply</u>:

(1) & (2) Under Subhead 297 "Fees for operation of waste management facilities" from 2021-22 to 2023-24, the contract payments by major waste management facilities and the increase in estimated expenditure for such facilities in 2023-24 are tabulated below:

	2021-22 Actual (\$m)	2022-23 Revised Estimate (\$m)	2023-24 Estimate (\$m)	2023-24 Estimate vs. 2022-23 Revised Estimate (\$m)
South East New	237	266	383	+117
Territories Landfill				
West New	350	299	451	+152
Territories Landfill				
North East New	356	511	652	+141
Territories Landfill				
Refuse Transfer	769	722	722	-
Stations				
Aftercare of restored landfills	118	129	145	+16

Chemical Waste	269	285	271	-14
Treatment Centre				
Animal Waste	24	26	25	-1
Composting Plant				
T·PARK	280	311	320	+9
WEEE·PARK	203	203	212	+9
O·PARK1	75	81	93	+12
Y·PARK	37	30	32	+2
Pilot Biochar	-	1	31	+30
Production Plant in				
EcoPark				
Other facilities	22	22	29	+7
Total	2,740	2,886	3,366	+480

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)058

(Question Serial No. 1371)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(700) General non-recurrent
Programme:	(-) Not specified
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

As mentioned in the Budget, the Government has set aside \$350 million to subsidise ferry operators for trials of electric ferries and the related charging facilities, and the cumulative expenditure has stood at \$3.268 million so far. In this connection, please advise this Committee of the following:

(1) What is the progress of the construction and trials of electric ferries and the related charging facilities by the 4 ferry operators?

(2) Where has the cumulative expenditure been spent?

(3) The trials of electric ferries are expected to commence in 2024. What are the main tasks involved at the current stage?

<u>Asked by</u>: Hon CHAN Siu-hung (LegCo internal reference no.: 7)

<u>Reply</u>:

- (1)&(3)The Government is preparing to launch the Pilot Scheme for Electric Ferries (Pilot Scheme) in 4 in-harbour ferry routes, with a view to testing out the technical viability of adopting electric ferries (e-ferries) in Hong Kong. The Government has earmarked \$350 million to provide full subsidies to ferry operators for constructing 4 e-ferries and the associated charging facilities, as well as the operational, maintenance and repair expenditures incurred for operating the eferries during the 24-month trial period. The costs involved will be calculated based on the actual operation. The Environmental Protection Department has entered into subsidy agreements with 4 in-harbour ferry operators, among which 3 of them have commenced the open tendering processes for the procurement of eferries and are evaluating the tenders received. Taking into account the lead time to construct the e-ferries and the associated charging facilities, we anticipate that the Pilot Scheme would commence by 2024 at the earliest.
- (2) The cumulative expenditure of the Pilot Scheme has stood at about \$3.3 million so far, mainly for engaging consultants to draw up specifications for the e-ferries,

design and plan the construction works of charging facilities at the ferry piers, as well as preparing the subsidy agreements and related contracts for the Pilot Scheme.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)059

(Question Serial No. 2135)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(4) Water
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Issues related to redevelopment and sewerage discharge of small houses in the New Territories

Some small houses in the New Territories are connected to the public sewerage network. In the North District, there is a case where a small house was not allowed to reconnect to the public sewerage network when applying for redevelopment and a septic tank had to be installed. In this connection, please advise this Committee of the following:

1. Please explain why the small house previously connected to the public sewerage network was not allowed to reconnect to the network after redevelopment;

2. Further to the above, can the Government pledge to allow small houses previously connected to the public sewerage network to stay connected to the network after redevelopment?

3. Will the Government upgrade and expand the capacity of the public sewerage network in rural areas so that new small houses can connect to the nearby public sewerage network?

Asked by: Hon CHAN Yuet-ming (LegCo internal reference no.: 18)

Reply:

When processing applications for connecting to the public sewerage network submitted by small houses in the New Territories (including those applying for redevelopment), the Government will take into account factors including the coverage of the existing sewerage network, capacity of sewage pipes and treatment capacity of sewage treatment facilities. Generally speaking, small houses in the New Territories can stay connected to the previous sewerage system after redevelopment. For rare cases where there are difficulties with connection after redevelopment, the Government would look into the actual situation and offer help accordingly

The Government will take into account the level of improvement to the environment by the village sewerage programme, density of village population, preference of residents, technical feasibility, cost effectiveness, resources availability, etc. in taking forward the progressive extension and expansion of relevant sewerage systems, so that new small houses can connect to the nearby public sewerage systems.

EEB(E)060

(Question Serial No. 2136)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Landfills

With regard to the captioned waste management facilities, please inform this Committee of the following:

1 Given that the operation and extension works of the North East New Territories (NENT) Landfill have seriously affected nearby residents, the Administration has put forward a series of improvement measures. However, has the Administration set any performance indicator to demonstrate its commitment to further mitigate the impact of the landfill on residents and development?

2 Regarding the operation of the NENT Landfill, what is the regular communication mechanism with Shenzhen authorities? How will the information concerning landfill problems be reported and exchanged for follow-up actions?

3 The NENT Landfill will stop receiving waste upon completion of the 2 incineration facilities. What is the anticipated schedule for its closure? When will be the restoration works expected to complete?

4 Upon closure of the 2 landfills in the New Territories in future, having regard to the need to dispose of construction waste and other waste at landfills, will uninhabited islands be considered for constructing landfills?

Asked by: Hon CHAN Yuet-ming (LegCo internal reference no.: 19)

<u>Reply</u>:

1. To enhance the operation of the North East New Territories (NENT) Landfill and strengthen control over potential odour emission during waste transportation and tipping, the Environmental Protection Department (EPD) has progressively rolled out various improvement measures since mid-2021 (please see Annex for details). The EPD also commissioned a professional body (the Hong Kong Productivity Council) to carry out independent monitoring of different parameters, including hydrogen sulphide and odour intensity, at the Liantang/Heung Yuen Wai area and also the nearby villages in Hong Kong since end-2021, with a view to enhancing public acceptance of the monitoring data. Real-time monitoring of the concentrations of hydrogen sulphide along the boundaries of the landfill has also been carried out, with a dedicated website setup to publicise the monitoring data. The EPD has allocated an additional funding

of \$160 million to implement the above improvement measures. It is anticipated that the increase in operating cost will be about \$110 million starting from 2023-24.

Apart from improving landfill operation, we also suggest trying out other technologies for livestock waste treatment. On pig waste treatment, we propose to send about 10 tonnes of pig waste per day to $O \cdot PARK$ of the EPD or the sewage treatment plants of the Drainage Services Department to trial the anaerobic digestion technology to properly degrade pig waste and produce biogas in the process for renewable electricity generation. Besides, we are carrying out a trial using black soldier flies bioconversion technology to turn about 10 tonnes of chicken waste per day into protein-rich animal feed and compost. It is estimated the total operating expenditure to be incurred in 2023-24 will be about \$27 million.

The EPD has injected additional resources to improve the environment of the NENT Landfill as early as possible. The final restoration and greening works of the NENT Landfill, originally scheduled for 2026 upon completion of its landfilling operation, has been advanced to end-2021 and the operational areas where landfilling is completed are progressively capped with impermeable permanent liners, and restoration works including installation of drainage systems and plantation are conducted to form a natural landscape. It is expected that 80% of the operational areas where landfilling is completed will have restoration and greening works accomplished by end-2023. Starting from March 2023, we will also make reference to the successful cases of landfill sites in the Mainland to apply impermeable plastic liners and install gas extraction facilities at appropriate locations of the operational areas, with a view to improving the odour emission control and the overall appearance of the NENT Landfill as soon as possible, thereby minimising the "Not In My Backyard" (NIMBY) effect and the associated odour and visual impact.

The contract for the extension of the NENT Landfill was awarded in January 2022. The extension project has included and complied with the requirements of the environmental impact assessment report and environmental permit. The relevant contractual requirements are more stringent than that of the NENT Landfill, with more environmental monitoring parameters and increased monitoring frequencies so as to ensure the construction, operation and restoration works of the extension project will not cause any impact to the surrounding area and the environment. Various environmental and operational monitoring and control requirements are also set out in the contract, and the contractor is required to set up a dedicated website to facilitate the public to access the environmental monitoring and audit data and results. The EPD will closely monitor the overall condition of the landfill, as well as the operational performance of the contractor. The EPD will close the original NENT Landfill and carry out the remaining restoration works immediately after the commencement of operation of the NENT Landfill extension.

2. The EPD has been liaising and working closely with the relevant Shenzhen authorities regarding the operation and management of the NENT Landfill to step up professional connection and information exchange, in order to explore specific measures that will improve the operation and reduce the impact induced by the NENT Landfill and its extension on nearby residents, as a concerted effort to alleviate public concern.

3&4. According to the "Waste Blueprint for Hong Kong 2035", the Government is actively developing a network of advanced and highly efficient modern waste-to-energy (WtE) facilities, including O·PARK, the use of "food waste/sewage sludge anaerobic codigestion" technology for the treatment of food waste at sewage treatment works, and These facilities will replace landfills for handling advanced WtE incinerators. municipal solid waste (MSW). The ultimate goal is to move away from the reliance on landfills for disposal of MSW by around 2035. The first WtE incinerator (I·PARK1) at Shek Kwu Chau is expected to commence operation in 2025. By then, the daily amount of MSW to be handled by the 2 landfills is expected to reduce by about 3 000 tonnes per day. The EPD will have room for reducing the amount of MSW to Besides, upon the planned commissioning of the be transported to the NENT Landfill. second WtE incinerator (I-PARK2) in early 2030s, the NENT Landfill will completely cease receiving MSW and only handle a small amount of waste that is non-combustible and cannot be recycled or reused.

The estimated serviceable life of landfills depends on a number of variable external factors, including population growth, district development, economic activities, effectiveness of waste reduction and recycling initiatives, development progress of other waste treatment and WtE facilities, etc. The Government does not have any plan at this stage to construct a new landfill at sea.

Improvement Measures for Odour Control at the North East New Territories Landfill

in Implementation i- Since early 2022, the Environmental Protection Department (EPD) has instructed the landfill contractor to apply an addition of 5 tonnes of Posi-Shell covers on top of the soil cappings required under the original contract every day to safeguard
(EPD) has instructed the landfill contractor to apply an addition of 5 tonnes of Posi-Shell covers on top of the soil cappings
environmental hygiene and further reduce odour emission. Posi-Shell is a patented blend of clay, polyester and cement that is specifically used to cover landfills and soil surfaces. Overseas experience shows that Posi-Shell covers are effective in controlling odour emission.
The EPD now requires the landfill contractor to advance the process of covering the operational areas with clean soil cappings upon completion of daily waste reception to around noon every day, so that the scope of the operational areas for MSW landfilling can be reduced earlier and trimmed down by about 40% to 50% as far as practicable.
e Since December 2021, the time for receiving waste at the landfill rs has been shortened by 1 hour (i.e. stop receiving waste after 6 p.m. instead of 7 p.m.) to ensure early commencement and completion of the subsequent odour control processes of applying soil cappings and Posi-Shell covers.
To strengthen control over potential odour emission during waste transportation and tipping, 16 additional deodourisers have been installed at the NENT Landfill in end-2021. Each with an effective control range of around 350 m ² , these deodourisers are placed at the operational areas and potential sources of odour sources.
thate To reduce odour emission from the 3 leachate storage lagoons of the landfill, covers are now installed at these lagoons.
To alleviate the concerns of nearby residents on the odour and gases emitted from the landfill, the EPD has not only conducted routine inspections at the landfill by deploying its on-site supervisory staff but also commissioned a professional body (the Hong Kong Productivity Council) to carry out independent monitoring of 2 parameters, i.e. hydrogen sulphide and odour intensity, at the Liantang/Heung Yuen Wai area and also the nearby villages in Hong Kong since end-2021, with a view to enhancing public acceptance of the monitoring data. Real-time monitoring of the concentrations of hydrogen sulphide along the boundaries of the landfill has also been carried out, with a dedicated website ¹ set up to publicise the monitoring data
dedicated website ¹ set up to publicise the monitoring data.

¹ The website for publicising real-time data: <u>http://airsensor.pedia.epd.gov.hk/</u>

EEB(E)061

(Question Serial No. 2137)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The environmental impact arising from landfill

Regarding the major pollution and secondary pollution arising from the North East New Territories Landfill, please inform this Committee of the following:

1 Are there any additional measures to improve the problem of fly infestation in the area arising from the landfill?

2 As refuse collection vehicles travelling at high speed in the area had caused accidents and secondary pollution on numerous occasions, are there any measures to improve the problem? 3 In view of the concerns of nearby residents over the impact of the landfill on water quality, are there any measures to collect samples from nearby stream courses and ground water for testing, with the results announced to allay their concerns?

Asked by: Hon CHAN Yuet-ming (LegCo internal reference no.: 20)

Reply:

1. The Environmental Protection Department (EPD) has been working closely with the Food and Environmental Hygiene Department to strengthen the fly control efforts. The EPD has been inspecting the surrounding areas of the landfill on a regular basis. The landfill contractor has also installed fly monitoring devices at 9 different locations in the district (including Ping Yeung Village, Heung Yuen Wai, Chuk Yuen Village, Wo Keng Shan Village, Nga Yiu Ha Village, Ping Che Village, Tai Po Tin Village/Sheung Shan Kai Wat, Chow Tin Tsuen and Lin Ma Hang Village) for fly monitoring. The status of individual operational areas has been closely monitored and the reports have been submitted by the landfill contractor to the EPD on a monthly basis. At the same time, the EPD has requested the landfill contractor to step up their insect control efforts inside the landfill by using suitable insecticides and other effective insect control methods and levelling the roads inside the landfill to prevent rainwater accumulation, so as to contain the breeding of fly and other insect within the area.

The EPD has injected additional resources to improve the environment of the NENT Landfill as early as possible. The final restoration and greening works of the NENT Landfill, originally scheduled for 2026 upon completion of its landfilling operation, has been advanced to end-2021 and the operational areas where landfilling is completed are

progressively capped with impermeable permanent liners, and restoration works including installation of drainage systems and plantation are conducted to form a natural landscape. It is expected that 80% of the operational areas where landfilling is completed will have restoration and greening works accomplished by end-2023. Starting from March 2023, we will also make reference to the successful cases of landfill sites in the Mainland to apply impermeable plastic liners and install gas extraction facilities at appropriate locations of the operational areas, with a view to improving the odour emission control and the overall appearance of the NENT Landfill as soon as possible, thereby minimising the "Not In My Backyard" (NIMBY) effect and the associated odour and visual impact. These additional measures would significantly improve the problem of fly infestation.

- 2. With regard to the driving safety and possible environmental nuisance problems caused by waste collection vehicles in the Ta Kwu Ling district, the EPD has been liaising with the relevant departments to vigorously combat the illegal activities related to these vehicles in the area, including the installation of smart surveillance camera systems on each major road leading to the NENT Landfill to detect whether waste collection vehicles have contravened any pollution control regulations, with a view to enhancing enforcement. In addition, the EPD has requested the landfill contractor to increase the frequency of washing or sweeping at Wo Keng Shan Road, i.e. the road leading to the NENT Landfill, from 3 times daily to 6 times daily. We also assisted the management company of Lung Shan Tunnel in carrying out cleansing work inside the tunnel to further reduce the environmental hygiene and dust impacts of landfill operation on the surrounding areas. The EPD will also remind the trade of the importance of safe driving and the statutory requirements through landfill liaison meetings.
- 3. The landfill has been designed and constructed as an intact and enclosed containment incorporating multilayer composite liner systems covering the entire base area of the site. Under the composite liner system, leachate within the landfill is properly collected and treated to ensure that there will be no untreated leachate discharges from the landfill to the environment. The treated leachate will be discharged to the sewage treatment works of the Drainage Services Department through public sewerage system for further treatment.

Noting the public's concerns and worries about the operation of the landfill, to minimise the potential impact of landfill operation on the surrounding environment and the community, a comprehensive and stringent environmental monitoring system has been implemented at the landfill. Various environmental monitoring points have been set up around the landfill for water quality monitoring. The EPD's supervisory staff stationed at the landfill and the enforcement officers of EPD's Environmental Compliance Division also conduct regular inspections in the surrounding areas of the landfill to closely monitor the operation and environmental performance of the landfill. We also regularly publish the water quality monitoring and related information of the Kong Yiu Channel near the landfill on the Internet:

https://www.epd.gov.hk/epd/english/environmentinhk/waste/prob_solutions/monitoring_kyc.html

EEB(E)062

(Question Serial No. 2138)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Waste incineration facilities

With respect to the captioned local waste treatment facilities, please inform this Committee of the following:

1. Regarding the proposed construction of the first waste incinerator at Shek Kwu Chau, is there any policy space for reclamation and expansion?

2. Regarding Phase 2 of incineration facility development at Tsang Tsui, Tuen Mun, please briefly describe the progress of the project as well as the studies on capacity expansion.

3. If a third incinerator will be needed, given that the capacity of waste transport by sea should have been enhanced already with the completion of the first incinerator, will uninhabited islands be considered for constructing the third incinerator?

Asked by: Hon CHAN Yuet-ming (LegCo internal reference no.: 21)

Reply:

- 1. Hong Kong's first modern waste-to-energy (WtE) incinerator (I·PARK1) for treating municipal solid waste (MSW) is located on an artificial island of about 16 hectares (including the area of seawalls and breakwaters) in the open sea off Shek Kwu Chau. The current design of I·PARK1 has already fully occupied the artificial island. There is no space for expansion. Besides, it will be necessary to reconstruct the completed seawalls and breakwaters if further reclamation is to be carried out, and the commissioning of I·PARK1 will be postponed. Hence, we have no plan for expansion of I·PARK1 or new reclamation beyond the artificial island at this stage.
- 2. The Government announced in January 2022 that the Tsang Tsui middle ash lagoon in Tuen Mun was identified to be the site for developing the second modern WtE incinerator (I·PARK2), with a daily treatment capacity of not less than 4 000 tonnes of MSW. The consultancy agreement for the planning and development of I·PARK2 was awarded at the end of December 2022. The consultant immediately commenced the relevant investigation and design study in January 2023, with the environmental impact assessment and various tasks of pre-construction works being carried out in parallel. During the course of the design study, we would maximise land use of the site at Tsang Tsui in Tuen Mun and manage to overcome the geographical constraints of the site so

as to increase the daily treatment capacity of MSW of I·PARK2 as far as practicable. The development of I·PARK2 under Public Works Programme is scheduled for commissioning in early 2030s. Also, we are proactively exploring alternative options for the development of I·PARK2 with a view to expediting the development progress for early commissioning.

3. I·PARK1 under construction near Shek Kwu Chau can only receive waste transported by sea. However, under inclement weather conditions, sea transportation of waste may be seriously affected. To adapt to the unpredictable impacts of climate change and prepare contingency arrangements effectively, we have to develop sufficient WtE incinerators with land transport links in tandem so as to enhance the resilience of the entire network of waste management facilities and provide sustainable and reliable service of waste incineration treatment in Hong Kong, with the aim to avoid being besieged by waste. As promulgated in the 2022 Policy Address, the Government will study developing more modern WtE incinerators in the Northern Metropolis to tie in with the future urban development of Hong Kong, and at the same time to minimise the traffic impact, environmental nuisance and carbon footprints generated from cross-district transportation of waste.

EEB(E)063

(Question Serial No. 0806)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding the continued implementation of the pilot scheme on free food waste collection for public and commercial & industrial premises (including food factories, public markets, hotels, large shopping malls, etc.), please provide information on the stakeholders, the number of restaurants, the regions, and the manpower and expenditure involved, as well as the amount of food waste collected in the past 3 years (2020, 2021 and 2022).

Asked by: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 1)

<u>Reply</u>:

The Environmental Protection Department (EPD) launched the first phase of the Pilot Scheme on Food Waste Collection (Pilot Scheme) in July 2018 to collect food waste mainly from public markets and cooked food centres managed by the Food and Environmental Hygiene Department, public markets and shopping centres managed by the Hong Kong Housing Authority as well as school lunch suppliers.

The EPD extended the scale of the Pilot Scheme in 2021 by rolling out 4 food waste collection service contracts in phases, providing door-to-door collection services for relatively clustered premises that generate larger quantities of food waste with less impurities, including public premises (such as shopping centres of public rental housing estates, cooked food centres and public markets, catering facilities of social service organisations, canteens in tertiary institutions and hospitals, etc.) as well as private commercial & industrial premises (such as food factories, hotels, large shopping malls, airline caterers, etc.). The first food waste collection service contract covering Hong Kong Island (including Islands District) and the second one covering Kowloon (including Tsuen Wan, Kwai Tsing and Tseung Kwan O) have come into operation in September 2021 and February 2022 respectively. The other 2 contracts covering New Territories East (including Sha Tin, Tai Po and North District) and New Territories West (including Tuen Mun and Yuen Long) are expected to commence in April this year.

The manpower required for the Pilot Scheme is absorbed by the existing staff establishment of the EPD. The expenditure, quantity of food waste recovered and number of participating premises are tabulated below:

Financial year	Expenditure involved	
	(\$ million)	
2020-21	35.1	
2021-22	39.9	
2022-23	67.0 [Note 1]	
	(Estimated expenditure)	

Table 1 Expenditure involved in the Pilot Scheme

Note 1: The contracts covering Hong Kong Island (including Islands District) and Kowloon (including Tsuen Wan, Kwai Tsing and Tseung Kwan O) have commenced in September 2021 and February 2022 respectively.

Table 2 Quantity of food waste recovered from public and commercial & industrial premises and number of participating premises [Note 2]

Year	Quantity of food waste recovered (tonnes/year)	No. of participating premises
2020	36 133	283
2021	48 986	300
2022	48 648	423
	[Note 3]	

Note 2: Quantity of food waste recovered refers to the total amount of food waste collected from public and commercial & industrial premises and treated by O·PARK1 and the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po Sewage Treatment Works in the respective year. Organisations subsidised by the Government and voluntarily participated in source separation and collection food waste have been covered.

Note 3: The overall quantity of food waste recovered was lower than that of 2021. This was due to the fifth wave of the epidemic in 2022, during which the catering industry had suspended their business or shortened their business hours and some markets with confirmed cases detected had to be closed for cleaning and disinfection.

Year	No. of participating premises [Note 4]			
	Premises with restaurants (e.g. shopping centre, hotel, clubhouse, etc.)	Individual restaurant		
2020	117	18		
2021	134	26		
2022	195	52		

Table 3 Number of restaurants participating in food waste collection

Note 4: Premises subsidised by the Government and voluntarily participated in source separation and collection of food waste have been covered. The EPD does not have information on the number of restaurants in each of the premises and the district each restaurant is located.

Examination of Estimates of Expenditure 2023-24

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)064

(Question Serial No. 0807)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding the expansion of the pilot scheme on free collection of food waste to domestic sources (including implementation of a trial scheme on food waste collection in public rental housing estates), please provide information on the implementation schedule and details, the number of residential buildings covered, the regions, and the manpower and expenditure involved, as well as the target amount of food waste to be collected.

<u>Asked by</u>: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 2)

Reply:

The Environmental Protection Department (EPD), in collaboration with the Housing Department and the Hong Kong Housing Society, launched an 18-month trial scheme on food waste collection in public rental housing estates (trial scheme) in October 2022 to promote domestic food waste recycling. The first phase of the trial scheme covers a total of 34 blocks in 5 public rental housing (PRH) estates, including Shek Pai Wan Estate in Aberdeen, Choi Tak Estate in Ngau Tau Kok, Sheung Tak Estate in Tseung Kwan O, Kwun Lung Lau in Kennedy Town and Lin Tsui Estate in Chai Wan, in which smart recycling bins have been installed to collect food waste, with GREEN\$ points awarded to encourage residents to participate in food waste recycling. The estimated expenditure of the trial scheme involved in 2022-23 is about \$3.5 million. As at February 2023, a total of about 240 tonnes of food waste have been collected under the trial scheme. The manpower involved is absorbed by the existing staff establishment of the EPD.

With additional funding allocated in the 2023-24 financial year, the trial scheme will be further extended to 4 other PRH estates in the New Territories and Kowloon, including Tin Heng Estate in Tin Shui Wai, Lee On Estate in Ma On Shan, On Yam Estate in Kwai Chung and Tsz Hong Estate in Wong Tai Sin, covering 32 blocks starting from March 2023. We will continue to liaise with the Housing Department and the Hong Kong Housing Society for site selection with an aim to extending the trial scheme to cover up to 100 blocks of PRH estates, involving about 150 000 residents in 2023-24. The estimated expenditure to be involved for extension of the trial scheme in 2023-24 is about \$13 million and it is estimated

that more than 1 000 tonnes of food waste can be collected. The manpower involved will be absorbed by the existing staff establishment of the EPD.

EEB(E)065

(Question Serial No. 0838)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding waste separation, food waste source separation, collection and recycling:

1) Please provide the amount of the funding allocated for and the number of projects applied for encouraging households to participate in waste separation, food waste collection and recycling in each of the past 3 years (i.e. 2020, 2021 and 2022).

2) Regarding waste separation projects, please tabulate the total numbers of domestic units, housing estates and single-block buildings participated in each of the past 3 years (i.e. 2020, 2021 and 2022).

3) Regarding food waste collection projects, please tabulate the total numbers of domestic units, housing estates and single-block buildings participated in each of the past 3 years (i.e. 2020, 2021 and 2022).

4) Regarding recycling projects, please tabulate the total numbers of domestic units, housing estates and single-block buildings participated in each of the past 3 years (i.e. 2020, 2021 and 2022).

5) How will the Administration plan to further promote and encourage the use of the Environment and Conservation Fund by the community to promote environmental protection activities?

6) Will more economic incentives be provided to encourage the public to recycle food waste and plastic bottles, etc.? If yes, what are the details? If no, what are the reasons?

<u>Asked by</u>: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 33)

<u>Reply</u>:

1) - 4) Regarding waste reduction as well as collection and recycling of waste, the Environment and Conservation Fund (ECF) has funded local non-profit-making organisations to operate different Community Waste Reduction Projects. Details of the approved projects from 2020-21 to 2022-23 are tabulated as follows:

	2020-21	2021-22	2022-23 (as at the end of December 2022)	
Source separation of domestic waste [Note 1]				
No. of approved projects	Not applicable	Not applicable	Not applicable	

Total amount of approved funding (\$m)	Not applicable	Not applicable	Not applicable
No. of Participants	About 95 housing	About 95 housing	About 95 housing
[Note 2]	estates and 101	estates and 101	estates and 101
L J	buildings [Note 3],	buildings [Note 3],	buildings [Note 3],
	covering about	covering about	covering about
	135 000	135 000	135 000
	households	households	households
	[Note 4]	[Note 4]	[Note 4]
Food waste reducti			
No. of approved	20	22	5
projects			
Total amount of	39.62	60.31	14.89
approved funding			
(\$m)			
No. of Participants	About 10 housing	About 5 housing	About 4 housing
[Note 2]	estates (27 300	estates (16 800	estates (8 200
	households), 129	households), 120	households), 122
	schools, 98	schools, 129	schools, 162
	community groups	community groups	community groups
	and 116	and 170	and 170
	restaurants	restaurants	restaurants
Waste recycling			
No. of approved	3	5	2
projects			
Total amount of	7.63	4.29	2.46
approved funding			
(\$m)			
No. of Participants	About 17 housing	About 10 housing	About 20 housing
[Note 2]	estates, 2 460	estates, 700	estates, 1 150
	single-block	single-block	single-block
	buildings [Note 3],	buildings [Note 3]	
	21 schools, 50	and 150	and 150
	community groups and 970	community groups	community groups
	shops/companies		
[Note 1], Unlike the			a ECE nouv supports

[Note 1]: Unlike the funding arrangements in earlier years, the ECF now supports source separation of waste initiatives through the Environmental Campaign Committee to directly provide free recycling bins to residential as well as commercial & industrial buildings which have participated in the Programme on Source Separation of Waste. The ECF also subsidises eligible local organisations to launch educational projects (such as Environmental Education and Community Action Projects and Waste Separation Projects to Pave the Path for Municipal Solid Waste Charging), under which various activities are organised to raise public awareness of waste reduction, source separation of waste as well as recycling. Given the diverse nature and content of such educational projects with other environmental education elements

embedded, the funding for such projects is not included in the above table.

- [Note 2]: The figures include the number of participants of projects approved in previous years, of which project activities are continued. The number of participants may drop occasionally due to anti-epidemic measures.
- [Note 3]: This refers to the number of single-block buildings and the buildings in participating housing estates are not included.
- [Note 4]: Rounded to the nearest thousand.
- 5) The ECF provides funding support to local non-profit-making organisations to launch different educational, research and other projects and activities in relation to environmental protection. To encourage the community to better utilise the ECF, we organise seminars, sharing sessions and workshops, and upload information on projects funded by the ECF to the relevant webpage for reference by the community and relevant parties. Besides, we also collaborate closely with district organisations to enhance the promotion on "Use Less, Waste Less" and resources recycling to encourage the public to practise green living. In addition, we will use the social media as a platform to further promote green messages and take forward the activities related to environmental protection and nature conservation.
- 6) To encourage members of the public and housing estates to participate in domestic food waste recycling, the Recycling Fund launched a solicitation scheme in 2020 for food waste recycling projects, focusing on supporting and subsidising private residential buildings to collect food waste using smart recycling bins, with a view to further enhancing the effectiveness and raising public awareness of food waste recycling.

In addition, the Environmental Protection Department (EPD) launched the trial scheme on food waste collection in public rental housing estates (trial scheme) in October 2022. The trial scheme uses smart recycling bins equipped with overflow prevention and odour abatement devices for food waste collection. The first phase of the scheme, that covers 5 public rental housing (PRH) estates and a total of 34 blocks, has already been launched. We will progressively expand the trial scheme up to 100 blocks of PRH estates in 2023-24, involving about 150 000 residents.

The above project offers GREEN\$ points to incentivise residents to actively participate in food waste recycling.

To manage waste plastic beverage containers properly and effectively, the Government conducted a public consultation on the Producer Responsibility Scheme on Plastic Beverage Containers (PPRS) from February to May 2021. The community responded positively to the proposal in general. Having considered the views received, the experience in other places and the development of the local recycling market, the Government proposes to provide an economic incentive to encourage the public to return used plastic beverage containers for recycling. It also plans to adopt a "market-based model" for the implementation of the PPRS and include beverage cartons in the scheme, which in turn will help

enhance the efficiency and cost-effectiveness of the recycling arrangement. Under the "market-based model", suppliers or scheme operators will need to set up a rebate arrangement to encourage the public to return used plastic beverage containers and beverage cartons to designated return points, so as to increase the recovery rate.

In addition, the EPD launched the Reverse Vending Machine (RVM) Pilot Scheme in 2021. A total of 60 RVMs were set up at locations with suitable foot traffic with an instant rebate (\$0.1 per plastic beverage container) provided via e-payment platforms to encourage the public to recycle plastic beverage containers. Stage 2 of the Pilot Scheme was launched in the second quarter of 2022 with the number of RVMs increased to 120. Positive responses have been received so far since the launch of the Pilot Scheme. As at the end of February 2023, over 46 million plastic beverage containers have been collected for delivery to local recyclers for recycling.

Besides, when recycling materials at the GREEN@COMMUNITY, members of the public can earn GREEN\$ points to redeem gift items, with higher points being awarded for plastic bottles to serve as an incentive for the public to handle plastic bottles with higher commercial value separately from other plastics.

EEB(E)066

(Question Serial No. 2114)

(44) Environmental Protection Department
(-) Not specified
(1) Waste
Director of Environmental Protection (Samuel CHUI)
Secretary for Environment and Ecology

Question:

The Producer Responsibility Scheme (PRS) is one of the major parts of the waste management policies in Hong Kong. Please advise this Committee of the following:

1. The quantity of plastic beverage containers recycled through the rebate arrangement under the PRS on Plastic Beverage Containers in the past 3 years;

2. It has been reported that there is suspected abusive use of some of the Reverse Vending Machines (RVMs) services. What were the number of inspections conducted by the Government on the operation of RVMs in the past 3 years?

Asked by: Hon CHU Kwok-keung (LegCo internal reference no.: 14)

Reply:

- 1. To pave the way for the future implementation of the Producer Responsibility Scheme on Plastic Beverage Containers, the Environmental Protection Department (EPD) launched the Reverse Vending Machine (RVM) Pilot Scheme (Pilot Scheme) in 2021 to test out the application of RVMs in Hong Kong. A total of 60 RVMs were set up at locations with suitable foot traffic with an instant rebate (\$0.1 per plastic beverage container) provided via e-payment platforms to encourage the public to recycle plastic beverage containers. Stage 2 of the Pilot Scheme was launched in the second quarter of 2022 with the number of RVMs increased to 120. Positive responses have been received so far since the launch of the Pilot Scheme. In 2021 and 2022, 16 million and 25 million plastic beverage containers were collected respectively for recycling.
- 2. The EPD and contractors of the Pilot Scheme have been closely monitoring the daily operation and performance of RVMs. In addition to real-time monitoring through the central surveillance system, we also arrange our staff to conduct on-site inspections at various locations from time to time. We conducted about 330 and 370 inspections in 2021 and 2022 respectively.

To prevent fraudulent use of RVMs for rebates, the RVMs are equipped with a number of identification features, including barcode scanning, weight and shape recognition, etc. for verifying the plastic beverage containers received. After going through the verification process, the RVM will further confirm that the container has entered into the compressor

for crushing before counting the process as complete and offer the rebate accordingly. Stage 2 of the Pilot Scheme, which was launched in the second quarter of 2022, has further improved the anti-fraud technology of the new generation of RVMs.

Examination of Estimates of Expenditure 2023-24

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)067

(Question Serial No. 3089)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(4) Water
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding Water Quality Objectives, please advise: how many cases of non-compliance with the Water Quality Objectives were there in the past three years (2020-21 to 2022-23) and what were the reasons?

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 55)

Reply:

Hong Kong is divided into a total of 10 Water Control Zones, each covering marine and inland waters and having a set of specific Water Quality Objectives (WQOs). "Marine waters" refer to all the waters connected to the sea, while "inland waters" refer to the environmental water bodies on land, including rivers, streams, watercourses, lakes, etc.

The WQOs are composed of a series of physical, chemical and biological parameters, and are used as the scientific benchmarks for measuring the state of health of the water environment and ecosystem to protect different beneficial uses of various waters. The key WQOs for marine waters include dissolved oxygen, unionised ammonia nitrogen, total inorganic nitrogen and *E. coli.*, while the key WQOs for inland waters include pH, suspended solids, dissolved oxygen, chemical oxygen demand and five-day biochemical oxygen demand. The Environmental Protection Department assesses WQO compliance rates every year based on data recorded at routine monitoring stations located within various waters of Hong Kong, making reference to relevant parameter limits and calculation methods as set out in the WQOs. The data are incorporated into the annual water quality reports.

In the past 3 years (2020 to 2022), the overall average WQO compliance rates for marine and inland waters in Hong Kong were both 87%, which were within the range of normal fluctuations. The compliance rates were comparable to the relevant average rates (88% for all years) in the past 5 years. The non-compliance of WQOs for marine waters in Hong Kong was mainly observed in the land-locked waters with limited water exchange. The natural phenomenon of seasonal water column stratification could have resulted in changes in dissolved oxygen levels in the waters. The marine WQO compliance was also affected by the regional inorganic nitrogen background levels. Parts of certain rivers and watercourses in hinterlands were affected by discharges from livestock farms and surface

runoffs from unsewered villages. In this connection, the Government will continue to strengthen its efforts in implementing various pollution control measures and extending public sewer networks to unsewered villages progressively so as to improve the overall WQO compliance rates.

EEB(E)068

(Question Serial No. 3152)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(4) Water
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding discharge from landfills, please advise of the following:

(a) What were the expenditure and manpower establishment for handling discharge from landfills in the past 3 years (2020-21 to 2022-23)?

(b) How many times did the contractors responsible for handling discharge from landfills fail to meet the contractual requirements in the past 3 years (2020-21 to 2022-23)?

(c) What were the daily amounts of discharge from various major sewage treatment plants managed by the Drainage Services Department, leachate treatment plants at landfills managed by the Environmental Protection Department and sewage treatment facilities of power plants operated by the private sector, as well as the water quality monitoring data (including the annual mean of major water quality data and discharge limit indicated by the monitoring data of the facilities) in the past 3 years (2020-21 to 2022-23)?

(d) Did any monitoring station detect exceedance over prescribed limits near the discharge points of sewage treatment plants in the past 3 years (2020-21 to 2022-23)?

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 56)

Reply:

- (a) Management and monitoring of the operation of landfills are mainly carried out by the Environmental Infrastructure Division of the Environmental Protection Department (EPD). We do not have a separate breakdown of the manpower resources required for individual tasks.
- (b) In the past 3 years (2020-21 to 2022-23), the contractor responsible for managing the restored Gin Drinkers Bay Landfill failed to meet the contractual requirement on leachate discharge for 1 time in 2021-22. The wastewater was discharged into the public sewerage system and the environment had not been affected. Regarding this incident, the Environmental Compliance Division of the EPD immediately collected the relevant evidence and initiated prosecution against the contractor who was later convicted by the court for contravening the Water Pollution Control (General) Regulations and was fined \$18,000. The Environmental Infrastructure Division of the EPD also promptly required the contractor to make improvement and deducted part of

its operation payment according to the mechanism for non-compliance with operation and environmental performance objectives as stipulated in the contract.

(c) The discharge flow rates, effluent quality monitoring data and discharge upper limits of the major sewage treatment works managed by the Drainage Services Department (DSD), leachate treatment plants at landfills managed by the EPD and sewage treatment facilities of power stations operated by the private sector in the past 3 years are set out in detail in the following tables.

	Maximum Discharge Limit in the WaterAnnual Average of Effluent Qualit as shown in the Facilities' Monitoring (Year 2020, 2021, 2022)			toring Data
Name	Pollution Control Ordinance (WPCO) Licence (x1000m ³ /day)	Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen ⁽¹⁾ (mg/L)
	Chemically E	Enhanced Primary T	reatment	
Stonecutters Island Sewage Treatment Works	4 000	2020: 43 2021: 60 2022: 65 (Upper limit: 150)	2020: 48 2021: 49 2022: 52 (Upper limit: 114)	N/A
Pillar Point Sewage Treatment Works	525	2020: 79 2021: 90 2022: 73 (Upper limit: 360)	2020: 50 2021: 40 2022: 52 (Upper limit: 240)	N/A
Siu Ho Wan Sewage Treatment Works	360	2020: 60 2021: 55 2022: 52 (Upper limit: 200)	2020: 63 2021: 52 2022: 45 (Upper limit: 200)	N/A
Sham Tseng Sewage Treatment Works	50.5	2020: 27 2021: 27 2022: 34 (Upper limit: 220)	2020: 35 2021: 45 2022: 40 (Upper limit: 180)	N/A
	Sec	condary Treatment		
Sha Tin Sewage Treatment Works	1 020	2020: <6 2021: <6 2022: <6 (Upper limit: 40)	2020: <13 2021: <13 2022: <16 (Upper limit: 60)	2020: <8 2021: <9 2022: <9 (Upper limit: 35)
Tai Po Sewage Treatment Works	300	2020: <5 2021: <5 2022: <5 (Upper limit: 40)	2020: <7 2021: <6 2022: <6 (Upper limit: 60)	2020: < 9 2021: <10 2022: <10 (Upper limit: 35)
Shek Wu Hui Sewage Treatment Works	240	2020: <5 2021: <5 2022: <5 (Upper limit: 40)	2020: <6 2021: <5 2022: <5 (Upper limit: 60)	2020: <6 2021: <8 2022: <8 (Upper limit: 28) ⁽²⁾
Yuen Long Sewage Treatment Works	105	2020: <6 2021: <6 2022: <6 (Upper limit: 40)	2020: <8 2021: <7 2022: <7 (Upper limit: 60)	N/A
Stanley Sewage Treatment Works	34.7	2020: <3 2021: <4 2022: <3 (Upper limit: 40)	2020: <4 2021: <3 2022: <3 (Upper limit: 60)	2020: <4 2021: <4 2022: <4 (Upper limit: 26) ⁽²⁾
Sai Kung Sewage Treatment Works	24	2020: <5 2021: <5 2022: <5 (Upper limit: 40)	2020: <5 2021: <5 2022: <5 (Upper limit: 60)	2020: <5 2021: <4 2022: <5 (Upper limit: 24)

(1) Major Sewage Treatment Works Managed by the DSD

	Maximum Discharge Limit in	Annual Average of Discharge Quality as shown in the Facilities' Monitoring Data (Year 2020, 2021, 2022)		
Name	the WPCO Licence (m ³ /day)	Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen ⁽¹⁾ (mg/L)
Pillar Point Valley Landfill	2 600	2020: 10 2021: 6 2022: <2 (Upper limit: 800)	2020: 5 2021: 4 2022: 4 (Upper limit: 800)	2020: 86 2021: 71 2022: 77 (Upper limit: 100)
Tseung Kwan O Stage I and Stage II/III Landfills	1 450	2020: 5 2021: 6 2022: 5 (Upper limit: 800)	2020: 5 2021: 4 2022: 4 (Upper limit: 800)	2020: 67 2021: 69 2022: 55 (Upper limit: 200)
Siu Lang Shui Landfill, Ma Tso Lung Landfill, Ngau Tam Mei Landfill and Gin Drinkers Bay Landfill ⁽³⁾	480	2020: 18 2021: 41 2022: 14 (Upper limit: 800)	2020: 10 2021: 9 2022: 8 (Upper limit: 800)	2020: 50 2021: 69 2022: 58 (Upper limit: 200)
Sai Tso Wan Landfill, Ngau Chi Wan Landfill, Jordan Valley	<u>Jordan Valley</u> <u>Landfill</u> 350	<u>Jordan Valley</u> <u>Landfill</u> 2020: 16 2021: 18 2022: 19 (Upper limit: 800)	<u>Jordan Valley</u> <u>Landfill</u> 2020: 59 2021: 41 2022: 33 (Upper limit: 800)	<u>Jordan Valley</u> <u>Landfill</u> 2020: 59 2021: 54 2022: 73 (Upper limit: 200)
Landfill, Ma Yau Tong West Landfill and Ma Yau Tong Central Landfill ⁽⁴⁾	<u>Ma Yau Tong</u> <u>Central Landfill</u> 350	<u>Ma Yau Tong</u> <u>Central Landfill</u> 2020: N/A 2021: 4 2022: 1 (Upper limit: 800)	<u>Ma Yau Tong</u> <u>Central Landfill</u> 2020: N/A 2021: 42 2022: 21 (Upper limit: 800)	<u>Ma Yau Tong</u> <u>Central Landfill</u> 2020: N/A 2021: 90 2022: 64 (Upper limit: 200)
Shuen Wan Landfill ⁽⁵⁾	N/A	N/A	N/A	N/A
West New Territories Landfill ⁽⁶⁾	3 000	2020: 21 2021: 22 2022: 15 (Upper limit: 800)	2020: 42 2021: 33 2022: 22 (Upper limit: 800)	2020: 86 2021: 82 (Upper limit for total nitrogen: 200) 2022: 11 (Upper limit for total inorganic nitrogen: 100)
North East New Territories Landfill ⁽⁷⁾	3 000	2020: 17 2021: 16 2022: 19 (Upper limit: 400)	2020: 52 2021: 56 2022: 69 (Upper limit: 400)	2020: 53 2021: 46 2022: 41 (Upper limit for total inorganic nitrogen: 100)
South East New Territories Landfill (including the extension part)	2 000	2020: 13 2021: 8 2022: 8 (Upper limit: 800)	2020: 35 2021: 27 2022: 30 (Upper limit: 800)	2020: 76 (Upper limit for total nitrogen: 200) 2021: 45 2022: 49 (Upper limit for total inorganic nitrogen: 100)

(2) Leachate Treatment Plants at Landfills Managed by the EPD

		Maximum Discharge Limit in the	as shown in t	Annual Average of Discharge Quality as shown in the Facilities' Monitoring Data (Year 2020, 2021, 2022)			
Name	Operator Unit in the WPCO Licence (m ³ /day)		Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen ⁽¹⁾ (mg/L)		
Castle Peak Power Station	Castle Peak Power Company Limited	2 000	2020: <5 2021: <5 2022: <5 (Upper limit: 20)	2020: 5 2021: 6 2022: 5 (Upper limit: 30)	N/A		
Black Point Power Station	Castle Peak Power Company Limited	420	2020: <5 2021: <5 2022: <5 (Upper limit: 20)	N/A	N/A		
Lamma Power Station	HK Electric	664	2020: <2 2021: <2 2022: <2 (Upper limit: 20)	2020: 15 2021: 14 2022: 16 (Upper limit: 30)	N/A		
Penny's Bay Power Station (standby facility)	Castle Peak Power Company Limited	4 181	N/A ⁽⁸⁾ (Upper limit: 20)	N/A ⁽⁸⁾ (Upper limit: 30)	N/A		

(3) Sewage Treatment Facilities of Power Stations

- Notes: (1) Discharge upper limits and the water quality monitoring requirements are formulated based on the design of the sewage treatment facilities and the carrying capacity of the relevant receiving waters.
 - (2) The figure stated is the sum of the amounts of ammonia nitrogen, nitrate nitrogen and nitrite nitrogen in the water sample(s) collected.
 - (3) Leachate from these landfills is collected and delivered to the leachate treatment plant at Gin Drinkers Bay Landfill for collective treatment.
 - (4) Leachate from these landfills is collected and delivered to the leachate treatment plants at Jordan Valley Landfill and Ma Yau Tong Central Landfill for collective treatment, while the leachate treatment plant at Ma Yau Tong Central Landfill is operated only in wet seasons when necessary and there was no need for operation in 2020.
 - (5) Leachate from the Shuen Wan Landfill is collected and delivered to the adjacent Tai Po Sewage Treatment Works for treatment.
 - (6) With effect from March 2021, the monitoring requirement stipulated in the WPCO licence of the West New Territories Landfill has been changed from "total nitrogen" to "total inorganic nitrogen".
 - (7) With effect from 30 September 2019, the monitoring requirement stipulated in the WPCO licence of the North East New Territories Landfill has been changed from "total nitrogen" to "total inorganic nitrogen". The maximum discharge limit in the latest licence is 3 000 m³ per day.
 - (8) The Penny's Bay Power Station is a standby facility and there is no discharge recorded from 2020 to 2022.
- (d) All the discharge from the major sewage treatment works managed by the DSD, leachate treatment plants at landfills managed by the EPD, and sewage treatment facilities of power stations operated by the private sector have to comply with the relevant requirements and treatment levels stipulated in the licence granted under the WPCO to ensure that the discharge will not cause any adverse impact on the surrounding

environment. The Environmental Compliance Division of the EPD conducts inspections to the relevant facilities operated by the public and private sectors at irregular time intervals to check whether the facilities are in normal operation and in compliance with the discharge requirements in the licences issued. At present, the DSD also conducts regular water quality monitoring at different sewage treatment works. There are on-site EPD staff at all landfills to conduct regular environmental monitoring and to monitor the day-to-day operation of the facilities. The Government has not set up additional monitoring stations near the discharge points of sewage treatment plants to monitor discharge from sewage treatment plants.

Examination of Estimates of Expenditure 2023-24

Reply Serial No.

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3153)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(4) Water (5) Environmental Assessment and Planning
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding the management of marine environment, please advise of the following:

(a) the respective numbers of inter-departmental clean-up operations and joint enforcement actions performed by the Task Force on Marine Refuse and the Task Force on Emergency Response to Marine Environmental Incidents under the Inter-departmental Working Group on Marine Environmental Management in the past 3 years (2020-21 to 2022-23) and the effectiveness of such actions; and

(b) the details of the existing notification mechanism on marine incidents between Hong Kong and Guangdong.

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 58)

Reply:

(a) In the past 3 years, a total of 15 inter-departmental special clean-up operations were performed by the Task Force on Marine Refuse under the Inter-departmental Working Group on Marine Environmental Management (IWGMEM), with over 180 tonnes of marine refuse collected in total. Most of the coastal sites involved are located in remote areas or with special refuse accumulation problems, such as Lung Kwu Chau, Pak Sha Wan at Heng Fa Chuen, Po Chue Tam in Tai O, Tsin Yue Wan, Stone Circle at Fan Lau, vacant sites near the shipyards at Aberdeen Typhoon Shelter and Ap Lei Chau, the coast of Tung Lung Island, the coast of Tap Mun, Yi Pak Wan in Discovery Bay and the coast of Shelter Island. In respect of joint enforcement work, a total of 12 joint enforcement actions were carried out by the relevant departments in the past 3 years and no irregularities were identified.

As for the Task Force on Emergency Response to Marine Environmental Incidents under the IWGMEM, a total of 37 notifications were issued to the relevant departments (including the Marine Department, the Environmental Protection Department (EPD), the Agriculture, Fisheries and Conservation Department, the Food and Environmental Hygiene Department and the Leisure and Cultural Services Department) under the Protocol for Handling Surge of Marine Refuse in Hong Kong during the same period, so that they could effectively deploy resources and make corresponding preparation for timely clean-up and follow-up actions. (b) Through the Hong Kong-Guangdong Marine Environmental Management Special Panel, the Government has been maintaining close liaison with Guangdong to continuously enhance the arrangements for relevant cross-border collaboration and incident notification mechanism in response to marine refuse and environmental incidents. Since the operation of the Notification and Alert System on Marine Refuse (the System) in May 2017, Hong Kong and Guangdong have been following the mechanism to activate the System and issue notifications in a timely manner in response to major marine environmental incidents or inclement weather conditions (such as heavy rainstorms) so that both parties can effectively deploy resources and make corresponding preparation for timely clean-up and follow-up actions. So far, the EPD has issued a total of 37 notifications to Guangdong under the System in response to inclement weather conditions or environmental incidents.

Examination of Estimates of Expenditure 2023-24

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)070

(Question Serial No. 3154)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding handling of refuse on various beaches and at sea, please advise of:

(a) the staffing of the government departments responsible for the collection and cleaning up of marine refuse and the division of work among these departments;

(b) the total amount of refuse collected by the Environmental Protection Department in the past 3 year (2020-21 to 2022-23) (please set out the information by existing zoning and by month).

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 59)

Reply:

- (a) Various government departments collect and clean up marine refuse (including floating refuse and shoreline refuse) at respective locations falling under their ambit. The Marine Department (MD), the Leisure and Cultural Services Department (LCSD) and the Agriculture, Fisheries and Conservation Department (AFCD) have outsourced the relevant cleansing services to contractors. Therefore, the marine refuse collection work does not involve any staffing of the Government. As for the Food and Environmental Hygiene Department (FEHD), apart from outsourcing the work to cleansing contractors, the routine cleansing work carried out by its staff also includes collection and cleaning up of shoreline refuse. Hence, separate breakdown of the staffing involved is not made available.
- (b) In the past 3 years, the total amount of floating/marine refuse collected by the MD each month is tabulated below:

Month	Total amount of floating refuse collected (tonnes)	Amount of marine refuse collect (tonnes)*		
	2020-21	2021-22	2022-23	
April	830#	188	171	
May	892#	233	242	
June	989#	279	397	
July	1 022#	307	372	
August	1 024#	274	314	

Month	Total amount of floating refuse collected (tonnes)	Amount of marine refuse collected (tonnes)*			
	2020-21	2021-22	2022-23		
September	982#	219	228		
October	811#	204	181		
November	764#	170	162		
December	704#	181	144		
January of the	147*	193	138		
following year					
February of the	141*	112	143		
following year					
March of the	155*	147	Λ		
following year					

The quantities of marine refuse reported in "tonnes" are estimated by volume, instead of actual weight.

- * In response to the recommendations of the Public Accounts Committee's report, the MD has adopted the practice of the Environmental Protection Department (EPD) for reporting the actual weight (in tonnes) of marine refuse, and used a new indicator of "marine refuse collected" in its Controlling Officer's Report of 2022. The marine refuse includes refuse from ships, floating refuse, as well as refuse from locally-licensed vessels and river trade vessels collected by the MD. Since the marine refuse collected by contractors in different areas are transported to marine refuse collected by vehicles for onward transport to the EPD's disposal sites where the actual weight is measured, the MD does not have an estimation on the weight of the marine refuse collected by district.
- ^ The figures are under compilation.

	Total amount of shoreline refuse collected (tonnes)								
	<u>2020-21</u>	2021-22	2022-23						
April	275	211	200						
May	308	205	224						
June	382	244	327						
July	322	290	358						
August	331	279	288						
September	303	253	248						
October	270	273	234						
November	244	210	206						
December	233	200	198						
January of the	211	189	176						
following year									
February of the	176	153	^						
following year									
March of the	265	204	^						
following year									

In the past 3 years, the total amount of shoreline refuse collected by the LCSD, the AFCD and the FEHD each month is tabulated below:

^ The figures are under compilation.

As the zoning demarcations adopted by various departments on cleaning up of marine refuse are different, the total amount of marine refuse collected cannot be further broken down by zone.

EEB(E)071

(Question Serial No. 2999)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding the usage of fuel-driven and new energy (including electric, hybrid, etc.) commercial vehicles, please inform this Committee of the following:

1. What were the percentages of emissions from respective types of vehicles to the total local emissions and the distribution of emissions from respective types of commercial vehicles in the past 3 years?

2. What were the numbers of diesel buses and new energy (including electric, hybrid, etc.) buses purchased, to be purchased after tendering exercises and put into service by local franchised bus companies in the past 3 years? Please list out in tabular form the numbers of buses by type in respective years.

3. What are the current percentages of new energy (including electric, hybrid, etc.) commercial vehicles (such as taxi, light bus, goods vehicle) to the total number of each type of commercial vehicles in Hong Kong?

4. As at the end of February 2023, how many registered vehicles are owned by government departments? What is the percentage share of new energy (including electric, hybrid, etc.) vehicles? What is the estimated number of vehicles to be procured by government departments in 2023-24 and the ratio of new energy vehicles among them? What are the Government's planning, targets and budget for purchasing new energy vehicles?

Asked by: Hon HO King-hong, Adrian Pedro (LegCo internal reference no.: 5)

Reply:

1. The Environmental Protection Department (EPD) compiles the Hong Kong Air Pollutant Emission Inventory every year to analyse the distribution and trends of major air pollution sources in Hong Kong. The Hong Kong Air Pollutant Emission Inventory for 2021 and 2022 are still under preparation. The percentages of emissions from various types of vehicles in the total local emissions (except emissions from hill fires) from 2018 to 2020 are tabulated as follows:

	Vehicle type	Percentage of air pollutant emissions from various types of vehicles in the total local emissions [#]								
Year		Sulphur dioxide (SO ₂)	Nitrogen oxides (NOx)	Respirable suspended particulates (RSP/PM ₁₀)	Fine suspended particulates (FSP/PM _{2.5})	Volatile organic compounds (VOC)	Carbon monoxide (CO)			
	Motorcycle	<1%	<1%	<1%	<1%	14%	5%			
	Private car	<1%	<1%	1%	1%	3%	12%			
	Taxi	<1%	3%	<1%	<1%	1%	16%			
	Light goods vehicle	<1%	4%	2%	2%	<1%	2%			
	Medium & heavy goods vehicle	<1%	6%	4%	4%	1%	2%			
2018	Private light bus	<1%	<1%	<1%	<1%	<1%	1%			
	Public light bus	<1%	1%	<1%	<1%	1%	8%			
	Non- franchised bus	<1%	2%	1%	1%	<1%	1%			
	Franchised bus	<1%	3%	2%	2%	<1%	2%			
	Total emission	<1%	18%	9%	11%	21%	49%			
	Motorcycle	<1%	<1%	<1%	<1%	16%	5%			
	Private car	<1%	<1%	1%	1%	3%	11%			
	Taxi	<1%	3%	<1%	<1%	1%	16%			
	Light goods vehicle	<1%	3%	2%	2%	<1%	2%			
	Medium & heavy goods vehicle	<1%	5%	3%	4%	<1%	2%			
2019	Private light bus	<1%	<1%	<1%	<1%	<1%	1%			
	Public light bus	<1%	<1%	<1%	<1%	1%	8%			
	Non- franchised bus	<1%	2%	1%	1%	<1%	1%			
	Franchised bus	<1%	3%	2%	2%	<1%	2%			
	Total emission	<1%	17%	9%	11%	22%	47%			
	Motorcycle	<1%	<1%	<1%	<1%	17%	5%			
	Private car	<1%	1%	1%	1%	3%	12%			
	Taxi	<1%	3%	<1%	<1%	1%	15%			
	Light goods vehicle	<1%	5%	2%	3%	<1%	2%			
2020	Medium & heavy goods vehicle	<1%	5%	3%	3%	<1%	2%			
	Private light bus	<1%	<1%	<1%	<1%	<1%	1%			

	Vehicle type	Percentage of air pollutant emissions from various types of vehicles in the total local emissions [#]							
Year		Sulphur dioxide (SO ₂)	Nitrogen oxides (NOx)	Respirable suspended particulates (RSP/PM ₁₀)	Fine suspended particulates (FSP/PM _{2.5})	Volatile organic compounds (VOC)	Carbon monoxide (CO)		
	Public light bus	<1%	1%	<1%	<1%	1%	9%		
	Non- franchised bus	<1%	1%	1%	1%	<1%	1%		
	Franchised bus	<1%	4%	2%	3%	<1%	2%		
	Total emission	<1%	19%	9%	11%	23%	47%		

May not add up to 100 due to rounding.

According to the vehicle emission inventory from 2018 to 2020, the percentages of emission distribution of commercial vehicles (including franchised bus) are tabulated as follows:

		Percentage of emission distribution of various types of commercial vehicles#							
Year	Vehicle type	Sulphur dioxide (SO ₂)	Nitrogen oxides (NOx)	Respirable suspended particulates (RSP/PM ₁₀)	Fine suspended particulates (FSP/PM _{2.5})	Volatile organic compounds (VOC)	Carbon monoxide (CO)		
	Taxi	11%	17%	0%	0%	22%	51%		
	Light goods vehicle	16%	20%	20%	20%	10%	5%		
	Medium & heavy goods vehicle	43%	31%	41%	41%	16%	8%		
2018	Private light bus	2%	1%	1%	1%	4%	3%		
	Public light bus	4%	3%	3%	3%	32%	25%		
	Non- franchised bus	8%	10%	13%	13%	9%	3%		
	Franchised bus	16%	18%	21%	21%	6%	6%		
from	al emissions 1 commercial icles in 2018	100%	100%	100%	100%	100%	100%		
	Taxi	12%	16%	0%	0%	24%	52%		
	Light goods vehicle	16%	22%	23%	23%	9%	5%		
2019	Medium & heavy goods vehicle	43%	30%	36%	36%	11%	6%		
	Private light bus	2%	1%	2%	2%	6%	4%		
	Public light bus	5%	3%	1%	1%	34%	25%		

	Vehicle type	Percentage of emission distribution of various types of commercial vehicles#							
Year		Sulphur dioxide (SO ₂)	Nitrogen oxides (NOx)	Respirable suspended particulates (RSP/PM ₁₀)	Fine suspended particulates (FSP/PM _{2.5})	Volatile organic compounds (VOC)	Carbon monoxide (CO)		
	Non- franchised bus	7%	10%	14%	14%	9%	3%		
	Franchised bus	16%	18%	24%	24%	6%	6%		
from	al emissions 1 commercial icles in 2019	100%	100%	100%	100%	100%	100%		
	Taxi	15%	15%	0%	0%	23%	49%		
	Light goods vehicle	15%	25%	28%	28%	<u> </u>	49% 6%		
	Medium & heavy goods vehicle	42%	28%	32%	32%	10%	6%		
2020	Private light bus	2%	1%	2%	2%	6%	3%		
	Public light bus	6%	4%	2%	2%	39%	28%		
	Non- franchised bus	4%	7%	8%	8%	7%	2%		
	Franchised bus	15%	21%	29%	29%	7%	6%		
from	al emissions commercial icles in 2020	100%	100%	100%	100%	100%	100%		

May not add up to 100 due to rounding.

2. The numbers of diesel buses and new energy (including electric, hybrid, etc.) buses put into service by the respective local franchised bus companies in the past 3 years are tabulated as follows:

	20	20	20	21	2022			
Bus company	Diesel bus	New energy bus	Diesel bus	New energy bus	Diesel bus	New energy bus	Total	
The Kowloon Motor Bus Company (1933) Limited	221	-	142	-	189	16	568	
Citybus Limited (Franchise for Hong Kong Island and Cross-Harbour Bus Network)	44	-	16	-	15	1	76	
Citybus Limited (Franchise for the Airport and North Lantau Bus Network)	20	-	-	-	-	-	20	
New World First Bus Services Limited	4	-	-	-	-	-	4	
Long Win Bus Company Limited	-	-	119	-	13	-	132	

	2020		2021		2022		
Bus company	Diesel bus	New energy bus	Diesel bus	New energy bus	Diesel bus	New energy bus	Total
New Lantao Bus Company (1973) Limited	-	-	-	-	-	2	2
Total	28	89	2'	77	23	36	802

Note: The above table shows the number of first registered and licensed buses in the corresponding years (January to December).

In addition, the Transport Department does not have record on the relevant numbers of diesel buses and new energy buses purchased and to be purchased after tendering exercises.

3. According to the statistics of the Transport Department, as at the end of December 2022, the numbers of registered electric commercial vehicles and their percentages to the total number of vehicles of the same type are as follows:

Vehicle type	No. of registered electric vehicles (EVs)	Total no. of registered vehicles	Percentage of registered EVs to the total number of vehicles of the same type
Taxi	1	18 163	0.01%
Franchised bus	51	6 198	0.82%
Non-franchised bus	7	6 905	0.1%
Private bus	2	815	0.25%
Public light bus	0	4 349	0%
Private light bus	6	3 473	0.17%
Goods vehicle	288	120 475	0.24%
Special purpose vehicle	128	2 233	5.73%

Note: Government vehicles are not included in the figures as government vehicles need not be registered. Besides, hybrid vehicles are included in their corresponding type of fuel-driven vehicle.

4. According to the statistics of the Government Logistics Department, as at January 2023, there were 7 108 vehicles (including special purpose vehicles) in the government vehicle fleet, of which the percentages of electric and hybrid vehicles in the fleet of each department are as follows:

Policy Bureau/ Department/Organisation	No. of EVs (a)	No. of hybrid vehicles (b)	Total no. of vehicles (c)	Percentage of EVs (d) = (a) / (c)	Percentage of hybrid vehicles (e) = (b) / (c)
Administration Wing	3	4	27	11.1%	14.8%
Agriculture, Fisheries and Conservation Department	9	0	212	4.2%	0.0%
Auxiliary Medical Service	0	0	19	0.0%	0.0%
Architectural Services Department	1	0	9	11.1%	0.0%
Audit Commission	0	0	2	0.0%	0.0%
Buildings Department	9	1	40	22.5%	2.5%
Customs and Excise Department	7	6	217	3.2%	2.8%
Census and Statistics Department	0	0	3	0.0%	0.0%
Civil Aviation Department	5	0	15	33.3%	0.0%
Civil Aid Service	0	0	40	0.0%	0.0%
Commerce and Economic Development Bureau	1	1	4	25.0%	25.0%

Policy Bureau/ Department/Organisation	No. of EVs (a)	No. of hybrid vehicles (b)	Total no. of vehicles (c)	Percentage of EVs (d) = (a) / (c)	Percentage of hybrid vehicles (e) = (b) / (c)
Civil Engineering and Development Department	2	0	41	4.9%	0.0%
Chief Executive's Office	1	0	8	12.5%	0.0%
Constitutional and Mainland Affairs Bureau	0	1	3	0.0%	33.3%
Companies Registry	0	0	1	0.0%	0.0%
Civil Service Bureau	0	1	3	0.0%	33.3%
Correctional Services Department	1	0	131	0.8%	0.0%
Culture, Sports and Tourism Bureau	0	4	5	0.0%	80.0%
Development Bureau	0	1	6	0.0%	16.7%
Department of Health	1	0	57	1.8%	0.0%
Department of Justice	0	0	11	0.0%	0.0%
Drainage Services Department	6	0	45	13.3%	0.0%
Education Bureau	0	1	5	0.0%	20.0%
Environment and Ecology Bureau	1	1	4	25.0%	25.0%
Electrical and Mechanical Services Department	17	5	202	8.4%	2.5%
Environmental Protection Department	2	0	52	3.8%	0.0%
Food and Environmental Hygiene Department	4	2	718	0.6%	0.3%
Fire Services Department	5	18	804	0.6%	2.2%
Financial Services and the Treasury Bureau	0	2	3	0.0%	66.7%
Government Flying Service	0	0	4	0.0%	0.0%
Government Logistics Department	3	4	62	4.8%	6.5%
Government Laboratory	0	0	1	0.0%	0.0%
Government Property Agency	0	0	2	0.0%	0.0%
Home Affairs Department	0	4	29	0.0%	13.8%
Housing Bureau	0	0	0	0.0%	0.0%
Health Bureau	0	1	4	0.0%	25.0%
Hong Kong Monetary Authority	0	1	5	0.0%	20.0%
Hong Kong Observatory	0	0	8	0.0%	0.0%
Hong Kong Police Force	29	109	2 877	1.0%	3.8%
Hongkong Post	7	12	267	2.6%	4.5%
Housing Department	4	1	51	7.8%	2.0%
Home and Youth Affairs Bureau	1	1	6	16.7%	16.7%
Highways Department	2	0	47	4.3%	0.0%
Independent Commission Against Corruption	0	2	38	0.0%	5.3%
Immigration Department	1	0	36	2.8%	0.0%
Invest Hong Kong	0	0	1	0.0%	0.0%
Intellectual Property Department	0	0	1	0.0%	0.0%

Policy Bureau/ Department/Organisation	No. of EVs (a)	No. of hybrid vehicles (b)	Total no. of vehicles (c)	Percentage of EVs (d) = (a) / (c)	Percentage of hybrid vehicles (e) = (b) / (c)
Inland Revenue Department	0	0	4	0.0%	0.0%
Information Services Department	0	0	8	0.0%	0.0%
Innovation and Technology Commission	0	0	3	0.0%	0.0%
Innovation, Technology and Industry Bureau	0	1	2	0.0%	50.0%
Joint Secretariat for the Advisory Bodies on Civil Service and Judicial Salaries and Conditions of Service	0	0	1	0.0%	0.0%
Judiciary	0	9	24	0.0%	37.5%
Legal Aid Department	0	0	2	0.0%	0.0%
Lands Department	4	0	172	2.3%	0.0%
Leisure and Cultural Services Department	3	1	151	2.0%	0.7%
Labour Department	2	0	27	7.4%	0.0%
Land Registry	0	0	1	0.0%	0.0%
Labour and Welfare Bureau	0	1	3	0.0%	33.3%
Marine Department	0	0	5	0.0%	0.0%
Office of the Communications Authority	2	0	21	9.5%	0.0%
Office of the Government Chief Information Officer	0	0	3	0.0%	0.0%
Official Receiver's Office	0	0	1	0.0%	0.0%
Planning Department	1	0	12	8.3%	0.0%
Public Service Commission	0	1	1	0.0%	100.0%
Registration and Electoral Office	0	1	1	0.0%	100.0%
Radio Television Hong Kong	1	0	24	4.2%	0.0%
Rating and Valuation Department	0	0	7	0.0%	0.0%
Security Bureau	0	2	3	0.0%	66.7%
Secretariat, Commissioner on Interception of Communications and Surveillance	0	0	1	0.0%	0.0%
Social Welfare Department	3	0	29	10.3%	0.0%
Transport Department	1	0	219	0.5%	0.0%
Trade and Industry Department	0	0	2	0.0%	0.0%
Transport and Logistics Bureau	0	1	2	0.0%	50.0%
Treasury	0	0	1	0.0%	0.0%
University Grants Committee Secretariat	0	0	1	0.0%	0.0%

Policy Bureau/ Department/Organisation	No. of EVs (a)	No. of hybrid vehicles (b)	Total no. of vehicles (c)	Percentage of EVs (d) = (a) / (c)	Percentage of hybrid vehicles (e) = (b) / (c)
Working Family and Student Financial Assistance Agency	2	0	2	100.0%	0.0%
Water Supplies Department	12	1	249	4.8%	0.4%
Total	153	201	7 108	2.2%	2.8%

In July 2021, the EPD updated the green procurement practice for government vehicles, requiring all bureaux and departments to adopt the use of EVs as the standard when purchasing and replacing small and medium-sized government private cars, except for those that cannot be replaced with EVs due to operational needs or other specific reasons. The Government Logistics Department will determine the number and models of vehicles to be procured each year in accordance with the above practice, the operational needs and requirements of bureaux and departments, and the actual market situation. The number of EVs to be procured in 2023-24 is still being worked out.

Examination of Estimates of Expenditure 2023-24

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)072

(Question Serial No. 0979)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(000) Operational expenses
Programme:	(-) Not specified
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The estimate of the Environmental Protection Department for 2023-24 is higher than last year by about \$390 million. Please advise this Committee of the specific details of the estimate, the expenditure for the relevant work and the effectiveness.

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 12)

Reply:

The estimate for operational expenses of the Environmental Protection Department (EPD) for 2023-24 is higher than the revised estimate for 2022-23 by \$390 million (11.6%), which is mainly due to the increased provision for waste management initiatives, including the implementation of municipal solid waste charging, extension of food waste collection service and launching of the Pilot Programme on Smart Recycling Systems.

The above increase in expenses is partly offset by the reduction of provision for operating expenses arising from the re-organisation of the Environment Branch of the Environment and Ecology Bureau and the EPD with effect from 1 January 2023.

As the above initiatives are being taken forward, we will closely monitor their implementation and review their effectiveness in due course.

EEB(E)073

(Question Serial No. 0980)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

As municipal solid waste charging is expected to be implemented in the second half of 2023, please inform this Committee of the specific details and the expenditures involved.

<u>Asked by</u>: Hon KWOK Wai-keung (LegCo internal reference no.: 14)

Reply:

The Amendment Bill on municipal solid waste (MSW) charging was passed by the Legislative Council (LegCo) on 26 August 2021. Premised on the "polluter-pays" principle, MSW charges will be levied by dual modes of "charging through purchasing and using designated bags (DBs) or designated labels (DLs)" (applicable to most residential buildings, commercial and industrial buildings, village houses, street level shops and institutional premises) and "charging by weight-based gate-fee" at landfills or refuse transfer stations (mainly applicable to oversized waste or waste which is irregular in shape generated from commercial & industrial premises).

We are now actively taking forward relevant preparatory work to enable the Government, various stakeholders and the public to prepare for the implementation of MSW charging at the end of this year. The preparatory work mainly include: (1) establishing a comprehensive manufacturing, inventory and distribution system for the DBs and DLs, with a retail network comprising a few thousand retail outlets; (2) enhancing the complementary system for collecting "gate-fee" at waste management facilities and developing a "gate-fee" registration and accounting system; (3) continuing to take forward publicity and education activities at various types of premises (such as residential/commercial & industrial buildings, public rental housing estates, rural villages, shopping malls, etc.) as well as providing training to the frontline staff concerned; (4) maintaining close communication with various stakeholders such as property management companies, formulating relevant guidelines and providing support to them; and (5) launching extensive public education and publicity campaigns.

The total estimated expenditure for the preparatory work of MSW charging for the 2023-24 financial year is about \$557.5 million, mainly for salary, the relevant expenditure involved in establishing a manufacturing, inventory and distribution system for the DBs and DLs, and the expenditure incurred in promotion, publicity and education activities.

We will consult the LegCo Panel on Environmental Affairs later this year on the specific commencement date for implementing MSW charging.

EEB(E)074

(Question Serial No. 0986)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

It is stated in the Matters Requiring Special Attention that the Administration will continue to implement the pilot scheme on free collection of food waste for public and commercial & industrial premises, and gradually expand the scheme to collect food waste from domestic sources including implementation of a trial scheme on food waste collection in public rental housing estates. Please advise this Committee of the following:

(a) What are the locations of recycling points and quantities of food waste recovered under the pilot scheme on free collection of food waste for public and commercial & industrial premises in the past 3 years? Does the response meet the expectations of the Administration? What are the manpower and expenditure allocated?

(b) What are the numbers of participating housing estates and quantities of food waste recovered in the past 3 years? Does the response meet the expectations of the Administration? What are the manpower and expenditure allocated?

(c) What are the details and progress of the gradual expansion of the scheme to collect food waste from the domestic sector?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 21)

Reply:

(a)-(c) The Environmental Protection Department (EPD) extended the scale of the Pilot Scheme on Food Waste Collection (Pilot Scheme) in 2021 by rolling out 4 two-year service contracts in phases, covering relatively clustered premises in different districts of Hong Kong, which generate larger quantities of food waste with less impurities, including public premises (such as shopping centres of public rental housing (PRH) estates, cooked food centres and public markets, catering facilities of social service organisations, canteens in tertiary institutions and hospitals, etc.) as well as private commercial & industrial premises (such as food factories, hotels, large shopping malls, airline caterers, etc.). At the same time, domestic food waste is being collected on a trial basis. The first food waste collection service contract covering Hong Kong Island (including Islands District) and the second one covering Kowloon (including Tsuen Wan, Kwai Tsing and Tseung Kwan O) have come into operation in September 2021 and February 2022 respectively. The other 2 contracts covering New Territories East (including Sha Tin, Tai Po and North District) and New Territories West (including Tuen Mun and Yuen Long) are expected to commence in April this year. The quantity of food waste collected through different channels in Hong Kong is increasing progressively, going beyond 150 tonnes per day on average. The participation and recovery rates of the commercial & industrial sector is higher than that of domestic households, the ratio of which is about the same as expected. Due to the tightening of control measures during the fifth wave of the epidemic in early 2022, the food waste recovery rate under the Pilot Scheme was also affected to some extent.

The manpower involved in the Pilot Scheme is absorbed by the existing establishment of the EPD. Please refer to Tables 1 and 2 for the expenditure involved, quantity of food waste recovered and number of participating premises under the Pilot Scheme.

Tuote I Empenditure involved in the I i	
Financial year	Expenditure
	(\$ million)
2020-21	35.1
2021-22	39.9
2022-23	67.0 [Note 1]
	(Estimated expenditure)

Table 1 Expenditure involved in the Pilot Scheme

Note 1: The EPD has rolled out 4 food waste collection service contracts in phases. The contracts covering Hong Kong Island (including Islands District) and Kowloon (including Tsuen Wan, Kwai Tsing and Tseung Kwan O) have commenced in September 2021 and February 2022 respectively.

Table 2 Quantity of food waste recovered and number of participating premises [Note 2]

Year	Quantity of food waste recovered		Number of participating premises	
	· ·	s/year)	1	1 01
	Public and	Residential	Public and	Residential
	commercial &	premises	commercial &	premises
	industrial		industrial	
	premises		premises	
2020	36 133	0	283	0
2021	48 986	45	300	13
2022	48 648	601	423	30
	[Note 3]			

Note 2: Quantity of food waste recovered refers to the total amount of food waste treated by O·PARK1 and the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po Sewage Treatment Works in the respective year. Organisations subsidised by the Government and voluntarily participated in source separation and collection of food waste have been covered.

Note 3: The overall quantity of food waste recovered from public and commercial & industrial premises was lower than that of 2021. This was due to the fifth wave of the epidemic in 2022, during which the catering industry had suspended their business or shortened their business hours and some markets with confirmed cases detected had to be closed for cleaning and disinfection.

The EPD, in collaboration with the Housing Department and the Hong Kong Housing Society, launched an 18-month trial scheme on food waste collection in PRH estates (trial scheme) in October 2022 to promote domestic food waste recycling. The first phase of the trial scheme covers a total of 34 blocks in 5 PRH estates, including Shek Pai Wan Estate in Aberdeen, Choi Tak Estate in Ngau Tau Kok, Sheung Tak Estate in Tseung Kwan O, Kwun Lung Lau in Kennedy Town and Lin Tsui Estate in Chai Wan, in which smart recycling bins have been installed to collect food waste. With additional funding allocated in the 2023-24 financial year, the trial scheme will be further extended to 4 other PRH estates in the New Territories and Kowloon, including Tin Heng Estate in Tin Shui Wai, Lee On Estate in Ma On Shan, On Yam Estate in Kwai Chung and Tsz Hong Estate in Wong Tai Sin, covering 32 blocks starting from March 2023. We will continue to liaise with the Housing Department and the Hong Kong Housing Society for site selection with an aim to extending the trial scheme to cover up to 100 blocks of PRH estates, involving about 150 000 residents in 2023-24.

To encourage members of the public and housing estates to participate in domestic food waste recycling, the Recycling Fund launched a solicitation scheme in 2020 for food waste recycling projects, focusing on supporting and subsidising private residential buildings to collect food waste using smart recycling bins, with a view to further enhancing the effectiveness and raising public awareness of food waste recycling. A total of 30 eligible applications have been received so far, of which 28 have been approved. It is expected that about 15 000 households will be benefitted.

EEB(E)075

(Question Serial No. 0987)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(3) Noise
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding the proposed amendments to the Noise Control Ordinance (NCO) to put control over domestic renovation noise and use of loudspeakers for street cries, please advise this Committee of the following:

(a) The specific progress of the legislative amendment. Is there a concrete schedule for the work? If yes, what are the details?

(b) The number of complaint cases regarding noise nuisance received in the past 3 years. What specific measures had been taken and what had been done to address these cases?

(c) The manpower and expenditure involved to strengthen noise control in the past 3 years. How effective is it?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 22)

<u>Reply</u>:

(a) At present, noise arising from renovation work is regulated under section 6 of the Noise Control Ordinance (NCO). Under section 6(1) of the NCO, the use of powered mechanical equipment for renovation work during the restricted hours, i.e. between 7 p.m. and 7 a.m. or at any time on Sundays/public holidays, shall only be carried out with a valid Construction Noise Permit issued by the Environmental Protection Department (EPD) and in accordance with the conditions stipulated therein, failing which an offence is committed.

The Government proposes to amend the NCO to strengthen the control of renovation noise, in particular noise arising from the use of percussive breakers and drills. We consulted the Legislative Council Panel on Environmental Affairs on 27 February 2023 on the proposed amendments and gained members' support. We plan to complete the consultation with stakeholders, relevant professional bodies and the Advisory Council on the Environment within this year, with a target to complete the drafting work and submit the proposed new regulations to the Legislative Council for scrutiny in 2024.

Noise arising from promotional activities in public places (including street cries using loudspeakers from shops) is regulated under section 5(4) of the NCO, under which any person who makes noise that is a source of annoyance to any person commits an offence

and will be prosecuted. The Government is also preparing to commence the consultation on the proposed regulations on the use of loudspeakers for street cries in the second half of 2023.

(b) In the past 3 years, the numbers of complaints received by the EPD on domestic renovation noise and use of loudspeakers for street cries are as follows:

Year	Domestic renovation noise	Use of loudspeakers for street cries*
2020	153	427
2021	124	572
2022	110	544

*In relation to shops using loudspeakers for street cries

Upon receipt of the complaints, the EPD will deploy staff to carry out investigation onsite for each case. If a breach is identified, enforcement officers will initiate prosecution against the suspected offender after collecting sufficient evidence. If the complaint involves daytime domestic renovation noise, the EPD will assist in mediation and advise on practical measures to mitigate the noise impact. For noise arising from street cries from shops, enforcement officers will conduct an assessment on-site in accordance with the enforcement guidelines to determine whether the noise causes annoyance to any person, and take enforcement action based on the assessment results. As for cases of shops with repeated offences, the Department will also investigate the liability of the director(s) concerned and initiate prosecution under the provisions of the NCO to enhance the deterrent effect.

(c) Over the past 3 years, the EPD has conducted 480 inspections on complaints about domestic renovation noise and more than 4 600 inspections on complaints about noise from street cries from shops. There were 2 and 105 convictions involving noise arising from domestic renovation and street cries from shops, with an average fine of \$5,000 and about \$4,400 correspondingly. As handling the above noise complaints and taking enforcement actions are part of the EPD's routine integrated enforcement work, there are no separate breakdowns on the manpower and expenditure involved.

CONTROLLING OFFICER'S REPLY

EEB(E)076

(Question Serial No. 0988)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding the implementation of the EV-charging at Home Subsidy Scheme to promote installation of electric vehicle charging-enabling infrastructure in car parks of existing private residential buildings and estates, please inform this Committee of the following:

(a) the number of charging facilities completed over the past 2 years;

(b) the number of charging facilities to be completed soon; and

(c) the amount of subsidy granted.

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 23)

Reply:

The EV-charging at Home Subsidy Scheme (EHSS) was launched in October 2020 for application. Upon approval of the EHSS applications, applicants are required to engage consultants and contractors to design and install electric vehicle charging-enabling infrastructure (EVCEI) through open tendering. It takes time for the applicants to conduct the tendering exercise, resolve the technical issues related to the installation works, as well as liaising with parking space owners to reach consensus over the detailed design of the installation. As at the end of January 2023, 11 car parks of residential estates, covering about 1 400 parking spaces, have commenced or completed the installation works, which involve mainly car parks of relatively small scale with less technical problems. For these car parks, the time between approval of the EHSS applications and completion of the installation works ranges from around 18 to 30 months. It is expected that a total subsidy of about \$40 million will be granted upon completion of the installation works at these car parks.

According to the current progress, it is anticipated that a total of some 7 000 parking spaces in about 60 car parks will have EVCEI installed in 2023, and the target of completing the installation of EVCEI for some 140 000 parking spaces in about 700 car parks of residential estates can be achieved in 2027-28 as planned.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)077

(Question Serial No. 2582)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Environmental Protection Department has implemented the Plastic Shopping Bag (PSB) Charging Scheme in full for over 10 years. Please inform this Committee of the following: (a) Please set out the annual PSB levy collected in the past 10 years;

(b) What are the reduction rates of PSBs after years of implementation of the PSB Charging Scheme? Is it effective in reducing the use of PSBs?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 13)

<u>Reply</u>:

(a) The Government implemented the first phase of the Plastic Shopping Bag (PSB) Charging Scheme (the Scheme) in July 2009, and extended the Scheme in April 2015 to cover the entire retail sector of over 100 000 retail points. Since the full implementation of the Scheme, we have been adopting the "retention" approach whereby retailers retain the PSB charge without the need of remitting to the Government. The PSB charge collected under the Scheme from 2013 to 2015 is tabulated below:

Year	PSB charge collected
	(\$m)
2013	33
2014	35
2015 (January - March)	9

(b) The Environmental Protection Department (EPD) has been conducting PSB disposal surveys annually since 2009 in order to monitor the disposal rates of PSBs originating from various retail categories. As estimated from the landfill disposal survey, the total number of PSBs disposed of in the first year of the full implementation of the Scheme (i.e. 2015) reduced significantly by about 25%. However, we note that there was a rebound of PSB disposal in the following years. For example, the total number of PSBs disposed of in 2021 was about 4.65 billion, which is about 11% less than the disposal rate in the year before full implementation of the Scheme (i.e. 2014), but about 11% more than the disposal rate in 2020. To maintain the effectiveness of the Scheme, we introduced enhancement measures on 31 December 2022 to increase the minimum

charge per PSB from \$0.5 to \$1, remove the exemption for PSBs carrying frozen or chilled foodstuff items, and tighten the scope of exemption for PSBs carrying foodstuff items in non-airtight packaging, subject to the basic principle of one free PSB per single transaction.

Relevant statistics of the PSB disposal surveys conducted since 2009 are tabulated in the Annex.

Annex

Findings of PSB disposal surveys⁽¹⁾ – Estimated annual disposal (by number of PSBs)

	200)9	201	0	201	1	201	2	201	3	201	4	2015	(4)	201	6	201	7	201	8	201	9	2020		20 2021	
Retail categories ⁽²⁾	Million/ year	%	Million/ year	%																						
Supermarkets	488.22	10.44%	84.22	1.90%	75.71	1.66%	75.09	1.43%	41.24	0.89%	59.40	1.13%	54.85	1.40%	32.26	0.75%	36.78	0.83%	49.35	1.09%	52.17	1.28%				
Convenience stores	89.98	1.92%	15.33	0.34%	17.55	0.39%	15.60	0.30%	15.13	0.33%	15.54	0.30%	18.71	0.48%	35.60	0.83%	40.44	0.92%	55.80	1.24%	4.37	0.11%				
Medicare and cosmetic stores	79.14	1.69%	53.57	1.21%	53.70	1.18%	65.12	1.24%	59.91	1.30%	80.22	1.53%	27.76	0.71%	37.20	0.87%	35.23	0.80%	45.23	1.00%	37.28	0.92%				
Sub-total Retail categories in the first phase	657.34	14.05%	153.12	3.45%	146.96	3.23%	155.81	2.97%	116.28	2.52%	155.15	2.96%	101.31	2.58%	105.06	2.45%	112.45	2.55%	150.39	3.33%	93.82	2.30%	waste c	lassifica	streamline tion since posal surve	2020.
Other retail categories	823.48	17.60%	890.20	20.03%	906.95	19.96%	844.26	16.09%	849.45	18.37%	914.68	17.45%	704.67	17.93%	697.71	16.24%	793.79	17.96%	934.24	20.71%	775.63	19.04%		nave co	mbined va	
Sub-total All retail categories		31.65%	1 043.32	23.48%	1 053.91	23.19%	1 000.07	19.06%	965.73	20.89%	1 069.84	20.41%	805.99	20.52%	802.77	18.69%	906.24	20.51%	1 084.62	24.05%	869.45	21.34%				
Source unidentified ⁽³⁾	3 197.71	68.35%	3 400.42	76.52%	3 490.28	76.81%	4 247.35	80.94%	3 656.58	79.11%	4 171.99	79.59%	3 124.18	79.49%	3 493.71	81.32%	3 512.26	79.49%	3 425.42	75.95%	3 204.17	78.66%				
Total	4 678.53	100%	4 443.74	100%	4 544.19	100%	5 247.42	100%	4 622.31	100%	5 241.82	100%	3 930.17	100%	4 296.48	100%	4 418.50	100%	4 510.04	100%	4 073.62	100%	4 175.46	100%	4 647.27	100%

(The figures may not add up to the total due to rounding)

Notes:

- 1. The disposal of flat-top bags is not included.
- 2. The first phase of the PSB Charging Scheme, which was implemented from 7 July 2009 to 31 March 2015, was applicable to registered retailers, covering mostly large chain supermarkets, convenience stores and medicare and cosmetic stores. However, it is also possible that the PSBs bearing distinguishing features of such retailers as found in the disposal surveys might be distributed by supermarkets, convenience stores or medicare and cosmetic stores which were not registered retailers.
- 3. PSBs bearing no logos or signs that show their sources or PSBs that cannot be categorised.
- 4. Since 1 April 2015, the PSB Charging Scheme has been extended to cover the entire retail sector.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)078

(Question Serial No. 1163)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(000) Operational expenses
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Environmental Protection Department (EPD) states that it will continue to promote reduction of food waste at source under the Food Wise Hong Kong Campaign. Please advise this Committee of the following:

1) the expenditure involved for the "Big Waster" Campaign in the last 3 years, including online publicity, advertising production, on-site events, etc.; and

2) the estimated expenditure of the Campaign in the coming 2 years.

Asked by: Hon LAM Kin-fung, Jeffrey (LegCo internal reference no.: 10)

Reply:

1) The Food Wise Hong Kong Campaign (the Campaign) has been promoting a "Food Wise and Waste Less" culture and encouraging behavioural change to reduce food waste at source in the community through various schemes and activities since its launch in 2013. The major schemes and activities of the Campaign include: the "Food Wise Charter", the "Food Wise Eateries" Scheme, the "Big Waster" Facebook and Instagram pages, and the publicity activities promoting food waste reduction at source through online platforms and mobile applications, public transport network, television and radio stations, etc.

In the past 3 years, the manpower involved in the implementation of the Campaign was absorbed by the existing staff establishment of the Environmental Protection Department (EPD) and the expenditures involved are tabulated below:

Item	Expenditure involved (\$million) [Note 1]							
	2020-21	2020-21 2021-22						
			(Estimate)					
• Promoting the "Food Wise Charter" and	1.54	0.86	0.47					
the "Food Wise Eateries" Scheme								
 Organising "Food Wise" talks 								
• The "Big Waster" Facebook and	0.84	1.41	1.39					
Instagram pages								
Publicity activities	1.07	2.13	2.02					
Total	3.45	4.40	3.88					

- Note 1: Due to the COVID-19 epidemic, we have organised less promotional visits to eateries and on-site seminars, but stepped up the promotion of the "Food Wise and Waste Less" culture through online platforms and television stations.
- 2) Since the launch of the Campaign, the per capita disposal rate of domestic food waste in Hong Kong has decreased by about 14% from 0.37 kg per day in 2013 to 0.32 kg per day in 2021. The EPD will continue to reinforce the "Food Wise and Waste Less" culture by promotion through the above-mentioned schemes and activities in the coming 2 years. The estimated expenditure is about \$4 million each year.

CONTROLLING OFFICER'S REPLY

EEB(E)079

(Question Serial No. 1164)

(44) Environmental Protection Department
(000) Operational expenses
(1) Waste
Director of Environmental Protection (Samuel CHUI)
Secretary for Environment and Ecology

Question:

The expenditure for waste treatment in 2023-24 is \$6.0693 billion, representing a year-onyear increase of 23.9%. Please advise this Committee of the following:

1) To which projects will the increased provision be allocated? Please provide a breakdown of the expenditure.

2) Regarding the additional funding of \$1 billion injected to the Recycling Fund in April 2021, please provide a breakdown of the expenditure.

3) Please provide the details of those actually involved in the Green Outreach, including the number of participants and their age groups, in the past 3 years.

4) The objectives of the Green Outreach are to reach out to the community to provide on-site support and assistance to residents and property management companies in practising proper source separation of waste and clean recycling, as well as preparing for the implementation of municipal solid waste charging. Based on the judgement of the Administration, has this scheme served its purpose? In addition, is the scheme resource-efficient with regard to the expenditure incurred?

Asked by: Hon LAM Kin-fung, Jeffrey (LegCo internal reference no.: 12)

Reply:

- 1) The provision for the Waste Programme in 2023-24 is \$1,172.1 million (23.9%) higher than the revised estimate for 2022-23 for the following reasons:
 - (i) the increased provision for operational expenses (\$626.4 million) which is mainly due to the increased provision for waste management initiatives, including the implementation of municipal solid waste charging, extension of food waste collection service and launching of the Pilot Programme on Smart Recycling Systems;
 - (ii) the increased provision for fees for operation of waste management facilities (\$479.4 million); and
 - (iii) the increased cash flow requirement for non-recurrent projects (\$66.8 million), including the cash flow requirement for the Recycling Fund (the Fund).

The above increased provision is partly offset by the reduction in cash flow requirement for plant, equipment and works (\$500,000).

- 2) In 2015, a funding of \$1 billion was injected into the Fund which was launched in October the same year. Afterwards, the Government injected an additional funding of \$1 billion to the Fund in 2021 and extended the application period of the Fund to 2027, with a view to rendering continuous assistance through various funding programmes, such as the Enterprise Support Programme, the Industry Support Programme and the Standard Project to the recycling industry, particularly the small and medium enterprises, in enhancing their operational capabilities and efficiency to cope with the latest needs of both the local and non-local markets. The Government has been actively encouraging them to upgrade and transform their operations as well as facilitating them to apply technologies to produce higher value-added products, so as to reduce waste disposal at landfills and foster the development of a circular economy. As at the end of the 2022-23 financial year, the estimated cumulative expenditure for the Fund stood at about \$780 million, including the expenditure for funding projects, project management and technical assessment, as well as education, publicity and promotion.
- 3) To strengthen on-site recycling support at community level, the Environmental Protection Department (EPD) set up the Green Outreach in 2018 and has been progressively enhancing its strength to over 200 staff at present, with about 70% of them aged below 40. The Green Outreach provides outreaching service which has been gradually expanded from 3 districts to all 18 districts of the territory. Over the past 3 years (2020-2022), the publicity and promotion activities organised by the Green Outreach attracted a total of 200 000 participants, involving different age groups and occupations, such as students, working adults, elderly people, housewives, foreign domestic helpers, ethnic minorities, etc. The EPD did not collect the personal particulars (such as age, etc.) of the participants concerned.
- To support and facilitate residents living in different types of premises to practise source 4) separation of waste and clean recycling, the EPD continues to implement various waste reduction and recycling programmes, expand the new community recycling network GREEN@COMMUNITY and reach out to the community through the Green Outreach to provide outreaching service. Among others, the EPD launched the Programme on Source Separation of Waste in 2005 with over 2 500 housing estates/residential buildings, some 700 rural villages and over 1 200 industrial & commercial buildings participated in the Programme since its launch, which has covered over 80% of the The Green Outreach has been striving to establish and population in Hong Kong. maintain a direct and effective liaison network with various stakeholders including property management companies and owners' corporations to encourage and assist them to set up recycling programmes and facilities in their premises through participating in the Programme, with a view to promoting source separation of waste and clean recycling, offering practical advice to reinforce such practices, as well as identifying As at December 2022, the Green Outreach has proper outlets for recyclables. conducted about 135 000 community visits and proactively approached residential estates/buildings, thereby establishing connections with over 4 200 property management companies and residents' organisations, and providing waste reduction and recycling support to about 70% of residential estates and buildings over the territory.

Tying-in the progressive expansion of the coverage of the Plastic Recycling Pilot Scheme to 9 districts (viz. Eastern District, Kwun Tong, Sha Tin, Central and Western District, Sham Shui Po, Tsuen Wan, Sai Kung, Tai Po and Tuen Mun) since early 2022, the EPD is progressively enhancing recycling support to those housing estates which have participated in the Programme on Source Separation of Domestic Waste in those 9 districts, including rolling out a one-stop reliable recycling service called "GREEN Coordinated by the Green Outreach, the operators of COLLECT" in mid-2022. GREEN@COMMUNITY and other recycling service contractors of the EPD collect recyclables with low market value, including plastics, glass containers, rechargeable batteries, fluorescent lamps and tubes, small electrical appliances, regulated electrical equipment, etc. from the participating estates in those 9 districts to ensure the recyclables collected will be properly treated and recycled. This initiative helps boost the public's confidence in practising clean recycling. The Green Outreach proactively contacts the major property management companies and organisations over the territory to promote the GREEN COLLECT service. As at February 2023, over 700 estates in the above districts are using the GREEN COLLECT service, covering more than 3.1 million people or 70% of the total population in the districts served.

In addition, the Green Outreach has been making efforts in promoting new GREEN@COMMUNITY facilities and services. For example, during the initial period of new Recycling Stores, members of the Green Outreach were deployed to nearby housing estates and single-block buildings to publicise to property management companies, residents' organisations and frontline cleansing workers. Besides. to strengthen recycling support in rural areas, the Green Outreach participated in the coordination of setting up add-on recycling spots in suitable locations of rural areas, covering more than 220 000 people or about 60% of the population in rural areas. Moreover, the Green Outreach also undertakes the planning and implementation of publicity and education work to promote waste reduction and recycling at community level, including making use of the multi-media such as the social media and online platforms for publicity, arranging training for property management staff/frontline cleansing workers to handle recyclables properly, as well as sharing the latest information on waste reduction and recycling.

In conclusion, the Green Outreach reaches out to the community to provide outreaching service for over 7 million people in Hong Kong, covering all 18 districts of the territory. The services include organising multi-faceted promotional and educational activities to encourage and facilitate the pubic to practice source separation of waste and clean recycling; implementing the Programme on Source Separation of Waste and the onestop reliable recycling service GREEN COLLECT to provide professional support on waste reduction and recycling to thousands of property management companies and residents' organisations; collecting information for professional analysis and participating in the planning of new facilities and service for the development and enhancement of GREEN@COMMUNITY facilities and services; as well as promoting various waste reduction and recycling programmes under the EPD, etc. The various outreaching services as well as the support on community waste reduction and recycling provided by the Green Outreach is an integral part of the supporting measures for the implementation of municipal solid waste charging. The annual expenditure of about \$100 million incurred by the Green Outreach is reasonable.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)080

(Question Serial No. 2712)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(000) Operational expenses
Programme:	(-) Not specified
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

In order to realise the vision of creating a "Liveable City", how much financial resources will be allocated to step up the monitoring and control on environmental pollution? Are there any specific numerical targets?

Asked by: Hon LAM Shun-chiu, Dennis (LegCo internal reference no.: 12)

<u>Reply</u>:

The Environmental Protection Department (EPD) strives to create a healthy and pleasant living environment for the people of Hong Kong through enforcing environmental laws and related regulations to reduce the impacts of air pollution, noise, wastewater and different types of waste on our environment and ecology. In addition, through the Environmental Impact Assessment Ordinance, we identify the alternatives and mitigation measures for various types of projects at an early planning stage, so as to minimise the impacts of the projects on the environment and ecology. As handling environmental pollution problems and enforcing the relevant laws and regulations are part of the routine integrated enforcement work of the EPD, there is no separate breakdown of the manpower and expenditure involved.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)081

(Question Serial No. 0247)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding Matters Requiring Special Attention in 2023-24, please inform this Committee of the following:

1. As the Administration will expand the Pilot Programme on Smart Recycling Systems, what are the estimated increase in devices and expenditure? Please provide a breakdown by district. When will this Pilot Programme be formalised?

2. As the Administration is currently implementing the pilot scheme on collection of waste plastics in 9 districts, will collaboration with GREEN@COMMUNITY be considered to develop more collection outlets? If yes, what are the coverage and timetable? If no, will relevant studies be conducted?

3. What are the estimated staff establishment and expenditure for the Green Outreach in the coming year? What measures will be taken to assist residents and property management companies to prepare for the implementation of municipal solid waste charging?

4. As there is currently no Recycling Station in certain districts, will the Administration set up such facilities or Recycling Spots in the vicinity of those districts, including public rental housing estates? If yes, what are the coverage and timetable? If no, will relevant studies be conducted?

<u>Asked by</u>: Hon LAM Siu-lo, Andrew (LegCo internal reference no.: 6)

Reply:

1. To enhance the community recycling services and efficiency through application of technology, the Environmental Protection Department (EPD) launched the Pilot Programme on Smart Recycling Systems (the Pilot Programme) in the fourth quarter of 2020 to test in phases smart recycling systems employing Internet of Things technology for local application. We are now implementing the second phase of the Pilot Programme with the number of application points being increased extensively from 4 locations in the initial phase to about 100 locations in the second phase, covering the GREEN@COMMUNITY facilities, large housing estates and public rental housing (PRH) estates, villages, shopping malls, universities, etc. The scope of technical trials has also been expanded so as to accumulate more experience. We will review the effectiveness of the Pilot Programme when adequate operational data have been collected

from the smart recycling facilities, and formulate the direction for the long-term development of local application of smart recycling systems. The estimated expenditure to be incurred by the smart recycling system contracts in the 2023-24 financial year is about \$18 million, mainly for engaging contractors for provision of equipment, as well as the territory-wide repair, maintenance and back-end system operation services. Hence, there is no breakdown of the estimated expenditure by district.

The number of application points by district under the second phase of the Pilot Programme is shown in the table below.

	Number of application points [#]
Hong Kong Island	
Eastern	7
Central and Western	6
Southern	4
Wan Chai	3
Kowloon	
Kowloon City	4
Kwun Tong	9
Sham Shui Po	4
Wong Tai Sin	4
Yau Tsim Mong	7
New Territories	
Islands	7
Kwai Tsing	7
North	6
Sai Kung	7
Sha Tin	4
Tai Po	6
Tsuen Wan	4
Tuen Mun	6
Yuen Long	4
Total	99

Some of the application points are subject to confirmation by the premises owners and the final number may be adjusted.

2. The coverage of the Plastic Recycling Pilot Scheme (Pilot Scheme) has been expanded progressively to 9 districts (viz. Eastern District, Kwun Tong, Sha Tin, Central and Western District, Sham Shui Po, Tsuen Wan, Sai Kung, Tai Po and Tuen Mun) since early 2022. To tie in with the progress of the Pilot Scheme, the EPD is enhancing recycling support to the housing estates which have participated in the Programme on Source Separation of Domestic Waste in those 9 districts by rolling out a new one-stop reliable recycling service called "GREEN COLLECT" in mid-2022. Coordinated by the Green Outreach, the operators of GREEN@COMMUNITY, the contractors of the Pilot Scheme and other recycling service contractors of the EPD collect recyclables with low market value, including plastics, glass containers, rechargeable batteries, fluorescent lamps and tubes, small electrical appliances, regulated electrical equipment, etc. from the participating estates to ensure the recyclables collected will be properly treated and

recycled. This initiative helps boost the public's confidence in practising clean recycling, thereby further enhancing the recycling quantity of waste plastics and other recyclables and the overall efficiency of community recycling service. As at February 2023, over 700 estates in the above districts are using the GREEN COLLECT service, covering more than 3.1 million people or 70% of the total population in the districts served. The EPD will review in due course the effectiveness of the GREEN COLLECT service service and the Pilot Scheme and the experience gained for considering the future expansion of service coverage.

- 3. To strengthen on-site recycling support at community level, the EPD set up the Green Outreach in 2018 and has been progressively enhancing its strength to over 200 staff to provide outreaching service which has been expanded from 3 districts to all 18 districts of the territory. The Green Outreach complements promotional activities by reaching out to the community. Through on-site guidance and hands-on demonstrations, the Green Outreach assists the public to practise proper source separation of waste and clean recycling, educates the public as well as assists frontline property management and cleansing staff to follow the statutory requirements of municipal solid waste charging. The annual expenditure incurred by the Green Outreach is about \$100 million.
- 4. The EPD has been expanding the community recycling network, namely GREEN@COMMUNITY. To date, there are 11 Recycling Stations serving the functions of instilling green living education and providing recycling support at district level, 32 Recycling Stores located in residential areas and over 120 Recycling Spots operating weekly at fixed locations throughout the 18 districts of Hong Kong. The distribution of Recycling Stations and Recycling Stores in the 18 districts is tabulated below.

Tiong Kong Island	
Eastern	GREEN@EASTERN*, GREEN@QUARRY BAY
Central and Western	GREEN@SHEUNG WAN, GREEN@SAI YING PUN,
	GREEN@KENNEDY TOWN
Southern	GREEN@TIN WAN, GREEN@AP LEI CHAU
Wan Chai	GREEN@WAN CHAI*, GREEN@TIN HAU,
	GREEN@HAPPY VALLEY

Hong Kong Island

Kowloon

GREEN@WALLED CITY, GREEN@TO KWA WAN,
GREEN@HUNG HOM
GREEN@KWUN TONG*, GREEN@YUE MAN
SQUARE
GREEN@SHAM SHUI PO*, GREEN@CHEUNG SHA
WAN
GREEN@SAN PO KONG
GREEN@TAI KOK TSUI, GREEN@JORDAN

New Territories

Islands	GREEN@ISLANDS*, GREEN@MUI WO
Kwai Tsing	GREEN@KWAI TSING*, GREEN@KWAI CHUNG

North	GREEN@FANLING, GREEN@SHEK WU HUI,
	GREEN@LUEN WO HUI
Sai Kung	GREEN@SAI KUNG*, GREEN@PO LAM,
	GREEN@SAI KUNG TOWN
Sha Tin	GREEN@SHA TIN*, GREEN@TAI WAI
Tai Po	GREEN@TAI PO* GREEN@TAI PO MARKET,
	GREEN@TAI WO
Tsuen Wan	GREEN@LO TAK COURT, GREEN@YI PEI SQUARE
Tuen Mun	GREEN@TUEN MUN*, GREEN@SAN HUI,
	GREEN@KIN SANG
Yuen Long	GREEN@YUEN LONG*, GREEN@YUEN LONG HUI,
	GREEN@LONG PING

*Recycling Station

We have commenced the construction of the twelfth Recycling Station, namely GREEN@WONG TAI SIN, in September 2022, with expected completion in the second quarter of 2024. We are also planning for the development of another Recycling Station under the "Invigorating Island South" initiative. Regarding areas without Recycling Stations, the operators of Recycling Stores in those districts will set up Recycling Spots to provide community recycling services. The Green Outreach also collaborate with local stakeholders to organise various kinds of public educational activities, so as to instil a green living culture into the community. Meanwhile, the EPD is planning to develop "Mini-Recycling Stores" networks in PRH estates to facilitate residents of PRH estates and nearby areas to participate in clean recycling and enhance the cost effectiveness of the recycling network. Our initial plan is to conduct a pilot trial of the new operation mode in Kwai Tsing District and gradually extend the scheme to about 50 PRH estates. We are working closely with the Housing Department to take forward the relevant scheme.

CONTROLLING OFFICER'S REPLY

EEB(E)082

(Question Serial No. 0248)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

It is stated in the Budget Speech that an additional funding of \$62 million will be allocated to gradually expand the scope of food waste collection to cover more public and private premises. The trial scheme on food waste collection in public rental housing estates will also be extended. In this connection, please advise this Committee of the following:

1. What are the details of food waste collection for public and private premises, the estimated expenditure and staff establishment involved, as well as the expected quantities of food waste to be recovered?

2. As at February this year, what is the progress of the trial scheme on food waste collection in public rental housing estates? Please set out the quantities of food waste recovered, the collection points, as well as the expenditure and staff establishment involved.

3. What are the respective treatment capacities of O·PARKs and food waste/sewage sludge anaerobic co-digestion facilities in the next 3 years? Has the Administration planned to increase their treatment capacities? If yes, what are the details? If no, will relevant studies be conducted?

4. What is the Administration's projection on the annual quantities of local food waste to be recovered in the next 3 years? Please set out the details by year and residential/public and private premises.

Asked by: Hon LAM Siu-lo, Andrew (LegCo internal reference no.: 7)

<u>Reply</u>:

1. To promote food waste recycling, the Environmental Protection Department (EPD) launched the Pilot Scheme on Food Waste Collection on a larger scale in 2021 by providing a door-to-door collection service for relatively clustered premises that generate larger quantities of food waste with less impurities, including food factories, public markets, hotels, large shopping malls, etc. The quantity of food waste collected through different channels in Hong Kong is increasing progressively, going beyond 150 tonnes per day on average.

Through the operation of 2 food waste collection service contracts covering the New Territories commencing in April this year, we will continue to enhance the food waste collection network, including the extension of food waste collection service to cover

more types of public premises (such as shopping centres of public rental housing (PRH) estates, cooked food centres and public markets, catering facilities of social service organisations, canteens in tertiary institutions and hospitals, etc.) as well as private commercial & industrial premises (such as food factories, hotels, large shopping malls, airline caterers, etc.). To further assist the catering sector in food waste collection, we will set up collection points at refuse collection points and restaurants concentrated districts to collect food waste generated in "restaurant clusters" on a trial basis. The EPD will progressively extend the trial scheme on food waste collection in PRH estates to cover up to 100 blocks. GREEN\$ points are awarded under these schemes so as to provide incentives for residents to participate in food waste recycling. It is expected that the quantity of food waste to be collected in 2023-24 can reach 220 tonnes per day. An additional expenditure of about \$62 million will be incurred in food waste collection at public and private premises and the extension of the trial scheme on food waste collection in PRH estates. The manpower involved will be absorbed by the existing establishment of the EPD.

- 2. The EPD launched the trial scheme on food waste collection in PRH estates in October 2022 to promote domestic food waste recycling. The first phase of the trial scheme covers a total of 34 blocks in 5 PRH estates, including Shek Pai Wan Estate in Aberdeen, Choi Tak Estate in Ngau Tau Kok, Sheung Tak Estate in Tseung Kwan O, Kwun Lung Lau in Kennedy Town and Lin Tsui Estate in Chai Wan, in which smart recycling bins have been installed to collect food waste. In 2023-24, the trial scheme will be further extended to cover up to 100 blocks of PRH estates, involving about 150 000 residents. As at February 2023, a total of about 240 tonnes of food waste have been collected under the scheme, involving an expenditure of about \$3.5 million, and the manpower involved is absorbed by the existing establishment of the EPD.
- 3. The treatment capacity of O·PARKs and the food waste/sewage sludge anaerobic codigestion facilities in the next 3 years is set out in the table below. In the longer term, the EPD and the Drainage Services Department will look into further expanding the food waste treatment capacity of the Tai Po Sewage Treatment Works (STW) and extending the anaerobic co-digestion technology to other suitable STWs.

Financial year	Treatment capacity (tonnes/day)	Relevant facilities
2023-24	600	 O·PARK1; O·PARK2; the Food Waste/Sewage Sludge Anaerobic Co- digestion Trial Scheme of the Tai Po STW; and the Food Waste/Sewage Sludge Anaerobic Co- digestion Trial Scheme of the Sha Tin STW
2024-25	600	Same as above
2025-26	600	Same as above

4. The EPD estimated that the quantity of food waste to be recovered in Hong Kong in the next 3 years can gradually reach close to 500 tonnes per day. The estimated quantities of food waste to be recovered from different channels are set out in the table below:

Financial year	Estimated quantity of food waste to be recovered (tonnes/day)				
	Residential premises	Residential Public and Total			
2023-24	10	210	220 [Note 1]		
2024-25	25	275	300 [Note 2]		
2025-26	40	460	500		

Note 1: The 2 contracts serving the New Territories are expected to commence service in April 2023.

Note 2: The implementation of municipal solid waste charging will help drive enterprises and the public to step up their efforts in food waste recycling.

CONTROLLING OFFICER'S REPLY

EEB(E)083

(Question Serial No. 2618)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

It is stated in the Budget Speech that an additional funding of \$62 million will be allocated to expand the scope of food waste collection to cover more premises. The trial scheme on food waste collection in public rental housing estates (trial scheme) will also be extended. In this connection, please advise this Committee of the following:

1) How effective was the trial scheme in the past 3 years?

2) Food waste has been sent to O·PARK and transformed into renewable energy in the past 3 years. How effective was it?

3) How will the additional funding of \$62 million be allocated?

Asked by: Hon LAM So-wai (LegCo internal reference no.: 23)

<u>Reply</u>:

- 1) The Environmental Protection Department (EPD), in collaboration with the Housing Department and the Hong Kong Housing Society, launched an 18-month trial scheme on food waste collection in public rental housing estates (trial scheme) in October 2022 to promote domestic food waste recycling. The first phase of the trial scheme covers a total of 34 blocks in 5 public rental housing (PRH) estates, including Shek Pai Wan Estate in Aberdeen, Choi Tak Estate in Ngau Tau Kok, Sheung Tak Estate in Tseung Kwan O, Kwun Lung Lau in Kennedy Town and Lin Tsui Estate in Chai Wan, in which smart recycling bins have been installed to collect food waste. More than 240 tonnes of food waste have been collected since the launch of the trial scheme in late October 2022. The response has been positive and about 40% of the households in the participating PRH estates have used the smart recycling bins in the first 3 months.
- 2) A total of about 125 000 tonnes of food waste was sent to O·PARK1 in the past 3 years for recycling. Approximately 30 million kWh of electricity and 7 400 tonnes of compost were produced to transform waste into energy and resources.
- 3) To promote food waste recycling, the EPD launched the Pilot Scheme on Food Waste Collection on a larger scale in 2021 by providing a door-to-door collection service for relatively clustered premises that generate larger quantities of food waste with less impurities, including food factories, public markets, hotels, large shopping malls, etc.

The quantity of food waste collected through different channels in Hong Kong is increasing progressively, going beyond 150 tonnes per day on average.

With the additional funding of \$62 million allocated in the 2023-24 financial year, we will continue to enhance the food waste collection network, including the extension of food waste collection service to cover more types of public premises (such as shopping centres of public rental housing estates, cooked food centres and public markets, catering facilities of social service organisations, canteens in tertiary institutions and hospitals, etc.) as well as private commercial & industrial premises (such as food factories, hotels, large shopping malls, airline caterers, etc.) with the 2 food waste collection service contracts for the New Territories commencing in April this year. То further assist the catering sector in food waste collection, we will set up collection points at refuse collection points and restaurants concentrated districts to collect food waste generated in "restaurant clusters" on a trial basis. We will also progressively expand the trial scheme to cover up to 100 blocks, with GREEN\$ points awarded to encourage residents to actively participate in food waste recycling. It is expected that the quantity of food waste to be collected in 2023-24 can reach 220 tonnes per day.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)084

(Question Serial No. 0525)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Environmental Protection Department stated that it would continue to implement recycling services and monitor the operation of the Recycling Fund to provide support to the recycling industry. In this connection, please advise:

1. Whether the Administration will assist the recycling industry to find suitable sites for relocation when they have to be resited due to development needs? If yes, what are the details? If no, what are the reasons?

2. The EcoPark has come into operation since 2007, but its current utilisation rate is only 60%. Would the Administration consider using the EcoPark to accommodate the operators of the recycling industry facing the aforementioned situation? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LAU Kwok-fan (LegCo internal reference no.: 38)

Reply:

- 1. The Government is committed to supporting the recycling industry by identifying suitable sites exclusively used for recycling. Apart from the 20-hectare EcoPark at Tuen Mun, the Government has currently allocated 18 sites totalling 4.7 hectares to the recycling industry through short-term tenancies, as well as 5 berthing spaces at Public Cargo Working Areas for exclusive use by the waste paper recycling industry. To support the sustainable development of the recycling industry, the Government is actively searching for other long-term sites, including the studying of reserving land in New Development Areas for environmental facilities and the environmental industry, as well as constructing multi-storey buildings for use by the recycling industry.
- 2. Around 90% of the land designated for recycling purposes (equivalent to approximately 12.2 hectares) in the EcoPark is being occupied, leaving only two sites totalling about 1.3 hectares currently available for development. On 31 October 2022, the Environmental Protection Department (EPD) invited open tenders for one of the sites with an area of about 0.4 hectares, and the tender assessment is in progress. As for the remaining 0.9-hectare site, the EPD will continue to communicate with the recycling

industry to understand their needs and arrange tendering exercise in due course to tie in with their development.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)085

(Question Serial No. 0904)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Government is committed to promoting green transport. In recent years, the "One-for-One Replacement" Scheme for electric vehicles (EVs) has been launched to offer tax concessions for the public to purchase EVs, and additional EV chargers have been installed in the public car parks managed by the Government. In this connection, please inform this Committee of the following:

1) What is the total number of chargers provided by public and private organisations for public use? How many of them are provided by the Government and what is the expenditure involved?

2) What are the respective numbers of different types of chargers (such as medium chargers and slow chargers) and their distribution in the 18 districts?

3) What are the current number of EVs in Hong Kong and the percentage of EVs in the total number of vehicles?

4) What is the current ratio of public chargers to EVs in Hong Kong? Does the Administration have any plan to improve the ratio?

5) In view of the shortage of charging locations, will the Administration consider implementing any improvement measures, such as suspending tax concessions for purchasing EVs or speeding up the installation of additional charging facilities in government car parks?

<u>Asked by</u>: Hon LEE Tsz-king, Dominic (LegCo internal reference no.: 14)

<u>Reply</u>:

- As at the end of December 2022, there were a total of about 5 434 public electric vehicle (EV) chargers provided by the Government and the private sector, among which 2 210 were provided by the Government. Among them, 1 615 were managed by the Environmental Protection Department and the expenditure involved was about \$9.3 million in 2022.
- 2) The numbers of public EV chargers by the 18 districts of Hong Kong as at the end of December 2022 are tabulated below:

	Number of chargers			
District	Standard	Medium	Quick	Sub-total
Central and Western	46	299	47	392
Eastern	21	227	69	317
Southern	6	192	42	240
Wan Chai	67	266	47	380
Kowloon City	95	45	36	176
Kwun Tong	561	322	108	991
Sham Shui Po	29	182	97	308
Wong Tai Sin	23	59	25	107
Yau Tsim Mong	54	180	100	334
Kwai Tsing	9	129	53	191
Tsuen Wan	20	201	25	246
Sai Kung	121	83	71	275
North	169	136	31	336
Tai Po	30	20	17	67
Sha Tin	118	314	94	526
Yuen Long	54	114	60	228
Tuen Mun	14	52	30	96
Islands	16	162	46	224
Total	1 453	2 983	998	5 434

3-5) As at the end of December 2022, the total number of EVs in Hong Kong was 47 468, among which 46 682 were electric private cars (e-PCs). The ratio of public EV chargers to e-PCs in Hong Kong was about 1:8.5 whilst that to other EVs was about 7:1.

It has been the Government's policy direction that e-PC owners should perform daily charging of their e-PCs at their home, workplace or other frequently visited premises. Public charging facilities should only serve as supplementary facilities for opportunity charging to top up their EV batteries. To meet the charging demand arising from the popularisation of EVs, the Government is encouraging the provision of EV charging-enabling infrastructure in existing residential buildings and new private buildings through the EV-charging at Home Subsidy Scheme and granting of gross floor area concessions respectively. The target is to have 150 000 parking spaces equipped with charging facilities in 2025 or earlier to meet the demand for charging facilities arising from the growth of e-PCs in the future.

Regarding public charging network, the Government has achieved ahead of schedule the target of having at least 5 000 public EV chargers by 2025, as set out in the Hong Kong Roadmap on Popularisation of Electric Vehicles. The Government will continue to expand the network actively by exploring the feasibility of converting progressively some of the existing petrol and liquefied petroleum gas filling stations to quick charging stations in the medium to long term and advancing the timeline of the progressive marketisation of EV charging services provided in government car parks to the second half of 2023, so as to provide impetus for the sustainable development of the whole public charging service market in the long run. Some private operators of public car parks have announced that they will significantly increase the number of EV chargers in their car parks. We anticipate that the number of public EV charging facilities will continue to increase in the future.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)086

(Question Serial No. 2629)

(44) Environmental Protection Department
(-) Not specified
(2) Air
Director of Environmental Protection (Samuel CHUI)
Secretary for Environment and Ecology

Question:

The EV-charging at Home Subsidy Scheme (EHSS) was launched in October 2020 to provide subsidy for installation of electric vehicle charging-enabling infrastructure (EVCEI) in car parks of private residential estates. The Government injected an additional funding of \$1.5 billion in the 2022-23 Budget to extend the EHSS for four years to 2027-28. In this connection, please inform this Committee of the following:

- (1) the number of EVCEI installed with the subsidy granted to approved cases in the 18 districts since the launch of the EHSS;
- (2) the total number of applications received and rejected since its launch;
- (3) the main reasons for rejecting applications; and
- (4) the total expenditure involved since its launch.

Asked by: Hon LEE Tsz-king, Dominic (LegCo internal reference no.: 16)

Reply:

(1) The EV-charging at Home Subsidy Scheme (EHSS) was launched in October 2020 for application. As at the end of January 2023, the number of car parks and parking spaces approved for the installation of electric vehicle charging-enabling infrastructure (EVCEI) in the 18 districts are tabulated below:

Administrative District	Number of car parks approved	Number of parking spaces approved for the installation of EVCEI
Central and Western	56	6 410
Eastern	31	7 461
Southern	22	4 107
Wan Chai	30	4 364
Kowloon City	29	4 778
Kwun Tong	5	2 153
Sham Shui Po	5	817
Yau Tsim Mong	18	8 770
Wong Tai Sin	4	913
Islands	4	2 152
Kwai Tsing	5	872

North	3	1 001
Sai Kung	9	3 473
Sha Tin	24	7 722
Tai Po	13	3 613
Tsuen Wan	21	8 038
Tuen Mun	15	2 706
Yuen Long	21	5 712
Total	315	75 062

- (2)&(3) Up to the end of January 2023, more than 660 applications had been received under the EHSS since its launch in October 2020. A total of 6 residential estates that failed to meet the eligibility criteria were rejected, including 5 applicants that had already entered into contracts or agreements with third parties for the provision of EV-charging services to car park users, and 1 applicant with more than 60% of the total number of the eligible parking spaces in open area.
- (4) As at the end of January 2023, 11 car parks of residential estates, covering about 1 400 parking spaces, have commenced or completed the installation works, which involve mainly car parks of relatively small scale with less technical problems. For these car parks, the time between approval of the EHSS applications and completion of the installation works ranges from around 18 to 30 months. It is expected that a total subsidy of about \$40 million will be granted upon completion of the installation works at these car parks.

CONTROLLING OFFICER'S REPLY

EEB(E)087

(Question Serial No. 0688)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(4) Water
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

In the Indicators for Specified Tasks of the Policy Address, one of the indicators is to reduce the pollution load at identified highly polluted outfalls along Victoria Harbour, including Tsuen Wan, Sham Shui Po and Kowloon City by 50% by end-2024. What are the details and progress to date?

Asked by: Hon LEE Wai-king, Starry (LegCo internal reference no.: 16)

<u>Reply</u>:

Since the commissioning of Harbour Area Treatment Scheme Stage 2A, the water quality of Victoria Harbour has markedly improved. In the past 5 years (from 2018 to 2022), the water quality of Victoria Harbour Water Control Zone was good and the overall compliance rate of Water Quality Objectives reached 90% or above. Notwithstanding that, with dense population and vibrant streets packed on both sides of the harbour, roadside activities and misconnection of foul sewers to stormwater drains lead to discharge of pollutants into Victoria Harbour through stormwater drainage systems, causing odour and environmental problems in some coastal areas.

The Government has been tackling the problems at source, focusing on the pollution problems identified at stormwater outfalls on both sides of Victoria Harbour, in particular at Tsuen Wan, Sham Shui Po and Kowloon City districts. The Environmental Protection Department is taking forward in full swing the investigation work in respect of near-shore water pollution sources so as to trace the pollution sources in stormwater drainage systems. As at January 2023, the government departments concerned have identified a total of some 110 major pollution sources, involving misconnections of foul sewers in individual districts and buildings to stormwater drains. Such misconnection cases are being followed up and rectified by government departments including the Buildings Department and the Drainage Services Department. We aim at reducing by half the pollution load at stormwater outfalls with serious pollution problems on both sides of Victoria Harbour, in particular at Tsuen Wan, Sham Shui Po and Kowloon City districts, by the end of 2024.

In addition, the Government will continue to implement various measures to resolve the problems, including planning and constructing dry weather flow interceptors at suitable

locations on both sides of Victoria Harbour to intercept pollutants that discharge through stormwater drains into the harbour; implementing territory-wide underground sewers replacement and rehabilitation works to reduce the risk of environmental pollution caused by damaged ageing sewers; carrying out regular inspection, maintenance and desilting of public sewerage and stormwater drainage systems; and applying Malodour Control Hydrogel extensively to stormwater outfalls along the seafront of Victoria Harbour and nearby locations with odour problems to mitigate odour on a regular basis.

CONTROLLING OFFICER'S REPLY

EEB(E)088

(Question Serial No. 1947)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding the Reverse Vending Machine (RVM) Pilot Scheme, please inform this Committee of the following:

1. Please set out by the 18 District Council districts the distribution and numbers of RVMs, the quantities recovered per month and the average number of containers collected from members of the public each time;

2. Please set out by the 18 District Council districts the number of service suspension days of RVMs per month, the reasons for the suspension (including reaching the maximum capacity, machine failure and routine inspection), and the average maintenance time required for service resumption;

3. It is noted that those RVMs located in places with high foot traffic (e.g. Admiralty Centre of Admiralty) often reach their maximum capacity or malfunction due to high usage. In this connection, will the Administration review the existing maintenance procedures so as to shorten the service suspension period or consider installing more RVMs based on the demand? If yes, what are the details? If no, what are the reasons?

4. Currently, RVMs are not evenly distributed. For instance, only 1 RVM is available in the North Point and Fortress Hill area and this cannot keep up with the demand. What criteria have been used to decide on the locations of RVMs? Will district bodies or resident groups be consulted for the convenience of the public? If yes, what are the details? If no, what are the reasons?

5. With the implementation of municipal solid waste charging towards the end of 2023, will the RVM Pilot Scheme be further expanded to meet the recycling needs of the public? If yes, what are the details? If no, what are the reasons?

<u>Asked by</u>: Hon LEUNG Hei, Edward (LegCo internal reference no.: 27)

<u>Reply</u>:

1. The Environmental Protection Department (EPD) launched the Reverse Vending Machine (RVM) Pilot Scheme (Pilot Scheme) in 2021. A total of 60 RVMs were set up to collect plastic beverage containers (PBCs) in Hong Kong. Stage 2 of the Pilot Scheme was launched in the second quarter of 2022 with the number of RVMs increased to 120 as at the end of August 2022. Statistics from September 2022 to end-January 2023, including the numbers of RVMs, the average quantities recovered per month and the average number of PBCs collected from members of the public each time under the Pilot Scheme, with a breakdown by the 18 districts, are as follows:

District	NumberAverage number ofofPBCs recovered perRVMsmonth		Average number of PBCs collected from members of the				
			public each time				
Central & Western	5	98 900	7.4				
Eastern	9	256 500	9.5				
Islands	3	63 500	10.5				
Kowloon City	6	98 100	9.8				
Kwai Tsing	5	125 500	13.2				
Kwun Tong	8	242 500	11.1				
North	6	151 000	9.5				
Sai Kung	8	211 900	7.6				
Sha Tin	12	320 600	9.4				
Sham Shui Po	6	187 000	14.1				
Southern	4	62 700	10.4				
Tai Po	5	137 300	10.6				
Tsuen Wan	8	185 900	10.2				
Tuen Mun	10	218 600	10.3				
Wan Chai	3	62 500	10.3				
Wong Tai Sin	9	282 300	11.8				
Yau Tsim Mong	6	134 700	11.7				
Yuen Long	7	221 200	12.1				
Total			10.3				
			(average of the 18 districts)				

2 to 3. Based on the calculation method stipulated in the contract, from 25 August 2022 to 24 January 2023, the service suspension period of RVMs under the Pilot Scheme accounts for about 4% of the total operating hours (the figures by district are tabulated below). The causes for service suspension included factors such as machine failure and the maximum capacity of RVMs being reached. However, the monthly routine inspection of RVMs is not counted according to the contract terms.

District	Number of RVMs	Average service suspension period of RVMs per month				
		Time (number of hours) [Note 1]	Percentage [Note 2]			
Central & Western	5	74	2.0%			
Eastern	9	225	3.4%			
Islands	3	71	3.2%			
Kowloon City	6	77	1.7%			
Kwai Tsing	5	232	6.3%			
Kwun Tong	8	245	4.2%			
North	6	205	4.6%			
Sai Kung	8	162	2.8%			

District	Number of RVMs	Average service suspension period o RVMs per month			
		Time (number of hours) [Note 1]	Percentage [Note 2]		
Sha Tin	12	582	6.6%		
Sham Shui Po	6	227	5.1%		
Southern	4	60	2.0%		
Tai Po	5	223	6.1%		
Tsuen Wan	8	314	5.3%		
Tuen Mun	10	136	1.9%		
Wan Chai	3	49	2.2%		
Wong Tai Sin	9	238	3.6%		
Yau Tsim Mong	6	127	2.9%		
Yuen Long	7	180	3.5%		
Total	120	3 425 [Note 3]	3.9%		
		-	(average of the 18 districts)		

Note 1: According to the contract terms, the hours of service suspension have already excluded the first hour of RVM service suspension, the period between 12:00 midnight to 8:00 a.m. on the following day, factors that are beyond the control of contractors (such as closure of venues), etc.

- Note 2: The total operating hours of RVMs are calculated on a 24-hour basis.
- Note 3: The figures by district may not necessarily add up to the total due to rounding.

RVMs may be temporarily out of service due to maximum storage capacity of plastic bottles being reached, machine failure or routine inspection. Under the contract, the contractor is required to collect the PBCs from RVMs at least 3 times a week or within 3 hours of a RVM reaching its storage threshold to ensure the smooth operation and service of RVMs. Besides, the contractor is required to inspect and maintain any RVM malfunctions within 4 hours, and arrange for maintenance and inspection for each RVM at least once a month. In addition, a real-time monitoring system is equipped in each RVM to alert the contractor when its storage reaches its maximum capacity or when any malfunctioning occurs. This system will automatically prompt the contractor to arrange for collection of PBCs from the RVM or conduct inspection and maintenance for the RVM. We will continue to monitor the performance of the contractor to ensure that they will arrange for timely collection or inspection and maintenance based on the quantities recovered and conditions of individual RVMs.

The Pilot Scheme aims to test out the on-site application and performance of RVMs at different venues. We have been closely monitoring the relevant statistics (including utilisation rates) collected from RVMs since the launch of the Pilot Scheme and will adjust their locations where necessary.

4. The contractor engaged by the Government is responsible for identifying suitable locations for setting up RVMs across the territory, and submitting proposals to the Government based on their on-site assessment of the feasibility. The Government

will then institute the arrangement for overall service provision of RVMs after receiving the contractor's proposals and making reference to the relevant statistics of the Pilot Scheme.

The 120 RVMs under the Pilot Scheme have commenced operation, and we have no 5. immediate plan to further increase the number of RVMs. To complement the implementation of municipal solid waste charging, the EPD continues to expand the community recycling network, namely GREEN@COMMUNITY, over the territory so as to strengthen recycling facilities at community level and provide proper outlets for recyclables of low commercial value. In addition to RVMs, the public can also deliver the used PBCs to over 160 collection points under GREEN@COMMUNITY or recycling bins located at public or private places. Moreover, the Government is exploring to require by legislation the property management companies and owners' organisations of major housing estates and single-block buildings with relatively large number of flats to separately collect common types of recyclables and pass them to downstream recyclers for proper processing, with effect from 2024 or earlier. By then, there will be more recyclables collection points for public use across the territory.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)089

(Question Serial No. 3117)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(000) Operational expenses
Programme:	(2) Air (5) Environmental Assessment and Planning
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

A number of concrete batching plants (CBPs) have been set up in various regions over the territory to supply concrete for the construction projects in nearby areas. The operator of a CBP is required to apply for a Specified Process Licence (SPL) in order to ensure no environmental nuisance would be caused to the nearby residents. In this connection, please advise this Committee of the following:

1. How many licensed CBPs are there in Hong Kong at present? What are their addresses and durations of operation respectively? (Please set out by District Council district)

2. What were the numbers of complaints received concerning the above CBPs in the past 3 years respectively? (Please set out by District Council district and each licensed CBP)

3. How many routine or surprise inspections to the above CBPs had been conducted by the Environmental Protection Department (EPD) in the past 3 years respectively? (Please set out by District Council district and each licensed CBP)

4. What were the numbers of warning letters and Notices of Intended Prosecution issued as well as successful prosecutions against the above CBPs in the past 3 years? (Please set out by District Council district and each licensed CBP)

5. Is there a designated team in the EPD for conducting inspections at CBPs at present? What is the total staff establishment of the team responsible for inspecting the CBPs in the territory?

6. Given that individual CBPs continued to operate after their applications for renewal of SPLs had been rejected and there was no remarkable improvement in the environment, the living environment of nearby residents had been seriously affected. The regulatory control over CBPs in Hong Kong is relatively backward and insufficient as compared to other developed countries and regions. Will the Government allocate more manpower and resources to step up the regulatory control over CBPs so as to prevent them from causing irreversible impacts on the environment and the health of residents?

Asked by: Hon LEUNG Hei, Edward (LegCo internal reference no.: 50)

Reply:

1-3. Under the Air Pollution Control Ordinance, the operation of a concrete batching plant (CBP) with a total silo capacity exceeding 50 tonnes is classified as a specified process (cement works) and the operator has to apply for a valid Specified Process Licence

(SPL). There are currently a total of 30 CBPs holding valid SPLs in Hong Kong. The address, expiry date of the SPL, the number of complaints received and inspections conducted in the past 3 years regarding each CBP are tabulated in Annex I.

- 4. The statistics of enforcement actions, including the number of warning letters and Notices of Intended Prosecution issued as well as successful prosecutions against CBPs by the Environmental Protection Department (EPD) in the past 3 years are set out in Annex II.
- 5. The EPD does not have a designated team for inspecting CBPs. Inspection of CBPs is an integral part of the EPD's enforcement work, which is shared by the 4 Regional Offices of the Environmental Compliance Division under the EPD based on the location of individual CBPs. There is no separate breakdown of the manpower involved.
- 6 The EPD has stringent requirements regarding the operation of CBPs and has been closely monitoring the operation of each CBP by conducting routine and surprise inspections. The EPD strongly condemns individual CBPs for continuing their operation after the application for renewal of SPLs had been rejected and will take follow-up actions against all irregularities in a serious manner. The EPD will adjust from time to time the manpower and resources required as well as the enforcement strategy for the regulatory control over CBPs, and deploy manpower and resources timely to strengthen the enforcement actions so as to minimise the impact of the operation of CBPs to the environment and residents nearby.

The number of complaint cases received and inspections conducted
regarding concrete batching plants (CBPs)

Item	District Council district	Address of CBP	Process Licence		1	No. of routine or surprise inspections conducted			
	uisti itt		(SPL)	2020	2021	2022	2020	2021	2022
1	Eastern	1/F, Safety Godown Industrial Building, 56 Ka Yip Street, Chai Wan, Hong Kong	December 2024	0	1	0	11	12	10
2	Tsuen Wan	Kwai Chung Lot No. 169, 13-17 Fu Uk Road, Kwai Chung, New Territories	August 2024	8	4	1	14	19	16
3		Lot No. 1825 in D.D. 130, Tuen Mun, New Territories	July 2023	0	0	1	5	6	9
4		Lot No. 1824 in D.D. 130, Yick Yuen, Tuen Mun, New Territories	November 2023	0	0	1	5	6	8
5	Tues	Lot Nos. 176 & 177 in D.D. 134, Lung Kwu Sheung Tan, Tuen Mun, New Territories	June 2024	0	0	0	6	6	6
6	Tuen Mun	Short term tenancy No. STTTM0004, Ho Yueng Street, Tuen Mun Area 40, New Territories	July 2026	1	0	0	6	5	6
7		Short term tenancy No. 1033, Ho Yueng Street, Tuen Mun Area 40, New Territories	November 2026	1	0	0	7	4	6
8		Lam Tei Quarry, Lam Tei, Tuen Mun, New Territories	Application for renewal under process	1	3	1	2	21	7
9		Lot No. 700 (part) and adjoining government land in D.D. 114, Shek Kong, Yuen Long	January 2027	0	0	0	2	5	3
10		Lot No. 362 in D.D. 127, Kiu Tau Wai, Yuen Long	November 2025	0	0	0	8	5	6
11	Yuen Long	Lot No. 1842 in D.D. 121, 89 Tong Yan San Tsuen, Yuen Long	April 2025	0	1	2	10	10	17
12		Lot Nos. 1207RP, 1208A, 1263RP, 1265RP, 1842RP and adjoining government land in D.D. 121, Tong Yan San Tsuen, Yuen Long	May 2024	1	0	1	11	7	10
13		3 San Fui Street, Tong Yan San Tsuen, Yuen Long	June 2025	1	0	1	9	7	8

Item	District Council	cil Address of CBP	Expiry date of the Specified Process Licence	No. of complaints received			No. of routine or surprise inspections conducted		
	district		(SPL)	2020	2021	2022	2020	2021	2022
14	Yuen Long	Lot No. 793 in D.D. 124 and Lot Nos. 70-77, 215RP & 216 in D.D. 127, Hung Uk Tsuen, Yuen Long	April 2025	0	0	1	6	5	7
15		20 On Kui Street, Fanling, New Territories	October 2025	0	0	0	5	3	8
16	North	Lot Nos. 24 (part), 25 (part), remaining portion of Lot No. 26 (part) and remaining portion of Section A of Lot No. 26 in D.D. 84, Ping Che, New Territories	March 2023	0	0	1	0	1	9
17		Lot No. 551 S.B.R.P in D.D. 89, Man Kam To Road, Sha Ling, New Territories	October 2024	2	1	0	6	8	0
18	Tai Po	Tai Po Town Lot No. 102, Yim Tin Tsai, Tai Po, New Territories	May 2026	4	5	2	39	23	8
19		14-18 Tsing Tim Street, Tsing Yi Island	June 2026	0	0	0	6	5	5
20		Lot No. 108, Sai Tso Wan Road, Tsing Yi (Note 1)	February 2026	0	0	2	7	6	6
21		Lot No. 108, Sai Tso Wan Road, Tsing Yi (Note 1)	May 2026	0	0	0	8	7	6
22	Kwai Tsing	Lot No. 108, Sai Tso Wan Road, Tsing Yi (Note 1)	June 2026	0	0	0	7	6	6
23		100 Tam Kon Shan Road, Tsing Yi (Note 1)	Application for renewal under process	3	4	3	13	25	17
24		100 Tam Kon Shan Road, Tsing Yi (Note 1)	Application for renewal under process	3	2	2	11	17	12
25		Lamma Power Station, Lot No. 1934 in D.D. 3, Lamma Island	May 2023	0	0	0	6	6	6
26	Islands	Western Support Area, three-runway system project, Hong Kong International Airport (Note 1)	September 2024	0	0	1	1	4	5
27	Western Support Area, three-runway system		November 2024	0	0	1	0	4	5
28	Sai Kung	Hong Kin Road, Sai Kung	September 2025	1	3	0	2	6	6

Item	District Council	Address of CBP	Expiry date of the Specified Process Licence		No. of complaints received			No. of routine or surprise inspections conducted		
	district		(SPL)	2020	2021	2022	2020	2021	2022	
29		6 Tung Yuen Street, Yau Tong, Kowloon	Application for renewal under process	2	0	3				
30	Kwun Tong	20 Tung Yuen Street, Yau Tong, Kowloon	Application for renewal rejected & appeal under process (Note 2)	4	29	39	64 39	81	58	
31		22 Tung Yuen Street, Yau Tong, Kowloon	SPL lapsed (Note 3)							
			Total	32	53	63	277	320	276	

Notes :

Note 1: A number of CBPs are operating in the lot.

- **Note 2:** The EPD has rejected the application for renewal of the SPL. The licensee has lodged an appeal to the Air Pollution Control Appeal Board (Appeal Board). The hearing by the Appeal Board has been completed and the ruling will be made in due course.
- **Note 3:** The EPD has rejected the application for renewal of the SPL. The licensee lodged an appeal to the Appeal Board. The appeal and the application for judicial review filed subsequently had been dismissed by the Appeal Board and the High Court respectively. The licence has lapsed.

Annex II

Item	District Council district	uncil Address of CBP		No. of warning letters issued		No. of prosecutions instituted (No. of Notices of Intended Prosecution issued)			No. of successful prosecutions		
district			2020	2021	2022	2020	2021	2022	2020	2021	2022
1	Yuen Long	Lot No. 1842 in D.D. 121, 89 Tong Yan San Tsuen, Yuen Long	0	1	1	0	0	0	0	0	0
2	Yuen Long	Lot Nos. 1207RP, 1208A, 1263RP, 1265RP, 1842RP and adjoining government land in D.D. 121, Tong Yan San Tsuen, Yuen Long	0	1	1	0	0	0	0	0	0
3	Tai Po	Tai Po Town Lot No. 102, Yim Tin Tsai, Tai Po, New Territories	0	1	0	0	0	0	0	0	0
4	Kwai Tsing	100 Tam Kon Shan Road, Tsing Yi (Note 1)	1	0	2	0	0	0	0	0	0
5	Kwai Tsing	100 Tam Kon Shan Road, Tsing Yi (Note 1)	1	0	0	0	0	0	0	0	0
6	Kwun Tong	6 Tung Yuen Street, Yau Tong, Kowloon	0	2	0	1	0	1 (Note 2)	0	1	0
7	Kwun Tong	20 Tung Yuen Street, Yau Tong, Kowloon	5	10	0	0	0	1	0	()
8	Kwun Tong	22 Tung Yuen Street, Yau Tong, Kowloon	5	10	9	2	4	6 (Note 3)	2	(Not	
		Total	7	15	13	3	4	8	2	1	0

Notes:

Note 1: A number of CBPs are operating in the lot.

Note 2: Conviction of this prosecution case was secured in 2023.

Note 3: Another 10 prosecutions have been initiated in 2023.

Note 4: Since 2021, the EPD has initiated a total of 21 prosecutions against CBPs. These prosecutions have been listed for trials or are pending hearing by the court.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)090

(Question Serial No. 3122)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(000) Operational expenses
Programme:	(-) Not specified
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Environmental Protection Department (EPD) launched the GREEN\$ Mobile App in November 2020. The mobile app allows the public to register as members of the GREEN\$ Electronic Participation Incentive Scheme (GREEN\$ ePIS), thereby encouraging them to participate in clean recycling. In this connection, please inform this Committee of the following:

1. What were the numbers of downloads of the GREEN\$ Mobile App and registered members of the GREEN\$ ePIS in the past year?

2. What was the expenditure for operating the GREEN\$ ePIS in the past year? How much money was spent on purchasing gift items for the scheme? What was the procurement cost for each type of gift items?

3. How many GREEN\$ points had the top 3 GREEN\$ ePIS members earned in the past year? 4. The trial period of the GREEN\$ ePIS was originally scheduled for 1 year. The EPD stated earlier that they were working on extending the scheme. What is the EPD's position on the GREEN\$ ePIS? Has it become a permanent programme?

<u>Asked by</u>: Hon LEUNG Hei, Edward (LegCo internal reference no.: 49)

Reply:

To enhance the community recycling services and efficiency through application of technology, the Environmental Protection Department (EPD) launched the Pilot Programme on Smart Recycling Systems (the Pilot Programme) in the fourth quarter of 2020 to test in phases smart recycling systems employing Internet of Things technology for local application. The EPD took the opportunity of the Pilot Programme to launch the GREEN\$ Electronic Participating Incentive Scheme (GREEN\$ ePIS) in November 2020 to encourage more members of the public to participate in resources separation for recycling. When carrying out recycling at the community recycling network via GREEN\$, members of the public can earn GREEN\$ points and redeem gift items, thereby integrating the habit of waste reduction and recycling into their daily lives. The EPD launched the GREEN\$ Mobile App in January 2022 to facilitate the public to participate in the GREEN\$ ePIS using smartphones.

- 1. There are over 240 000 accounts registered under the GREEN\$ ePIS since its launch. Of the some 120 000 newly registered accounts in the past year, the majority of account holders downloaded the GREEN\$ Mobile App and completed the registration.
- 2. The operating expenses of the GREEN\$ ePIS in 2022 was about \$400,000, which was mainly used for maintenance of the GREEN\$ Mobile App and cloud hosting services. In addition, a total of about \$3.28 million was spent on the purchase of GREEN\$ gift items, of which the expenditures for food items (e.g. noodles, cooking oil, etc.) and household items (e.g. toilet paper, kitchen towel, etc.) were \$2.92 million and \$360,000 respectively.
- 3. As at 28 February 2023, the top 3 GREEN\$ ePIS accounts have earned about 1 058 000, 966 000 and 870 000 GREEN\$ points respectively. (Note: Some transaction records are pending verification. The GREEN\$ points may change subject to the recycling and redemption activities of the registered accounts. The highest GREEN\$ points was calculated based on the balance as at 28 February 2023).
- 4. We are now implementing the second phase of the Pilot Programme with the scope of technical trials expanded, so as to accumulate more experience which will serve as references for the long-term development of the local application of smart recycling systems (including the GREEN\$ ePIS).

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)091

(Question Serial No. 3201)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Please set out the number of first registered private cars in the past 5 years by vehicle type of electric vehicle (EV) and petrol vehicle.

How many applications for tax concessions have been received and approved under the "Onefor-One Replacement" Scheme since its launch (please set out by year)?

What is the number of additional public chargers in each of the past 3 years? What is the target number of public EV chargers to be installed in the coming 3 years?

<u>Asked by</u>: Hon LEUNG Hei, Edward (LegCo internal reference no.: 62)

Reply:

The numbers of first registered private cars in the past 5 years are tabulated below by fuel type:

Year	No. of first registered private cars in the year				
I cal	Petrol private cars	Electric private cars			
2018	41 551	471			
2019	35 858	2 423			
2020	32 441	4 595			
2021	29 724	9 583			
2022	17 683	19 795			

Note: Government vehicles are not included in the figures as government vehicles need not be registered. Besides, hybrid vehicles are included in their corresponding fuel type.

The "One-for-One Replacement" Scheme was launched on 28 February 2018. As at end-2022, a total of 36 543 applications were received by the Transport Department, among which 35 762 were approved, 397 were under processing and 384 were rejected for not meeting the eligibility criteria. Among the approved applications, the first registration of 35 426 cases have been completed and the first registration tax concessions involved amounted to about \$9.148 billion.

The numbers of applications received and approved under the "One-for-One Replacement" Scheme in each year are tabulated below:

Year	No. of applications received	No. of applications approved
2018 (starting from 28 February 2018)	329	323
2019	2 223	2 186
2020	4 385	4 321
2021	9 413	9 280
2022	20 193	19 652

Besides, the number of additional public electric vehicle (EV) chargers in each of the past 3 years is tabulated below:

Year	No. of public EV chargers	No. of newly installed public EV chargers
2019	2 929	-
2020	3 351	422
2021	4 696	1 345
2022	5 434	738

The Government allocated \$120 million in 2019 to install more than 1 000 medium chargers in over 70 car parks open to the public. The programme was completed in 2022. The Government is also preparing to marketise the charging services provided in the public car parks so as to provide impetus for the market development of public charging services.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)092

(Question Serial No. 3202)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(3) Noise
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding the noise control work, please advise this Committee of the following:

What were the numbers of complaints received and prosecutions instituted by the Environmental Protection Department against noise from (a) domestic premises and (b) public places over the past 5 years? (Please provide a breakdown by year and type of premises.)

<u>Asked by</u>: Hon LEUNG Hei, Edward (LegCo internal reference no.: 63)

Reply:

The numbers of complaints received and prosecutions instituted by the Environmental Protection Department (EPD) against noise emanated from domestic premises and public places in each of the past 5 years (2018-2022) are as follows:

	Domestic premises		Public places					
Year	No. of	No. of	Ge	neral	Near shops			
I cal	complaints received	prosecutions instituted ^{Note 1}	No. of complaints received	No. of prosecutions instituted ^{Note 1}	No. of complaints received	No. of prosecutions instituted ^{Note 2}		
2018	222	0	401	0	370	26		
2019	162	0	421	0	355	45		
2020	290	0	422	0	427	15		
2021	282	0	341	0	572	27		
2022	300	0	374	0	544	63		

Note 1: Noise from domestic premises and general public places is controlled under sections 4 and 5 of the Noise Control Ordinance (NCO), and the enforcement work against such noise is mainly carried out by the Police. Upon receipt of the relevant noise complaints, the EPD will approach the complainants to understand the situation, explain the regulatory arrangements of the NCO to them, and refer the cases to the Police for follow-up enforcement as appropriate. The EPD will also provide the contact telephone number of the police station in the district concerned to the complainants to facilitate their contact with the Police for immediate follow up when necessary.

Note 2: For annoying noise from peddling by shops in nearby public places, the EPD will carry out enforcement in accordance with the NCO.

CONTROLLING OFFICER'S REPLY

EEB(E)093

(Question Serial No. 0570)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

In recent years, the Government has been actively promoting environmental protection and has planned to reduce the amount of waste generated by the public and minimise pollution through various charging schemes. It is stated in the Budget that the Environmental Protection Department has strengthened and expanded the territory-wide community recycling network comprising Recycling Stations, Recycling Stores and Recycling Spots. The waste collection and recycling services for food waste and waste plastics are being expanded progressively. Regarding the effectiveness of waste recycling, please inform this Committee of the following:

1. The quantity of various types of recyclables recovered in the past 5 years and its percentage share in the total quantity of waste disposed of. Please provide a breakdown by year;

2. The cost and effectiveness of recovering various types of recyclables in the past 5 years; and

3. Whether the Government has considered allocating additional resources to provide more recyclables collection points and means, as well as to enhance publicity and education to increase the quantity to be recovered? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEUNG Man-kwong (LegCo internal reference no.: 5)

<u>Reply</u>:

1. According to the reports on "Monitoring of Solid Waste in Hong Kong" compiled by the Environmental Protection Department (EPD), the quantities of the major types of recyclables recovered and their percentages in the quantities of the respective types of waste generated^(Note 1) from 2017 to 2021 are tabulated below. The relevant statistics for 2022 are still under compilation.

Major type of recyclables		2017	2018	2019	2020	2021
Quantity recovered (thousand tonnes)		792	695	532	450	603
Paper	Percentage in the quantity generated	46%	41%	35%	32%	43%

Major type of r	Major type of recyclables		2018	2019	2020	2021
Plastics	Quantity recovered (thousand tonnes)	116	64	77	102	104
Plastics	Percentage in the quantity generated	13%	7%	8%	11%	11%
Ferrous	Quantity recovered (thousand tonnes)	785	789	754	741	786
metals	Percentage in the quantity generated	91%	91%	91%	91%	92%
Non-ferrous	Quantity recovered (thousand tonnes)	49	127	137	115	182
metals	Percentage in the quantity generated	72%	85%	88%	88%	88%
Cl	Quantity recovered (thousand tonnes)	11	15	21	15	20
Glass	Percentage in the quantity generated	9%	12%	19%	18%	20%
Food waste	Quantity recovered (thousand tonnes)	15	27	46	55	66
rood waste	Percentage in the quantity generated	1%	2%	4%	4%	5%
Electrical and electronic	Quantity recovered (thousand tonnes)	49	42	47	41	44
equipment	Percentage in the quantity generated	65%	63%	69%	71%	74%

Note 1: The quantity of waste generated is the sum of the quantities of waste disposed of and recyclables recovered.

2. To complement the implementation of waste charging and encourage the public to practise waste reduction at source and clean recycling, the EPD has been putting in place various waste reduction and recycling programmes and expanding the community recycling network to strengthen recycling support at community level. The expenditures of relevant programmes and the quantities of various types of recyclables collected in the past 5 years are tabulated as follows.

a) Experiences in the past 5 years.		
Name of waste reduction	Financial year	Expenditure
programme/facility		(\$million)
Waste paper collection and	2021-22	325.0
recycling services ^(Note 2)	2020-21	126.6
Pilot scheme on waste plastics	2021-22	8.9
collection and recycling ^(Note 3)	2020-21	4.3
	2019-20	0.8
Reverse Vending Machine Pilot	2021-22	15.6
Scheme (plastic beverage containers) ^(Note 4)	2020-21	1.3
Glass management contract ^{(Note}	2021-22	42.0
5)	2020-21	29.4

a) Expenditures in the past 5 years:

Name of waste reduction	Financial year	Expenditure
programme/facility	·	(\$million)
	2019-20	54.7
	2018-19	8.4
	2017-18	N/A
Fluorescent Lamp Recycling	2021-22	
Programme	2020-21	
	2019-20	A self-financed recycling programme
	2018-19	operated by the trades, with the EPD
	2017-18	acting as the programme advisor,
Rechargeable Battery Recycling	2021-22	providing support and promoting it to the public. The relevant work is part
Programme	2020-21	of the work of the EPD and is
	2019-20	absorbed by existing resources.
	2018-19	absorbed by existing resources.
	2017-18	
WEEE·PARK	2021-22	203.4
	2020-21	220.1
	2019-20	220.2
	2018-19	164.7
	2017-18	28.3
Pilot Scheme on Food Waste	2021-22	39.9
Collection ^(Note 6)	2020-21	35.1
	2019-20	25.4
	2018-19	17.1
	2017-18	N/A
GREEN@COMMUNITY ^(Note 7)	2021-22	226.0
	2020-21	162.0
	2019-20	31.0
	2018-19	24.0
	2017-18	17.0

b) The quantities of various types of recyclables recovered (by waste reduction programme/facility)

<u>programme, raemey)</u>		
Name of waste reduction	Year	Quantity of recyclables collected/treated
programme/facility		(tonne)
Waste paper collection and	2022	About 581 230 ^(Note 2)
recycling services ^(Note 2)	2021	598 620
	2020	149 650
Pilot scheme on waste	2022	4 850
plastics collection and	2021	2 280
recycling ^(Note 3)	2020	480
Reverse Vending Machine	2022	640
Pilot Scheme (plastic	2021	400
beverage containers) ^(Note 4)		
Glass management contract	2022	19 530 ^(Note 8)
(Note 5)	2021	20 280 ^(Note 8)

Name of waste reduction	Year	Quantity of recyclables collected/treated
programme/facility		(tonne)
· · ·	2020	14 270 ^(Note 8)
	2019	21 210
	2018	9 580
Fluorescent Lamp Recycling	2022	510 000 pieces
Programme ^(Note 9)	2021	510 000 pieces
	2020	408 000 pieces
	2019	454 000 pieces
	2018	478 000 pieces
Rechargeable Battery	2022	30 ^(Note 10)
Recycling Programme ^(Note 9)	2021	30 ^(Note 10)
	2020	40
	2019	40
	2018	70
WEEE·PARK	2022	22 170 ^(Note 11)
	2021	23 970 ^(Note 11)
	2020	23 380
	2019	23 980
	2018	10 830 ^(Note 12)
Pilot Scheme on Food Waste	2022	49 250
Collection ^(Note 13)	2021	49 030
	2020	36 130
	2019	34 580
	2018	14 510
GREEN@COMMUNITY	2022	20 300
(Note 7)	2021	14 400
	2020	3 950
	2019	2 800
	2018	2 100

- Note 2: To enhance the quality and quantity of waste paper recovered locally and promote the sustainable development of the local waste paper recycling industry, the EPD launched a territory-wide waste paper collection and recycling services in September 2020 by engaging multiple service contractors to collect waste paper from all kinds of waste paper deliverers in Hong Kong. The waste paper will undergo the processes of sorting, baling, etc. locally before being delivered to various markets for recycling to paper products, thus turning waste into resources. The quantity recovered in 2022 is a preliminary figure, as the data for December submitted by the contractors are pending verification.
- Note 3: The EPD has commenced a two-year pilot scheme on waste plastics collection and recycling progressively since January 2020 in Eastern District, Kwun Tong and Sha Tin, and further extended the scheme to 9 districts progressively since late March 2022. The 6 newly covered districts are Tai Po, Sai Kung, Central and Western District, Sham Shui Po, Tsuen Wan and Tuen Mun. The pilot scheme collects all types of non-commercial & industrial waste plastics in the district (including waste plastics collected from registered public and private residential buildings, schools, public institutions, GREEN@COMMUNITY, etc.) for proper recycling.

- Note 4: The EPD launched the Reverse Vending Machine Pilot Scheme in January 2021 to encourage the public to return used plastic beverage containers for recycling.
- Note 5: The glass management contracts for Hong Kong Island (including Islands District) and the New Territories started providing collection and treatment services for waste glass containers in January 2018. The contract for Kowloon commenced service in July 2018.
- Note 6: The EPD launched the first phase of the Pilot Scheme in July 2018, hence there is no expenditure record for 2017-18.
- Note 7: The number of Recycling Stations increased from 7 in 2018 to 11 in 2021. The first batch of 22 Recycling Stores commenced operation progressively starting from the fourth quarter of 2020, and the new batch of 10 Recycling Stores have been put into service since early 2022. Together with over 120 Recycling Spots, the community recycling network of GREEN@COMMUNITY collects at least 8 types of common recyclables, including glass containers, plastics, small electrical appliances, fluorescent lamps, rechargeable batteries, etc. The figures represent the total operating costs of various GREEN@COMMUNITY projects.
- Note 8: The quantities of waste glass containers collected between 2020 and 2022 had reduced due to the impact of the COVID-19 epidemic situation.
- Note 9: The reports on "Monitoring of Solid Waste in Hong Kong" compiled by the EPD have not included the quantities of compact fluorescent lamps and tubes and rechargeable batteries recovered.
- Note 10: Due to the impacts of the COVID-19 epidemic situation and freight shipping arrangements, rechargeable batteries collected under the programme will be arranged for export this year.
- Note 11: The quantity of the waste electrical and electronic equipment collected in 2022 had reduced due to the impacts of the COVID-19 epidemic situation.
- Note 12: Including the amount processed from January to July 2018 before full implementation of the scheme.
- Note 13: Quantity of food waste recovered refers to the total amount of food waste treated by O·PARK1 and the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po Sewage Treatment Works in the respective year. Organisations subsidised by the Government and voluntarily participated in source separation and collection of food waste have been covered.
- 3. To strengthen recycling support at community level, the EPD has been expanding the new community recycling network, namely GREEN@COMMUNITY. So far, there are 11 Recycling Stations emphasising on both recycling and public education, 32 Recycling Stores located in residential areas and over 120 Recycling Spots operating weekly at fixed locations throughout the 18 districts of Hong Kong for collecting various types of recyclables. We have commenced the construction of the twelfth Recycling Station, namely GREEN@WONG TAI SIN, in September 2022, with expected completion in the second quarter of 2024. We are also planning for the development of another Recycling Station under the "Invigorating Island South" initiative.

Meanwhile, the EPD is planning to develop "Mini-Recycling Stores" networks in public rental housing (PRH) estates to facilitate residents of PRH estates and nearby areas to participate in clean recycling and enhance the cost effectiveness of the recycling network. Our initial plan is to conduct a pilot trial of the new operation mode in Kwai Tsing District

and gradually extend the scheme to about 50 PRH estates. We are working closely with the Housing Department to take forward the relevant scheme.

Tying-in the progressive expansion of the coverage of the Plastic Recycling Pilot Scheme to 9 districts (viz. Eastern District, Kwun Tong, Sha Tin, Central and Western District, Sham Shui Po, Tsuen Wan, Sai Kung, Tai Po and Tuen Mun) since early 2022, the EPD is progressively enhancing recycling support to those housing estates which have participated in the Programme on Source Separation of Domestic Waste in those 9 districts, including rolling out a new one-stop reliable recycling service called "GREEN COLLECT" in mid-2022. Coordinated by the Green Outreach, the operators of GREEN@COMMUNITY and other recycling service contractors of the EPD collect recyclables with low market value, including plastics, glass containers, rechargeable batteries, fluorescent lamps and tubes, small electrical appliances, regulated electrical equipment, etc. from the participating estates to ensure the recyclables collected will be properly treated and recycled. This initiative helps boost the public's confidence in practising clean recycling, so as to increase the quantity of recyclables recovered.

To help members of the public become more familiarised with the services of the community recycling network and encourage them to recycle materials at GREEN@COMMUNITY facilities, the EPD has added icons of Recycling Stations and Recycling Spots to the GeoInfo Map, Google Map and the "Waste Less" Mobile App of the EPD, and has put up signboards with information on Recycling Spot services on the lamp posts nearby. The EPD also publicises extensively and organises various promotional activities (e.g. GREEN@COMMUNITY Recycling Month held in late 2022, 6 times GREEN\$ award promotion, etc.) through different channels (including media and public transport advertisements, social media, etc.) from time to time. To complement the expanding community recycling network of GREEN@COMMUNITY, the Green Outreach strengthening the publicity and promotion has been of new GREEN@COMMUNITY facilities and services to encourage the public to make good use of the new facilities and services for recycling. The Green Outreach also collaborate with local stakeholders to organise various kinds of public educational activities to encourage the public to develop the habit of waste reduction and recycling in their daily lives.

CONTROLLING OFFICER'S REPLY

EEB(E)094

(Question Serial No. 0580)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Electric vehicles (EVs) have become increasingly popular in Hong Kong in recent years and this will have positive impacts on air quality improvement and decarbonisation. While the Government has launched various measures to encourage vehicle owners to replace their vehicles with EVs, the charging networks in the territory are by no means extensive. Quite a lot of vehicle owners expressed that the EV charging-enabling infrastructure (EVCEI) is inadequate, which has affected their intention to replace their vehicles with EVs. In this connection, please advise this Committee of the following:

1. How many vehicle owners have replaced their vehicles with EVs through the measures of the Government in the past 5 years? What were the amounts involved? Please provide a breakdown by year.

2. Please give an overview of the current progress of popularisation of EVs. What is the ratio of EVs to EVCEI?

3. What is the expected increase of EVs and EVCEI in the next 5 years? Will the EVCEI be sufficient to meet the demand?

Asked by: Hon LEUNG Man-kwong (LegCo internal reference no.: 15)

Reply:

1. The Government launched the "One-for-One Replacement" Scheme (the Scheme) on 28 February 2018 to encourage private car (PC) owners to opt for electric vehicles (EVs) when they need to replace their cars. Purchasers of electric private cars (e-PCs) who scrap and de-register their eligible old PCs and then first register a new e-PC can enjoy a higher first registration tax (FRT) concession. The concession cap is currently \$287,500. In the past 5 years (from 2018 to 2022), there were a total of 35 426 approved applications under the Scheme with the first registration of the vehicles concerned completed and the FRT concessions involved amounted to about \$9.1 billion. The breakdown by year are tabulated below:

Year	No. of vehicles approved	Amount of
	under the Scheme with	FRT concessions granted
	the first registration completed	(\$ million)
2018	321	65
2019	2 159	452
2020	4 264	955
2021	9 317	2,381
2022	19 365	5,295

2&3. In recent years, the number of newly registered e-PCs has been growing steadily. The percentage of e-PCs among all first registered PCs increased from 6.3% in 2019 to 52.8% in 2022, representing that more than one out of every two newly registered PCs in 2022 was electric. As at the end of December 2022, there were a total of 46 682 e-PCs in Hong Kong, accounting for about 7.2% of the total number of PCs. Taking into account the growth trend of e-PCs, it is estimated that the number of e-PCs in Hong Kong may increase to 140 000 or more in the coming 5 years.

To meet the charging demand from e-PCs, the Government is actively expanding the EV charging network by encouraging the provision of EV charging-enabling infrastructure in existing residential buildings and new private buildings through the EV-charging at Home Subsidy Scheme and granting of gross floor area concessions respectively. The target is to have 150 000 parking spaces equipped with charging facilities in 2025 or earlier, with the number continuing to increase to meet the demand for charging facilities arising from the growth of e-PCs in the future.

Regarding public charging network, the Government has achieved ahead of schedule the target of having at least 5 000 public EV chargers by 2025, as set out in the Hong Kong Roadmap on Popularisation of Electric Vehicles. The Government will continue to expand the network actively by exploring the feasibility of converting progressively some of the existing petrol and liquefied petroleum gas filling stations to quick charging stations in the medium to long term, and advancing the timeline of the progressive marketisation of EV charging services provided in government car parks to the second half of 2023, so as to provide impetus for the sustainable development of the whole public charging service market in the long run. Some private operators of public car parks have announced that they will significantly increase the number of EV chargers in their car parks. We anticipate that the number of public EV charging facilities will continue to increase in the future.

CONTROLLING OFFICER'S REPLY

EEB(E)095

(Question Serial No. 0050)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding the implementation of municipal solid waste (MSW) charging, please inform this Committee of the following:

1. What is the progress of the open tender exercise for "designated garbage bags manufacturing contract"? When is this exercise expected to be completed, and when will the manufacturing process begin?

2. Will the Government consider allocating additional resources to implement measures that encourage domestic waste recovery, such as providing more and enhancing waste separation facilities? If yes, what are the details?

3. Will more economic incentives be provided to encourage members of the public to recycle food waste, plastic bottles, etc.? If yes, what are the details?

4. Will additional resources be allocated to replace all the filter systems of water dispensers provided by the Government at public sports venues and public places and to arrange more manpower to step up the inspection and monitoring of the hygiene and safety of water dispensers so that more people will be willing to bring their own water bottles?

5. How much additional resources will be devoted to media publicity in 2023-24 to raise public awareness of clean recycling and proper source separation of waste?

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 10)

<u>Reply</u>:

Municipal solid waste (MSW) charging sits at the centre of the overall waste reduction strategy of the Government and complements with the waste reduction and recycling initiatives. Apart from actively taking forward preparatory work for MSW charging, a multi-pronged approach has been adopted to implement a series of complementary waste reduction and recycling initiatives. Our response to the above questions is as follows:

1. In order to ensure appropriate supply of designated garbage bags (DBs) in the market prior to the implementation of MSW charging, we conducted an open tender exercise for the DBs manufacturing contracts in June 2022. However, the tender prices of all conforming tenders that can fully comply with the technical requirements are much higher than expected. In order to utilise public financial resources prudently, we have cancelled this tender exercise in November 2022. To control cost more effectively, we

have engaged a consultant to re-examine the thickness and material requirements of DBs. We have also invited plastic bag manufacturers to submit non-binding Express of Interest returns to collect their views on the production cost reduction measures and the requirements of the new contracts. The revision of tender terms is almost complete, and we plan to invite tenders in a few weeks' time. It is expected that the tendering procedures will conclude with the contracts awarded before the end of July 2023, with a view to commencing the production of DBs in the third quarter of 2023, in preparation for the implementation of MSW charging towards the end of this year.

2. To complement the implementation of MSW charging, the Government has been strengthening the recycling facilities and support at community level. Since 2020, the Environmental Protection Department (EPD) has been expanding the community recycling network, namely GREEN@COMMUNITY. To date, there are 11 Recycling Stations serving the functions of instilling green living education and providing recycling support at district level, 32 Recycling Stores located in residential areas and over 120 Recycling Spots operating weekly at fixed locations throughout the 18 districts of Hong Kong, which collect at least 8 types of recyclables. We have commenced the construction of the twelfth Recycling Station, namely GREEN@WONG TAI SIN, in September 2022 and are planning for the development of another Recycling Station under the "Invigorating Island South" initiative. Meanwhile, the EPD is planning to develop "Mini-Recycling Stores" networks in public rental housing (PRH) estates to facilitate residents of PRH estates and nearby areas to participate in clean recycling and enhance the cost effectiveness of the recycling network. Our initial plan is to conduct a pilot trial of the new operation mode in Kwai Tsing District and gradually extend the scheme to about 50 PRH estates. We are working closely with the Housing Department to take forward the relevant scheme.

To enhance the community recycling services and efficiency through application of technology, the EPD launched the Pilot Programme on Smart Recycling Systems (the Pilot Programme) in the fourth quarter of 2020 to test in phases smart recycling systems employing Internet of Things technology for local application. We are now implementing the second phase of the Pilot Programme, with the number of application points being increased extensively from 4 locations in the initial phase to about 100 locations in the second phase and the scope of technical trials also expanded, so as to accumulate more experience which will serve as reference for the long-term development of local application of smart recycling systems. The facilities under the second phase has been coming into service progressively since mid-2022, with the application points covering the community recycling network facilities, large housing estates and PRH estates, villages, shopping centres, universities, etc. The EPD also took the opportunity of the Pilot Programme to launch the GREEN\$ Electronic Participation Incentive Scheme (GREEN\$ ePIS) in November 2020 to encourage more members of the public to participate in resources separation for recycling. When carrying out recycling at the community recycling network via GREEN\$, members of the public can earn GREEN\$ points and redeem gift items, thereby integrating the habit of waste reduction and recycling into their daily lives. There are over 240 000 accounts registered under the GREEN\$ ePIS since its launch.

The EPD launched the Programme on Source Separation of Waste in 2005 to encourage members of the public to separate their waste for recycling at their home or workplace.

Tying-in the progressive expansion of the coverage of the Plastic Recycling Pilot Scheme to 9 districts (viz. Eastern District, Kwun Tong, Sha Tin, Central and Western District, Sham Shui Po, Tsuen Wan, Sai Kung, Tai Po and Tuen Mun) since early 2022, the EPD is progressively enhancing recycling support to those housing estates which have participated in the Programme on Source Separation of Domestic Waste in those 9 districts, including rolling out a new one-stop reliable recycling service called "GREEN COLLECT" in mid-2022. Coordinated by the Green Outreach, the operators of GREEN@COMMUNITY and other recycling service contractors of the EPD collect recyclables with low market value, including plastics, glass containers, rechargeable batteries, fluorescent lamps and tubes, small electrical appliances, regulated electrical equipment, etc. from the participating estates to ensure the recyclables collected will be properly treated and recycled. This initiative helps boost the public's confidence in practising clean recycling. As at February 2023, over 700 estates in the above districts are using the GREEN COLLECT service, covering more than 3.1 million people or 70% of the total population in the districts served.

To strengthen on-site recycling support at community level, the EPD set up the Green Outreach in 2018 and has been progressively enhancing its strength to over 200 staff to provide outreaching service which has been expanded from 3 districts to all 18 districts of the territory. The Green Outreach reaches out to the community through on-site guidance and hands-on demonstrations, to constantly and regularly educate the public the importance of waste reduction at source and clean recycling, assists the public to practice proper source separation of waste and clean recycling, and conveys the latest information on waste management to the community. The Green Outreach also helps identify suitable outlets for recyclables, devise collaboration plans for recycling support at community level for individual districts, as well as coordinate the implementation of the one-stop reliable recycling service, GREEN COLLECT.

To encourage members of the public to practice waste reduction at source and clean recycling so as to prepare for the implementation of MSW charging, we are exploring to require by legislation the property management companies and owners' organisations of major housing estates and single-block buildings with relatively large number of flats to separately collect common types of recyclable and pass them to downstream recyclers for proper processing, with effect from 2024 or earlier.

3. To encourage members of the public and housing estates to participate in domestic food waste recycling, the Recycling Fund launched a solicitation scheme in 2020 for food waste recycling projects, focusing on supporting and subsidising private residential buildings to collect food waste using smart recycling bins, with a view to further enhancing the effectiveness and raising public awareness of food waste recycling.

In addition, the EPD launched the trial scheme on food waste collection in PRH estates (trial scheme) in October 2022. The trial scheme uses smart recycling bins equipped with overflow prevention and odour abatement devices for food waste collection. The first phase of the scheme, that covers 5 PRH estates and a total of 34 blocks, has already been launched. We will progressively expand the scheme up to 100 blocks of PRH estates in 2023-24, involving about 150 000 residents.

The above project offers GREEN\$ points to incentivise residents to actively participate in food waste recycling.

To manage waste plastic beverage containers properly and effectively, the Government conducted a public consultation on the Producer Responsibility Scheme on Plastic Beverage Containers (PPRS) from February to May 2021. The community responded positively to the proposal in general. Having considered the views received, the experience in other places and the development of the local recycling market, the Government proposes to provide an economic incentive to encourage the public to return used plastic beverage containers for recycling. It also plans to adopt a "market-based model" for the implementation of the PPRS and include beverage cartons in the scheme, which in turn will help enhance the efficiency and cost-effectiveness of the recycling arrangement. Under the "market-based model", suppliers or scheme operators will need to set up a rebate arrangement to encourage the public to return used plastic beverage cartons to designated return points, so as to increase the recovery rate.

In addition, the EPD launched the Reverse Vending Machine (RVM) Pilot Scheme in 2021. A total of 60 RVMs were set up at locations with suitable foot traffic with an instant rebate (\$0.1 per plastic beverage container) provided via e-payment platforms to encourage the public to recycle plastic beverage containers. Stage 2 of the RVM Pilot Scheme was launched in the second quarter of 2022 with the number of RVMs increased to 120. Positive responses have been received so far since the launch of the RVM Pilot Scheme. As at the end of February 2023, over 46 million plastic beverage containers have been collected for delivery to local recyclers for recycling.

Besides, when recycling materials at the GREEN@COMMUNITY, members of the public can earn GREEN\$ points to redeem gift items, with higher points being awarded for plastic bottles to serve as an incentive for the public to handle plastic bottles with higher commercial value separately from other plastics.

To inculcate a living culture of "bring your own bottle" in the public, the Government is 4. progressively installing 500 more water dispensers in government venues and the target is to increase the number of water dispensers from about 2 700 units at present to about 3 200 units by 2023 for public use in government venues. The Government has earmarked some \$82 million and \$32 million respectively for the costs of installing 500 new water dispensers and procuring five-year maintenance service. Water dispensers and plumbing installations in government venues have been installed in accordance with the guidelines issued by the Water Supplies Department (WSD) and relevant legislative requirements, including the Practice Guide on Carrying Out Plumbing Works and the Waterworks Ordinance etc., and prior approvals from the WSD have been obtained before These water dispensers are generally equipped with filter installing and using. cartridges/UV sterilisers to ensure that the water is hygienic. Government departments that manage government venues will undertake regular maintenance, such as inspections and replacement of filter cartridges and UV sterilisers, and clean the water dispensers regularly in accordance with the Centre for Health Protection's recommendations and the manufacturers' guidelines so as to ensure the water supplied from water dispensers is hygienic.

5. To complement the continuous expansion of recycling facilities and enhancement of recycling support at community level, the EPD has stepped up publicity and promotion through the media in the past 2 years to raise public awareness of the new community recycling network, namely GREEN@COMMUNITY and its services, and encourage the public to make good use of the services to practice source separation of waste and clean recycling. The average expenditure incurred in the above publicity programmes for 2021-2022 and 2022-23 was about \$5.6 million. We are devising the programme for 2023-24 and it is expected that the expenditure will be similar to the average expenditure of the past 2 financial years.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)096

(Question Serial No. 1651)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Under this Programme, the provision for 2023-24 is 2,758.8 million, which is considerably higher than the revised estimate for 2022-23 by 46%. According to the Controlling Officer's explanation, the increase is "mainly due to increased cash flow requirement for non-recurrent projects". In this connection, will the Government inform this Committee of the breakdown of the non-recurrent projects concerned, the respective revised estimate for 2022-23 and provision for 2023-24 of each project, and the reason for the increase in provision?

Asked by: Hon LOONG Hon-biu, Louis (LegCo internal reference no.: 24)

Reply:

The provision for the Air Programme in 2023-24 is \$869.2 million (46%) higher than the revised estimate for 2022-23. This is mainly attributed to the enhancement of the 4 priority tasks listed below:

Major item	2022-23 Revised Estimate (\$ million)	2023-24 Estimate (\$ million)	Increase in 2023-24 Estimate (\$ million)	Reason
Pilot Scheme for Electric Public Light Buses		78.6	78.6	Note (1)
EV-charging at Home Subsidy Scheme (EHSS)	22.0	500.0	478.0	Note (2)
Pilot Scheme for Electric Ferries	0.5	89.2	88.7	Note (3)
Ex-gratia payment for Phasing Out Euro IV Diesel Commercial Vehicles	1,160.3	1,411.1	250.8	Note (4)

- Note (1): The installation of quick charging facilities for electric public light buses (e-PLBs) and the granting of subsidies to public light bus operators for procuring e-PLBs under the Pilot Scheme for e-PLBs will commence in 2023. The expenses incurred will be settled starting from 2023-24.
- Note (2): As successful applicants of the EHSS will complete the installation of electric vehicle charging-enabling infrastructure progressively in 2023-24, the estimated

amount of subsidies to be disbursed for the completion of installation will increase significantly in 2023-24 as compared to that of 2022-23.

- Note (3): As for the expenditure incurred by the Pilot Scheme for Electric Ferries, the construction of electric ferries is expected to commence in 2023-24, and the amount of subsidies to be disbursed for the construction works will increase significantly in 2023-24 as compared to that of 2022-23.
- Note (4): As for the expenditure incurred by the ex-gratia payment for Phasing Out Euro IV Diesel Commercial Vehicles, the relevant figures show that the number of eligible vehicles reaching the statutory retirement age by 31 December 2023 is higher than that of 2022. Hence, the 2023-24 estimate has been revised to meet the funding needs of these applications.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)097

(Question Serial No. 0497)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

What were the numbers of complaints received by the Environmental Protection Department (EPD) about illegal disposal of waste, the numbers of proactive inspections conducted and the numbers of prosecutions instituted against illegal disposal of waste in the past 3 years (please set out the numbers by district)?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 6)

<u>Reply</u>:

The numbers of complaints about illegal disposal of waste handled by the Environmental Protection Department (EPD), as well as the numbers of inspections conducted and the numbers of prosecutions instituted in the past 3 years are as follows:

^			•			Yea	r					
	2020				2021			2022				
	No. of	No. of	No. of prose institu		No. of	No. of	No. of prose institu		No. of	No. of	No. of prose institu	
	complaints handled ¹	inspections conducted	No. of summonses	No. of Fixed Penalty Notices	complaints handled ¹	inspections conducted	No. of summonses	No. of Fixed Penalty Notices	complaints handled ¹	inspections conducted	No. of summonses	No. of Fixed Penalty Notices
Total	2 012	11 564	289	214	1 981	16 422	485	264	1 814	15 667	372	348
Figures by District	<u> </u>											
Central & Western	75	389	10	0	98	537	6	0	88	585	6	2
Eastern	42	770	3	17	82	1 300	5	29	60	1 059	16	11
Southern	19	254	54	11	26	337	6	14	15	293	6	3
Wan Chai	69	252	0	0	66	490	0	1	92	613	0	0
Kowloon City	181	521	7	6	190	778	2	19	156	740	14	22
Kwun Tong	49	349	1	13	52	530	11	5	71	636	9	11
Sham Shui Po	185	859	4	57	140	1 844	5	63	144	1 446	9	75
Wong Tai Sin	24	295	7	2	24	498	25	2	27	667	10	0
Yau Tsim Mong	205	1 222	2	34	232	1 852	8	11	264	2 061	23	10
Islands	84	521	3	1	92	593	2	2	74	435	0	0
Kwai Tsing	59	939	55	45	58	954	57	52	58	1 072	69	142
North	180	813	11	8	186	880	135	22	120	676	46	9
Sai Kung	122	559	50	7	106	699	91	4	87	716	102	6
Sha Tin	99	623	7	4	89	776	11	10	69	742	7	19
Tai Po	146	754	2	4	159	1 036	5	3	112	532	2	5
Tsuen Wan	72	599	3	2	69	638	7	1	60	441	13	4
Tuen Mun	70	349	8	2	61	314	56	10	56	264	0	9
Yuen Long	331	1 496	62	1	251	2 366	53	16	261	2 689	40	20

Note :

1 Including multiple complaints which may have arisen from a single case.

CONTROLLING OFFICER'S REPLY

EEB(E)098

(Question Serial No. 0498)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

In 2023-24, the Government will allocate an additional funding of \$62 million to gradually expand the scope of food waste collection to cover more public and private premises, including food factories, public markets, hotels, large shopping malls, etc. In this connection, please inform this Committee of the following for the past 3 years:

1. What were the quantities of food waste generated from the commercial & industrial and domestic sectors and their recovery rates? What were the quantities of food waste disposed of at landfills?

2. What were the quantities of food waste recovered from the commercial & industrial sector as well as the project expenditures involved each year?

<u>Asked by</u>: Hon QUAT Elizabeth (LegCo internal reference no.: 7)

Reply:

1. According to the reports on "Monitoring of Solid Waste in Hong Kong" compiled by the Environmental Protection Department (EPD), the statistics on food waste (including domestic and commercial & industrial food waste) from 2019 to 2021 are tabulated below. The EPD does not have a breakdown of the food waste generated and recovered from the domestic and commercial & industrial sectors. The relevant statistics for 2022 are under compilation.

Year	Domestic food wasteCommercial & industrial food waste		Overall municipal food waste			
	Disposal quantity (tonnes/day) (a)	Disposal quantity (tonnes/day) (b)	Disposal quantity (tonnes/day) (c)=(a)+(b)	Quantity generated (tonnes/day)	Recovery rate	
2019	2 286	1 067	3 353	3 479	3.6%	
2020	2 477	778	3 255	3 405	4.4%	
2021	2 342	1 095	3 437	3 618	5.0%	

Note 1: The above figures may not add up to the total due to rounding

2. To promote food waste recycling, the EPD launched the Pilot Scheme on Food Waste Collection (Pilot Scheme) on a larger scale in 2021 by providing a door-to-door collection service for relatively clustered premises that generate larger quantities of food waste with less impurities, including food factories, public markets, hotels, large shopping malls, etc. The expenditure involved in the Pilot Scheme and the quantity of commercial & industrial food waste recovered (including food waste collected from public premises) are tabulated below:

Financial year	Expenditure involved in the Pilot Scheme (\$ million)	Year	Quantity of commercial & industrial food waste recovered (tonnes/year) [Note 2]
2020-21	35.1	2020	36 133
2021-22	39.9	2021	48 986
2022-23	67.0 [Note 3]	2022	48 648
	(Estimated expenditure)		[Note 4]

Note 2: Quantity of food waste recovered refers to the total amount of food waste collected from commercial & industrial and public premises and treated by O·PARK1 and the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po Sewage Treatment Works in the respective year. Organisations subsidised by the Government and voluntarily participated in source separation and collection of food waste have been covered.

Note 3: The EPD has rolled out 4 food waste collection service contracts in phases. The contracts covering Hong Kong Island (including Islands District) and Kowloon (including Tsuen Wan, Kwai Tsing and Tseung Kwan O) have commenced in September 2021 and February 2022 respectively.

Note 4: The overall quantity of food waste recovered from commercial & industrial premises was lower than that of 2021. This was due to the fifth wave of the epidemic in 2022, during which the catering industry had suspended their business or shortened their business hours and some markets with confirmed cases detected had to be closed for cleaning and disinfection.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)099

(Question Serial No. 0499)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(-) Not specified
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

1. What are the numbers of non-civil service contract (NCSC) staff members employed by the Environmental Protection Department (EPD) and the relevant expenditures in the past 3 years?

2. Are there any establishment and expenditure ceilings on the NCSC staff members employed by the EPD? If yes, what are the relevant establishment and expenditure ceilings?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 8)

<u>Reply</u>:

Details of the full-time^(Note 1) and part-time^(Note 2) non-civil service contract (NCSC) staff employed by the Environmental Protection Department (EPD) as at 30 June 2020, 30 June 2021 and 30 June 2022 are set out in the following table:

	Number of staff members		Expenditure(\$m) ^(Note3)	
	Full-time	Part-time		
Position as at 30 June 2020	101	115	53.5	
Position as at 30 June 2021	220	110	87.4	
Position as at 30 June 2022	181	108	113.0	

Under the NCSC Staff Scheme, Heads of bureaux/departments (B/Ds) may employ NCSC staff to meet changing operational and service needs. They include those: (a) which may be time-limited, seasonal, or subject to market fluctuations; or (b) which require staff to work less than the conditioned hours of civil servants; or (c) which require tapping the latest expertise in a particular area from the labour market; or (d) where the mode of service delivery is under review or likely to be changed. While NCSC staff positions are not civil service posts and are not on the civil service establishment, the arrangement for creation of and the number of NCSC staff positions should still be subject to the guidelines issued by the Civil Service Bureau. Regarding expenditure, the expenditure for employing NCSC staff should be charged to the provision under relevant subheads of expenditure of the corresponding B/Ds.

Subject to the above conditions, the EPD will employ NCSC staff having regard to the operational needs.

- Note 1: "Full-time" employment means employment under a "continuous contract" as defined by the Employment Ordinance (EO). According to the EO, an employee is regarded as being employed under a "continuous contract" if he or she works continuously for the same employer for 4 weeks or more, with at least 18 hours in each week.
- Note 2: "Part-time" employment means employment whereby the number of working hours of the NCSC staff is less than that under a "continuous contract" as defined by the EO. The number of part-time NCSC staff refers to those with employment contractual relations with the EPD as at 30 June of the subject year, and only some of them were called upon to perform duty on that date.

Note 3: The expenditure from 1 July of the preceding year to 30 June of the subject year.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)100

(Question Serial No. 0504)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

How many projects were funded by the Recycling Fund in each of the past 3 years? What were the content of the projects and processed quantities involved for various types of recyclables? What were the respective amounts of funding allocated for various types of recyclables? What is the number of applications being processed at present?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 13)

<u>Reply</u>:

In the past 3 years (i.e. the financial years from 2020-21 to 2022-23 (as at 28 February 2023)), the Recycling Fund (the Fund) approved over 2 100 projects, involving a total funding of about \$490 million. Among others, the One-off Rental Support Scheme, the One-off Recycling Industry Anti-epidemic Scheme and the One-off Frontline Recycling Staff Support Scheme were launched under the Enterprise Support Programme of the Fund to provide subsidies to help the recycling industry cope with operational difficulties arising from the COVID-19 epidemic and offer financial support to frontline staff of the recycling business. The schemes, which have ended already, have approved more than 1 800 applications and disbursed over \$218 million in total in the past 3 years. Various types of recyclables are involved in other projects under the Industry Support Programme and Enterprise Support Programme, including waste paper, plastics, metals, wood, food waste, etc. At present, 68 applications are being processed. The numbers of projects subsidised by the Fund under different application programmes each year are as follows:

Financial year	Enterprise Support Programme	Industry Support Programme	Standard Project
2020-21	1 172*	8	44
2021-22	10#	8	74
2022-23 (as at 28 February 2023)	723^	27	58
Total	1 905	43	176

20 applications, which have been withdrawn by the applicants, are excluded from the above table.

*1 167 applications for the One-off Rental Support Scheme and the One-off Recycling Industry Anti-epidemic Scheme were included in the figures for 2020-21.

#1 application for the One-off Rental Support Scheme was included in the figures for 2021-22.

[^]715 applications for the One-off Frontline Recycling Staff Support Scheme were included in the figures for 2022-23.

As for details of various projects funded by the Fund, please visit the following website: <u>https://www.recyclingfund.hk/en/news_approved.php</u>

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)101

(Question Serial No. 0505)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

At present, over 5 million tonnes of waste are disposed of at the 3 strategic landfills in Hong Kong every year. Please inform this Committee of the cost for handling per tonne of waste disposed of at the landfills over the past 5 years.

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 14)

Reply:

In the past 5 years, the operating cost per tonne of waste at the landfills is tabulated as follows:

	Operating cos	t per tonne of was	ste (\$/tonne)	
2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Actual)	2022-23 (Revised
(Actual)	(Actual)	(Actual)	(Actual)	estimate)
130	140	150	170	190

CONTROLLING OFFICER'S REPLY

EEB(E)102

(Question Serial No. 0637)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Environmental Protection Department will continue to implement the EV-charging at Home Subsidy Scheme (EHSS) in 2023-24. In this connection, please advise:

1. The number of approved applications for the installation of electric vehicle chargingenabling infrastructure each year since the launch of the EHSS in October 2020, as well as the estimated number of applications to be approved in each of the coming 5 years; and

2. In view of the long application and processing time of the EHSS as reflected by residents who have applied for the subsidy, what are the procedures involved and the general time required for each procedure from the receipt of an application to the granting of subsidy by the Administration?

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 4)

Reply:

1. The Government launched the EV-charging at Home Subsidy Scheme (EHSS) in October 2020 to promote installation of electric vehicle charging-enabling infrastructure (EVCEI) in car parks of existing private residential buildings and estates. The response to the EHSS was overwhelming after its launch. Over 300 applications were received as at mid-May 2021 and the total amount of subsidy earmarked for these applications had reached the original funding ceiling of \$2 billion under the EHSS. As such, the Environmental Protection Department (EPD) had to suspend processing of the applications received after mid-May 2021 and put them on waiting list. The EPD had also notified the relevant applicants of the arrangements and made announcement on the dedicated website of the EHSS. Apart from those cases that supplementary information has not been provided as required, the EPD has completed in 2022 the processing of all applications received before mid-May 2021.

In view of the overwhelming response to the EHSS, the Government injected an additional funding of \$1.5 billion into the EHSS in the 2022-23 Budget with the scheme extended to 2027-28. After reviewing the implementation details of the EHSS, the EPD resumed the processing of applications on the waiting list in batches in August 2022. It is expected that the processing of some 300 applications received as at January this year can be completed within 2023. The EPD will review the processing procedures and

optimise the vetting arrangements, with a view to further shortening the time required for vetting and approval of applications. According to the current progress, it is anticipated that a total of some 7 000 parking spaces in about 60 car parks will have EVCEI installed in 2023, and the target of completing the installation of EVCEI for some 140 000 parking spaces in about 700 car parks of residential estates can be achieved in 2027-28 as planned.

2. Upon EPD's approval of the EHSS applications, applicants are required to engage consultants and contractors to design and install EVCEI through open tendering. It takes time for the applicants to conduct the tendering exercise, resolve the technical issues related to the installation works, as well as liaising with parking space owners to reach consensus over the detailed design of the installation. The time required depends on the actual circumstances of each case. Among the cases approved by the EPD with the installation works successfully completed, involving mainly car parks of relatively small scale with less technical problems, the time between approval of the EHSS applications and completion of the installation works ranges from around 18 to 30 months.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)103

(Question Serial No. 0656)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The provision for 2023-24 under this programme is \$1,172.1 million (23.9%) higher than the revised estimate for 2022-23. This is mainly due to increased provision for waste management initiatives, increased provision for the operation of waste management facilities and increased cash flow requirement for non-recurrent projects. Please provide the relevant details and a breakdown of the estimated expenditure?

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 23)

Reply:

The provision for the Waste Programme in 2023-24 is \$1,172.1 million (23.9%) higher than the revised estimate for 2022-23 for the following reasons:

- the increased provision for operational expenses (\$626.4 million) which is mainly due to the increased provision for waste management initiatives, including the implementation of municipal solid waste charging, extension of food waste collection service and launching of the Pilot Programme on Smart Recycling Systems;
- (ii) the increased provision for fees for operation of waste management facilities (\$479.4 million); and
- (iii) the increased cash flow requirement for non-recurrent projects (\$66.8 million), including the cash flow requirement for the Recycling Fund.

The above increased provision is partly offset by the reduction in cash flow requirement for plant, equipment and works (\$500,000).

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)104

(Question Serial No. 1224)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(3) Noise
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Environmental Protection Department has been striving to minimise and resolve environmental noise problems through the implementation of noise abatement measures. In this connection, please set out in tabular form the following statistics in the past 5 fiscal years: (a) the number of prosecutions instituted regarding various types of noise under the Noise Control Ordinance;

(b) The number of Noise Abatement Notices issued regarding various types of noise;

(c) The number of complaints handled regarding various types of noise; and

(d) The number of complaints received, the number of cases successfully handled and the number of prosecutions instituted regarding domestic renovation noise.

Asked by: Hon TIEN Puk-sun, Michael (LegCo internal reference no.: 5)

<u>Reply</u>:

(a) Over the past 5 years (2018-2022), the numbers of prosecutions instituted by the Environmental Protection Department (EPD) against various types of noise under the Noise Control Ordinance (NCO) are as follows[%]:

Year	Industrial/ Commercial noise	Construction noise	Shop peddling noise	Others	Total
2018	15	112	26	1*	154
2010	8	104	45	0	157
2020	11	63	15	0	89
2021	2	36	27	0	65
2022	10	61	63	0	134

% The statistics are prepared on a calendar year basis.

* The prosecution case involves person(s) who wilfully resisted, obstructed or delayed public officers in the exercise of their conferred powers.

(b) The EPD issues Noise Abatement Notices (NANs) under section 13 of the NCO to control noise from commercial & industrial premises. The numbers of NANs issued by the EPD over the past 5 years (2018-2022) are as follows[%]:

Year	Number of NANs issued	
2018	38	
2019	30	
2020	11	
2021	21	
2022	24	

% The statistics are prepared on a calendar year basis.

(c) The numbers of noise complaints handled by the EPD over the past 5 years (2018-2022) are as follows[%]:

Year	Industrial/ Commercial noise	Construction noise	Shop peddling noise	Noise from neighbourhood and public places#	Traffic noise	Aircraft noise*	Other Noise^	Total
2018	2 406	1 427	370	623	111	0	80	5 017
2019	2 326	1 575	355	583	138	1	71	5 049
2020	2 067	1 844	427	712	143	0	72	5 265
2021	2 290	1 889	572	623	149	0	94	5 617
2022	2 110	2 013	544	674	142	0	107	5 590

% The statistics are prepared on a calendar year basis.

- # Noise from domestic premises and general public places is controlled under sections 4 and 5 of the NCO, and the enforcement work against such noise is mainly carried out by the Police. Upon receipt of the relevant noise complaints, the EPD will approach the complainants to understand the situation, explain the regulatory arrangements of the NCO to them, and refer the cases to the Police for follow-up enforcement as appropriate. The EPD will also provide the contact telephone number of the police station in the district concerned to the complainants to facilitate their contact with the Police for immediate follow up when necessary.
- * The handling of aircraft noise complaints falls within the purview of the Civil Aviation Department, which is responsible for following up on such cases.
- [^] E.g. false intruder alarm, marine traffic noise, etc.
- (d) The numbers of complaints received and prosecutions instituted in relation to domestic renovation noise handled by the EPD over the past 5 years (2018-2022) are as follows[%]:

Year	Number of complaints received	Number of prosecutions instituted
2018	121	0
2019	102	6
2020	153	0
2021	124	2
2022	110	0

% The statistics are prepared on a calendar year basis.

At present, noise arising from renovation work is regulated under section 6 of the NCO. Under section 6(1) of the NCO, the use of powered mechanical equipment for renovation work during the restricted hours, i.e. between 7 p.m. and 7 a.m. or at any time on Sundays/public holidays, shall only be carried out with a valid Construction Noise Permit issued by the EPD and in accordance with the conditions stipulated therein, failing which an offence is committed. Upon receipt of the complaints, the EPD will deploy staff to carry out investigation on-site for each case. If a breach is identified, enforcement officers will initiate prosecution against the suspected offender after collecting sufficient evidence. If the complaint involves daytime domestic renovation noise, the EPD will assist in mediation and advise on practical measures to mitigate the noise impact. From the experience of the EPD staff, in most cases, domestic renovation noise can be alleviated accordingly after mediation, persuasion or giving advice on noise mitigation.

CONTROLLING OFFICER'S REPLY

EEB(E)105

(Question Serial No. 1233)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The aim of the Environmental Protection Department (EPD) is to develop and implement a waste-to-resources management strategy for Hong Kong to reduce, reuse and recycle waste, as well as to safeguard the health and welfare of the community from any adverse environmental effects associated with the improper handling and disposal of waste.

The EPD has been implementing the pilot scheme on free collection of food waste for public and commercial & industrial premises since July 2018, and has planned to gradually expand the scheme to collect food waste from the domestic sector including implementation of a trial scheme on food waste collection in public rental housing estates. Please inform this Committee of the following:

(a) Regarding the pilot scheme on free collection of food waste:

(1) Please tabulate the actual number and the list of participating public and commercial & industrial premises in the past 3 financial years.

(2) Please tabulate the quantities of food waste recovered from the participating public and commercial & industrial premises, as well as the effectiveness of the scheme in the past 3 financial years.

(b) Regarding the Government's plan in 2023-2024 to gradually expand the scheme to collect food waste from the domestic sector, including public rental housing (PRH) estates:

(1) Please set out the list of PRH estates to be included in the scheme.

(2) Please set out the number of food waste recycling facilities to be installed in each PRH estate and the estimated expenditure to be involved.

Asked by: Hon TIEN Puk-sun, Michael (LegCo internal reference no.: 14)

Reply:

(a)(1)&(2) The Environmental Protection Department (EPD) extended the scale of the Pilot Scheme on Food Waste Collection (Pilot Scheme) in 2021 by rolling out 4 twoyear service contracts in phases, covering relatively clustered premises in different districts of Hong Kong, which generate larger quantities of food waste with less impurities, including public premises (such as shopping centres of public rental housing (PRH) estates, cooked food centres and public markets, catering facilities of social service organisations, canteens in tertiary institutions and hospitals, etc.) as well as private commercial & industrial premises (such as food factories, hotels, large shopping malls, airline caterers, etc.). At the same time, domestic food waste is being collected on a trial basis. The 2 contracts covering Hong Kong Island, Kowloon and Islands Districts have been rolled out, while the other 2 contracts covering the New Territories are expected to commence in April this year. The quantity of food waste collected through different channels in Hong Kong is increasing progressively, going beyond 150 tonnes per day on average. Due to the tightening of control measures during the fifth wave of the epidemic in early 2022, the food waste recovery rate under the Pilot Scheme was also affected to some extent.

In the past 3 years, the quantities of food waste recovered from the participating public and commercial & industrial premises under the Pilot Scheme and the number of participating premises are tabulated below:

Year	Quantity of food waste recovered (tonnes/year) [Note 1]	No. of participating premises [Note 2]
2020	36 133	283
2021	48 986	300
2022	48 648 [Note 3]	423

- Note 1: Quantity of food waste recovered refers to the total amount of food waste collected from public and commercial & industrial premises and treated by O·PARK1 and the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po Sewage Treatment Works in the respective year. Organisations subsidised by the Government and voluntarily participated in source separation and collection of food waste have been covered.
- Note 2: In some public and commercial & industrial premises, a number of shops have participated in source separation and collection of food waste. Although the EPD has not maintained a detailed list of each participating premises, the logos of some of the participating companies or organisations are uploaded to the website of O·PARK1. For more details, please visit: <u>https://www.opark.gov.hk/en/sponsor.php</u>
- Note 3: The overall quantity of food waste recovered was lower than that of 2021. This was due to the fifth wave of the epidemic in 2022, during which the catering industry had suspended their business or shortened their business hours and some markets with confirmed cases detected had to be closed for cleaning and disinfection.
- (b)(1)&(2) The EPD launched a trial scheme on food waste collection in PRH estates (trial scheme) in October 2022 to promote domestic food waste recycling. The first phase of the trial scheme covers a total of 34 blocks in 5 PRH estates, including Shek Pai Wan Estate in Aberdeen, Choi Tak Estate in Ngau Tau Kok, Sheung Tak Estate in Tseung Kwan O, Kwun Lung Lau in Kennedy Town and Lin Tsui Estate in Chai Wan, in which smart recycling bins have been installed to collect food waste, with GREEN\$ points awarded to encourage residents to actively participate in food waste recycling. The estimated expenditure of the scheme in 2022-23 is about \$3.5 million.

With additional funding allocated in the 2023-24 financial year, the trial scheme will be further extended to 4 other PRH estates in the New Territories and Kowloon, including Tin Heng Estate in Tin Shui Wai, Lee On Estate in Ma On Shan, On Yam Estate in Kwai Chung and Tsz Hong Estate in Wong Tai Sin, covering 32 blocks starting from March 2023. We will continue to liaise with the Housing Department and the Hong Kong Housing Society for site selection, with an aim to extending the trial scheme to cover up to 100 blocks of PRH estates in 2023-24. The estimated expenditure to be involved for extension of the trial scheme in 2023-24 is about \$13 million.

PRH estate	No. of smart recycling bin(s)
Shek Pai Wan Estate	9
Choi Tak Estate	8
Lin Tsui Estate	1
Sheung Tak Estate	8
Kwun Lung Lau	3
Tin Heng Estate	14
Lee On Estate	5
On Yam Estate	8
Tsz Hong Estate	5
Total	61

The number of smart recycling bins and the participating PRH estates in the first two phases of the trial scheme are tabulated below:

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)106

(Question Serial No. 0238)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Government proposed to allocate an additional funding of \$62 million in 2023-24 to gradually expand the scope of food waste collection to cover more public and private premises, and extend the trial scheme on food waste collection in public rental housing estates to cover a total of 100 blocks. In this connection, please advise:

(a) What is the estimated amount of extra food waste to be collected under the additional allocation?

(b) Will all the food waste collected be delivered to O·PARK1? If O·PARK1 does not have the capacity for the additional food waste, how will the remaining food waste be handled?

Asked by: Hon TSE Wai-chuen, Tony (LegCo internal reference no.: 26)

<u>Reply</u>:

(a)&(b)

To promote food waste recycling, the Environmental Protection Department launched the Pilot Scheme on Food Waste Collection on a larger scale in 2021 by providing a door-to-door collection service for relatively clustered premises that generate larger quantities of food waste with less impurities, including food factories, public markets, hotels, large shopping malls, etc. The quantity of food waste collected through different channels in Hong Kong is increasing progressively, going beyond 150 tonnes per day on average. The food waste collected will be delivered to O·PARK1 or via the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po Sewage Treatment Works for treatment. The total treatment capacity of both facilities can reach 250 tonnes daily.

With the additional funding of \$62 million, we will continue to enhance the food waste collection network and to take forward and refine different schemes, including the extension of food waste collection service to cover more types of public and private premises, extension of the trial scheme on food waste collection in public rental housing estates to cover up to 100 blocks, as well as conducting trials of food waste collection for "restaurant clusters" located in restaurants concentrated districts, etc. It is expected that the quantity of food waste to be collected in 2023-24 can reach 220 tonnes daily.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)107

(Question Serial No. 2924)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The provision for 2023-24 is \$869.2 million (46%) higher than the revised estimated for 2022-23. This is mainly due to increased cash flow requirement for non-recurrent projects. Please give an account of the original estimate and the increase in provision for each project.

Asked by: Hon YICK Chi-ming, Frankie (LegCo internal reference no.: 14)

<u>Reply</u>:

The provision for the Air Programme in 2023-24 is \$869.2 million (46%) higher than the revised estimate for 2022-23. This is mainly attributed to the enhancement of the 4 priority tasks listed below:

Major item	2022-23 Revised Estimate (\$ million)	2023-24 Estimate (\$ million)	Increase in 2023-24 Estimate (\$ million)	Reason
Pilot Scheme for Electric Public Light Buses	_	78.6	78.6	Note (1)
EV-charging at Home Subsidy Scheme (EHSS)	22.0	500.0	478.0	Note (2)
Pilot Scheme for Electric Ferries	0.5	89.2	88.7	Note (3)
Ex-gratia payment for Phasing Out Euro IV Diesel Commercial Vehicles	1,160.3	1,411.1	250.8	Note (4)

Note (1): The installation of quick charging facilities for electric public light buses (e-PLBs) and the granting of subsidies to public light bus operators for procuring e-PLBs under the Pilot Scheme for e-PLBs will commence in 2023. The expenses incurred will be settled starting from 2023-24.

Note (2): As successful applicants of the EHSS will complete the installation of electric vehicle charging-enabling infrastructure progressively in 2023-24, the estimated amount of subsidies to be disbursed for the completion of installation will increase significantly in 2023-24 as compared to that of 2022-23.

- Note (3): As for the expenditure incurred by the Pilot Scheme for Electric Ferries, the construction of electric ferries is expected to commence in 2023-24, and the amount of subsidies to be disbursed for the construction works will increase significantly in 2023-24 as compared to that of 2022-23.
- Note (4): As for the expenditure incurred by the ex-gratia payment for Phasing Out Euro IV Diesel Commercial Vehicles, the relevant figures show that the number of eligible vehicles reaching the statutory retirement age by 31 December 2023 is higher than that of 2022. Hence, the 2023-24 estimate has been revised to meet the funding needs of these applications.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)108

(Question Serial No. 2925)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The provision for 2023-24 is \$1,172.1 million (23.9%) higher than the revised estimate for 2022-23. This is mainly due to the increased provision for waste management initiatives, increased provision for the operation of waste management facilities and increased cash flow requirement for non-recurrent projects. In this connection, please give an account of the increase in provision and the amount incurred for each initiative.

Asked by: Hon YICK Chi-ming, Frankie (LegCo internal reference no.: 15)

<u>Reply</u>:

The provision for the Waste Programme in 2023-24 is \$1,172.1 million (23.9%) higher than the revised estimate for 2022-23 for the following reasons:

- (i) the increased provision for operational expenses (\$626.4 million) which is mainly due to the increased provision for waste management initiatives, including the implementation of municipal solid waste charging, extension of food waste collection service and launching of the Pilot Programme on Smart Recycling Systems;
- (ii) the increased provision for fees for operation of waste management facilities (\$479.4 million) which is mainly due to the increased provision for the operation of waste management facilities and the implementation of environmental improvement measures for such facilities; and
- (iii) the increased cash flow requirement for non-recurrent projects (\$66.8 million), including the expected increase in funding to be granted upon the implementation of enhancement measures and the expansion of funding scope of the Recycling Fund.

The above increased provision is partly offset by the reduction in cash flow requirement for plant, equipment and works (\$500,000).

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)109

(Question Serial No. 2926)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding the Ex-gratia Payment Scheme for Phasing Out Euro IV Diesel Commercial Vehicles (the Scheme), please advise this Committee of the following:

1. For each type of the eligible vehicles, please set out by year the numbers and percentages of those having applied to the Scheme and the ex-gratia payment amount involved;

2. Although the epidemic has subsided and the society is resuming normal, enterprises are still facing cash flow difficulties. It is believed that the situation will not improve until next year. As such, many commercial vehicle owners cannot afford to replace their old diesel vehicles with new ones. In this connection, will the Administration consider postponing the deadlines for cancelling the vehicle registration set at the end of this year and launching a loan scheme with 100% guarantee similar to that for electric taxi replacement to help vehicle owners replace their old diesel vehicles? If yes, what are the details? If no, what are the reasons?

Asked by: Hon YICK Chi-ming, Frankie (LegCo internal reference no.: 16)

<u>Reply</u>:

1. Regarding the Ex-gratia Payment Scheme for Phasing Out Euro IV Diesel Commercial Vehicles (the Scheme), as at January 2023, the numbers of eligible vehicles, the numbers of applications received and approved, as well as the ex-gratia payment amount involved by vehicle class and year of first registration are tabulated below:

		Number of Euro IV diesel commercial vehicles (percentage in the total number of the vehicles concerned)							
Ve	hicle class			Year of	f first regi	stration		I	
		2006	2007	2008	2009	2010	2011	2012	Total
	Number of vehicles*	269	4 274	5 005	2 233	3 639	4 174	3 890	23 484
Light goods	Number of applications received	267 (99%)	3 404 (80%)	2 067 (41%)	760 (34%)	862 (24%)	959 (23%)	685 (18%)	9 004 (38%)
vehicle	Number of applications approved	267 (99%)	3 356 (79%)	1 972 (39%)	738 (33%)	839 (23%)	936 (22%)	662 (17%)	8 770 (37%)
	Amount granted (\$m)#	32.6	346.1	214.6	83.3	97.0	106.8	74.7	955.0
	Number of vehicles*	488	1 986	2 413	886	2 398	2 431	904	11 506
Medium goods	Number of applications received	486 (99%)	1 796 (90%)	1 436 (60%)	362 (41%)	706 (29%)	453 (19%)	126 (14%)	5 365 (47%)
vehicle	Number of applications approved	486 (99%)	1 785 (90%)	1 398 (58%)	356 (40%)	678 (28%)	425 (17%)	120 (13%)	5 248 (46%)
	Amount granted (\$m)#	105.6	397.9	327.4	87.6	175.2	116.4	32.7	1,242.8
	Number of vehicles*	10	76	117	134	378	529	254	1 498
Heavy	Number of applications received	10 (100%)	67 (88%)	59 (50%)	59 (44%)	120 (32%)	114 (22%)	34 (13%)	463 (31%)
goods vehicle	Number of applications approved	10 (100%)	67 (88%)	57 (49%)	59 (44%)	118 (31%)	111 (21%)	32 (13%)	454 (30%)
	Amount granted (\$m)#	3.7	22.7	21.8	21.5	43.7	41.1	11.9	166.5
	Number of vehicles*	7	129	183	54	107	125	55	660
Light bus	Number of applications received	7 (100%)	111 (86%)	84 (46%)	12 (22%)	23 (21%)	38 (30%)	13 (24%)	288 (44%)
Light ous	Number of applications approved	7 (100%)	109 (84%)	81 (44%)	12 (22%)	23 (21%)	37 (30%)	13 (24%)	282 (43%)
	Amount granted (\$m)#	1.6	24.6	19.3	3.0	5.8	9.5	3.3	67.0
	Number of vehicles*	43	317	536	365	512	491	255	2 519
Non-	Number of applications received	40 (93%)	270 (85%)	271 (51%)	128 (35%)	135 (26%)	145 (30%)	26 (10%)	1 015 (40%)
bus	Number of applications approved	39 (91%)	261 (82%)	263 (49%)	126 (35%)	129 (25%)	140 (29%)	25 (10%)	983 (39%)
	Amount granted (\$m)#	14.9	94.3	110.9	56.2	60.5	64.5	11.2	412.5

			Number of Euro IV diesel commercial vehicles (percentage in the total number of the vehicles concerned)						
	ehicle class			Year of	f first regi	stration			
		2006	2007	2008	2009	2010	2011	2012	Total
	Number of vehicles*	817	6 782	8 254	3 672	7 034	7 750	5 358	39 667
T.4.1	Number of applications received	810 (99%)	5 648 (83%)	3 917 (47%)	1 321 (36%)	1 846 (26%)	1 709 (22%)	884 (16%)	16 135 (41%)
Total	Number of applications approved	809 (99%)	5 578 (82%)	3 771 (46%)	1 291 (35%)	1 787 (25%)	1 649 (21%)	852 (16%)	15 737 (40%)
	Amount granted (\$m)#	158.3	885.4	694.0	251.6	382.3	338.3	133.8	2,843.7

* The number of registered vehicles as at 1 January 2020.

May not add up to the total amount granted due to rounding.

2. In view of the operational difficulties faced by the transport sector last year when the epidemic had not yet subsided, the Environmental Protection Department (EPD) announced in October 2022 a special arrangement under the Scheme to extend the deadline for applying for ex-gratia payment for Euro IV diesel commercial vehicles first registered in 2007 by 1 year to 31 December 2023, so as to ease the operational difficulties faced by the transport sector. Although the epidemic in Hong Kong has subsided gradually since early 2023, it is noted that the transport sector is still having a hard time in their operation in general. As such, the EPD is actively exploring the feasibility of rolling out a new round of special arrangement on extension of the deadline for ex-gratia allowance application. The EPD will complete the review and announce the arrangement as soon as possible. As subsidies have been provided to these vehicle owners to replace their Euro IV diesel commercial vehicles under the Scheme, the Government has no plan to introduce other measures at this stage.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)110

(Question Serial No. 2927)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(2) Air
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

With regard to promoting the use of electric vehicles, please advise this Committee of the following:

1. the current progress of the preparatory work for electric public light buses, electric ferries and electric taxis and the expenditures involved;

2. the latest progress of the conversion of some existing petrol filling stations into quick charging stations, the petrol filling stations to be converted and the estimated expenditure involved; and

3. to encourage more residential estates to install charging facilities, will the Administration consider relaxing the eligibility criteria of "having less than 60% of the total number of the eligible parking spaces in open area" under the EV-charging at Home Subsidy Scheme? If yes, what are the details? If no, what are the reasons?

Asked by: Hon YICK Chi-ming, Frankie (LegCo internal reference no.: 17)

Reply:

1. The current progress of the preparatory work for electric public light buses (e-PLBs), electric ferries (e-ferries) and electric taxis (e-taxis) and the expenditures involved are set out below:

Pilot Scheme for e-ferries

The Government is preparing to launch the Pilot Scheme for e-ferries in 4 in-harbour ferry routes, with a view to testing out the technical viability of adopting e-ferries in Hong Kong. The Government has earmarked \$350 million to provide full subsidies to ferry operators for constructing 4 e-ferries and the associated charging facilities, as well as the operational, maintenance and repair expenditures incurred for operating the e-ferries during the 24-month trial period. The costs involved will be calculated based on the actual operation. The Environmental Protection Department (EPD) has entered into subsidy agreements with 4 in-harbour ferry operators, among which 3 of them have commenced the open tendering processes for the procurement of e-ferries and are evaluating the tenders received. Taking into account the lead time to construct the e-ferries and the associated charging facilities, we anticipate that the Pilot Scheme for e-ferries would commence by 2024 at the earliest.

The work progress of e-taxis and the expenditure involved

As for e-taxis, we have engaged contractor to provide quick charging service for e-taxis in Lantau Island, and later in Sai Kung District. No less than 10 relevant electric vehicle (EV) chargers are expected to be put into service in phases from mid-2023. The estimated expenditure of providing charging service for 5 years is about \$27 million. Furthermore, the Government is identifying suitable locations across the territory to provide quick charging service for e-taxis, thereby establishing a comprehensive charging service network for e-taxis and promoting the electrification of taxis. We are also exploring the use of existing quick charging facilities operated by commercial operators to facilitate e-taxi charging, and encourage commercial operators to expand the public quick charging network.

Pilot Scheme for e-PLBs

The Government has earmarked \$80 million for the Pilot Scheme for e-PLBs, mainly for providing quick charging service for e-PLBs under the Pilot Scheme and subsidising public light bus operators to purchase e-PLBs. The EPD conducted 2 briefing sessions in May and September 2022 respectively and briefed the relevant public light bus operators on the details and progress of the Pilot Scheme. Positive responses were received from the public light bus operators attending the briefing sessions. Pending the type approval from the Transport Department to be obtained by the "prequalified suppliers" and verification by an independent assessor engaged by the EPD, the operators concerned will be invited to join the Pilot Scheme. They can then choose the appropriate e-PLBs from the confirmation list and apply for subsidy from the EPD to purchase the e-PLBs. We are pressing ahead with the preparatory work concerned. It is expected that the Pilot Scheme for ePLBs can be rolled out in the second half of 2023.

- 2. The Government is exploring the feasibility of converting progressively some of the existing petrol filling stations to quick charging stations in the medium to long term for charging various types of vehicles, so as to support a more diversified charging infrastructure to cope with different needs. To this end, we are liaising with the relevant government departments regarding site selection and the tenancy arrangements of the sites etc. We plan to invite tenders in 2023-24 for the conversion of the first petrol filling station site to a quick charging station. As the financial resources involved have been included in the general operating expenditure, the EPD does not have a separate breakdown regarding this area of work.
- 3. Premised on the principle of prudent use of public money, to enable timely installation of electric vehicle charging-enabling infrastructure in more residential estates under limited resources while maximising the effectiveness of the EV-charging at Home Subsidy Scheme (EHSS), the Government has set the relevant eligibility criteria under the EHSS, such as excluding residential estate car parks with more than 60% of the total number of the parking spaces in open area. This is to avoid spending the majority of the subsidy granted on the road excavation works and additional cable supporting facilities needed for supplying electricity to those parking spaces. The relevant rules and implementation details are clearly set out in the "EHSS Application Notes" and uploaded to the dedicated website of the EHSS concurrently when the EHSS was open for application for public information. To be fair to the applicants that have already

submitted or plan to submit an application, the EPD has to assess and approve all the applications in accordance with the rules announced at the launch of the EHSS.

The application of the EHSS will close later this year and the EPD will evaluate the effectiveness of the scheme. The Government has no plan to inject additional funding into the scheme at this stage. That said, subject to the availability of fund after completing the assessment on the required amount of subsidy earmarked for the received applications, we will consider reopening the application to some of the car parks previously not covered by the scheme, including residential estate car parks with more than 60% of the total number of the parking spaces in open area. The assessment is expected to be completed in 2023. We will announce in due course the eligibility and implementation details on the dedicated website of the EHSS after the review.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)111

(Question Serial No. 2356)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(-) Not specified
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Please provide information on the current number of electric vehicles (EVs) in the government vehicle fleet, as well as the numbers of EV charging posts already in service and will be in service in government premises and their target user groups. If any of the data is not available, please state the reason(s).

Asked by: Hon ZHANG Xinyu, Gary (LegCo internal reference no.: 35)

Reply:

According to the information provided by the Government Logistics Department, there was a total of 153 electric vehicles (EVs) in the government vehicle fleet as at January 2023.

In addition, there was a total of 2 210 EV chargers that are open for public use in government premises as at the end of December 2022.

The Government will continue to further expand the charging network in accordance with the targets set out in the Chief Executive's 2022 Policy Address and provide EV charging facilities at an additional 7 000 parking spaces in government premises in the next 3 years. The future usage arrangement of such facilities is still under planning.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)112

(Question Serial No. 2358)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

The Hong Kong Blueprint for Sustainable Use of Resources 2013-2022 published 10 years ago stated that waste reduction at source is more important than recycling policies in realising the vision of "Use Less, Waste Less". However, years later in 2021, the amount of municipal solid waste hit the second record high. Please provide information on the relevant studies and the estimated or actual operational expenditure of various environmental projects, as well as the estimated or actual operational expenditure of various environmental facilities in the past 10 years (2013-2022), with a breakdown by the following items:

Waste reduction

- i) Municipal Solid Waste Charging Scheme
- ii) Scheme on Regulation of Disposable Plastic Tableware
- iii) Control on disposable plastic products
- iv) Plastic shopping bag charging

Recycling projects

i) Producer Responsibility Scheme (including plastic beverage containers, beverage cartons, glass bottles, regulated electrical equipment)

ii) Community Recycling Centre (from 2013 until being replaced by the current GREEN@COMMUNITY)

iii) GREEN@COMMUNITY (including Recycling Stations, Recycling Stores and Recycling Spots, with a breakdown of the expenditure involved.)

iv) Pilot scheme on waste plastics collection and recycling

v) Recycling Fund (approved funding amounts, including but not limited to the Enterprise Support Programme, Industry Support Programme, projects from new and start-up enterprises.)

Waste management facilities i) I·PARK1 ii) I·PARK2 iii) I·PARK3 iv) T·PARK v) 3 landfills (North East New Territories Landfill, South East New Territories Landfill, West New Territories Landfill) vi) O·PARK1

vii) O·PARK2 viii) O·PARK3 ix) WEEE·PARK x) Y·PARK

Asked by: Hon ZHANG Xinyu, Gary (LegCo internal reference no.: 8)

Reply:

The Government promulgated in February 2021 the "Waste Blueprint for Hong Kong 2035" to advocate the vision of "Waste Reduction \cdot Resources Circulation \cdot Zero Landfill", outlining the strategies, goals and measures to tackle the challenge of waste management up to 2035. Under the vision, the Government will work with the industry and the community to move towards two main goals. The medium-term goal is to gradually reduce the per capita municipal solid waste (MSW) disposal rate by 40-45% and raise the recovery rate to about 55% by implementing MSW charging, while the long-term goal is to move away from the reliance on landfills for direct waste disposal by developing adequate waste-to-energy facilities.

To achieve the above goals, the Government has been steering the advancement of various policies and measures as well as building a circular economy and a sustainable green living environment. The expenditures involved in waste reduction, recycling projects and waste management facilities in the past 5 financial years (from 2018-19 to 2022-23) are set out below (rounded to the nearest million):

Waste reduction

The expenditures involved in the MSW Charging Scheme and the Scheme on Regulation of Disposable Plastic Tableware are tabulated below. As the preparatory work for regulating disposable plastic products and the enforcement work of the Plastic Shopping Bag Charging Scheme are part of the Environmental Protection Department (EPD)'s routine work, we do not have a separate breakdown of the expenditure involved.

	Expenditure (\$ million)						
Scheme	2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Actual)	2022-23 (Revised Estimate)		
MSW Charging Scheme	Expenditure involved in the preparatory work						
	40	51	64	68	83		
Scheme on Regulation of	Expenditure involved in the research						
Disposable Plastic	0	2	0	1	0		
Tableware							

Recycling projects

The expenditures of various recycling projects in the past 5 years, the approved funding amounts under the Recycling Fund, as well as the supplementary information of Community Recycling Centres, GREEN@COMMUNITY and the pilot scheme on waste plastics collection and recycling are set out below:

(a) The 17 Community Recycling Centres funded by the Environment and Conservation Fund (ECF) on a project basis had come into operation in 2009 until the first quarter of 2021, and they had been gradually replaced by Recycling Stores since the fourth quarter The community recycling network, GREEN@COMMUNITY, now of 2020. comprises of 11 Recycling Stations emphasising on both recycling and public education, 32 Recycling Stores located in residential areas and over 120 Recycling Spots operating in the form of kerb-side collection booths at fixed time and locations. The first 2 Recycling Stations, GREEN@SHA TIN and GREEN@EASTERN, came into service in 2015, followed by the successive launch of the remaining 9 Recycling Stations. We have commenced the construction of the twelfth Recycling Station, namely GREEN@WONG TAI SIN, in September 2022. The first batch of 22 Recycling Stores commenced operation progressively starting from the fourth quarter of 2020, and the new batch of 10 Recycling Stores have been put into service since early 2022. The Recycling Stores are set up in the form of rented stores, with the rent and renovation cost already included in the operating expenditure. The operating expenditures involved in the Recycling Stations and Recycling Stores by year are tabulated below.

(b) The EPD has commenced a two-year pilot scheme on waste plastics collection and recycling progressively since January 2020 in Eastern District, Kwun Tong and Sha Tin, and further extended the scheme to 9 districts progressively since late March 2022. The 6 newly covered districts are Tai Po, Sai Kung, Central and Western District, Sham Shui Po, Tsuen Wan and Tuen Mun. The expenditures involved since the commencement of the scheme in 2020 are tabulated below:

		Expe	enditure (\$ mil	llion)	
Project/Scheme	2018-19	2019-20	2020-21	2021-22	2022-23
r roject/Scheme	(Actual)	(Actual)	(Actual)	(Actual)	(Revised
	, , ,		, , ,		Estimate)
Producer Responsibility			n the research		n plastic
Scheme (PRS)	beverage co	ontainers and	d beverage car	tons	
	0	1	1	1	0
	Operating expenditure involved in the Reverse Vending				
	Machine Pi	lot Scheme		1	
	0	0	1	16	30
		-	involved in the	e PRS on Gla	ISS
	Beverage C	ontainers	1	1	1
	16	58	31	43	41
			involved in the	e PRS on Wa	ste
	Electrical a	nd Electroni	ic Equipment	I	ſ
	3	4	5	4	4
	• •	• •	igns of PRSs (g	, , , , , , , , , , , , , , , , , , , ,	
			ical and electr		ent and the
		pping Bag C	harging Schen		Γ
	5	5	2	3	4
Community Recycling	Amount of	funds grante	ed under the E	CF	
Centres (from 2009 until	43	36	Not	Not	Not
being replaced by the			applicable ⁽¹⁾	applicable	applicable
current Recycling Stores)					
GREEN@COMMUNITY			of Recycling S		1
(including Recycling	24	31	52	52	60
Stations, Recycling Stores	Operating		of Recycling S		1
and Recycling Spots ⁽²⁾)	Not	Not	110	174	186
	applicable	applicable			

	Expenditure (\$ million)						
Project/Scheme	2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Actual)	2022-23 (Revised Estimate)		
Pilot scheme on waste	Operating expenditure						
plastics collection and	Not	1	4	9	15		
recycling	applicable						
Recycling Fund	40	161 ⁽⁵⁾	309 ⁽⁶⁾	64 ⁽⁷⁾	116		
					(As at 28		
					February 2023) ⁽⁸⁾		

Notes:

- (1) Starting from 2020, the EPD has engaged non-profit-making organisations in setting up and operating the Recycling Stores across the territory on a contract basis, with a view to replacing the Community Recycling Centres previously funded by the ECF, thereby enhancing the services and extending the community recycling network to cover 18 districts in the territory in order to strengthen the support for community recycling. The last batch of Community Recycling Centres funded by the ECF in 2019-20 had operated until the first quarter of 2021.
- (2) Recycling Spots are operated by Recycling Stations and Recycling Stores. The operating expenditures of Recycling Spots are included in the operating expenditures of Recycling Stations and Recycling Stores.
- (3) The number of Recycling Stations increased from 7 in 2018 to 11 in 2021.
- (4) The first batch of 22 Recycling Stores commenced operation progressively starting from the fourth quarter of 2020, and the new batch of 10 Recycling Stores have been put into service since early 2022.
- (5) 136 applications for the One-off Rental Support Scheme and the One-off Recycling Industry Anti-epidemic Scheme were included in the figures for 2019-20.
- (6) 1 167 applications for the One-off Rental Support Scheme and the One-off Recycling Industry Anti-epidemic Scheme were included in the figures for 2020-21.
- (7) 1 application for the One-off Rental Support Scheme was included in the figures for 2021-22.
- (8) 715 applications for the One-off Frontline Recycling Staff Support Scheme were included in the figures for 2022-23 (as at 28 February 2023).

Waste management facilities

The operating expenditures involved in various waste management facilities in the past 5 years are tabulated below:

	Operating expenditure (\$ million)					
Facility	2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Actual)	2022-23 (Revised Estimate)	
T·PARK	260	263	266	280	311	
North East New Territories Landfill	218	222	259	356	511	
South East New Territories Landfill and the Extension	202	203	200	237	266	
West New Territories Landfill	364	347	331	350	299	

		Operating expenditure (\$ million)							
Facility	2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Actual)	2022-23 (Revised Estimate)				
O·PARK1 ⁽¹⁾	11	42	58	75	81				
WEEE·PARK	165	220	220	203	203				
Y·PARK ⁽²⁾	Not applicable	Not applicable	21	37	30				

Notes:

 O·PARK1 has commenced operation since July 2018 to collect and treat food waste. Apart from O·PARK1, other O·PARKs and I·PARKs are under construction, study or site selection, and no operating expenditure has been incurred.

(2) Y·PARK has commenced operation since June 2021.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)113

(Question Serial No. 2398)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(1) Waste
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

A number of recycling measures have been put in place under the waste policy over the years. Please provide the expenditure involved and the effectiveness of the following measures.

It was announced in the 2014 Policy Address that a GREEN@COMMUNITY initiative (now renamed as Recycling Station) would be set up in all 18 districts. Please advise of the annual operating cost and quantities of each type of waste recovered (including but not limited to paper, plastic, small electrical appliance, etc.) since the initiative was implemented. What are the respective operating costs of the Recycling Stores and their Recycling Spots since they came into service?

Further to the above, what are the annual quantities of each type of waste recovered (including but not limited to paper, plastic, small electrical appliance, etc.) under the three initiatives mentioned above.

Asked by: Hon ZHANG Xinyu, Gary (LegCo internal reference no.: 9)

Reply:

To strengthen recycling support at community level, the Environmental Protection Department (EPD) has been expanding the rebranded community recycling network, namely GREEN@COMMUNITY, under which there are 11 Recycling Stations serving the functions of instilling green living education and providing recycling support at district level, 32 Recycling Stores located in residential areas and over 120 Recycling Spots operating weekly at fixed locations throughout the 18 districts of Hong Kong for collecting various types of The first 2 Recycling Stations, GREEN@SHA TIN and GREEN@EASTERN, recyclables. came into service in 2015, followed by the successive launch of the remaining 9 Recycling We have commenced the construction of the twelfth Recycling Station, namely Stations. GREEN@WONG TAI SIN, in September 2022. The first batch of 22 Recycling Stores commenced operation progressively starting from the fourth quarter of 2020, and the new batch of 10 Recycling Stores have been put into service since early 2022. The Recycling Stores are set up in the form of rented stores, with the rent and renovation cost already included in the operating expenditure.

The actual/estimated operating expenditures incurred by the GREEN@COMMUNITY project in the past 5 years are as follows:

Project [Note 1]	Actual/estimated operating expenditure by financial year (\$m)					
Project [Note 1]	2018-19	2019-20	2020-21	2021-22	2022-23	
Recycling Stations [Note 2]	24	31	52	52	60	
Recycling Stores [Note 3]	N/A	N/A	110	174	186	

Note 1: Recycling Spots are operated by Recycling Stations and Recycling Stores. The operating expenditures of Recycling Spots are included in the operational data of Recycling Stations and Recycling Stores.

- Note 2: The number of Recycling Stations increased from 5 in 2017 to 11 in 2021.
- Note 3: The first batch of 22 Recycling Stores commenced operation progressively starting from the fourth quarter of 2020, and the new batch of 10 Recycling Stores have been put into service since early 2022.

The quantities of each type of recyclables collected by Recycling Stations, Recycling Stores and their Recycling Spots in the past 5 years are as follows:

		Recycling Stations					
Deervalahlee	Approximate quantity of recyclables collected (tonnes)						
Recyclables	2018	2019	2020	2021	2022		
					[Note 1]		
Computer and electrical	304	432	562	700	710		
products							
Glass containers	1 556	1 947	2 008	3 146	3 600		
Rechargeable batteries	5	7	9	14	10		
Compact fluorescent	16	23	22	25	20		
lamps/fluorescent tubes							
Waste paper	90	149	275	753	980		
0069s	59	126	240	677	970		
Waste metals	13	23	47	125	150		
Beverage carton	N/A	N/A	18	34	40		

Recyclables	Approximate qu	Recycling Stores antity of recyclables	collected (tonnes)
	2020	2021	2022 [Note 1]
Regulated electrical equipment	18	262	360
Non-regulated electrical	33	528	740
equipment (such as small			
electrical appliances)			
Glass containers	64	1 522	2 270
Rechargeable batteries	1	6	19
Compact fluorescent	1	7	27
lamps/fluorescent tubes			
Waste paper	106	2 432	3 880
Waste plastics	518	3 776	5 920
Waste metals	19	385	660
Beverage carton	4	90	120

Note 1: The quantities of each type of recyclables collected in 2022 are still being verified. The above figures are preliminary data.

CONTROLLING OFFICER'S REPLY

EEB(E)114

(Question Serial No. 2400)

(44) Environmental Protection Department
(-) Not specified
(1) Waste
Director of Environmental Protection (Samuel CHUI)
Secretary for Environment and Ecology

Question:

A total of 120 reverse vending machines (RVMs) have been installed in Hong Kong since the launch of the RVM Pilot Scheme in the first quarter of 2021. Please set out the following figures in tabular form:

	1 st Phase (Period)	2 nd Phase (Period)
Number of plastic beverage containers collected		
Quantity of plastic beverage containers collected		
(tonnes)		
Total cost of the RVM Pilot Scheme (please		
provide a breakdown if available):		
1. Procurement cost of RVMs (the highest, lowest		
and average amount)		
2. Total expenditure for repair and maintenance		
3. Monthly rent of each RVM (the highest, lowest		
and average amount)		

2. What is the estimated quantity of plastic beverage containers to be collected by RVMs in 2023?

3. Please set out by year and in tabular form the annual contractual expenditure and the weight of waste plastics collected (tonnes) in each district under the pilot scheme on waste plastics collection and recycling:

District	Operating	Weight of waste	Operating	Weight of waste
	expenditure in	plastics collected in	expenditure in	plastics collected in
	2021	2021 (tonnes)	2022	2022 (tonnes)

4. Please set out by year the quantities of waste paper, metals and plastics collected in tonnes by the three-colour recycling bins and the operating expenditures incurred by each type of recycling bins in the past 2 years.

5. The Municipal Solid Waste (MSW) Charging Scheme will be implemented by the end of this year at the earliest. What is the expected effectiveness or target of MSW charging?

6. Has the Administration set any recovery targets for waste plastics, paper and food waste? <u>Asked by</u>: Hon ZHANG Xinyu, Gary (LegCo internal reference no.: 12)

Reply:

1. The Environmental Protection Department (EPD) launched the Reverse Vending Machine (RVM) Pilot Scheme (Stage 1) in the first quarter of 2021. A total of 60 RVMs were set up to collect plastic beverage containers (PBCs) in Hong Kong. Stage 2 of the RVM Pilot Scheme was launched in the second quarter of 2022 with the number of RVMs increased to 120 in total. The quantity of PBCs collected as well as the total cost under the contracts of Stage 1 and Stage 2 of the RVM Pilot Scheme are tabulated below:

	The RVM Pilot Scheme		
	Stage 1	Stage 2	
	(from end-January 2021 to	(from end-June 2022 to	
	end-August 2022)	end-August 2023)	
Quantity of PBCs	Over 25 million	Over 21 million	
collected		(as at end-February 2023)	
(in piece)			
Quantity of PBCs	About 600 tonnes	About 540 tonnes	
collected		(as at end-February 2023)	
(in tonnes)			
Total cost of the	About \$20 million, which	The contractual value is about	
RVM Pilot	includes the expenditure for	\$40 million, which includes the	
Scheme	engaging a contractor to	expenditure for engaging a	
	operate the RVM Pilot Scheme	contractor to operate the RVM	
	(including the provision,	Pilot Scheme (including the	
	installation, operation and	provision, installation,	
	repair of 60 RVMs, as well as	operation and repair of 120	
	the collection and delivery of	RVMs, as well as the	
	PBCs) and providing a rebate	collection and delivery of	
	to incentivise the public to	PBCs) and providing a rebate	
	return used PBCs. There is	to incentivise the public to	
	no breakdown of the rent of	return used PBCs. There is	
	RVMs and the expenditure for	no breakdown of the rent of	
	repair and maintenance in the	RVMs and the expenditure for	
	contract.	repair and maintenance in the	
		contract.	

- 2. According to the statistics on the PBCs collected under the RVM Pilot Scheme in 2022, we estimate that over 30 million PBCs will be collected by the 120 RVMs in 2023.
- 3. The EPD has commenced a two-year pilot scheme on waste plastics collection and recycling progressively since January 2020 in 3 districts (i.e. Eastern District, Kwun Tong and Sha Tin), and further extended the scheme to 9 districts progressively since late March 2022. The 6 newly covered districts are Tai Po, Sai Kung, Central and Western District, Sham Shui Po, Tsuen Wan and Tuen Mun. Since the launch of the pilot scheme in 2020, the annual service fee payment to the contractor under the contract and the quantity of waste plastics collected are tabulated below:

District ^(Note 1)	Service fee in 2021 ^(Note 2) (\$ million)	Quantity collected in 2021 (thousand tonnes)	Service fee in 2022 ^(Note 2) (\$ million)	Quantity collected in 2022 (thousand tonnes)
Eastern District, Kwun Tong and Sha Tin	7.4	2.28	13.5	4.85
Tai Po, Sai Kung, Central and Western District, Sham Shui Po, Tsuen Wan and Tuen Mun	Not applicable	Not applicable		

- Note 1: The pilot scheme has been successively launched in 3 districts since January 2020. Afterwards, the EPD has gradually extended the pilot scheme to 9 districts starting from end-March 2022. The 3 contracts for the extension of the pilot scheme were awarded to 3 contractors, with each of them being responsible for serving 3 districts. Hence, the detailed expenditure for each district is not available.
- Note 2: The service fee payable to the contractor is calculated on the basis of the quantity of plastic raw materials generated upon recycling. Payment will only be made upon verification. Hence, the quantity of plastics processed is not equivalent to the quantity of plastics collected during the same period.
- 4. Over the past 2 years, the EPD has placed about 1 800 sets of roadside waste separation bins (roadside recycling bins) in public places across the territory and engaged contractors under service contracts to collect waste paper, plastics and metals from roadside recycling bins on a regular basis, and deliver the sorted recyclables to downstream recyclers for export and recycling. The quantities of waste paper, metals and plastics collected from roadside recycling bins as well as the operating costs incurred are tabulated below:

	Recyclable	s collected fro	m roadside rec	ycling bins	Operating cost
Year	Waste paper	Plastics	Metals	Total	Operating cost (\$ million)
	(tonnes)	(tonnes)	(tonnes)	(tonnes)	(\$ 11111011)
2021	417	842	52	1 311	23.9
2022	367	779	51	1 197	21.0

With the development and continuous enhancement in services of the GREEN@COMMUNITY, coupled with the implementation of various waste reduction and recycling programmes, the role of roadside recycling bins placed in urban areas in respect of community recycling support has been diminishing gradually. The EPD has progressively removed the roadside recycling bins placed in urban areas (including the new towns) since mid-2022, and basically completed the removal of about 800 sets of recycling bins in urban areas by the end of 2022. There are still about 1 100 sets of recycling bins in public places of rural areas, and the quality and quantity of the recyclables collected are generally better than those collected in urban areas. The EPD will closely monitor the usage of recycling bins in rural areas and increase their provision where necessary, and will actively explore and provide other effective means for recycling support in rural areas.

5-6. The Government promulgated in February 2021 the "Waste Blueprint for Hong Kong 2035" to advocate the vision of "Waste Reduction · Resources Circulation · Zero Landfill", outlining the strategies, goals and measures to tackle the challenge of waste management up to 2035. The medium-term goal is to gradually reduce the per capita municipal solid waste (MSW) disposal rate by 40-45% and at the same time raise the recovery rate to about 55% through implementing MSW charging, together with the launch of other policies and legislation, waste reduction and recycling initiatives, as well as publicity and educational campaigns. In view of this, the Government has progressively introduced a number of measures to enhance recycling performance of recyclables, including provision of central collection services targeted at major recyclables, such as waste plastics, waste paper and food waste, as well as expanding the community recycling network, etc.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)195

(Question Serial No. 3552)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(-) Not specified
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

Regarding "Big Waster", the mascot of the Environment Bureau, please advise this Committee:

(1) of the respective expenditures on the design, promotion and operation regarding the abovementioned mascot;

(2) of the quantities of promotional materials featuring the mascot and the number of publicity and promotion activities organised in the past 5 years; and

(3) whether local public awareness of the above-mentioned mascot has been assessed; if yes, of the assessment criteria, methods, cycle and results; if no, of the reasons.

<u>Asked by</u>: Hon LAM Chun-sing (LegCo internal reference no.: 38)

Reply:

- (1) To promote the Food Wise Hong Kong Campaign, the former Environment Bureau introduced a publicity character named "Big Waster" in May 2013. With eyes that are literally bigger than his stomach and his wasteful personality, "Big Waster" aims to remind members of the public to treasure food and reduce food waste. In addition, "Big Waster" has strengthened interaction with the public through its dedicated Facebook and Instagram pages in which information on environmental protection, including food waste reduction and waste reduction, is provided. In 2022-23, the total estimated expenditure for managing the "Big Waster" dedicated Facebook and Instagram pages and supporting "Big Waster" mascot to attend events is about \$1.4 million.
- (2) In the past 5 years, the Government has widely used "Big Waster" to disseminate green messages through different platforms and promotion activities. We do not have the relevant statistics.
- (3) "Big Waster" has strengthened its interaction with the public through the dedicated Facebook and Instagram pages and has been widely welcomed by the general public. Up to February 2023, "Big Waster" has received more than 95 300 "likes" on Facebook

and has over 17 250 "followers" on Instagram as well. We will keep in view the popularity of both dedicated pages and conduct reviews in due course.

Reply Serial No.

CONTROLLING OFFICER'S REPLY

EEB(E)196

(Question Serial No. 3498)

Head:	(44) Environmental Protection Department
Subhead (No. & title):	(-) Not specified
Programme:	(4) Water
Controlling Officer:	Director of Environmental Protection (Samuel CHUI)
Director of Bureau:	Secretary for Environment and Ecology

Question:

1. Has the Government estimated on (a) the total cost and (b) the average cost to be shared by each household regarding the provision of sewerage networks for remote villages in Hong Kong such as Tung Ping Chau and Po Toi Island?

2. Apart from cost effectiveness, what criteria does the Administration use to determine whether to provide sewerage network for a village? For example, will the local village representatives and the respective rural committees be consulted?

Asked by: Hon NG Chau-pei, Stanley (LegCo internal reference no.: 24)

Reply:

At present, septic tank systems are commonly used as sewage disposal facilities of New Territories Exempted Houses (i.e. New Territories village houses). After passing through a septic tank and soakaway system, the sewage is naturally purified in the soil. With regular maintenance, septic tanks and soakaway systems are still an effective rural sewage disposal solution in many countries and regions. However, due to the scarce land resources and high population density in Hong Kong, septic tanks and soakaway systems in some of the densely populated villages may be overloaded and therefore require more frequent repair and maintenance. To improve the rural environment, the Government will take into account the level of improvement to the environment by the village sewerage programme (programme), density of village population, preference of residents, technical feasibility, cost effectiveness, resource availability, etc. in taking forward the progressive extension of the relevant works to unsewered villages.

At planning stage, the Government will consult the relevant district councils and rural committees, and take into consideration the views of village representatives. Given the above, some remote and sparsely populated villages, such as Tung Ping Chau and Po Toi Island, have not yet been included in the programme. Hence, we do not have an estimate on the cost of constructing public sewerage networks for these places. The residents concerned can continue to use septic tanks and soakaway systems to treat their sewage.