

LCQ8: Promoting the popularisation of electric vehicles

Following is a question by the Hon Chan Hak-kan and a written reply by the Secretary for Environment and Ecology, Mr Tse Chin-wan, in the Legislative Council today (January 10):

Question:

On promoting the popularisation of electric vehicles (EVs), will the Government inform this Council:

(1) given that the "One-for-One Replacement" Scheme for EVs will expire on March 31 this year, whether the Government will extend the Scheme to continue with the promotion of the popularisation of EVs; if so, of the details; if not, whether it has assessed the impact to be made on the entire EV industry chain after the Scheme comes to an end;

(2) given that according to the information from the Government Logistics Department, as at the end of January last year, only 7.1 per cent of the saloon cars in the establishment of the government fleet were EVs, and among the vehicles (excluding specialised vehicles) purchased by various government departments in 2022, the number of EVs only accounted for about 14.9 per cent, which was far lower than the proportion of electric private cars in newly registered private cars in Hong Kong in the first eight months of last year (64.3 per cent), whether the Government will set an example by requesting various government departments to purchase EVs when purchasing new saloon cars; if so, of the target proportion; if not, the reasons for that;

(3) as the Chief Executive has indicated in the 2023 Policy Address that tenders will be invited in the first quarter of this year for the conversion of two vacant petrol-filling station sites to quick charging stations, whether the Government has assessed the public demand for such kind of charging stations; if so, of the details;

(4) as the Government has indicated in the Hong Kong Roadmap on Popularisation of Electric Vehicles that it will identify sites for the establishment of a territory-wide quick charging network, whether the Government will consider setting up restaurants or supermarkets, etc. in places where quick charging stations are proposed to be built, so that EV owners can wait for the completion of charging in the charging stations; if so, of the details; if not, the reasons for that;

(5) as there are views pointing out that EV charging facilities in car parks which are managed by the MTR Corporation Limited (MTRCL) and provide park-and-ride services are grossly inadequate, whether the Government will promote the installation of more EV chargers by MTRCL in such car parks; if so, of the details; if not, the reasons for that;

(6) given that the Government conducted a pilot scheme in four government open car parks in 2017 to test the reliability of outdoor EV chargers, of the relevant outcome; whether the Government will learn from the relevant experience and install quick charging facilities at on-street parking spaces; if so, of the details; if not, the reasons for that; and

(7) whether measures are in place to assist in the development of the EV battery recycling industry; if so, of the details; if not, the reasons for that?

Reply:

President,

Developing green transport is vital to Hong Kong in achieving carbon neutrality by 2050. The Government announced the Hong Kong Roadmap on Popularisation of Electric Vehicles (the EV Roadmap) in March 2021, setting the target to cease new registration of fuel-propelled and hybrid private cars (PCs) in 2035 or earlier.

The Government is committed to promote green transport. With the percentage of electric private cars (e-PCs) in newly registered PCs in Hong Kong soared from 6.3 per cent in 2019 to 64.1 per cent in November 2023, associated charging facilities have become indispensable. As mentioned in the Chief Executive's 2023 Policy Address, the Government strives to expand the network of electric vehicle (EV) charging facilities and aims to increase the total number of public and private parking spaces with charging infrastructure to about 200 000 by mid-2027.

In consultation with the Financial Services and the Treasury Bureau, I provide the reply to the question raised by the Hon Chan Hak-kan as follows:

(1) The "One-for-One Replacement" Scheme (the Scheme) has been effective in increasing the number of e-PCs on the premise of not increasing the total number of PCs. From the launch of the Scheme to November 2023, nearly 60 700 old PCs were scrapped and replaced by new e-PCs under the Scheme, accounting for 97 per cent of the 62 400 new e-PCs or so. Meanwhile, the number of registered e-PCs recorded a growth of over 600 per cent while the total number of registered PCs only grew by less than 7 per cent, indicating that the Scheme did not lead to a significant increase in the total number of registered PCs. The current first registration tax concession arrangement for EVs, including the Scheme, will expire on March 31, 2024. The Government is reviewing the Scheme and will announce the latest arrangement in due course.

(2) The Environmental Protection Department (EPD) updated the green procurement practice for government vehicles in July 2021, setting out the use of EVs as the standard when procuring or replacing government private cars with five seats or less, unless circumstances such as operational needs that render the use of EVs infeasible. The Government has been following the green procurement practice in procuring EVs, having regard to the operational

needs of the policy bureaux and departments as well as the actual market situation.

Statistics of the Government Logistics Department showed that 55 (about 63.2 per cent) of the 87 government private cars with five seats or less (including both new and replacement vehicles) procured by the Government in 2023 were EVs. According to the information from the departments concerned, the main reason for not switching to EVs is that current models of e-PCs available on the market are unable to meet the actual operational needs, such as long hours of outdoor operations.

The Government will continue to follow the above green procurement practice when determining the number of EVs to be procured, taking into account the operational needs of the policy bureaux and departments as well as the actual market situation, including the latest development and supply of EVs.

(3) The EV Roadmap put forward the introduction of different charging arrangements for different types of EVs and the progressive marketisation of charging services to promote the sustainable development of EVs in the long run. Specifically, e-PCs should be mainly charged at home, work place or frequently visited places while parking, whereas public charging facilities mainly serve ad-hoc top-up charging needs. As regards electric commercial vehicles (e-CVs) with relatively long operation hours and high mileage, apart from the charging facilities at their parking places, quick charging facilities are also needed for topping up their batteries in daily operation.

The Policy Address announced that tenders will be invited in the first quarter of 2024 for the conversion of two vacant petrol filling station sites in East Kowloon and New Territories East into quick charging stations (QCSs). With power of charger no less than 100 kilowatts, which is at least ten times higher of that of medium chargers, chargers at QCS can meet different charging needs of EVs, especially those of e-CVs (such as taxis and public light buses) for quick top-ups.

(4) Due to the limited area of QCSs, the Government will not require the operators to provide eateries or supermarkets within QCSs. As the advancement in charging technologies will further reduce charging time, there should be a diminishing need of drivers/passengers for such facilities as eateries when waiting for the completion of charging. Nevertheless, the Government will, at the initial stage, consider relaxing the land lease conditions for QCSs to allow operators to extend the area of convenience store thereat for providing car-related products and refreshments to drivers/passengers during EV charging.

(5) According to the information from the MTR Corporation Limited (MTRCL), 18 EV charging facilities have been installed in total at four of its car parks participating in the Park and Ride Scheme. It also plans to provide over 200 additional EV charging facilities at its car parks before 2025. The Government will continue to liaise with the MTRCL, encouraging the MTRCL to provide more EV chargers at its car parks. With the progressive marketisation

of EV charging services at government car parks, we believe that more public and private organisations, such as the MTRCL, will enhance the charging services at their car parks or become charging service providers to develop EV charging networks.

(6) In earlier years, the EPD conducted a pilot scheme at four government open car parks with the installation of a total of 11 outdoor medium chargers to test their performances. The results showed that the chargers functioned well in outdoor environment, and could be used at open car parks. However, having considered the relevant factors including power supply and space constraints, possible impact on nearby traffic, and the parking needs of other drivers, the Government has no plans to install charging facilities near existing public metered parking spaces.

The Government will ensure that there will be sufficient charging facilities to meet the growing demand for EV charging. It is the Government's policy that e-PC owners should mainly charge their cars at home, work place or frequently visited places while parking. To this end, the Government has introduced a number of initiatives, including the EV-charging at Home Subsidy Scheme and granting gross floor area concessions, to substantially increase the provision of EV charging infrastructure in car parks of existing housing estates and newly built buildings. About 37 800 EV charging infrastructure have been equipped so far across the city under these two initiatives. Meanwhile, the Government has been accelerating the marketisation of EV charging services. For instance, charged EV charging services have been progressively introduced at government car parks since end-2023 to drive the participation of the private sector in providing more charging facilities for EV drivers, with a view to increasing the number of public and private parking spaces with charging infrastructure to about 200 000 by mid-2027, a target as set out in the Policy Address.

(7) The Government will introduce a bill in 2024 to establish a common legislative framework applicable to different products for the Producer Responsibility Schemes (PRSs) and formulate relevant subsidiary legislation. The PRSs for five types of products, including retired EV batteries, will be implemented gradually starting from 2025. These PRSs allow stakeholders in the supply chain to share the responsibilities for the collection, recycling, handling and disposal of waste products. Retired EV batteries that properly and effectively enter into the recycling chain can facilitate the development of second-life applications, thereby turning waste into resources, thus promoting the development of the circular economy.

To facilitate the development of the battery recycling industry, the EPD has invited tender for a piece of land in EcoPark to develop a recycling facility for retired EV batteries, and the tender invitation was closed in November 2023. The relevant tender proposals are currently under evaluation.