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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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**CONTROLLING OFFICER'S REPLY****EEB(E)001****(Question Serial No. 2604)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for Environment and EcologyQuestion:

Please advise this Committee of the following over the past 5 years: (1) the manpower and expenditure involved in handling wild pigs each year; its proportion in the total expenditure of the Department; (2) the number of wild pig capture operations conducted each year and the details of each operation, including the date and location of operation; (3) the number of wild pigs handled under the pilot Capture and Contraception/Relocation Programme; (4) the number of wild pigs captured for humane dispatch each year; (5) the details and expenditure of appealing to the public to stop feeding wild animals; its proportion in the total expenditure of the Department; and (6) the number of reports received regarding illegal feeding of wild animals and successful prosecutions; the number of persons arrested and convicted, and the penalties imposed.

Asked by: Hon CHAN Kapui, Judy (LegCo internal reference no.: 23)Reply:

- (1) The manpower and expenditure involved in the work in relation to wild pig management by the Agriculture, Fisheries and Conservation Department (AFCD) over the past 5 years are tabulated as follows:

Year	Manpower (number of staff)	Expenditure (\$ million)	Percentage of total expenditure of the AFCD (%)
2018-19	14	9.9	0.6
2019-20	26	14.5	0.9
2020-21	32	17.8	0.9
2021-22	32	19.2	1.0
2022-23 (revised estimate)	34	21.0	1.1



- (2) The AFCD launched the Capture and Contraception/Relocation Programme (CCRP) in late 2017 to administer contraceptive vaccine or surgically sterilise wild pigs captured and relocate them to the countryside where condition permitted. However, the AFCD's investigations revealed that the progress of contraception and sterilisation was far from catching up with the reproduction rate of wild pigs. Moreover, once wild pigs are accustomed to being fed by people, they will return to the urban or residential areas relentlessly to seek food from people even after being relocated to the countryside. To exercise effective control over the wild pig nuisance in Hong Kong, safeguard public safety and maintain public hygiene, the AFCD has implemented new measures since 12 November 2021 to conduct regular capture operations against wild pigs at sites with large numbers of wild pig sightings, and those with past injury cases caused by wild pigs or with wild pigs posing risks to members of the public, as well as upon receiving reports about wild pig sightings in residential or public areas from members of the public or other government departments. During the capture operations, veterinary officers will use dart guns on wild pigs and dispatch them humanely by the injection of drug.

The number of wild pig capture operations conducted by the AFCD over the past 5 years with a breakdown by month is tabulated as follows:

Month \ Year	2018-19	2019-20	2020-21	2021-22	2022-23 (as at Feb 2023)
Apr	4	9	11	13	12
May	3	8	14	16	7
Jun	2	10	16	13	6
Jul	5	21	4	17	11
Aug	3	9	6	21	13
Sep	2	14	16	30	24
Oct	3	16	22	16	28
Nov	5	21	22	22	20
Dec	7	13	14	11	19
Jan	9	7	13	19	10
Feb	8	7	16	8	20
Mar	6	16	24	5	N/A
Total	57	151	178	191	170

The number of wild pig capture operations conducted by the AFCD over the past 5 years with a breakdown by district is tabulated as follows:

District \ Year	Year				
	2018-19	2019-20	2020-21	2021-22	2022-23 (as at Feb 2023)
Islands	0	0	0	1	0
Kwai Tsing	2	1	4	4	4
North	1	6	8	10	3
Sai Kung	1	21	27	23	25
Sha Tin	7	20	16	13	15
Tai Po	3	4	16	16	8
Tsuen Wan	2	9	4	7	6
Tuen Mun	3	4	2	1	3
Yuen Long	1	1	4	3	1
Kowloon City	0	1	2	0	0
Kwun Tong	0	1	1	0	6
Sham Shui Po	1	4	0	2	3
Wong Tai Sin	1	3	3	1	3
Yau Tsim Mong	0	0	0	1	0
Central and Western	9	12	19	26	20
Eastern	4	5	24	31	31
Southern	17	50	39	45	35
Wan Chai	5	9	9	7	7
Total	57	151	178	191	170

(3) and (4) The number of wild pigs involved in the CCRP and humanely dispatched over the past 5 years is tabulated as follows:

Year	Number of wild pigs		
	Captured	Administered with contraceptive vaccine or surgically sterilised	Humanely dispatched*
2018-19	192	64	2
2019-20	293	106	14
2020-21	344	165	26
2021-22	370	109	105
2022-23 (as at Feb 2023)	347	The CCRP has ceased.	330

\* Including wild pigs humanely dispatched due to injury.

(5) The AFCD has all along been striving to educate the public and appeal to them not to feed wild animals. It has commissioned the Hong Kong Ocean Park

Conservation Foundation to provide eco-educational activities and guided tours at “the place at which the feeding of any wild animal is prohibited” (Feeding Ban Area) designated under the Wild Animals Protection Ordinance (Cap. 170) (the Ordinance) since 2018 and extended the publicity and educational activities to kindergartens, primary schools and communities near feeding black spots since 2019, with a view to educating public members of various age groups, especially students, on concepts about preventing wild animal nuisance and no-feeding of wild animals. Starting from November 2021, the AFCD has also rolled out a new round of public education and publicity campaign, which includes uploading promotional and educational information on social media, and putting up posters on public transport and at stations and stops. The AFCD will continue to strengthen public education on no-feeding of wild pigs and the risk behind feeding wild pigs through diverse channels. The expenditure on publicity and education to the public on no-feeding of wild animals by the AFCD over the past 5 years is tabulated as follows:

Year	Expenditure (\$ million)	Percentage of the total expenditure of AFCD (%)
2018-19	2.2	0.1
2019-20	2.1	0.1
2020-21	3.2	0.2
2021-22	5.0	0.3
2022-23 (revised estimate)	11.2	0.6

- (6) The numbers of reports received regarding illegal feeding of wild animals, prosecutions instituted, successful prosecutions and the penalties imposed over the past 5 years are tabulated as follows:

Year	Number of reports	Number of prosecutions instituted*#	Number of successful prosecutions#	Fine (\$)
2018-19	9	32	20	1,000
2019-20	6	26	28	1,500-2,000
2020-21	32	50	31	300-2,000
2021-22	48	120	90	200-1,500
2022-23 (as at Feb 2023)	74	101	79	300-1,500

\* Some of the prosecutions instituted in the year might be processed in the following year.

# Each prosecution involved 1 person.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)002**

**(Question Serial No. 1385)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

In recent years, many members of the public visited country parks for leisure since their travelling plan had been affected by the epidemic. For the past 2 years, the number of visitors to country parks reached 12 million every year. The Agriculture, Fisheries and Conservation Department also estimated that there will be about 13 million visitors to country parks in 2023. In this connection, would the Government inform this Committee of the following:

- (1) the expenditure involved in restoring the facilities and landscapes in country parks over the past 3 years;
- (2) the current manpower responsible for patrolling country parks and whether the Government will strengthen patrolling manpower in the light of the estimated increase in the number of visitors to country parks; if yes, the staffing establishment and expenditure to be involved; and
- (3) the reasons for the respective indicators of 230 000 and 220 000 for “seedlings produced” and “seedlings planted” in the Estimates for 2023 being smaller than the actual number in 2021 and 2022?

Asked by: Hon CHAN Siu-hung (LegCo internal reference no.: 21)

Reply:

- (1) The Agriculture, Fisheries and Conservation Department (AFCD) provides various visitor facilities in country parks, such as hiking trails, picnic sites, barbecue areas, rain shelters, viewing points, etc., and will conduct regular inspections, maintenance and repair work to ensure that they are safe for members of the public to use. The expenditure involved in the construction and maintenance of country park facilities over the past 3 years is tabulated as follows. There is no breakdown of the expenditure involved in the maintenance of such facilities.

<b>Year</b>	<b>Expenditure (\$ million)</b>
2020-21	80.7
2021-22	80.0
2022-23 (revised estimate)	79.3

- (2) In 2022-23, the manpower and expenditure involved in regular patrols and law enforcement work at country parks were 135 staff members and \$63 million respectively. The AFCD will flexibly deploy manpower to step up patrols and law enforcement at popular locations in country parks as necessary according to actual circumstances. Besides, the AFCD will continue to appeal to countryside visitors to keep country parks clean and care for the nature through various publicity channels.
- (3) Tree planting is one of the major duties of the Agriculture, Fisheries and Conservation Department (AFCD) in conserving the environment of country parks. The estimated figures on seedlings to be produced and planted every year by the AFCD are based on the actual needs. In the early stage of afforestation in country parks, the tree planting strategy was to plant a large quantity of trees to provide a vegetation cover quickly at barren hillsides for the improvement of landscape and prevention of soil erosion. After decades of extensive tree planting, most country park areas are now covered by vegetation. With the increasing public awareness towards hill fire prevention, reports of hill fires (especially those of a larger scale) in country parks have been kept at a low level in recent years and the demand for tree planting to rehabilitate areas affected by hill fires has also dropped. The current objective of tree planting in country parks focuses on improving the quality rather than the quantity of plantations, and shifts from soil erosion control to enhancement of the ecological value and biodiversity of woodlands. The AFCD enhances the quality, ecological value and biodiversity of woodlands in country parks through measures such as producing and planting more seedlings of native species that can provide better food and habitats for local wildlife, as well as enhancing plantations in country parks, including the implementation of Country Parks Plantation Enrichment Programme, the thinning of aging exotic tree species and planting of native tree seedlings.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)003**

**(Question Serial No. 2967)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation (Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

During 2023-24, the Agriculture, Fisheries and Conservation Department (the Department) will implement measures to enhance the education and recreation functions of country parks. In this connection, would the Department advise of the following:

- (1) whether there is any plan on public education and publicity this year to remind members of the public to protect the country parks and ecological environment; if yes, the details and estimated expenditure;
- (2) the work done over the past 3 years to combat irregularities in country parks to protect the natural environment, and the law enforcement situation; and
- (3) in view of the crowdedness of many country parks and hiking trails during holidays in recent years, whether the Government has conducted any study on the carrying capacity of the local country parks; if yes, the details; if not, the reasons?

Asked by: Hon CHAN Wing-kwong (LegCo internal reference no.: 44)

Reply:

- (1) The Agriculture, Fisheries and Conservation Department (AFCD) attaches great importance to the education, promotion and publicity programmes of country parks. It continues to promote the messages of nature appreciation and care for nature to members of the public through various channels. In 2023-24, the AFCD will continue to organise publicity and educational activities, such as nature excursions, school visits, roving exhibitions, orienteering, volunteer services and country park hiking trail clean-up programmes, etc., with a view to engaging members of the public to participate in the conservation work of the country parks so as to foster an attitude of caring for the nature. The estimated expenditure of the relevant work is about \$22 million.
- (2) The AFCD is committed to combating illegal activities in country parks so as to protect the natural environment. The AFCD staff conduct patrols in various country parks and special areas to monitor the conditions of country parks and the use of related facilities by visitors. If irregularities such as littering, illegal camping or lighting of a fire, illegal plucking or damaging of plants are detected, the AFCD will take enforcement actions against persons involved under the Country Parks and Special Areas Regulations

(Cap. 208A) (the Regulations) and other relevant legislation. Over the past 3 years, the number of successful prosecutions under the Regulations were 678 (in 2020), 1 183 (in 2021) and 1 043 (in 2022) respectively, and the fine imposed on the offenders ranged from \$100 to \$2,000.

- (3) The carrying capacity of hiking spots is affected by many factors, such as the visitor flow, activities and behaviour of visitors, and the actual environmental factors of different locations. In response to the public's growing demand for visits to country parks, the AFCDC is diverting visitors with different needs to various country parks as far as possible to reduce the pressure arising from visits through improving the coverage of the hiking trail network and its linkage and implementing enhancement projects at country parks in different districts. The AFCDC will continue to monitor closely the visitor flow and environment of popular hiking trails or attractions, and when necessary, carry out appropriate improvement work such as repair of damaged trails, control of soil erosion at the trails, enhancement of vegetation coverage, enhancement of cleansing services, enrichment of information for visitors and promotion of public awareness on protecting the environment of country parks, etc. In planning the enhancement projects, the AFCDC will select suitable sites for detailed studies, including taking into account the geographical and environmental setting and the existing ancillary facilities of these sites, etc. with a view to implementing the enhancement proposals at locations already with provision of infrastructure nearby as far as practicable, thereby reducing the impact on the country park environment and other users.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)004****(Question Serial No. 2446)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

1. What was the number of local and overseas visitors to Hong Kong Geopark in each of the past 3 years?
2. Regarding the promotion of quality and sustainable tourism by Hong Kong Geopark, what were the expenditure and staff establishment involved in facilitating such work by the Agriculture, Fisheries and Conservation Department (AFCD) over the past 3 years?
3. It is stated in the Matters Requiring Special Attention in 2023-24 that the AFCD will strengthen promotion, conservation and education of geological and cultural heritages of Hong Kong UNESCO Global Geopark. What are the details of the relevant activities and expenditure to be involved?

Asked by: Hon FOK Kai-kong, Kenneth (LegCo internal reference no.: 16)

Reply:

1. The number of visitors to Hong Kong UNESCO Global Geopark (Hong Kong Geopark) in each of the past 3 years is tabulated as follows:

<b>Year</b>	<b>Number of visitors (million)</b>
2020	1.2
2021	1.2
2022	1.5

The Agriculture, Fisheries and Conservation Department (AFCD) does not have a breakdown of the local and overseas visitors.

2. The expenditure and manpower involved in the promotion of Hong Kong Geopark (including conservation, publicity and education) by the AFCD over the past 3 years are tabulated as follows:



<b>Year</b>	<b>Expenditure (\$ million)</b>	<b>Manpower (number of staff)</b>
2020-21	18.8	12
2021-22	22.6	12
2022-23 (revised estimate)	19.8	12

3. The AFCD has all along made dedicated efforts for the conservation, promotion and education of geological and cultural heritages of Hong Kong Geopark. Such efforts mainly include (1) production of multilingual promotion materials for local and overseas visitors; (2) overseas promotion through the internet and the international platform of the Global Geoparks Network; (3) upgrading of the skills of geopark guides through the Geopark Guide System in collaboration with non-governmental organisations; (4) provision of training for tour operators, local communities and other stakeholders of Hong Kong Geopark; (5) organisation of science popularisation programmes for students through the Geopark School Programme; and (6) collaboration with local communities in conserving and promoting the local history, tradition, culture and intangible cultural heritage through story rooms and other means.

In addition, special programmes planned for 2023-24 include: (1) supporting the Tourism Commission in the organisation of the Sai Kung Hoi Arts Festival to promote green tourism in the Sai Kung geopark community; (2) supporting and promoting the development of sustainable tourism at Ap Chau, Kat O, Lai Chi Wo, etc. to tie in with the Government's gradual opening up of the Sha Tau Kok Frontier Closed Area; and (3) introducing the first phase of the Hing Chun Alliance Heritage Trail (connecting Lai Chi Wo to Mui Tsz Lam and Kop Tong) and erecting interpretation panels along the route to introduce the village culture and history.

In 2023-24, the estimated expenditure of the AFCD on the aforesaid conservation, promotion and education work as well as the relevant special programmes is \$20 million.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)005**

**(Question Serial No. 0164)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding wild pigs, please advise of the following:

- (a) the projected population of wild pigs in Hong Kong over the past 3 years (2020-21 to 2022-23);
- (b) the number of help-seeking cases and complaints received and the total value of property losses as reported by the public in relation to wild pig sightings over the past 3 years (2020-21 to 2022-23);
- (c) the number of operations conducted; the number of wild pigs captured, among which the number of female wild pigs injected with contraceptive vaccines and surgically sterilised; the number of wild pigs relocated to the countryside away from residential areas; the number of wild pigs euthanised, and the number of wild pigs hunted over the past 3 years (2020-21 to 2022-23);
- (d) the expenditure and manpower dedicated to the pilot programme on the contraception/relocation of wild pigs, hunting teams and the work in relation to the wild pigs over the past 3 years (2020-21 to 2022-23);
- (e) the number of arrests made and successful prosecutions instituted in relation to the illegal feeding of wild pigs over the past 3 years (2020-21 to 2022-23) as well as the average, maximum and minimum penalties imposed respectively;
- (f) the number of wild pig carcasses found in Hong Kong and the number of wild pigs captured in each of the past 3 years (2020-21 to 2022-23), and whether the Government has conducted African Swine Fever testing on the said wild pigs; and
- (g) whether the Government will implement any new measures to strengthen the work on prevention of African Swine Fever.

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 2)

Reply:

- (a) The Agriculture, Fisheries and Conservation Department (AFCD) launched a study in 2019 to estimate the number of wild pigs in the countryside using infrared camera traps. In 2020, the scope of the study was extended to cover more sites and different seasons. It was estimated that there were about 2 500 wild pigs in the countryside all over Hong Kong based on the wild pig population density. The AFCD is collecting and analysing

the latest data to estimate the latest number of wild pigs throughout the territory. It is aimed that the result will be available in the latter half of this year.

- (b) The number of reports on wild pig sightings or nuisance received by the AFCD over the past 3 years is as follows:

<b>Year</b>	<b>Number of reports on wild pig sightings or nuisance</b>
2020-21	1 114
2021-22	1 351
2022-23 (as at Feb 2023)	1 108

The AFCD does not maintain information on the property losses due to nuisance caused by wild pigs as reported by members of the public.

- (c) The AFCD suspended the hunting operations of civilian hunting teams in 2017 and formally ceased the hunting operation in 2019. The AFCD launched the Capture and Contraception/Relocation Programme (CCRP) in late 2017 to administer contraceptive vaccine or surgically sterilise wild pigs captured and relocate them to the countryside where condition permitted. However, the AFCD's investigations revealed that the progress of contraception and sterilisation was far from catching up with the reproduction rate of wild pigs. Moreover, once wild pigs are accustomed to being fed by people, they will return to the urban or residential areas relentlessly to seek food from people even after being relocated to the countryside. To exercise effective control over the wild pig nuisance in Hong Kong, safeguard public safety and maintain public hygiene, the AFCD has ceased the CCRP and implemented new measures since 12 November 2021 to conduct regular capture operations against wild pigs at sites with large numbers of wild pig sightings, and those with past injury cases caused by wild pigs or with wild pigs posing risks to members of the public, as well as upon receiving reports about their sightings in residential or public areas from members of the public or other government departments. During the capture operations, veterinary officers will use dart guns on wild pigs and dispatch them humanely by the injection of drug.

The numbers of wild pigs captured, administered with contraceptive vaccine or surgically sterilised, relocated to the countryside and humanely dispatched over the past 3 years are tabulated below:

Year	Number of wild pigs			
	Captured	CCRP		Humanely dispatched <sup>^</sup>
		Administered with contraceptive vaccine or surgically sterilised*	Relocated to countryside*	
2020-21	344	165	270	26
2021-22	370	109	219	105
2022-23 (as at Feb 2023)	347	The CCRP has ceased		330

\* The number of wild pigs administered with contraceptive vaccine or surgically sterilised overlaps with that of wild pigs relocated to countryside, as some wild pigs would be relocated after they had been administered with the vaccine or after the surgery.

<sup>^</sup> Including wild pigs humanely dispatched due to injury.

- (d) The manpower and expenditure involved in the AFCD's work in relation to wild pig management over the past 3 years are tabulated as follows:

Year	Manpower (number of staff)	Total expenditure on wild pig management (\$ million)	Expenditure involved in CCRP (\$ million)
2020-21	32	17.8	9.4
2021-22	32	19.2	8.6
2022-23 (revised estimate)	34	21.0	(N/A)

- (e) Since 1999, Kam Shan, Lion Rock and Shing Mun Country Parks, part of Tai Mo Shan Country Park, Tai Po Kau Nature Reserve, a section of Tai Po Road along Caldecott Road and Piper's Hill section of Tai Po Road are specified places at which the feeding of any wild animal is prohibited (Feeding Ban Area) under the Wild Animals Protection Ordinance (Cap. 170). Any person feeding wild animals in the Feeding Ban Area shall be liable on conviction to a maximum fine of \$10,000. Since the main cause of festering nuisance of wild pigs in recent years is intentional feeding, to step up the efforts to curb wild pig feeding activities and resolve the wild pig nuisance at source, the Feeding Ban Area has been expanded to the entire territory of Hong Kong with effect from 31 December 2022.

The AFCD will arrange patrols at wild animal feeding black spots from time to time and take prosecution actions against anyone who has contravened the prohibition of wild animal feeding, subject to sufficient evidence. The AFCD will also review from time to time the patrol and enforcement arrangements in accordance with the actual circumstances, including stepping up blitz and enforcement operations where necessary, as well as collaborating with relevant departments to strengthen combatting the relevant activities. The information on the prosecutions against illegal feeding of wild animals (including wild pigs) over the past 3 years is tabulated as follows:

Year	2020-21	2021-22	2022-23 (as at Feb 2023)
Number of prosecutions instituted*	50	120	101
Number of successful prosecutions	31	90	79
Fine (\$)	300-2,000 (average: 559)	200-1,500 (average: 833)	300-1,500 (average: 601)

\* Some of the prosecutions instituted in the year might be processed in the following year.

- (f) The number of wild pig carcasses collected by the Food and Environmental Hygiene Department (FEHD) over the past 3 years (2020-21 to 2022-23) is tabulated as follows:

Year	Number of wild pig carcasses*
2020-21	337
2021-22	547
2022-23 (as at Feb 2023)	485

\* Including wild pigs captured and humanely dispatched by the AFCD.

With a view to strengthening the surveillance of African Swine Fever (ASF) on local wild pigs, the AFCD has been working with the FEHD on a surveillance programme for ASF on local wild pigs since late 2019, which includes testing for ASF in wild pig carcasses reported by the FEHD. The programme covers the New Territories and Kowloon as well as other areas found with a large number of wild pig deaths. For early detection of potential cases, the programme also collects samples from humanely dispatched wild pigs (the number of pigs is detailed in part (c) above) for ASF testing. The number of wild pigs captured in each year is detailed in part (c) above.

- (g) The AFCD has been closely monitoring the epidemic situation of ASF and taking corresponding measures in a timely manner. Major measures which have been implemented include:
- (i) devising a surveillance and contingency plan for detecting ASF, including stepping up inspections to all local pig farms and collecting pig samples for ASF virus testing when necessary;
  - (ii) advising local pig farmers to implement proper biosecurity measures and providing assistance and loans to facilitate purchase of appropriate facilities to enhance biosecurity of their pig farms;
  - (iii) requesting all local pig farms to step up cleansing and disinfection of vehicles and personnel entering and leaving pig farms;
  - (iv) suspending the import of breeders from regions infected by ASF;
  - (v) banning the storage or use of kitchen waste, catering waste or other food wastes of pork origin as pig feed;
  - (vi) commissioning contractors to thoroughly cleanse and disinfect all local pig-carrying trucks at designated positions every time before they leave the Sheung Shui Slaughterhouse and Tsuen Wan Slaughterhouse;
  - (vii) strengthening the regulation of local pig-carrying trucks, including restricting each local pig-carrying truck to carry live pigs from a single licensed pig farm to the

- slaughterhouse per trip to reduce the risk of cross infection between pig farms and setting spillage prevention standard for local pig-carrying trucks to minimise the spread of diseases arising from spillage or leakage of pig wastes;
- (viii) liaising with relevant government departments regarding improvement in the collection arrangements for pig waste and carcasses;
  - (ix) maintaining close contact with the pig farming sector, organising meetings and seminars with the trade representatives in a timely manner, and increasing local pig farmers' knowledge of preventing ASF through producing various publicity materials on information about ASF, including posters, videos and guidelines on the procedures of cleansing and disinfecting pig-carrying trucks, so as to provide local pig farmers with information about the disease, its infection as well as the prevention and control measures that pig farms should heed;
  - (x) co-operating with the FEHD in conducting a regular surveillance programme for ASF in local wild pig carcasses and testing samples collected from humanely dispatched wild pigs for ASF for early detection of potential cases;
  - (xi) providing financial assistance to the City University of Hong Kong through the Sustainable Agricultural Development Fund to provide free veterinary consultation service for local pig farms with a view to improving the overall animal health conditions of local pig farms; and
  - (xii) devising an action plan and providing the necessary equipment for culling of pigs.

The AFCD will remain vigilant and closely monitor the epidemic situation, and will take further measures as appropriate and necessary.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)006**

**(Question Serial No. 3080)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding marine parks and marine reserves, please advise of the following:

- (a) the name, location, size and date of establishment of the marine parks and marine reserve currently established or to be established as well as the size of the core areas or restricted zones therein. Please also provide the boundary maps of these marine parks and marine reserve (including the core areas or restricted zones);
- (b) the number of fishing permits issued to various types of fishing vessels in each marine park and marine reserve, in the first year after the establishment of the marine parks and marine reserve and over the past 3 years (2020-21 to 2022-23);
- (c) the number of operations and the effectiveness of the enforcement operations against illegal fishing activities (including capture, angling as well as any other method) in marine parks over the past 3 years (2020-21 to 2022-23), as well as the penalties and fines imposed;
- (d) the expenditure and staff establishment involved in the enforcement operations against illegal fishing activities in marine parks over the past 3 years (2020-21 to 2022-23); and
- (e) the number of patrol vessels deployed by the Government to combat illegal fishing activities in marine parks, the waters patrolled, and the number of patrols conducted, over the past 3 years (2020-21 to 2022-23).

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 46)

Reply:

- (a) The information on the name, location, size, core area size and date of designation of the existing and proposed marine parks and marine reserve is at **Annex 1**. The relevant map is at **Annex 2**.
- (b) The number of fishing permits issued to various types of fishing vessels in each marine park and marine reserve is tabulated as follows:

Name of marine park/ marine reserve	Number of relevant permits			
	First year of establishment	2020-21	2021-22	2022-23 (as at Feb 2023)
Cape D'Aguilar Marine Reserve <sup>(i)</sup>	N/A	N/A	N/A	N/A
Hoi Ha Wan Marine Park (HHWMP) <sup>(ii) (iii)</sup>	409	66	2	N/A
Yan Chau Tong Marine Park (YCTMP) <sup>(ii) (iii)</sup>	409	69	2	N/A
Sha Chau and Lung Kwu Chau Marine Park (SCLKCMP) <sup>(iii)</sup>	208	22	1	N/A
Tung Ping Chau Marine Park (TPCMP) <sup>(ii) (iii)</sup>	280	56	1	N/A
The Brothers Marine Park <sup>(iv)</sup>	472	873	1 043	1 339
Southwest Lantau Marine Park (SWLMP) <sup>(iv)</sup>	742	742	1 002	1 332
South Lantau Marine Park (SLMP) <sup>(iv) (v)</sup>	1 329	N/A	N/A	1 329

- (i) There is no fishing permit issued to fishing vessels for the Cape D'Aguilar Marine Reserve as commercial fishing is banned in the marine reserve.
- (ii) Some fishing permits cover the TPCMP, YCTMP and/or HHWMP concurrently.
- (iii) Under the new fisheries management strategy in marine parks, commercial fishing in the 4 marine parks (namely the HHWMP, YCTMP, TPCMP and SCLKCMP) has been banned with effect from 1 April 2022. All permit holders have surrendered their fishing permits.
- (iv) Some fishing permits cover The Brothers Marine Park, SWLMP and/or SLMP concurrently.
- (v) As the SLMP was designated on 30 June 2022, the number of fishing permits issued in the first year of establishment was counted up to February 2023 only.

- (c) The number of prosecutions against illegal fishing activities in marine parks over the past 3 years and the penalties imposed are tabulated as follows:

Year	Number of cases	Total amount of fine (\$)
2020-21	3	6,000
2021-22	5	5,600
2022-23 (as at Feb 2023)	10*	6,200*

\* Including 3 cases of prosecution in progress.

To strengthen the curbing of illegal fishing and the related law enforcement work, the Agriculture, Fisheries and Conservation Department (AFCD) consolidated its internal resources and set up a dedicated sea enforcement team in August 2020 with a view to enhancing the mobility and responsiveness of enforcement actions against illegal fishing. The AFCD will continue to exchange intelligence with relevant government



departments and Mainland authorities, as well as adjust its enforcement strategy from time to time in the light of circumstances to combat illegal fishing activities together.

- (d) The expenditure and manpower involved in the daily management of marine parks and marine reserve (including law enforcement against illegal fishing) over the past 3 years are tabulated as follows:

<b>Year</b>	<b>Expenditure (\$ million)</b>	<b>Manpower (number of staff)</b>
2020-21	39.2	66
2021-22	47.1	77
2022-23 (revised estimate)	48.2	77

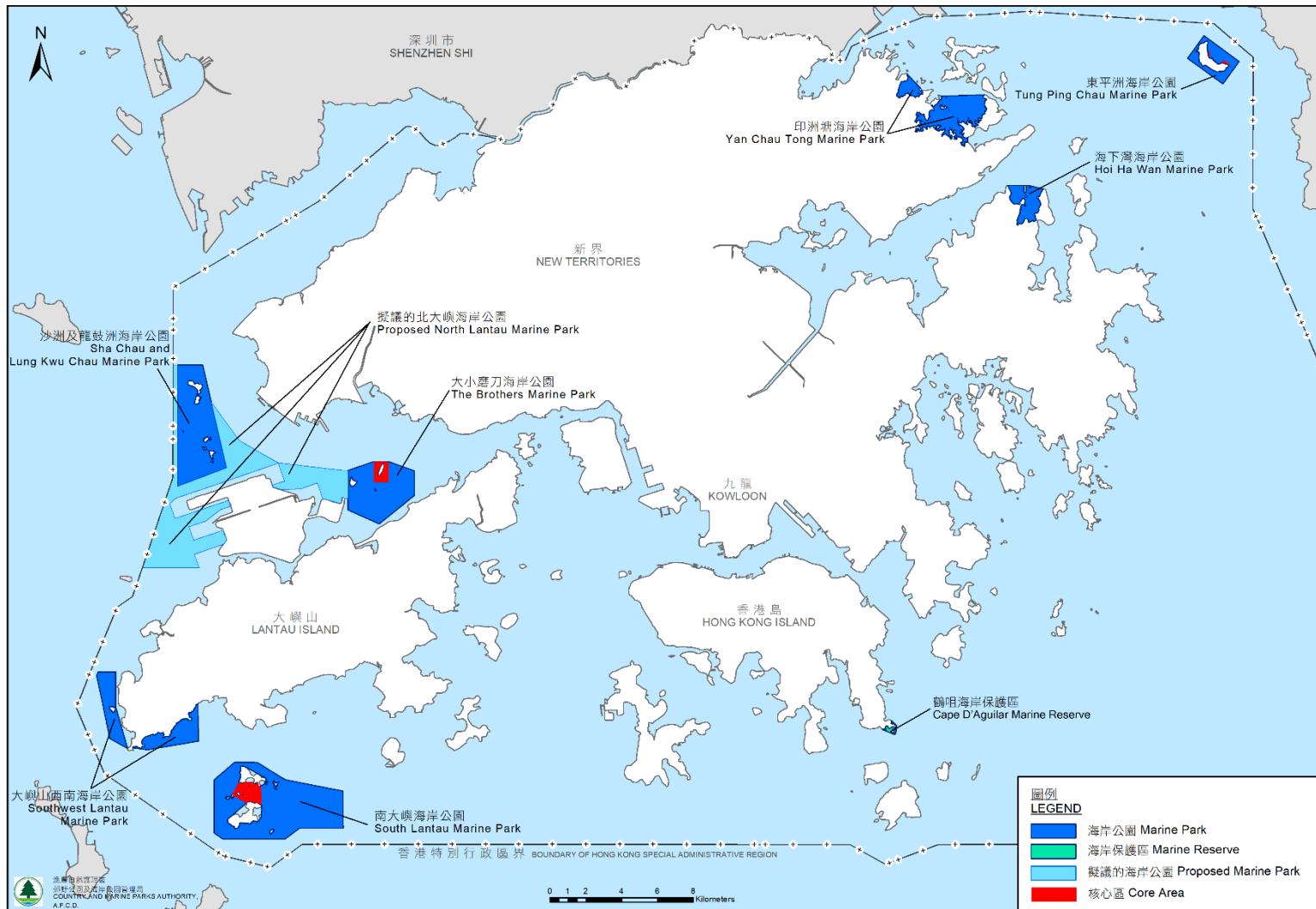
As combating illegal fishing is part of the daily management of marine parks and marine reserve, the AFCD does not have the relevant breakdown.

- (e) The AFCD will continue to conduct patrols and combat illegal fishing in marine parks, including flexibly deploying manpower dedicated to law enforcement at sea as well as providing additional patrol vessels and replacing some of the vessels. In early 2021, the Department provided additional patrol vessels and replaced some vessels deployed to marine parks, the marine reserve and the surrounding waters. The Marine Police and their patrol vessels also provide assistance in law enforcement within marine parks and marine reserve from time to time at the AFCD's request. The AFCD is also planning to procure 3 patrol vessels (including 2 new vessels and replacement of 1 existing patrol vessel) to further combat illegal fishing and other irregularities in marine parks.

The number of patrols conducted over the past 3 years is tabulated as follows:

<b>Year</b>	<b>Number of patrols</b>
2020-21	3 080
2021-22	3 285
2022-23 (as at Feb 2023)	3 125

Name of existing or proposed marine park/ marine reserve	Location	Size (hectares)		Designation date
		Total	Core area	
Cape D'Aguilar Marine Reserve	Waters at the southeastern tip of Hong Kong Island	20	0	Jul 1996
Hoi Ha Wan Marine Park	Sheltered bay located north of the Sai Kung West Country Park	260	0	Jul 1996
Yan Chau Tong Marine Park	Northeast coast of Plover Cove Country Park	680	0	Jul 1996
Sha Chau and Lung Kwu Chau Marine Park	Waters enclosing the islands of Sha Chau and Lung Kwu Chau on the western part of Hong Kong	1 200	0	Nov 1996
Tung Ping Chau Marine Park	Waters enclosing the small island Ping Chau in the northeastern waters of Hong Kong	270	7.4	Nov 2001
The Brothers Marine Park	Waters in the vicinity of The Brothers in northern Lantau	970	80	Dec 2016
Southwest Lantau Marine Park	Waters in the vicinity of Fan Lau in southwestern Lantau	650	0	Apr 2020
South Lantau Marine Park	Waters in the vicinity of Soko Islands in southern Lantau	2 067	145	Jun 2022
North Lantau Marine Park (the marine park for the Three-Runway System of the Hong Kong International Airport)	Waters enclosing the airport in northern Lantau	~2 400	0	2024 (Tentative)



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- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)007****(Question Serial No. 3081)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for Environment and EcologyQuestion:

Regarding the nuisances caused by wild monkeys to nearby residents or visitors, please advise of the following:

- (a) the expenditure involved in public education and promotion of the feeding ban by the Department over the past 3 years (2020-21 to 2022-23);
- (b) the number of complaints received by the Department about nuisance of or attack caused by wild monkeys over the past 3 years (2020-21 to 2022-23);
- (c) the manpower and expenditure involved in the investigation and study on the control of wild monkeys, as well as the administration of contraceptive and neutering treatment to wild monkeys over the past 3 years (2020-21 to 2022-23); and
- (d) whether the management plan for monkeys has been updated; if yes, the progress, timetable and details involved; if not, the reasons.

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 47)Reply:

- (a) The expenditure incurred by the Agriculture, Fisheries and Conservation Department (AFCD) in public education and publicity on the prohibition of feeding of monkeys over the past 3 year is tabulated as follows:

<b>Year</b>	<b>Expenditure (\$ million)</b>
2020-21	1.7
2021-22	1.8
2022-23 (revised estimate)	3.0

- (b) The number of complaints about monkey nuisance/attack received by the AFCD over the past 3 years is tabulated as follows:

<b>Year</b>	<b>Number of complaints</b>
2020-21	248
2021-22	207
2022-23 (as at Feb 2023)	257

- (c) The AFCD's expenditure and manpower involved in handling monkey nuisance over the past 3 years are tabulated as follows:

<b>Year</b>	<b>Expenditure (\$ million)</b>	<b>Manpower (number of staff)</b>
2020-21	7.2	17
2021-22	8.6	17
2022-23 (revised estimate)	11.2	17

In addition, the AFCD's contractor (the Ocean Park Conservation Foundation) arranges regular sterilisation operations for monkeys in Kam Shan, Lion Rock and Shing Mun Country Parks, which involve about 10 staff members of the contractor in each operation.

- (d) The AFCD completed the review of the management plan which addresses monkey nuisances in 2020-21, and reported the result to the Nature Conservation Subcommittee (Subcommittee) under the Advisory Council on the Environment in October 2020. Members of the Subcommittee supported the AFCD's continuous implementation of the relevant management plan and commencement of new research projects. The AFCD is reviewing the existing monkey contraceptive programme and aims to complete the review in 2023-24.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)008**

**(Question Serial No. 3084)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the conservation and management of the wetland, please advise of the following:

- (a) over the past 3 years (2020-21 to 2022-23), the number of complaints received by the Government about alleged illegal bird prevention measures taken by fish farmers and farmers, the average and longest time taken to handle such cases, the number of prosecutions instituted against the contravention of the Wild Animals Protection Ordinance (Cap. 170), and the number of convictions thereof;
- (b) over the past 3 years (2020-21 to 2022-23), regarding farmers who have installed bird preventive netting or other measures, the number of applications for low-interest loans from loan funds and the Farm Improvement Scheme grants under the Sustainable Agricultural Development Fund received by the Agriculture, Fisheries and Conservation Department (AFCD), and the amount so involved in the applications;
- (c) over the past 3 years (2020-21 to 2022-23), how the AFCD assisted farmers and fish farmers in reducing their loss due to bird predation in farmland and fish ponds;
- (d) over the past 3 years (2020-21 to 2022-23), the amount of subventions granted to the management agreement projects under the Environment and Conservation Fund and the number of participating fish farmers as well as the figure and percentage of the fish ponds taken up to the total area of the Ramsar Site; and
- (e) over the past 3 years (2020-21 to 2022-23), whether the Government has estimated the quantity of fish preyed on by birds in fish ponds and the production value involved; please list by fish ponds engaged and not engaged in the Nature Conservation Management Agreement Projects.

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 50)

Reply:

- (a) According to the Wild Animals Protection Ordinance (Cap. 170) (the Ordinance), no person shall, except in accordance with a special permit, wilfully disturb or hunt any protected wild animal, including all wild birds. Over the past 3 years (as at February 2023), the Agriculture, Fisheries and Conservation Department (AFCD) has prosecuted a total of 462 cases for contravening the Ordinance and a total of 366 cases were convicted. During the same period, the AFCD received 16 complaints about suspected

use of illegal bird prevention measures by farmers or fish farmers. It usually took 3 to 6 months to process these cases.

- (b) Over the past 3 years (as at February 2023), the AFCD has received 3 applications for the Farm Improvement Scheme (FIS) grants under the Sustainable Agricultural Development Fund (SADF) related to installing bird preventive netting and bird repellents to protect their crops from birds. The amount requested was around \$5,000 in total. No applications for low-interest loans for installing bird preventive netting or other measures were received.
- (c) The AFCD understood the concern of farmers and fish farmers over their loss due to predation by wild birds in farmland and fish ponds. The AFCD aimed to strike a balance between supporting the agriculture and fisheries industries as well as conservation of wild birds, and assist farmers and fish farmers in taking appropriate measures to reduce predation by wild birds in farmland and fish ponds without causing harm to birds.

Regarding farmers, the AFCD regularly organised talks and farmland visits where technical advice on bird prevention was provided to assist farmers in taking appropriate measures to reduce bird predation in farmland. Farmers who were interested in installing bird preventive netting or other measures could apply for low-interest loans from loan funds administered by the AFCD, or purchase the necessary materials with the FIS grants under the SADF.

Regarding fish farmers, the AFCD regularly organised talks and workshops on good aquaculture practices and general fish farming guidelines, where methods on prevention of predation by wild birds were introduced, such as pond wiring, hanging of reflective materials, etc., to reduce loss of fish produce. Fish farmers could also apply for low-interest loans from fisheries loan funds administered by the AFCD should they need any financial assistance, or grants under the Equipment Improvement Project of the Sustainable Fisheries Development Fund to purchase the necessary materials.

Besides, the AFCD published 2 pamphlets on the “Methods of Preventing Bird Predation in Farmland” and “Methods of Preventing Bird Predation in Fish Ponds” for the reference of farmers and fish farmers respectively. According to the AFCD’s observation, many farmers and fish farmers adopted the AFCD’s recommendations to reduce the risk of wild bird predation in farmland and fish ponds.

- (d) There were 2 Management Agreement projects with funding from the Environment and Conservation Fund and Countryside Conservation Funding Scheme conducted during the period from March 2019 to February 2023 in the Ramsar Site and Deep Bay Wetland outside the Ramsar Site respectively. Details of the projects are tabulated as follows:

<b>Project period</b>	<b>Mar 2019 to Feb 2021</b>	<b>Mar 2021 to Feb 2023<sup>#</sup></b>
<b>(1) Ramsar Site</b>		
<b>Total approved budget (\$)</b>	7,456,636	9,706,158
<b>Number of fish pond operators engaged</b>	71	82
<b>Area of fish ponds engaged (hectare)</b>	265	268
<b>Total area of eligible fish ponds (hectare)*</b>	290	293
<b>Percentage of area of fish ponds engaged in eligible fish ponds (%)</b>	91	91
<b>(2) Deep Bay Wetland outside Ramsar Site</b>		
<b>Total approved budget (\$)</b>	7,246,276	9,347,368
<b>Number of fish pond operators engaged</b>	91	107
<b>Area of fish ponds engaged (hectare)</b>	330	309
<b>Total area of eligible fish ponds (hectare)*</b>	370	403
<b>Percentage of area of fish ponds engaged in eligible fish ponds (%)</b>	89	77

\* Eligible fish ponds are those registered under the AFCD's Voluntary Registration Scheme.

# Since operators of fish ponds can engage in/withdraw from the project during the project period, the relevant figures may subject to change.

- (e) The AFCD does not keep information on the quantity of fish preyed on by birds in fish ponds and the production value involved.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)009**

**(Question Serial No. 0645)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

In 2023-24, the Agriculture, Fisheries and Conservation Department will enhance the management of wild pigs. In this connection, would the Government advise of the following:

1. the details of the relevant work, staff establishment and expenditure to be involved; and
2. the total number of reports received on wild pig sightings and the number of wild pigs captured in each of the past 5 years?

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 12)

Reply:

1. To exercise effective control over wild pig nuisance in Hong Kong, safeguard public safety and maintain public hygiene, the Agriculture, Fisheries and Conservation Department (AFCD) has implemented new measures since November 2021 to conduct regular capture operations against wild pigs at sites with large numbers of wild pig sightings, and those with past injury cases caused by wild pigs or with wild pigs posing risks to members of the public, as well as upon receiving reports about their sightings in residential or public areas from members of the public or other government departments. During the capture operations, veterinary officers will use dart guns on wild pigs and dispatch them humanely by the injection of drug.

Moreover, since the main cause of festering wild pig nuisance in recent years is intentional feeding, to step up the efforts to curb wild pig feeding activities and resolve the wild pig nuisance at source, the Government has expanded the area of “the place at which the feeding of any wild animal is prohibited” designated under the Wild Animals Protection Ordinance (Cap. 170) to the entire territory of Hong Kong with effect from 31 December 2022. It is also considering amending the Ordinance to increase the maximum penalty and introduce fixed penalty for illegal feeding of wild animals with a view to strengthening the deterrent effect. The legislative amendments are aimed to be tabled to the Legislative Council for scrutiny within this year. In addition, the AFCD continues to strengthen its education and publicity through various channels to appeal to the public not to feed wild animals.

In 2022-23, a total of 34 staff members of the AFCD were involved in wild pig management and the expenditure (revised estimate) incurred was \$21 million. In 2023-24, the AFCD's staff establishment and expenditure on wild pig management are expected to be similar to those in 2022-23.

2. Over the past 5 years, the number of reports on wild pig sightings or nuisance received and the number of wild pigs captured by the AFCD are tabulated as follows:

Year	Number of reports on wild pig sightings or nuisance	Number of wild pigs captured
2018-19	1 008	192
2019-20	1 073	293
2020-21	1 114	344
2021-22	1 351	370
2022-23 (as at Feb 2023)	1 108	347

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)010**

**(Question Serial No. 3134)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Agriculture, Fisheries and Conservation Department will promote the “compatible” use of country parks and marine parks. Please advise of the following:

- 1) the Government’s definition of “compatible” and whether specific assessment indicators have been set;
- 2) the current performance of country parks and marine parks in environmental protection, such as waste disposal, the degree of impact of visitors on the natural environment, the pollution status of rivers and reservoirs, etc. and prioritised areas for enhancement; and
- 3) the staff establishment (including ranks, salary points, actual number of staff, etc.) on “public education and publicity” and “law enforcement under the Country Parks Ordinance (Cap. 208) and the Marine Parks Ordinance (Cap. 476)”.

Asked by: Hon KAN Wai-mun, Carmen (LegCo internal reference no.: 50)

Reply:

- 1) and 2) Country parks and marine parks are set up mainly for the purposes of nature conservation, recreation and education. The Agriculture, Fisheries and Conservation Department (AFCD) endeavours to adopt the low carbon and green principles in the management of country parks and marine parks so that the design of the relevant facilities integrates with the natural surroundings and meets the needs of different people. The AFCD sets up picnic sites and campsites away from ecologically sensitive areas to minimise the adverse impacts of human activities on nature, with a view to enabling the public to enjoy the countryside in a way compatible with the environment. In addition, the AFCD monitors the usage of country parks and marine parks through inspections and enforcement and enhances its management measures as necessary.

The AFCD continues to promote the messages of keeping the environment of country parks and marine parks clean and caring for the nature to countryside visitors through various channels. The AFCD has been implementing the “Take Your Litter Home” publicity and education programme with various groups since 2015 and has installed water filling stations in country parks to encourage public’s

participation in the protection of the countryside environment. The AFCD has also removed litter bins and recycling bins along the hiking trails in country parks since the end of 2017 while only keeping them at recreational sites (e.g. barbecue sites and campsites) for use by members of the public when needed. Subsequent to the implementation of the measures, the amount of refuse collected in country parks has showed a decreasing trend in recent years. Since 2021, the AFCD has organised an array of activities under the theme of “Hiking Etiquette” to promote good outdoor behaviour, and has employed green ambassadors to promote the messages of “Respect Nature”, “Prevent Hillfire”, “Reduce Waste” and “Take Your Litter Home”, etc. to the general public at popular hiking spots with a view to encouraging the public to care for the nature during their visits to the countryside. In 2022 and 2023, the AFCD launched country park hiking trail clean-up programmes targeted at the general public and organisations respectively to encourage the members of the public to develop the good habit of caring for the countryside, reducing waste and keeping the trails clean.

Moreover, in view of the increased usage of popular trails and the associated facilities, the AFCD has stepped up inspections to monitor and assess the impact of the increasing number of visitors on the environment and facilities of country parks. In respect of certain trails with increased wear and tear due to the effect of increasing number of visitors, the AFCD plans to restore the damaged trails through improvement works, and conduct vegetation maintenance and tree planting, as well as increase ancillary facilities at suitable locations in order to reduce the impact brought by the visitors to the countryside.

- 3) The manpower involved in the education, publicity, patrol and enforcement work for country parks and marine parks in 2022-23 as well as the respective ranks and salary points are tabulated as follows:

	<b>Manpower (number of staff)</b>	<b>Rank (MPS point)</b>
Education and publicity	38	Senior Forestry Officer (MPS 45-49) Senior Fisheries Officer (MPS 45-49)
Patrol and enforcement	172	Forestry Officer (MPS 27-44) Fisheries Officer (MPS 27-44) Senior Field Officer (MPS 29-33) Senior Fisheries Supervisor (MPS 29-33) Field Officer I (MPS 22-28) Fisheries Supervisor I (MPS 22-28) Field Officer II (MPS 8-21) Fisheries Supervisor II (MPS 8-21) Senior Field Assistant (MPS 12-15) Field Assistant (MPS 7-11) Artisan (MPS 5-8) Clerical Assistant (MPS 1-10)

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)011****(Question Serial No. 1753)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for Environment and EcologyQuestion:

Under the Programme, the estimated financial provision allocated for the Agriculture, Fisheries and Conservation Department for 2023-24 will increase by 13.6%. This will be used to conserve flora, fauna and natural habitats; to designate and manage country parks, special areas, marine parks and marine reserves; and to control international trade in endangered species of animals and plants in Hong Kong. In this connection, would the Government inform this Committee of the following:

- a) the details of the estimated distribution of seedlings to be planted and produced in the 18 districts of Hong Kong;
- b) the number of endangered species prosecutions has increased from 38 in 2021 to 50 in 2023; please provide the type of endangered species involved in these prosecutions and the respective numbers of prosecutions; and
- c) the number of operations conducted to combat illegal trade and smuggling of endangered species over the past 3 years?

Asked by: Hon KWOK Ling-lai, Lillian (LegCo internal reference no.: 16)Reply:

- a) The estimated total number of seedlings to be produced and planted in 2023 is tabulated as follows:

	<b>2023 (estimate)</b>
Seedlings produced (number)	230 000
Seedlings planted (number) <sup>Note 1</sup>	220 000

Note 1: The seedlings produced will be mainly planted in country parks and about 10 000 seedlings will be provided to other departments for greening purpose.

All seedlings are produced in the Tai Tong Nursery of the Agriculture, Fisheries and Conservation Department. The total number of seedlings to be planted in country park areas in the various districts is tabulated as follows:

<b>District</b> <sup>Note 2</sup>	<b>2023</b> <b>(estimate) (number)</b>
Eastern	300
Islands	39 000
North	35 000
Sai Kung	4 000
Sha Tin	66 000
Southern	400
Tai Po	30 000
Tsuen Wan	5 000
Tuen Mun	27 000
Wan Chai	300
Yuen Long	13 000

Note 2: There is no country park in Kowloon City, Kwun Tong, Sham Shui Po, Yau Tsim Mong and Kwai Tsing Districts. In addition, no planting of seedlings will be carried out in the country parks in Wong Tai Sin (in which there is only a small area of Ma On Shan Country Park) and the Central and Western Districts in 2023.

- b) The type of endangered species involved in prosecution cases for contravention of the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) (the Ordinance) and the respective numbers of prosecutions in 2021 and 2022 are tabulated as follows:

<b>Type of endangered species</b>	<b>Year</b>	<b>Number of prosecution cases</b>	
		<b>2021</b>	<b>2022</b>
Live reptile		5	5
Live bird		1	7
Live plant		18	11
Ivory		2	19
Rhino horn		1	0
Dried seahorse		4	1
Parts or derivatives of plant		3	0
Others (such as proprietary Chinese medicine and turtle plastron)		4	7
<b>Total*</b>		<b>38</b>	<b>48</b>

\* Since some cases involve more than 1 type of species, the total number of prosecution cases every year may be less than the sum of prosecution cases by type of species.

It is expected that the overall number of prosecutions and the type of endangered species to be involved in 2023 would be similar to those in 2022.

- c) The numbers of cases involving illegal imports and exports in contravention of the Ordinance over the past 3 years (i.e. 2020, 2021 and 2022) were 276, 306 and 291, respectively.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)012**

**(Question Serial No. 1754)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

The work of the Agriculture, Fisheries and Conservation Department (AFCD) in pursuit of its aim involves the promotion of public awareness of nature conservation. In 2023-24, the AFCD will focus on the promotion of public education and publicity on nature conservation and compatible use of country parks and marine parks. In this connection, would the Government inform this Committee of the following:

- a) the expenditure of the AFCD on the organisation of educational activities over the past 3 years;
- b) further to the above, the number of educational activities organised and the number of participants over the past 3 years; and
- c) given that the number of participants in educational activities reached 200 000 last year, whether online platforms were used in conducting the educational activities; if so, please provide the proportion of online participants.

Asked by: Hon KWOK Ling-lai, Lillian (LegCo internal reference no.: 17)

Reply:

- a) The Agriculture, Fisheries and Conservation Department (AFCD) attaches great importance to public education and publicity on nature conservation and the promotion of compatible use of country parks and marine parks. The expenditure involved in education and publicity on country parks and marine parks over the past 3 years is tabulated as follows:

<b>Year</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23 (revised estimate)</b>
Expenditure (\$ million)	22.7	24.6	23.8



- b) The number of educational activities in relation to country parks and marine parks organised by the AFCD and the number of participants over the past 3 years are tabulated as follows:

<b>Year</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Number of educational activities	1 377	1 431	2 333
Number of participants	130 000	150 000	200 000

- c) In 2022, the AFCD organised different types of publicity and educational activities, such as nature excursions, school visits, roving exhibitions, volunteer services and hiking challenges, etc. to enrich the public's knowledge and experience about the natural environment and foster the attitude of caring for the nature. The AFCD also used online platforms such as social media and online talks to support the above publicity and educational activities. The number of participants who took part in the educational activities through online platforms accounted for about 3% of the total number of participants.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)013**

**(Question Serial No. 0982)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is mentioned under the Matters Requiring Special Attention that the Government will implement measures for enhanced management of wild pigs, including the legislative amendment to the Wild Animals Protection Ordinance (Cap. 170). In this connection, would the Government inform this Committee of the following:

- (a) the specific progress of raising the level of maximum penalty and introducing a fixed penalty for illegal feeding of wild animals; whether a specific timetable for legislative amendments has been set; if yes, the details;
- (b) the details of complaints against nuisance caused by wild pigs over the past 3 years; the details of specific measures implemented by the Government in handling the aforesaid cases and the work concerned;
- (c) the manpower and expenditure involved in enhancing the management of wild pigs over the past 3 years; and the effectiveness of such management measures?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 16)

Reply:

- (a) Since the main cause of festering wild pig nuisance in recent years is intentional feeding, to step up efforts to curb wild pig feeding activities and resolve the wild pig nuisance at source, the area of "the place at which the feeding of any wild animals is prohibited" (Feeding Ban Area) designated under the Wild Animals Protection Ordinance (Cap. 170) (the Ordinance) has been expanded to the entire territory of Hong Kong with effect from 31 December 2022. Any person feeding any wild animal (including wild pigs, monkeys and wild birds) without permission may be prosecuted and is liable to a maximum fine of \$10,000. The Government is considering amending the Ordinance to increase the maximum penalty and introduce fixed penalty for illegal feeding of wild animals with a view to strengthening the deterrent effect. The legislative amendments are aimed to be tabled to the Legislative Council for scrutiny within this year.

- (b) The number of reports on wild pig sightings or nuisance received by the AFCD over the past 3 years is tabulated as follows:

Year	Number of reports on wild pig sightings or nuisance
2020-21	1 114
2021-22	1 351
2022-23 (as at Feb 2023)	1 108

To exercise effective control over the wild pig nuisance in Hong Kong, safeguard public safety and maintain public hygiene, the AFCD has implemented new measures since 12 November 2021 to conduct regular capture operations against wild pigs at sites with large numbers of wild pig sightings, and those with past injury cases caused by wild pigs or with wild pigs posing risks to members of the public, as well as upon receiving reports about their sightings in residential or public areas from members of the public or other government departments. During the capture operations, veterinary officers will use dart guns on wild pigs and dispatch them humanely by the injection of drug. In addition, the AFCD continues to strengthen its education and publicity through various channels to appeal to the public not to feed wild animals.

- (c) The manpower and expenditure involved in the AFCD's work in relation to wild pig management over the past 3 years are tabulated as follows:

Year	Manpower (number of staff)	Expenditure (\$ million)
2020-21	32	17.8
2021-22	32	19.2
2022-23 (revised estimate)	34	21.0

To monitor the effectiveness of the wild pig management measures in an effective approach, the AFCD has set "key performance indicators (KPI)", which aims to reduce half of the wild pig nuisance black spots each year, and updates the black spot list on a yearly basis. According to the records of the AFCD, the management measures have shown positive results.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)014****(Question Serial No. 0990)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for Environment and EcologyQuestion:

The Matters Requiring Special Attention mentions the licensing control of international trade in endangered species and curbing of illegal trade in endangered species in Hong Kong. Would the Government advise this Committee of the following:

- (a) the total number of seizure operations conducted over the past 3 years;
- (b) the quantity of wild fauna and flora seized over the past 3 years; and
- (c) the manpower and expenditures involved?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 26)Reply:

- (a) and (b) The number of seizure operations conducted against the contravention of the Protection of Endangered Species of Animals and Plants Ordinance and the quantity seized over the past 3 years are tabulated as follows:

<b>Year</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Number of seizure operations	359	330	343
Quantity seized (kg)	279 000	408 000	22 300

- (c) The expenditure and manpower of the Agriculture, Fisheries and Conservation Department involved in the work related to the licensing control of international trade in endangered species and curbing of illegal trade in endangered species in Hong Kong over the past 3 years are tabulated as follows:

<b>Year</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23 (revised estimate)</b>
Expenditure (\$ million)	51.8	51.0	48.2
Manpower (number)	61	57	56

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)015**

**(Question Serial No. 1162)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (000) Operational expenses

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Agriculture, Fisheries and Conservation Department announced in November 2021 that wild pigs in the urban area would be regularly captured for humane dispatch with a view to reducing their number and nuisance. Please advise this Committee of the following:

- (1) the total number of operations conducted by the Department, the total number of wild pigs humanely dispatched as well as the expenditure involved so far;
- (2) the locations where capture operations and humane dispatch of wild pigs were performed by the Department in the aforesaid period as well as the manpower and tools involved in detail;
- (3) the number of reports on injury cases caused by wild pigs received by the Department so far; and
- (4) the number of reports on injury cases caused by wild pigs received by the Department in each of the past 3 years.

Asked by: Hon LAM Kin-fung, Jeffrey (LegCo internal reference no.: 4)

Reply:

- (1) and (2) To effectively control wild pig nuisance in Hong Kong, safeguard public safety and maintain public hygiene, over 170 wild pig capture operations have been conducted, with over 400 wild pigs humanely dispatched, as at 9 March 2023 since the announcement of conducting wild pig capture operations by the Agriculture, Fisheries and Conservation Department (AFCD) on 12 November 2021. The date and location of the operations and the number of wild pigs dispatched in each operation have been uploaded to the AFCD website [https://www.afcd.gov.hk/english/conservation/con\\_fau/con\\_fau\\_nui/con\\_fau\\_nui\\_pig/con\\_fau\\_nui\\_pig.html](https://www.afcd.gov.hk/english/conservation/con_fau/con_fau_nui/con_fau_nui_pig/con_fau_nui_pig.html). The capture operations involve veterinary officers using dart guns and drugs on wild pigs. Where necessary, the AFCD will use tools like fences and shields to assist the operation, and the Police will also maintain order and control traffic on the scene.

The AFCD's manpower and expenditure on wild pig management were 32 staff members and \$19.2 million in 2021-22 and 34 staff members and \$21 million

(revised estimate) in 2022-23 respectively. As the capture operations are part of the regular work in wild pig management, there is no separate breakdown of the expenditure involved in these operations.

- (3) Between November 2021 and February 2023, the AFCD received a total of 47 reports on injuries caused by wild pigs.
- (4) The number of reports on injuries caused by wild pigs received by the AFCD over the past 3 years is tabulated as follows:

Year	Reports on injuries caused by wild pigs (number of cases)
2020-21	4
2021-22	33
2022-23 (as at Feb 2023)	23

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)016**

**(Question Serial No. 2800)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (000) Operational expenses

Programme: (2) Nature Conservation and Country Parks  
(3) Animal, Plant and Fisheries Regulation and Technical Services

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding strengthening the control of trade in endangered species:

(a) With the passage of the Protection of Endangered Species of Animals and Plants (Amendment) Bill 2017 (the Amendment Bill) earlier, the import and re-export of pre-Convention (i.e. the Convention on the International Trade in Endangered Species of Wild Fauna and Flora) ivory (except antique ivory) have been banned and the possession of pre-Convention ivory (except antique ivory) for commercial purposes in the local market is subject to licensing control.

Please advise this Committee of the enforcement efforts of the Government since the passage and implementation of the Ordinance, including the relevant law enforcement data, the amount of imported and exported pre-Convention and post-Convention worked ivory seized, as well as the number of licences issued for the commercial possession of pre-Convention ivory since the Ordinance came into force.

(b) Regarding the licensing control of international trade in endangered species and curbing of illegal trade in endangered species in Hong Kong, please give details of the expenditure and manpower involved over the past 3 years and in the forthcoming year.

(c) What are the details of the expenditure and manpower involved in the Government's efforts to protect endangered species and combat wildlife smuggling over the past 3 years? Apart from ivory, what are the manpower and expenditure involved in relation to the increase in penalties under the Ordinance by virtue of the Amendment Bill?

Asked by: Hon LAM Kin-fung, Jeffrey (LegCo internal reference no.: 61)

Reply:

(a) The Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 (the Amendment Ordinance) came into effect on 1 May 2018 to enhance protection of endangered elephants. With the implementation of the Amendment Ordinance, all imports and exports of ivory (except antique ivory) for commercial purposes have been banned starting from 1 August 2018. A

possession licence is required for possessing pre-Convention (i.e. the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)) ivory for commercial purposes. With the full implementation of the Amendment Ordinance on 31 December 2021, the import, re-export and possession of ivory for commercial purposes have been fully banned, except for antique ivory.

The Agriculture, Fisheries and Conservation Department (AFCD) has been implementing a series of measures against ivory smuggling, including stepping up joint operations and intelligence exchange with the Customs and Excise Department and overseas law enforcement agencies (e.g. Interpol), and deploying sniffer dogs to assist in the detection of ivory at import and export control points. The AFCD has also strengthened control of the local ivory trade, including stepping up market inspections, surveillance of online trading platforms and intelligence collection, as well as using hi-tech radiocarbon dating analysis to determine the age and legality of ivory.

On the other hand, the AFCD has carried out a series of activities to publicise the phase-out plan of the local ivory trade and the new penalties to the general public, travellers and traders. The relevant measures include issuing letters, press releases and posting messages on the Facebook; displaying posters at various import and export control points; broadcasting Announcements of Public Interest on YouTube Channel; publicising regulatory measures and sharing information on cases and penalties through the AFCD Facebook page; placing advertisements on means of transport such as buses, trams and MTR; as well as conducting visits to licensed ivory shops and other art and craft shops for education and promotion. Internationally, the AFCD has also notified the World Trade Organization and all Parties to the CITES of the relevant details.

Statistics on law enforcement related to ivory since the commencement of the Amendment Ordinance are tabulated as follows:

<b>Year</b>	<b>2018 (May to Dec)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Quantity of ivory seized (kg)</b>	336	2 058	0.07	1.13	6.93
<b>Number of persons convicted</b>	24	18	1	0	19
<b>Maximum term of imprisonment</b>	4 months	6 weeks	24 months	N/A	6 weeks (suspended sentence of 18 months)
<b>Maximum amount of fine</b>	\$8,000	N/A	N/A	N/A	N/A

Starting from 31 December 2021, all Licences to Possess for ivory have become invalid. The AFCD has also ceased issuing Licences to Possess for ivory.



(b) and (c) The efforts of the AFCD in protecting endangered species and combating wildlife smuggling include carrying out licensing control of international trade in endangered species, as well as curbing the illegal trade in endangered species in Hong Kong. The expenditure and manpower involved in the above work over the past 3 years and the forthcoming year are tabulated as follows:

<b>Year</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23 (revised estimate)</b>	<b>2023-24 (estimate)</b>
<b>Expenditure (\$ million)</b>	51.8	51.0	48.2	48.2
<b>Manpower (number of staff)</b>	61	57	56	56

No additional manpower or expenditure was involved in relation to the imposition of heavier penalties under the Amendment Ordinance.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)017**

**(Question Serial No. 0249)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is proposed in the Budget Speech that the Agriculture, Fisheries and Conservation Department will gradually enhance facilities in country parks and explore ideas such as providing treetop adventure, repairing wartime relics and turning them into open museums. In this connection, would the Government inform this Committee of the following:

1. the details of the various projects for enhancing facilities in country parks, providing treetop adventure and repairing wartime relics, and the selected sites, design, estimated expenditure and manpower of the projects;
2. the details and timetable of the feasibility studies and consultation exercises required for providing treetop adventure, repairing wartime relics and turning them into open museums;
3. in view of the crowdedness of many country parks and hiking trails during holidays in recent years, whether the Government has conducted any study on the carrying capacity of the local scenic attractions; if yes, the details; if not, whether the Government will conduct the relevant study;
4. further to the above, whether the Government has reviewed the traffic planning and arrangement for those exceptionally popular scenic attractions; if yes, the details; if not, whether the Government will conduct the relevant study; and
5. whether the Government has evaluated the socio-economic benefits to be brought about by the enhancement of country parks?

Asked by: Hon LAM Siu-lo, Andrew (LegCo internal reference no.: 8)

Reply:

1. and 2. The Agriculture, Fisheries and Conservation Department (AFCD) is progressively implementing a series of short and medium-term enhancement projects for country park facilities based on the recommendations of the consultancy study on "Enhancing the Recreation and Education Potential of Country Parks", including the enhancement of 10 hiking trails with the improvement or addition of about 20 viewing points at popular tourist spots such as High West, Dragon's Back and Sunset Peak; the launch of the advance booking system pilot scheme for the Twisk Campsite to facilitate advance booking of camping space and facilities by the

public; and the installation of a total of 34 water filling stations in country parks across the territory to encourage the public to bring their own bottles and reduce utilisation of single-use plastic bottles.

As for long-term projects, the AFCD is working with departments including the Architectural Services Department and Civil Engineering and Development Department to implement the projects in phases. Projects in the first phase include enhancement of public toilets at Bride's Pool (Pat Sin Leng Country Park), Tai Tam Tuk (Tai Tam Country Park) and Pak Kung Au on Lantau Island (Lantau South Country Park), as well as the setting up of a viewing platform overlooking Po Pin Chau in Sai Kung East Country Park. Projects in the second phase include reconstruction of a public toilet and a refreshment kiosk at the Aberdeen Physically Handicapped and Able-bodied (P.H.A.B.) Barbecue Area, and provision of a viewing platform overlooking Aberdeen Upper Reservoir and associated P.H.A.B. recreation facilities (Aberdeen Country Park); provision of a new public toilet at Long Ke Wan Campsite (Sai Kung East Country Park); provision of a new public toilet at Twisk Campsite (Tai Lam Country Park); revitalisation of Lin Ma Hang Lead Mine Cave; and provision of an outdoor free exploration field at the Lions Nature Education Centre.

In addition, the AFCD progressively commenced feasibility studies on the provision of glamping sites and treetop adventures, and the revitalisation of some wartime relics by converting them into open museums in the second half of last year, with a view to determining the potential site, design, mode of operation, fee level and operation requirements, etc. of these facilities. The AFCD will conduct activities to gather views of the public during the course of the studies. The AFCD anticipates that the aforementioned feasibility studies will be completed in 2024, and the recommendations in the study reports will be taken into account in the implementation of the relevant projects.

The Government has earmarked \$500 million in the 2021-22 Budget to support the implementation of the above projects. In the 2021-22 financial year, the AFCD created 2 time-limited posts lasting for a period of 5 years and took forward the related work through deployment of internal resources.

3. In response to the public's growing demand for visits to country parks, the AFCD is diverting visitors with different needs to various country parks as far as possible through improving the coverage of the hiking trail network and its linkage and implementing enhancement projects at country parks in different districts. In addition, the AFCD will also continue to monitor closely the visitor flow and environment of popular hiking trails or attractions, and when necessary, carry out appropriate improvement work such as repair of damaged trails, control of soil erosion at the trails, enhancement of vegetation coverage, enhancement of cleansing services, enrichment of information for visitors and promotion of public awareness on protecting the environment of country parks, etc. In planning the enhancement projects, the AFCD will select suitable sites for detailed studies, including taking into account the geographical and environmental setting and the existing ancillary facilities of these sites, etc. with a view to implementing the enhancement proposals at locations already with provision of infrastructure nearby

as far as practicable, thereby reducing the impact on the country park environment and other users.

4. For particularly popular countryside attractions, the AFCD has been communicating and co-ordinating closely with the relevant departments such as the Transport Department (TD), the Hong Kong Police Force and the Home Affairs Department regarding relevant transportation planning and arrangements, and has made corresponding improvement measures according to actual circumstances, such as the implementation of special transport arrangement at Tai Tong (Tai Lam Country Park) and Lau Shui Heung Reservoir (Pat Sin Leng Country Park) during the red leaves season every year. In addition, the TD has been closely monitoring public transport services to country parks and will work with public transport operators to strengthen existing services or introduce new services when necessary to meet passenger demand.
5. Country parks attracts about 12 million visitors every year. Through enhancing the recreational facilities in country parks, the Government aims to provide more quality outdoor recreational and educational facilities for the public, promote the message of caring for nature, improve the quality of life of the public, and at the same time promote green tourism. Although the Government has not assessed the socio-economic benefits to be brought about by the enhancement projects, the AFCD engaged a local university to conduct a consultancy study on ecosystem services during the period between 2020 and 2022, and the result indicated that country parks are of high value regarding recreation and tourism.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)018**

**(Question Serial No. 2563)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is mentioned in the Budget that in the next 2 to 3 years, the Agriculture, Fisheries and Conservation Department will gradually enhance facilities in country parks such as the provision of treetop adventure training. In this connection, would the Government inform this Committee of the following:

1. at present, whether assessment has been made on the structural condition of the trees, impact on the natural environment and commercial effectiveness; if yes, the progress made;
2. whether additional publicity resources will be allocated for taking forward the proposal to enhance public understanding of the nature; and
3. further to the above, with reference to the popular treetop adventure training overseas which mainly focuses on activities such as treetop walkways, tree-climbing, zip-lining and grass skiing, whether the Government will allocate additional education resources for examining the incorporation of elements of 5 senses training for children to stimulate their brain development through adventure games and courses?

Asked by: Hon LAM So-wai (LegCo internal reference no.: 20)

Reply:

1. and 3. In July last year, the Agriculture, Fisheries and Conservation Department (AFCD) commissioned a consultancy to conduct a feasibility study on the provision of treetop adventure facilities in country parks with a view to determining the potential sites, design, mode of operation, fee level and operation requirements, etc. of those facilities. The consultant will carry out a detailed study on the potential sites, including Pak Tam Chung (Sai Kung West Country Park), Shing Mun (Shing Mun Country Park) and Shek Pik (Lantau South Country Park), so as to ensure that the operation of the relevant facilities will not pose adverse impacts on the environment of country parks. During the course of the study, the AFCD will gather views of the public in order to ensure that the new facilities can offer diversified adventure experiences to people of different age groups as appropriate. The aforesaid feasibility study is anticipated to be completed in 2024, and the

AFCD will further finalise the relevant design and construction work by taking into account the recommendations of the study report.

Besides, the AFCD and the Architectural Services Department are planning to provide an outdoor free exploration field at the Lions Nature Education Centre situated at Tsiu Hang Special Area, Sai Kung for children to explore and play freely through diversified play equipment in the natural environment. An array of children's play equipment, such as tree house, wood logs, climbing frame, dynamic balancing frame, balance rope, rope course and sound exploration devices, will be provided at the outdoor free exploration field to enrich the learning experience of children.

2. The AFCD attaches great importance to the publicity and education programmes of country parks. It continues to promote to the public the messages of nature appreciation and conservation, as well as the proper use of country park facilities through various channels. After the completion of the treetop adventure and other enhancement works on facilities, the AFCD will also promote the new recreational facilities to the public through suitable channels (e.g. social media).

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)019**

**(Question Serial No. 0624)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

To enhance wild pig management, the Government introduced amendments to the Wild Animals Protection Ordinance (Cap. 170) to increase the level of maximum penalty and introduce a fixed penalty for illegal feeding of wild animals. In this connection, would the Government inform this Committee of the following:

- 1 the latest projected population of wild pigs in each district of Hong Kong;
- 2 the manpower and expenditure involved in handling wild pigs over the past 3 years;
- 3 the advertising expenditure, promotional approaches and expenditure involved in public education and publicity on the prohibition of feeding wild pigs over the past 3 years in tabular form;
- 4 over the past 3 years, the number of (i) patrols conducted and (ii) prosecutions instituted by the Government in relation to the prohibition of feeding wild pigs, as well as the number of successful prosecutions and average penalties imposed;
- 5 the number of wild pig sightings or nuisance and injury to people caused by wild pigs over the past 3 years;
- 6 the number of wild pigs captured, injected with contraceptive vaccines, surgically sterilised and relocated to the countryside under the Pilot Capture and Contraception/Relocation Programme launched by the Government over the past 3 years and the expenditure involved;
- 7 the number of wild pigs euthanised by the Government over the past 3 years and the expenditure involved; and
- 8 the most effective measure to control wild pigs in the Government's opinion.

Asked by: Hon LAU Ip-keung, Kenneth (LegCo internal reference no.: 22)

Reply:

1. The Agriculture, Fisheries and Conservation Department (AFCD) launched a study in 2019 to estimate the number of wild pigs in the countryside using infrared camera traps. In 2020, the scope of the study was extended to cover more sites and different seasons. It was estimated that there were about 2 500 wild pigs in the countryside all over Hong Kong based on the wild pig population density. The AFCD is collecting and analysing

the latest data to estimate the latest number of wild pigs throughout the territory. It is aimed that the result will be available in the latter half of this year.

2. The manpower and expenditure involved in the work in relation to wild pig management by the AFCD over the past 3 years are tabulated as follows:

<b>Year</b>	<b>Manpower (number of staff)</b>	<b>Expenditure (\$ million)</b>
2020-21	32	17.8
2021-22	32	19.2
2022-23 (revised estimate)	34	21.0

3. The AFCD has all along been striving to educate the public and appeal to them not to feed wild animals. Over the past 3 years, in addition to commission the Hong Kong Ocean Park Conservation Foundation to provide eco-educational activities and guided tours at “the place at which the feeding of any wild animal is prohibited” (Feeding Ban Area) designated under the Wild Animals Protection Ordinance (Cap. 170) (the Ordinance) and carry out publicity and educational activities in kindergartens, primary schools and communities near feeding black spots with a view to educating public members of various age groups, especially students, on concepts about preventing wild animal nuisance and no-feeding of wild animals, the AFCD has also rolled out a new round of public education and publicity campaign in November 2021, which includes uploading promotional and educational information on social media, putting up posters at public transport and at stations. The AFCD will continue to strengthen public education on no-feeding of wild pigs and the risk behind feeding wild pigs through diverse channels. The expenditures on advertisements and other publicity and education programmes in relation to wild pigs by the AFCD over the past 3 years are tabulated as follows:

<b>Year</b>	<b>Expenditure on advertisements (\$ million)</b>	<b>Other expenditure on publicity and education (\$ million)</b>
2020-21	0.3	1.2
2021-22	0.4	2.8
2022-23 (revised estimate)	5.6	1.6

4. Since 1999, Kam Shan, Lion Rock and Shing Mun Country Parks, part of Tai Mo Shan Country Park, Tai Po Kau Nature Reserve, a section of Tai Po Road along Caldecott Road and Piper’s Hill section of Tai Po Road have been specified as the Feeding Ban Area under the Ordinance. Any person feeding wild animals in the Feeding Ban Area shall be liable on conviction to a maximum fine of \$10,000. Since the main cause of festering nuisance of wild pigs in recent years is intentional feeding, to step up the efforts to curb wild pig feeding activities and resolve the wild pig nuisance at source, the Feeding Ban Area has been expanded to the entire territory of Hong Kong with effect from 31 December 2022. The AFCD will arrange patrols at wild animal feeding black spots from time to time and take prosecution actions against anyone who has contravened the prohibition of wild animal feeding, subject to sufficient evidence. The



AFCD will also review from time to time the patrol and enforcement arrangements in accordance with the actual circumstances, including stepping up blitz and enforcement operations where necessary, as well as collaborating with relevant departments to strengthen combatting the relevant activities. The information on patrols and prosecutions against illegal feeding of wild animals (including wild pigs) over the past 3 years is tabulated as follows:

<b>Year</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23 (as at Feb 2023)</b>
Number of patrols conducted	572	577	702
Number of prosecutions instituted*	50	120	101
Number of successful prosecutions	31	90	79
Fine (\$)	300-2,000 (average: 559)	200-1,500 (average: 833)	300-1,500 (average: 601)

\* Some of the prosecutions instituted in the year might be processed in the following year.

5. The number of reports on wild pig sightings or nuisance and injury caused by wild pigs received by the AFCD over the past 3 years with a breakdown by district is tabulated as follows:

<b>District</b>	<b>Year/Number of reports on wild pig sightings or nuisance (Number of reports on injury)</b>		
	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23 (as at Feb 2023)</b>
Central and Western	98 (0)	161 (6)	101 (0)
Eastern	136 (1)	150 (17)	81 (6)
Islands	10 (0)	10 (0)	9 (0)
Kowloon City	14 (0)	9 (0)	6 (0)
Kwai Tsing	30 (0)	33 (0)	26 (0)
Kwun Tong	9 (0)	17 (0)	29 (0)
North	49 (0)	35 (0)	39 (0)
Sai Kung	142 (0)	202 (0)	197 (5)
Sha Tin	107 (0)	119 (0)	121 (6)
Sham Shui Po	5 (0)	9 (0)	23 (0)
Southern	211 (3)	281 (8)	154 (3)
Tai Po	90 (0)	99 (0)	106 (1)
Tsuen Wan	43 (0)	22 (1)	67 (2)
Tuen Mun	52 (0)	48 (0)	53 (0)
Wan Chai	51 (0)	84 (1)	52 (0)
Wong Tai Sin	27 (0)	17 (0)	17 (0)
Yau Tsim Mong	1 (0)	1 (0)	1 (0)
Yuen Long	39 (0)	54 (0)	26 (0)
<b>Total</b>	<b>1 114 (4)</b>	<b>1 351 (33)</b>	<b>1 108 (23)</b>

6. The AFCD launched the Capture and Contraception/Relocation Programme (CCRP) in late 2017 to administer contraceptive vaccine or surgically sterilise wild pigs caught and relocate them to the countryside where condition permitted. However, the AFCD's investigations revealed that the progress of contraception and sterilisation was far from catching up with the reproduction rate of wild pigs. Moreover, once wild pigs are accustomed to being fed by people, they will return to the urban or residential areas relentlessly to seek food from people even after being relocated to the countryside. To exercise effective control over the wild pig nuisance in Hong Kong, safeguard public safety and maintain public hygiene, the AFCD has implemented new measures since 12 November 2021 to conduct regular wild pig capture operations, during which veterinary officers will use dart guns on wild pigs and dispatch them humanely by the injection of drug. At the same time, the CCRP was ceased. Figures and expenditure in relation to the implementation of the CCRP in 2020-21 and 2021-22 during which the Programme was in effect are tabulated as follows:

Year	Number of wild pigs			Expenditure (\$ million)
	Captured	Administered with contraceptive vaccine or surgically sterilised*	Relocated to countryside*	
2020-21	344	165	270	9.4
2021-22	370	109	219	8.6

\* The number of wild pigs administered with contraceptive vaccine or surgically sterilised overlaps with that of wild pigs relocated to countryside, as some wild pigs would be relocated after they had been administered with the vaccine or after the surgery.

7. The number of wild pigs humanely dispatched by the AFCD over the past 3 years is tabulated as follows:

Year	Number of wild pigs humanely dispatched <sup>^</sup>
2020-21	26
2021-22	105
2022-23 (as at Feb 2023)	330

<sup>^</sup> Including wild pigs humanely dispatched due to injury.

As the capture and humane dispatch of wild pigs are part of the regular work in wild pig management, the AFCD does not have the breakdown of the relevant expenditure.

8. Wild pigs are native to Hong Kong. They are by nature wary of humans. However, once wild pigs get accustomed to being fed by humans which leads to a change in their behaviour, not only will they cause nuisance by proactively seeking food from humans, they will even develop aggressive behaviour, posing threats to public safety. To exercise effective control over the wild pig nuisance in Hong Kong, apart from educating the public and appealing to them not to feed wild animals, the AFCD will also take actions in two major directions. First of all, the AFCD will continue to conduct regular capture operations against wild pigs at sites with large numbers of wild pig sightings, and those with past injury cases caused by wild pigs or with wild pigs posing risks to members of the public, as well as upon receiving reports about wild pig sightings

in residential or public areas from members of the public or other government departments, and will humanely dispatch the wild pigs. In addition, to step up the efforts to curb wild pig feeding activities and resolve the wild pig nuisance at source, apart from expanding the Feeding Ban Area designated under the Ordinance to the entire territory of Hong Kong with effect from 31 December 2022, the Government is considering further amending the Ordinance to increase the maximum penalty and introduce fixed penalty for illegal feeding of wild animals with a view to strengthening the deterrent effect. The relevant legislative amendments are aimed to be tabled to the Legislative Council for scrutiny within this year.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)020**

**(Question Serial No. 2259)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

In recent years, wild pigs have caused nuisance in Hong Kong. They wander into residential areas, pushed over litter containers for food, and even dashed out onto the road and injured passers-by. The Government tried to control the number of wild pigs through different means, including capture and contraception/relocation and humane dispatch. This year, the Government even expanded the Feeding Ban Area for wild animals to the entire territory of Hong Kong with the aim of alleviating wild pig nuisance. In this connection, please advise this Committee of the following:

1. the number of complaints received in relation to wild pig sightings in Sha Tin and Tai Po Districts respectively over the past 5 years;
2. the number of operations and wild pigs handled by capture and contraception, relocation and humane dispatch in Sha Tin and Tai Po Districts respectively over the past 5 years;
3. before the implementation of the expansion of the Feeding Ban Area for wild animals, the number of complaints received in relation to the feeding of wild pigs in Sha Tin and Tai Po Districts respectively;
4. after the implementation of the expansion of the Feeding Ban Area for wild animals, the number of enforcement actions taken in Sha Tin and Tai Po Districts respectively;
5. specific actions taken in the past year to prevent wild pigs from wandering into housing estates and specific actions to be taken in the future; and
6. the staff establishment involved in handling wild pigs in the 18 districts across the territory.

Asked by: Hon LEE Tsz-king, Dominic (LegCo internal reference no.: 31)

Reply:

1. The number of wild pig sightings or nuisance cases received by the Agriculture, Fisheries and Conservation Department (AFCD) in Sha Tin and Tai Po Districts over the past 5 year is tabulated as follows:

District	Number of wild pig sightings or nuisance cases				
	2018-19	2019-20	2020-21	2021-22	2022-23 (as at Feb 2023)
Sha Tin	87	111	107	119	121
Tai Po	75	82	90	99	106

2. The AFCD launched the Capture and Contraception/Relocation Programme (CCRP) in late 2017 to administer contraceptive vaccine or surgically sterilise wild pigs captured and relocate them to the countryside where condition permitted. However, the AFCD's investigations revealed that the progress of contraception and sterilisation was far from catching up with the reproduction rate of wild pigs. Moreover, once wild pigs are accustomed to being fed by people, they will return to the urban or residential areas relentlessly to seek food from people even after being relocated to the countryside. To exercise effective control over the wild pig nuisance in Hong Kong, safeguard public safety and maintain public hygiene, the AFCD has implemented new measures since 12 November 2021 to conduct regular capture operations against wild pigs at sites with large numbers of wild pig sightings, and those with past injury cases caused by wild pigs or with wild pigs posing risks to members of the public, as well as upon receiving reports about wild pig sightings in residential or public areas from members of the public or other government departments. During the capture operations, veterinary officers will use dart guns on wild pigs and dispatch them humanely by the injection of drug.

The number of operations conducted under the CCRP in Sha Tin and Tai Po Districts and the number of wild pigs involved between 2018-19 and 2021-22 (as at November 2021) are tabulated as follows:

District	Number of operations (number of wild pigs involved)				
	2018-19	2019-20	2020-21	2021-22	2022-23
Sha Tin	7 (22)	20 (51)	16 (40)	10 (12)	N/A
Tai Po	3 (5)	4 (7)	16 (50)	12 (41)	N/A

The number of wild pig capture and humane dispatch operations conducted in Sha Tin and Tai Po Districts and the number of wild pigs involved between November 2021 and February 2023 are tabulated as follows:

District	Number of wild pig capture and humane dispatch operations (number of wild pigs involved)	
	2021-22	2022-23
Sha Tin	3 (3)	15 (35)
Tai Po	4 (9)	8 (19)

3. With effect from 31 December 2022, the area of “the place at which the feeding of any wild animal is prohibited” (Feeding Ban Area) under the Wild Animals Protection Ordinance (Cap. 170) (the Ordinance) has been expanded to the entire territory of Hong Kong with a view to stepping up the efforts to curb the feeding activities of wild animals such as wild pigs. Prior to the expansion of the Feeding Ban Area, the AFCD received

42 and 12 complaints about wild animal feeding (including wild pigs) in Sha Tin and Tai Po Districts respectively in 2022-23.

4. Since the expansion of the Feeding Ban Area to the entire territory of Hong Kong, as at February 2023, the AFCD has instituted 47 prosecutions for illegal feeding of wild animals (including wild pigs) in Sha Tin District and no relevant prosecutions have been instituted in Tai Po District.
5. In addition to continuing to conduct wild pig capture and humane dispatch operations by the AFCD, to step up the efforts to curb feeding of wild animals such as wild pigs, the Government is considering amending the Ordinance to increase the maximum penalty and introduce fixed penalty for illegal feeding of wild animals to strengthen the deterrent effect. Relevant legislative amendments are aimed to be tabled to the Legislative Council for scrutiny within this year. Besides, the AFCD continues to strengthen its education and publicity through various channels to appeal to the public not to feed wild animals.
6. At present, there are 34 staff members of the AFCD responsible for wild pig management work in all districts of Hong Kong.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)021****(Question Serial No. 1446)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for Environment and EcologyQuestion:

The indicators for seedlings produced and seedlings planted have decreased for consecutive years. In this connection, would the Government inform this Committee of the following:

- the statistics on seedlings produced and planted over the past 5 years in tabular form;
- the reasons for the sustained decrease in both indicators; and
- whether the Department has drawn up any specific measures to increase both figures?

Asked by: Hon LUK Hon-man, Benson (LegCo internal reference no.: 21)Reply:

- The statistics on seedlings produced and planted over the past 5 years are tabulated as follows:

	2018	2019	2020	2021	2022
Seedlings produced (number)	396 700	312 300	228 600	270 200	259 000
Seedlings planted (number) <sup>Note</sup>	396 700	298 100	220 100	261 300	249 000

Note: The seedlings produced were mainly planted in country parks. Since 2019, about 10 000 seedlings were provided to other departments for greening purpose.

- and c) Tree planting is one of the major duties of the Agriculture, Fisheries and Conservation Department (AFCD) in conserving the environment of country parks. The estimated figures on seedlings to be produced and planted every year by the AFCD are based on the actual needs. In the early stage of afforestation in country parks, the tree planting strategy was to plant a large quantity of trees to provide a vegetation cover quickly at barren hillsides for the improvement of landscape and prevention of soil erosion. After decades of extensive tree planting, most country park areas are now covered by vegetation. With the increasing public awareness towards hill fire prevention, reports of hill fires

(especially those of a larger scale) in country parks have been kept at a low level in recent years and the demand for tree planting to rehabilitate areas affected by hill fires has dropped. The current objective of tree planting in country parks focuses on improving the quality rather than the quantity of plantations, and shifts from soil erosion control to enhancement of the ecological value and biodiversity of woodlands. The AFCD enhances the quality, ecological value and biodiversity of woodlands in country parks through measures such as producing and planting more seedlings of native species that can provide better food and habitats for local wildlife, as well as enhancing plantations in country parks, including the implementation of Country Parks Plantation Enrichment Programme, the thinning of aging exotic tree species and planting of native tree seedlings.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)022**

**(Question Serial No. 0501)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation (Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the implementation of the Biodiversity Strategy and Action Plan for Hong Kong, what were the specific initiatives, manpower and expenditure involved over the past 3 years?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 10)

Reply:

The Hong Kong Biodiversity Strategy and Action Plan (BSAP) implemented in Hong Kong since late 2016 aims to conserve Hong Kong's biodiversity and support sustainable development. Apart from short and medium-term measures, the BSAP also includes some long-term and on-going tasks.

Key measures implemented by the Agriculture, Fisheries and Conservation Department (AFCD) under the BSAP in 2020-21 to 2022-23 include:

- (i) enhancing the existing conservation measures, which include enhancing habitat management in protected areas, implementing species action plans for Incense Tree and Chinese Pangolin, improving identification and control of invasive alien species, and the full banning of local ivory trade to enhance the protection of endangered species;
- (ii) mainstreaming biodiversity to prompt the public and private sectors to take biodiversity into consideration in relevant policies, programmes, works and projects;
- (iii) improving knowledge on biodiversity, such as monitoring and studying important habitats and species, developing a habitat map and a biodiversity information hub, as well as commissioning a study on ecosystem services; and
- (iv) enhancing public awareness and participation in biodiversity through publicity and education activities to encourage the public to practise conservation.

The number of staff and expenditure involved in the implementation of the BSAP are tabulated as follows:

<b>Year</b>	<b>Total expenditure (\$ million)</b>	<b>Number of staff (persons)</b>
2020-21	40.1	29
2021-22	38.9	26
2022-23 (revised estimate)	32.6	26

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)023****(Question Serial No. 0502)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Agriculture, Fisheries and Conservation Department (AFCD) will introduce policies to enhance the facilities in country parks in the coming 2 to 3 years. Would the Government inform this Committee of the following:

1. the number of inspections conducted at country parks by the AFCD over the past 3 years;
2. the number of warnings and summonses issued to those visitors who violated the rules and caused damage to the country parks respectively;
3. the amount of litter collected in country park areas over the past 3 years; and
4. the education and publicity work that has been done to call on countryside visitors to care for the nature?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 11)

Reply:

1. The number of patrols conducted by the Agriculture, Fisheries and Conservation Department (AFCD) in country parks and special areas throughout the territory over the past 3 years is tabulated as follows:

<b>Year</b>	<b>Number of patrols</b>
2020	13 362
2021	14 137
2022	13 024

2. Over the past 3 years, the AFCD instituted 3 117 prosecutions and issued 717 written warnings under the Country Parks and Special Areas Regulations (Cap. 208A), which mainly involved unauthorised possession or driving of bicycles or vehicles in country parks or special areas, entry of closed sites and illegal camping, etc. The number of prosecutions instituted and written warnings issued over the past 3 years are tabulated respectively as follows:

<b>Year</b>	<b>Number of prosecutions</b>	<b>Number of written warnings</b>
2020	833	123
2021	1 140	309
2022	1 144	285

3. The total volume of litter collected by the AFCD in country park areas over the past 3 years is tabulated as follows:

<b>Year</b>	<b>Total volume of litter (tonnes)</b>
2020	2 316
2021	1 808
2022	2 054

4. The AFCD continues to promote the messages of keeping the environment of country parks clean and conserving the nature to countryside visitors through various channels, including displaying promotional banners and posters at suitable locations in country parks, promoting through social media as well as placing advertisements on public transport. In addition, the AFCD has been implementing the “Take Your Litter Home” publicity and education programme together with green and hiking groups since 2015 and has installed water filling stations in country parks to encourage the public to bring their own water bottles. Since 2021, the AFCD has also organised an array of activities under the theme of “Hiking Etiquette” to promote good outdoor practice, culture and etiquette, and employed green ambassadors to promote the various aspects of “Hiking Etiquette”, including “Respect Nature”, “Prevent Hillfire” and “Take Your Litter Home”, to the general public at popular hiking spots.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)024****(Question Serial No. 0506)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for Environment and EcologyQuestion:

Since the Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 was fully implemented, the import, re-export and commercial possession of ivory have been banned. Would the Government advise this Committee of the following:

1. the number of cases processed by the Government in combating illegal trade and smuggling of endangered species, the respective numbers of persons prosecuted, arrested, convicted and the penalties imposed in each case over the past 3 years (please set out cases of ivory smuggling separately); and
2. the quantity of ivory forfeited over the past 3 years; the total quantity of forfeited ivory in stockpile, of which the quantity disposed and its estimated value as well as the manpower and expenditure involved; and how to prevent sellers from falsely purporting/camouflaging new ivory as antique ivory?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 15)Reply:

1. The statistics on cases involving illegal imports and exports in contravention of the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) over the past 3 years are tabulated as follows:

<b>Year</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Number of cases	276	306	291
Number of persons arrested <sup>#</sup>	128	151	149
Number of persons prosecuted <sup>#</sup>	25	34	24
Number of persons convicted <sup>#</sup>	45	29	28
Maximum penalty (imprisonment)	27 months	6 months	6 weeks (suspended sentence of 18 months)
Maximum penalty (fine/\$)	300,000	60,000	3,000

<sup>#</sup> As prosecution takes time, persons arrested might not be prosecuted and convicted within the same year.

Among which the statistics involving illegal imports and exports of ivory is tabulated as follows:

<b>Year</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Number of cases	2	1	21
Number of persons arrested <sup>#</sup>	1	0	19
Number of persons prosecuted <sup>#</sup>	0	0	19
Number of persons convicted <sup>#</sup>	1	0	19
Maximum penalty (imprisonment)	24 months	Not applicable	6 weeks (suspended sentence of 18 months)
Maximum penalty (fine/\$)	Not applicable	Not applicable	Not applicable

<sup>#</sup> As prosecution takes time, persons arrested might not be prosecuted and convicted within the same year.

- In 2020, 2021 and 2022, 0.07, 1.13 and 6.93 kg of ivory were seized respectively. Since 2014, a total of 29.5 tonnes of confiscated ivory have been disposed of by incineration. The Agriculture, Fisheries and Conservation Department (AFCD) does not have information on the estimated value of the ivory involved. The existing ivory stockpile under government custody is about 11.8 tonnes. Apart from saving some ivory for scientific, education, enforcement or identification purposes, the remaining ivory will be incinerated in batches after completion of the necessary legal procedures. The estimated expenditure for ivory incineration is \$80,000 and the manpower required will be absorbed by the existing resources of the AFCD.

The Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 (the Amendment Ordinance) was fully implemented starting from 31 December 2021. Except antique ivory, the Government has fully banned the import, re-export, and commercial possession of ivory. Traders possessing antique ivory for commercial purposes must provide evidence, such as the certifying document issued under the Convention on International Trade in Endangered Species of Wild Fauna and Flora, a qualified appraisal or scientifically approved aging methods for determining the origin and age of the article, so as to prove that the concerned ivory meets the definition of antique ivory. Since the implementation of the Amendment Ordinance, the AFCD has strengthened its efforts in market inspections, monitoring of online trading platforms and intelligence collection. In case of doubt on whether an ivory article is antique ivory, the AFCD will carry out scientific assessment, such as the use of radiocarbon dating analysis to determine the age of ivory. If irregularities are detected, the AFCD will take enforcement actions and institute prosecutions.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)025**

**(Question Serial No. 0530)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Last December, the Convention on Biological Diversity COP15 agreed on a set of global targets for reversing biodiversity loss by 2030. In this connection, would the Government inform this Committee of the relevant expenditure involved in conserving biodiversity? Are sufficient resources reserved for achieving the aforesaid targets?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 26)

Reply:

The Hong Kong Biodiversity Strategy and Action Plan 2016-2021 (BSAP) implemented since late 2016 has made substantial achievements so far, including designation of new marine parks, establishment of the Countryside Conservation Office to co-ordinate the conservation and sustainable development of the countryside, complete ban on local ivory trade, development of the Long Valley Nature Park, launch of the online Hong Kong Biodiversity Information Hub, and promotion of biodiversity mainstreaming. The Government will continue to carry out the long-term and ongoing initiatives under the BSAP, including compiling information, funding research projects, conducting public education and promotion, with a view to conserving Hong Kong's biodiversity and supporting sustainable development. From 2016-17 to 2022-23, the expenditure (including the revised estimate for 2022-23) involved in the implementation of the BSAP by the Agriculture, Fisheries and Conservation Department was about \$290 million.

The 15th Conference of Parties to the Convention on Biological Diversity (CBD) adopted the "Kunming-Montreal Global Biodiversity Framework" (Framework) in December 2022, which included a set of targets to be achieved from 2022 through 2030. The targets laid down in the Framework are global in nature. Each Party would contribute to attaining the global targets in accordance with its national circumstances, priorities and capabilities. The Government is reviewing the implementation of the BSAP, and will during the process, draw reference from the latest national and international measures in relation to biodiversity including the targets laid down in the Framework, and consider factors such as the actual local situation and resource allocation. The Government will, subject to the actual needs, devote resources appropriately to the implementation of various measures under the BSAP. The

Government also plans to report the implementation situation and the way forward of the BSAP to the Panel on Environmental Affairs of the Legislative Council later this year.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)026**

**(Question Serial No. 0237)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

A vast amount of seedlings are planted by the Agriculture, Fisheries and Conservation Department every year to enhance the landscape of Hong Kong and rehabilitate areas damaged by hill fires and soil erosion. In this connection, please advise on the following:

- (a) the reasons for the Government's estimate for production and planting of 230 000 and 220 000 seedlings respectively in 2023-24 being smaller than the actual number in 2021 and 2022, and the cost to be involved; and
- (b) the factors that determine the number of seedlings to be planted every year.

Asked by: Hon TSE Wai-chuen, Tony (LegCo internal reference no.: 11)

Reply:

- (a) and (b) Tree planting is one of the major duties of the Agriculture, Fisheries and Conservation Department (AFCD) in conserving the environment of country parks. The estimated figures on seedlings to be produced and planted every year by the AFCD are based on the actual needs. In the early stage of afforestation in country parks, the strategy was to plant a large quantity of trees to provide a vegetation cover quickly at barren hillsides for the improvement of landscape and prevention of soil erosion. After decades of extensive tree planting, most country park areas are now covered by vegetation. With the increasing public awareness towards hill fire prevention, reports of hill fires (especially those of a larger scale) in country parks have been kept at a low level in recent years and the demand for tree planting to rehabilitate areas affected by hill fires has dropped. The current objective of tree planting in country parks focuses on improving the quality rather than the quantity of plantations, and shifts from soil erosion control to enhancement of the ecological value and biodiversity of woodlands. The AFCD enhances the quality, ecological value and biodiversity of woodlands in country park through measures such as producing and planting more seedlings of native species that can provide better food and habitats for local wildlife, as well as enhancing plantations in country parks, including the implementation of Country

Parks Plantation Enrichment Programme, the thinning of aging exotic tree species and planting of native tree seedlings. In 2023-24, the cost involved in the production and planting of seedlings is about \$12.2 million.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)027**

**(Question Serial No. 0956)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

In recent months, the media has reported that members of the public in many districts are feeding rodents and pigeons, which may worsen the problem of rodents and pigeons. In this connection, would the Government inform this Committee of the following:

- (1) over the past 3 financial years, the total number of crime reports received in relation to illegal feeding of wild animals; among them, the number of prosecutions instituted, cases where law enforcement was not carried out, and the respective year-on-year changes;
- (2) the current manpower and resources for investigating and prosecuting the said cases; whether assessment has been made to ascertain if the current staff establishment is sufficient to cope with the increasing number of cases of illegal feeding of wild animals; and
- (3) the measures that the Government has been taken to prohibit and eradicate illegal feeding behaviours so as to prevent hygiene problems in all the districts from worsening?

Asked by: Hon TSE Wai-chun, Paul (LegCo internal reference no.: 33)

Reply:

- (1) Since 1999, Kam Shan, Lion Rock and Shing Mun Country Parks, part of Tai Mo Shan Country Park, Tai Po Kau Nature Reserve, a section of Tai Po Road along Caldecott Road and Piper's Hill section of Tai Po Road are specified places at which the feeding of wild animals is prohibited (Feeding Ban Area) under the Wild Animals Protection Ordinance (Cap. 170) (the Ordinance). The Feeding Ban Area has been expanded to the entire territory of Hong Kong with effect from 31 December 2022. Any person feeding wild animals in the Feeding Ban Area will be liable to a maximum fine of \$10,000 upon conviction. The Agriculture, Fisheries and Conservation Department (AFCD) arranges patrols at wild animal feeding black spots from time to time and takes prosecution actions against anyone who has contravened the prohibition of wild animal feeding, subject to sufficient evidence.

Over the past 3 years, the information on the number of reports, prosecutions instituted and successful prosecutions against illegal feeding of wild animals is tabulated as follows:

Year	2020-21	2021-22	2022-23 (as at Feb 2023)
Number of reports	32	48	74
Number of prosecutions instituted*	50	120	101
Number of successful prosecutions	31	90	79

\* Some of the prosecutions instituted in the year might be processed in the following year.

- (2) & (3) In 2022-23, the number of staff and expenditure involved in fauna conservation work of the AFCD were 64 staff members and about \$60 million (revised estimate) respectively. As the investigation and law enforcement work in relation to illegal feeding of wild animals forms part of the fauna conservation work, the AFCD does not have the relevant breakdown. The AFCD will cope with the enforcement work through internal redeployment of resources.

To strengthen combatting illegal feeding of wild animals, the AFCD will review from time to time the patrol and enforcement arrangements in accordance with the actual circumstances, including stepping up blitz operations and enforcement where necessary, as well as enhancing the collaboration with relevant departments. The Government is considering amending the Ordinance to increase the maximum penalty and introduce fixed penalty for illegal feeding of wild animals with a view to strengthening the deterrent effect. Since feral pigeons are not wild animals defined under the Ordinance, the Government will also consider regulating the feeding of feral pigeons through amending the Ordinance. The relevant legislative amendments are aimed to be tabled to the Legislative Council for scrutiny within this year. In addition, the AFCD will also educate the public about the message of no-feeding of wild animals and feral pigeons through various publicity channels, such as organising roving exhibitions, setting up promotional street counters at congregating spots of feral pigeons, displaying banners and setting up a dedicated website, etc.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)028****(Question Serial No. 0826)**Head: (39) Drainage Services DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (2) Sewage ServicesControlling Officer: Director of Drainage Services (Alice PANG)Director of Bureau: Secretary for Environment and EcologyQuestion:

How many appeals against sewage charge and trade effluent surcharge were filed in 2020, 2021 and 2022? Of the appeals filed, how many were lodged by the restaurant trade? How many appeals were allowed? Of the appeals allowed, how many were lodged by the restaurant trade? What is the average time needed to complete the processing of an appeal?

Asked by: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 21)Reply:

		2020	2021	2022
Reassessment of Trade Effluent Surcharge (TES) rate	Number of applications received			
	<i>All trades</i>	4	0	13
	<i>Restaurant trade</i>	3	0	8
	Number of applications approved <sup>Note</sup>			
	<i>All trades</i>	78	3	0
	<i>Restaurant trade</i>	18	3	0
Reassessment of Discharge Factor (DF)	Number of applications received			
	<i>All trades</i>	17	24	8
	<i>Restaurant trade</i>	0	0	0
	Number of applications approved <sup>Note</sup>			
	<i>All trades</i>	12	14	16
	<i>Restaurant trade</i>	0	0	0

Note: As there is a time lag for processing the applications, the number of applications approved does not correspond to the number of applications received within the same financial year.

Normally, upon receipt of all the necessary information, it takes 3 to 4 months to process a case of reassessment of TES rate, while it takes 1 to 2 months to process a case of reassessment of DF. Furthermore, some businesses have ceased or reduced their operations during the

epidemic and the Government waived TES from 2020 to 2022. As a result, the number of applications received by the Drainage Services Department for reassessment of TES rate dropped during this period.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)029**

**(Question Serial No. 2643)**

Head: (42) Electrical and Mechanical Services Department  
Subhead (No. & title): (-) Not specified  
Programme: (3) Energy Efficiency and Conservation, and Alternative Energy  
Controlling Officer: Director of Electrical and Mechanical Services (PANG Yiu-hung)  
Director of Bureau: Secretary for Environment and Ecology

Question:

Provision for 2023-24 (\$643.3 million) is \$159.2 million (32.9%) higher than the revised estimate for 2022-23 (\$484.1 million). This is mainly due to the increased provision for capital non-works projects and recurrent consequence of the development of the district cooling systems at the Kai Tak Development, partly offset by the reduced provision for a net decrease of 6 posts in 2023-24.

In this regard, will the Government inform this Committee of the following:

- (1) The projects and amounts involved in the capital non-works projects?
- (2) The provision for the net decrease of 6 posts in 2023-24?
- (3) An estimate and breakdown of the annual recurrent expenditure for the development of the district cooling systems at the Kai Tak Development for the coming 3 years (including 2023-24)?

Asked by: Hon CHAN Siu-hung (LegCo internal reference no.: 34)

Reply:

- (1) The expenditure on capital non-works projects for 2023-24 mainly includes the expenditure for Subhead 696 “Energy saving projects in government buildings (block vote)” and Subhead 661 “Minor plant, vehicles and equipment (block vote)”.

The estimated expenditure for Subhead 696 “Energy saving projects in government buildings (block vote)” is \$120 million, which will be used for acquisition and replacement of plant and equipment for government buildings for the purpose of energy saving. The estimated expenditure is \$38 million (46.3%) higher than the revised estimate for 2022-23, mainly due to the increase in the number of new projects from 56 in the previous year to 100 in 2023-24.

The estimated expenditure for Subhead 661 “Minor plant, vehicles and equipment (block vote)” is \$235.7 million, which will mainly be used for “Solar Harvest” (installing solar photovoltaic systems at premises of eligible schools and welfare non-governmental organisations (NGOs)); “Green Schools 2.0 – Energy Smart” (installing energy saving installations for eligible schools); “Green Welfare NGOs” (conducting energy audits and

installing energy saving installations at premises of eligible welfare NGOs); and conducting retro-commissioning for major government buildings. The estimated expenditure is higher than the revised estimate of \$188.4 million for 2022-23, mainly because some of the premises (such as schools and welfare NGOs) where works were originally scheduled in 2022-23 were closed, suspended from operation or used as anti-epidemic-related facilities under the fifth wave of the COVID-19 epidemic, resulting in unforeseen delay in project implementation. The relevant expenditure will be settled in 2023-24.

(2) As for the net decrease of 6 posts in 2023-24, the posts involved are time-limited ones and mainly responsible for providing relevant engineering support for the district cooling system (DCS) projects at the Kai Tak Development and in the Tung Chung New Town Extension (East). The provision involved is about \$5.779 million.

(3) The estimated annual recurrent expenditure for the DCS projects (including the existing DCS and an additional one) at Kai Tak for the coming 3 years is as follows:

	<u>2023-24</u>	<u>2024-25</u>	<u>2025-26</u>
Estimated recurrent expenditure (\$ million)	107.503	79.947	10.893

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)030**

**(Question Serial No. 3135)**

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (-) Not specified

Programme: (1) Energy Supply; Electrical, Gas and Nuclear Safety

Controlling Officer: Director of Electrical and Mechanical Services (PANG Yiu-hung)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the approval and monitoring of the operation of liquefied petroleum gas (LPG) filling stations, please inform this Committee of the following:

- 1) There were only 5 cases of “competent persons enlistment applications processed” and 6 cases of “filling stations approved”, which should be completed within 25 or 30 working days according to the targets set. What is the staffing provision of the Department (including the post title, pay point, exact number of staff, etc.) for processing the relevant applications, and what other duties do the staff undertake as well?
- 2) What are the numbers of LPG taxis, LPG light buses, LPG filling stations and LPG filling nozzles currently in Hong Kong? Does the Government has any data on the utilisation of each LPG filling station; if yes, please provide the utilisation rate of each station.
- 3) Since Hong Kong is planning to cease the registration of fuel-propelled vehicles progressively and there is a growing popularity of hybrid or electric taxis and light buses in recent years, what are the development strategies of the Government for auto-LPG?

Asked by: Hon KAN Wai-mun, Carmen (LegCo internal reference no.: 51)

Reply:

- 1) The approval and monitoring work associated with LPG vehicles and filling stations is undertaken by a team of engineers (Master Pay Scale (MPS) Points 32 to 49) and inspectors (MPS Points 24 to 37) in the Electrical and Mechanical Services Department. Their duties cover a wide range of areas, including approving and overseeing the LPG filling network; monitoring LPG supply from LPG terminals and transportation arrangements of LPG road tankers; approving and monitoring the operation of LPG vehicle maintenance workshops; handling the revalidation of LPG vehicle fuel tanks; approving and monitoring the performance of relevant technical staff, etc. Processing

enlistment applications of competent persons and approving LPG filling stations constitute only a small part of the above duties. There is no separate breakdown of the manpower for processing and approving these applications.

- 2) At present, there are about 18 000 LPG taxis and 4 600 LPG light buses operating in Hong Kong. LPG refuelling services for these vehicles are provided by 12 dedicated LPG filling stations and 58 non-dedicated LPG filling stations with a total number of 508 LPG filling nozzles. The operators of dedicated LPG filling stations have contractual arrangements with the Government. Based on the operational records provided by the operators of the 12 dedicated LPG filling stations, the average monthly utilisation rate of each LPG filling station ranged from 25 451 to 128 717 vehicles in 2022. The Government does not have any information on the number of vehicles refilled at non-dedicated LPG filling stations.
- 3) Since LPG vehicles emit air pollutants, the Government will focus on promoting zero-emission electric vehicles and other new energy vehicles with a view to achieving the Government's ultimate goal of zero vehicular emissions before 2050. Nevertheless, the Government will still strive to ensure a stable and reliable supply of auto-LPG to meet the demand.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)031****(Question Serial No. 2700)**

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (-) Not specified

Programme: (1) Energy Supply; Electrical, Gas and Nuclear Safety

Controlling Officer: Director of Electrical and Mechanical Services (PANG Yiu-hung)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Electrical and Mechanical Services Department (EMSD) is responsible for monitoring the two power companies in Hong Kong. In recent years, there have been a number of fire incidents involving cable bridges and transformer rooms, resulting in problems like power interruptions. In this regard, would the Government advise this Committee of the following:

1. In each of the past 3 years, how many incidents of transient voltage dip or power interruption involving the power supply systems of the respective power company occurred?
2. Further to the above question, for how many of these incidents, reporting to the EMSD or follow-up investigations by the EMSD staff were required?
3. Currently, what are the staff establishment and provision reserved for conducting follow-up investigations or routine inspections regarding the above-mentioned incidents?

Asked by: Hon LEUNG Hei, Edward (LegCo internal reference no.: 40)

Reply:

1 and 2. According to the records of incidents reported by the two power companies (namely the CLP Power Hong Kong Limited (CLP) and The Hong Kong Electric Company, Limited (HEC)) under the prevailing reporting mechanism, the numbers of voltage dip and power interruption incidents involving the power supply systems of the CLP and HEC over the past 3 years are as follows:

Nature of incidents	Number of incidents					
	2020		2021		2022	
	CLP	HEC	CLP	HEC	CLP	HEC
Voltage dip	5	1	2	0	8	0
Power interruption	8	0	8	0	11	1

As per the Electricity Ordinance, the two power companies are required to submit a report to the Electrical and Mechanical Services Department (EMSD) after the occurrence of a voltage dip or power interruption incident to explain the identified causes of the incident, and to take remedial measures, in order to prevent the recurrence of a similar incident. The two power companies have submitted reports to the EMSD for the incidents tabulated above, and the EMSD has followed up on such incidents and urged the two power companies to make improvements to prevent the recurrence of similar incidents.

3. The EMSD is responsible for the implementation and enforcement of the Electricity Ordinance and its subsidiary legislation. The major tasks include ensuring the safety of electrical installations and electrical products, ensuring the safety of electricity supply, and promoting the safe use of electricity through public education. With regard to ensuring the safety of electricity supply, the EMSD monitors and inspects the operation of the two power companies, and takes follow-up actions or conducts investigations on incidents involving power supply facilities. As following up on such incidents is part of the overall duties of the EMSD in implementing and enforcing the Electricity Ordinance and its subsidiary legislation, a separate breakdown of the manpower and expenditure involved in such work is not available.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)032**

**(Question Serial No. 2624)**

Head: (42) Electrical and Mechanical Services Department  
Subhead (No. & title): (-) Not specified  
Programme: (3) Energy Efficiency and Conservation, and Alternative Energy  
Controlling Officer: Director of Electrical and Mechanical Services (PANG Yiu-hung)  
Director of Bureau: Secretary for Environment and Ecology

Question:

Under this Programme, provision for 2023-24 is \$643.3 million, which is considerably higher than the revised estimate for 2022-23 by 32.9%. According to the Controlling Officer's explanation, the increase is "mainly due to the increased provision for capital non-works projects and recurrent consequence of the development of the district cooling systems at the Kai Tak Development". In this regard, will the Government inform this Committee of the following:

- (a) The revised estimate in 2022-23 and the provision in 2023-24 for the capital non-works projects;
- (b) The revised estimate in 2022-23 and the provision in 2023-24 for the development of the district cooling systems at the Kai Tak Development; and
- (c) The reasons for the increased provision?

Asked by: Hon LOONG Hon-biu, Louis (LegCo internal reference no.: 23)

Reply:

- (a) and (c) The expenditure on capital non-works projects for 2023-24 mainly includes the expenditure for Subhead 696 "Energy saving projects in government buildings (block vote)" and Subhead 661 "Minor plant, vehicles and equipment (block vote)".

The estimated expenditure for Subhead 696 "Energy saving projects in government buildings (block vote)" is \$120 million, which will be used for acquisition and replacement of plant and equipment for government buildings for the purpose of energy saving. The estimated expenditure is \$38 million (46.3%) higher than the revised estimate for 2022-23, mainly due to the increase in the number of new projects from 56 in the previous year to 100 in 2023-24.

The estimated expenditure for Subhead 661 "Minor plant, vehicles and equipment (block vote)" is \$235.7 million, which will mainly be used for "Solar Harvest" (installing solar photovoltaic systems at premises of eligible schools

and welfare non-governmental organisations (NGOs)); “Green Schools 2.0 – Energy Smart” (installing energy saving installations for eligible schools); “Green Welfare NGOs” (conducting energy audits and installing energy saving installations at premises of eligible welfare NGOs); and conducting retro-commissioning for major government buildings. The estimated expenditure is higher than the revised estimate of \$188.4 million for 2022-23, mainly because some of the premises (such as schools and welfare NGOs) where works were originally scheduled in 2022-23 were closed, suspended from operation or used as anti-epidemic-related facilities under the fifth wave of the COVID-19 epidemic, resulting in unforeseen delay in project implementation. The relevant expenditure will be settled in 2023-24.

- (b) and (c) The estimated expenditure on the district cooling system (DCS) projects at the Kai Tak Development is \$107.5 million in 2023-24, which is \$72.69 million higher than the revised estimate of \$34.81 million in 2022-23. This is mainly due to the commencement of the operation of the additional DCS in the third quarter of 2023, the increased operating expenses resulting from the rising cooling demands of user buildings, and the annual increase in the electricity tariff to be paid to the CLP Power Hong Kong Limited. In addition, the relevant estimated expenditure also covers non-recurrent works including system optimisation and upgrade to improve the overall performance of chillers, thereby enhancing their energy efficiency.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)033**

**(Question Serial No. 0545 )**

Head: (42) Electrical and Mechanical Services Department  
Subhead (No. & title): (-) Not specified  
Programme: (3) Energy Efficiency and Conservation, and Alternative Energy  
Controlling Officer: Director of Electrical and Mechanical Services (PANG Yiu-hung)  
Director of Bureau: Secretary for Environment and Ecology

Question:

Carbon emission from buildings is one of the major sources of carbon emissions in Hong Kong. The number of certificates issued under the voluntary Energy Efficiency Registration Scheme for Buildings over the past 2 years was 10 and 24 respectively, and it is estimated that about 20 certificates will be issued in 2023, which is far fewer than the number of existing or new buildings in Hong Kong. What are the specific measures of the Department to encourage more existing and new buildings to participate in the scheme, in order to speed up the progress of energy conservation and emission reduction in Hong Kong?

Asked by: Hon TSE Wai-chuen, Tony (LegCo internal reference no.: 22)

Reply:

The Electrical and Mechanical Services Department (EMSD) launched the voluntary Hong Kong Energy Efficiency Registration Scheme for Buildings (the Scheme) in 1998 to promote the adoption of building energy codes. To further promote energy efficiency in buildings, the Government enacted the Buildings Energy Efficiency Ordinance (BEEO) in 2011, requiring various types of prescribed buildings to comply with the codes of practice concerning energy efficiency and energy audit. The BEEO has been fully implemented since 21 September 2012. As at 28 February 2023, a total of more than 1 900 new buildings, 13 000 major retrofit works in existing buildings and 2 600 energy audit reports complied with the energy efficiency requirements for buildings under the BEEO.

To speed up the progress of energy conservation and emission reduction in Hong Kong, the EMSD reviews the Building Energy Code and the Energy Audit Code under the BEEO in consultation with the trade once every 3 years to continuously enhance building energy efficiency standards. The 2021 edition of the Building Energy Code gazetted by the Government on 31 December 2021 uplifted the energy efficiency standards, with an improvement of more than 15% as compared with the 2015 edition. By 2035, the estimated annual energy saving from buildings in Hong Kong is around 4.7 to 5.3 billion kilowatt-hours (compared with 2015), which will help achieve the target of carbon neutrality before 2050.

To continue to encourage and drive the further enhancement of building energy efficiency, the Scheme serves to certify buildings where energy performance exceeds statutory standards and which have obtained certification from relevant environmental protection institutions (such as the BEAM Plus certification of the Hong Kong Green Building Council). In addition, starting from the year of assessment 2008/09, for buildings certified by the Scheme, tax deduction for the capital expenditure incurred on the procurement of relevant eligible environmental protection installations was provided over a period of 5 years. Starting from the year of assessment 2018/19, the arrangement has been enhanced so that the tax deduction for such capital expenditure could be claimed in full in the first year. The EMSD continues to review and expand the coverage of the Scheme to encourage more owners of existing and new buildings to participate in the Scheme. For example, the EMSD included 2 new green building assessment tools (i.e. BEAM Plus New Data Centres and BEAM Plus Existing Data Centres) as certification criteria of the Scheme in September 2021. The EMSD will keep promoting the Scheme through various publicity activities related to energy efficiency and energy conservation.

- End -



**CONTROLLING OFFICER'S REPLY****EEB(E)034****(Question Serial No. 0472)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (2) AirControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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)Reply:

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:

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

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

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.

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

<b>Make</b>	<b>Number of EVs granted with the FRT concessions*</b>
AIDEA	5
AUDI	196
B.M.W.	1 750
BMW I	101
BYD	523
CARVER	1
CFMOTO	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
LONKING	1
MAXUS	7
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
TCM	1

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

\* 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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)035****(Question Serial No. 0473)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (2) AirControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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 (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), respirable suspended particulates (RSP or PM<sub>10</sub>), fine suspended particulates (FSP or PM<sub>5</sub>), 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 <sub>2</sub> )	Nitrogen oxides (NO <sub>x</sub> )	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:

Year	Vehicle type	Percentage of air pollutant emissions from vehicles in the total vehicle emissions <sup>#</sup>					
		Sulphur dioxide (SO <sub>2</sub> )	Respirable suspended particulates (RSP /PM <sub>10</sub> )	Fine suspended particulates (FSP /PM <sub>2.5</sub> )	Nitrogen oxides (NO <sub>x</sub> )	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%
Total in 2018	100%	100%	100%	100%	100%	100%	
2019	Motorcycle	1%	1%	1%	1%	72%	10%
	Taxi	8%	0%	0%	16%	4%	34%
	Private car	29%	7%	7%	2%	13%	24%
	Light goods vehicle	11%	21%	21%	21%	1%	3%
	Medium & 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%
Total in 2019	100%	100%	100%	100%	100%	100%	
2020	Motorcycle	1%	2%	1%	1%	75%	11%
	Taxi	10%	0%	0%	15%	3%	31%
	Private car	29%	8%	8%	3%	13%	25%
	Light goods vehicle	11%	25%	25%	24%	1%	4%
	Medium & heavy goods vehicle	30%	29%	29%	27%	1%	4%
	Private light bus	1%	2%	2%	1%	1%	2%

Year	Vehicle type	Percentage of air pollutant emissions from vehicles in the total vehicle emissions <sup>#</sup>					
		Sulphur dioxide (SO <sub>2</sub> )	Respirable suspended particulates (RSP /PM <sub>10</sub> )	Fine suspended particulates (FSP /PM <sub>2.5</sub> )	Nitrogen oxides (NO <sub>x</sub> )	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%
	Total 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

- End -

**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 e-ferries 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)

Reply:

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.

- End -

**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)

Reply:

The operating cost of O·PARK<sup>1</sup> 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-to-door collection service for relatively clustered premises that generate larger quantities of food waste with less impurities. 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 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 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.

- End -

**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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)039****(Question Serial No. 2671)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (1) WasteControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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.

<b>PRH estate</b>	<b>Implementation schedule</b>	<b>No. of blocks [Note 1]</b>
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

<b>PRH estate</b>	<b>Implementation schedule</b>	<b>No. of blocks [Note 1]</b>
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.

- End -

**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 re-industrialisation, 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).

- (2) 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. 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.

- End -



**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.

- End -

**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.
- (2) In general, retired EV batteries will go through preliminary treatment locally before 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 for recycling. In Hong Kong, all the delivery and treatment processes should be 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 “polluter-pays” principle, and the charging levels of individual collectors and disposal facilities are determined by supply and demand in the market.

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:

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

- (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.

- End -

**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; 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	Commercial & industrial food waste	Overall municipal food waste	
	Disposal quantity (tonnes/day) (a)	Disposal quantity (tonnes/day) (b)	Disposal quantity (tonnes/day) (c)=(a)+(b)	Recovery rate
2019	2 286	1 067	3 353	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:

Table 1 Expenditures involved in the Campaign

Item	Expenditure involved (\$million) [Note 1]		
	2020-21	2021-22	2022-23 (Estimate)
● Promoting the “Food Wise Charter” and the “Food Wise Eateries” Scheme	1.54	0.86	0.47
● Organising “Food Wise” talks			
● 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 2 Participation statistics of the Campaign

Accumulated number of participants					
Year	No. of signees of the “Food Wise Charter”	No. of eateries participating in the “Food Wise Eateries” Scheme	No. of “Food Wise” talks organised and no. of attendees [Note 2]	No. of followers on the “Big Waster” Facebook and Instagram pages	
				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.

- (4) The Government is continuously expanding the food waste recycling infrastructure with 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 each day. Meanwhile, the first trial scheme utilising food waste/sewage sludge 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 waste. The trial scheme will be extended to the Sha Tin Sewage Treatment Works for 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:

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

- End -



**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:

- (1) The Government implemented the first phase of the Plastic Shopping Bag (PSB) 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 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 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 <sup>(Note 1)</sup>	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
<b>Total (2018-2022)</b>	<b>83 907</b>	<b>0</b>	<b>399</b>	<b>7</b>	<b>7</b>	<b>\$812,900</b>

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.

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

Retail categories <sup>(2)</sup>	2017		2018		2019		2020		2021	
	Million/year	%	Million/year	%	Million/year	%	Million/year	%	Million/year	%
Supermarkets	36.78	0.83%	49.35	1.09%	52.17	1.28%	The EPD has streamlined the waste classification since 2020. The landfill disposal surveys on PSBs have combined various retail categories.			
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%				
<i>Sub-total Retail categories in the first phase</i>	<i>112.45</i>	<i>2.55%</i>	<i>150.39</i>	<i>3.33%</i>	<i>93.82</i>	<i>2.30%</i>				
Other retail categories	793.79	17.96%	934.24	20.71%	775.63	19.04%				
<i>Sub-total All retail categories</i>	<i>906.24</i>	<i>20.51%</i>	<i>1 084.62</i>	<i>24.05%</i>	<i>869.45</i>	<i>21.34%</i>				
Source unidentified <sup>(3)</sup>	3 512.26	79.49%	3 425.42	75.95%	3 204.17	78.66%				
<b>Total</b>	<b>4 418.50</b>	<b>100%</b>	<b>4 510.04</b>	<b>100%</b>	<b>4 073.62</b>	<b>100%</b>	<b>4 175.46</b>	<b>100%</b>	<b>4 647.27</b>	<b>100%</b>

(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.

- End -

**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.

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

Reply:

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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)046****(Question Serial No. 0370)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (700) General non-recurrentProgramme: (2) AirControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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:

Administrative District	Applications	Progress of application	Reason(s) for rejection	Number of parking spaces applied	Estimated subsidy amount	Progress of facility installation	Estimated commencement time of installation
	Time of application	Approved or not				Installation completed or not	Estimated completion time of 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 EV-charging 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:

Administrative District	Applications (car park)	Progress of application <sup>2</sup>	Reason(s) for rejection <sup>3</sup>	Number of parking spaces applied	Estimated Subsidy amount (\$ million)	Progress of installation of EVCEI	Estimated commencement time of installation works
	Time of application <sup>1</sup>	Approved or not				Installation completed or not	Estimated completion time of installation works
Central and Western	105	Approved: 54 Rejected: 1 Withdrawn: 0	(A)	10 066	301.20	Upon approval of the EHSS applications by the Environmental Protection Department (EPD), 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.  The EHSS was launched in October 2020 for application. 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. 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.	
Eastern	48	Approved: 31 Rejected: 0 Withdrawn: 1	Not applicable	10 754	270.48		
Southern	55	Approved: 22 Rejected: 0 Withdrawn: 0	Not applicable	7 603	167.13		
Wan Chai	82	Approved: 30 Rejected: 0 Withdrawn: 1	Not applicable	9 341	269.49		
Kowloon City	93	Approved: 28 Rejected: 2 Withdrawn: 1	(A)(B)	13 420	333.51		
Kwun Tong	9	Approved: 5 Rejected: 0 Withdrawn: 0	Not applicable	3 595	53.82		
Sham Shui Po	17	Approved: 5 Rejected: 1 Withdrawn: 0	(A)	2 861	62.94		
Yau Tsim Mong	24	Approved: 18 Rejected: 0 Withdrawn: 0	Not applicable	10 027	224.31		
Wong Tai Sin	4	Approved: 4 Rejected: 0 Withdrawn: 0	Not applicable	917	27.51		
Islands	5	Approved: 4 Rejected: 0 Withdrawn: 0	Not applicable	2 331	54.09		
Kwai Tsing	6	Approved: 4 Rejected: 0 Withdrawn: 0	Not applicable	1 674	44.22		
North	8	Approved: 3 Rejected: 0 Withdrawn: 0	Not applicable	1 933	48.63		
Sai Kung	20	Approved: 9 Rejected: 0 Withdrawn: 0	Not applicable	6 241	149.88		
Sha Tin	49	Approved: 24 Rejected: 0 Withdrawn: 0	Not applicable	17 926	364.98		
Tai Po	25	Approved: 12 Rejected: 1 Withdrawn: 0	(A)	5 297	146.82		
Tsuen Wan	31	Approved: 21 Rejected: 0 Withdrawn: 0	Not applicable	12 784	179.37		
Tuen Mun	36	Approved: 15 Rejected: 0 Withdrawn: 0	Not applicable	9 002	235.35		
Yuen Long	35	Approved: 21 Rejected: 0 Withdrawn: 0	Not applicable	7 789	172.92		
<b>Total</b>	<b>652</b>	Approved: 310 Rejected: 5 Withdrawn: 3	Not applicable	<b>133 561</b>	<b>3,106.65</b>		

- 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 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.
- 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.

District	Number of chargers			
	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
<b>Total</b>	<b>1 453</b>	<b>2 983</b>	<b>998</b>	<b>5 434</b>

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.

- End -

**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)

Reply:

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 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 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.

- End -

**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.

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

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
<b>Total</b>	<b>34</b>	<b>18 788</b>	<b>29</b>	<b>7 573</b>	<b>2 606</b>	<b>63.6</b>

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-effective service in the future. Compared with the previous food waste recycling 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 food waste. We are also distributing GREEN\$ cards to those in need, such as the 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 bins. The process of food waste recycling is in fact very simple. Residents can 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.

- End -

**CONTROLLING OFFICER'S REPLY**

**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)

Reply:

- 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 to them. Such arrangement can enshrine the “polluter-pays” principle on one 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.

- End -



**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)

Reply:

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.

- End -

**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 Protection Inspector (Resources Recovery)31	Senior Environmental Protection Inspector	MPS Point 22 to 28	-2
Environmental Protection Inspector (Air Science and Modelling)63  Environmental Protection Inspector (Resources Recovery)13  Environmental Protection Inspector (Water Quality Management)35	Environmental Protection Inspector	MPS Point 8 to 21	-3
Personal Secretary II	Personal Secretary II	MPS Point 4 to 15	-1
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.

- End -

**CONTROLLING OFFICER'S REPLY**

**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 commence 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

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

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.

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

<b>District</b>	<b>No. of public and commercial &amp; industrial premises [Note 4]</b>		
	<b>2020</b>	<b>2021</b>	<b>2022</b>
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

District	No. of public and commercial & industrial premises [Note 4]		
	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
<b>Total</b>	<b>283</b>	<b>300</b>	<b>423</b>

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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)053****(Question Serial No. 1366)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (1) WasteControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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.

Asked by: Hon CHAN Siu-hung (LegCo internal reference no.: 2)Reply:

- (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 <sup>(2)</sup> (\$ million)	Quantity of waste paper recovered (thousand tonnes)
2020-21	127	295
2021-22	325	593
2022-23 <sup>(1)</sup>	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.

- End -

**CONTROLLING OFFICER'S REPLY**

**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 charging-enabling 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.

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

Reply:

- (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 services and fostering its sustainable development in the long term.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)055****(Question Serial No. 1368)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (2) AirControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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?

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

Reply:

(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:

District	Number of chargers									Total
	Standard			Medium			Quick			
	Government	Other organisations	Sub-total	Government	Other organisations	Sub-total	Government	Other organisations	Sub-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

District	Number of chargers									Total
	Standard			Medium			Quick			
	Government	Other organisations	Sub-total	Government	Other organisations	Sub-total	Government	Other organisations	Sub-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
<b>Total</b>	<b>523</b>	<b>930</b>	<b>1 453</b>	<b>1 674</b>	<b>1 309</b>	<b>2 983</b>	<b>13</b>	<b>985</b>	<b>998</b>	<b>5 434</b>

- (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.

- End -

**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?

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

Reply:

- (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 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.

- (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 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 can be rolled out in the second half of 2023.

- End -

**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)

Reply:

- (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:

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



Chemical Waste Treatment Centre	269	285	271	-14
Animal Waste Composting Plant	24	26	25	-1
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 Production Plant in EcoPark	-	1	31	+30
Other facilities	22	22	29	+7
Total	2,740	2,886	3,366	+480

- End -

**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?

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

Reply:

- (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 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.
- (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.

- End -

**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.

- End -

**CONTROLLING OFFICER'S REPLY**

**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)

Reply:

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·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 co-digestion” technology for the treatment of food waste at sewage treatment works, and advanced WtE incinerators. These facilities will replace landfills for handling 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 be transported to the NENT Landfill. Besides, upon the planned commissioning of the 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**

	Improvement Measure	Implementation
1	Applying Posi-Shell covers	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 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.
2	Reducing the operational areas of the landfill	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.
3	Shortening the operation hours on receiving waste at the landfill	Since December 2021, the time for receiving waste at the landfill 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.
4	Installing additional deodourisers	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 <sup>2</sup> , these deodourisers are placed at the operational areas and potential sources of odour sources.
5	Covering leachate storage lagoons	To reduce odour emission from the 3 leachate storage lagoons of the landfill, covers are now installed at these lagoons.
6	Enhancing the monitoring of odour emission	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 <sup>1</sup> set up to publicise the monitoring data.

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



**CONTROLLING OFFICER'S REPLY**

**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](https://www.epd.gov.hk/epd/english/environmentinhk/waste/prob_solutions/monitoring_kyc.html)

- End -

**CONTROLLING OFFICER'S REPLY**

**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.

- End -

**CONTROLLING OFFICER'S REPLY**

**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)

Reply:

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:

Table 1 Expenditure involved in the Pilot Scheme

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

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]

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

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.

Table 3 Number of restaurants participating in food waste collection

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

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.

- End -

**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.

Asked by: 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.

- End -



**CONTROLLING OFFICER'S REPLY****EEB(E)065****(Question Serial No. 0838)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (1) WasteControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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?

Asked by: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 33)Reply:

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)
<b><u>Source separation of domestic waste</u></b> [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 [Note 2]	About 95 housing estates and 101 buildings [Note 3], covering about 135 000 households [Note 4]	About 95 housing estates and 101 buildings [Note 3], covering about 135 000 households [Note 4]	About 95 housing estates and 101 buildings [Note 3], covering about 135 000 households [Note 4]
<b><i>Food waste reduction and recovery</i></b>			
No. of approved projects	20	22	5
Total amount of approved funding (\$m)	39.62	60.31	14.89
No. of Participants [Note 2]	About 10 housing estates (27 300 households), 129 schools, 98 community groups and 116 restaurants	About 5 housing estates (16 800 households), 120 schools, 129 community groups and 170 restaurants	About 4 housing estates (8 200 households), 122 schools, 162 community groups and 170 restaurants
<b><i>Waste recycling</i></b>			
No. of approved projects	3	5	2
Total amount of approved funding (\$m)	7.63	4.29	2.46
No. of Participants [Note 2]	About 17 housing estates, 2 460 single-block buildings [Note 3], 21 schools, 50 community groups and 970 shops/companies	About 10 housing estates, 700 single-block buildings [Note 3] and 150 community groups	About 20 housing estates, 1 150 single-block buildings [Note 3] and 150 community groups

[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.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)066**

**(Question Serial No. 2114)**

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 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.

- End -

**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.

- End -



**CONTROLLING OFFICER'S REPLY**

**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.

**(1) Major Sewage Treatment Works Managed by the DSD**

Name	Maximum Discharge Limit in the Water Pollution Control Ordinance (WPCO) Licence (x1000m <sup>3</sup> /day)	Annual Average of Effluent Quality as shown in the Facilities' Monitoring Data (Year 2020, 2021, 2022)		
		Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen <sup>(1)</sup> (mg/L)
<b>Chemically Enhanced Primary Treatment</b>				
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
<b>Secondary Treatment</b>				
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) <sup>(2)</sup>
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) <sup>(2)</sup>
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)

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

Name	Maximum Discharge Limit in the WPCO Licence (m <sup>3</sup> /day)	Annual Average of Discharge Quality as shown in the Facilities' Monitoring Data (Year 2020, 2021, 2022)		
		Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen <sup>(1)</sup> (mg/L)
<b>Pillar Point Valley Landfill</b>	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)
<b>Tseung Kwan O Stage I and Stage II/III Landfills</b>	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)
<b>Siu Lang Shui Landfill, Ma Tso Lung Landfill, Ngau Tam Mei Landfill and Gin Drinkers Bay Landfill<sup>(3)</sup></b>	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)
<b>Sai Tso Wan Landfill, Ngau Chi Wan Landfill, Jordan Valley Landfill, Ma Yau Tong West Landfill and Ma Yau Tong Central Landfill<sup>(4)</sup></b>	<u>Jordan Valley Landfill</u> 350	<u>Jordan Valley Landfill</u> 2020: 16 2021: 18 2022: 19 (Upper limit: 800)	<u>Jordan Valley Landfill</u> 2020: 59 2021: 41 2022: 33 (Upper limit: 800)	<u>Jordan Valley Landfill</u> 2020: 59 2021: 54 2022: 73 (Upper limit: 200)
	<u>Ma Yau Tong Central Landfill</u> 350	<u>Ma Yau Tong Central Landfill</u> 2020: N/A 2021: 4 2022: 1 (Upper limit: 800)	<u>Ma Yau Tong Central Landfill</u> 2020: N/A 2021: 42 2022: 21 (Upper limit: 800)	<u>Ma Yau Tong Central Landfill</u> 2020: N/A 2021: 90 2022: 64 (Upper limit: 200)
<b>Shuen Wan Landfill<sup>(5)</sup></b>	N/A	N/A	N/A	N/A
<b>West New Territories Landfill<sup>(6)</sup></b>	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)
<b>North East New Territories Landfill<sup>(7)</sup></b>	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)
<b>South East New Territories Landfill (including the extension part)</b>	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)

### **(3) Sewage Treatment Facilities of Power Stations**

Name	Operator	Maximum Discharge Limit in the WPCO Licence (m <sup>3</sup> /day)	Annual Average of Discharge Quality as shown in the Facilities' Monitoring Data (Year 2020, 2021, 2022)		
			Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen <sup>(1)</sup> (mg/L)
<b>Castle Peak Power Station</b>	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
<b>Black Point Power Station</b>	Castle Peak Power Company Limited	420	2020: <5 2021: <5 2022: <5 (Upper limit: 20)	N/A	N/A
<b>Lamma Power Station</b>	HK Electric	664	2020: <2 2021: <2 2022: <2 (Upper limit: 20)	2020: 15 2021: 14 2022: 16 (Upper limit: 30)	N/A
<b>Penny's Bay Power Station (standby facility)</b>	Castle Peak Power Company Limited	4 181	N/A <sup>(8)</sup> (Upper limit: 20)	N/A <sup>(8)</sup> (Upper limit: 30)	N/A

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 m<sup>3</sup> 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.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)069**

**(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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)070****(Question Serial No. 3154)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (1) WasteControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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 collected (tonnes)*	
	2020-21	2021-22	2022-23
<b>April</b>	830 <sup>#</sup>	188	171
<b>May</b>	892 <sup>#</sup>	233	242
<b>June</b>	989 <sup>#</sup>	279	397
<b>July</b>	1 022 <sup>#</sup>	307	372
<b>August</b>	1 024 <sup>#</sup>	274	314



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

# 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 collection points for temporary storage, which would then be centrally 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.

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:

	Total amount of shoreline refuse collected (tonnes)		
	2020-21	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 following year	211	189	176
February of the following year	176	153	^
March of the following year	265	204	^

^ 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.

- End -

**CONTROLLING OFFICER'S REPLY**

**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:

Year	Vehicle type	Percentage of air pollutant emissions from various types of vehicles in the total local emissions <sup>#</sup>					
		Sulphur dioxide (SO <sub>2</sub> )	Nitrogen oxides (NO <sub>x</sub> )	Respirable suspended particulates (RSP/PM <sub>10</sub> )	Fine suspended particulates (FSP/PM <sub>2.5</sub> )	Volatile organic compounds (VOC)	Carbon monoxide (CO)
2018	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%
	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%
	<b>Total emission</b>	<b>&lt;1%</b>	<b>18%</b>	<b>9%</b>	<b>11%</b>	<b>21%</b>	<b>49%</b>
	2019	Motorcycle	<1%	<1%	<1%	<1%	16%
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%
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%
<b>Total emission</b>		<b>&lt;1%</b>	<b>17%</b>	<b>9%</b>	<b>11%</b>	<b>22%</b>	<b>47%</b>
2020		Motorcycle	<1%	<1%	<1%	<1%	17%
	Private car	<1%	1%	1%	1%	3%	12%
	Taxi	<1%	3%	<1%	<1%	1%	15%
	Light goods vehicle	<1%	5%	2%	3%	<1%	2%
	Medium & heavy goods vehicle	<1%	5%	3%	3%	<1%	2%
	Private light bus	<1%	<1%	<1%	<1%	<1%	1%

Year	Vehicle type	Percentage of air pollutant emissions from various types of vehicles in the total local emissions <sup>#</sup>					
		Sulphur dioxide (SO <sub>2</sub> )	Nitrogen oxides (NO <sub>x</sub> )	Respirable suspended particulates (RSP/PM <sub>10</sub> )	Fine suspended particulates (FSP/PM <sub>2.5</sub> )	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%
	<b>Total emission</b>	<b>&lt;1%</b>	<b>19%</b>	<b>9%</b>	<b>11%</b>	<b>23%</b>	<b>47%</b>

# 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:

Year	Vehicle type	Percentage of emission distribution of various types of commercial vehicles <sup>#</sup>					
		Sulphur dioxide (SO <sub>2</sub> )	Nitrogen oxides (NO <sub>x</sub> )	Respirable suspended particulates (RSP/PM <sub>10</sub> )	Fine suspended particulates (FSP/PM <sub>2.5</sub> )	Volatile organic compounds (VOC)	Carbon monoxide (CO)
2018	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%
	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%
<b>Total emissions from commercial vehicles in 2018</b>		<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
2019	Taxi	12%	16%	0%	0%	24%	52%
	Light goods vehicle	16%	22%	23%	23%	9%	5%
	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%

Year	Vehicle type	Percentage of emission distribution of various types of commercial vehicles#					
		Sulphur dioxide (SO <sub>2</sub> )	Nitrogen oxides (NO <sub>x</sub> )	Respirable suspended particulates (RSP/PM <sub>10</sub> )	Fine suspended particulates (FSP/PM <sub>2.5</sub> )	Volatile organic compounds (VOC)	Carbon monoxide (CO)
	Non-franchised bus	7%	10%	14%	14%	9%	3%
	Franchised bus	16%	18%	24%	24%	6%	6%
<b>Total emissions from commercial vehicles in 2019</b>		<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
2020	Taxi	15%	15%	0%	0%	23%	49%
	Light goods vehicle	16%	25%	28%	28%	9%	6%
	Medium & heavy goods vehicle	42%	28%	32%	32%	10%	6%
	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%
<b>Total emissions from commercial vehicles in 2020</b>		<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

# 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:

Bus company	2020		2021		2022		Total
	Diesel bus	New energy bus	Diesel bus	New energy bus	Diesel bus	New energy bus	
The Kowloon Motor Bus Company (1933) Limited	221	-	142	-	189	16	<b>568</b>
Citybus Limited (Franchise for Hong Kong Island and Cross-Harbour Bus Network)	44	-	16	-	15	1	<b>76</b>
Citybus Limited (Franchise for the Airport and North Lantau Bus Network)	20	-	-	-	-	-	<b>20</b>
New World First Bus Services Limited	4	-	-	-	-	-	<b>4</b>
Long Win Bus Company Limited	-	-	119	-	13	-	<b>132</b>

Bus company	2020		2021		2022		Total
	Diesel bus	New energy bus	Diesel bus	New energy bus	Diesel bus	New energy bus	
New Lantao Bus Company (1973) Limited	-	-	-	-	-	2	2
<b>Total</b>	<b>289</b>		<b>277</b>		<b>236</b>		<b>802</b>

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%
<b>Total</b>	<b>153</b>	<b>201</b>	<b>7 108</b>	<b>2.2%</b>	<b>2.8%</b>

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.

- End -

**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.

- End -

**CONTROLLING OFFICER'S REPLY**

**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.

Asked by: 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.

- End -

**CONTROLLING OFFICER'S REPLY**

**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.

Table 1 Expenditure involved in the Pilot Scheme

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

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 (tonnes/year)		Number of participating premises	
	Public and commercial & industrial premises	Residential premises	Public and commercial & industrial premises	Residential premises
2020	36 133	0	283	0
2021	48 986	45	300	13
2022	48 648 [Note 3]	601	423	30

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.

- End -



**CONTROLLING OFFICER'S REPLY**

**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)

Reply:

- (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:

<b>Year</b>	<b>Domestic renovation noise</b>	<b>Use of loudspeakers for street cries*</b>
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 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. 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.

- End -

**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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)077****(Question Serial No. 2582)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (1) WasteControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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)Reply:

- (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.

Findings of PSB disposal surveys<sup>(1)</sup> – Estimated annual disposal (by number of PSBs)

	2009		2010		2011		2012		2013		2014		2015 <sup>(4)</sup>		2016		2017		2018		2019		2020		2021			
Retail categories <sup>(2)</sup>	Million/year	%	Million/year	%	Million/year	%	Million/year	%	Million/year	%	Million/year	%	Million/year	%	Million/year	%	Million/year	%	Million/year	%	Million/year	%	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%	The EPD has streamlined the waste classification since 2020. The landfill disposal surveys on PSBs have combined various retail categories.					
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%						
<i>Sub-total Retail categories in the first phase</i>	<i>657.34</i>	<i>14.05%</i>	<i>153.12</i>	<i>3.45%</i>	<i>146.96</i>	<i>3.23%</i>	<i>155.81</i>	<i>2.97%</i>	<i>116.28</i>	<i>2.52%</i>	<i>155.15</i>	<i>2.96%</i>	<i>101.31</i>	<i>2.58%</i>	<i>105.06</i>	<i>2.45%</i>	<i>112.45</i>	<i>2.55%</i>	<i>150.39</i>	<i>3.33%</i>	<i>93.82</i>	<i>2.30%</i>						
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%						
<i>Sub-total All retail categories</i>	<i>1 480.82</i>	<i>31.65%</i>	<i>1 043.32</i>	<i>23.48%</i>	<i>1 053.91</i>	<i>23.19%</i>	<i>1 000.07</i>	<i>19.06%</i>	<i>965.73</i>	<i>20.89%</i>	<i>1 069.84</i>	<i>20.41%</i>	<i>805.99</i>	<i>20.52%</i>	<i>802.77</i>	<i>18.69%</i>	<i>906.24</i>	<i>20.51%</i>	<i>1 084.62</i>	<i>24.05%</i>	<i>869.45</i>	<i>21.34%</i>						
Source unidentified <sup>(3)</sup>	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%						
<b>Total</b>	<b>4 678.53</b>	<b>100%</b>	<b>4 443.74</b>	<b>100%</b>	<b>4 544.19</b>	<b>100%</b>	<b>5 247.42</b>	<b>100%</b>	<b>4 622.31</b>	<b>100%</b>	<b>5 241.82</b>	<b>100%</b>	<b>3 930.17</b>	<b>100%</b>	<b>4 296.48</b>	<b>100%</b>	<b>4 418.50</b>	<b>100%</b>	<b>4 510.04</b>	<b>100%</b>	<b>4 073.62</b>	<b>100%</b>	<b>4 175.46</b>	<b>100%</b>	<b>4 647.27</b>	<b>100%</b>		

(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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)078****(Question Serial No. 1163)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational expensesProgramme: (1) WasteControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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	2021-22	2022-23 (Estimate)
<ul style="list-style-type: none"> <li>• Promoting the “Food Wise Charter” and the “Food Wise Eateries” Scheme</li> <li>• Organising “Food Wise” talks</li> </ul>	1.54	0.86	0.47
<ul style="list-style-type: none"> <li>• The “Big Waster” Facebook and Instagram pages</li> </ul>	0.84	1.41	1.39
<ul style="list-style-type: none"> <li>• Publicity activities</li> </ul>	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.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)079**

**(Question Serial No. 1164)**

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 expenditure for waste treatment in 2023-24 is \$6.0693 billion, representing a year-on-year 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.
- 4) To support and facilitate residents living in different types of premises to practise source 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 population in Hong Kong. The Green Outreach has been striving to establish and 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 proper outlets for recyclables. As at December 2022, the Green Outreach has 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 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 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 public to practice source separation of waste and clean recycling; implementing the Programme on Source Separation of Waste and the one-stop 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.

- End -

**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)

Reply:

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.

- End -

**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?

Asked by: 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 <sup>#</sup>
<b>Hong Kong Island</b>	
Eastern	7
Central and Western	6
Southern	4
Wan Chai	3
<b>Kowloon</b>	
Kowloon City	4
Kwun Tong	9
Sham Shui Po	4
Wong Tai Sin	4
Yau Tsim Mong	7
<b>New Territories</b>	
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
<b>Total</b>	<b>99</b>

<sup>#</sup> 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 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.

#### Hong 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

#### Kowloon

Kowloon City	GREEN@WALLED CITY, GREEN@TO KWA WAN, GREEN@HUNG HOM
Kwun Tong	GREEN@KWUN TONG*, GREEN@YUE MAN SQUARE
Sham Shui Po	GREEN@SHAM SHUI PO*, GREEN@CHEUNG SHA WAN
Wong Tai Sin	GREEN@SAN PO KONG
Yau Tsim Mong	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.

- End -



**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)

Reply:

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 co-digestion 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	Public and commercial & industrial premises	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.

- End -

**CONTROLLING OFFICER'S REPLY**

**(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)

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, 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·PARK<sup>1</sup> 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. 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. 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.

- End -

**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.

- End -

**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?

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

Reply:

- 1) 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:



District	Number of chargers			Sub-total
	Standard	Medium	Quick	
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
<b>Total</b>	<b>1 453</b>	<b>2 983</b>	<b>998</b>	<b>5 434</b>

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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)086****(Question Serial No. 2629)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (2) AirControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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:

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

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

- End -

**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)

Reply:

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.

- End -

**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?

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

Reply:

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:

<b>District</b>	<b>Number of RVMs</b>	<b>Average number of PBCs recovered per month</b>	<b>Average number of PBCs collected from members of the public each time</b>
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
<b>Total</b>	<b>120</b>	<b>3 060 700</b>	<b>10.3</b> <b>(average of the 18 districts)</b>

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.

<b>District</b>	<b>Number of RVMs</b>	<b>Average service suspension period of RVMs per month</b>	
		<b>Time (number of hours) [Note 1]</b>	<b>Percentage [Note 2]</b>
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 of 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%
<b>Total</b>	<b>120</b>	<b>3 425 [Note 3]</b>	<b>3.9% (average of the 18 districts)</b>

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.

5. The 120 RVMs under the Pilot Scheme have commenced operation, and we have no 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.

- End -

**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	Expiry date of the Specified Process Licence (SPL)	No. of complaints received			No. of routine or surprise inspections conducted		
				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	Tuen Mun	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		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		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	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 district	Address of CBP	Expiry date of the Specified Process Licence (SPL)	No. of complaints received			No. of routine or surprise inspections conducted		
				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	North	20 On Kui Street, Fanling, New Territories	October 2025	0	0	0	5	3	8
16		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	Kwai Tsing	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		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	Islands	Lamma Power Station, Lot No. 1934 in D.D. 3, Lamma Island	May 2023	0	0	0	6	6	6
26		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 project, Hong Kong International Airport (Note 1)	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 district	Address of CBP	Expiry date of the Specified Process Licence (SPL)	No. of complaints received			No. of routine or surprise inspections conducted		
				2020	2021	2022	2020	2021	2022
29	Kwun Tong	6 Tung Yuen Street, Yau Tong, Kowloon	Application for renewal under process	2	0	3	64	81	58
30		20 Tung Yuen Street, Yau Tong, Kowloon	Application for renewal rejected & appeal under process (Note 2)	4	29	39			
31		22 Tung Yuen Street, Yau Tong, Kowloon	SPL lapsed (Note 3)						
<b>Total</b>				<b>32</b>	<b>53</b>	<b>63</b>	<b>277</b>	<b>320</b>	<b>276</b>

**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.

**Enforcement actions against concrete batching plants (CBPs)**

Item	District Council district	Address of CBP	No. of warning letters issued			No. of prosecutions instituted (No. of Notices of Intended Prosecution issued)			No. of successful prosecutions		
			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	9	0	0	1	0	0	0 (Note 4)
8	Kwun Tong	22 Tung Yuen Street, Yau Tong, Kowloon				2	4	6 (Note 3)			
<b>Total</b>			<b>7</b>	<b>15</b>	<b>13</b>	<b>3</b>	<b>4</b>	<b>8</b>	<b>2</b>	<b>1</b>	<b>0</b>

**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.

- End -



**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?

Asked by: 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).

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)091****(Question Serial No. 3201)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (2) AirControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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 “One-for-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?

Asked by: 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	
	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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)092****(Question Serial No. 3202)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (3) NoiseControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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.)

Asked by: 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:

Year	Domestic premises		Public places			
	No. of complaints received	No. of prosecutions instituted <sup>Note 1</sup>	General		Near shops	
			No. of complaints received	No. of prosecutions instituted <sup>Note 1</sup>	No. of complaints received	No. of prosecutions instituted <sup>Note 2</sup>
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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)093****(Question Serial No. 0570)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (1) WasteControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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)Reply:

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<sup>(Note 1)</sup> 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
Paper	Quantity recovered (thousand tonnes)	792	695	532	450	603
	Percentage in the quantity generated	46%	41%	35%	32%	43%

Major type of recyclables		2017	2018	2019	2020	2021
Plastics	Quantity recovered (thousand tonnes)	116	64	77	102	104
	Percentage in the quantity generated	13%	7%	8%	11%	11%
Ferrous metals	Quantity recovered (thousand tonnes)	785	789	754	741	786
	Percentage in the quantity generated	91%	91%	91%	91%	92%
Non-ferrous metals	Quantity recovered (thousand tonnes)	49	127	137	115	182
	Percentage in the quantity generated	72%	85%	88%	88%	88%
Glass	Quantity recovered (thousand tonnes)	11	15	21	15	20
	Percentage in the quantity generated	9%	12%	19%	18%	20%
Food waste	Quantity recovered (thousand tonnes)	15	27	46	55	66
	Percentage in the quantity generated	1%	2%	4%	4%	5%
Electrical and electronic equipment	Quantity recovered (thousand tonnes)	49	42	47	41	44
	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) Expenditures in the past 5 years:

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



Name of waste reduction programme/facility	Financial year	Expenditure (\$million)
	2019-20	54.7
	2018-19	8.4
	2017-18	N/A
Fluorescent Lamp Recycling Programme	2021-22	A self-financed recycling programme operated by the trades, with the EPD acting as the programme advisor, providing support and promoting it to the public. The relevant work is part of the work of the EPD and is absorbed by existing resources.
	2020-21	
	2019-20	
	2018-19	
	2017-18	
Rechargeable Battery Recycling Programme	2021-22	
	2020-21	
	2019-20	
	2018-19	
	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 Collection <sup>(Note 6)</sup>	2021-22	39.9
	2020-21	35.1
	2019-20	25.4
	2018-19	17.1
	2017-18	N/A
GREEN@COMMUNITY <sup>(Note 7)</sup>	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)

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

Name of waste reduction programme/facility	Year	Quantity of recyclables collected/treated (tonne)
	2020	14 270 <sup>(Note 8)</sup>
	2019	21 210
	2018	9 580
Fluorescent Lamp Recycling Programme <sup>(Note 9)</sup>	2022	510 000 pieces
	2021	510 000 pieces
	2020	408 000 pieces
	2019	454 000 pieces
	2018	478 000 pieces
Rechargeable Battery Recycling Programme <sup>(Note 9)</sup>	2022	30 <sup>(Note 10)</sup>
	2021	30 <sup>(Note 10)</sup>
	2020	40
	2019	40
	2018	70
WEEE-PARK	2022	22 170 <sup>(Note 11)</sup>
	2021	23 970 <sup>(Note 11)</sup>
	2020	23 380
	2019	23 980
	2018	10 830 <sup>(Note 12)</sup>
Pilot Scheme on Food Waste Collection <sup>(Note 13)</sup>	2022	49 250
	2021	49 030
	2020	36 130
	2019	34 580
	2018	14 510
GREEN@COMMUNITY <sup>(Note 7)</sup>	2022	20 300
	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 has been strengthening the publicity and promotion 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.

- End -

**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 under the Scheme with the first registration completed	Amount of FRT concessions granted (\$ 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.

- End -

**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)

Reply:

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 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 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.

4. To inculcate a living culture of “bring your own bottle” in the public, the Government is 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 installing and using. These water dispensers are generally equipped with filter 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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)096****(Question Serial No. 1651)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (2) AirControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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.

- End -

**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)

Reply:

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:

	Year											
	2020				2021				2022			
	No. of complaints handled <sup>1</sup>	No. of inspections conducted	No. of prosecutions instituted		No. of complaints handled <sup>1</sup>	No. of inspections conducted	No. of prosecutions instituted		No. of complaints handled <sup>1</sup>	No. of inspections conducted	No. of prosecutions instituted	
No. of summonses			No. of Fixed Penalty Notices	No. of summonses			No. of Fixed Penalty Notices	No. of summonses			No. of Fixed Penalty Notices	
<b>Total</b>	<b>2 012</b>	<b>11 564</b>	<b>289</b>	<b>214</b>	<b>1 981</b>	<b>16 422</b>	<b>485</b>	<b>264</b>	<b>1 814</b>	<b>15 667</b>	<b>372</b>	<b>348</b>
Figures by District												
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 :

<sup>1</sup> Including multiple complaints which may have arisen from a single case.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)098****(Question Serial No. 0498)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (1) WasteControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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?

Asked by: 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 waste	Commercial & 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:

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

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)099****(Question Serial No. 0499)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (-) Not specifiedControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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)Reply:

Details of the full-time<sup>(Note 1)</sup> and part-time<sup>(Note 2)</sup> 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) <sup>(Note3)</sup>
	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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)100****(Question Serial No. 0504)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (1) WasteControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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)Reply:

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:

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

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:

[https://www.recyclingfund.hk/en/news\\_approved.php](https://www.recyclingfund.hk/en/news_approved.php)

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)101****(Question Serial No. 0505)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (1) WasteControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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:

<b>Operating cost per tonne of waste (\$/tonne)</b>				
<b>2018-19 (Actual)</b>	<b>2019-20 (Actual)</b>	<b>2020-21 (Actual)</b>	<b>2021-22 (Actual)</b>	<b>2022-23 (Revised estimate)</b>
130	140	150	170	190

- End -

**CONTROLLING OFFICER'S REPLY**

**(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 charging-enabling 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.

- End -



**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:

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

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)104****(Question Serial No. 1224)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (3) NoiseControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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)Reply:

- (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
2019	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%:

<b>Year</b>	<b>Number of NANs issued</b>
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%:

<b>Year</b>	<b>Industrial/Commercial noise</b>	<b>Construction noise</b>	<b>Shop peddling noise</b>	<b>Noise from neighbourhood and public places#</b>	<b>Traffic noise</b>	<b>Aircraft noise*</b>	<b>Other Noise^</b>	<b>Total</b>
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%:

<b>Year</b>	<b>Number of complaints received</b>	<b>Number of prosecutions instituted</b>
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.

- End -

**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 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. 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:

<b>Year</b>	<b>Quantity of food waste recovered (tonnes/year) [Note 1]</b>	<b>No. of participating premises [Note 2]</b>
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: <https://www.opark.gov.hk/en/sponsor.php>

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.

The number of smart recycling bins and the participating PRH estates in the first two phases of the trial scheme are tabulated below:

<b>PRH estate</b>	<b>No. of smart recycling bin(s)</b>
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
<b>Total</b>	<b>61</b>

- End -

**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)

Reply:

(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.

- End -



**CONTROLLING OFFICER'S REPLY****EEB(E)107****(Question Serial No. 2924)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (2) AirControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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)

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.

- End -

**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)

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:

- (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).

- End -

**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)

Reply:

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:

Vehicle class		Number of Euro IV diesel commercial vehicles (percentage in the total number of the vehicles concerned)							
		Year of first registration							
		2006	2007	2008	2009	2010	2011	2012	Total
Light goods vehicle	Number of vehicles*	269	4 274	5 005	2 233	3 639	4 174	3 890	23 484
	Number of applications received	267 (99%)	3 404 (80%)	2 067 (41%)	760 (34%)	862 (24%)	959 (23%)	685 (18%)	9 004 (38%)
	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
Medium goods vehicle	Number of vehicles*	488	1 986	2 413	886	2 398	2 431	904	11 506
	Number of applications received	486 (99%)	1 796 (90%)	1 436 (60%)	362 (41%)	706 (29%)	453 (19%)	126 (14%)	5 365 (47%)
	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
Heavy goods vehicle	Number of vehicles*	10	76	117	134	378	529	254	1 498
	Number of applications received	10 (100%)	67 (88%)	59 (50%)	59 (44%)	120 (32%)	114 (22%)	34 (13%)	463 (31%)
	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
Light bus	Number of vehicles*	7	129	183	54	107	125	55	660
	Number of applications received	7 (100%)	111 (86%)	84 (46%)	12 (22%)	23 (21%)	38 (30%)	13 (24%)	288 (44%)
	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
Non-franchised bus	Number of vehicles*	43	317	536	365	512	491	255	2 519
	Number of applications received	40 (93%)	270 (85%)	271 (51%)	128 (35%)	135 (26%)	145 (30%)	26 (10%)	1 015 (40%)
	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

Vehicle class		Number of Euro IV diesel commercial vehicles (percentage in the total number of the vehicles concerned)							
		Year of first registration							Total
		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
	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%)
	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.

- 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.

- End -

**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.

- End -

**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.

- End -

**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 · Resources Circulation · 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.

Scheme	Expenditure (\$ million)				
	2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Actual)	2022-23 (Revised Estimate)
MSW Charging Scheme	<b>Expenditure involved in the preparatory work</b>				
	40	51	64	68	83
Scheme on Regulation of Disposable Plastic Tableware	<b>Expenditure involved in the research</b>				
	0	2	0	1	0

### **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 of 2020. The community recycling network, GREEN@COMMUNITY, now 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:

Project/Scheme	Expenditure (\$ million)				
	2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Actual)	2022-23 (Revised Estimate)
<b>Producer Responsibility Scheme (PRS)</b>	<b>Expenditure involved in the research of the PRS on plastic beverage containers and beverage cartons</b>				
	0	1	1	1	0
	<b>Operating expenditure involved in the Reverse Vending Machine Pilot Scheme</b>				
	0	0	1	16	30
	<b>Operating expenditure involved in the PRS on Glass Beverage Containers</b>				
	16	58	31	43	41
	<b>Operating expenditure involved in the PRS on Waste Electrical and Electronic Equipment</b>				
	3	4	5	4	4
<b>Major publicity campaigns of PRSs (glass beverage containers, waste electrical and electronic equipment and the Plastic Shopping Bag Charging Scheme)</b>					
	5	5	2	3	4
<b>Community Recycling Centres (from 2009 until being replaced by the current Recycling Stores)</b>	<b>Amount of funds granted under the ECF</b>				
	43	36	Not applicable <sup>(1)</sup>	Not applicable	Not applicable
<b>GREEN@COMMUNITY (including Recycling Stations, Recycling Stores and Recycling Spots<sup>(2)</sup>)</b>	<b>Operating expenditure of Recycling Stations<sup>(3)</sup></b>				
	24	31	52	52	60
	<b>Operating expenditure of Recycling Stores<sup>(4)</sup></b>				
	Not applicable	Not applicable	110	174	186

Project/Scheme	Expenditure (\$ million)				
	2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Actual)	2022-23 (Revised Estimate)
Pilot scheme on waste plastics collection and recycling	<b>Operating expenditure</b>				
	Not applicable	1	4	9	15
Recycling Fund	40	161 <sup>(5)</sup>	309 <sup>(6)</sup>	64 <sup>(7)</sup>	116 (As at 28 February 2023) <sup>(8)</sup>

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:

Facility	Operating expenditure (\$ million)				
	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

Facility	Operating expenditure (\$ million)				
	2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Actual)	2022-23 (Revised Estimate)
O·PARK1 <sup>(1)</sup>	11	42	58	75	81
WEEE·PARK	165	220	220	203	203
Y·PARK <sup>(2)</sup>	Not applicable	Not applicable	21	37	30

Notes:

- (1) 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.

- End -

**CONTROLLING OFFICER'S REPLY**

**(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 recyclables. 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 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)				
	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:

Recyclables	Recycling Stations				
	Approximate quantity of recyclables collected (tonnes)				
	2018	2019	2020	2021	2022 [Note 1]
Computer and electrical products	304	432	562	700	710
Glass containers	1 556	1 947	2 008	3 146	3 600
Rechargeable batteries	5	7	9	14	10
Compact fluorescent lamps/fluorescent tubes	16	23	22	25	20
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	Recycling Stores		
	Approximate quantity of recyclables collected (tonnes)		
	2020	2021	2022 [Note 1]
Regulated electrical equipment	18	262	360
Non-regulated electrical equipment (such as small electrical appliances)	33	528	740
Glass containers	64	1 522	2 270
Rechargeable batteries	1	6	19
Compact fluorescent lamps/fluorescent tubes	1	7	27
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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)114****(Question Serial No. 2400)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (1) WasteControlling Officer: Director of Environmental Protection (Samuel CHUI)Director of Bureau: Secretary for Environment and EcologyQuestion:

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 <sup>st</sup> Phase (Period)	2 <sup>nd</sup> 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 expenditure in 2021	Weight of waste plastics collected in 2021 (tonnes)	Operating expenditure in 2022	Weight of waste plastics collected in 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?

Asked by: 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 (from end-January 2021 to end-August 2022)	Stage 2 (from end-June 2022 to end-August 2023)
Quantity of PBCs collected (in piece)	Over 25 million	Over 21 million (as at end-February 2023)
Quantity of PBCs collected (in tonnes)	About 600 tonnes	About 540 tonnes (as at end-February 2023)
Total cost of the RVM Pilot Scheme	About \$20 million, which includes the expenditure for engaging a contractor to operate the RVM Pilot Scheme (including the provision, installation, operation and repair of 60 RVMs, as well as the collection and delivery of PBCs) and providing a rebate to incentivise the public to return used PBCs. There is no breakdown of the rent of RVMs and the expenditure for repair and maintenance in the contract.	The contractual value is about \$40 million, which includes the expenditure for engaging a contractor to operate the RVM Pilot Scheme (including the provision, installation, operation and repair of 120 RVMs, as well as the collection and delivery of PBCs) and providing a rebate to incentivise the public to return used PBCs. There is no breakdown of the rent of RVMs and the expenditure for 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 <sup>(Note 1)</sup>	Service fee in 2021 <sup>(Note 2)</sup> (\$ million)	Quantity collected in 2021 (thousand tonnes)	Service fee in 2022 <sup>(Note 2)</sup> (\$ 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:

Year	Recyclables collected from roadside recycling bins				Operating cost (\$ million)
	Waste paper (tonnes)	Plastics (tonnes)	Metals (tonnes)	Total (tonnes)	
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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)115****(Question Serial No. 1396)**

Head: (60) Highways Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Capital Projects

Controlling Officer: Director of Highways (Jimmy P M CHAN)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the “retrofitting of noise barriers on existing roads in Hong Kong”, will the Government inform this Committee of the following:

1. How many noise barrier retrofitting projects were (i) completed, (ii) under construction and (iii) under planning respectively in each of the past three years?
2. The following information (if applicable) for projects mentioned in (1) above : (i) (anticipated) commencement dates, (ii) (anticipated) completion dates, (iii) construction progress, (iv) traffic noise levels of the relevant road sections, (v) (estimated) number of workers, (vi) (estimated) project costs and (vii) (anticipated) number of beneficiaries.
3. Did the Highways Department keep abreast of the effectiveness of the measures by consulting stakeholders, such as the local residents, after retrofitting the noise barriers? If yes, what are the details? If not, what are the reasons?

Asked by: Hon CHOW Man-kong (LegCo internal reference no.: 39)

Reply:

1. The respective numbers of the noise barrier retrofitting projects that were completed, under construction and under planning in each of the past three years are tabulated below:

Year	Completed	Under construction	Under planning
2020	1	2	20
2021	0	4	18
2022	0	5	17

2. Other information for the retrofitting projects mentioned in (1) above is tabulated below:

Projects completed

Road section	Commencement date (Year)	Completion date (Year)	Works progress	Maximum traffic noise level (dB(A))	Project costs (\$ million)	Approximate number of residents benefitted
Tuen Mun Road (Town Centre section)	2015	2020	Completed	86	826.5	5 450

Projects under construction

Road section	Commencement date (Year)	Anticipated completion date (Year)	Works progress	Maximum traffic noise level (dB(A))	Approximate number of workers	Project costs (\$ million)	Approximate number of residents benefitted
Tai Po Road (Sha Tin section)	2018	2023	Under construction	81	135	851.8	6 660
Long Tin Road	2019	2023	Under construction	77	50	304.0	1 360
Po Lam Road North	2021	2025	Under construction	76	65	376.0	1 890
Po Ning Road	2021	2025	Under construction	76	45	241.7	1 930
Po Lam Road North (near King Ming Court)	2022	2025	Under construction	77	45	180.1	1 010

Projects under planning

Road section (Note)	Maximum traffic noise level (dB(A))	Approximate number of residents benefitted
Castle Peak Road (Hung Shui Kiu section)	74	50
Castle Peak Road (Ping Shan section)	78	180
Chai Wan Road	76	470
Fanling Highway (near Tsung Pak Long)	79	280
Hoi On Road	79	1 900
Island Eastern Corridor (near Heng Fa Chuen)	81	420

Road section (Note)	Maximum traffic noise level (dB(A))	Approximate number of residents benefitted
Jockey Club Road and San Wan Road (near Fanling Wai)	77	190
Ma Wang Road	72	260
New Clear Water Bay Road	80	4 430
Po Shek Wu Road	81	2 140
San Tin Highway	83	1 220
Sha Tin Road	79	3 170
Sha Tin Road near Wong Uk Village	76	50
Tai Po Road (Sham Shui Po)	78	1 080
Tam Kon Shan Road	78	1 610
Tsuen Wan Road	79	2 850
Yuen Wo Road	77	920

Note: Listed in alphabetical order of the road sections. As the projects are still under planning, details of the anticipated commencement and completion dates, works progress as well as numbers of workers are unavailable.

3. Upon completion of the noise barriers retrofitting works, the Government will conduct on-site noise monitoring to review the effectiveness of noise mitigation. According to the previous monitoring results after completion of the works, the noise mitigation performance of all newly retrofitted noise barriers could meet the anticipated design levels.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)116**

**(Question Serial No. 0198)**

Head: (100) Marine Department  
Subhead (No. & title): (-) Not Specified  
Programme: (2) Port Services (3) Local Services  
Controlling Officer: Director of Marine (Carol YUEN)  
Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the collection of refuse from locally-licensed vessels and river trade vessels, please advise on:

- (a) the staffing, expenditures and numbers of vessels involved in collecting refuse from fishing vessels, locally-licensed vessels and river trade vessels, either by staff of the Marine Department (MD) or the contractor it engaged, in the past 3 years (2020-21 to 2022-23); and the staffing, expenditures and numbers of vessels involved in collecting refuse in various typhoon shelters in the past 3 years (2020-21 to 2022-23);
- (b) the mechanism adopted by MD for collecting refuse in various typhoon shelters, and the daily collection schedules;
- (c) whether MD will consider providing additional notification channels or establishing a mechanism in addition to the 24-hour hotline manned by officers on duty, email and fax so as to improve the service for collecting refuse for fishing vessels in typhoon shelters;
- (d) the total quantities of marine refuse collected by MD in the past 3 years (2020-21 to 2022-23) and the total quantities of refuse collected in typhoon shelters (please provide the information by month); and
- (e) the number of notifications issued by the notification and alert system on marine refuse since its setting up under the Hong Kong-Guangdong Marine Environmental Management Special Panel, with the extent of its effectiveness; and the way to an enhanced cross-border collaboration between Guangdong and Hong Kong.

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 36)

Reply:

- (a) MD has conducted a comprehensive review on the tender of marine refuse cleansing and disposal service contract for the whole of Hong Kong waters. In the review, MD has considered different ways, such as splitting contract service areas and removing

unnecessary contract service requirements to reduce the contract price, thereby making the most cost-effective tender award.

MD signed the contract for marine refuse cleansing and disposal services with the existing contractor for a term of three years commencing 1 October 2022 and ending 30 September 2025, involving a contract expenditure of about \$299.75 million.

Under the contract, the contractor is currently providing a fleet of at least 42 vessels of various types for marine refuse cleansing and support to clean up marine refuse in Hong Kong waters on a daily basis (including Sundays and public holidays), which includes offering domestic refuse collection service to vessels berthed in typhoon shelters, anchorages and small boat anchorage areas. The contractor may deploy more vessels in accordance with the actual needs to clean up marine refuse. The contract for marine refuse cleansing services includes cleaning up floating refuse, collecting domestic refuse from vessels, managing refuse collection points and transporting refuse to landfills for disposal, etc. Since the overall contract cost includes the staffing, expenditure and number of vessels involved in collecting refuse from fishing vessels, locally-licensed vessels and river trade vessels in typhoon shelters, there is no separate breakdown for such items.

MD will continue to closely monitor the cleanliness of Hong Kong waters to ensure the effectiveness of marine cleansing services. The current contract adopts an objective-based specifications, requiring the contractor to maintain the cleanliness of Hong Kong waters at “Good” level during service hours (i.e. between 8:00 am and 6:00 pm daily). A penalty mechanism has also been introduced in the contract so that the contractor’s monthly payment will be deducted in case of contract violation. The contractor is also committed to applying innovative technology in marine refusing cleansing services during the contract period, including the use of remote-controlled equipment to improve service efficiency.

As for the staffing of MD, there are mainly ten Marine Inspector IIs and four patrol launches responsible for the inspection of sea water cleanliness across the territory and monitoring of the performance of the contractor, as well as requiring the contractor to redeploy resources in accordance with the actual needs to address the floating refuse problems in various districts. MD will continue to monitor and regularly review the effectiveness of marine refuse cleansing and disposal work, so as to ensure its cost-effectiveness and service quality.

- (b) Currently, the marine refuse cleansing contractor of MD has refuse collection boats stationed in major typhoon shelters such as Sam Ka Tsuen, Shau Kei Wan, Causeway Bay, To Kwa Wan, New Yau Ma Tei, Tuen Mun, Sai Kung, Cheung Chau and Shuen Wan for collecting refuse from vessels at those typhoon shelters at least once a day. The refuse collection boats of the contractor generally sail through the typhoon shelters in the morning period to collect refuse from vessels. Vessels berthed in the typhoon shelters may also make calls to MD or the contractor for arranging refuse collection service. Since the end of 2015, the frequency of collecting refuse from vessels in Aberdeen Typhoon Shelter has been increased to twice a day, i.e. once in the morning and once in the afternoon.

- (c) Apart from the 24-hour hotlines (2385 2791 or 2385 2792) manned by duty officers, MD's contractor has set up a hotline (3527 3929) to facilitate the arrangements for refuse collection service. At meetings before fishing moratorium and Chinese New Year, MD will also inform those in need, via the attending representatives of various organisations, of the available channels to provide information by email (admpcu@mardep.gov.hk) or by fax (2543 6877) for arranging refuse collection service. MD will continuously monitor the use of the various existing notification channels.
- (d) The quantities of marine refuse (including floating refuse, refuse collected from ships, and refuse collected from locally-licensed vessels and river trade vessels) collected in the past three years are as follows:

2020

Month	Floating refuse (in tonnes)#	Refuse collected from ships (in tonnes)#	Refuse collected from locally-licensed vessels and river trade vessels (in tonnes)#
January	767.1	209.4	181.4
February	737.6	194.9	169.4
March	804.8	208.1	177.3
April	829.7	200.6	171.8
May	891.9	207.7	189.8
June	988.8	198.9	187.8
July	1 021.8	209.1	196.0
August	1 023.6	194.6	175.0
September	981.8	202.2	172.9
October	811.1	195.3	158.3
November	764.4	201.3	164.9
December	704.2	209.1	155.6
Full year	10 326.8	2 431.2	2 100.2

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

2021

Month	Marine refuse collected (in tonnes)*
January	146.5
February	140.8
March	154.9
April	188.1
May	232.7
June	279.4
July	307.0
August	274.2
September	219.0
October	204.1
November	169.8
December	180.5

Month	Marine refuse collected (in tonnes)*
Full year	2 497.0

2022

Month	Marine refuse collected (in tonnes)*
January	192.6
February	111.6
March	146.9
April	171.2
May	241.6
June	396.7
July	371.6
August	314.4
September	228.3
October	180.9
November	162.2
December	144.3
Full year	2 662.3

\* In response to the recommendation of the Public Accounts Committee's Report, MD had already used the actual weight (tonnes) to record the disposal of marine refuse in accordance with the practice of the Environmental Protection Department (EPD) and a new indicator of "marine refuse collected" was adopted in MD's 2022 Controlling Officer's Report; the marine refuse as referred to included marine refuse collected from ships, floating refuse and refuse collected from locally-licensed and river trade vessels by MD. As the marine refuse collected from various districts by the contractor was first delivered to marine refuse collection points for temporary storage before vehicles were arranged to centrally collect and send them to EPD's disposal sites where the actual weight would be measured, MD is therefore unable to estimate the weight of marine refuse collected from each district.

The refuse from locally-licensed vessels and river trade vessels is mainly collected in typhoon shelters, with only a small quantity collected in small boat anchorage areas. MD does not maintain separate statistics on the quantities of refuse collected in individual typhoon shelters and small boat anchorage areas. The quantities of refuse collected in typhoon shelters are therefore not separately accounted for.

- (e) The Government has been maintaining close liaison with Guangdong through the "Hong Kong-Guangdong Marine Environmental Management Special Panel" to continually enhance arrangements for relevant cross-border collaboration and the incident notification mechanism in handling marine refuse and environmental incidents. Since the commencement of operation of the "Notification and alert system on marine refuse" in May 2017, EPD had triggered the mechanism and issued a total of 37 timely notifications to Guangdong due to inclement weather or environmental incidents as of December 2022, so that both parties could deploy resources effectively for better preparation, timely clean-up and follow-up actions. Furthermore, Hong Kong and Guangdong will continue to co-organise coastal clean-up activities to jointly promote the messages of keeping the shoreline clean and protecting the ocean together.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)117**

**(Question Serial No. 2866)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The provision for 2023-24 is \$84.4 million higher than the revised estimate for 2022-23, representing a significant increase of 122.9%. This is mainly due to the increased cash flow requirement for the New Energy Transport Fund (NET Fund). Please provide:

1. the specific reasons for the increase in cash flow requirement;
2. the number of projects and the amount of subsidy approved under the NET Fund in the past year.

Asked by: Hon CHAN Chun-ying (LegCo internal reference no.: 10)

Reply:

1. The increase in cash flow requirement for the New Energy Transport Fund (NET Fund) is mainly due to the allocation of \$200 million for subsidising trial projects of hydrogen fuel cell (HFC) double-deckers and heavy vehicles. The estimated expenditure is as follows:

New project	Relevant information	Estimated expenditure
Trials of HFC double-deckers and heavy vehicles	To assist the transport trade in commencing trials of HFC double-deckers and heavy vehicles, we have earmarked \$200 million under the NET Fund for subsidising the procurement and operation of HFC vehicles, the installation of hydrogen refilling facilities, and other associated costs such as the costs for collecting and analysing trial data.	We will subsidise the trials of HFC double-deckers and heavy vehicles on a project basis. It is anticipated that the first funding case will be approved in the third quarter of this year. The relevant estimate for 2023-24 is about \$76 million.

2. In the past year, a total of 46 trials involving a total sum of about \$47 million have been subsidised under the NET Fund, including trials of 50 electric light goods vehicles, 5 single-deck electric buses, 1 electric light bus, 4 electric taxis, 2 electric medium goods vehicles, 2 electric heavy goods vehicles and 2 electric kaitos. 21 applications are being reviewed under the NET Fund and will be submitted to the NET Fund Steering Committee for approval at the end of March. To further understand the operation of the NET Fund, including the trial products' information, members of the public can visit the website of the Environment and Ecology Bureau (EEB) at <https://www.eeb.gov.hk/en/new-energy-transport-fund.html>.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)118**

**(Question Serial No. 0476)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the \$200 million earmarked by the Government for launching a trial of hydrogen fuel cell double-deckers and heavy vehicles, please advise this Committee:

1. of the timetable for launching the trial of hydrogen fuel cell double-deckers and heavy vehicles;
2. of the test standard definitions;
3. of the progress and details of the provision of additional hydrogen filling stations;
4. of the operational, maintenance and repair expenditures to be incurred during the trial period;
5. whether the Government will further educate the public on new energy knowledge; if yes, of the details; if no, of the details.

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 27)

Reply:

1-3. At present, hydrogen fuel cell (HFC) heavy vehicles are still at the early stage of development, and resources are being invested in research and development, operational trials and construction of ancillary infrastructure worldwide. To keep up with the development trend and the demand for ancillary facilities for HFC vehicles, the Environment and Ecology Bureau (EEB) is leading an inter-departmental working group (IWG) to progressively commence the trials of HFC double-deckers and heavy vehicles in phases having regard to local circumstances. Moreover, the IWG will conduct risk assessments on hydrogen refilling stations, the arrangements of hydrogen supply and HFC vehicles on road, etc., as well as review relevant regulations, standards and technical guidelines, with a view to preparing for the establishment of a legal framework for the local use of hydrogen fuel. The IWG will review and assess applications for trial projects on hydrogen fuel technology before the completion of abovementioned tasks, and advise on aspects such as safety and planning, so that the relevant trades can commence trials on hydrogen fuel technology as soon as possible.

As at the end of February 2023, the IWG Secretariat has received 8 trial applications in total, involving various areas such as HFC double-deckers, hydrogen refilling station (including the installation of hydrogen refilling facilities at franchised bus depots), hydrogen transportation and electricity generation from hydrogen fuel cells. The IWG is liaising closely with the applicants of the trial projects and discussing detailed arrangements for the trial projects to facilitate the phased commencement of the trial projects in the second half of 2023. With the results and data gathered from the trials of HFC vehicles, the Government will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.

4. To assist the transport trade in commencing the relevant trial projects, we have earmarked \$200 million under the New Energy Transport Fund for subsidising the procurement and operation of HFC vehicles (including the maintenance and repair expenditure during the trial period), the installation of hydrogen refilling facilities, and other associated costs such as the costs for collecting and analysing trial data. We anticipate that the first funding case will be approved in the third quarter of this year.
5. The Government will actively collaborate and communicate with the academia, research institutes and the transport trade to follow up on the development of HFC vehicles, and provide appropriate information to the public by different means such as website and publication in a timely manner, so as to raise public awareness of HFC vehicles and related technologies.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)119**

**(Question Serial No. 2809)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

There are 27 years to go before achieving zero vehicular emissions by 2050. For the remaining years, will the Government set a clear phased schedule to phase out the government vehicles and public transport that are still using fuels? Please consolidate and list out in tabular form all the Government's expenditures on the projects for zero emissions at present.

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 43)

Reply:

Currently, carbon emissions from transport make up around 20% of total carbon emissions in Hong Kong. To tie in with the goal of achieving carbon neutrality before 2050 in Hong Kong, the Government has been striving to promote the use of electric vehicles (EVs) and other new energy vehicles, with a view to improving roadside air quality and reducing carbon emissions.

To this end, the Government will cease new registration of fuel-propelled and hybrid private cars in 2035 or earlier. In the meantime, we will actively promote the trials of various new energy public transport and commercial vehicles, with a view to announcing a roadmap for the promotion of electric public transport and commercial vehicles by 2025, and formulating the long-term strategies for the application of hydrogen energy in road transport. We also target to introduce about 700 electric buses and about 3 000 electric taxis by the end of 2027. The Government will review the progress of the popularisation of EVs and the development of other new energy vehicles periodically around every 3 years, in contrast to the earlier plan of every 5 years, so as to evaluate and improve the overall strategies and objectives in a timely manner.

Regarding government vehicles, the circular on Green Procurement in the Government has been updated to set EV as the standard for small and medium private cars to be procured or replaced, unless there are special circumstances such as operational needs that render the use of EVs technically infeasible. For other types of vehicles, EVs and other more

environmentally friendly vehicles will be accorded priority for the Government's use. According to the information provided by the Government Logistics Department, the number of EVs (excluding special purpose vehicles) procured by government departments by vehicle type and the amount of expenditure involved in each of the past 5 years are tabulated below:

Year	Electric saloon car	Electric van	Expenditure involved (\$m)
2018	7	-	1.65
2019	4	2	1.75
2020	12	-	3.34
2021	27	-	7.54
2022	55	-	17.33

Hong Kong will strive to achieve carbon neutrality before 2050 and reduce its carbon emissions by half before 2035 as compared with the 2005 level. Over the last decade or so, the Government has allocated more than \$47 billion to various carbon reduction measures. In the next 15 to 20 years, the Government will allocate about \$240 billion to implement mitigation and adaptation measures to combat climate change. Promoting zero vehicular emissions is one of the measures to combat climate change and we do not have the breakdown of the expenditure involved at present.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)120**

**(Question Serial No. 2602)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding granting each eligible residential electricity account a subsidy of \$1,000, and extending the arrangement of distributing electricity charges relief of \$50 a month to each eligible residential electricity account to the end of 2025, please advise this Committee: (1) of the commitments and cumulative expenditures under the electricity subsidy and relief schemes over the past 3 years, as well as the numbers of residential and non-residential accounts benefitted in each of these years respectively; and (2) how the Administration will promote energy efficiency, energy saving as well as the development of renewable energy specifically in 2023-24; and whether there is any measure to alleviate the increase in tariff; if yes, of the details.

Asked by: Hon CHAN Kapui, Judy (LegCo internal reference no.: 21)

Reply:

- (1) Over the past 3 financial years, the approved commitments, cumulative expenditures and numbers of accounts benefitted under the electricity subsidy and relief schemes provided by the Government were as follows:

	Approved commitments (\$ billion)	Cumulative expenditures (as at 31 March) (\$ billion)			Numbers of residential accounts benefitted (as at 31 March)		
		2020	2021	2022	2020	2021	2022
Electricity Charges Subsidy Scheme (Note 1)	36.37 (Note 2)	22.52	26.73	28.74	Over 2.7 million	Over 2.7 million (Note 3)	Over 2.7 million

	Approved commitments (\$ billion)	Cumulative expenditures (as at 31 March) (\$ billion)			Numbers of residential accounts benefitted (as at 31 March)		
		2020	2021	2022	2020	2021	2022
Electricity Charges Relief Scheme (Note 4)	8.7	1.87	3.38	5.09	Over 2.7 million	Over 2.7 million	Over 2.7 million

Note 1: This Scheme is included under Head 147 “Government Secretariat: Financial Services and the Treasury Bureau (The Treasury Branch)”.

Note 2: Including the increase of \$2.9 billion in commitment for the Electricity Charges Subsidy Scheme as announced in the 2023-24 Budget, which will be used for granting each eligible residential electricity account a one-off subsidy of \$1,000. Approval for the increase in commitment is sought in the context of the Appropriation Bill 2023.

Note 3: Disbursement under the Electricity Charges Subsidy Scheme for 2020 was made between January and December 2020, while disbursement under the Scheme for 2021 was made between June 2021 and May 2022. As such, the figure for 2021 only reflected the number of accounts benefitted as at December 2020.

Note 4: It refers to the Electricity Charges Relief Scheme from 2019 to 2023 under Subhead 700 Item 801, and does not include the new round of Electricity Charges Relief Scheme for 2024 to 2025 under the new Item 804. The commitment for the new round of Electricity Charges Relief Scheme is \$3.5 billion, funding for which is sought in the context of the Appropriation Bill 2023.

Note 5: Apart from the above Schemes, the Government also granted non-residential electricity account a one-off subsidy from March to October 2020, so as to alleviate the impacts of the tough external and local economic environment and the COVID-19 epidemic on small and medium-sized enterprises. The approved commitment and total actual expenditure were \$5.2 billion and \$4.23 billion respectively, while the number of non-residential accounts benefitted was about 430 000.

- (2) For the public sector, the Government has been leading by example in optimising the favourable conditions of premises and developing renewable energy (RE), including raising the requirements of applying RE technologies in new government buildings, and developing large-scale solar energy generation and waste-to-energy projects, etc. at suitable venues. For instance, the Environmental Protection Department has commenced the operation of T • PARK (sludge treatment facility) and O • PARK1 (Organic Resources Recovery Centre Phase 1), and is constructing O • PARK2 (Organic Resources Recovery Centre Phase 2) and I • PARK1 (Integrated Waste Management Facilities Phase 1). In addition, the Water Supplies Department plans to install a 5 MW floating solar energy generation system at Plover Cove Reservoir and introduce high-efficiency battery storage technology on a pilot basis to better utilise the electricity generated by large-scale solar energy generation systems at

reservoirs, and develop a 10 MW solar farm at the South East New Territories Landfill in Tseung Kwan O.

The Government has all along endeavoured to create favourable conditions that are conducive to encouraging the private sector to develop RE. The Electrical and Mechanical Services Department (EMSD) has launched Solar Harvest since 2019-20 to install small-scale solar energy generation systems for eligible schools and welfare non-governmental organisations (NGOs) free of charge. Besides, it plans to install 150 solar energy generation systems in 2023-24. In the past, the EMSD would install a small-scale solar energy generation system with a generating capacity of about 10 kW on the rooftops of participating schools and NGOs. To further promote the development of RE, starting from 2023-24, the EMSD will, subject to the conditions of the premises, install up to 3 electricity generation systems for participating schools and welfare NGOs.

Other supporting measures include facilitating the private sector in installing solar energy generation systems in open car parks, suitably relaxing the requirements for installation of solar energy generation systems on the rooftops of New Territories Exempted Houses (i.e. village houses), revamping the “HK RE Net” and setting up an enquiry hotline, introducing legislative amendments to provide exemption from the requirements to apply for business registration and pay profits tax in respect of participation in and the payments received under the Feed-in Tariff Scheme, etc.

With regard to energy efficiency and energy conservation, we will set a good example by striving to improve the overall energy performance of government buildings and infrastructure by more than 6% by 2024-25. Apart from energy saving, the energy performance of RE projects will also be taken into account, with a view to exploring new energy sources while reducing energy consumption. The fourth phase of the Mandatory Energy Efficiency Labelling Scheme (MEELS) is expected to commence on 1 September 2023. By then, the total coverage of energy consumption in the residential sector by the household appliances under the MEELS will be increased substantially from about 50% to about 80%. We will also accelerate the implementation of District Cooling System in New Development Areas (including the Northern Metropolis), so as to promote energy conservation from the infrastructure level.

In the long run, the Government will implement various measures to stabilise electricity tariffs, including developing a diversified fuel mix, raising the share of zero-carbon energy in the fuel mix for electricity generation and strengthening collaboration with neighbouring regions. We also encourage all sectors of our community to join hands to save energy and reduce electricity expenses by making changes in electricity consumption patterns and lifestyle choices.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)121**

**(Question Serial No. 0373)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (6) Climate Change

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Under the vision of the Hong Kong's Climate Action Plan 2050, the Government has been taking forward 4 major decarbonisation strategies, namely "net-zero electricity generation", "energy saving and green buildings", "green transport" and "waste reduction" to lead Hong Kong towards carbon neutrality. As for coordinating the Government's efforts in combating climate change and achieving carbon neutrality, please advise this Committee of the following:

1. The Administration stated that there would be a decrease of 3 posts in 2023-24. Regarding the details of such posts, what are the post title, rank, salary, duties, job description and nature (permanent or supernumerary post) respectively? Will the decrease of posts affect the relevant environmental protection work progress?
2. The Administration has indicated that the provision for 2023-24 is \$19.8 million (15.6%) higher than the revised estimate for 2022-23. This is mainly due to the increased cash flow requirement for the Green Tech Fund (GTF). What are the details of the applications approved by the GTF so far? Please set out the relevant funded projects according to the 4 main research themes, namely "net-zero electricity generation", "energy saving and green buildings", "green transport" and "waste reduction", with details including the project title, research synopsis, project applicant, project coordinator, project duration, grant approved and implementation progress.
3. In the Matters Requiring Special Attention in 2023-24, the Administration mentioned that it would set up a new Council for Carbon Neutrality and Sustainable Development to offer advice on decarbonisation strategies and promote participation by different sectors of the community. What are the details of the new Council? Is it necessary to create posts? If yes, what are the details? If no, what are the reasons?

Asked by: Hon CHAN Pui-leung (LegCo internal reference no.: 13)

Reply:

1. In January 2023, the Environment and Ecology Bureau (EEB) re-organised the structure of the Environment Branch and the Environmental Protection Department (EPD) to strengthen climate change actions, waste reduction and recycling, and various environment-related tasks. Following the redistribution of duties between the bureau and the department, a total of 167 non-directorate posts have been transferred from the EPD to the Environment Branch, including the 3 posts to be reduced as mentioned under Programme (6) (Climate Change) of the Controlling Officer's Report of the EEB (Environment Branch) (Head 137). The 3 posts are time-limited posts and will lapse on 31 March 2023. Details are set out in the table below:

<b>Post title</b>	<b>Rank and salary</b>
Senior Environmental Protection Officer (Climate Change)3	Senior Environmental Protection Officer (Master Pay Scale Point 45 to 49)
Environmental Protection Officer (Climate Change)12	Environmental Protection Officer (Master Pay Scale Point 27 to 44)  <u>or</u>  Assistant Environmental Protection Officer (Master Pay Scale Point 16 to 21)
Environmental Protection Officer (Climate Change)21	Environmental Protection Officer (Master Pay Scale Point 27 to 44)  <u>or</u>  Assistant Environmental Protection Officer (Master Pay Scale Point 16 to 21)

When setting up the Office of Climate Change and Carbon Neutrality (OCCCN) in January 2023, the Environment Branch had already taken into account the lapse of the above-mentioned 3 posts on 31 March 2023 and ensured that the arrangement would not affect the progress of the work on combating climate change.

2. As at end-February 2023, a total of 22 projects have been approved under the Green Tech Fund, details of which are at [Annex](#).
3. The OCCCN will set up the new Council for Carbon Neutrality and Sustainable Development (CCNSD) comprising relevant stakeholders to offer advice on decarbonisation strategies and promote participation in deep decarbonisation by different sectors of the community. The OCCCN will provide support to the CCNSD. The work involved will be undertaken by the existing staffing establishment, and no new posts will be created.

	Project title	Synopsis	Applicant	Coordinator	Grant duration	Grant approved	Implementation progress
<b>Net-zero electricity generation and energy saving and green buildings</b>							
1.	Development of high performance and long life hydrogen fuel cell stacks	Development of high performance and long life hydrogen fuel cells that can be widely applied in electric vehicles (EVs) for facilitating large-scale application of fuel cells and helping to promote the popularisation of EVs and low-carbon transformation	The Hong Kong University of Science and Technology	Shao Minhua	36 months	\$8,991,500	In progress
2.	Development of printable perovskite solar cells for transformative clean energy	Development of solar cells that can be printed on different surfaces to increase the power generation efficiency of photovoltaic systems and to develop building-integrated photovoltaic systems	City University of Hong Kong	JEN, Kwan-Yue Alex	36 months	\$5,031,934	In progress
3.	A safe, efficient and facile approach for hydrogen storage and generation: catalytic hydrolysis of solid-state hydrogen storage materials	Development of hydrogen storage and release technology involving the use of stable solid-state materials for hydrogen storage to enhance safety and reduce potential risks associated with hydrogen transport and storage	The Hong Kong Polytechnic University	ZHENG Guangping	30 months	\$3,305,100	In progress
4.	Green hydrogen production from active flow membraneless electrolyzers	Development of more cost-effective and efficient technologies for producing green hydrogen	The Hong Kong University of Science and Technology	Francesco Ciucci	36 months	\$3,198,150	In progress
5.	Turning water into the source of solar hydrogen via photocatalyst panel	Use of domestic water for scalable solar hydrogen evolution, and development of a demonstration system to promote public awareness of green hydrogen technologies	City University of Hong Kong	NG Yun Hau	36 months	\$2,876,449	In progress
6.	A high-performance roll-to-roll process for the manufacture of a novel PEM membrane electrode assembly	Development of a novel membrane electrode assembly, and by reducing the particle size and increasing the conductivity of the support material, a larger surface area is available for catalyst deposition and a lower catalyst loading is required to achieve a similar performance in water electrolysis	iCreate Limited	FUNG Ka Yip	18 months	\$3,866,033	Withdrawn by the applicant
<b>Green transport</b>							
7.	Smart power conditioners with second-life EV batteries	Development of a smart energy storing power regulator with retired EV batteries to control and improve the power quality and grid stability, improve the charging infrastructure for EVs, and facilitate the application of second-life EV batteries with a view to achieving the goals of waste reduction and decarbonisation	City University of Hong Kong	CHUNG Shu Hung Henry	36 months	\$6,687,710	In progress



	Project title	Synopsis	Applicant	Coordinator	Grant duration	Grant approved	Implementation progress
8.	Agile and dynamic control technologies to enhance system stability and power quality considering renewables and electrical vehicle impacts	Development of technologies that can control power quality and grid stability by storing the energy generated by a photovoltaic power generation system and analysing the utilisation of the charging stations with the use of software to improve the stability and reliability of the power grid, thereby supporting the popularisation of EVs	CAFEA Smart City Limited	Sun Lingling	30 months	\$2,504,200	In progress
<b>Waste reduction</b>							
9.	Reducing biological landfill leachate treatment footprint via rapid electrochemical-UV technologies	Research on more energy-efficient ways to purify landfill leachate which has to be treated before it is discharged into the public sewerage system	The Hong Kong University of Science and Technology	CHEN Guanghao	30 months	\$6,674,600	In progress
10.	Coupling AnMBR and PNA for compact - and energy-saving landfill leachate treatment	Development of a low-cost, less energy-intensive and less space-demanding system for landfill leachate treatment, with renewable energy generated in the process for use by the system	The University of Hong Kong	ZHANG Tong	24 months	\$4,381,040	Withdrawn by the applicant
11.	Biochar-enhanced construction materials for sustainable waste management and decarbonisation	Research on the use of yard waste for production of biochar building materials to reduce landfilled woody waste and carbon emissions each year	The Hong Kong Polytechnic University	Daniel C. W. Tsang	36 months	\$8,784,200	In progress
12.	Recycling of waste lithium-ion batteries as highly active fuel cell catalysts	Collection of waste batteries, EV batteries in particular, and recycling the cathode materials therein to produce fuel cells	The Hong Kong Polytechnic University	LEE Lawrence Yoon Suk	24 months	\$2,783,920	In progress
13.	Carbon-friendly pneumatic flow mixing (PFM) to rapidly recycle waste mud for land reclamation in Hong Kong	Collaboration with the Civil Engineering and Development Department to recycle waste mud for land reclamation instead of dumping it into sediment pits in the open sea	The University of Hong Kong	Clarence E. Choi	36 months	\$4,901,300	In progress
14.	Low carbon road pavement by maximising material circularity and adopting sustainable materials	Development of low carbon road pavement systems by adopting the closed-loop and open-loop based material circularity strategies according to the specifications of pavement systems of Hong Kong	City University of Hong Kong	NG Shiu Tong, Thomas	36 months	\$4,197,500	In progress
15.	Low-carbon transformation of construction materials using waste glass	Development of novel glass-based concrete products and promising large-scale technologies to provide a viable route for the use of waste glass in concrete, and reduce the consumption of cement and concrete raw materials in the construction industry	The Hong Kong Polytechnic University	POON Chi Sun	36 months	\$5,292,875	To be commenced in April this year
16.	Development of renewable energy and retired EV battery solution	Extending the lifespan and enhancing the value of retired EV batteries by providing a solution to overcome the technical challenges of reusing retired EV batteries	Hong Kong Productivity Council	LAW Wing Ting	36 months	\$2,942,000	To be commenced in April this year

	Project title	Synopsis	Applicant	Coordinator	Grant duration	Grant approved	Implementation progress
17.	Manufacturing high-efficiency noise-absorbing materials from recycled plastics	Manufacturing noise-absorbing products with superior acoustic and non-acoustic performance through using recycled plastics as raw materials	Lumi Technology Company Limited	Shuyu CHEN	24 months	\$3,379,200	In progress
18.	Green intelligent garbage bag assessment system	Development of a smart garbage bag assessment system by using artificial intelligence technologies, together with positioning system data analysis to optimise waste management processes and facilitate effective implementation of municipal solid waste charging	United Microelectronics Centre (Hong Kong) Limited	Li Yiu Kei	21 months	\$2,514,580	Withdrawn by the applicant
19.	Green tech platform for waste management and reduction – Large scale reverse vending machine for plastic beverage bottles	Provision of a large size reverse vending machine (RVM) with enhanced accuracy, speed and reliability, and the use of the RVM database and 5G communication network to facilitate bottles identification and analysis of the public's recycling habits	Roborn Technology Limited	MAK Hin Yu	12 months	\$2,518,000	In progress
<b>Air quality (Note 1)</b>							
20.	Temperature and humidity impact free gas sensor and monitor system development for real-time high performance air quality monitoring	Development of low-cost smart air sensors capable of accurate and real-time air quality monitoring under different temperature and humidity conditions	Sundial Technology Development Limited	TSUI Kwong Hoi	36 months	\$5,701,200	In progress
21.	Portable and low-cost sensors for the real-time ambient air monitoring of BTEX and other volatile organic compounds	Development of low-cost portable sensors for real-time concentration monitoring of the most common air pollutants that lead to the formation of ozone in Hong Kong. The development of the sensors will help identify the sources of ozone formation.	City University of Hong Kong	CHAN Chak Keung	36 months	\$5,686,750	In progress
22	Hybrid air cleaning system	Development of an air cleaning system to reduce air pollutants in roadside and semi-enclosed spaces through advanced technologies, such as high efficiency particulate filtration and nano catalytic coating, without affecting traffic flow or altering existing facilities	The Hong Kong Polytechnic University	LEE Shun Cheng	24 months	\$5,561,400	In progress

Note 1: "Air quality" was one of the 4 main research themes in the first round of applications for the Green Tech Fund.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)122**

**(Question Serial No. 0374)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

In paragraph 43 of the Budget Speech, the Administration mentioned that each eligible residential electricity account would be granted a subsidy of \$1,000. This measure would involve an expenditure of about \$2.9 billion. The current arrangement of distributing electricity charges relief of \$50 a month to each eligible residential electricity account would be extended to the end of 2025. This measure would involve an expenditure of about \$3.5 billion and benefit around 2.9 million residential households. Regarding the electricity market and electricity tariff, please advise this Committee of the following:

1. Did the Government know about the annual registration (including new registration) and the subsidy amounts for customers of the Hongkong Electric Company Limited and CLP Power Hong Kong Limited under the Electricity Charges Relief Scheme in the past 3 years? Has the Government compiled statistics on the respective numbers of i) service apartments; ii) subdivided unit tenants; and iii) vacant flats with registered meters among the registered residential households? If yes, what are the details? If no, what are the reasons?
2. In Matters Requiring Special Attention in 2023-24, the Administration mentioned that it would oversee the 2 power companies' establishment and operation of the Liquefied Natural Gas (LNG) Terminal which allows them to purchase LNG from international market directly. Does the Administration know about the current progress of work for the offshore LNG Terminal, as well as the expected date for its commissioning in this year? If yes, what are the details? If no, what are the reasons?
3. Please advise when discussion will commence this year regarding the interim review of the Scheme of Control Agreements, as well as the new Five-year Development Plans of the 2 power companies. Does the Government have any plan for the contribution to part of the fuel costs by the 2 power companies, or strengthen the Government's role in making advanced payment of the fuel costs, so as to alleviate the burden on the public?

Asked by: Hon CHAN Pui-leung (LegCo internal reference no.: 14)

Reply:

1. All residential electricity accounts can benefit from the Electricity Charges Relief Scheme. The number of accounts benefited from the Electricity Charges Relief Scheme and the expenditure involved in the past 3 years are as follows:

Year	Number of accounts benefited (as at 31 December)		Expenditure (\$)	
	CLP Power Hong Kong Limited	The Hongkong Electric Company Limited	CLP Power Hong Kong Limited	The Hongkong Electric Company Limited
2020	About 2.32 million	About 470 000	1.27 billion	270 million
2021	About 2.36 million	About 470 000	1.38 billion	270 million
2022	About 2.39 million	About 470 000	1.42 billion	280 million

It is understood that the power companies do not have any breakdown on whether the residential accounts belong to serviced apartments, subdivided unit tenants and vacant flats.

2. The construction works of the offshore Liquefied Natural Gas Terminal carried out by the 2 power companies in Hong Kong waters have been largely completed and various tests are underway. It is expected that the terminal can be commissioned in mid-2023.
3. The Scheme of Control Agreements (SCAs) signed between the Government and the 2 power companies set out the obligations of the power companies, the returns for shareholders and the arrangements for monitoring the power companies' financial affairs by the Government. The current SCAs run for a term of 15 years and will expire in 2033. Under the SCAs, the 2 power companies are required to submit the 2024-2028 Development Plans by the end of June 2023 to the Government for approval of their capital expenditures. With the support of an independent energy consultant, the Government will critically review the need, timing and cost effectiveness of the capital investment proposals in order to ensure that there are genuine needs for these projects and to avoid excessive, premature, unnecessary or unreasonable investments. In addition, the SCAs stipulate clearly that the Government and the 2 power companies shall have the right during 2023 to request modification of any part of the current SCAs, and mutual agreement is needed before implementing any proposed modification. The Government is making preparation for an interim review of the SCAs with the 2 power companies respectively in 2023 in accordance with the SCAs. We have no fixed views on the interim review and have set no boundary to its scope (including financial, technical and environmental issues). However, the review is premised on the current SCAs which shall continue to operate until 2033.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)123**

**(Question Serial No. 1889)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (700) General non-recurrent

Programme: (5) Nature Conservation

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the countryside conservation initiatives of the Countryside Conservation Office (CCO), please advise this Committee of the following:

1. What are the respective work objectives, action plan, estimated expenditure and staff establishment of the CCO for the coming year?
2. Please advise of the use of funds under the Countryside Conservation Funding Scheme to date, and set out the details and progress of the relevant approved projects.
3. What is the progress of the minor improvement works in Lai Chi Wo and Sha Lo Tung?
4. The provision for 2023-24 is \$30.8 million higher than the revised estimate for last year. This is mainly due to the increased cash flow requirement for the non-recurrent item "CCO". Please explain the relevant details.

Asked by: Hon CHAN Pui-leung (LegCo internal reference no.: 35)

Reply:

1. For the coming year, the Countryside Conservation Office (CCO) will continue to take forward countryside minor improvement works, which include repairing the footpaths in Sha Lo Tung, Tai Po; conducting advance works for the public sewerage system in Lai Chi Wo and the flood control study for the area; introducing smart/low-carbon public toilets; and to work with relevant bureaux/departments with a view to formulating a set of licensing requirements and procedural guidelines for guesthouses and catering business in countryside areas. In addition, the CCO will continue to take forward countryside conservation and revitalisation projects ranging from natural environment and ecological habitats to historical and cultural heritage under the Countryside Conservation Funding Scheme (CCFS).

The staff establishment of the CCO for 2023-24 includes 22 civil service posts, involving an expenditure of about \$17 million. The estimated expenditure of the CCFS is about \$80 million.

2. As at end-2022, the CCFS has approved a total of 33 projects, involving a total subsidy of about \$165 million. The details are as follows:

Type of subsidised projects	Number of approved projects	Subsidy amount
Nature Conservation Management Agreement Projects	9	\$106 million
Projects regarding Formulation of Proposals on Restoration of Built Heritage	6	\$16 million
Cultural Rehabilitation/Revitalisation Projects	3	\$6.7 million
Projects regarding Research Activities on Countryside Conservation and Revitalisation	15	\$36.8 million

The abovementioned projects covered a wide variety of aspects ranging from natural environment and ecological habitats to historical and cultural heritage. Examples of such projects included ecologically friendly farming and maintenance of habitat diversity; organisation of theatrical performances with countryside cultural elements; study and development of a countryside revitalisation model led by the village community and villagers; and the setting up of an information platform on countryside conservation. The funded projects have been making good progress. Over 1 000 activities related to countryside natural habitats and historical and cultural heritage have been organised by recipient organisations, attracting over 300 000 participants.

3. The CCO will continue to work with relevant government departments to take forward countryside minor improvement works in Lai Chi Wo and Sha Lo Tung. Amongst them, the eco-smart toilet in Lai Chi Wo is expected to be completed by mid-2023; and pre-condition surveys for refurbishment of the toilet in Sha Lo Tung have also been completed, with the refurbishment works scheduled for completion within 2024. The CCO has also commenced studies on the feasible options for improving the public sewage collection, treatment and disposal systems, drainage system and farmland irrigation facilities in Lai Chi Wo village. In addition, the CCO will adopt green building design for the construction of Visitor Facility cum Management Office in Sha Lo Tung to promote its ecological values and conservation. Pre-construction works and preliminary design are in progress, and the works are expected to be completed in 2025.
4. The provision for the CCO for 2023-24 is higher than the revised estimate for 2022-23. This is mainly due to the continuous increase in the number of projects expected to be approved and the amount of funding required for the approved projects under the CCFS. Members of the public may search for further information on the projects on the relevant website ([https://www.eeb.gov.hk/en/conservation/ccfs/ccfs\\_main.html](https://www.eeb.gov.hk/en/conservation/ccfs/ccfs_main.html)).

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)124**

**(Question Serial No. 1346)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is mentioned in the Budget that the Government will earmark \$200 million under the New Energy Transport Fund for progressively commencing trials of hydrogen fuel cell (HFC) electric double-deckers and heavy vehicles within this year in collaboration with franchised bus companies and other stakeholders to fully assess their operational feasibility under local circumstances. In this connection, please inform this Committee of the following:

- (1) What are the details of the trial scheme?
- (2) How will the earmarked funding of \$200 million be allocated to HFC electric double-deckers and heavy vehicles for trials?
- (3) As the existing legislation restricts the trials of HFC vehicles, how will the Administration allow such vehicles on the road for test run when launching the trials of HFC electric double-deckers and heavy vehicles?
- (4) It is learnt that the Government will also provide hydrogen refilling stations to test out the operation and safety of hydrogen refilling technology. How many hydrogen refilling stations have been initially planned to be provided? What are the locations involved and when are they expected to be provided?

Asked by: Hon CHAN Siu-hung (LegCo internal reference no.: 26)

Reply:

- (1)-(2) At present, hydrogen fuel cell (HFC) heavy vehicles are still at the early stage of development, and resources are being invested in research and development, operational trials and construction of ancillary infrastructure worldwide. To keep up with the development trend and the demand for ancillary facilities for HFC vehicles, the Environment and Ecology Bureau is leading an inter-departmental working group (IWG) to progressively commence the trials of HFC double-deckers and heavy vehicles in phases having regard to local circumstances. In the meantime, the IWG will also review and assess applications for trial projects on hydrogen fuel technology, and advise on aspects such as safety and planning.

Due to the substantial price difference between HFC double-deckers and heavy vehicles and their conventional counterparts, as well as a high upfront capital expenditure to procure hydrogen supply equipment, it will certainly be difficult for the trial projects to be implemented in the short run without government subsidies. Therefore, we have earmarked \$200 million under the New Energy Transport Fund for subsidising the procurement and operation of HFC vehicles, the installation of hydrogen refilling facilities, and other associated costs such as the costs for collecting and analysing trial data. We will subsidise the trial of HFC double-deckers and heavy vehicles on a project basis. It is anticipated that the first funding case will be approved in the third quarter of this year, hence a breakdown of the exact amount and expenditure is not available at this moment.

- (3)-(4) While pushing forward the trial of HFC double-deckers and heavy vehicles, the IWG will also conduct risk assessments on hydrogen refilling stations, the arrangements of hydrogen supply and HFC vehicles on road, etc., as well as review relevant regulations, standards and technical guidelines, with a view to preparing for the establishment of a legal framework for the local use of hydrogen fuel. The IWG will review and assess applications for trial projects on hydrogen fuel technology before the completion of abovementioned tasks, and advise on aspects such as safety and planning, so that the relevant trades can commence trials on hydrogen fuel technology as soon as possible.

As at the end of February 2023, the IWG Secretariat has received 8 trial applications in total, involving various areas such as HFC double-deckers, hydrogen refilling station, hydrogen transportation and electricity generation from HFCs. The IWG is liaising closely with the applicants of the trial projects to study the feasibility of providing hydrogen refuelling facilities at suitable locations (including franchised bus depots) on Hong Kong Island, in Kowloon and the New Territories, as well as discussing detailed arrangements for the trial projects to facilitate the phased commencement of the trial projects in the second half of 2023. With the results and data gathered from the trials of HFC vehicles, the Government will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)125**

**(Question Serial No. 1351)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (6) Climate Change

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is stated in the Budget that resources have been allocated in support of efforts to address climate change over the past few years. Last year, the Government injected an additional funding of \$200 million into the Green Tech Fund (GTF), doubling the provision to \$400 million. The GTF received overwhelming responses from applicants, and 22 projects from local universities, designated public research institutes and private enterprises have been approved, involving a total subsidy of about \$100 million. These research projects involve technologies for the cell storage and generation of hydrogen fuel; manufacturing of biochar-enhanced construction materials; and air cleaning system for reducing roadside air pollution.

In this connection, please inform this Committee of the following:

- (1) In the past financial years, how many applications have been received by the GTF in total? Among these applications, what were the numbers of applications approved and rejected respectively? What were the main reasons for rejecting the applications?
- (2) How many of the approved projects have been completed? What are their research and development outcomes?

Asked by: Hon CHAN Siu-hung (LegCo internal reference no.: 31)

Reply:

In 2020, the Government set up the Green Tech Fund (GTF) to provide better and more focused funding support for research and development (R&D) projects which can help Hong Kong decarbonise and enhance environmental protection. The Government has injected a total of \$400 million into the GTF to subsidise R&D projects in the priority areas such as net-zero electricity generation, energy saving and green buildings, green transport and waste reduction. All applications are carefully deliberated and considered by the GTF Assessment Committee which comprises members from the academia, the industry and green groups.

The first and second rounds of applications for the GTF ended in February 2021 and February 2022 respectively. A total of 288 applications were received. 22 projects involving a total grant of around \$100 million were approved following careful deliberation by the GTF Assessment Committee. The approved projects cover a wide range of areas, including technologies for the cells storage and generation of hydrogen fuel; manufacturing and application of biochar-enhanced construction materials; and air cleaning system for reducing roadside air pollution, etc. The GTF's Guide to Applicants provides guidance on application and sets out the assessment criteria, including potential contributions to decarbonisation and environmental protection (a weighting of 40%), technical and management capability (a weighting of 30%), plan for further development of project deliverables (a weighting of 20%) and financial considerations (a weighting of 10%). The Guide to Applicants has been uploaded to the GTF webpage ([www.gtf.gov.hk](http://www.gtf.gov.hk)), and the aforesaid assessment criteria are applicable to applications from both public institutes and private companies. Applications may not receive funding support for different reasons. According to our experience in handling the first and second rounds of applications, the main reason was that the project's potential contribution to decarbonisation and environmental protection was not significant. Other reasons include applicants' failure to submit sufficient information to support their technical and management capability, and the failure to provide any plan for further developing the project deliverables. All unsuccessful applicants were informed of the reasons for not being granted funding support.

The R&D projects approved in the first and second rounds of GTF applications have commenced progressively, and no project has been completed for the time being. Upon the completion of the funded projects, we will share and promote the project outcomes on the GTF website to encourage further development and practical application.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)126**

**(Question Serial No. 2957)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (000) Operational expenses

Programme: (-) Not specified

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is mentioned in paragraph 158 of the Budget Speech that the Environment and Ecology Bureau has set up the Office of Climate Change and Carbon Neutrality (Climate Change Office) in January this year to strengthen co-ordination and promote deep decarbonisation. A Council for Carbon Neutrality and Sustainable Development will also be formed to advise on decarbonisation strategies. In this connection, please advise:

- (1) of the staff establishment, salaries expenditure and operating expenditure of the Climate Change Office in 2022-23, and the estimated staff establishment, salaries expenditure and operating expenditure of the Climate Change Office in 2023-24, respectively;
- (2) of the advice mainly provided by the Climate Change Office on decarbonisation strategies in 2022-23; and
- (3) whether the Administration has formulated criteria for assessing the performance of the Climate Change Office; if yes, of the details; if no, of the reasons.

Asked by: Hon CHAN Wing-kwong (LegCo internal reference no.: 24)

Reply:

To reduce Hong Kong's carbon emissions by 50% from the 2005 level before 2035 in order to achieve the goal of carbon neutrality before 2050, the Government will adopt a whole-government approach and encourage the entire community to achieve low-carbon transformation. We will also endeavour to engage the local, Mainland and overseas authorities and stakeholders for the purpose of driving low-carbon development.

To implement the above tasks, the Environment and Ecology Bureau (EEB) set up the Office of Climate Change and Carbon Neutrality (Climate Change Office) in January 2023 to strengthen coordination and promote deep decarbonisation. The Climate Change Office is responsible for taking forward and coordinating the Government's strategies, policies and action plans for combating climate change; providing support for the inter-departmental Steering Committee on Climate Change and Carbon Neutrality and the Council for Carbon Neutrality and Sustainable Development which will soon be established; stepping up

exchange and collaboration with the local, Mainland (especially the Guangdong-Hong Kong-Macao Greater Bay Area (GBA)) and overseas authorities and stakeholders on various issues relevant to low-carbon development; coordinating and overseeing the operation of the Green Tech Fund (GTF); and launching publicity and public education campaigns to raise public awareness of and support for climate actions. The Climate Change Office is also responsible for assisting in overseeing the housekeeping of the Hong Kong Observatory.

The major work of the Climate Change Office in 2022-23 includes preparing for the establishment of a new Council for Carbon Neutrality and Sustainable Development, continuous promotion of the GTF, conducting preparatory work for the launch of publicity programmes on carbon neutrality, monitoring the work of bureaux and departments in implementing the Hong Kong's Climate Action Plan 2050, as well as promoting collaboration at regional (including collaboration with cities in the GBA) and international levels. The Climate Change Office will endeavour to take forward the work of combating climate change and achieving carbon neutrality in accordance with the indicators (including key performance indicators (KPIs)) for environment-related specified tasks set out in the Chief Executive's Policy Address.

The estimated expenditures for the work relevant to climate change in 2022-23 and 2023-24 are about \$127 million and \$147 million respectively, which will be used for covering the expenditure on projects under the GTF and the Sustainable Development Fund, as well as supporting all the work of the Climate Change Office. The above work will be absorbed by the existing staff establishment, and we do not have the relevant breakdown.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)127**

**(Question Serial No. 2139)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (5) Nature Conservation

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Environmental Assessment

As the development of the Northern Metropolis involves environmental assessment, please advise this Committee of the following:

1 Situated along the 30 km coast line between Shenzhen and Hong Kong, the Northern Metropolis covers the jointly developed Boundary Control Points (BCPs) Economic Belt and the first batch of innovative and technology (I&T) projects such as the San Tin Technopole. For development projects near the BCPs which involve environmental assessment work, what mechanism has been put in place to notify and coordinate with the Shenzhen authorities?

2 Feasibility studies on the wetlands and conservation parks in the Northern Metropolis are being conducted. As Hong Kong is part of the Greater Bay Area (GBA), will the studies duly consider the relation between the development of the GBA and the Northern Metropolis, as well as the synergy effects of existing conservation areas in neighbouring cities and local conservation efforts?

3 Further to the above question, being located on the first batch of sites for I&T use in the Northern Metropolis, the San Tin Technopole will be surrounded by wetlands and conservation areas. Regarding the relation between development and conservation, does the Government have any stance and will it strike a balance between the two?

Asked by: Hon CHAN Yuet-ming (LegCo internal reference no.: 22)

Reply:

1. Hong Kong and Shenzhen have all along maintained liaison and co-operation on various issues. To take forward works projects of the Northern Metropolis, the

two places have set up the Joint Task Force for Northern Metropolis Development (Task Force) under the Guangdong-Hong Kong and Hong Kong-Shenzhen co-operation mechanism, so as to exchange views on matters of mutual concern, including environmental matters. The Task Force held its first meeting in February this year. In addition, environmental impact assessments (EIA) will be carried out for the Northern Metropolis works projects in a comprehensive manner according to the requirements under the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499), and appropriate mitigation measures will be formulated based on the EIA results, so as to ensure that the projects and their implementation comply with the EIAO and relevant statutory requirements. The HKSAR Government will also communicate and co-ordinate with the Shenzhen authorities through the established mechanism if necessary (e.g. joint development of the Boundary Control Points Economic Belt).

- 2 and 3. The Northern Metropolis has diverse habitats, among which the wetland at Deep Bay/Shenzhen Bay is on the List of Wetlands of International Importance under the Ramsar Convention, and is a habitat of conservation importance in the entire South China region, with close relation to the habitats in the Guangdong-Hong Kong-Macao Greater Bay Area and the adjacent Shenzhen.

The Government is exploring the implementation of a New Proactive Conservation Policy under the framework of the Northern Metropolis Development Strategy to gradually resume private wetlands and fish ponds with ecological value within the Northern Metropolis, and develop a Wetland Conservation Parks (WCP) System in phases, with a view to enhancing the ecological value and biodiversity of these areas, as well as achieving the dual objectives of conservation and development. Meanwhile, through the establishment of the WCP System and the implementation of proactive management measures, we aim to conserve important habitats in the area more effectively; create synergy effect with the mangroves and wetlands along the northern shore of the Shenzhen Bay; and form a more comprehensive ecological corridor and biodiversity conservation network, thereby enhancing the capacity and quality of the overall ecological environment in the area. To this end, the Agriculture, Fisheries and Conservation Department is taking forward the Strategic Feasibility Study on the Development of WCP System under the Northern Metropolis Development Strategy at full steam, to determine the exact locations, areas and management model, etc. of the proposed parks to be developed under the WCP System. The study is expected to be completed by the end of 2023 at the earliest.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)128**

**(Question Serial No. 2140)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (5) Nature Conservation

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Ecological Corridor between Hong Kong and Shenzhen

As announced by the Government, the Wutong Mountain in Shenzhen and the Robin's Nest in Hong Kong will form an ecological corridor between Hong Kong and Shenzhen. Regarding this latest development, please advise this Committee of the following:

1. The map of the Robin's Nest Country Park is being gazetted, and the extension works of the North East New Territories Landfill, which adjoin the Robin's Nest, are underway in the vicinity. Will the operation of the landfill affect the progress of the project?
2. Further to the above question, what are the improvement proposals and follow-up actions?

Asked by: Hon CHAN Yuet-ming (LegCo internal reference no.: 23)

Reply:

The Agriculture, Fisheries and Conservation Department gazetted in December 2022 the proposed designation of about 530 hectares of land as the Robin's Nest Country Park (RNCP) and the draft map of the proposed RNCP for public inspection. The inspection period ended in January this year and the whole statutory process is expected to be completed in 2024. By then, the RNCP and the neighbouring Shenzhen Wutong Mountain Scenic Area will form a cross-border ecological corridor between Hong Kong and Shenzhen, thereby facilitating the ecological conservation work for both areas.

The boundary of the North East New Territories Landfill and its extension is located at more than 150 metres from the proposed RNCP, and it does not fall within the ambit of the proposed RNCP. The feasibility and the environmental impact assessment (EIA) report of the North East New Territories Landfill Extension have been approved in accordance with the Environmental Impact Assessment Ordinance. According to the EIA report, after the implementation of the proposed mitigation measures such as the extensive plantation of tree

seedlings and the appropriate progressive restoration of the operational areas where landfilling is completed, the environmental impacts of the project (including the natural environment in the Robin's Nest area) will be at an acceptable level. The relevant requirements stipulated in the EIA report and the environmental permit have already been incorporated into the extension contract, and the effectiveness of various mitigation measures will be assured in accordance with the environmental monitoring and audit programme proposed in the EIA report. It is expected that the operation of the landfill will not affect the work progress of designating the Robin's Nest area as a country park.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)129**

**(Question Serial No. 2141)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (5) Nature Conservation

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Conservation of the Northern Metropolis

Regarding the conservation arrangements for the Northern Metropolis, please inform this Committee of the estimated amount of land to be resumed for the proposed wetlands or conservation park in the Northern Metropolis, the progress of the plan, as well as the estimated amount of public funds to be involved.

Asked by: Hon CHAN Yuet-ming (LegCo internal reference no.: 24)

Reply:

The Government is exploring the implementation of a New Proactive Conservation Policy under the framework of Northern Metropolis Development Strategy to gradually resume some private wetlands and fish ponds with ecological value, and develop a Wetland Conservation Parks (WCP) System in phases in the Northern Metropolis. The initiative seeks to enhance the ecological value and biodiversity, as well as increase the environmental capacity for the development of the Northern Metropolis, thereby achieving the dual objectives of conservation and development.

The Agriculture, Fisheries and Conservation Department is taking forward the Strategic Feasibility Study on the Development of WCP System Under the Northern Metropolis Development Strategy in full steam, which is expected to be completed by the end of 2023 at the earliest. The study report will determine the exact locations, areas and management model, etc. of the proposed parks to be developed under the WCP System. By then, the Government will have more specific information and a clearer direction on the land resumption involved.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)130**

**(Question Serial No. 2174)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Feed-in Tariff Scheme

Since the introduction of the Feed-in Tariff (FiT) policy in 2018 and the amendment on household amenity features of small houses, which allows the installation of solar panel racks on rooftops, many people have been attracted to participate in the FiT scheme. In this connection, please advise this Committee of the following:

1. There are views that due to the capacity constraint of the rural electricity grid, it is not possible for individual villages to accommodate the generating capacity arising from multiple FiT applications at the same time, otherwise the grid will become unstable. Is the Government aware of the relevant situation? Is this situation contrary to the original intent of the FiT policy?
2. At present, a solar panel rack included in the household amenity features of small houses is only allowed to cover 50% of the rooftop area. Is it possible to allow the coverage to be extended to a larger area or to places other than the rooftops?

Asked by: Hon CHAN Yuet-ming (LegCo internal reference no.: 33)

Reply:

1. To promote renewable energy (RE), the Government together with power companies have introduced the Feed-in Tariff (FiT) Scheme under the Scheme of Control Agreement since the end of 2018, allowing the private sector to sell the renewable power energy generated to the power companies at a rate higher than the normal electricity tariff rate, thereby providing financial incentives to invest in RE. Considering that the renewable power energy generated by distributed RE systems under the FiT Scheme involves the power companies' expenditure on purchasing power, we also need to balance the impact of FiT on tariff.

In order to maintain a safe and reliable power supply, if the capacity of an individual RE system under application exceeds the grid capacity of the district concerned, the power companies will, depending on the circumstances, liaise with the applicant on appropriate and feasible technical solutions, including connection of the RE system to the grid within the grid capacity. In addition, the power companies will continue to explore different ways to flexibly increase the grid capacity, with a view to enabling more systems to get connected to the grid.

While creating favourable conditions to encourage the private sector to develop RE, the Government will continue to take into account the 4 energy policy objectives of safety, reliability, affordability and environmental protection performance, with a view to ensuring that electricity is generated safely, reliably and affordably to meet the needs of the community, as well as minimising the environmental impact of electricity generation.

2. The Government relaxed the restrictions on the installation of solar power systems on rooftops of New Territories Exempted Houses (also known as “village houses”) in October 2018. For village houses exempted under the Buildings Ordinance (Application to the New Territories) Ordinance (Cap. 121), if the solar power system installed on the rooftop covers not more than half of the roofed-over area of the village house, then prior approval of the Lands Department or the Buildings Department (BD) is not required. In formulating the above requirements, the Government has taken into account the building and fire safety factors, as well as the enhanced enforcement strategy currently in place against unauthorised building works in New Territories Exempted Houses, so that residents can continue to enjoy the use of rooftops for legitimate purposes while coping with climate change.

Besides, we have been studying the provision of clearer guidelines and streamlining of the procedures for installing RE systems by the private sector. For instance, in October 2022, the Town Planning Board updated the assessment criteria for considering applications for solar power system made under section 16 of the Town Planning Ordinance (Cap. 131), so as to consider planning applications on installing solar power systems in various land zones submitted by members of the public. We believe that it can encourage the private sector to develop RE in more spaces with greater potential.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)131**

**(Question Serial No. 1177)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (-) Not specified

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

With regard to the promotion of green research development, the Government set up the Green Tech Fund (GTF) in 2020 and increased the provision for the GTF to \$400 million last year. So far, 22 projects from local universities, public research institutes and private enterprises have been approved. In this connection, please advise of the following:

1. In the new round of applications with the deadline on 14 March this year, what are the total number of project applications received, the major technology areas involved and the funding amounts requested? What are the respective funding amounts granted, to be granted and balance of the GTF so far?
2. Since the launch of the GTF, has the Government fully reviewed its operation and effectiveness, including the vetting process, assessment criteria, eligibility criteria, funding scope, funding amount, etc.? If yes, what are the results and enhancement measures?
3. Apart from the research and development (R&D) funding support, please advise of the specific support provided by the GTF in areas such as trial and fine-tuning, as well as marketing and sales upon the productisation of R&D achievements, including whether the Government has taken the lead to procure these green technology products, and how to promote such products to the trades afterward.
4. What is the amount of resources to be allocated by the Government to procure local green technology products in 2023-24? What major technology areas and how many projects are expected to be involved?

Asked by: Hon CHIU Duncan (LegCo internal reference no.: 29)

Reply:

In 2020, the Government set up the Green Tech Fund (GTF) to provide better and more focused funding support for research and development (R&D) projects which can help Hong Kong decarbonise and enhance environmental protection. The Government has injected a total of \$400 million into the GTF to support R&D projects in the priority areas such as net-zero electricity generation, energy saving and green buildings, green transport and waste reduction. Projects of designated local public research institutes and R&D centres will be

fully funded, while projects of local private research institutes will receive grants on a matching basis. The first and second rounds of applications for the GTF ended in February 2021 and February 2022 respectively. A total of 288 applications were received. Following careful deliberation by the GTF Assessment Committee, 22 projects from local universities, public research institutes and private enterprises have been approved, involving a total grant of about \$100 million. The approved projects cover a wide range of areas, including technologies for the cell storage and generation of hydrogen fuel; manufacturing and application of biochar-enhanced construction materials; and air cleaning system for reducing roadside air pollution, etc. The GTF is inviting a new round of applications before the deadline of 14 March this year. As at 7 March this year, the GTF Secretariat has received a total of 7 applications. According to our experience in handling the first and second rounds of applications, a majority of the applications would arrive just before the deadline. The GTF Secretariat will announce the number of applications received in the new round of applications in due course.

Two rounds of applications have been completed since the launch of the GTF. The GTF Secretariat will continue to review and optimise the operation and application procedures of the GTF in light of the experience gained from each round of applications. To encourage eligible institutes and companies to apply for the GTF and to help them better understand the assessment criteria, the GTF Secretariat would organise briefings when inviting applications. The briefings covered introduction to the GTF, application procedures, priority themes, assessment criteria, as well as briefings by members of the GTF Assessment Committee on the major considerations for assessing applications. Video recordings of the briefings have been uploaded to the GTF webpage for reference by members of the public and prospective applicants. The GTF Secretariat has been optimising the processing procedures. Apart from fully digitalising the submission of applications via the GTF website ([www.gtf.gov.hk](http://www.gtf.gov.hk)), the website also automatically reminds applicants to fill in all requested information to ensure the timely submission of sufficient information for the consideration of the GTF Assessment Committee. The GTF Secretariat has also provided an email address and an enquiry hotline for handling enquiries about applications for the GTF and collecting views from the public for the purpose of further improving the operation of the GTF. Upon the completion of the funded projects, we will share and promote the project outcomes on the GTF website to encourage further development and practical application.

The Government has led by example by adopting green procurement to promote environmental protection. The Government's Stores and Procurement Regulations require bureaux and departments to consider including or upgrading applicable green specifications in drawing up tender specifications, so as to allow for fair competition of compliant products and services on a cost-effective basis, thereby promoting green procurement while ensuring the prudent use of public funds. The Environment and Ecology Bureau has developed the green specifications and guidelines for the products and services commonly used by the Government after making reference to the practices and standards generally adopted in the market, and has provided training to frontline procurement staff, requiring bureaux and departments to practise green procurement in accordance with the relevant specifications. To promote green procurement, the Government has further expanded its green procurement list to cover more products and services by increasing the number of products and services from 150 to 183, as well as updating the relevant green specifications in 2021-22. At the same time, the Government will continue promoting green procurement by uploading the relevant information, such as the Government's latest green procurement list and the relevant

specifications, green procurement tips as well as the local and international best practices onto the Environmental Protection Department's website for public reference.

Bureaux and departments procured green products and services of over \$11.4 billion in total value from 2015 to 2021. The Government's procurement policy is to obtain goods and services at the best value for money through fair and open competition. We treat all tenderers equally. Suppliers from any regions are allowed to bid for government contracts on an equal basis so long as they can provide products fulfilling the green specifications. Procurement of products and services, including green technologies, will be handled by bureaux and departments themselves having regard to their actual needs.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)132**

**(Question Serial No. 2113)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (3) Sustainable Development

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is pleased to note that the Environment Branch will implement education and publicity programmes, including the School Outreach Programme and the School Award Programme during 2023-24. Please advise this Committee of:

1. the estimated numbers of schools and students participating in the School Outreach Programme;
2. the allocation of the expenditure for the above Programmes;
3. the teaching concept and teaching approach for the above Programmes.

Asked by: Hon CHU Kwok-keung (LegCo internal reference no.: 13)

Reply:

1. In the 2022/23 school year, the Sustainable Development School Outreach Programme (Outreach Programme) featured the themes of sustainable development and ecology. A total of 161 schools (84 secondary schools and 77 primary schools) have enrolled for 141 drama performances, 80 seminars and 114 workshops and field trips, with an estimated participation of about 53 000 teachers and students. The Outreach Programme for the 2023/24 school year will be open for enrolment in this mid-year.
2. In 2022-23, the expenditures for the Outreach Programme and the Sustainable Development School Award Programme (Award Programme) were about \$1.86 million and about \$120 000 respectively.

In 2023-24, the Environment and Ecology Bureau will continue to further promote the concept and practice of sustainable development among students through the Outreach Programme and the Award Programme. The estimated expenditure for the work in this aspect is about \$2.5 million, and the specific allocations will be subject to the actual needs of various programmes.

3. The Outreach Programme, with the sustainable development-related themes such as waste reduction and plastic-free, low-carbon lifestyle, climate change and natural resources, aims to promote the concept and practice of sustainable development among primary and secondary school students and, in tandem, foster their value of sustainable development through different types of seminars, workshops, field trips, interactive dramas and other activities on diverse topics with the integration of interactive learning approaches like case study, discussion, sharing, role play, presentation, etc. In the 2022/23 school year, the new topics for the activities included waste reduction and plastic-free, food cherisher, green living, etc., while the field trip locations included the EcoPark, O·PARK1 (Organic Resources Recovery Centre Phase 1), T·PARK, the GREEN@COMMUNITY Recycling Stations, the CLP Power Low Carbon Energy Education Centre, Hoi Ha Wan, the Ocean Park (for the educational programme on “Every Drop Counts”), the Kadoorie Farm and Botanic Garden, etc. As at February this year, about 22 000 teachers and students have taken part in various activities under the Outreach Programme.

The Award Programme aims to enable secondary school students to put into practice the sustainable development concept in schools and the community by encouraging the schools to join and organise the activities on sustainable development. Under the Award Programme, there are “Sustainable Development Community Project Award” and “Sustainable Development Participation Award” to recognise the schools’ efforts and contributions in promoting sustainable development in the campus and the community respectively. A wide variety of innovative activities were held by the schools. For instance, an online virtual reality platform was designed for all local primary school students to look for the green facilities such as photovoltaic panels and food waste grinders in their schools, thereby understanding the importance of renewable energy and waste reduction. In addition, the “Water Conservation Carnival” was held to raise the community awareness of the importance of water conservation and water resources through multimedia games, educational videos and exhibitions, etc. Furthermore, the schools held, amongst others, the exhibitions and game booths on waste reduction and plastic-free, food cherisher and green living in the campus and the community as well.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)133**

**(Question Serial No. 2116)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is a well-known fact that district cooling can save energy. As mentioned by the Administration in its paper, it will accelerate the incorporation of District Cooling System (DCS) projects in New Development Areas. Please advise this Committee whether the Administration will consider using the opportunity of redeveloping old districts to establish district cooling facilities and techniques in the redevelopment process, so that commercial and public facilities in these districts will be equipped with basic district cooling facilities; and whether the Administration will consider extending the DCS to public housing.

Asked by: Hon CHU Kwok-keung (LegCo internal reference no.: 19)

Reply:

The Government has been adopting a multi-pronged approach in planning for energy conservation, which includes accelerating the implementation of District Cooling System (DCS) in New Development Areas (including the Northern Metropolis), so as to promote energy conservation from the infrastructure level.

Considerations for the implementation of DCS include whether there will be sufficient cooling demand (e.g. the air-conditioned floor areas of non-residential buildings, whether buildings served by the DCS are clustered), technical feasibility (e.g. the space for laying underground chilled water pipes, hindrance posed by public utilities and drainage pipelines, the environmental impacts of the construction works, the availability of cooling water required for the cooling process in the district), and financial viability (including the financial viability of the construction of DCS, the DCS tariffs required), etc. Incorporating DCS in redevelopment projects for old districts involves wider and more complicated considerations. Apart from the need to have suitable sites for constructing cooling facilities, as extensive laying of underground chilled water pipes is required, we have to take into consideration the impacts on people's livelihood (including how to reduce inconvenience brought to nearby residents and the impacts on the daily routines of the community). We have to assess the

existing dense public utilities as well as the technical feasibility of constructing the DCS in their service areas.

The DCS is designed for buildings with central air-conditioning systems. In general, residential buildings are not equipped with central air-conditioning systems and do not require year-round cooling services. Moreover, it is difficult to estimate the cooling consumption as it varies with the living habits of different residential users. As such, the environmental performance and cost effectiveness of the DCS are low. The Government will therefore not consider implementing the DCS in residential buildings for the time being.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)134**

**(Question Serial No. 2117)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (5) Nature Conservation

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Administration stated that it would oversee the strategic feasibility study on the establishment of the wetland conservation park system proposed in the Northern Metropolis Development Strategy for exploring the implementation of a New Proactive Conservation Policy to achieve the dual objectives of meeting both conservation and development needs in the Northern Metropolis. Please advise this Committee of the following: The Administration puts the focus of its conservation work on the areas of country parks and wetland parks, but in fact there are many green areas with diversified ecosystems in the Northern Metropolis. What measures does the Administration have to protect the ecosystems of such green areas for the purpose of nature conservation?

Asked by: Hon CHU Kwok-keung (LegCo internal reference no.: 23)

Reply:

To increase the environmental capacity for the development of the Northern Metropolis and achieve the dual objectives on both conservation and development, the Government is exploring the implementation of a New Proactive Conservation Policy. Under such policy, we will gradually resume some private wetlands and fish ponds with ecological value, and develop a Wetland Conservation Parks System in phases, thereby enhancing the ecological value and biodiversity of the area concerned.

In addition, the relevant works for the Northern Metropolis have to undergo comprehensive environmental impact assessments (EIA) according to the requirement under the Environmental Impact Assessment Ordinance (Cap. 499) to address the potential environmental impact of the projects (including the ecological impact). Appropriate mitigation measures shall be proposed to protect the ecological habitats affected by the projects. The EIA process is open and transparent. In deciding whether to approve an EIA report, the Environmental Protection Department (EPD) will, in accordance with the statutory requirements, take into account views of the public and the Advisory Council on the Environment. Approved EIA reports and environmental permits (including the

requirements set out for the projects, such as the mitigation measures for the protection of the ecological habitats, etc.) will be uploaded to the EPD's website for inspection by the public.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)135**

**(Question Serial No. 2298)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

One of the roles of the Environment and Ecology Bureau is to promote competition in the local fuel market, but over the years people have queried why the prices set by oil companies are almost the same. Please advise this Committee of the measures to be adopted by the Administration to lower the local fuel price level upon the allocation of additional resources.

Asked by: Hon CHU Kwok-keung (LegCo internal reference no.: 16)

Reply:

The supply of auto-fuels in Hong Kong has all along been operated according to the principles of a free market economy. Their retail prices have also been determined by individual oil companies having regard to commercial principles, and the Government would not intervene. The role of the Government is to ensure that the quality of fuels meets standards and that their supply is reliable and safe. We understand the public's concern about auto-fuel prices, therefore we endeavour to maintain an open market and remove barriers to market entry, and at the same time enhance the transparency of the prices of auto-fuel products so that consumers can make choices that suit their needs, thereby promoting competition.

The Government has been monitoring the changes in local retail prices of auto-fuels and comparing them with the trend movements of international oil prices (benchmarked against the Singapore free-on-board prices, i.e. Means of Platts Singapore (MOPS), for unleaded petrol and motor vehicle diesel). According to our observation, the trend movements of local retail prices of auto-fuels and those of import prices and MOPS are generally in line. We have published the trend movements of local auto-fuels import prices, retail prices and MOPS on the website of the Environment and Ecology Bureau (EEB) on a weekly basis, with linkage to the statistical information on the import and retail prices of major oil products, so as to enhance the transparency of the prices of auto-fuel products and strengthen market competition.

At present, as local oil companies generally offer various kinds of discounts and concessions to attract customers, the actual price paid by customers is often lower than the retail price and is also often not the same, suggesting that competition does exist in the market. According to our understanding, the walk-in discount and the membership card discount offered by some oil companies have increased from \$0.9 per litre in 2019 to a maximum of \$6.0 per litre recently; the number of days on which the special discount is offered has also increased from 1 day a week to 2 to 5 days a week.

In addition, the EEB has commissioned the Consumer Council to launch the “Oil Price Watch” website and mobile application since 2020, so that consumers can obtain more comprehensive discount information more easily and compare the net retail prices (i.e. retail prices net of walk-in discounts) among different retailers to make informed choices that suit their needs, thereby enhancing price competition. According to our rough estimate, by leveraging the information available in the “Oil Price Watch”, drivers using unleaded petrol and diesel could enjoy extra fuel discounts of about \$4.2 per litre and \$2.6 per litre respectively upon each refuelling in last year, which were equivalent to savings of about 15% of their fuel costs.

With the increasing popularity of electric vehicles (EV), the sales volume of auto-fuels is expected to decline. In facing changes to the future development of the auto-fuel market, we will closely monitor the progress of popularisation of EV as well as its impact on the auto-fuel market.

The relevant work is an integral part of the EEB’s work and the expenditure is absorbed by its existing resources.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)136**

**(Question Serial No. 2299)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the local renewable energy (RE), most of the existing public housing estates are yet to be provided with a large number of RE facilities at present. Please advise this Committee of the measures to be taken to encourage the Government and public organisations to install RE facilities including but not limited to solar power generation facilities in the existing buildings?

Asked by: Hon CHU Kwok-keung (LegCo internal reference no.: 17)

Reply:

The Government is grappling with Hong Kong's geographical and environmental constraints in driving the development of renewable energy (RE) in accordance with the Hong Kong's Climate Action Plan 2050.

The Government has been leading by example in optimising the favourable conditions of premises and developing RE, including raising the requirements of applying RE technologies in new government buildings, and developing large-scale solar energy generation and waste-to-energy projects at suitable venues. For instance, the Environmental Protection Department has commenced the operation of T • PARK (sludge treatment facility) and O • PARK1 (Organic Resources Recovery Centre Phase 1), and is constructing O • PARK2 (Organic Resources Recovery Centre Phase 2) and I • PARK1 (Integrated Waste Management Facilities Phase 1). In addition, the Water Supplies Department plans to install a 5 MW floating solar energy generation system at Plover Cove Reservoir and introduce high-efficiency battery storage technology on a pilot basis to better utilise the electricity generated by large-scale solar energy generation systems at reservoirs, and develop a 10 MW solar farm at the South East New Territories Landfill in Tseung Kwan O.

Since 2017-18, the Government has earmarked a total of \$3 billion to install small-scale RE facilities on government premises. The Electrical and Mechanical Services Department

(EMSD) and the Architectural Services Department have invited departments to submit their plans for RE projects. About \$1.9 billion have been approved for about 170 projects so far, including installation of solar energy generation systems at government offices, government quarters, schools, recreational grounds-cum-rest gardens, reservoirs and pedestrian links, as well as installation of waste-to-energy and hydro power systems at multiple sewage treatment plants. Among the approximately 170 approved projects, about 90 projects have been completed. The remaining ones are planned to commence in the coming year.

Furthermore, we will continue our collaboration with the EMSD to regularly organise activities such as seminars and briefings to introduce to relevant stakeholders (including public organisations, schools and welfare non-governmental organisations (NGOs)) the installation of RE facilities and the Feed-in Tariff Scheme, so as to encourage different sectors to make optimum use of their premises for the development of RE. At the same time, the Government has also introduced a series of supporting measures. For instance, the Environment and Ecology Bureau (EEB) and the Development Bureau introduced a set of measures in April last year to facilitate the installation of solar energy generation systems not exceeding 3 metres in height in open car parks by applicants, including public organisations, who can also benefit from the Buildings Department's facilitation measures. Among these projects, some have already received policy support from the EEB and are anticipated to commission within this year, thereby providing practical reference for similar solar energy projects in open car parks. The EMSD has also launched Solar Harvest since 2019-20 to install small-scale solar energy generation systems for eligible schools and welfare NGOs free of charge. Besides, it plans to install 150 solar energy generation systems in 2023-24. In the past, the EMSD would install a small-scale solar energy generation system with a generating capacity of about 10 kW on the rooftops of participating schools and NGOs. To further promote the development of RE, starting from 2023-24, the EMSD will, subject to the conditions of the premises, install up to 3 electricity generation systems for participating schools and welfare NGOs.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)137**

**(Question Serial No. 2593)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

With regard to energy conservation, the Environment and Ecology Bureau will implement the fourth phase of the Mandatory Energy Efficiency Labelling Scheme in the new financial year to cover more types of products. However, the reference value of energy labels tends to decrease as production technology of electrical products constantly advances with time. Please inform this Committee of the following: Under what circumstances will the current data for energy labels be updated? What measures has the Administration put in place to actively adjust the data for energy labels, so as to induce producers to develop electrical appliances with higher energy efficiency?

Asked by: Hon CHU Kwok-keung (LegCo internal reference no.: 20)

Reply:

To further encourage product suppliers to provide more energy-efficient products to consumers, the Electrical and Mechanical Services Department (EMSD) will continue to review the energy efficiency grading standards of prescribed products under the Mandatory Energy Efficiency Labelling Scheme (MEELS). After inclusion of the products in the MEELS, the EMSD has reviewed and upgraded the energy efficiency grading standards of room air conditioners, refrigerating appliances, washing machines, dehumidifiers and compact fluorescent lamps (CFLs), so as to promote the development and sale of products with higher energy efficiency by product suppliers. The EMSD will keep up its efforts in this respect.

The EMSD will also continue to review the scope of the MEELS and make reference to various factors, including the Mainland and overseas experience, availability of international testing standards, availability of testing laboratories in the market, energy consumption and potential energy saving of the products, the types of products commonly used by consumers, etc., before deciding whether to include more products in the MEELS. The EMSD will also

consider expanding the scope of the MEELS to cover non-domestic or commercial appliances.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)138**

**(Question Serial No. 2997)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

With regard to the installation of additional charging facilities for electric vehicles (EVs) and the expansion of the EV charging network, please advise this Committee of the following:

1. Given that the charging standard for EVs in the Mainland is different from that of Hong Kong (i.e. Hong Kong follows the European standard of Type 2/CCS 2, while China has its own standard of GB/T), and there is no direct current adapter available at present to convert CCS 2 into GB/T, does the Administration have any plan to earmark resources to provide cross-boundary EV owners between the Mainland and Hong Kong with charging facilities suitable for their use at road-based land crossings (including the Hong Kong-Zhuhai-Macao Bridge Port, the Heung Yuen Wai Control Point, etc.)? If yes, what are the details and the estimated expenditure?
2. In 2019, the Government allocated \$120 million to install more EV public charging facilities at government public car parks, including a plan to install over 1 000 additional medium chargers for EV by 2022. Has the plan been completed? If yes, has the next target been set? If not, by how many does the current number fall short of the target?
3. Regarding private charging facilities, according to the Hong Kong Roadmap on Popularisation of Electric Vehicles announced in March 2021, the Government has set the target of having at least 150 000 parking spaces in private residential and commercial buildings equipped with EV charging infrastructure by 2025. Apart from providing gross floor area concessions to car parks in new buildings that have EV charging infrastructure installed, does the Government have any planning to introduce other enhanced measures to further encourage the installation and addition of EV charging facilities for better achieving the popularisation of EVs?

Asked by: Hon HO King-hong, Adrian Pedro (LegCo internal reference no.: 3)

Reply:

1. At present, the car parks at the Hong Kong-Zhuhai-Macao Bridge Port and the Heung Yuen Wai Control Point in Hong Kong are equipped with electric vehicle (EV) chargers of different charging standards (including the national standard of GB/T and the

European standard of IEC Type 2) for use by cross-boundary EV owners between the Mainland and Hong Kong. The Environmental Protection Department will discuss with relevant departments to further enhance the charging arrangement and supporting facilities for cross-boundary EVs.

2. 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 overall market development of public charging services.
3. Apart from providing gross floor area concessions to car parks in new buildings, the Government also launched the \$2 billion EV-charging at Home Subsidy Scheme (EHSS) in October 2020 to promote the installation of EV charging-enabling infrastructure (EVCEI) in car parks of existing private residential buildings and estates. An additional funding of \$1.5 billion was further injected into the EHSS in the 2022-23 Budget, with the target of having the installation of EVCEI for some 140 000 parking spaces in about 700 car parks of residential estates completed by 2027-28 so as to further promote the popularisation of electric private cars.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)139**

**(Question Serial No. 3000)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (000) Operational expenses

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

With regard to the trial scheme and latest development of hydrogen-fuelled vehicles, please advise this Committee:

1. whether the Government has any plan to allocate fund to subsidise, or subsidise through the New Energy Transport Fund, the purchase of hydrogen fuel cell vehicles by vehicle owners, including but not limited to franchised bus companies and heavy commercial vehicle owners; if yes, of the details and estimated provision; and
2. whether the Government has any plan to make early preparation for the trial and development of hydrogen-fuelled vehicles, including supporting their operations and planning for the construction of relevant facilities, such as identifying suitable sites for setting up hydrogen refilling stations; if yes, of the details and estimated provision.

Asked by: Hon HO King-hong, Adrian Pedro (LegCo internal reference no.: 6)

Reply:

1. At present, hydrogen fuel cell (HFC) heavy vehicles are still at the early stage of development, and resources are being invested in research and development, operational trials and construction of ancillary infrastructure worldwide. To keep up with the development trend and the demand for ancillary facilities for HFC vehicles, the Environment and Ecology Bureau is leading an inter-departmental working group (IWG) to progressively commence the trials of HFC double-deckers and heavy vehicles in phases having regard to local circumstances. In the meantime, the IWG will also review and assess applications for trial projects on hydrogen fuel technology, and advise on aspects such as safety and planning.

Due to the substantial price difference between HFC double-deckers and heavy vehicles and their conventional counterparts, as well as a high upfront capital expenditure to procure hydrogen supply equipment, it will certainly be difficult for the trial projects to be implemented in the short run without government subsidies. Therefore, we have earmarked \$200 million under the New Energy Transport Fund for subsidising the

procurement and operation of HFC vehicles, the installation of hydrogen refilling facilities, and other associated costs such as the costs for collecting and analysing trial data. We will subsidise the trial of HFC double-deckers and heavy vehicles on a project basis. It is anticipated that the first funding case will be approved in the third quarter of this year, hence a breakdown of the exact amount and expenditure is not available at this moment.

2. While pushing forward the trial of HFC double-deckers and heavy vehicles, the IWG will also conduct risk assessments on hydrogen refilling stations, the arrangements of hydrogen supply and HFC vehicles on road, etc., as well as review relevant regulations, standards and technical guidelines, with a view to preparing for the establishment of a legal framework for the local use of hydrogen fuel. The IWG will review and assess applications for trial projects on hydrogen fuel technology before the completion of abovementioned tasks, and advise on aspects such as safety and planning, so that the relevant trades can commence trials on hydrogen fuel technology as soon as possible.

As at the end of February 2023, the IWG Secretariat has received 8 trial applications in total, involving various areas such as HFC double-deckers, hydrogen refilling station, hydrogen transportation and electricity generation from HFCs. The IWG is liaising closely with the applicants of the trial projects to study the feasibility of providing hydrogen refuelling facilities at suitable locations (including franchised bus depots) on Hong Kong Island, in Kowloon and the New Territories, as well as discussing detailed arrangements for the trial projects to facilitate the phased commencement of the trial projects in the second half of 2023. With the results and data gathered from the trials of HFC vehicles, the Government will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)140**

**(Question Serial No. 1023)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

To reduce carbon dioxide (CO<sub>2</sub>) emissions from vehicles, it is necessary to step up efforts in promoting new energy vehicles. While hydrogen energy may be the way forward, electrical energy is the current feasible option. With regard to stepping up efforts in promoting electrical energy, please inform this Committee:

- 1) whether consideration will be given to the “one-for-one” scheme, under which exemption for electric vehicle licence fees will be granted for replacing petrol-fuelled vehicles, with the exemption being restricted to those who participate in the scheme within the first 6 months;
- 2) whether consideration will be given to offering 50% motor vehicle first registration tax concession to the scheme participants.

Asked by: Hon HO Kwan-yiu, Junius (LegCo internal reference no.: 9)

Reply:

- 1) & 2) Currently, carbon emissions from transport make up around 20% of total carbon emissions in Hong Kong. To tie in with the goal of achieving carbon neutrality before 2050 in Hong Kong, the Government has been striving to promote the use of electric vehicles (EVs), with a view to reducing vehicular-carbon emissions. However, the cost of owning an EV at present is still generally higher than owning a traditional fuel-propelled vehicle. As such, on the premise of not increasing the total number of private cars (PCs), the Government has been providing existing PC owners with economic incentive to choose EVs when they are due to replace their old PCs through various measures in recent years. Examples are the provision of first registration tax (FRT) concessions arrangement for EVs and the “One-for-One Replacement” Scheme. Furthermore, a lower licence fee for electric PCs (e-PCs) is one of the important financial incentives to promote the use of EVs.

At present, e-PCs are eligible for a FRT concession of up to \$97,500, while PC owners who arrange to scrap and de-register their own eligible old PC and then first register a new e-PC can enjoy a higher FRT concession under the “One-for-One Replacement” Scheme. The concession cap is \$287,500. The FRT of electric commercial vehicles, electric motor cycles and electric motor tricycles will be waived in full.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)141**

**(Question Serial No. 1687)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the legislation for mandatory collection of separated recyclables in major housing estates and single-block buildings with relatively larger number of flats, please advise:

- 1) of the preparatory work carried out on this matter in the past; whether public consultation will be launched as soon as possible to let the community know about the relevant charging levels;
- 2) whether there are designated responsible officers;
- 3) of the timetable for programme implementation, including consultation with the trades and councillors, presentation of a bill and the preparatory work for the implementation, etc.

Asked by: Hon KAN Wai-mun, Carmen (LegCo internal reference no.: 12)

Reply:

To ensure that sufficient and suitable recycling facilities are set up in residential buildings and the recyclables collected are properly handled so as to facilitate public participation in recycling and strengthen the public's confidence towards the recycling system, the Environment and Ecology Bureau (EEB) and Environmental Protection Department (EPD) 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 recyclables and pass them to downstream recyclers for proper processing, with effect from 2024 or earlier. The work will be undertaken by the units of EEB and EPD responsible for formulating waste management policies and implementing waste reduction and recycling work.

The EEB and EPD have met with the property management companies organisations and associations to consult the property management sector on this new initiative and certain operational details (such as the types of residential buildings to be covered by the law and the respective household thresholds, as well as the types of recyclables, etc.). We will progressively consult other stakeholders (including the Housing Department, owners' organisations, cleansing contractors, the recycling trade, etc.), so as to formulate a proposal

that is in line with the actual situation of Hong Kong. We plan to seek the views from the Panel on Environmental Affairs of the Legislative Council (LegCo) on the legislative framework and operational details of the proposed regulation in mid-2023, and introduce a bill to the LegCo in the second quarter of 2024 or earlier.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)142**

**(Question Serial No. 1688)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

In respect of conducting energy and carbon audits as well as retro-commissioning to improve the overall energy performance of government premises, please advise:

- 1) of the expenditure for implementing energy saving projects over the past 3 years;
- 2) whether there is any plan to completely phase out non-LED lighting fixtures (except those for special purposes) in government premises;
- 3) of the plan to extend energy saving works to public housing estates, private buildings, etc., based on the experience gained from carrying out such works for government premises; and whether the Administration will consider using the green bond proceeds to support the replacement works.

Asked by: Hon KAN Wai-mun, Carmen (LegCo internal reference no.: 13)

Reply:

1. The Electrical and Mechanical Services Department is conducting energy audits (i.e. systematic reviews of the energy consuming equipment/systems in buildings to identify energy management opportunities) for about 250 government buildings, and encourages government departments to actively implement the energy saving measures recommended in the audit report. The Government will conduct retro-commissioning and implement energy saving projects for its buildings, such as replacing lighting facilities with light emitting diode (LED) lamps and adopting high-efficiency air conditioning units. The expenditure of these measures from 2020-21 to 2022-23 was approximately \$470 million.
2. When carrying out maintenance, refurbishment and improvement works, etc. for government buildings and infrastructure, the Architectural Services Department will, subject to the actual operating conditions, replace the original tungsten filament lamps or old type fluorescent tubes with energy efficient lighting, such as compact fluorescent lamps (CFLs), T5 fluorescent tubes and LED lamps, as far as possible, with a view to improving the overall energy performance of government buildings and infrastructure.

3. The Government has set up the “Energy Saving for All” website to provide energy saving tips for public reference, including energy saving tips for home and office, so as to educate the public on various ways to reduce energy consumption in daily life. (Website link: <https://www.energysaving.gov.hk/en/home/index.html>)

The funds raised through the Government Green Bond Programme will be credited to the Capital Works Reserve Fund (CWRP) to finance green projects under it. The Steering Committee on the Government Green Bond Programme chaired by the Financial Secretary is responsible for approving the allocation of the green bond proceeds.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)143**

**(Question Serial No. 1709)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (6) Climate Change

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the publicity programmes on carbon neutrality, please advise:

- 1) of the details and objectives of the publicity activities;
- 2) of the expenditure earmarked;
- 3) of the evaluation approach as to whether the publicity and education work can effectively achieve the policy objectives;
- 4) whether a target has been set for the necessary advertising materials such as banners, paper, promotional materials, etc. for the publicity activities to be 100% reusable and degradable to reduce additional resources consumption from such activities.

Asked by: Hon KAN Wai-mun, Carmen (LegCo internal reference no.: 35)

Reply:

With the support of the Environmental Campaign Committee (ECC), the Environment and Ecology Bureau (EEB) will launch a two-year “Carbon Neutrality Publicity Campaign”, organising different kinds of publicity and education activities to encourage the public to practise waste reduction at source, green commuting and smart energy saving, thereby adopting a low-carbon lifestyle and moving towards carbon neutrality. At present, the event contractors are carrying out various production and preparation work for the publicity activities which are expected to be rolled out successively at a later stage. The total estimated expenditure of the “Carbon Neutrality Publicity Campaign” is about \$40 million. (Note 1: The expenditure of the “Carbon Neutrality Publicity Campaign” is supported by the Environment and Conservation Fund (ECF) and is not an estimated expenditure item under Head 137 – Environment and Ecology Bureau)

During the publicity campaign, the ECC will review the number of participants/people reached, feedback on the events, and the number of followers/viewers, the interaction rate, etc. on the social media platforms for various publicity and education programmes, so as to evaluate the effectiveness of the programmes. As for the production of advertising materials and necessary event supplies for promotion, publicity and educational events organised in

recent years, the ECC has required the contractors and suppliers to use environmentally friendly and reusable materials as far as possible, as well as to reduce the use of consumables, e.g. disseminating information/messages by electronic means instead of using paper.

In addition, the ECF plans to earmark a funding of \$25 million in 2023-24 to subsidise eligible organisations to organise environmental education and community action projects with the theme “carbon neutrality” to further enhance public awareness of achieving carbon neutrality (Note 2: Funding from the ECF is not an estimated expenditure item under Head 137 – Environment and Ecology Bureau).

The Government has been striving to promote public education and publicity about carbon neutrality. To help the public practise a low-carbon lifestyle, the EEB has established a dedicated website on climate change to provide the public with information about carbon neutrality, including the Low Carbon Living Calculator to help members of the public understand their own carbon emissions in the daily life. The EEB and the Education Bureau have set up an education platform on long-term decarbonisation to provide the education sector with teaching materials on carbon neutrality, with a view to incorporating the concept of carbon neutrality into school education. We will continue to launch publicity activities on carbon neutrality, including TV programmes with different themes, announcements of public interest and low carbon living tips to disseminate messages about carbon neutrality through the media and other social media platforms, thereby driving behavioural changes and a low-carbon transformation on the part of the public. The above-mentioned work is an integral part of the EEB’s work and is being undertaken by the existing staff establishment. We do not have a separate breakdown.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)144**

**(Question Serial No. 2839)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the incorporation of the District Cooling System (DCS) projects in New Development Areas, please advise of the following:

- 1) Please list out in tabular form the details of the DCSs, including their project titles, project progress, funding amounts and approval dates, commissioning dates/scheduled commissioning dates of the DCSs, the estimated annual operating costs, etc.
- 2) Have the prevailing charges in respect of the commissioned DCSs met the expected level?
- 3) Has the Administration examined whether the DCSs, in comparison with traditional air-conditioners, could achieve the results expected from launching the projects in terms of their expenditure and environmental performance?

Asked by: Hon KAN Wai-mun, Carmen (LegCo internal reference no.: 53)

Reply:

1) The details of the District Cooling Systems (DCSs) with funding approved for the works are as follows:

Project title	Project progress	Funding amount	Date of funding approval	Commissioning date/scheduled commissioning date of the DCS	Estimated annual operating cost
District Cooling System at the Kai Tak Development (5045CG)	The works commenced in February 2011 and the whole project is scheduled for completion in December 2025.	\$4.9455 billion	As this was the first time for Hong Kong to launch the DCS on a pilot basis, funding approval from the Finance Committee of the Legislative Council was sought in phases for the project according to the progress of the Kai Tak Development: 1. June 2009 (\$1.6710 billion) 2. February 2011 (\$190.8 million) 3. June 2013 (\$1.2841 billion) 4. July 2015 (\$606.1 million) 5. April 2016 (\$153.7 million) 6. January 2019 (\$1.0398 billion)	February 2013	\$74.92 million
Provision of an additional District Cooling System at the Kai Tak Development (5050CG)	The works commenced in December 2020 and the whole project is scheduled for completion in December 2028.	\$4.2693 billion	June 2020	2024 (scheduled)	\$39.1 million



Project title	Project progress	Funding amount	Date of funding approval	Commissioning date/scheduled commissioning date of the DCS	Estimated annual operating cost
The District Cooling System for Tung Chung New Town Extension (East) (5049CG)	The works commenced in June 2021 and the whole project is scheduled for completion in 2034.	\$3.9182 billion	February 2021	2026 (scheduled)	\$39.98 million
District Cooling System at the Kwu Tung North New Development Area (5051CG)	The works commenced in March 2021 and the whole project is scheduled for completion in 2040.	\$5.7877 billion	February 2021	2026 (scheduled)	\$50.09 million

- 2) Under the existing mechanism, the Government will adjust annually the charges for district cooling services based on the changes in the Composite Consumer Price Index and the electricity tariff rate. As the actual cost and revenue may deviate from the forecast, the Government will conduct a review on the charges at least once every 5 years. The Government has undertaken to set the charges for district cooling services at a competitive level comparable to the cost of individual water-cooled air-conditioning systems using cooling towers. The prevailing charges have met the expected level so far.
- 3) Compared to traditional air-cooled air-conditioning systems, DCSs are 35% more energy-efficient. The total estimated electricity saving from the commencement of operation of the Kai Tak DCS in 2013 to 2021-22 was about 40 million kWh and the total electricity cost saving was about \$49 million (calculated on the basis of \$1.2 per kWh on average), thus achieving the energy saving results expected from launching the project.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)145**

**(Question Serial No. 0985)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is mentioned in the Matters Requiring Special Attention that the Administration will continue to oversee the implementation of the various programmes and schemes to promote energy efficiency and conservation and the development of renewable energy. Please advise this Committee of:

- (a) the specific details and progress of the programmes and schemes;
- (b) the manpower and expenditure involved in the relevant work over the past 3 years.

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 19)

Reply:

The Government has been taking proactive steps to promote energy efficiency and conservation and the development of renewable energy through various policy initiatives, which, amongst others, include the following:

(i) Energy efficiency and conservation

- To lead by example, the Government will strive to improve the overall energy performance of government buildings and infrastructure by more than 6% by 2024-25. Based on the data compiled preliminarily, the Government's overall energy performance had improved by about 3.2% up to 2021-22. We are therefore confident of achieving the target of more than 6% within 5 years (i.e. by 2024-25).
- The Electrical and Mechanical Services Department (EMSD) is conducting energy audits (i.e. systematic reviews of the energy consuming equipment/systems in buildings to identify energy management opportunities) for about 250 government buildings, and encourages government departments to actively implement the energy saving measures recommended in the audit report. The Government will conduct retro-commissioning and implement energy saving projects for its buildings, such as replacing lighting facilities with light emitting diode (LED) lamps and adopting high-efficiency air

conditioning units. The estimated costs of these measures from 2017-18 to 2025-26 are approximately \$1.1 billion.

- The EMSD reviews the Building Energy Code (BEC) and the Energy Audit Code under the Buildings Energy Efficiency Ordinance once every 3 years to enhance the energy efficiency of buildings. The Government gazetted on 31 December 2021 the 2021 edition of the BEC, uplifting the energy efficiency standards with an overall improvement of more than 15% in energy saving as compared with the 2015 edition. By 2035, it is estimated that the BEC would bring about an annual energy saving of around 4.7 billion to 5.3 billion kWh from buildings in Hong Kong (compared with 2015). The EMSD will commence the review for the 2024 edition of both Codes this year to further enhance the energy efficiency of buildings.
- The EMSD will continue to review the scope of the Mandatory Energy Efficiency Labelling Scheme (MEELS) and the energy efficiency grading standards of prescribed products under the MEELS. The scope of the fourth phase of the MEELS, which is expected to take effect on 1 September 2023, will be expanded to include gas cookers, gas instantaneous water heaters and LED lamps. By then, the total coverage of energy consumption in the residential sector by the household appliances under the MEELS will be increased substantially from about 50% to about 80%.
- The EMSD will continue to oversee the construction and operation of the District Cooling System (DCS) projects in the Kai Tak Development and take forward the implementation of DCS projects in the Kwu Tung North New Development Area and Tung Chung New Town Extension (East). The Government will accelerate the incorporation of DCSs in new development areas (including the Northern Metropolis) to reduce energy consumption from infrastructure level.

(ii) Renewable energy (RE)

- For the public sector, the Government has been leading by example in optimising the favourable conditions of premises and developing RE, including raising the requirements of applying RE technologies in new government buildings, and developing large-scale solar energy generation and waste-to-energy projects, etc. at suitable venues. For instance, the Environmental Protection Department has commenced the operation of T·PARK (sludge treatment facility) and O·PARK1 (Organic Resources Recovery Centre Phase 1), and is constructing O·PARK2 (Organic Resources Recovery Centre Phase 2) and I·PARK1 (Integrated Waste Management Facilities Phase 1). In addition, the Water Supplies Department plans to install a 5 MW floating solar energy generation system at Plover Cove Reservoir and introduce high-efficiency battery storage technology on a pilot basis to better utilise the electricity generated by large-scale solar energy generation systems at reservoirs, and develop a 10 MW solar farm at the South East New Territories Landfill in Tseung Kwan O.
- The Government has earmarked a total of \$3 billion to install small-scale RE systems at government premises since 2017-18. About \$1.9 billion have been approved for about 170 projects so far, including installation of solar energy generation systems at government offices, government quarters, schools, recreational grounds-cum-rest gardens, reservoirs and pedestrian links, as well as installation of waste-to-energy and

hydro power systems at multiple sewage treatment plants. The projects are expected to generate a total of about 25 million kWh of electricity annually.

- The Government has all along endeavoured to create favourable conditions that are conducive to facilitating the installation of RE systems by the private sector on their land and properties, and encouraging the private sector to develop RE. The EMSD has launched Solar Harvest since 2019-20 to install small-scale solar energy generation systems for eligible schools and welfare non-governmental organisations (NGOs) free of charge. Besides, it plans to install 150 solar energy generation systems in 2023-24. In the past, the EMSD would install a small-scale solar energy generation system with a generating capacity of about 10 kW on the rooftops of participating schools and NGOs. To further promote the development of RE, starting from 2023-24, the EMSD will, subject to the conditions of the premises, install up to 3 electricity generation systems for participating schools and welfare NGOs.
- Other support measures include facilitating the private sector in installing solar energy generation systems at open car parks, suitably relaxing the requirements on the installation of solar energy generation systems on the rooftops of New Territories Exempted Houses (i.e. village houses), revamping the “HK RE Net” and setting up an enquiry hotline, introducing legislative amendments to provide exemption from the requirements to apply for business registration and pay profits tax in respect of participation in and the payments received under the Feed-in Tariff Scheme, etc.

The Environment and Ecology Bureau implements the above measures with the existing staff establishment.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)146**

**(Question Serial No. 0989)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is stated in the Budget Speech that \$200 million under the New Energy Transport Fund will be earmarked for collaboration with franchised bus companies and other stakeholders. Please advise this Committee of:

- (a) the specific plans of the relevant work;
- (b) the expected progress and achievements;
- (c) the review measures to be put in place.

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 24)

Reply:

- (a)-(c) At present, hydrogen fuel cell (HFC) heavy vehicles are still at the early stage of development, and resources are being invested in research and development, operational trials and construction of ancillary infrastructure worldwide. To keep up with the development trend and the demand for ancillary facilities for HFC vehicles, the Environment and Ecology Bureau is leading an inter-departmental working group (IWG) to progressively commence the trials of HFC double-deckers and heavy vehicles in phases in the second half of 2023 having regard to local circumstances. The IWG will also conduct risk assessments on hydrogen refilling stations, the arrangements of hydrogen supply and HFC vehicles on road, etc., as well as review relevant regulations, standards and technical guidelines, with a view to preparing for the establishment of a legal framework for the local use of hydrogen fuel.

Due to the substantial price difference between HFC double-deckers and heavy vehicles and their conventional counterparts, as well as a high upfront capital expenditure to procure hydrogen supply equipment, it will certainly be difficult for the trial projects to be implemented in the short run without government subsidies. Therefore, we have earmarked \$200 million under the New Energy Transport Fund for subsidising the procurement and operation of HFC vehicles, the installation of

hydrogen refilling facilities, and other associated costs such as the costs for collecting and analysing trial data. We will subsidise the trial of HFC double-deckers and heavy vehicles on a project basis. It is anticipated that the first funding case will be approved in the third quarter of this year.

With the results and data gathered from the trials of HFC vehicles, we will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)147****(Question Serial No. 2583)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The work carried out by the Environmental Protection Department in seeking to achieve and maintain satisfactory air quality includes the development of standards and guidelines. Please advise this Committee:

- (a) of the data on the electricity generated from coal and natural gas in Hong Kong by the two power companies over the past 3 years;
- (b) whether the Government has developed standards and guidelines to stipulate when the two power companies have to completely cease the use of coal for electricity generation; if yes, of the details; if no, of the reasons.

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 20)

Reply:

- (a) For environmental reasons, Hong Kong ceased the construction of coal-fired generating units in 1997. The two power companies have been gradually replacing coal-fired generation as required by the Government. The share of coal in Hong Kong's overall fuel mix for electricity generation has been reduced from about half in 2015 to about a quarter at present, while the share of natural gas has substantially increased from about a quarter in 2015 to nearly half at present. As the two power companies will adjust the use of fuels in response to the actual situation including the electricity demand and the maintenance of generating units, the generation data of natural gas and coal may slightly vary from year to year. The respective shares of natural gas and coal in the fuel mix for electricity generation over the past 3 years are as follows:

Year	Natural gas	Coal
2020	48%	24%
2021	48%	25%
2022	48%	25%

- (b) The Government has devised “Net-zero Electricity Generation” as one of the decarbonisation strategies in Hong Kong’s Climate Action Plan 2050 promulgated in 2021. We have set the target to cease using coal for daily electricity generation by 2035 and to only keep it for providing backup support. Under the overall target of achieving carbon neutrality before 2050, we will progressively increase the use of zero-carbon energy for electricity generation. In this connection, the Government will continue to promote the development of renewable energy, explore ways to enhance regional co-operation and identify sources of zero-carbon energy in neighbouring regions, thereby enabling Hong Kong to use more clean fuels, progressively rely less on fossil fuels in electricity generation and promote transformation towards low-carbon energy.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)148**

**(Question Serial No. 2654)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is mentioned in Matters Requiring Special Attention in 2023-24 under Programme (2) Power that the Bureau will “continue to promote decarbonisation in electricity generation and energy efficiency and conservation as per the direction set out in the Hong Kong’s Climate Action Plan 2050”. In addition, according to the paper submitted by the Administration to the Legislative Council Panel on Development on 31 January 2023 (CB(1)44/2023(05)), power receiving facilities are proposed to be built in Tseung Kwan O Area 132 (TKO 132) to import zero-carbon energy through regional cooperation and meet the target of achieving carbon neutrality before 2050. In this connection, please advise this Committee of the following:

1. For the power receiving facilities to be provided in TKO 132, what are the expected (a) time for the construction works to be commenced and the facilities to be commissioned; (b) construction cost; (c) financing method, e.g. the apportionment of the construction cost for the power companies?
2. Upon the commissioning of the power receiving facilities in TKO 132, what is the estimated share of the power received by the facilities in Hong Kong’s power supply?
3. Is the Government considering the construction of similar power receiving facilities in other places within Hong Kong to further reduce carbon emissions from local electricity generation and to achieve the target of carbon neutrality sooner?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 25)

Reply:

To meet the future needs to increase the use of zero-carbon energy in Hong Kong, we have to plan ahead for the construction of new infrastructure for receiving and processing electricity transmitted to Hong Kong from other regions.

The Electricity Facilities to be built on the land reserved by the Government in Tseung Kwan O Area 132 are strategic facilities for enhancing regional energy cooperation. They are also important for stabilising future electricity tariffs and promoting low-carbon energy transition

in Hong Kong. The Electricity Facilities will connect to the electricity supply systems of the 2 power companies in the future, and can strengthen the interconnection between the 2 power companies and the ability of electricity transmission, thereby helping to stabilise electricity tariffs and reduce emissions from local power plants in the long run for the benefit of members of the public in Hong Kong.

The project is currently under preliminary planning. We estimate that it will take around 10 years to plan, construct and complete the new cross-boundary power transmission and receiving facilities. The Electricity Facilities are expected to be commissioned before 2035, and the share of imported zero-carbon energy electricity may have an increase of about 30% by then. We will proceed with the preparatory work for the detailed study and the cost estimates for the project are not available at the moment.

We will explore and study various long-term proposals for the development of Electricity Facilities, while cautiously scrutinising the capital investment proposals submitted by the 2 power companies under the framework of the Scheme of Control Agreements, thereby striving to safeguard the public interest. We will continue to review the electricity supply and demand according to Hong Kong's development plans, and consider the need for the construction of Electricity Facilities.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)149**

**(Question Serial No. 2359)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

With regard to the promotion of green transport, please inform this Committee of the following:

- (1) What were the numbers of trial projects approved by the New Energy Transport Fund, the classes of vehicles and the amounts of subsidy involved over the past 5 years? How will the Administration assess the effectiveness of the operation of the Fund?
- (2) Regarding the recycling and treatment of waste electric vehicle (EV) batteries, will the Administration set any timetable and roadmap for the relevant planning? If yes, what are the details and expenditure to be involved? If not, what are the reasons?
- (3) Please set out in tabular form the number of the existing public chargers, with a breakdown by the 18 districts and the speed of the chargers respectively.
- (4) Please set out in tabular form the numbers of public chargers expected to be built in the coming 5 years, with a breakdown by the 18 districts and the speed of the chargers respectively.
- (5) It is mentioned in the Budget Speech that the Administration will prepare to launch a trial of hydrogen fuel cell electric buses and heavy vehicles. How will the expenditure be allocated in the relevant areas (including the procurement and testing of vehicles, supply of hydrogen energy, necessary supporting facilities, safety considerations, training of technical personnel, legislative control, etc., to be set out in tabular form) and what is the implementation timetable?
- (6) Further to question (5), what is the estimated number of technical personnel that need to be trained in the coming 5 years? Will the Administration develop operational safety guidelines and a registration system jointly with the Electrical and Mechanical Services Department and the transport trade?

Asked by: Hon LAM Lam, Nixie (LegCo internal reference no.: 17)

Reply:

- (1) The Government has been actively promoting the use of new energy vehicles and vessels to the transport trade and charitable/non-profit making organisations, including organising more than 40 briefings, sharing sessions, workshops and seminars, etc. over the past 2 years, so as to share the benefits of using new energy transport and encourage the trade to apply for the New Energy Transport (NET) Fund to trial new energy transport technologies. In the past 5 years, a total of 174 trials involving a total sum of about \$131 million have been subsidised under the NET Fund, including trials of 165 electric light goods vehicles, 21 single-deck electric buses, 1 electric double-decker, 2 electric light buses, 8 electric taxis (e-taxis), 4 electric medium goods vehicles, 2 electric heavy goods vehicles, 1 electric motorcycle, 4 hybrid light goods vehicles, 15 hybrid light buses, 3 electric vessels (work boats) and 2 electric kaitos. 21 applications are being reviewed under the NET Fund and will be submitted to the NET Fund Steering Committee (Steering Committee) for approval at the end of March. To further understand the operation of the NET Fund, including the trial products' information, members of the public can visit the website of the Environment and Ecology Bureau (EEB) at <https://www.eeb.gov.hk/en/new-energy-transport-fund.html>.

The NET Fund Secretariat will report to the Steering Committee on the progress of the trial schemes on a quarterly basis. The Steering Committee will, having regard to factors such as trial results of technology products and market development, make timely recommendations to the Government on the subsidy level, limits of applications, etc., with a view to encouraging the transport trade to try out and use green innovative transport technologies.

We will continue to subsidise the transport trade and charitable/non-profit making organisations to encourage trial and wider use of zero emission new energy transport technologies. Key projects include the trial of hydrogen fuel cell (HFC) vehicles as well as promotion of the trials of e-taxis and electric medium and heavy goods vehicles.

- (2) 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 electric vehicle (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. The Waste Management Division of the Environmental Protection Department is responsible for handling various waste management projects and PRSs. We do not have the breakdown of the expenditure involved in taking forward the PRS on retired EV batteries.
- (3) The numbers of public EV chargers with a breakdown by the 18 districts of Hong Kong as at the end of December 2022 are tabulated below:

District	Number of chargers			
	Standard	Medium	Quick	Sub-total
Central & Western	46	299	47	392
Eastern	21	227	69	317
Southern	6	192	42	240

<b>District</b>	<b>Standard</b>	<b>Medium</b>	<b>Quick</b>	<b>Sub-total</b>
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
<b>Total</b>	<b>1 453</b>	<b>2 983</b>	<b>998</b>	<b>5 434</b>

- (4) 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 of public car parks so as to provide impetus for the market development of public charging services.
- (5) At present, HFC heavy vehicles are still at the early stage of development, and resources are being invested in research and development, operational trials and construction of ancillary infrastructure worldwide. To keep up with the development trend and the demand for ancillary facilities for HFC vehicles, the EEB is leading an inter-departmental working group (IWG) to progressively commence the trials of HFC double-deckers and heavy vehicles in phases in the second half of 2023 having regard to local circumstances. In the meantime, the IWG will also review and assess applications for trial projects on hydrogen fuel technology, and advise on aspects such as safety and planning.

Due to the substantial price difference between HFC double-deckers and heavy vehicles and their conventional counterparts, as well as a high upfront capital expenditure to procure hydrogen supply equipment, it will certainly be difficult for the trial projects to be implemented in the short run without government subsidies. Therefore, we have earmarked \$200 million under the NET Fund for subsidising the procurement and operation of HFC vehicles, the installation of hydrogen refilling facilities, and other associated costs such as the costs for collecting and analysing trial data. We will subsidise the trial of HFC double-deckers and heavy vehicles on a project basis. It is anticipated that the first funding case will be approved in the third quarter of this year, hence a breakdown of the exact amount and expenditure is not available at this moment.

With the results and data gathered from the trials of HFC vehicles, we will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.

- (6) Regarding the number of and requirements for technical personnel necessary for HFC vehicles in the future, the Government will, by reference to Hong Kong's prevailing regulatory framework for gas safety and the Voluntary Registration Scheme for Vehicle Maintenance, devise the relevant plans when formulating the long-term strategies for the application of hydrogen energy in road transport by 2025, and consult the trade and stakeholders in due course.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)150**

**(Question Serial No. 2710)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (000) Operational expenses

Programme: (6) Climate Change

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Hong Kong is making vigorous efforts to achieve carbon neutrality before 2050. What is the amount of funding available for the Council for Carbon Neutrality and Sustainable Development which will be formed by the Government to advise on decarbonisation strategies?

Asked by: Hon LAM Shun-chiu, Dennis (LegCo internal reference no.: 10)

Reply:

To reduce Hong Kong's carbon emissions from the 2005 level by half before 2035 in order to achieve the goal of carbon neutrality before 2050, apart from setting up the Office of Climate Change and Carbon Neutrality (Climate Change Office) in January 2023 to strengthen coordination and promote deep decarbonisation, the Environment and Ecology Bureau will also establish the "Council for Carbon Neutrality and Sustainable Development" (CCNSD) comprising relevant stakeholders to offer advice on decarbonisation strategies and promote participation in deep decarbonisation by different sectors of the community. The Climate Change Office will provide necessary support for the operation of the CCNSD. The manpower and expenditure involved will be absorbed by the existing resources and we do not have the relevant breakdown.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)151**

**(Question Serial No. 2711)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (000) Operational expenses

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

How much fund will the Government earmark for the introduction of electric buses, electric taxis, electric ferries for in-harbour routes and the associated charging facilities, in order to implement new energy transport?

Asked by: Hon LAM Shun-chiu, Dennis (LegCo internal reference no.: 11)

Reply:

To promote the wide application of new energy transport, the Government established a \$300 million Pilot Green Transport Fund (PGTF) in March 2011, and injected additional \$800 million to the fund to extend its scope in 2020 and renamed the PGTF as the New Energy Transport Fund (NET Fund), with a view to subsidising the transport trade and charitable/non-profit making organisations to trial and promote wider use of green innovative transport technologies, including various new energy commercial vehicles and vessels.

As regards the promotion of electric buses (e-buses), a total of 27 e-bus projects, involving 32 single-deck e-buses and 1 electric double-decker, have been subsidised under the NET Fund since its establishment, with a sum of about \$80 million. Currently, trial applications for 8 single-deck e-buses have been preliminarily assessed and will be submitted to the NET Fund Steering Committee (Steering Committee) for approval at the end of March this year. In addition to the subsidy from the NET Fund, the Government has also allotted \$180 million since 2015 to fully subsidise the franchised bus companies to purchase a total of 36 single-deck e-buses and the associated charging facilities for trial on a number of routes.

As regards the promotion of electric taxis (e-taxis), a total of 9 e-taxi trials, involving 11 e-taxis (8 of which are new generation e-taxis), have been subsidised under the NET Fund as at the end of February 2023, with a sum of about \$5 million. Currently, trial applications for 15 new generation e-taxis have been preliminarily assessed and will be submitted to the



Steering Committee for approval at the end of March this year. Besides, the Government has engaged contractor to provide quick charging service for e-taxis in Lantau Island and later in Sai Kung District. No less than 10 relevant chargers for the first stage are expected to be put into service in phases from this mid-year. The estimated expenditure involved in the provision of 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.

As regards the promotion of electric ferries (e-ferries) for in-harbour routes, the Government is preparing to launch a pilot scheme for e-ferries (Pilot Scheme) in 4 in-harbour ferry routes, with a view to testing out the technical viability of adopting e-ferries in Hong Kong. It is anticipated that the Pilot Scheme would commence by 2024 at the earliest. Payments to be incurred by the Pilot Scheme will not involve the NET Fund. The Government has earmarked \$350 million separately to fully subsidise the construction costs of 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.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)152****(Question Serial No. 0242)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

In Matters Requiring Special Attention in 2023-24, the Administration stated that it would continue to promote decarbonisation in electricity generation and energy efficiency and conservation as per the Hong Kong's Climate Action Plan 2050 (the Action Plan). Please inform this Committee:

1. of Hong Kong's greenhouse gas emissions over the past 3 years, and set out a breakdown in the table below:

Year	Energy			Waste	Industrial processes and product use	Agriculture, forestry and other land use	Total
	Electricity generation					Transport	
2022							
2021							
2020							

2. of the respective percentages of coal, natural gas, nuclear energy and renewable energy in the current fuel mix for electricity generation in Hong Kong, and whether the Administration will allocate more resources to facilitate compliance with the target of the Action Plan by such fuel mix; if yes, of the details; if not, of the follow-up actions; and

3. whether the Administration will consider enhancing regional cooperation to identify sources of zero-carbon energy in the Greater Bay Area, with a view to achieving the target of net-zero electricity generation; if yes, of the details and staffing establishment; if not, whether the Administration will conduct relevant studies.

Asked by: Hon LAM Siu-lo, Andrew (LegCo internal reference no.: 1)

Reply:

1. The Environment and Ecology Bureau (EEB) compiles yearly greenhouse gas (GHG) inventory in accordance with the guidelines published by the United Nations' Intergovernmental Panel on Climate Change. As the inventory compilation involves a large amount of work on data collection and consolidation, as well as analysis and verification work, there is usually a time lag of 2 to 3 years in the publication of GHG inventories in different parts of the world. It is expected that Hong Kong's GHG inventory in 2021 and 2022 can be released this year and next year respectively.

The GHG emissions by source in 2018 to 2020 are set out as follows:

Year	GHG emissions (in kilotonnes CO <sub>2</sub> -e)						
	Energy			Waste	Industrial processes and product use	Agriculture, forestry and other land use	Total ^
	Electricity generation and other energy industries	Transport	Other end use of fuel @				
2018	26 700	7 470	2 090	2 980	1 690	29	41 000
2019	26 300	7 270	1 940	2 950	1 710	28	40 200
2020	20 400	6 650	1 970	2 960	1 780	35	33 800

Remarks:

@ Including the use of fuel for combustion in commercial, industrial and domestic premises.

^ Because of rounding, individual items may not add up to the total.

- 2-3. In the overall fuel mix for electricity generation in Hong Kong in 2022, gas-fired generation accounted for around 48%, nuclear electricity imported from the Mainland and local renewable energy accounted for around 27%, and coal-fired generation accounted for around 25%.

The Government has devised the decarbonisation strategy of “Net-zero Electricity Generation” in Hong Kong’s Climate Action Plan 2050 promulgated in 2021. Under the overall target of achieving carbon neutrality before 2050, we will progressively increase the use of zero-carbon energy for electricity generation. In this connection, the Government will explore ways to enhance regional cooperation and identify sources of zero-carbon energy in neighbouring regions, thereby enabling Hong Kong to use more clean fuels, progressively rely less on fossil fuel in electricity generation and promote transformation towards low-carbon energy. The work of promoting net-zero electricity generation and enhancing regional cooperation will be handled by the existing staff establishment of the EEB.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)153**

**(Question Serial No. 0277)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the promotion of new energy vehicles, please advise:

1. of the progress of the conversion of petrol filling stations into quick charging stations by the Government and the marketisation of charging services, as well as the working schedule in 2023-24;
2. of the number of additional electric vehicle (EV) charging facilities provided under the EV-charging at Home Subsidy Scheme in the past 3 years;
3. of the estimated numbers of EV charging stations to be provided and their locations, the expenditures involved, as well as the electricity expenditures on providing free charging services for vehicles in the next 3 years;
4. whether there is any plan to promote hydrogen vehicles; if yes, of the details; if no, of the reasons.

Asked by: Hon LAM Siu-lo, Andrew (LegCo internal reference no.: 37)

Reply:

1. The Government is studying the feasibility of gradually converting some of the existing petrol filling stations (PFSs) into quick charging stations (QCSs) in the medium to long term for charging various types of vehicles, so as to support a more diversified EV charging infrastructure to cope with different needs. To this end, we are liaising with 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 PFS site to a QCS.

As for the marketisation of EV charging services, the Government is installing in phases self-service payment kiosks for EV chargers and updating related software system at several government car parks 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, which 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 services and fostering its sustainable development in the long term.

2. The EV-charging at Home Subsidy Scheme (EHSS) was launched in October 2020 for application. 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 of EV charging infrastructure, thereby facilitating installation of EV chargers by parking space owners in future. This batch of applications involves mainly car parks of relatively small scale with less technical problems, and the time between approval of the EHSS applications and completion of the installation works ranges from around 18 to 30 months.
3. To pave the way for the trade to switch to electric commercial vehicles progressively, the Government is proactively establishing a quick charging service network to address the charging needs of different types of vehicles. Amongst others, the Government has endeavoured to set up a charging service network for electric taxis (e-taxis) and has engaged contractor to provide quick charging service for e-taxis in Lantau Island, and later in Sai Kung District. No less than 10 relevant EV chargers (please see their locations in the table below) are expected to be put into service in phases from mid-2023. The estimated expenditure involved in providing charging service for 5 years is about \$27 million. As the aforesaid quick charging facilities are yet to be commissioned, information on the relevant expenditure on electricity is not available.

Area	Location	Number of EV chargers
<b>Lantau Island</b>		
Tung Chung	Taxi stand at Tung Chung Waterfront Road, Tung Chung Development Pier	2
Tung Chung	Yat Tung Estate Carpark No. 2	2
Ngong Ping	Taxi stand at Ngong Ping	2
Mui Wo	Taxi stand at Ngan Shek Street, opposite to Mui Wo Municipal Services Building	1
<b>Sai Kung District</b>		
Sai Kung	New Territories taxi stand at Fui Yiu Lane, next to Lakeside Garden	1 (maximum)
Sai Kung	The Jockey Club Kau Sai Chau Public Golf Course Car Park	2 (maximum)
Pak Tam Chung	Taxi stand at Pak Tam Chung	2 (maximum)
Tseung Kwan O	Taxi and minibus stands at Tseung Kwan O Industrial Estate	2 (maximum)
Tseung Kwan O	Kin Ming Estate Car Park	2 (maximum)

Regarding the Pilot Scheme for Electric Public Light Buses, the Environmental Protection Department (EPD) plans to provide charging services for electric light buses

at 2 to 3 public transport interchanges. Each charging station will be equipped with 2 pantograph quick chargers and 2 backup plug-in chargers. The estimated expenditure for each charging station (including 4 years of charging, management and maintenance services) is about \$14 million.

Furthermore, the Government is identifying suitable locations across the territory to provide dedicated quick charging services for electric buses, taxis or public light buses, thereby establishing a comprehensive charging service network. It has been announced in the 2022 Policy Address that about additional 7 000 parking spaces in government premises just completed or to be soon completed will be provided with EV chargers by 2025. As for the conversion of PFSs into QCSs, we are studying the feasibility of gradually converting some of the existing PFSs into QCSs in the medium to long term, and exploring the feasibility of developing some larger petrol or liquefied petroleum gas filling station sites under the “single site, multiple use” model. As the aforementioned measures are still under planning, the Government does not have their specific estimates at the moment.

At present, EV charging services in government car parks are free of charge. The EPD is preparing for the progressive marketisation of existing EV charging services starting from the second half of this year at the earliest, after which the electricity cost will be paid by the relevant operators. Taking into account this factor and the future demand for charging services, the estimated electricity cost for providing EV charging services over the next 3 years is about \$30 million.

4. There is a global drive to identify and develop different zero-carbon technologies in order to achieve the target of carbon neutrality. Given their long travel range and fast refuelling as compared with battery EVs, hydrogen fuel cell (HFC) vehicles are a potential means of new energy vehicles for adoption, especially for heavy commercial vehicles. In view of the development of HFC vehicles in the Mainland and different places of the world, the Environment and Ecology Bureau is leading an inter-departmental working group (IWG) to progressively commence the trials of HFC double-deckers and heavy vehicles in phases having regard to local circumstances. The IWG will also conduct risk assessments on hydrogen refilling stations, the arrangements of hydrogen supply and HFC vehicles on road, etc., as well as review relevant regulations, standards and technical guidelines, with a view to preparing for the establishment of a legal framework for the local use of hydrogen fuel. The IWG will review and assess applications for trial projects on hydrogen fuel technology before the completion of abovementioned tasks, and advise on aspects such as safety and planning, so that the relevant trades can commence trials on hydrogen fuel technology as soon as possible.

The IWG is liaising closely with the applicants of the trial projects and discussing detailed arrangements for the trial projects to facilitate the phased commencement of the trial projects in the second half of 2023. With the results and data gathered from the trials of HFC vehicles, the Government will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.

To assist the transport trade in commencing the relevant trial projects, we have earmarked \$200 million under the New Energy Transport Fund for subsidising the procurement and operation of HFC vehicles, the installation of hydrogen refilling facilities, and other associated costs such as the costs for collecting and analysing trial data. We anticipate that the first funding case will be approved in the third quarter of this year.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)154**

**(Question Serial No. 2559)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is mentioned in the Budget that the Government has set aside \$350 million to provide subsidies to 4 in-harbour ferry operators for the construction and trials of electric ferries (e-ferries) and the related charging facilities. In this connection, please advise this Committee of the following:

1. What are the details of the latest progress of the proposed Pilot Scheme for Electric Ferries (Pilot Scheme) and the progress of monitoring?
2. How is the performance of the 4 in-harbour ferry routes under the Pilot Scheme in terms of environmental outcome, technical capability and cost-effectiveness, etc.?
3. If the Pilot Scheme is successful, will the Administration fully introduce e-ferries to all existing ferry routes in the future, and has it formulated the relevant estimates?
4. Further to the above question, will the Administration consider introducing additional electric ferry routes to alleviate the existing traffic congestion issue between Sai Kung and East Kowloon?
5. If e-ferries are to be fully introduced in Hong Kong, how will they contribute to the vision of achieving carbon neutrality of Hong Kong?

Asked by: Hon LAM So-wai (LegCo internal reference no.: 16)

Reply:

1. The Government is preparing to launch the 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.

2. 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 during the 24-month trial period, so as to evaluate their effectiveness and performance in terms of operation and environmental protection.
3. Subject to the trial results and technological development of new energy vessels, the Government will explore with the ferry operators the possibility of progressively replacing conventional ferries with new energy ferries before 2035. The Government currently has no relevant estimates for the full introduction of e-ferries to all existing ferry routes.
4. In-harbour ferries mainly perform a supplementary role as an alternative public transport service to rail and road-based harbour-crossing services. The Government welcomes interested parties to apply for operation of new ferry services and stands ready to discuss with the operators and advise on service details of the proposed ferry routes. Applications will be processed in accordance with the established mechanism, taking into account all relevant factors such as the current transport policy, existing and planned public transport services, passenger demand, financial viability and availability of pier facilities. The Transport Department understands that so far no operator is interested in operating ferry services, including e-ferry services, plying between Sai Kung and East Kowloon.
5. Currently, carbon emissions from transport make up around 20% of total carbon emissions in Hong Kong. To tie in with the goal of achieving carbon neutrality before 2050 in Hong Kong, developing green transport is instrumental in achieving the goal. Through the electrification of vehicles and ferries, development of new energy transport and improvement in traffic management, the Government will achieve the target of zero carbon emissions before 2050.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)155**

**(Question Serial No. 1558)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (-) Not specified

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is learnt that the Government has earmarked \$1 billion to support various countryside conservation initiatives implemented under the Countryside Conservation Office, of which \$500 million will be used for supporting non-profit-making organisations via the Countryside Conservation Funding Scheme. How will the weightings be distributed for the provision which involved different aspects including the natural environment, ecological habitats, non-graded built heritage, as well as cultural and historic assets? In addition, Hong Kong is surrounded by waters from 3 sides with an extensive area of country parks. Will the Administration consider subsidising non-profit-making organisations to set up museums in relation to agriculture, fisheries and conservation?

Asked by: Hon LAU Chi-pang (LegCo internal reference no.: 6)

Reply:

Since its launch in October 2019, the Countryside Conservation Funding Scheme (CCFS) has approved a total of 33 projects to support collaboration amongst villagers and local universities, green groups, etc. for carrying out countryside conservation and revitalisation projects ranging from natural environment, ecological habitats to historic and cultural assets. The total subsidy involved is about \$165 million and the distribution by project type is as follows:

Type of subsidised projects	Number of projects approved	Subsidy amount	Percentage share of the subsidy
Nature Conservation Management Agreement Projects	9	\$106 million	64%
Projects regarding Formulation of Proposals on Restoration of Built Heritage	6	\$16 million	10%
Cultural Rehabilitation/Revitalisation Projects	3	\$6.7 million	4%
Projects regarding Research Activities on Countryside Conservation and Revitalisation	15	\$36.8 million	22%

The scope of the CCFS does not include the construction of facilities in country parks. To enrich the hiking experience of the public, the Agriculture, Fisheries and Conservation Department (AFCD) has set up a total of 8 visitor centres in country parks, including the Lions Nature Education Centre, the Woodside Biodiversity Education Centre, etc. to provide information on topics such as Hong Kong's precious natural resources, culture and history. The Hoi Ha Visitor Centre was established in 2021 to introduce Hong Kong's marine ecology. The AFCD is commencing a feasibility study on repairing wartime relics in country parks for turning into open museums. In addition, the AFCD has also collaborated with local groups to set up various visitor centres in the Hong Kong Geopark, including the Volcano Discovery Centre in Sai Kung, as well as the Story Rooms in Ap Chau, Kat O, Kau Sai Village and Lai Chi Wo to display the natural and cultural heritage of local communities.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)156**

**(Question Serial No. 0625)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (5) Nature Conservation

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Environment Branch promotes countryside conservation and oversees the work of the Countryside Conservation Office (CCO). The provision for 2023-24 is \$30.8 million (26%) higher than the revised estimate for 2022-23. This is mainly due to the increased cash flow requirement for the non-recurrent item "CCO". In addition, there will be a net decrease of 2 posts in 2023-24. In this connection, please advise this Committee of:

1. the details of the increased cash flow;
2. the staff establishment and administrative expenditure of the CCO over the past 3 years;
3. the details of the decrease of 2 posts, including the rank and remuneration package; the reasons for the decrease of such posts and the impacts on the CCO's work;
4. the conservation activities, revitalisation projects, the staff establishment involved and the detailed expenditure breakdown of the Countryside Conservation Funding Scheme since the establishment of the CCO in July 2018;
5. the plans and implementation schedule of the CCO's work for this financial year; and the ways to facilitate sustainable development of the countryside.

Asked by: Hon LAU Ip-keung, Kenneth (LegCo internal reference no.: 23)

Reply:

1. The provision for the Countryside Conservation Office (CCO) for 2023-24 is higher than the revised estimate for 2022-23. This is mainly due to the continuous increase in the number of projects expected to be approved and the amount of funding required for the approved projects under its Countryside Conservation Funding Scheme (CCFS).
2. Over the past 3 years, the staff establishment of the CCO comprised 24 civil service posts of various grades. The annual administrative expenditure was about \$18 million.
3. The 2 time-limited civil service posts at the CCO will lapse in 2022-23, which include 1 Executive Officer I post and 1 Assistant Clerical Officer post, involving an annual expenditure of about \$1.1 million. In view of the deletion of the time-limited posts

concerned, the CCO will refine the administrative work procedures to ensure that its overall operation will not be affected.

4. As at the end of 2022, the CCFS has approved a total of 33 projects, involving a total subsidy of about \$165 million. The funded projects covered a wide range of aspects, including countryside conservation and revitalisation projects ranging from natural environment, ecological habitats to non-graded assets. Examples included ecologically friendly farming and maintenance of habitat diversity; organisation of theatrical performances with countryside cultural elements; study and development of a countryside revitalisation model led by the village community and villagers; and the setting up of an information platform on countryside conservation. Members of the public may search for further information on the CCFS at the relevant website: [https://www.eeb.gov.hk/en/conservation/ccfs/ccfs\\_main.html](https://www.eeb.gov.hk/en/conservation/ccfs/ccfs_main.html). As the CCO staff are engaged in the implementation of the CCFS, please refer to point 2 of the reply above for the staff establishment and administrative expenditure concerned.
5. The CCO will continue to take forward the countryside minor improvement works in the coming year, which include repairing the footpaths in Sha Lo Tung, Tai Po; conducting advance works for the public sewerage system in Lai Chi Wo and the flood control study for the area; introducing smart/low-carbon public toilets, and will, based on the experience gained, implement progressively minor improvement works in neighbouring areas such as Kuk Po and Fung Hang, taking into account the site context of different remote countryside locations. The CCO will also continue to take forward diverse and innovative conservation and revitalisation projects through the CCFS, and work with relevant bureaux/departments with a view to formulating a set of licensing requirements and procedural guidelines for guesthouses and catering business in countryside areas.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)157**

**(Question Serial No. 0518)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (6) Climate Change

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

How many projects in total were funded by the Green Tech Fund over the past 3 years? What were the content of the projects and the amount of funding involved? What is the number of applications being processed at present?

Asked by: Hon LAU Kwok-fan (LegCo internal reference no.: 45)

Reply:

In 2020, the Government set up the Green Tech Fund (GTF) to provide better and more focused funding support for scientific research projects which can help Hong Kong decarbonise and enhance environmental protection. The Government has injected a total of \$400 million into the GTF to subsidise R&D projects that can help promote net-zero electricity generation, energy saving and green buildings, green transport and waste reduction. The GTF can help Hong Kong achieve carbon neutrality and support innovation and create green job opportunities for the innovation and technology industry.

The GTF was open for the first round of applications in December 2020, and 22 projects from local universities, designated public research institutes and private enterprises have been approved, involving a total grant of about \$100 million. These research projects involve technologies for the cells storage and generation of hydrogen fuel; manufacturing and application of biochar-enhanced construction materials; and air cleaning system for reducing roadside air pollution. Relevant details are set out in Annex. The GTF is open for the third round of applications before the deadline of 14 March this year. Currently, no applications are being processed.

## Projects approved under the Green Tech Fund

	Project title	Research synopsis	Applicant	Grant duration	Grant approved
<b>Projects approved in 2021</b>					
1	Development of high performance and long life hydrogen fuel cell stacks	Development of high performance and long life hydrogen fuel cells that can be widely applied in electric vehicles (EVs) for facilitating large-scale application of fuel cells and helping to promote the popularisation of EVs and low-carbon transformation	The Hong Kong University of Science and Technology	36 months	\$8,991,500
2	Development of printable perovskite solar cells for transformative clean energy	Development of solar cells that can be printed on different surfaces to increase the power generation efficiency of photovoltaic systems and to develop building-integrated photovoltaic systems	City University of Hong Kong	36 months	\$5,031,934

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
3	A safe, efficient and facile approach for hydrogen storage and generation: catalytic hydrolysis of solid-state hydrogen storage materials	Development of hydrogen storage and release technology involving the use of stable solid-state materials for hydrogen storage to enhance safety and reduce potential risks associated with hydrogen transport and storage	The Hong Kong Polytechnic University	30 months	\$3,305,100
4	Green hydrogen production from active flow membraneless electrolyzers	Development of more cost-effective and efficient technologies for producing green hydrogen	The Hong Kong University of Science and Technology	36 months	\$3,198,150
5	Turning water into the source of solar hydrogen via photocatalyst panel	Use of domestic water for scalable solar hydrogen evolution, and development of a demonstration system to promote public awareness of green hydrogen technologies	City University of Hong Kong	36 months	\$2,876,449



	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
6	Smart power conditioners with second-life EV batteries	Development of a smart energy storing power regulator with retired EV batteries to control and improve the power quality and grid stability, improve the charging infrastructure for EVs, and facilitate the application of second-life EV batteries with a view to achieving the goals of waste reduction and decarbonisation	City University of Hong Kong	36 months	\$6,687,710
7	Agile and dynamic control technologies to enhance system stability and power quality considering renewables and electrical vehicle impacts	Development of technologies that can control power quality and grid stability by storing the energy generated by a photovoltaic power generation system and analysing the utilisation of the charging stations with the use of software to improve the stability and reliability of the power grid, thereby supporting the popularisation of EVs	CAFEA Smart City Limited	30 months	\$2,504,200

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
8	Reducing biological landfill leachate treatment footprint via rapid electrochemical-UV technologies	Research on more energy-efficient ways to purify landfill leachate which has to be treated before it is discharged into the public sewerage system	The Hong Kong University of Science and Technology	30 months	\$6,674,600
9	Coupling AnMBR and PNA for compact - and energy- saving landfill leachate treatment	Development of a low-cost, less energy-intensive and less space-demanding system for landfill leachate treatment, with renewable energy generated in the process for use by the system	The University of Hong Kong	24 months	\$4,381,040
10	Biochar-enhanced construction materials for sustainable waste management and decarbonisation	Research on the use of yard waste for production of biochar building materials to reduce landfilled woody waste and carbon emissions each year	The Hong Kong Polytechnic University	36 months	\$8,784,200
11	Recycling of waste lithium-ion batteries as highly active fuel cell catalysts	Collection of waste batteries, EV batteries in particular, and recycling the cathode materials therein to produce fuel cells	The Hong Kong Polytechnic University	24 months	\$2,783,920

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
12	Green intelligent garbage bag assessment system	Development of a smart garbage bag assessment system by using artificial intelligence technologies, together with positioning system data analysis to optimise waste management processes and facilitate effective implementation of municipal solid waste charging	United Microelectronics Centre (Hong Kong) Limited	21 months	\$2,514,580
13	Temperature and humidity impact free gas sensor and monitor system development for real-time high performance air quality monitoring	Development of low-cost smart air sensors capable of accurate and real-time air quality monitoring under different temperature and humidity conditions	Sundial Technology Development Limited	36 months	\$5,701,200

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
14	Portable and low-cost sensors for the real-time ambient air monitoring of BTEX and other volatile organic compounds	Development of low-cost portable sensors for real-time concentration monitoring of the most common air pollutants that lead to the formation of ozone in Hong Kong. The development of the sensors will help identify the sources of ozone formation.	City University of Hong Kong	36 months	\$5,686,750
<b>Projects approved in 2022</b>					
15	A high-performance roll-to-roll process for the manufacture of a novel PEM membrane electrode assembly	Development of a novel membrane electrode assembly, and by reducing the particle size and increasing the conductivity of the support material, a larger surface area is available for catalyst deposition and a lower catalyst loading is required to achieve a similar performance in water electrolysis.	iCreate Limited	18 months	\$3,866,033

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
16	Hybrid air cleaning system	Development of an air cleaning system to reduce air pollutants in roadside and semi-enclosed spaces through advanced technologies, such as high efficiency particulate filtration and nano catalytic coating, without affecting traffic flow or altering existing facilities	The Hong Kong Polytechnic University	24 months	\$5,561,400
17	Carbon-friendly pneumatic flow mixing (PFM) to rapidly recycle waste mud for land reclamation in Hong Kong	Collaboration with the Civil Engineering and Development Department to recycle waste mud for land reclamation instead of dumping it into sediment pits in the open sea	The University of Hong Kong	36 months	\$4,901,300
18	Low carbon road pavement by maximising material circularity and adopting sustainable materials	Development of low carbon road pavement systems by adopting the closed-loop and open-loop based material circularity strategies according to the specifications of pavement systems of Hong Kong	City University of Hong Kong	36 months	\$4,197,500

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
19	Low-carbon transformation of construction materials using waste glass	Development of novel glass-based concrete products and promising large-scale technologies to provide a viable route for the use of waste glass in concrete, and reduce the consumption of cement and concrete raw materials in the construction industry	The Hong Kong Polytechnic University	36 months	\$5,292,875
20	Development of renewable energy and retired EV battery solution	Extending the lifespan and enhancing the value of retired EV batteries by providing a solution to overcome the technical challenges of reusing retired EV batteries	Hong Kong Productivity Council	36 months	\$2,942,000
21	Manufacturing high-efficiency noise-absorbing materials from recycled plastics	Manufacturing noise-absorbing products with superior acoustic and non-acoustic performance through using recycled plastics as raw materials	Lumi Technology Company Limited	24 months	\$3,379,200

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
22	Green tech platform for waste management and reduction – Large scale reverse vending machine for plastic beverage bottles	Provision of a large size reverse vending machine (RVM) with enhanced accuracy, speed and reliability, and the use of the RVM database and 5G communication network to facilitate bottles identification and analysis of the public's recycling habits	Roborn Technology Limited	12 months	\$2,518,000

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)158**

**(Question Serial No. 0629)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

How many projects in total were subsidised by the New Energy Transport Fund in the past 3 years? What were the contents of the projects and the amounts involved? What is the number of applications being processed at present?

Asked by: Hon LAU Kwok-fan (LegCo internal reference no.: 47)

Reply:

In the past 3 years, a total of 125 projects involving a total sum of about \$113 million have been subsidised under the New Energy Transport Fund (NET Fund), including trials of 117 electric light goods vehicles, 21 single-deck electric buses, 1 electric double-decker, 2 electric light buses, 8 electric taxis, 4 electric medium goods vehicles, 2 electric heavy goods vehicles, 1 electric motorcycle, 6 hybrid light goods vehicles, 6 hybrid medium goods vehicles, 19 hybrid light buses, 1 single-deck hybrid bus, 3 electric vessels and 2 electric kaitos. To further understand the operation of the NET Fund, including the trial products' information, members of the public can visit the website of the Environment and Ecology Bureau (EEB) at <https://www.eeb.gov.hk/en/new-energy-transport-fund.html>.

21 applications are being reviewed under the NET Fund and will be submitted to the NET Fund Steering Committee for approval at the end of March.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)159**

**(Question Serial No. 1058)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (5) Nature Conservation

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is mentioned in the Matters Requiring Special Attention in 2023-24 that the Environment and Ecology Bureau (Environment Branch) will enhance the recreational and educational potential of country parks, and oversee the designation of the proposed Robin's Nest Country Park. In this connection, please advise:

- a) of the measures to be adopted by the Administration to enhance the recreational and educational potential of country parks;
- b) of the progress of designating the Robin's Nest Country Park, and when the country park is expected to be officially opened to the public.

Asked by: Hon LAU Kwok-fan (LegCo internal reference no.: 18)

Reply:

- a) The Agriculture, Fisheries and Conservation Department (AFCD) is, in accordance with the recommendations of the consultancy study on "Enhancing the Recreation and Education Potential of Country Parks", progressively implementing a series of short and medium-term projects to enhance country park facilities, including the enhancement of 10 hiking trails with the improvement or addition of about 20 viewing points at popular tourist spots such as High West, Dragon's Back and Sunset Peak; the launch of an advance booking system pilot scheme for the Twisk Campsite for members of the public to reserve camping spaces and facilities; and the installation of a total of 34 water filling stations in country parks across the territory to encourage the public to bring their own water bottles and reduce utilisation of single-use plastic bottles, etc.

As for long-term projects, the AFCD is working with departments including the Architectural Services Department and the Civil Engineering and Development Department to reprovision toilets and construct new ones; set up new viewing platforms with associated trails and recreational facilities; carry out the revitalisation of the Lin Ma Hang Lead Mine Cave; and provide an outdoor free exploration field at Lions Nature Education Centre, etc. within country parks in phases. In addition, the AFCD

progressively commenced feasibility studies on the provision of glamping site facilities and tree top adventure activities, and the revitalisation of some wartime relics to turn them into open museums within country parks in the second half of last year, with a view to determining the potential site, design, mode of operation, fee level and operation requirements, etc. of these facilities. During the course of the studies, the AFCD will also conduct activities to gather views of the public. The AFCD anticipates that the aforementioned feasibility studies will be completed in 2024, and the recommendations in the study reports will be taken into account in the implementation of the relevant projects. The Government has earmarked \$500 million in the 2021-22 Budget to support the implementation of the said projects.

- b) The Government initiated the statutory procedures for designating the Robin's Nest Country Park and gazetted the draft map of the proposed country park under the Country Parks Ordinance in December 2022 for public inspection until the end of January 2023. The Country and Marine Parks Authority and the Country and Marine Parks Board are following up on the written representations. The Government aims to complete the designation of the relevant country park in 2024 at the earliest.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)160**

**(Question Serial No. 2659)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

With regard to promoting the use of electric vehicles (EVs), please advise this Committee of the following information for the past 5 years:

1. What were the numbers of first registered EVs of various types (e.g. private car and light goods vehicle) in Hong Kong in each year, and their percentages in the total number of first registered vehicles of various types in the same year?
2. What were the numbers of EVs of various types in Hong Kong in each year, and their percentages in the total number of vehicles of various types in the same year?
3. What were the expenditures involved in providing additional EV charging facilities in government buildings by the Administration?
4. What were the electricity costs and maintenance costs of the charging facilities paid by the Administration?
5. What were the numbers of quick, medium and slow EV chargers open for public use in government and non-government car parks across the territory?
6. What were the types and numbers of all the EVs procured by government bureaux and departments as well as the expenditures involved?

Asked by: Hon LAU Kwok-fan (LegCo internal reference no.: 44)

Reply:

1. Over the past 5 years, the numbers of newly registered electric vehicles (EVs) and their percentages of the total number of newly registered vehicles in respective vehicle classes are tabulated below:

2018

<b>Vehicle class</b>	<b>Number of first registered EVs</b>	<b>Total number of first registered vehicles</b>	<b>Percentage of first registered EVs over the total number of first registered vehicles</b>
Motor cycle	0	5 286	-
Private car	471	42 287	1.11%
Taxi	0	1 770	-
Franchised bus	5	653	0.77%
Non-franchised bus	0	619	-
Private bus	0	50	-
Public light bus	0	496	-
Private light bus	0	402	-
Goods vehicle	16	9 865	0.16%
Special purpose vehicle	5	169	2.96%

2019

<b>Vehicle class</b>	<b>Number of first registered EVs</b>	<b>Total number of first registered vehicles</b>	<b>Percentage of first registered EVs over the total number of first registered vehicles</b>
Motor cycle	0	6 468	-
Private car	2 423	38 309	6.32%
Taxi	0	1 118	-
Franchised bus	1	315	0.32%
Non-franchised bus	2	447	0.45%
Private bus	0	64	-
Public light bus	0	481	-
Private light bus	1	269	0.37%
Goods vehicle	42	8 991	0.47%
Special purpose vehicle	5	146	3.42%

2020

<b>Vehicle class</b>	<b>Number of first registered EVs</b>	<b>Total number of first registered vehicles</b>	<b>Percentage of first registered EVs over the total number of first registered vehicles</b>
Motor cycle	25	9 368	0.27%
Private car	4 595	37 036	12.41%
Taxi	0	805	-
Franchised bus	0	289	-
Non-franchised bus	0	172	-
Private bus	0	35	-
Public light bus	0	159	-
Private light bus	0	144	-
Goods vehicle	35	5 427	0.64%
Special purpose vehicle	9	119	7.56%

2021

<b>Vehicle class</b>	<b>Number of first registered EVs</b>	<b>Total number of first registered vehicles</b>	<b>Percentage of first registered EVs over the total number of first registered vehicles</b>
Motor cycle	79	9 092	0.87%
Private car	9 583	39 309	24.38%
Taxi	0	1 120	-
Franchised bus	0	277	-
Non-franchised bus	0	277	-
Private bus	0	74	-
Public light bus	0	159	-
Private light bus	0	109	-
Goods vehicle	55	7 102	0.77%
Special purpose vehicle	13	115	11.30%

2022

<b>Vehicle class</b>	<b>Number of first registered EVs</b>	<b>Total number of first registered vehicles</b>	<b>Percentage of first registered EVs over the total number of first registered vehicles</b>
Motor cycle	163	7 640	2.13%
Private car	19 795	37 478	52.82%
Taxi	1	1 105	0.09%
Franchised bus	19	236	8.05%
Non-franchised bus	2	312	0.64%
Private bus	0	57	-
Public light bus	0	129	-
Private light bus	0	70	-
Goods vehicle	80	6 993	1.14%
Special purpose vehicle	13	137	9.49%

Note: Government vehicles are not included as government vehicles are not required to be registered.

- Over the past 5 years, the numbers of registered EVs and their percentages of the total number of registered vehicles in respective vehicle classes are tabulated below:

As at the end of 2018

<b>Vehicle class</b>	<b>Number of registered EVs</b>	<b>Total number of registered vehicles</b>	<b>Percentage of registered EVs over the total number of registered vehicles</b>
Motor cycle	19	79 920	0.02%
Private car	11 080	617 683	1.79%
Taxi	0	18 163	-
Franchised bus	33	6 253	0.53%
Non-franchised bus	8	7 130	0.11%
Private bus	2	704	0.28%
Public light bus	0	4 350	-
Private light bus	6	3 385	0.18%
Goods vehicle	95	119 071	0.08%
Special purpose vehicle	104	1 970	5.28%

As at the end of 2019

<b>Vehicle class</b>	<b>Number of registered EVs</b>	<b>Total number of registered vehicles</b>	<b>Percentage of registered EVs over the total number of registered vehicles</b>
Motor cycle	17	84 426	0.02%
Private car	13 447	628 230	2.14%
Taxi	0	18 163	-
Franchised bus	34	6 373	0.53%
Non-franchised bus	8	7 187	0.11%
Private bus	2	734	0.27%
Public light bus	0	4 346	-
Private light bus	6	3 489	0.17%
Goods vehicle	125	117 199	0.11%
Special purpose vehicle	104	2 009	5.18%

As at the end of 2020

<b>Vehicle class</b>	<b>Number of registered EVs</b>	<b>Total number of registered vehicles</b>	<b>Percentage of registered EVs over the total number of registered vehicles</b>
Motor cycle	42	93 578	0.04%
Private car	17 998	651 358	2.76%
Taxi	0	18 163	-
Franchised bus	34	6 145	0.55%
Non-franchised bus	6	7 194	0.08%
Private bus	2	745	0.27%
Public light bus	0	4 350	-
Private light bus	6	3 569	0.17%
Goods vehicle	160	119 043	0.13%
Special purpose vehicle	113	2 101	5.38%

As at the end of 2021

<b>Vehicle class</b>	<b>Number of registered EVs</b>	<b>Total number of registered vehicles</b>	<b>Percentage of registered EVs over the total number of registered vehicles</b>
Motor cycle	119	100 557	0.12%
Private car	27 358	656 973	4.16%
Taxi	0	18 163	-
Franchised bus	34	6 167	0.55%
Non-franchised bus	5	6 995	0.07%
Private bus	2	784	0.26%
Public light bus	0	4 349	-
Private light bus	6	3 504	0.17%
Goods vehicle	213	119 895	0.18%
Special purpose vehicle	118	2 163	5.46%

As at the end of 2022

<b>Vehicle class</b>	<b>Number of registered EVs</b>	<b>Total number of registered vehicles</b>	<b>Percentage of registered EVs over the total number of registered vehicles</b>
Motor cycle	282	106 205	0.27%
Private car	46 565	649 540	7.17%
Taxi	1	18 163	0.01%
Franchised bus	51	6 198	0.82%
Non-franchised bus	7	6 905	0.10%
Private bus	2	815	0.25%
Public light bus	0	4 349	-
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 as government vehicles are not required to be registered.

3. 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.



4. The annual expenditures on electricity tariff and maintenance for the 1 615 EV charging facilities managed by the Environmental Protection Department were about \$9.3 million in 2022.
5. The number of public EV chargers managed by the Government and other organisations by the 18 districts of Hong Kong as at the end of December 2022 is tabulated below:

District	Number of chargers									Total
	Standard			Medium			Quick			
	Government	Other organisations	Sub-total	Government	Other organisations	Sub-total	Government	Other organisations	Sub-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
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
<b>Total</b>	<b>523</b>	<b>930</b>	<b>1 453</b>	<b>1 674</b>	<b>1 309</b>	<b>2 983</b>	<b>13</b>	<b>985</b>	<b>998</b>	<b>5 434</b>

6. According to the information provided by the Government Logistics Department, the number of EVs (excluding special purpose vehicles) procured by government departments by vehicle class and the amount of expenditure involved in each of the past 5 years are tabulated below:

Year	Electric car	Electric van	Expenditure involved (\$m)
2018	7	-	1.65
2019	4	2	1.75
2020	12	-	3.34
2021	27	-	7.54
2022	55	-	17.33

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)161**

**(Question Serial No. 3200)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Since the launch of the Pilot Scheme for Electric Public Light Buses (e-PLBs), how many e-PLBs have been subsidised in total? How many of them have already come into service? What is the expenditure involved?

Does the Government have any plan to tie in with the development of e-PLBs by providing more charging stations for e-PLBs? What is the planning?

Asked by: Hon LEUNG Hei, Edward (LegCo internal reference no.: 61)

Reply:

The \$80 million earmarked for the Pilot Scheme for Electric Public Light Buses (e-PLBs) are mainly used for providing quick charging service for e-PLBs and subsidising public light bus (PLB) operators to purchase e-PLBs under the Pilot Scheme. The Environmental Protection Department (EPD) conducted 2 briefing sessions in May and September 2022 respectively and briefed the relevant PLB operators on the details and progress of the Pilot Scheme. Positive responses were received from the PLB 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.

The EPD is pressing ahead with the preparatory work concerned. It is expected that the Pilot Scheme can be rolled out in the second half of 2023. Through the Pilot Scheme, we will test out the respective technologies and arrangements for the operation of e-PLBs (including comparing the performance of different models), and collect the operational data of the e-

PLBs, so as to evaluate the feasibility of their application in the local context, as well as consider the long-term strategies and specific arrangements for the electrification of PLBs.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)162**

**(Question Serial No. 0569)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (3) Sustainable Development

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The plastic bag levy was adjusted upward to \$1 on 31 December. While the levy increase helps to change Hong Kong people's habit of using plastic bags, its effectiveness will drop with the passage of time. In the long run, environmental education will help to raise the public awareness of environmental protection, strengthen waste reduction of the community as a whole and build a greener city. Relevant provisions for sustainable development which have been transferred from the Environmental Protection Department are related to environmental education resources. Please advise this Committee of the following:

1. What were the environmental education expenditures involved in the past 3 years?
2. The estimated provisions for sustainable development in 2023-24 have increased by 16.8% when compared with last year. What is the amount of additional resources to be allocated by the Government for environmental education purpose? Please give a detailed breakdown of the various sums used for environmental education purpose.

Asked by: Hon LEUNG Man-kwong (LegCo internal reference no.: 4)

Reply:

1. The Environment and Ecology Bureau (EEB) has been actively implementing public education and publicity programmes to promote public awareness of the principles of sustainable development. Under Programme (3) Sustainable Development, details of the expenditure for promoting sustainable development in the past 3 years are as follows:

<b>Financial year</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
1. Sustainable Development School Outreach Programme (Outreach Programme)	This programme aims at promoting the concept and practice of sustainable development among primary and secondary school students through a series of seminars, workshops, field trips and interactive dramas.		
<b>Expenditure</b>	About \$700,000	About \$1.7 million	About \$1.86 million
2. Sustainable Development School Award Programme (Award Programme)	This programme aims at encouraging schools to participate in and organise sustainable development related activities, so that students can put sustainable development concept into practice in schools and the community.		
<b>Expenditure</b>	About \$110,000		About \$120,000 (Note)

Note: With effect from 2022-23, the Award Programme has been changed from a biennial school year programme to an annual school year programme. Accordingly, the expenditure on the programme has been calculated on an annual rather than biennial financial year basis.

2. The increase of 16.8% in the estimate for 2023-24 over the revised estimate for 2022-23 is mainly due to the need to fill vacancies, as well as the increased cash flow requirement for enhancing education and publicity on sustainable development.

In 2023-24, the EEB will continue its efforts in education and publicity under Programme (3) Sustainable Development to enhance public awareness and practice of sustainable development, including enabling more students to understand and put into practice the sustainable development concept outside the classroom through the Outreach Programme and the Award Programme.

The Outreach Programme, with the sustainable development-related themes such as waste reduction and plastic-free, low-carbon lifestyle, climate change and natural resources, aims to promote the concept and practice of sustainable development among primary and secondary school students and, in tandem, foster their value of sustainable development through different types of seminars, workshops, field trips, interactive dramas and other activities on diverse topics with the integration of interactive learning approaches like case study, discussion, sharing, role play, presentation, etc. In the 2022/23 school year, the new topics for the activities included waste reduction and plastic-free, food cherisher, green living, etc., while the field trip locations included the EcoPark, O·PARK1 (Organic Resources Recovery Centre Phase 1), T·PARK, the GREEN@COMMUNITY Recycling Stations, the CLP Power Low Carbon Energy Education Centre, Hoi Ha Wan, the Ocean Park (for the educational programme on “Every Drop Counts”), the Kadoorie Farm and Botanic Garden, etc.

The Award Programme aims to enable secondary school students to put into practice the sustainable development concept in schools and the community by encouraging the schools to join and organise the activities on sustainable development. Under the Award Programme, there are “Sustainable Development Community Project Award” and “Sustainable Development Participation Award” to recognise the schools’ efforts and contributions in promoting sustainable development in the campus and the community respectively. A wide variety of innovative activities were held by the schools. For instance, an online virtual reality platform was designed for all local primary school students to look for the green facilities such as photovoltaic panels and food waste grinders in their schools, thereby understanding the importance of renewable energy and waste reduction. In addition, the “Water Conservation Carnival” was held to raise the community awareness of the importance of water conservation and water resources through multimedia games, educational videos and exhibitions, etc. Furthermore, the schools held, amongst others, the exhibitions and game booths on waste reduction and plastic-free, food cherisher and green living in the campus and the community as well.

The estimated expenditure on the work involved in the above 2 programmes is about \$2.5 million, and the specific allocations will be subject to the actual needs of various projects.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)163**

**(Question Serial No. 0046)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Government pointed out that in 2023-24, it would continue to oversee the construction and operation of the District Cooling System (DCS) projects in the Kai Tak Development, take forward the implementation of DCS projects in the Kwu Tung North New Development Area and Tung Chung New Town Extension (East), and oversee feasibility studies on implementing DCS projects in other New Development Areas. In this connection, please advise this Committee:

1. of the total estimated electricity saving, the total estimated electricity cost saving, as well as the equivalent amount of reduction in carbon emissions since the commencement of operation of the Kai Tak DCS in 2013;
2. whether the Administration has assessed if the performance of the Kai Tak DCS complied with the key performance indicators, how the Administration monitors the relevant system and of the follow-up actions for non-compliance cases;
3. of the current progress of the DCS projects in the Kwu Tung North New Development Area and Tung Chung New Town Extension (East), whether the completion time can tie in with the Tung Chung New Town Extension development, and the estimated expenditure for the two projects in 2023-24;
4. of the progress of the feasibility studies on implementing DCS projects in other New Development Areas, and the estimated manpower resources and expenditure to be allocated in 2023-24.

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 2)

Reply:

1. The total estimated electricity saving from the commencement of operation of the Kai Tak District Cooling System (DCS) in 2013 to 2021-22 was about 40 million kWh, which was equivalent to a reduction in carbon emissions of about 28 000 tonnes, and the total electricity cost saving was about \$49 million (calculated on the basis of \$1.2 per kWh on average).

2. According to the contract provisions, the Electrical and Mechanical Services Department (EMSD) monitors the contractor's performance in operating the Kai Tak DCS mainly by using 2 key performance indicators (KPIs), including maintaining the chilled water supply temperature at the primary and secondary sides, so as to monitor the operational performances of the cooling system and the heat exchanger respectively. Currently, the Kai Tak DCS contractor's performance complies with the contractual requirements for the above 2 KPIs. When a substation's measured Counts of Non-compliance for a KPI in a month exceeds 20, the EMSD will investigate the cause of the substation's non-compliance. If the actual performance of the contractor is found to be unsatisfactory, then apart from deducting the contractor's operating income in accordance with the mechanism, the EMSD will also issue advisory letter or warning letter to the contractor as necessary, and will duly reflect the contractor's performance in its performance appraisal report.
3. The construction works of the DCS at the Kwu Tung North New Development Area (KTN NDA) commenced in the first quarter of 2021. The consultant is carrying out the detailed design work for the "design-build-operate" contract of the DCS chiller plants. It is expected that the DCS at the KTN NDA will be completed in phases from 2026, so as to tie in with the progress of the NDA project. It is expected that the chiller plants and chilled water pipes of the project will be substantially completed in 2031, while the works of the whole project, including those for the connection facilities at user buildings, will be completed in 2040.

The construction works of the DCS at Tung Chung New Town Extension (East) commenced in the second quarter of 2021. The consultant is carrying out the tendering exercise for the "design-build-operate" contract of the DCS chiller plant. It is expected that the DCS at Tung Chung New Town Extension (East) will be completed in phases from 2026, so as to tie in with the progress of the Tung Chung New Town Extension development. It is expected that the chiller plant and chilled water pipes of the project will be substantially completed in 2030, while the works of the whole project, including those for the connection facilities at user buildings, will be completed in 2034.

The estimated expenditure for the 2 projects in 2023-24 is about \$374 million.

4. The EMSD is working together with other departments to conduct preliminary feasibility studies on implementing DCS in NDAs at the Artificial Islands in the Central Waters, Ngau Tam Mei, Ma Tso Lung, Man Kam To/New Territories North, etc., and is preparing the Technical Feasibility Statement for implementing DCS at Yuen Long South Development Area and San Tin/Lok Ma Chau Development Node.

The EMSD will absorb the relevant work with its existing staff establishment, and will not allocate additional manpower resources for the above projects in 2023-24. The EMSD anticipates that it will seek a funding of about \$1.1 million for employing consultants to carry out the relevant design and investigation work in 2023-24.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)164**

**(Question Serial No. 0047)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (6) Climate Change

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Environment and Ecology Bureau set up the Office of Climate Change and Carbon Neutrality (Climate Change Office) in January this year, and will establish the Council for Carbon Neutrality and Sustainable Development (the Council). In this connection, please advise this Committee:

1. of the specific projects to be launched by the Climate Change Office for promotion of deep decarbonisation in 2023-24, and the estimated manpower resources and expenditure to be involved;
2. of the existing establishment of the Council, the expenditure involved and the work to be implemented;
3. how the Administration will follow up on the work of the Climate Change Office and the Council in the areas of operation, accountability and performance review;
4. of the estimated amount of resources to be allocated in 2023-24 to promote collaboration with the Greater Bay Area and at international level for achieving the regional emission reduction and decarbonisation targets, as well as the relevant specific work.

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 3)

Reply:

To reduce Hong Kong's carbon emissions by 50% before 2035 from the 2005 level in order to achieve the goal of carbon neutrality before 2050, the Government will adopt a whole-government approach and encourage the entire community to achieve low-carbon transformation. We will also endeavour to engage the local, Mainland and overseas authorities and stakeholders for the purpose of driving low-carbon development.

To implement the above tasks, the Environment and Ecology Bureau (EEB) set up the Office of Climate Change and Carbon Neutrality (Climate Change Office) in January this year to strengthen coordination and promote deep decarbonisation. The Climate Change Office is responsible for taking forward and coordinating the Government's strategies, policies and action plans for combating climate change; providing support for the inter-departmental

Steering Committee on Climate Change and Carbon Neutrality and the Council for Carbon Neutrality and Sustainable Development which will soon be established; coordinating and overseeing the operation of the Green Tech Fund (GTF); and launching publicity and public education campaigns to raise public awareness of and support for climate actions. The Climate Change Office is also responsible for assisting in overseeing the housekeeping of the Hong Kong Observatory.

Regarding collaboration with the Greater Bay Area (GBA) and the international community, the EEB has been promoting collaboration on the environmental front with the Mainland and at the international level. The newly established Climate Change Office will step up exchange and collaboration with the local, Mainland (especially the Guangdong-Hong Kong-Macao GBA) and overseas authorities and stakeholders on various issues relevant to low-carbon development in order to help Hong Kong seize the growth opportunities brought about by the low-carbon transformation.

In 2023-24, apart from monitoring the work of bureaux and departments in implementing the Hong Kong's Climate Action Plan 2050, as well as promoting collaboration at regional (including collaboration with cities in the GBA) and international levels, the Climate Change Office will also be responsible for setting up a new Council for Carbon Neutrality and Sustainable Development to enable relevant stakeholders to offer advice on decarbonisation strategies and to promote participation in carbon reduction by different sectors of the community, as well as launching publicity programmes on carbon neutrality for promoting participation in deep decarbonisation by various sectors of the society.

The estimated provision for the work relevant to climate change in 2023-24 is about \$147 million which will be used for covering the expenditure on projects under the GTF and the Sustainable Development Fund, as well as supporting all the work of the Climate Change Office. The work of the EEB (Environment Branch) in promoting collaboration with the GBA and the international community will be absorbed by the existing staff establishment, and we do not have the relevant breakdown.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)165**

**(Question Serial No. 0048)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Environment and Ecology Bureau is leading an inter-departmental working group to prepare to launch a trial of hydrogen fuel cell electric buses and heavy vehicles in 2023-24. In this connection, please advise this Committee of the following:

1. What is the timetable for the Administration to implement the trial by phases? Please advise of the expenditure involved in 2023-24.
2. Since the Hong Kong legislation has not yet allowed hydrogen vehicles on the road (not even on a trial run basis), has the Administration considered amendment to relevant legislation to facilitate various trials during the transition period? If yes, please advise of the details.
3. Given that quite a number of Hong Kong people have misconceptions about hydrogen, what measures does the Administration have for the promotion and public education purposes? What is the estimated expenditure involved?

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 4)

Reply:

1. At present, hydrogen fuel cell (HFC) heavy vehicles are still at the early stage of development, and resources are being invested in research and development, operational trials and construction of ancillary infrastructure worldwide. To keep up with the development trend and the demand for ancillary facilities for HFC vehicles, the Environment and Ecology Bureau (EEB) is leading an inter-departmental working group (IWG) to progressively commence the trials of HFC double-deckers and heavy vehicles in phases having regard to local circumstances. In the meantime, the IWG will also review and assess applications for trial projects on hydrogen fuel technology, and advise on aspects such as safety and planning. As at the end of February 2023, the IWG Secretariat has received 8 trial applications in total, involving various areas such as HFC double-deckers, hydrogen refilling stations, hydrogen transportation and electricity generation from hydrogen fuel cells. The IWG is liaising closely with the applicants of the trial projects and discussing detailed arrangements for the trial projects to facilitate the phased commencement of the trial projects in the second half of 2023.

Due to the substantial price difference between HFC double-deckers and heavy vehicles and their conventional counterparts, as well as a high upfront capital expenditure to procure hydrogen supply equipment, it will certainly be difficult for the trial projects to be implemented in the short run without government subsidies. Therefore, we have earmarked \$200 million under the New Energy Transport Fund for subsidising the procurement and operation of HFC vehicles, the installation of hydrogen refilling facilities, and other associated costs such as the costs for collecting and analysing trial data. We anticipate that the first funding case will be approved in the third quarter of this year.

2. While pushing forward the trials of HFC double-deckers and heavy vehicles, the IWG will also conduct risk assessments on hydrogen refilling stations, the arrangements of hydrogen supply and HFC vehicles on road, etc., as well as review relevant regulations, standards and technical guidelines, with a view to preparing for the establishment of a legal framework for the local use of hydrogen fuel. The IWG will review and assess applications for trial projects on hydrogen fuel technology before the completion of abovementioned tasks, and advise on aspects such as safety and planning, so that the relevant trades can commence trials on hydrogen fuel technology as soon as possible. With the results and data gathered from the trials of HFC vehicles, we will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.
3. The Government will actively collaborate and communicate with the academia, research institutes and the transport trade to follow up on the development of HFC vehicles, and provide appropriate information to the public timely to raise public awareness of HFC vehicles and related technologies. As the promotion of new energy transport (including HFC vehicles) is part of the routine work of the Air Policy Division of the EEB, the expenditure on future promotion work will be absorbed by the existing resources of the EEB.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)166**

**(Question Serial No. 0049)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Administration will introduce the fourth phase of the Mandatory Energy Efficiency Labelling Scheme (MEELS) to expand its scope to include gas cookers, gas instantaneous water heaters and light emitting diode (LED) lamps. In this connection, please advise this Committee on the following:

1. Will the Administration consider adopting more stringent grading thresholds to distinguish products with different energy performances, as well as promote the development and sale of products with higher energy efficiency by product suppliers?
2. Will the Administration consider expanding the scope of MEELS at subsequent phases to include other types of products with higher energy consumption or commonly used by consumers, such as electric fans, electric heaters, electric rice-cookers, microwave ovens? Moreover, apart from home appliances, will energy intensive products such as passenger vehicles (especially electric vehicles) also be considered?
3. Has the Administration taken steps to promote mutual recognition of energy efficiency labelling schemes between Hong Kong and overseas regions to streamline test procedures and save costs?

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 5)

Reply:

1. To further encourage product suppliers to provide more energy-efficient products to consumers, the Electrical and Mechanical Services Department (EMSD) will continue to review the energy efficiency grading standards of prescribed products under the Mandatory Energy Efficiency Labelling Scheme (MEELS). After inclusion of the products in the MEELS, the EMSD has reviewed and upgraded the energy efficiency grading standards of room air conditioners, refrigerating appliances, washing machines, dehumidifiers and compact fluorescent lamps (CFLs), so as to promote the development and sale of products with higher energy efficiency by product suppliers. The EMSD will keep up its efforts in this respect.

2. The scope of the fourth phase of the MEELS, which is expected to commence on 1 September 2023, will be expanded to include gas cookers, gas instantaneous water heaters and light-emitting diode (LED) lamps. By then, the total coverage of energy consumption in the residential sector by the household appliances under the MEELS will be increased substantially from about 50% to about 80%.

The EMSD will continue to review the scope of the MEELS and make reference to various factors, including the Mainland and overseas experience, availability of international testing standards, availability of testing laboratories in the market, energy consumption and potential energy saving of the products, the types of products commonly used by consumers, etc., before deciding whether to include more products in the MEELS. The EMSD will also consider expanding the scope of the MEELS to cover non-domestic or commercial appliances.

3. Under the MEELS, international testing standards or the national testing standards are adopted for testing the energy performance of prescribed products. Manufacturers or importers of prescribed products are also required to conduct tests in accredited testing laboratories. Apart from accredited laboratories under the Hong Kong Laboratory Accreditation Scheme (HOKLAS), the MEELS also recognises those under an accreditation scheme operated by a laboratory accreditation body in other economies with which the HOKLAS has concluded a mutual recognition arrangement. Importers can therefore submit test reports issued by accredited laboratories outside Hong Kong when applying for energy labels to streamline test procedures and save costs.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)167**

**(Question Serial No. 0058)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Administration plans to work with bureaux and departments to take various measures with a view to improving the overall energy performance of government buildings and infrastructure by more than 6% by 2024-25. In this connection, please advise this Committee of the following:

1. What are the specific details of the measures and plans, the manpower and expenditures involved, as well as their implementation schedules?
2. When introducing the relevant measures, has the Administration set any specific and quantifiable emission reduction targets (including phased targets) for departments to evaluate the effectiveness of the projects in future? If yes, what are the specific targets? If no, what are the reasons?
3. A Guide to Environmental Reporting for Controlling Officers issued by the Environmental Protection Department for reference amongst government departments has not been updated since 1999. Will the Government revise the standards to meet the current targets for carbon reduction and energy saving? If yes, please provide the details. If no, what are the reasons?
4. Have there been regular coordination and communication among the government departments and policy bureaux on the environmental targets? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 1)

Reply:

- 1, 2 and 4. As stated in the 2022 Policy Address, we have to set a good example by striving to improve the overall energy performance of government buildings and infrastructure by more than 6% by 2024-25. Apart from energy saving, the energy performance of renewable energy (RE) projects will also be taken into account, with a view to exploring new energy sources while reducing energy consumption. The relevant measures include the following:

- The Electrical and Mechanical Services Department (EMSD) is conducting energy audits (i.e. systematic reviews of the energy consuming equipment/systems in buildings to identify energy management opportunities) for about 250 government buildings, and encourages government departments to actively implement the energy saving measures recommended in the audit report. The Government will conduct retro-commissioning and implement energy saving projects for its buildings, such as replacing lighting facilities with light emitting diode (LED) lamps and adopting high-efficiency air conditioning units. The estimated costs of these measures from 2017-18 to 2025-26 are approximately \$1.1 billion.
- The Government will take the lead in developing large-scale RE projects at suitable locations, including planning to install a 5 MW floating solar energy generation system at Plover Cove Reservoir in 2025, and a 10 MW solar farm at the South East New Territories Landfill in Tseung Kwan O in 2026, etc. Besides, the Government will introduce high-efficiency battery storage technology on a pilot basis to better utilise the electricity generated by large-scale solar energy systems at reservoirs.
- We have earmarked a total of \$3 billion to install small-scale RE systems at government premises since 2017-18. About \$1.9 billion have been approved for about 170 projects so far, including installation of solar energy generation systems at government offices, government quarters, schools, recreational grounds-cum-rest gardens, reservoirs and pedestrian links, as well as installation of waste-to-energy and hydro power systems at multiple sewage treatment plants. The projects are expected to generate a total of about 25 million kWh of electricity annually.

The EMSD requests bureaux and departments to provide information on the energy consumption and RE of government buildings and infrastructure each year, in order to review their energy performance. In addition, the EMSD organises briefing sessions every year to communicate with bureaux and departments on energy performance, and provide suggestions on energy saving measures and planning of RE projects.

Based on the data compiled preliminarily, the Government's overall energy performance had improved by about 3.2% up to 2021-22. We are therefore confident of achieving the target of more than 6% within 5 years (i.e. by 2024-25).

The Environment and Ecology Bureau and the EMSD undertake the planning, coordination and implementation of the above measures with their existing staffing establishment.

3. A Guide to Environmental Reporting for Controlling Officers aims to assist Controlling Officers within the Government in preparing their environmental reports. All government bureaux and departments are required to prepare environmental reports in accordance with the guidelines issued by the Environmental Protection Department (EPD). The report contents cover the environmental impact of departmental operations, as well as the environmental



objectives, environmental initiatives and performance of the departments. The EPD will review the guidelines from time to time.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)168**

**(Question Serial No. 0792)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (6) Climate Change

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding enhancing the promotion and application of the Green Tech Fund (GTF), please inform this Committee of the following:

1. What are the numbers of applications received and approved, as well as the amount of funding involved as at February this year? Please list out the specific projects.
2. It is learnt that recipient organisations may use up to 50% of the GTF funding to conduct research and development (R&D) tasks outside Hong Kong, including other places or cities of the Greater Bay Area. Please provide the numbers of such applications received and approved.
3. Will the Administration, by making reference to the practice of providing tax deduction at 2 to 3 times of the R&D expenditures, provide a higher percentage of tax deductions for capital expenditure on environmental protection, as well as enhance the mechanism of granting gross floor area concessions to developers who provide green features, so as to offer additional incentives to promote green building through a multi-pronged approach?

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 30)

Reply:

In 2020, the Government set up the Green Tech Fund (GTF) to provide better and more focused funding support for research and development (R&D) projects which can help Hong Kong decarbonise and enhance environmental protection. The Government has injected a total of \$400 million into the GTF to subsidise R&D projects in the priority areas such as net-zero electricity generation, energy saving and green buildings, green transport and waste reduction. Projects of designated local public research institutes and R&D centres will be fully funded, while projects of local private research institutes will receive grants on a matching basis. According to the Guide to Applicants for the GTF, recipient organisations may, with the approval from the Environment and Ecology Bureau, use up to 50% of the funding to conduct R&D tasks outside Hong Kong. It is the recipient organisation's responsibility to ensure compliance with the laws applicable to the jurisdiction(s) where the

project activities are conducted and to provide the necessary insurance coverage for such activities.

The first and second rounds of applications for the GTF ended in February 2021 and February 2022 respectively. A total of 288 applications were received. Following careful deliberation by the GTF Assessment Committee, 22 projects from local universities, public research institutes and private enterprises have been approved, involving a total grant of about \$100 million. The approved projects cover a wide range of areas, including technologies for the cells storage and generation of hydrogen fuel; manufacturing and application of biochar-enhanced construction materials; and air cleaning system for reducing roadside air pollution. Relevant details are set out at Annex. Among the 22 approved R&D projects, there are 3 projects with not more than 50% of the R&D tasks to be conducted outside Hong Kong, including cities in the Greater Bay Area such as Shenzhen and Zhuhai, as specified in their applications.

As regards promotion of green buildings, in order to further encourage private buildings to enhance energy efficiency and conservation, with effect from the year of assessment 2018-19, the Government provided further tax incentive for the capital expenditure incurred in purchasing renewable energy installations, as well as building energy-efficient installations that outperform the statutory energy efficiency requirements and achieve the relevant ratings under BEAM Plus (such as using energy-efficient lifts and central air-conditioning systems) by allowing full deduction in the first year of purchase instead of 5 years. In addition, the Government provides gross floor area (GFA) concessions for green and amenity features to encourage the inclusion of such facilities in new development projects. One of the prerequisites is that the development projects should be registered for BEAM Plus certification. To further promote a sustainable built environment, the Buildings Department (BD) proposed a new mechanism requiring projects to attain a specific rating under BEAM Plus, or fulfil certain specific standards set by the BD, in order to be eligible for GFA concessions. The BD is finalising the implementation details in consultation with the industry, with a view to promulgating the relevant practice note in the first half of 2023.

## Projects approved under the Green Tech Fund

	Project title	Research synopsis	Applicant	Grant duration	Grant approved
<b>Projects approved in 2021</b>					
1	Development of high performance and long life hydrogen fuel cell stacks	Development of high performance and long life hydrogen fuel cells that can be widely applied in electric vehicles (EVs) for facilitating large-scale application of fuel cells and helping to promote the popularisation of EVs and low-carbon transformation	The Hong Kong University of Science and Technology	36 months	\$8,991,500
2	Development of printable perovskite solar cells for transformative clean energy	Development of solar cells that can be printed on different surfaces to increase the power generation efficiency of photovoltaic systems and to develop building-integrated photovoltaic systems	City University of Hong Kong	36 months	\$5,031,934

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
3	A safe, efficient and facile approach for hydrogen storage and generation : catalytic hydrolysis of solid-state hydrogen storage materials	Development of hydrogen storage and release technology involving the use of stable solid-state materials for hydrogen storage to enhance safety and reduce potential risks associated with hydrogen transport and storage	The Hong Kong Polytechnic University	30 months	\$3,305,100
4	Green hydrogen production from active flow membraneless electrolyzers	Development of more cost-effective and efficient technologies for producing green hydrogen	The Hong Kong University of Science and Technology	36 months	\$3,198,150
5	Turning water into the source of solar hydrogen via photocatalyst panel	Use of domestic water for scalable solar hydrogen evolution, and development of a demonstration system to promote public awareness of green hydrogen technologies	City University of Hong Kong	36 months	\$2,876,449

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
6	Smart power conditioners with second-life electric vehicle (EV) batteries	Development of a smart energy storing power regulator with retired EV batteries to control and improve the power quality and grid stability, improve the charging infrastructure for EVs, and facilitate the application of second-life EV batteries with a view to achieving the goals of waste reduction and decarbonisation	City University of Hong Kong	36 months	\$6,687,710
7	Agile and dynamic control technologies to enhance system stability and power quality considering renewables and electrical vehicle impacts	Development of technologies that can control power quality and grid stability by storing the energy generated by a photovoltaic power generation system and analysing the utilisation of the charging stations with the use of software to improve the stability and reliability of the power grid, thereby supporting the popularisation of EVs	CAFEA Smart City Limited	30 months	\$2,504,200

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
8	Reducing biological landfill leachate treatment footprint via rapid electrochemical-UV technologies	Research on more energy-efficient ways to purify landfill leachate which has to be treated before it is discharged into the public sewerage system	The Hong Kong University of Science and Technology	30 months	\$6,674,600
9	Coupling AnMBR and PNA for compact - and energy- saving landfill leachate treatment	Development of a low-cost, less energy-intensive and less space-demanding system for landfill leachate treatment, with renewable energy generated in the process for use by the system	The University of Hong Kong	24 months	\$4,381,040
10	Biochar-enhanced construction materials for sustainable waste management and decarbonisation	Research on the use of yard waste for production of biochar building materials to reduce landfilled woody waste and carbon emissions each year	The Hong Kong Polytechnic University	36 months	\$8,784,200
11	Recycling of waste lithium-ion batteries as highly active fuel cell catalysts	Collection of waste batteries, electric vehicle batteries in particular, and recycling the cathode materials therein to produce fuel cells	The Hong Kong Polytechnic University	24 months	\$2,783,920

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
12	Green intelligent garbage bag assessment system	Development of a smart garbage bag assessment system by using artificial intelligence technologies, together with positioning system data analysis to optimise waste management processes and facilitate effective implementation of municipal solid waste charging	United Microelectronics Centre (Hong Kong) Limited	21 months	\$2,514,580
13	Temperature and humidity impact free gas sensor and monitor system development for real-time high performance air quality monitoring	Development of low-cost smart air sensors capable of accurate and real-time air quality monitoring under different temperature and humidity conditions	Sundial Technology Development Limited	36 months	\$5,701,200



	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
14	Portable and low-cost sensors for the real-time ambient air monitoring of BTEX and other volatile organic compounds	Development of low-cost portable sensors for real-time concentration monitoring of the most common air pollutants that lead to the formation of ozone in Hong Kong. The development of the sensors will help identify the sources of ozone formation.	City University of Hong Kong	36 months	\$5,686,750
<b>Projects approved in 2022</b>					
15	A high-performance roll-to-roll process for the manufacture of a novel PEM membrane electrode assembly	Development of a novel membrane electrode assembly, and by reducing the particle size and increasing the conductivity of the support material, a larger surface area is available for catalyst deposition and a lower catalyst loading is required to achieve a similar performance in water electrolysis.	iCreate Limited	18 months	\$3,866,033

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
16	Hybrid air cleaning system	Development of an air cleaning system to reduce air pollutants in roadside and semi-enclosed spaces through advanced technologies, such as high efficiency particulate filtration and nano catalytic coating, without affecting traffic flow or altering existing facilities	The Hong Kong Polytechnic University	24 months	\$5,561,400
17	Carbon-friendly pneumatic flow mixing (PFM) to rapidly recycle waste mud for land reclamation in Hong Kong	Collaboration with the Civil Engineering and Development Department to recycle waste mud for land reclamation instead of dumping it into sediment pits in the open sea	The University of Hong Kong	36 months	\$4,901,300
18	Low carbon road pavement by maximising material circularity and adopting sustainable materials	Development of low carbon road pavement systems by adopting the closed-loop and open-loop based material circularity strategies according to the specifications of pavement systems of Hong Kong	City University of Hong Kong	36 months	\$4,197,500

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
19	Low-carbon transformation of construction materials using waste glass	Development of novel glass-based concrete products and promising large-scale technologies to provide a viable route for the use of waste glass in concrete, and reduce the consumption of cement and concrete raw materials in the construction industry	The Hong Kong Polytechnic University	36 months	\$5,292,875
20	Development of renewable energy and retired EV battery solution	Extending the lifespan and enhancing the value of retired EV batteries by providing a solution to overcome the technical challenges of reusing retired EV batteries	Hong Kong Productivity Council	36 months	\$2,942,000
21	Manufacturing high-efficiency noise-absorbing materials from recycled plastics	Manufacturing noise-absorbing products with superior acoustic and non-acoustic performance through using recycled plastics as raw materials	Lumi Technology Company Limited	24 months	\$3,379,200

	<b>Project title</b>	<b>Research synopsis</b>	<b>Applicant</b>	<b>Grant duration</b>	<b>Grant approved</b>
22	Green tech platform for waste management and reduction – Large scale reverse vending machine for plastic beverage bottles	Provision of a large size reverse vending machine (RVM) with enhanced accuracy, speed and reliability, and the use of the RVM database and 5G communication network to facilitate bottles identification and analysis of the public’s recycling habits	Roborn Technology Limited	12 months	\$2,518,000

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)169**

**(Question Serial No. 1065)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

With regard to the development of new energy vehicles, please advise this Committee:

1. of the projects approved by the New Energy Transport Fund in the past, and the amount of funding involved;
2. whether the Government has assessed the effectiveness of various incentive measures and trial schemes relating to the promotion of the use of new energy commercial vehicles in the past, and whether new measures and ancillary facilities will be introduced to promote the popularisation of new energy commercial vehicles; if yes, of the details; if not, of the reasons; and
3. of the numbers and percentages of new energy vehicles used by government departments, with a breakdown by department.

Asked by: Hon LUK Chung-hung (LegCo internal reference no.: 41)

Reply:

1. As at the end of February 2023, 284 trials involving a total sum of about \$237 million have been subsidised under the New Energy Transport Fund (NET Fund), including trials of 219 electric light goods vehicles, 32 single-deck electric buses, 1 electric double-decker, 5 electric light buses, 11 electric taxis (e-taxis), 7 electric medium goods vehicles, 2 electric heavy goods vehicles, 1 electric motorcycle, 47 hybrid light goods vehicles, 27 hybrid medium goods vehicles, 25 hybrid light buses, 2 single-deck hybrid buses, 1 set of solar air-conditioning system for a bus, 4 sets of electric inverter air-conditioning systems for buses, the retrofitting of 3 in-use ferries with a diesel-electric propulsion system to replace their old-type of diesel engines, the retrofitting of 1 in-use ferry with a seawater scrubber, 3 electric vessels and 2 electric kaitos. To further understand the operation of the NET Fund, including the trial products' information, members of the public can visit the website of the Environment and Ecology Bureau (EEB) at <https://www.eeb.gov.hk/en/new-energy-transport-fund.html>.

The NET Fund Steering Committee (Steering Committee) will, having regard to factors such as trial results of technology products and market development, make timely recommendations to the Government on the subsidy level, limits of applications, etc., with a view to encouraging the transport trade to try out and use green innovative transport technologies.

2. The Government has been actively promoting the use of new energy vehicles and vessels to the transport trade and charitable/non-profit organisations, including organising more than 40 briefings, sharing sessions, workshops and seminars, etc. over the past 2 years, so as to share the benefits of using new energy transport and encourage the trade to apply for the NET Fund to trial new energy transport technologies.

With the rapid development of electric vehicle (EV) technologies in recent years, some suppliers have introduced or are preparing to introduce electric commercial transport tools with long driving range which support quick charging. In response to the Government's active promotion, the transport trade has been more willing to trial different new brands and models of new energy transport tools over the past 2 years, with a view to increasing the number and proportion of new energy transport fleet in their business, and is also willing to share the trial results with other trades.

We will continue to subsidise the transport trade and charitable/non-profit organisations to encourage trial and wider use of zero emission new energy transport technologies. Major projects include the trial applications for hydrogen fuel cell (HFC) vehicles as well as promotion of the trials of e-taxis and electric medium and heavy goods vehicles. Details are as follows:

#### Trial of HFC vehicles

At present, HFC heavy vehicles are still at the early stage of development, and resources are being invested in research and development, operational trials and construction of ancillary infrastructure worldwide. To keep up with the development trend and the demand for ancillary facilities for HFC vehicles, the EEB is leading an inter-departmental working group to progressively commence the trials of HFC double-deckers and heavy vehicles in phases in the second half of 2023 having regard to local circumstances. However, due to the substantial price difference between HFC double-deckers and heavy vehicles and their conventional counterparts, as well as a high upfront capital expenditure to procure hydrogen supply equipment, it will certainly be difficult for the trial projects to be implemented in the short run without government subsidies. Therefore, we have earmarked \$200 million under the NET Fund for subsidising the trials of HFC double-deckers and heavy vehicles on a project basis. With the results and data gathered from the trials of HFC vehicles, we will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.

#### Trial of e-taxis

To achieve the target of introducing 3 000 e-taxis by 2027, we are actively encouraging taxi owners to apply for the NET Fund to trial the new generation e-taxis, so as to collect more actual driving and operational data for the trade's reference and promote the

replacement of old liquefied petroleum gas taxis with electric ones. At present, applications for trials of 15 e-taxis have been preliminarily assessed and will be submitted to the Steering Committee for approval at the end of March this year. Other applications for trials of about 10 e-taxis are also being processed.

#### Trial of electric medium and heavy goods vehicles

With the rapid development of EV technologies in recent years, some suppliers have introduced or are preparing to introduce electric medium and heavy goods vehicles with high payload, long driving range which support quick charging, but their costs can be up to 3 times higher than their diesel counterparts. We are actively encouraging the transport trade (e.g. the logistics sector, container terminals, airport, etc.) to apply for the NET Fund to trial new brands and models of electric medium and heavy goods vehicles, and install charging facilities. In addition, we will continue to encourage suppliers to introduce more models of electric medium and heavy goods vehicles suitable for use in Hong Kong, so as to promote a fair market competition.

3. As at January 2023, all new energy vehicles used by the Government are EVs. The numbers and percentages of EVs used by the government departments broken down by department are tabulated below:

Bureau/Department/Organisation	Number of EVs	Total number of vehicles	Percentage of EVs
Commerce and Economic Development Bureau	1	4	25.0%
Constitutional and Mainland Affairs Bureau	0	3	0.0%
Civil Service Bureau	0	3	0.0%
Culture, Sports and Tourism Bureau	0	5	0.0%
Development Bureau	0	6	0.0%
Education Bureau	0	5	0.0%
Environment and Ecology Bureau	1	4	25.0%
Financial Services and the Treasury Bureau	0	3	0.0%
Housing Bureau	0	0	0.0%
Health Bureau	0	4	0.0%
Home and Youth Affairs Bureau	1	6	16.7%
Innovation, Technology and Industry Bureau	0	2	0.0%
Labour and Welfare Bureau	0	3	0.0%
Security Bureau	0	3	0.0%
Transport and Logistics Bureau	0	2	0.0%
Administration Wing	3	27	11.1%
Agriculture, Fisheries and Conservation Department	9	212	4.2%
Auxiliary Medical Service	0	19	0.0%
Architectural Services Department	1	9	11.1%

Bureau/Department/Organisation	Number of EVs	Total number of vehicles	Percentage of EVs
Audit Commission	0	2	0.0%
Buildings Department	9	40	22.5%
Customs and Excise Department	7	217	3.2%
Census and Statistics Department	0	3	0.0%
Civil Aviation Department	5	15	33.3%
Civil Aid Service	0	40	0.0%
Civil Engineering and Development Department	2	41	4.9%
Chief Executive's Office	1	8	12.5%
Companies Registry	0	1	0.0%
Correctional Services Department	1	131	0.8%
Department of Health	1	57	1.8%
Department of Justice	0	11	0.0%
Drainage Services Department	6	45	13.3%
Electrical and Mechanical Services Department	17	202	8.4%
Environmental Protection Department	2	52	3.8%
Food and Environmental Hygiene Department	4	718	0.6%
Fire Services Department	5	804	0.6%
Government Flying Service	0	4	0.0%
Government Logistics Department	3	62	4.8%
Government Laboratory	0	1	0.0%
Government Property Agency	0	2	0.0%
Home Affairs Department	0	29	0.0%
Hong Kong Monetary Authority	0	5	0.0%
Hong Kong Observatory	0	8	0.0%
Hong Kong Police Force	29	2 877	1.0%
Post Office	7	267	2.6%
Housing Department	4	51	7.8%
Highways Department	2	47	4.3%
Independent Commission Against Corruption	0	38	0.0%
Immigration Department	1	36	2.8%
Invest Hong Kong	0	1	0.0%
Intellectual Property Department	0	1	0.0%
Inland Revenue Department	0	4	0.0%
Information Services Department	0	8	0.0%



Bureau/Department/Organisation	Number of EVs	Total number of vehicles	Percentage of EVs
Innovation and Technology Commission	0	3	0.0%
Joint Secretariat for the Advisory Bodies on Civil Service and Judicial Salaries and Conditions of Service	0	1	0.0%
Judiciary	0	24	0.0%
Land Registry	0	1	0.0%
Legal Aid Department	0	2	0.0%
Lands Department	4	172	2.3%
Leisure and Cultural Services Department	3	151	2.0%
Labour Department	2	27	7.4%
Marine Department	0	5	0.0%
Office of the Communications Authority	2	21	9.5%
Office of the Government Chief Information Officer	0	3	0.0%
Official Receiver's Office	0	1	0.0%
Planning Department	1	12	8.3%
Public Service Commission	0	1	0.0%
Registration and Electoral Office	0	1	0.0%
Radio Television Hong Kong	1	24	4.2%
Rating and Valuation Department	0	7	0.0%
Secretariat, Commissioner on Interception of Communications and Surveillance	0	1	0.0%
Social Welfare Department	3	29	10.3%
Transport Department	1	219	0.5%
Trade and Industry Department	0	2	0.0%
The Treasury	0	1	0.0%
University Grants Committee Secretariat	0	1	0.0%
Working Family and Student Financial Assistance Agency	2	2	100.0%
Water Supplies Department	12	249	4.8%
<b>Total</b>	<b>153</b>	<b>7 108</b>	<b>2.2%</b>

Some departments have to wait until new energy vehicles meeting their operational needs are available and there are more models for selection in the market before they can replace their conventional fossil fuel vehicles with new energy vehicles.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)170****(Question Serial No. 2823)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

According to Programme (4), the Environment and Ecology Bureau promotes green transport. The Government will provide an additional 7 000 parking spaces with electric vehicle (EV) chargers in government premises in the coming 3 years. With a breakdown by the 18 districts, what are the numbers of parking spaces to be provided with additional EV chargers in government premises? Will the Administration consider installing quick chargers at these parking spaces? If yes, what are the details? If no, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (LegCo internal reference no.: 41)

Reply:

In the Chief Executive's 2022 Policy Address, the Government announced that it would provide an additional 7 000 parking spaces with electric vehicle (EV) chargers in government premises in the coming 3 years. According to the information gathered by the Environmental Protection Department, these EV chargers will mainly be medium chargers, some of which are still under planning, and their distribution by region is tabulated as follows:

<b>Region</b>	<b>Number of additional chargers</b>
Hong Kong	300
Kowloon	2 000
New Territories	4 700
<b>Total</b>	<b>7 000</b>

In general, a medium charger can provide a notable top-up to the battery of an EV within an hour, allowing it to travel at least another 30 km, which is sufficient for the normal operation needs of an EV. On the other hand, quick chargers are mainly used for providing quick top-ups within a short period of time to EVs with special needs in their daily operation. Hence,

medium chargers will be the main EV charging facilities to be installed by the Government in its normal car parks.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)171**

**(Question Serial No. 0771)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the promotion of green public transport, please advise this Committee of the expenditure and staff deployment involved in promoting green public transport for the coming year, as well as the details of the relevant plans, including the Pilot Scheme for Electric Public Light Buses, the Pilot Scheme for Electric Ferries, the trial of electric taxis, etc. Does the Bureau have any plan to formulate the timetable, roadmap and key performance indicator for promoting green public transport, as well as to encourage the trade to switch to the use of green public transport facilities by enhancing the technical support, hardware services and financial support?

Asked by: Hon NGAN Man-yu (LegCo internal reference no.: 25)

Reply:

The Government will continue to promote green public transport in accordance with the measures set out in the *Hong Kong Roadmap on Popularisation of Electric Vehicles*, *Clean Air Plan for Hong Kong 2035* and *Hong Kong's Climate Action Plan 2050* announced in March, June and October 2021 respectively. The Government will, inter alia, actively promote the trials of various new energy public transport and commercial vehicles, with a view to announcing a roadmap for the promotion of electric public transport and commercial vehicles by 2025, and formulating the long-term strategies for the application of hydrogen energy in road transport. We also target to introduce about 700 electric buses and about 3 000 electric taxis (e-taxis) by the end of 2027.

Details of the Government's manpower and expenditure involved in promoting green public transport as well as the relevant schemes (i.e. Pilot Scheme for Electric Public Light Buses (e-PLBs), Pilot Scheme for Electric Ferries (e-ferries), trial of e-taxis and trials of hydrogen fuel cell (HFC) double-deckers and heavy vehicles) for the coming year are tabulated below:

<b>Project</b>	<b>Details of the scheme for the coming year</b>	<b>Manpower and expenditure involved in relevant work</b>
Implementation of the Pilot Scheme for e-PLBs	<p>The Government has earmarked \$80 million for the Pilot Scheme, mainly for providing quick charging service for e-PLBs and subsidising PLB operators to purchase e-PLBs for trial under the Pilot Scheme. The first quick charging facility will be set up at Kowloon Tong (Suffolk Road) Public Transport Interchange. The Environmental Protection Department (EPD) will engage a supplier to set up, operate, manage and maintain the charging facility. The relevant tendering process will be completed in the first quarter of 2023. We anticipate that the Pilot Scheme will commence in the second half of 2023 at the earliest.</p>	<p>The work of implementing the Pilot Scheme will be absorbed by existing resources of the EPD.</p>
Implementation of the Pilot Scheme for e-ferries	<p>The Government is preparing to launch a 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 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 will commence by 2024 at the earliest.</p>	<p>The work of implementing the Pilot Scheme will be absorbed by existing resources of the EPD.</p>

<b>Project</b>	<b>Details of the scheme for the coming year</b>	<b>Manpower and expenditure involved in relevant work</b>
Trial of e-taxis	<p>To achieve the target of introducing about 3 000 e-taxis by the end of 2027, the Government is taking a multi-pronged approach to promote the electrification of taxis, including actively encouraging vehicle suppliers to introduce more e-taxi models suitable for local use in Hong Kong, and encouraging the trade to apply for the New Energy Transport Fund (NET Fund) to trial e-taxis. Eligible taxi operators may receive subsidies from the NET Fund to purchase e-taxis for trial.</p> <p>In addition, the Environment and Ecology Bureau (EEB) is identifying suitable locations across the territory, including Lantau Island and Sai Kung District, for providing quick charging service for e-taxis.</p>	<p>As the promotion of e-taxi trial in the trade is an integral part of the work of the Air Policy Division under the EEB and the EPD, we do not have a separate breakdown of the manpower involved.</p>
Trials of HFC double-deckers and heavy vehicles	<p>At present, HFC heavy vehicles are still at the early stage of development, and resources are being invested in research and development, operational trials and construction of ancillary infrastructure worldwide. To keep up with the development trend and the demand for ancillary facilities for HFC vehicles, the EEB is leading an inter-departmental working group (IWG) to progressively commence the trials of HFC double-deckers and heavy vehicles in phases having regard to local circumstances. In the meantime, the IWG will also review and assess applications for trial projects on hydrogen fuel technology, and advise on aspects such as safety and planning. As at the end of February 2023, the IWG Secretariat has received 8 trial applications in total, involving various areas such as HFC double-</p>	<p>As the promotion of the local use of HFC double-deckers and heavy vehicles is an integral part of the work of the Air Policy Division under the EEB, we do not have a separate breakdown of the manpower involved.</p>

<b>Project</b>	<b>Details of the scheme for the coming year</b>	<b>Manpower and expenditure involved in relevant work</b>
	<p>deckers, hydrogen refilling station, hydrogen transportation and electricity generation from HFCs. The IWG is liaising closely with the applicants of the trial projects and discussing detailed arrangements for the trial projects to facilitate the phased commencement of the trial projects in the second half of 2023.</p> <p>To assist the transport trade in commencing the relevant trial projects, we have earmarked \$200 million under the NET Fund for subsidising the procurement and operation of HFC vehicles, the installation of hydrogen refilling facilities, and other associated costs such as the costs for collecting and analysing trial data. We anticipate that the first funding case will be approved in the third quarter of this year.</p> <p>While pushing forward the trials of HFC double-deckers and heavy vehicles, the IWG will also conduct risk assessments on hydrogen refilling stations, the arrangements of hydrogen supply and HFC vehicles on road, etc., as well as review relevant regulations, standards and technical guidelines, with a view to preparing for the establishment of a legal framework for the local use of hydrogen fuel. The IWG will review and assess applications for trial projects on hydrogen fuel technology before the completion of relevant work, and advise on aspects such as safety and planning, so that the relevant trades can commence trials on hydrogen fuel technology as soon as possible. With the results and data gathered from the trials of HFC vehicles, we</p>	

<b>Project</b>	<b>Details of the scheme for the coming year</b>	<b>Manpower and expenditure involved in relevant work</b>
	will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.	

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)172**

**(Question Serial No. 0529)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (6) Climate Change

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Government stated earlier that about \$240 billion would be allocated in the next 15 to 20 years to take forward the measures on climate change mitigation and adaptation, as well as create investment and employment opportunities. Please advise this Committee how the fund will be allocated and of the schedule.

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 25)

Reply:

Hong Kong will strive to achieve carbon neutrality before 2050 and reduce its carbon emission by half before 2035 from the 2005 level. In pursuit of carbon neutrality, the Government and all sectors of the society will allocate substantial financial resources to formulate and implement measures to promote energy saving, clean energy, green infrastructure, electrification of transport, waste reduction and recycling, etc. To this end, the Government plans to allocate about \$240 billion in the next 15 to 20 years to take forward the measures on climate change mitigation and adaptation, covering renewable energy, energy saving and green buildings, green transport, waste management, strengthening coastal defences, stabilising slopes and drainage improvement works, etc. The relevant government departments will ascertain the details and estimated expenditure of individual projects in due course.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)173**

**(Question Serial No. 0538)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Government is determined to reduce carbon emissions. To achieve carbon neutrality before 2050, the Government strives to reduce Hong Kong's carbon emissions from the 2005 level by half before 2035. About two-thirds of Hong Kong's greenhouse gas emissions come from electricity generation, followed by the transport sector and waste. It is announced in the 2021 Policy Address that in the next 15 to 20 years, the Government will devote about \$240 billion to take forward various measures on climate change mitigation and adaptation, that means the Government will spend at least \$12 billion every year to achieve carbon neutrality. The world is currently facing an energy crisis. This year, the surge in the electricity tariffs of the two power companies has hit a historical high, resulting in higher cost of living to be borne by the public. Please inform this Committee of the following:

1. What is the estimated expenditure for the development of renewable energy?
2. Will the Administration allocate additional resources to explore renewable energy development, as well as provide concrete proposals and timetable? If yes, what are the details? If no, what are the reasons?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 24)

Reply:

1. As mentioned in the Hong Kong's Climate Action Plan 2050, the Government is grappling with Hong Kong's geographical and environmental constraints in driving the development of renewable energy (RE).

Since 2017-18, the Government has earmarked a total of \$3 billion to install small-scale RE facilities at government premises. The Electrical and Mechanical Services Department (EMSD) and the Architectural Services Department have invited departments to submit their plans for RE projects. About \$1.9 billion have been approved for about 170 projects so far, including installation of solar energy generation systems at government offices, government quarters, schools, recreational grounds-cum-rest gardens, reservoirs and pedestrian links, as well as installation of waste-to-

energy and hydro power systems at multiple sewage treatment plants. The use of the estimated expenditure will depend on the concrete proposals of the departments.

The Government has all along endeavoured to create favourable conditions that are conducive to encouraging the private sector to develop RE. The EMSD has launched Solar Harvest since 2019-20 to install small-scale solar energy generation systems for eligible schools and welfare non-governmental organisations (NGOs) free of charge. Besides, it plans to install 150 solar energy generation systems in 2023-24. In the past, the EMSD would install a small-scale solar energy generation system with a generating capacity of about 10 kW on the rooftops of participating schools and NGOs. To further promote the development of RE, starting from 2023-24, the EMSD will, subject to the conditions of the premises, install up to 3 electricity generation systems for participating schools and welfare NGOs. The estimated expenditure for 2023-24 is \$45 million.

2. The Government has been leading by example in optimising the favourable conditions of premises and developing RE, including raising the requirements of applying RE technologies in new government buildings, and developing large-scale solar energy generation and waste-to-energy projects, etc. at suitable venues. For instance, the Environmental Protection Department has commenced the operation of T-PARK (sludge treatment facility) and O-PARK1 (Organic Resources Recovery Centre Phase 1), and is constructing O-PARK2 (Organic Resources Recovery Centre Phase 2) and I-PARK1 (Integrated Waste Management Facilities Phase 1). In addition, the Water Supplies Department plans to install a 5 MW floating solar energy generation system at Plover Cove Reservoir and introduce high-efficiency battery storage technology on a pilot basis to better utilise the electricity generated by large-scale solar energy generation systems at reservoirs, and develop a 10 MW solar farm at the South East New Territories Landfill in Tseung Kwan O.

Large-scale development of RE requires the support of land and space. Hong Kong has relatively limited potential for large-scale development of RE (such as solar and wind energy) due to its geographical factors, scarce land resources and dense population. We will actively explore ways to strengthen regional cooperation for developing low-carbon and zero-carbon energy. With the continuous advancement and enhancement of RE technologies, the Government-led RE development and active participation of the community, we expect that the overall RE will be able to meet 7.5% to 10% of Hong Kong's electricity demand by 2035 and increase to 15% gradually thereafter.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)174**

**(Question Serial No. 3038)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (000) Operational expenses

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Environment Bureau announced the first Roadmap on Popularisation of Electric Vehicles in 2021, setting out the long-term policy objectives and plans for the use of electric vehicles (EVs) and their associated supporting facilities. The Government will also take the lead to use more EVs. In this connection, please advise this Committee of the following:

1. What is the latest progress of the Government's work on promoting the recycling of waste EV batteries? It is heard that there are research centres promoting the reuse of batteries and supporting the battery recovery industry in the Mainland. Will the Administration consider commencing cooperation with the research and development (R&D) centres in the Mainland, so that end-of-life or retired EV batteries can be delivered to the R&D centres in the Mainland for central processing in the future, thereby making the most of cross-boundary cooperation?
2. The Government launched the \$2 billion EV-charging at Home Subsidy Scheme (EHSS) in October 2020. It is expected that about 60 000 parking spaces in existing private residential buildings will be provided with EV charging-enabling infrastructure under the EHSS in 3 years. The EHSS only subsidises the provision of charging-enabling infrastructure in car parks of private residential buildings, but overlooks stakeholders from a large number of single block buildings. What are the progress and details of the EHSS? Besides, does the Government consider it necessary to review the implementation details, existing problems and effectiveness of the EHSS, as well as put forward enhancement proposals to the public as soon as possible?
3. Since the implementation of the "One-for-One Replacement" Scheme, how many vehicle owners have joined the first registration tax concession arrangement?
4. Ancillary charging facilities are the critical bottleneck affecting the prevalence rate of EVs in Hong Kong. At present, there are over 5 000 parking spaces with EV charging for public use in Hong Kong, but the total number of registered electric private cars at the end of 2022 was over 46 000. As the number of parking spaces with EV charging is unable to catch up

with the growth rate of EVs, will the Administration consider an overall planning for parking spaces with EV charging, so that it will not only increase the number of parking spaces with EV charging in the territory comprehensively and at full speed, but also consider the planning for the 18 districts across the territory, thus achieving balanced development?

5. Will the Administration follow the practice of the Mainland cities such as Shenzhen by providing a subsidy of RMB 20,000 or a certain amount to people purchasing or switching to the use of EVs, so as to encourage transition to EVs for all?

6. To encourage the people in Hong Kong to use EVs, the CLP Power Hong Kong Limited (CLP) will not charge any fees so long as EVs are charged at locations under its management before the end of 2023. In other words, starting from 2024, charging fees will be charged to the public. Will the Administration set a price ceiling for EV charging, say only HK\$0.9 to \$1 per kWh, so as to provide incentive for the people in Hong Kong to switch to EVs?

7. As it is stipulated in the Hong Kong Planning Standards and Guidelines that 30% of the private car parking spaces in public car parks will be equipped with EV chargers, will the Administration consider raising the percentage? If yes, what are the details? If no, what are the reasons?

8. It is said that the charging technology with a maximum power output of 600 kW has been introduced to the Yueliangwan charging station in Shenzhen, such that EVs can be charged with 50% to 80% of the power within a few minutes. Will the Administration conduct relevant study together with the local electricity suppliers, so as to introduce advanced charging technology from the Mainland, thereby resolving the difficult charging problem for EV owners of Hong Kong?

Asked by: Hon SHANG Hailong (LegCo internal reference no.: 19)

Reply:

1. The Hong Kong Roadmap on Popularisation of Electric Vehicles sets the policy direction for the introduction of a producer responsibility scheme to further ensure the proper collection and handling of retired electric vehicle (EV) batteries. We are liaising with the trade and stakeholders and are conducting a business impact assessment. We will conduct a consultation in 2023, with a view to introducing the relevant bill within 2024.

Retired EV batteries have to be properly handled under the Waste Disposal Ordinance (Cap. 354) and its subsidiary legislation, Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). Currently, EV suppliers have engaged licensed collectors to collect the retired batteries of their brands' EVs. After proper preliminary treatment (e.g. sorting, discharging and insulating) and packaging, these retired batteries are exported to overseas disposal facilities for recycling. Given the growing popularity of EVs, some members of the local trades have expressed interest in setting up EV battery recovery and disposal facilities in Hong Kong. We are looking into and following up on their plans, so as to explore an EV battery recovery and recycling model that suits local circumstances.

2. The Government launched the EV-charging at Home Subsidy Scheme (EHSS) in October 2020, and has received more than 660 applications in total as at the end of January 2023, of which 315 applications have been approved. Upon approval of the EHSS applications by the Environmental Protection Department (EPD), the applicants are required to engage consultants and contractors to design and install EV 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 liaise with parking space owners to reach consensus over the detailed design of the installation. The EPD will provide assistance in this regard. 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 cases, the time between approval of the EHSS applications and completion of the installation works ranges from around 18 to 30 months. 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.

When the EHSS was open for application, the eligibility criteria and implementation details were clearly set out in the EHSS Application Notes, which were uploaded to the EHSS website concurrently for public information. Any existing private residential buildings, including single block buildings, that meet the eligibility criteria can apply for the EHSS to install EVCEI in their car parks.

3. From the launch of the “One-for-One Replacement” Scheme on 28 February 2018 to the end of 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 has been completed and the first registration tax (FRT) concessions involved amounted to about \$9.148 billion.
- 4 and 8. To meet the charging demand from electric private cars (e-PCs), the Government is actively expanding the EV charging network by encouraging the provision of EVCEI in existing residential buildings and new private buildings through the EHSS 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.

The Government is also studying the feasibility of gradually converting some of the existing petrol and liquefied petroleum gas filling stations into 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 EV charging

facilities will continue to increase in the future. As regards EV charging, the Government has been exchanging views with different suppliers on the development of relevant technologies, with a view to supporting more diversified charging facilities catering for different needs, as well as preparing the community for the transition to EVs.

5. To encourage the public to switch to EVs while at the same time avoiding vehicular growth, the Government has introduced a series of measures, including waiving in full the FRT on electric commercial vehicles, electric motorcycles and electric motor tricycles, as well as FRT concessions and the “One-for-One Replacement” Scheme for e-PCs. At present, e-PCs are eligible for a basic FRT concession of up to \$97,500, while the “One-for-One Replacement” Scheme offers a higher FRT concession of up to \$287,500 to those who arrange to scrap their old cars and switch to EVs.
6. The Government is preparing to impose EV charging fees in government car parks progressively starting from the second half of this year, with a view to providing impetus for the marketisation of EV charging services and their long-term sustainable development. The EPD will announce the detailed arrangements in due course.
7. According to the prevailing Hong Kong Planning Standards and Guidelines (HKPSG), only 30% of car parking spaces for PCs in public car parks are required to be provided with EV chargers, while there is no requirement for outdoor car parks to be provided with EV chargers. The Government is amending the HKPSG to stipulate that all parking spaces for PCs, motorcycles and light goods vehicles (whether indoor or outdoor) within the boundaries of new government buildings must be fully equipped with medium EV chargers. It is anticipated that the amendment to the HKPSG will be completed in the second quarter of this year.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)175**

**(Question Serial No. 0635)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The provision under this Programme for 2023-24 is \$84.4 million (122.9%) higher than the revised estimate for 2022-23. This is mainly due to increased cash flow requirement for the New Energy Transport Fund (NET Fund). Please inform this Committee:

1. of the reasons for the increased cash flow requirement and a breakdown of the estimated expenditure;
2. how to assess the effectiveness of the NET Fund in promoting green transport in the past 2 years; and
3. of the work plan of the NET Fund in 2023-24, including the introduction of new energy commercial vehicles.

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 2)

Reply:

1. The increase in cash flow requirement for the New Energy Transport Fund (NET Fund) is mainly due to the allocation of \$200 million for subsidising trial projects of hydrogen fuel cell (HFC) double-deckers and heavy vehicles. The estimated expenditure is as follows:



New project	Relevant information	Estimated expenditure
Trials of HFC double-deckers and heavy vehicles	To assist the transport trade in commencing trials of HFC double-deckers and heavy vehicles, we have earmarked \$200 million under the NET Fund for subsidising the procurement and operation of HFC vehicles, the installation of hydrogen refilling facilities, and other associated costs such as the costs for collecting and analysing trial data (please refer to reply 3 for details).	We will subsidise the trials of HFC double-deckers and heavy vehicles on a project basis. It is anticipated that the first funding case will be approved in the third quarter of this year. The relevant estimate for 2023-24 is about \$76 million.

2. The Government has been actively promoting the use of new energy vehicles and vessels to the transport trade and charitable/non-profit organisations, including organising more than 40 briefings, sharing sessions, workshops and seminars, etc. over the past 2 years, so as to share the benefits of using new energy transport and encourage the trade to apply for the NET Fund to trial new energy transport technologies. In the past 2 years, a total of 96 trials involving a total subsidy of about \$94 million have been approved under the NET Fund, including trials of 91 electric light goods vehicles, 21 single-deck electric buses, 2 electric light buses, 8 electric taxis (e-taxis), 2 electric medium goods vehicles, 2 electric heavy goods vehicles, 1 electric motorcycle, 3 electric vessels and 2 electric kaitos. 21 applications are being reviewed under the NET Fund and will be submitted to the NET Fund Steering Committee (Steering Committee) for approval at the end of March. To further understand the operation of the NET Fund, including the trial products' information, members of the public can visit the website of the Environment and Ecology Bureau (EEB) at <https://www.eeb.gov.hk/en/new-energy-transport-fund.html>.

With the rapid development of electric vehicle technologies in recent years, some suppliers have introduced or are preparing to introduce electric commercial transport tools with long driving range which support quick charging. In response to the Government's active promotion, the transport trade has been more willing to trial different new brands and models of new energy transport tools over the past 2 years, with a view to increasing the number and proportion of new energy transport fleets in their business, and is also willing to share the trial results with other trades.

3. In 2023-24, the NET Fund will continue to subsidise the transport trade and charitable/non-profit organisations to encourage trial and wider use of zero emission new energy transport technologies. Major projects include the trial applications for HFC vehicles as well as promotion of the trials of e-taxis and electric medium and heavy goods vehicles.

### Trial of HFC vehicles

At present, HFC heavy vehicles are still at the early stage of development, and resources are being invested in research and development, operational trials and construction of ancillary infrastructure worldwide. To keep up with the development trend and the demand for ancillary facilities for HFC vehicles, the EEB is leading an inter-departmental working group to progressively commence the trials of HFC double-deckers and heavy vehicles in phases in the second half of 2023 having regard to local circumstances. However, due to the substantial price difference between HFC double-deckers and heavy vehicles and their conventional counterparts, as well as a high upfront capital expenditure to procure hydrogen supply equipment, it will certainly be difficult for the trial projects to be implemented in the short run without government subsidies. Therefore, we have earmarked \$200 million under the NET Fund for subsidising the trials of HFC double-deckers and heavy vehicles on a project basis. With the results and data gathered from the trials of HFC vehicles, we will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.

### Trial of e-taxis

To achieve the target of introducing 3 000 e-taxis by 2027, we are actively encouraging taxi owners to apply for the NET Fund to trial the new generation e-taxis, so as to collect more actual driving and operational data for the trade's reference and promote the replacement of old liquefied petroleum gas taxis with electric ones. At present, applications for trials of 15 e-taxis have been preliminarily assessed and will be submitted to the Steering Committee for approval at the end of March this year. Other applications for trials of about 10 e-taxis are also being processed.

To support the trials and operations of e-taxis, we have engaged contractors to provide quick charging service for e-taxis in Lantau Island and later in Sai Kung District. No less than 10 relevant chargers are expected to be commissioned in phases from mid-2023. In addition, we are also making efforts to identify suitable locations across the territory for providing quick charging service for e-taxis.

### Trial of electric medium and heavy goods vehicles

With the rapid development of electric vehicle technologies in recent years, some suppliers have introduced or are preparing to introduce electric medium and heavy goods vehicles with high payload, long driving range which support quick charging, but their costs can be up to 3 times higher than their diesel counterparts. We are actively encouraging the transport trade (e.g. the logistics sector, container terminals, airport, etc.) to apply for the NET Fund to trial new brands and models of electric medium and heavy goods vehicles, and install charging facilities. In addition, we will continue to encourage suppliers to introduce more models of electric medium and heavy goods vehicles suitable for use in Hong Kong, so as to promote a fair market competition.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)176**

**(Question Serial No. 2094)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Administration stated that it would prepare to launch a trial of hydrogen fuel cell electric buses and heavy vehicles. Please provide details of the specific supporting measures and a breakdown of the estimated expenditure.

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 37)

Reply:

At present, hydrogen fuel cell (HFC) heavy vehicles are still at the early stage of development, and resources are being invested in research and development, operational trials and construction of ancillary infrastructure worldwide. To keep up with the development trend and the demand for ancillary facilities for HFC vehicles, the Environment and Ecology Bureau (EEB) is leading an inter-departmental working group (IWG) to progressively commence the trials of HFC double-deckers and heavy vehicles in phases in the second half of 2023 having regard to local circumstances.

The IWG will also conduct risk assessments on hydrogen refilling stations, the arrangements of hydrogen supply and HFC vehicles on road, etc., as well as review relevant regulations, standards and technical guidelines, with a view to preparing for the establishment of a legal framework for the local use of hydrogen fuel. The IWG will review and assess applications for trial projects on hydrogen fuel technology before the completion of abovementioned tasks, and advise on aspects such as safety and planning, so that the relevant trades can commence trials on hydrogen fuel technology as soon as possible.

Due to the substantial price difference between HFC double-deckers and heavy vehicles and their conventional counterparts, as well as a high upfront capital expenditure to procure hydrogen supply equipment, it will certainly be difficult for the trial projects to be implemented in the short run without government subsidies. Therefore, we have earmarked \$200 million under the New Energy Transport Fund for subsidising the procurement and operation of HFC vehicles, the installation of hydrogen refilling facilities, and other

associated costs such as the costs for collecting and analysing trial data. We will subsidise the trial of HFC double-deckers and heavy vehicles on a project basis. It is anticipated that the first funding case will be approved in the third quarter of this year, hence a breakdown of the exact amount and expenditure is not available at this moment.

With the results and data gathered from the trials of HFC vehicles, we will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)177**

**(Question Serial No. 1601)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

In Matters Requiring Special Attention in 2023-24, the Environment and Ecology Bureau stated that it would “continue to promote green transport through the New Energy Transport Fund”. In this connection, please advise this Committee:

1. of the implementation progress, the resources allocated, the major work conducted and the major achievements for the New Energy Transport Fund over the past 3 years;
2. of the numbers, classes and makes of electric vehicles (EVs) granted with the first registration tax concession and involved in the “One-for-One Replacement” Scheme over the past 3 years, as well as the effectiveness of the Scheme;
3. of the total numbers of vehicles and numbers of EVs purchased by various government departments, as well as the percentages of EVs in all vehicles over the past 3 years; whether there is any concrete plan for the progressive replacement of the existing government vehicles by EVs; if yes, of the specific details, the amount of estimated expenditure involved and the timetable; if no, of the reasons;
4. of the total number of applications received, the number of applications approved, the total amount of subsidies granted, the number of parking spaces with the commissioned facilities, the estimated number of parking spaces approved but have not yet been equipped with the facilities, as well as the number of applications pending approval under the EV-charging at Home Subsidy Scheme; whether there is any plan to expedite the approval procedures and progress of works, so that the public can use the facilities as soon as possible; if yes, of the specific details, the amount of estimated expenditure involved and the timetable; if no, of the reasons;
5. whether there is any concrete plan to further promote or subsidise the installation of additional charging stations in major shopping malls and commercial buildings, with a view to improving the accessibility to the charging service across the territory, in particular providing more appropriate supporting services for future electric buses, light buses and taxis, so as to address the concerns of the public and vehicle owners for the driving ranges of EVs; if yes, of the specific details, the amount of estimated expenditure involved and the timetable; if no, of the reasons.

Asked by: Hon SO Cheung-wing (LegCo internal reference no.: 35)

Reply:

1. The Government has been actively promoting the use of new energy vehicles and vessels to the transport trade and charitable/non-profit making organisations, including organising more than 50 briefings, sharing sessions, workshops and seminars, etc. over the past 3 years, so as to share the benefits of using new energy transport and encourage the trade to apply for the New Energy Transport (NET) Fund to trial new energy transport technologies. In addition, the Government injected additional \$800 million to the Pilot Green Transport Fund (PGTF) to extend its scope in 2020 and renamed the PGTF as the NET Fund, with a view to subsidising the transport trade and charitable/non-profit making organisations to trial and promote wider use of green innovative transport technologies. In the past 3 years, a total of 125 projects involving a total sum of about \$113 million have been subsidised under the NET Fund, including trials of 117 electric light goods vehicles, 21 single-deck electric buses, 1 electric double-decker, 2 electric light buses, 8 electric taxis (e-taxis), 4 electric medium goods vehicles, 2 electric heavy goods vehicles, 1 electric motorcycle, 6 hybrid light goods vehicles, 6 hybrid medium goods vehicles, 19 hybrid light buses, 1 single-deck hybrid bus, 3 electric vessels (work boats) and 2 electric kaitos. 21 applications are being reviewed under the NET Fund and will be submitted to the NET Fund Steering Committee for approval at the end of March. To further understand the operation of the NET Fund, including the trial products' information, members of the public can visit the website of the Environment and Ecology Bureau at <https://www.eeb.gov.hk/en/new-energy-transport-fund.html>.

We will continue to subsidise the transport trade and charitable/non-profit making organisations to encourage trial and wider use of zero emission new energy transport technologies. Major projects include the trial applications for hydrogen fuel cell vehicles as well as promotion of the trials of e-taxis and electric medium and heavy goods vehicles.

2. According to the information provided by the Transport Department, 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) of various classes including motorcycles, private cars (PCs), taxis, franchised buses, non-franchised buses, goods vehicles and special purpose vehicles. Among them, 32 946 were cases of electric private cars (e-PCs) under the "One-for-One Replacement" Scheme (Replacement Scheme). Since the launch of the Replacement Scheme, over 90% of the owners of newly bought e-PCs have participated in the Replacement Scheme. In recent years, the number of newly registered e-PCs has been growing steadily. The percentage of such e-PCs among all first registered PCs in Hong Kong each year 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.

The makes of the EVs granted with FRT concessions for EVs are tabulated below:

<b>Makes</b>		
AIDEA	KIA*	SHUI CHEONG
AUDI*	KOMATSU	SILENCE

Makes		
B.M.W.*	KUMPAN ELECTRIC	SMART*
BMW I*	LEXUS*	STILL
BYD*	LINDE	SUITONG
CARVER	LONKING	SUMITOMO
CFMOTO	MAXUS	SUPER SOCO
DAYANG	MERCEDES BENZ*	SURRON
DFSK	MG*	TAYLOR DUNN
ENERGICA	MINI*	TCM
EVOKE	NISSAN*	TESLA*
FIAT*	NIU	TOYOTA
HORWIN	PEUGEOT*	TROMOX
HYUNDAI*	POLESTAR*	UGBEST
JAC	PORSCHE*	VMAX
JAGUAR*	RENAULT*	VOLKSWAGEN*
JOYLONG	RIEJU	VOLVO*

\* These makes also involve e-PCs granted with FRT concessions for EVs under the Replacement Scheme.

3. According to the information provided by the Government Logistics Department (GLD), the number of general purpose vehicles purchased by the Government and the percentage share of EVs in each of the past 3 years are tabulated below:

Year	Number of EVs purchased	Number of vehicles purchased	Percentage share of EVs
2020	12	446	2.7%
2021	27	581	4.6%
2022	55	368	14.9%

In July 2021, the Environmental Protection Department (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 PCs, except for those that cannot be replaced with EVs due to operational needs or other specific reasons. The GLD will determine the number and classes of vehicles to be procured each year in accordance with the above practice, the operational needs of bureaux and departments and the actual market situation.

4. As at the end of January 2023, more than 660 applications have been received under the EV-charging at Home Subsidy Scheme (EHSS). Among them, 315 applications have been approved. The response to the EHSS was overwhelming after its launch in 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 2021.

An additional funding of \$1.5 billion was further injected to 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 EV 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. The EPD will provide assistance in this regard. 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 cases, 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 disbursed upon completion of the relevant installation works. 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.

5. For new private buildings, the Government has, since April 2011, encouraged developers to provide EVCEI in private car parks of new buildings (including major shopping malls and commercial buildings) through granting of gross floor area concessions for new private buildings. Besides, the Government will designate charging bays for electric franchised buses, electric public light buses (e-PLBs) and e-taxis in newly planned public transport interchanges or bus termini. The number of charging facilities provided will be subject to the number and daily mileage of the electric franchised buses and e-PLBs. As for e-taxis, the charging infrastructure to be installed will support at least 3 quick chargers with output power not less than 100 kW each for future installation of quick charging facilities for e-taxis.

Furthermore, the Government is identifying suitable locations across the territory to provide dedicated quick charging service for electric buses, taxis or PLBs, thereby establishing a comprehensive charging service network. It has been announced in the 2022 Policy Address that about additional 7 000 parking spaces in government premises just completed or to be soon completed will be provided with EV chargers by 2025. As for the conversion of petrol filling stations (PFSs) into quick charging stations, we are studying the feasibility of gradually converting some of the existing PFSs into quick charging stations in the medium to long term, and exploring the feasibility of developing some larger petrol or liquefied petroleum gas filling station sites under the "single site, multiple use" model. Tenders are planned to be invited in 2023-24 for the conversion of the first PFS site into a quick charging station. As the aforementioned measures are



still under planning, the Government does not have their specific estimates at the moment.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)178**

**(Question Serial No. 1867)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

In paragraph 160 of the Budget Speech, it is stated that the Government has set the target of introducing about 700 electric buses and 3 000 electric taxis by end-2027, and \$200 million under the New Energy Transport Fund will be earmarked for progressively commencing trials of hydrogen fuel cell double-deckers and heavy vehicles within this year in collaboration with franchised bus companies and other stakeholders to fully assess their operational feasibility under local circumstances. In this connection, please advise this Committee of the following:

1. The promotion of electrification of public transport is an important part of green transport development. However, some operators of the industry have relayed that the application process for the installation of green public transport facilities is rather complicated. A case in point is that an operator said it had to visit a number of government departments when applying for the installation of pantograph chargers for charging electric vehicles. Has the Administration planned for or studied the further streamlining and integration of the vetting work for green public transport facilities?
2. What are the specific work plans and targets of the Government in future for promoting wider use of hydrogen-fuelled vehicles?
3. There has been suggestion that the Government should remove barriers and restrictions in a progressive and orderly manner for green transport technologies such as the application of hydrogen energy. For example, it may classify the licences for the application of hydrogen energy into two types, one for formal operation and one for scientific research, and allow institutions to conduct research on hydrogen energy development, etc. with a temporary licence. Will the Administration consider or study the adoption of this suggestion to remove barriers and restrictions for the application of hydrogen energy?

Asked by: Hon TAN Sunny (LegCo internal reference no.: 1)

Reply:

1. The Environmental Protection Department (EPD) engaged the Hong Kong Productivity Council to study and develop the 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, including the installation and application of pantographs for charging of e-PLBs, for guidance purpose. Through the Pilot Scheme for e-PLBs, we will test out the respective technology and arrangements for the operation of e-PLBs, and will consolidate and analyse the data and experience collected so as to assess the feasibility of the local application of e-PLBs, as well as to review and streamline the procedures for installing electric vehicle chargers. The Pilot Scheme is expected to commence in the second half of 2023 at the earliest.

- 2-3. At present, hydrogen fuel cell (HFC) heavy vehicles are still at the early stage of development, and resources are being invested in research and development, operational trials and construction of ancillary infrastructure worldwide. To keep up with the development trend and the demand for ancillary facilities for HFC vehicles, the Environment and Ecology Bureau is leading an inter-departmental working group (IWG) to progressively commence the trials of HFC double-deckers and heavy vehicles in phases having regard to local circumstances. The IWG will also conduct risk assessments on hydrogen refilling stations, the arrangements of hydrogen supply and HFC vehicles on road, etc., as well as review relevant regulations, standards and technical guidelines, with a view to preparing for the establishment of a legal framework for the local use of hydrogen fuel. The IWG will review and assess applications for trial projects on hydrogen fuel technology before the completion of relevant tasks, and advise on aspects such as safety and planning, so that the relevant trades can commence trials on hydrogen fuel technology as soon as possible.

As at the end of February 2023, the IWG Secretariat has received 8 trial applications in total, involving various areas such as HFC double-deckers, hydrogen refilling station, hydrogen transportation and electricity generation from hydrogen fuel cells. The IWG is liaising closely with the applicants of the trial projects and discussing detailed arrangements for the trial projects to facilitate the phased commencement of the trial projects in the second half of 2023.

Due to the substantial price difference between HFC double-deckers and heavy vehicles and their conventional counterparts, as well as a high upfront capital expenditure to procure hydrogen supply equipment, it will certainly be difficult for the trial projects to be implemented in the short run without government subsidies. Therefore, we have earmarked \$200 million under the New Energy Transport Fund for subsidising the procurement and operation of HFC vehicles, the installation of hydrogen refilling facilities, and other associated costs such as the costs for collecting and analysing trial data. We anticipate that the first funding case will be approved in the third quarter of this year.

With the results and data gathered from the trials of HFC vehicles, we will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)179****(Question Serial No. 1247)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Transport Department's responsibility is to continue to support the implementation of the Ex-gratia Payment Scheme for Phasing Out Euro IV Diesel Commercial Vehicles and the "One-for-One Replacement" Scheme for electric private cars (e-PCs) and the promotion of the use of environment-friendly vehicles. In this connection, please advise this Committee of the following:

- What are the respective numbers of the registered and licensed electric vehicles (EVs) of various classes including but not limited to private cars (PCs), buses, taxis, etc. in Hong Kong as at January 2023?
- What is the percentage of registered e-PCs in the total number of registered PCs in Hong Kong as at January 2023?
- Please set out by District Council district the numbers of charging stations for EVs of various types in Hong Kong as at January 2023.
- It is mentioned in the Budget Speech that the Government will encourage taxi owners to replace their existing taxis with battery electric taxis. How many additional chargers for electric taxis are expected to be provided for such plan?

Asked by: Hon TIEN Puk-sun, Michael (LegCo internal reference no.: 29)

Reply:

- a) Based on the information provided by the Transport Department (TD), the respective numbers of various classes of registered and licensed electric vehicles (EVs) in Hong Kong as at the end of January 2023 are tabulated below:

<b>Vehicle class</b>	<b>Number of registered EVs</b>	<b>Number of licensed EVs</b>
Motorcycle	290	274
Private car	48 068	47 154
Taxi	3	2
Bus	60	41
Light bus	6	3

Vehicle class	Number of registered EVs	Number of licensed EVs
Goods vehicle	312	301
Special purpose vehicle	128	100
<b>Total</b>	<b>48 867</b>	<b>47 875</b>

Note: Government vehicles are not included as they are not required to be registered.

- b) Based on the information provided by the TD, as at the end of January 2023, the total number of registered private cars (PCs) in Hong Kong is 649 370. Among them, 48 068 are registered electric PCs, accounting for about 7.4% of the total number of registered PCs.
- c) Based on the latest information provided by the Environmental Protection Department, the numbers of public EV chargers with a breakdown by the 18 districts of Hong Kong as at the end of December 2022 are tabulated below:

District	Number of chargers			
	Standard	Medium	Quick	Sub-total
Central & 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
<b>Total</b>	<b>1 453</b>	<b>2 983</b>	<b>998</b>	<b>5 434</b>

- d) The Government has engaged contractor to provide quick charging service for electric taxis (e-taxis) in Lantau Island, and later in Sai Kung District. No less than 10 relevant EV chargers are expected to be put into service in phases from mid-2023. 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. In addition, the Government is studying the feasibility of gradually converting some of the existing petrol filling stations into quick charging stations for charging various classes of vehicles (including e-taxis) in the medium to long term. Tenders are planned to be invited in 2023-24 Financial Year for the conversion of the first petrol filling station site into a quick charging station.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)180**

**(Question Serial No. 2983)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is mentioned in the Budget Speech that the Government will earmark \$200 million under the New Energy Transport Fund (NET Fund) for progressively commencing trials of hydrogen fuel cell (HFC) electric double-decker and heavy vehicles within this year in collaboration with franchised bus companies and other stakeholders to fully assess their operational feasibility under local circumstances. Please advise this Committee of the following:

1. Has there been any application relating to HFC vehicles that were approved under the NET Fund before? If yes, how many applications have been approved? Please give a breakdown by the type of vehicles involved.
2. Is the subsidy from the earmarked funding of \$200 million subject to its existing cap of \$12 million?
3. What is the expected commencement time for the trials of buses and heavy vehicles? When will the Administration amend the existing legislation to facilitate the trials of the abovementioned vehicles on the road?

Asked by: Hon WONG Kam-fai, William (LegCo internal reference no.: 9)

Reply:

1. Up till now, no application relating to hydrogen fuel cell (HFC) vehicles has been received or approved under the New Energy Transport Fund (NET Fund).
- 2-3. At present, HFC heavy vehicles are still at the early stage of development, and resources are being invested in research and development, operational trials and construction of ancillary infrastructure worldwide. To keep up with the development trend and the demand for ancillary facilities for HFC vehicles, the Environment and Ecology Bureau (EEB) is leading an inter-departmental working group (IWG) to progressively commence the trials of HFC double-deckers and heavy vehicles in phases in the second half of 2023 having regard to local circumstances.

The IWG will also conduct risk assessments on hydrogen refilling stations, the arrangements of hydrogen supply and HFC vehicles on road, etc., as well as review relevant regulations, standards and technical guidelines, with a view to preparing for the establishment of a legal framework for the local use of hydrogen fuel. The IWG will review and assess applications for trial projects on hydrogen fuel technology before the completion of abovementioned tasks, and advise on aspects such as safety and planning, so that the relevant trades can commence trials on hydrogen fuel technology as soon as possible.

Due to the substantial price difference between HFC double-deckers and heavy vehicles and their conventional counterparts, as well as a high upfront capital expenditure to procure hydrogen supply equipment, it will certainly be difficult for the trial projects to be implemented in the short run without government subsidies. Therefore, we have earmarked \$200 million under the NET Fund for subsidising the procurement and operation of HFC vehicles, the installation of hydrogen refilling facilities, and other associated costs such as the costs for collecting and analysing trial data. We suggest that the funding approved for the trial projects on HFC double-deckers and heavy vehicles would not be subject to the prevailing subsidy levels and caps for “applications for trial” under the NET Fund, and would not be counted towards the \$12 million subsidy cap for “applications for trial”. After further consulting the Panel on Environmental Affairs, we will subsidise the relevant trials on a project basis. It is anticipated that the first funding case will be approved in the third quarter of this year, hence a breakdown of the exact amount and expenditure is not available at this moment.

With the results and data gathered from the trials of HFC vehicles, we will formulate the long-term strategies for the application of hydrogen energy in road transport by 2025, in order to assist in guiding Hong Kong towards the target of zero vehicular emissions before 2050.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)181**

**(Question Serial No. 1269)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (4) Environmental Protection

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the development of new energy vehicles, please advise this Committee of:

1. the number of parking spaces with electric vehicle (EV) chargers at the properties managed by the Government Property Agency, including the disciplined services quarters, the sports grounds managed by the Leisure and Cultural Services Department, etc. (please provide the breakdown by different departments, and the annual recurrent expenditure involved);
2. the estimated number of additional parking spaces with EV chargers to be provided for government departments and the estimated expenditure to be incurred in the next 5 years.

Asked by: Hon WONG Kwok, Kingsley (LegCo internal reference no.: 28)

Reply:

1. As at the end of 2022, there were a total of about 2 210 public electric vehicle (EV) chargers installed in government premises across the territory, of which about 1 615 were installed by the Environmental Protection Department (EPD) in car parks managed by concerned departments, including the Transport Department (891), the Government Property Agency (359), the Leisure and Cultural Services Department (LCSD) (363) and the Agriculture, Fisheries and Conservation Department (2). The expenditures on electricity tariff and maintenance for the chargers managed by the EPD were about \$9.3 million in 2022. For the remaining 595 public EV chargers provided by other government departments, the EPD does not have the relevant information on the expenditure involved in 2022.
2. In the Chief Executive's 2022 Policy Address, the Government announced that it would provide an additional 7 000 parking spaces with EV chargers in government premises in the coming 3 years. To this end, the relevant departments have indicated that they will increase the number of EV chargers in government premises under construction or planning, provided that it is technically feasible and does not affect the progress of the works. For example, in the Kai Tak Sports Park under construction, all of the 600-odd parking spaces will be provided with medium chargers. In addition, the Government

has completed the revision of the “*Joint Circular on Green Government Buildings*” in March this year, which requires that all parking spaces in government premises shall be fully equipped with medium chargers instead of not less than 30% of indoor parking spaces as in the previous requirement. The new requirement stipulates that all parking spaces for private cars, motorcycles and light goods vehicles (whether indoor or outdoor) within the boundaries of new government premises shall be equipped with medium chargers. The expenditures on installing EV chargers depend on individual projects and will be borne by the relevant departments. The EPD does not have the relevant estimates.

In addition, the Government is identifying suitable locations across the territory to provide quick charging service for EVs, including studying the feasibility of gradually converting some of the existing petrol filling stations into quick charging stations in the medium to long term. The relevant government departments, such as the Food and Environmental Hygiene Department and the LCSD, have also expressed their initial agreement-in-principle to provide additional quick charging service in their premises and are assessing its feasibility. As the aforementioned measures are still under planning, the Government does not have their specific estimates at the moment.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)182**

**(Question Serial No. 1214)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (5) Nature Conservation

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is mentioned in the Matters Requiring Special Attention in 2023-24 that the Administration will enhance the recreational and educational potential of country parks, and oversee the designation of the proposed Robin's Nest Country Park.

1. Please advise of the progress of the implementation of the short-term and medium-term projects as mentioned in the consultancy study on "Enhancing the Recreation and Education Potential of Country Parks" by the Government, as well as the relevant estimated expenditures. Besides, please briefly describe whether the feasibility studies conducted by the Administration for the long-term projects, including open museums for war relics in country parks, tree top adventure facilities and eco-lodges, have been completed; and whether the Administration has the timetables for implementation of the proposals and the relevant expenditure estimates.
2. Please tabulate the estimates and staff establishments of the 8 country park visitor centres under the Agriculture, Fisheries and Conservation Department, as well as the numbers of visitors in 2020, 2021 and 2022; and advise whether the Administration has any plan to develop visitor centres in other country parks.
3. What measures does the Administration have in place to explore the tourism potential of country parks while enhancing their recreation and education potential, so as to promote in-depth green tourism to visitors?
4. Please advise of the current progress of the Robin's Nest Country Park. Besides, what measures will be introduced into the Park to facilitate visitors?

Asked by: Hon YIU Pak-leung (LegCo internal reference no.: 25)

Reply:

1. Over the past few years, the Agriculture, Fisheries and Conservation Department (AFCD) has, in accordance with the recommendations of the consultancy study on "Enhancing the Recreation and Education Potential of Country Parks", progressively implemented a series of short and medium-term projects to enhance country park

facilities, including the enhancement of 10 hiking trails with the improvement or addition of about 20 viewing points at popular tourist spots such as High West, Dragon's Back and Sunset Peak; the launch of an advance booking system pilot scheme for the Twisk Campsite for members of the public to reserve camping spaces and facilities; and the installation of a total of 34 water filling stations in country parks across the territory to encourage the public to bring their own water bottles and reduce utilisation of single-use plastic bottles, etc. The expenditure on the abovementioned projects is about \$81 million.

As for long-term projects, the AFCD is working with departments including the Architectural Services Department and the Civil Engineering and Development Department to reprovision toilets and construct new ones; set up new viewing platforms with associated trails and recreational facilities; carry out the revitalisation of the Lin Ma Hang Lead Mine Cave; and provide an outdoor free exploration field at Lions Nature Education Centre, etc. within country parks in phases. In addition, the AFCD progressively commenced feasibility studies on the provision of glamping site facilities and tree top adventure activities, and the revitalisation of some wartime relics to turn them into open museums within country parks in the second half of last year, with a view to determining the potential site, design, mode of operation, fee level and operation requirements, etc. of these facilities. During the course of the studies, the AFCD will also conduct activities to gather views of the public. The AFCD anticipates that the aforementioned feasibility studies will be completed in 2024, and the recommendations in the study reports will be taken into account in the implementation of the relevant projects. The Government has earmarked \$500 million in the 2021-22 Budget to support the implementation of the said projects.

2. The management of country park visitor centres forms part of the AFCD's education and publicity work of country parks. We do not keep a breakdown of the operational expenditures and staffing establishments of individual visitor centres. The expenditures and manpower involved in education and publicity work of country parks and the numbers of visitors to country park visitor centres over the past 3 years are tabulated below:

<b>Year</b>	<b>Manpower for education and publicity work (number of staff)</b>	<b>Expenditure on education and publicity work (\$ million)</b>	<b>Number of visitors to 8 country park visitor centres</b>
2020-21	38	19.9	430 000
2021-22	37	22.9	473 000
2022-23 (revised estimate)	34	22.1	486 000 (as at February 2023)

The Government plans to develop Pak Tam Chung as a green tourism hub and a gateway to the Sai Kung Country Parks and the Hong Kong UNESCO Global Geopark in order to further promote green tourism. In this connection, the Government intends to carry out redevelopment of the Sai Kung Country Park Visitor Centre and replanning of the visitor service supporting facilities in the Pak Tam Chung area, with a view to providing one-stop services to visitors.

3. To promote green tourism, the Tourism Commission, in collaboration with the AFCD, has taken forward the “Enhancement of Hiking Trails” since 2018, with a view to enhancing the tourism supporting facilities of 20 hiking trails within country parks which are popular and with tourism appeal. The enhancement works include improvement to existing hiking trail network, control of soil erosion at the trails, enhancement of vegetation coverage, addition of viewing points and enrichment of visitor information, etc.

As regards the promotion work on hiking trails in Hong Kong, the AFCD launched the enhanced “Enjoy Hiking” thematic website in 2019 to provide detailed information on hiking trails and green attractions, as well as information on featured attractions in 4 languages, namely Chinese, English, Japanese and Korean, for locals and tourists. As at the end of February 2023, there are more than 3.58 million pageviews at the enhanced thematic website.

In addition, the Hong Kong Tourism Board (HKTB) has been actively promoting Hong Kong’s nature-based green tourism products and countryside landscapes through the “Great Outdoors Hong Kong” platform and a series of promotional channels including activity guides, websites, TV series, social media and mobile apps, etc. during autumn and winter each year since 2009, covering the Hong Kong UNESCO Global Geopark, country parks, marine parks, hiking trails and itineraries featuring the outlying islands, as well as guided tours and green tourism products organised by the travel trade or other organisations. In 2022, HKTB repackaged the “Great Outdoors Hong Kong” into a year-round promotional platform named “Hong Kong Great Outdoors”, introducing in detail Hong Kong’s unique natural scenery and countryside experiences under the themes such as hiking, beaches and activities, sightseeing and island hopping, so as to allow visitors to appreciate the natural features of Hong Kong.

HKTB also launched the “360 Hong Kong Moments” campaign in October 2020. Using a series of 360-degree VR panoramic technologies, the videos allow audiences to enjoy Hong Kong’s natural wonders and outdoor camping, hiking, rock climbing, diving, cycling and canoeing experiences through realistic immersive journeys in the comfort of their own homes.

4. The Government initiated the statutory procedures for designating the Robin’s Nest Country Park and gazetted the draft map of the proposed country park under the Country Parks Ordinance in December 2022 for public inspection until the end of January 2023. The Country and Marine Parks Authority and the Country and Marine Parks Board are following up on the written representations. The Government aims to complete the designation of the relevant country park in 2024 at the earliest.

Upon designation of the Robin’s Nest Country Park, the AFCD will implement a series of measures to facilitate local visitors and tourists, including upgrading suitable existing footpaths and constructing new footpaths to create a hiking trail network; erecting ancillary facilities such as information boards, maps, waymarks and directional signages; providing picnic sites, rain shelters, viewing points, seating benches, etc. at suitable locations. The AFCD will also revitalise the Lin Ma Hang Lead Mine Cave into an open museum to showcase its mining history and bat ecology etc.; display information on the natural ecology, cultural and historical heritage of Robin’s Nest and

its neighbouring villages at suitable locations in the country park and on departmental website; and consider providing guided tours and educational services at signature attractions in the country park to enrich the countryside experience of local visitors and tourists.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)183**

**(Question Serial No. 2313)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (6) Climate Change

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

Hong Kong has announced its target to achieve carbon neutrality before 2050. The Government should set an example by taking the lead to reduce carbon emissions, and disclose its data relating to carbon neutrality. Please advise of the following:

What were the estimated and actual expenditures of the various projects for the promotion of carbon neutrality (including but not limited to the Energy Saving Charter, 4T Charter, "Carbon Neutrality" Partnership) in each of the past 10 years?

What were the actual expenditures spent on the carbon audits by the Government in each of the past 5 years?

The Budget stated that carbon audits would be carried out on major government buildings and infrastructure for bureaux and departments. If carbon audits are to be conducted for all government departments, what will be the estimated expenditure?

Please set out in a table the information on the environmental impacts arising from the overall operation of the Government (including but not limited to buildings and infrastructure) in each of the past 5 years, including the total greenhouse gas emissions by the Government (tonnes, carbon dioxide equivalent), the total electricity consumption by the Government (kWh), the total renewable energy generation by the Government (kWh), the total fuel oil consumption by the Government, the total driving mileages of the Government, the total waste loads of the Government (tonnes), the total quantity of waste recovered by the Government (tonnes), and the total water consumption by the Government (m<sup>3</sup>).

Asked by: Hon ZHANG Xinyu, Gary (LegCo internal reference no.: 10)

Reply:

In October 2020, the Government announced that Hong Kong would strive to achieve carbon neutrality before 2050. To this end, the Government announced the Hong Kong's Climate Action Plan 2050 (CAP2050) in October 2021, which outlines the decarbonisation strategies and measures that seek to reduce Hong Kong's carbon emissions by half from the 2005 level before 2035 and lead Hong Kong towards the goal of carbon neutrality. Since the adoption of the target to achieve carbon neutrality before 2050, the Government has launched a series

of activities to promote carbon neutrality, including the TV programmes “Towards a Zero Carbon Life” (邁向零碳生活) and “Zero Carbon in All Trades” (行行邁向零碳) broadcast in collaboration with the TV broadcasting company in April and May 2021 respectively. In addition, we launched the “Energy Saving and Decarbonisation for All 2022” campaign in 2022 to encourage organisations from different sectors to sign the Energy Saving Charter and the 4T Charter; released Announcements in the Public Interest featuring the Carbon Neutrality Ambassador; updated the online Low Carbon Living Calculator; and launched a promotional video on CAP2050 to drive behavioural change and low-carbon transformation on the part of the public. The efforts to promote carbon neutrality mentioned above form an integral part of the Environment and Ecology Bureau’s work and is being undertaken by the existing staffing establishment. We do not have a separate breakdown.

To ensure that relevant government bureaux and departments set science-based emission reduction targets and implement carbon reduction measures, the Government is conducting energy-cum-carbon audits for about 250 government buildings to systematically collect and compile data relating to the activities that contributed to carbon emissions, and identify energy management and other decarbonisation opportunities. The audits cover consumption of various fuels, indirect emissions from energy sources such as electricity and town gas, and other indirect emissions such as water consumption and waste paper disposal, etc.

Apart from encouraging government departments to actively implement the energy saving and decarbonisation measures recommended in the audit reports, the Government will also conduct retro-commissioning and implement energy saving projects for its buildings, such as replacing lighting facilities with light emitting diode (LED) lamps and adopting high-efficiency air conditioning units. The estimated costs of these measures from 2017-18 to 2025-26 are approximately \$1.1 billion.

The aforementioned energy-cum-carbon audits are still in progress. Upon completion of the audits, bureaux and departments will formulate carbon reduction measures and targets in the light of the audit results, and publish the carbon audit results via their respective annual environmental performance reports or other means.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)184**

**(Question Serial No. 2314)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

- 1.The new Charter on External Lighting (the Charter) has already taken effect. What is the total number of participants who have signed up for the Charter so far? As compared with 2022, how many new participants are there?
- 2.The new Charter has added a level with more stringent requirements, namely the Diamond Award. How many participants have been granted this award? Among them, how many participants are new ones, Platinum Award or Gold Award recipients of the previous year? Please provide a breakdown of the figures.
- 3.How will the Administration promote and publicise the Charter?
- 4.Does the Bureau have any timetable at present for introducing legislative control on light pollution?

Asked by: Hon ZHANG Xinyu, Gary (LegCo internal reference no.: 13)

Reply:

To minimise light nuisance caused by external lighting, the Government launched the Charter on External Lighting (the Charter) in 2016 to invite owners and responsible persons of external lighting installations to pledge to switch off lighting installations of decorative, promotional or advertising purposes which affect the outdoor environment during the preset times. Since the launch of the Charter in 2016, the number of Charter participants has increased from nearly 1 000 to about 4 900 at present. The participants come from different sectors including building management, property development, hotels and catering, retail, banking, telecommunications, real estate agencies, schools, public utilities, and public/non-governmental organisations (NGOs).

The Government appointed the Working Group on External Lighting (the Working Group) in 2018. Apart from continuing to promote the Charter, the Working Group also assisted the Government in reviewing its effectiveness, and advised the Government on measures to better manage external lighting.

The Working Group noted the improvements in light nuisance, which suggest that the measures adopted in the past few years have been effective to some extent. The owners/responsible persons of external lighting installations have in general been exercising self-restraint. In view of the usefulness of external lighting, it is necessary to take into full account the needs of residents in addition to commercial development when managing external lighting. Since the Working Group started the review in 2018, the local business environment has undergone tremendous changes. The COVID-19 epidemic situation in the past 3 years has led to a surge in unemployment rate and dealt a heavy blow to the economy, with the retail, catering and tourism sectors bearing the brunt. Businesses suffered huge losses. Thousands of shops were forced to suspend operations or even went out of business as a result. In this connection, the Government has been taking a series of relief measures to help tide various sectors and citizens over the severe economic winter, boost consumption sentiment and expedite economic recovery. When determining the way forward, particularly in contemplating any strict management measures, the Working Group believes that it is necessary to take into account the macro-social environment and the economic situation to see if such measures will aggravate the business environment and impact on job opportunities, putting a disproportionate burden on different sectors of the community. It is also important to see if such measures will contradict the Government's overall direction in driving post-epidemic economic recovery. Given that the economy is not fully recovered and light nuisance has shown a trend of improvement, the community has not yet reached a consensus on legislation. Hence, there is no pressing need, nor is it appropriate, to formulate legislation or rigorous measures to manage external lighting at this stage. After deliberation, the Working Group considers that it will be more pragmatic to improve the current measures for continuous implementation.

The Working Group reviewed the effectiveness of the Charter, and advised on measures to further reduce the nuisance which may be caused by external lighting by tightening the switch-off requirements in respect of the operating hours and the mode for enhancing the Charter. The Government accepted the recommendations and introduced a new tier with more stringent requirements to the Charter, i.e. the Diamond Award, where participants will switch off relevant external lighting installations at an earlier time (i.e. from 10pm to 7am on the following day). As to the mode of operation, participants will need to turn off non-static lighting installations or switch them to static mode 1 hour earlier than the current preset time (i.e. advanced from 11pm to 10pm). The enhancements took effect on 1 January 2023.

There have been over 400 new participants since the enhancements to the Charter came into effect. Also, a total of about 1 200 existing and new participants have pledged to switch off their external lighting installations from 10pm to 7am on the following day, i.e. meeting the criterion for the Diamond Award. The Environment and Ecology Bureau (EEB) has been liaising with various trade associations and NGOs to invite owners and responsible persons of external lighting installations to join the Charter and to encourage other business partners to sign up together. In addition, the EEB has published a list of participants on the Charter's website and distributed stickers and certificates to participants for display at their properties/shops to raise public awareness of the Charter.

At present, upon receipt of complaints against light nuisance, the Environmental Protection Department would relay the complainants' concerns and requests to the persons responsible for the lighting installations in question, and if applicable advise them to take appropriate measures to minimise the impact of the lighting installations on residents in the vicinity.

Most of the persons responsible for the lighting installations would, upon receipt of complaints, adopt measures to minimise light nuisance as far as practicable. The Government will continue to monitor the implementation of the Charter, promote the Charter and handle complaints against light nuisance through the current mechanism. With mutual respect and understanding as well as maintaining good neighbourhood relationship as entry points, the Government will follow up closely with the responsible persons of the lighting installations being complained to proactively handle the complaints against light nuisance.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)185**

**(Question Serial No. 2399)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (6) Climate Change

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

In 2021, the Government announced the Climate Action Plan 2050, which states that in the next 15 to 20 years, the Government will devote about \$240 billion to take forward various measures on climate change mitigation and adaptation. Please advise of the following: Does the \$240 billion mentioned in the Climate Action Plan 2050 come from public funds, green bonds or other bonds? If yes, what are the respective proportions of the said sources of funds? If not, please provide the sources and proportions of funds. Please tabulate the projects for which relevant amounts have been allocated from the above \$240 billion, including: the funded projects, as well as the expenditure or estimate, achievement or objective, progress and target completion year of the projects.

Of the above \$240 billion, what are the proportions for the estimated expenditures that the Government plans to spend on climate change mitigation/climate change adaptation/others (please specify) respectively?

Please tabulate the description, completion time and expenditure estimates of the projects for which funds have already been earmarked from the above \$240 billion.

Asked by: Hon ZHANG Xinyu, Gary (LegCo internal reference no.: 11)

Reply:

Hong Kong will strive to achieve carbon neutrality before 2050 and reduce its carbon emission by 50% from the 2005 level before 2035. In pursuit of carbon neutrality, the Government and all sectors of the society will invest substantial financial resources to formulate and implement measures to promote energy saving, clean energy, green infrastructure, electrification of transport, waste reduction and recycling, etc. To this end, the Government plans to devote about \$240 billion in the next 15 to 20 years to take forward the measures on climate change mitigation and adaptation, covering renewable energy, energy saving and green buildings, green transport, waste management, strengthening coastal defences, stabilising slopes and drainage improvement works, etc. The relevant government

departments will ascertain the details, estimated expenditure and financial arrangements of individual projects in due course.

As for the Government Green Bond Programme (GGBP), under the existing legislative framework, the funds raised through the GGBP will be credited to the Capital Works Reserve Fund to finance green projects under it. The Steering Committee on the GGBP chaired by the Financial Secretary is responsible for approving the allocation of the green bond proceeds.

- End -

**CONTROLLING OFFICER'S REPLY**

**(Question Serial No. 2109)**

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) -

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Mr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Hong Kong Observatory (HKO) mentioned that it will enhance the Very Hot Weather Warning service to alert the general public of prolonged heat situations. However, as the weather of Hong Kong is often affected by multiple factors, if only temperature data is taken into account, it may not be able to issue accurate alerts to the public. Please inform this Committee whether the HKO will include data such as the apparent temperature to enhance the reference value of the Very Hot Weather Warning service; and the measures to be taken to remind the public of safety and health risks related to localised high temperature.

Asked by: Hon CHU Kwok-keung (LegCo internal reference no.: 25)

Reply:

There is currently no unified international standard on “apparent temperature”. Different countries and regions devise their indices in similar nature with different calculation methods according to their climate regimes. When issuing the Very Hot Weather Warning, apart from air temperature, the Hong Kong Observatory (HKO) will also take into consideration the Hong Kong Heat Index (HKHI). The formula of the HKHI has taken into account meteorological data such as air temperature, humidity, airflow and solar thermal radiation, as well as the overall hospital admission data of Hong Kong. Therefore, the HKHI can adequately reflect the health risks posed by different levels of heat stress to the general public in Hong Kong. In general, when the HKHI at King’s Park reaches around 30 or above, the HKO will also, through its website, remind the public to take appropriate heat stroke prevention measures to avoid the health effects of hot weather.

The HKO has set up meteorological monitoring stations in various regions in Hong Kong and provides regional temperature forecasts. When issuing the Very Hot Weather Warning, the HKO will consider the temperatures of all regions in Hong Kong. Information such as real time regional temperatures, temperature forecasts and Very Hot Weather Warning will be disseminated to the public through HKO’s website, mobile app, electronic media, etc.

- End -

**CONTROLLING OFFICER'S REPLY**

**(Question Serial No. 2502)**

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) -

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Mr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

It is mentioned in the Matters Requiring Special Attention in 2023-24 that the Government will conduct a series of publicity activities for the 140th anniversary of the Hong Kong Observatory (HKO) to promote the HKO's services. In this connection, please advise this Committee on:

1. the details and the estimated expenditure of the relevant publicity activities; and
2. the estimated numbers of participants of the relevant activities.

Asked by: Hon FOK Kai-kong, Kenneth (LegCo internal reference no.: 37)

Reply:

In 2023, the Hong Kong Observatory (HKO) will conduct a number of activities to celebrate its 140th anniversary, including the HKO Open Day on 25 and 26 March. Depending on the public response, the number of participants is estimated to reach around 8 000. A dedicated webpage "HKO 140th Anniversary" will be launched in March and the 140th Anniversary Book will be published later in 2023. The HKO will also produce videos to introduce its development and services as well as its participation and contribution in regional and international cooperation. All the relevant work will be absorbed by the existing staff establishment and resources of the HKO, and a breakdown in this respect is not available.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)188**

**(Question Serial No. 0190)**

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) -

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Mr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the Cold Weather Warning, please advise on the respective figures on Cold Weather Warnings issued by the Hong Kong Observatory in the past 3 years (2020-21 to 2022-23), and the figures on those involving reported death of or damage to vegetables and fish. Please also provide the respective dates of warnings issued and reports received.

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 28)

Reply:

The number and dates of Cold Weather Warnings issued by the Hong Kong Observatory in the past three years (2020-21 to 2022-23) are as follows:

Year	Numbers of Cold Weather Warnings issued and relevant dates	Numbers of times involving reported losses of crops or deaths of fish <sup>#</sup>	Dates of reports <sup>#</sup>
2020-21	5 (16 to 17 December 2020) (19 to 21 December 2020) (29 December 2020 to 3 January 2021) (7 to 15 January 2021) (17 to 19 January 2021)	Crops : 3	4 January 2021 13 January 2021 15 January 2021
		Fish : 4	11 January 2021 19 January 2021 25 January 2021 28 January 2021



Year	Numbers of Cold Weather Warnings issued and relevant dates	Numbers of times involving reported losses of crops or deaths of fish <sup>#</sup>	Dates of reports <sup>#</sup>
2021-22	3 (26 to 28 December 2021) (29 January 2022 to 5 February 2022) (18 to 25 February 2022)	Crops : 1	24 February 2022
		Fish : 0	-
2022-23 (up to end of February)	7 (13 to 15 December 2022) (16 to 20 December 2022) (31 December 2022) (15 to 18 January 2023) (24 to 26 January 2023) (27 to 30 January 2023) (14 to 15 February 2023)	Crops : 3	19 December 2022 30 January 2023 31 January 2023
		Fish : 1	28 December 2022

<sup>#</sup> Figures provided by the Agriculture, Fisheries and Conservation Department.

- End -

**CONTROLLING OFFICER'S REPLY**

**(Question Serial No. 2474)**

Head: (168) Hong Kong Observatory

Subhead (No. & title): (000) Operational expenses

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Mr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

The Hong Kong Observatory, through the “Science in Public Service (SIPS) Campaign” and the “Community Weather Information Network”, organises a number of educational events and outreach activities, including workshops, scientific talks, site visits and a SIPS documentary TV programme showcasing the application of science and technology by government departments. Please inform this Committee of:

- 1) the details on target and actual numbers of participants of the activities, including the numbers and age distribution of the participants;
- 2) the details of expenditure of the activities;
- 3) whether the activities served the intended purposes upon assessment; and to what extent the targets of the activities have been met; and
- 4) as regards the announced programmes to continue to strengthen efforts in public communication as well as education, outreach and social media services to enhance public awareness of and preparedness for natural disasters, the details of the progress, expenditure and manpower involved.

Asked by: Hon LAM Kin-fung, Jeffrey (LegCo internal reference no.: 41)

Reply:

In 2022-23, the Hong Kong Observatory (HKO) joined hands with various government departments, universities and organisations through the “Science in Public Service (SIPS) Campaign” to organise a number of scientific talks, workshops and guided tours for all members of the public. The total number of participants was about 10 000. The HKO also organised a variety of educational events and outreach activities through the “Community Weather Information Network” (Co-WIN), including management of weather stations, virtual tours, online quizzes as well as photo competition, targeting mainly secondary and primary students, with nearly 3 000 participants. The above activities aim at introducing the scientific works of government departments to the public and enhancing the knowledge of weather among students, so as to achieve the objectives of promoting science and technology education and enhancing public awareness of disaster prevention.

In 2023-24, the HKO, through the SIPS Campaign and Co-WIN, will continue to organise a series of educational events and outreach activities, including scientific talks, workshops, guided tours as well as meteorological data analytics competition, with a view to enhancing the knowledge of the public and students on science application, weather and climate. The HKO also plans to provide a training course on weather observation for the public to develop basic knowledge in weather observation and understand different types of weather phenomena and natural hazards. On social media, the HKO will continue to make use of its Facebook page and Instagram platform to enhance public awareness of weather and climate issues and promote understanding of various weather phenomena and natural hazards through text, photos and videos. Furthermore, the HKO will also continue to utilise various social media platforms including YouTube, Twitter, Sino Weibo and WeChat to provide weather information and educational video clips to enhance public awareness of disaster prevention.

The provision of all the activities and services above is part of the HKO's day-to-day work. As the expenditure required has been subsumed under the regular provision for the HKO, a breakdown in this respect is not available.

- End -

**CONTROLLING OFFICER'S REPLY**

**(Question Serial No. 1282)**

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) -

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Mr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Under this Programme, the matters requiring special attention of the Hong Kong Observatory in 2023-24 include taking forward planning efforts for establishment of the supersite for the Greater Bay Area (GBA) Meteorological Monitoring and Warning Centre (Hong Kong) under the Meteorological Development Plan for the Guangdong-Hong Kong-Macao GBA (2020–2035) to provide regional meteorological monitoring and forecasting services, with a view to strengthening collaboration in combatting climate change in the GBA. Please inform this Committee of the expenditure and manpower involved in the relevant work and projects as well as their progress. What are the specific plans in the coming year and the expected effects?

Asked by: Hon NG Kit-chong, Johnny (LegCo internal reference no.: 26)

Reply:

The Hong Kong Observatory and the Environmental Protection Department are jointly preparing to set up a supersite for the Greater Bay Area air quality laboratory and meteorology monitoring (the Supersite) to provide regional air pollution and meteorological monitoring and forecasting services. The Supersite will be the site of the “Guangdong-Hong Kong-Macao Greater Bay Area Meteorological Monitoring and Warning Centre (HK)”, which is scheduled for commissioning in 2027.

The Supersite will be equipped with a series of world-class air quality and greenhouse gases monitoring equipment and high performance computers, involving a total commitment of \$261 million. Construction works of the Supersite (including land formation and construction works) will involve separate expenses. The construction cost is subject to estimation in the Technical Feasibility Study and approval for funding will be applied separately according to established procedures. As regards the manpower required, the HKO will create one Scientific Officer post for this project in 2023-24.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)191**

**(Question Serial No. 1283)**

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) -

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Mr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Under this Programme, the matters requiring special attention of the Hong Kong Observatory (HKO) in 2023-24 include conducting a series of publicity activities for the 140th anniversary of HKO to promote HKO's services. Please inform this Committee of the expenditures and manpower of the relevant work and projects, as well as the specific plans, publicity activities and timetable.

Asked by: Hon NG Kit-chong, Johnny (LegCo internal reference no.: 27)

Reply:

In 2023, the Hong Kong Observatory (HKO) will conduct a number of activities to celebrate its 140th anniversary, including the HKO Open Day to be held on 25 and 26 March, a dedicated webpage "HKO 140th Anniversary" to be launched in March and the 140th Anniversary Book to be published later in 2023. During the year, videos will also be produced to introduce the development and services of the HKO as well as its participation and contribution in regional and international cooperation. All the relevant work will be absorbed by the existing staff establishment, and a breakdown in this respect is not available.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)192**

**(Question Serial No. 3550)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding Mr. B, the mascot of the Agriculture, Fisheries and Conservation Department, would the Government advise this Committee of the following:

- (1) the expenditure on design, publicity and promotion of the said mascot and the operating expenses involved;
- (2) the number of publicity materials produced and publicity and promotional activities organised using the image of the mascot over the past 5 years; and
- (3) whether assessment has been made on the public awareness of the said mascot; if so, the criteria, methods, cycle and result of the assessment; if not, the reasons?

Asked by: Hon LAM Chun-sing (LegCo internal reference no.: 38)

Reply:

- (1) The Agriculture, Fisheries and Conservation Department (AFCD) commissioned a contractor to assist in the promotion of the 3-month campaign of the Hong Kong Biodiversity Festival (HKBF) in 2016. The contract expenditure totalled about \$900,000, covering services such as recommending and operating the promotion strategies (including the design of Mr. B as the mascot), designing pamphlets and the website for the HKBF, as well as launching a publicity campaign on Facebook. Since the creation of Mr. B as the mascot to enhance the promotional effect is only one of the promotional strategies, the AFCD does not have a breakdown of the expenditure in this regard.
- (2) Over the past 5 years, the AFCD generally published 2 to 3 posts on the Facebook page of Mr. B Nature Classroom every week. In the posts, the mascot Mr. B introduced biodiversity knowledge and promoted relevant activities in the capacity of an education ambassador. Every year, there were about 3 occasions on which Mr. B was employed to produce promotional materials or attend promotional events.

- (3) Mr. B, the AFCD's mascot, mainly appears on the Facebook page of Mr. B Nature Classroom, which has accumulated around 26 000 "likes". The AFCD has not made any separate assessment on the public awareness of Mr. B.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)193**

**(Question Serial No. 3521)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Natural Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation  
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the sustainable development of Lantau, please provide in tabular form the timetable (indicating quarter and year) drawn up by the Government for implementing the North Lantau Marine Park project. If the timetable for the project is not yet available, please provide the reason.

	Commencement and completion dates of consultancy study expected to be/ already commenced	Anticipated date of the Government's announcement to the public and the Legislative Council	Anticipated timetable of the Government for provision of funding and completion of statutory procedures
Implementation of the North Lantau Marine Park project			

Asked by: Hon ZHANG Xinyu, Gary (LegCo internal reference no.: 5)

Reply:

The Government's timetable for designating the proposed North Lantau Marine Park (NLMP) is set out as follows:



Commencement and completion dates of consultancy study expected to be/already commenced	Anticipated date of the Government's announcement to the public and the Legislative Council	Anticipated timetable of the Government for provision of funding and completion of statutory procedures
<p>The proposed NLMP serves as a mitigation measure for the Hong Kong International Airport Three-Runway System Project, as stipulated in the related environmental impact assessment report. The Airport Authority Hong Kong has completed the relevant consultancy study for the establishment of NLMP.</p>	<p>The Agriculture, Fisheries and Conservation Department gazetted a draft map of the proposed NLMP in accordance with the Marine Parks Ordinance (Cap. 476) on 3 March this year. The map is available for public inspection within 60 days from the gazettal date.</p>	<p>The statutory procedures for designating the proposed NLMP are planned for completion next year. The Government will deploy resources to handle the relevant work as required.</p>

- End -

**CONTROLLING OFFICER'S REPLY****EEB(E)194****(Question Serial No. 3497)**Head: (39) Drainage Services DepartmentSubhead (No. & title): Not specifiedProgramme: (2) Sewage ServicesControlling Officer: Director of Drainage Services (Alice PANG)Director of Bureau: Secretary for Environment and EcologyQuestion:

## Systematic Sewage Disposal in the New Territories

Regarding systematic sewage disposal in rural areas in the New Territories, would the Government inform this Committee:

1. whether the information on the proposed systematic sewerage projects in the New Territories can be provided in table form by district;
2. of the number of systematic sewerage projects completed in the New Territories for the past 5 years; and
3. whether there are any measures and timetables for improvement to those villages without any satisfactory sewerage systems?

Asked by: Hon CHAN Yuet-ming (LegCo internal reference no.: 17)Reply:

1. The village sewerage projects now in progress in the New Territories are as follows:

District	Project No.	Project Title
North	4434DS	Village sewerage in Fanling Wai, So Kwun Po and Leng Pei Tsuen, Fanling
	4457DS	North District sewerage stage 2 part 2A – village sewerage in Muk Wu, New Territories
Sai Kung	4431DS	Port Shelter sewerage, stage 2, package 3
	4432DS	Port Shelter sewerage, stage 3, package 2
	4214DS	Tseung Kwan O sewerage for villages
	4362DS	Sewerage for Ma Yau Tong Village, Tseung Kwan O
Islands	4353DS	Outlying Islands Sewerage, Stage 2 – extension of sewerage system to other unsewered villages in Mui Wo
	4355DS	Outlying Islands sewerage, stage 2 – Lamma village sewerage phase 2, package 2
	4422DS	Outlying Islands sewerage stage 2 – Peng Chau village sewerage phase 2 package 1
	4433DS	Construction of San Shek Wan Sewage Treatment Works and Pui O village sewerage

District	Project No.	Project Title
	Minor Works Items	Village sewerage at Tai Tei Tong and Pak Ngan Heung
Sha Tin; Tai Po	4430DS	Tolo Harbour sewerage of unsewered areas, stage 2 – phase 2
Tai Po	4403DS	Upgrading of sewage pumping stations and sewerage along Ting Kok Road
	Minor Works Items	Provision of trunk sewer to three villages in Tai Po including Ta Tit Yan, Yuen Tun Ha and Lo Lau Uk
Tuen Mun	4435DS	Village Sewerage in Northern Tuen Mun
Kwai Tsing; Tsuen Wan	4358DS	Sewerage to Lo Wai, Chuen Lung and Kau Wa Keng Old Village
Yuen Long	Minor Works Items	Village sewerage at Kam Tin Shi, Kam Tin

The proposed village sewerage projects in the New Territories are as follows:

District	Project No.	Project Title
North	4462DS	North District sewerage, stage 1 phase 2C and stage 2 phase 1– village sewerage in Sheung Shui Heung
Sai Kung	4461DS	Port Shelter sewerage, stage 2 – trunk sewers between Marina Cove and Hong Kin Road

2. For the past 5 years, the DSD has completed a total of 9 village sewerage projects in various districts of the New Territories (including Lantau Island and Islands).
3. The Government has been taking continuous actions and allocating resources, including the implementation of the village sewerage programme (the Programme), which progressively provides public sewerage facilities in village areas to improve rural environmental hygiene conditions. In future planning, the Government will take into account the level of improvement to the environment by the Programme, density of village population, preference of residents, technical feasibility and cost effectiveness, etc. in taking forward the progressive extension of relevant sewerage works to unsewered village areas. Premises in rural areas that currently have yet been covered by the public sewerage systems are required to continue using septic tanks or other original sewage facilities to treat domestic sewage.

- End -

**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 above-mentioned 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.

Asked by: 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.

- End -

**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.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)197**

**(Question Serial No. 3484)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (5) Nature Conservation

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

1. What were the details of the implementation of the initiatives and projects under the Countryside Conservation Funding Scheme (CCFS) in the past 3 years, including the programmes and estimated expenditures?
2. What are the details of the implementation of the initiatives and projects under the CCFS in the coming year, including the programmes and estimated expenditures?

Asked by: Hon LAM Siu-lo, Andrew (LegCo internal reference no.: 26)

Reply:

1. Over the past 3 years, the Countryside Conservation Funding Scheme (CCFS) has continuously supported collaboration amongst villagers and local universities, green groups, etc. for carrying out countryside conservation and revitalisation projects on a wide variety of aspects ranging from natural environment and ecological habitats to historical and cultural heritage. Examples of such projects included ecologically friendly farming and maintenance of habitat diversity; organisation of theatrical performances with countryside cultural elements; study and development of a countryside revitalisation model led by the village community and villagers; and the setting up of an information platform on countryside conservation, etc. During the period, the recipient organisations had organised over 1 000 activities to promote to the public scenic countryside natural habitats and valuable historical and cultural heritage, attracting over 300 000 participants. Members of the public may search for further information on the CCFS on the relevant website: [https://www.eeb.gov.hk/en/conservation/ccfs/ccfs\\_main.html](https://www.eeb.gov.hk/en/conservation/ccfs/ccfs_main.html). The numbers of projects approved under the CCFS and the actual expenditures/revised estimate involved over the past 3 years are listed below:

<b>Year</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
Number of projects approved	15	13	3 (as at the end of 2022)
Actual expenditure	\$25.7 million	\$37.9 million	\$40 million (revised estimate)

2. In 2023-24, the Countryside Conservation Office will continue to support the implementation of more countryside conservation and revitalisation projects through the CCFS, and enhance the arrangements of the CCFS in light of the experience gained over the implementation, so as to encourage more organisations to take part in contributing to the sustainable conservation and revitalisation of remote countryside. The estimated expenditure for the year is about \$80 million.

- End -



**CONTROLLING OFFICER'S REPLY**

**EEB(E)198**

**(Question Serial No. 3510)**

Head: (137) Government Secretariat : Environment and Ecology  
Bureau (Environment Branch)

Subhead (No. & title): (-) Not specified

Programme: (-) Not specified

Controlling Officer: Permanent Secretary for Environment and Ecology (Environment)  
(Janice TSE)

Director of Bureau: Secretary for Environment and Ecology

Question:

With regard to the development of new energy vehicles, please advise this Committee whether the Administration will include hybrid vehicles in the "One-for-One Replacement" Scheme or other subsidy schemes.

Asked by: Hon LUK Chung-hung (LegCo internal reference no.: 43)

Reply:

Hybrid vehicles, which emit air pollutants, are not in line with Hong Kong's ultimate goal of zero vehicular emissions before 2050. Furthermore, given the increasingly mature technologies, zero-emission electric vehicles (EVs) have become very popular, and are able to meet different operational requirements in a progressive manner. As for other zero-emission new energy vehicles, although these vehicles are still in the trial stage, they possess quite a number of potential advantages, such as having sufficient battery capacity for long-distance driving.

Therefore, the Government will continue to focus on the promotion of zero-emission EVs and other new energy vehicles. There is no plan to include hybrid vehicles in the "One-for-One Replacement" Scheme or other subsidy schemes.

- End -

**CONTROLLING OFFICER'S REPLY**

**(Question Serial No. 3554)**

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) -

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Mr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the Hong Kong Observatory's mascot, Dr Tin, will the Government inform this Council of:

- (1) the expenditure on the design, promotion and operation of the above mascot;
- (2) the respective numbers of publicity materials and promotional activities in which the image of the mascot was used in the past 5 years; and
- (3) whether any assessment has been made on the public awareness of the above mascot? If yes, what are the assessment criteria, methodology, cycle and outcome? If no, what are the reasons?

Asked by: Hon LAM Chun-sing (LegCo internal reference no.: 38)

Reply:

The design and elements of Dr Tin took inspirations from the winning designs of the Weather Mascot Competition jointly organised by the Hong Kong Meteorological Society, the Hong Kong Society for Education in Art and the Hong Kong Observatory (HKO) for primary school students in late 2012. In 2013, Dr Tin was officially launched and named. In 2018, the HKO brought a new image to Dr Tin with modern design style.

In the past 5 years, Dr Tin showed up from time to time on different platforms such as the HKO's Facebook, YouTube, Instagram, and TV Announcements in the Public Interest to promote various weather-related knowledge to the public, raise public awareness of climate change and extreme weather, and enhance the understanding of various physical phenomena of the Earth and the services of the HKO. Besides, Dr Tin was also used as a Chatbot in the mobile application "MyObservatory" to answer public enquiries. It also met with the public on occasions such as the HKO's open days.

As the above work is part of the HKO's day-to-day work and the various platforms are not solely designated for Dr Tin, it is difficult to separately assess the public awareness of Dr Tin. As the expenditure required has been subsumed under the regular provision for the HKO, a breakdown in this respect is not available.

- End -

**CONTROLLING OFFICER'S REPLY**

**EEB(E)200**

**(Question Serial No. 3472)**

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) -

Programme: (3) Time Standard and Geophysical Services

Controlling Officer: Director of the Hong Kong Observatory (Mr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

In the past 5 years, how many reports of Unidentified Flying Objects (UFOs) in the 18 districts had been received by the Hong Kong Observatory?

Asked by: Hon TIK Chi-yuen (LegCo internal reference no.: 325)

Reply:

The Hong Kong Observatory received a total of 88 reports of Unidentified Flying Objects (UFOs) from members of the public from 2018 to 2022. The breakdown of reports received each year by district is shown in Annex A.

Numbers of sightings of Unidentified Flying Objects (UFOs) by members of the public  
from 2018 to 2022 by district

District	Calendar year					Sub-total of each district in 2018-2022
	2018	2019	2020	2021	2022	
Hong Kong Island – Eastern	-	-	-	-	1	1
Hong Kong Island – Wan Chai	-	1	-	2	1	4
Hong Kong Island – Central and Western	2	1	-	1	3	7
Hong Kong Island –Southern	-	1	1	-	-	2
Kowloon East – Kwun Tong	2	-	-	1	-	3
Kowloon East – Wong Tai Sin	-	1	-	-	-	1
Kowloon West – Yau Tsim Mong	-	-	1	1	1	3
Kowloon West – Kowloon City	2	-	-	1	-	3
Kowloon West – Sham Shui Po	1	-	-	1	-	2
New Territories East – Sai Kung	4	-	1	1	-	6
New Territories East – Sha Tin	2	1	3	4	-	10
New Territories East – Tai Po	-	1	-	1	2	4
New Territories East – North	1	-	-	-	1	2
New Territories West – Kwai Tsing		-	-	-	2	2
New Territories West – Tsuen Wan	3	-	1	2	1	7
New Territories West – Tuen Mun	2	-	1	3	2	8
New Territories West – Yuen Long	2	1	1	-	-	4
New Territories West – Islands	1	1	1	3	2	8
Others (District not mentioned in report)	2	4	1	1	3	11
Sub-total of all districts each year	24	12	11	22	19	-
<b>Total</b>	88					

- End -