

## LCQ16: Charging facilities for electric vehicles

Following is a question by the Hon Kenneth Leung and a written reply by the Secretary for the Environment, Mr Wong Kam-sing, in the Legislative Council today (December 4):

Question:

It is learnt that an acute shortage of charging facilities for electric vehicles (EVs) has caused quite a number of people to give up the idea of purchasing EVs. Regarding charging facilities for EVs, will the Government inform this Council:

(1) as the authorities indicated early this year that the relevant government departments were looking for suitable on-street car parking spaces to install charging facilities as a pilot, of the progress and implementation timetable of the measure;

(2) as the authorities indicated early this year that the relevant government departments were looking for suitable locations (which were not car parking spaces) to set up public quick charging stations for trial, of the locations that the authorities have considered so far, the progress of the studies carried out on the feasibility of the various locations, and the implementation timetable of the measure;

(3) whether the authorities will encourage, through the provision of rates concession, commercial car park operators to install charging facilities in their car parks; if so, of the details; if not, the reasons for that; and

(4) given that under section 20 of the Electricity (Wiring) Regulations (Cap. 406E), if a low voltage fixed electrical installation located in a general premises has an approved loading exceeding 100A, single or three phase, the owner of the installation shall arrange to have the installation inspected, tested and certified at least once every five years, and that the Government will allocate \$2 billion for launching a pilot scheme to subsidise the installation of EV charging-enabling infrastructure in car parks of private residential buildings, whether the Government will accord priority to contacting the owners' corporations or managers of buildings the communal electrical installation therein for which the said inspections will soon be conducted, so as to encourage them to install EV charging-enabling infrastructure in their car parks in tandem with the conduct of the aforesaid inspection; if so, of the details; if not, the reasons for that?

Reply:

President,

The Government has all along adopted a multi-pronged approach to promote

the steady development and gradual popularisation of electric vehicles (EVs) in Hong Kong.

My responses to the question raised by the Hon Kenneth Leung are as follows:

(1) Provision of on-street parking spaces is mainly to cater for short-term parking needs, and such spaces are usually installed with parking meters to accelerate the turnover of parking spaces for use by more drivers. Taking into account the power supply and space constraints, potential impact on nearby traffic as well as related considerations such as other drivers' parking needs, the Government has to look for suitable on-street parking spaces to install charging facilities. Ten-odd possible sites have initially been identified for such installation and their feasibility is under detailed study. When these sites are confirmed to be suitable for installing on-street charging facilities, the Government will draw up an implementation timetable and commence a pilot scheme.

(2) A quick charger (charger with a power output of at least 50 kilowatts) can provide 50 to 100 kilometres of driving range for small EVs (such as electric private cars (e-PCs) and electric taxis) in 15 to 30 minutes. To enable e-PC owners to top up their batteries quickly to meet occasional needs during their trips, and to pave the way for promoting the development of electric taxis, the Government is looking for suitable sites to set up public quick charging stations for trial. In October 2019, a consultant was engaged to identify suitable sites across the territory, and a complete list of such is expected to be ready by the end of 2020 to facilitate the formulation of a comprehensive plan for developing a network of quick charging stations. When searching for trial sites to set up quick charging stations, the Government will consider the impact on nearby traffic flow and explore the possibility of co-locating quick charging stations with other government facilities so as to reduce costs and optimise land use.

(3) As regards the charging arrangements for e-PCs, it has always been the Government's policy direction that e-PC owners should perform daily charging of their e-PCs at their homes, workplaces or other suitable places. Public charging facilities, mainly supplementary in nature, are set up for EV owners to top up the batteries of their EVs at times of occasional needs during their trips.

Given the policy direction mentioned above, the Government's priority is to facilitate and encourage the installation of charging facilities in private buildings when planning for the development of charging facilities for e-PCs. For new private buildings, the Government has, since April 2011, encouraged developers to provide EV charging-enabling infrastructure (including the provision of sufficient power supply as well as cabling and conduits for all parking spaces) in private car parks of new buildings (including commercial and residential buildings) through granting of concessions on gross floor area (GFA) so that future owners of these parking spaces may install EV chargers for daily charging. According to the information of the Buildings Department, from April 2011 to March 2019, over 80 per cent of parking spaces in the newly approved developments, involving

about 490 car parks and around 57 000 parking spaces, will be equipped with EV charging-enabling infrastructure.

For existing private residential buildings, the Chief Executive's 2019 Policy Address announced to set aside \$2 billion to implement a pilot subsidy scheme to promote installation of EV charging-enabling infrastructure in car parks of existing private residential buildings (the pilot subsidy scheme) to subsidise car parks of existing private residential buildings to install EV charging-enabling infrastructure, thereby helping resolve problems encountered when installing the charging facilities in these buildings.

With regard to the public charging network, the Government and the private sector have all along been enhancing the installation of public charging facilities. As at September 2019, there are 2 506 public chargers across all 18 districts with 857 in government car parks and the remaining 1 649 installed by private sectors. The Government has allocated \$120 million to install additional medium chargers in government car parks that are open to the public. It is expected that over 1 000 public chargers will be added by 2022, increasing the total number of public chargers in government car parks to around 1 800.

Meanwhile, the private sector has kept providing new public chargers in response to the charging demand from e-PCs in the market. The number of public chargers provided by the private sector has been significantly increased from 536 in 2013 to 1 649 at present. With the continued growth in the number of e-PCs, it is expected that the private sector will continue to provide more public chargers to meet market demand.

For commercial buildings, as mentioned above, the Government has, since April 2011, encouraged developers to provide EV charging-enabling infrastructure in private car parks of new buildings (including the commercial ones) through granting of GFA concessions. The two power companies, at the same time, have been providing technical advice to EV owners or business establishments and rendering service to connect power supply for installation of charging facilities at parking spaces of EV owners or in car parks of commercial buildings. In recent years, several private companies have been providing EV owners or business establishments with one-stop EV charging services, including installation of charging facilities at EV owners' parking spaces and provision of free and/or paid charging services to tenants and customers at specified locations in car parks of commercial buildings.

The Government's priority in the next few years is to spearhead the above mentioned pilot subsidy scheme to assist car parks of existing private residential buildings to install EV charging-enabling infrastructure, and encourage developers to provide EV charging-enabling infrastructure in private car parks of new buildings (including commercial ones) through the current granting of GFA concessions. While the Government has no plan to offer other subsidy schemes (such as rates concession) to encourage commercial car park operators to install charging facilities in their car parks, we will keep in view the development of charging facilities in the market and review the relevant policies and measures in due course.

(4) The Environmental Protection Department is working out the implementation details of the pilot subsidy scheme. In respect of facilitating participation of eligible applicants in the scheme, the department would consider applicants' requests to, as far as practicable, arrange the approved installation works for charging-enabling infrastructure to tie in with the inspection programme of electrical installations in the premises concerned.