

# LCQ20: Introduction of China-made plug-in hybrid electric vehicles

Following is a question by the Hon Lai Tung-kwok and a written reply by the Secretary for Transport and Logistics, Mr Lam Sai-hung, in the Legislative Council today (July 10):

Question:

There are views that, given the excellent performance of China-made plug-in hybrid electric vehicles (EVs), with a recently launched model boasting extremely low fuel consumption and remarkably long travel range, coupled with the fact that the supply of EV charging facilities in Hong Kong remains insufficient in the short term, Hong Kong should more proactively introduce as early as possible different types of China-made new energy vehicles into the market in addition to pure battery EVs, so as to meet the demand that will still exist before the cessation of new registration of fuel-propelled and hybrid private cars by 2035. In this connection, will the Government inform this Council:

(1) of the following information in respect of the Transport Department's processing of applications for Type Approval of vehicles in each of the past three years: (i) the number of vehicle models applying for Type Approval, (ii) the number of Type-Approved vehicle models, and (iii) the average time taken for conducting Type Approval of vehicle models, with a breakdown by vehicle type (classified by fuel used, including but not limited to pure battery EVs and plug-in hybrid EVs) and place of origin of vehicle;

(2) of the staff establishment and strength of various ranks of the Type Approval Section under the Transport Department in each of the past three years; and

(3) whether it has considered providing tax incentives for first registration of motor vehicles to promote the introduction of high performance China-made plug-in hybrid EVs; if so, of the details; if not, the reasons for that?

Reply:

President,

In consultation with the Environment and Ecology Bureau (EEB) and the Transport Department (TD), my consolidated reply to questions raised by Hon Lai is as follows:

(1) The TD has always been approving vehicles in accordance with the requirements of the Road Traffic Ordinance (Cap. 374) and its subsidiary legislation. The purpose of vehicle type approval is to assess the technical specification, design and construction of a sample vehicle of the same make and model, in order to facilitate the authorised dealer or distributor in

importing and selling new mass-produced vehicles for first registration. Upon completion of documentary vetting and examination of a sample vehicle by the TD, the TD will issue a type approval certificate to confirm that such vehicle model is in compliance with the statutory requirements. The TD has been accepting submissions of Guobiao (GB) from the trade to substantiate that vehicles or their components comply with the objective vehicle construction standards stipulated in the legislation. In addition to GB, the TD also accepts other standards, including those of the United Nations Economic Commission for Europe.

The TD has been regularly reviewing and amending existing legislation and guidelines with reference to different national or regional standards to cope with the latest development of the automotive market. For example, with a view to supporting the introduction of different new energy vehicles, the TD issued guidelines on Vehicle Construction Approval Requirements for Electric Vehicles in 2010 to elaborate in detail the technical and safety requirements for electric vehicles (EVs) in Hong Kong. Meanwhile, GB safety requirements for EVs and electric motorcycles have also been included in the guidelines. The latest version was released in May 2023, providing further guidance and specifications on the technical and safety requirements for EVs and facilitating the vehicle trades in providing relevant information on EVs to simplify applications for EV approval. The TD also updated the annex to the above guidelines in June of this year with a view to accepting applications for vehicle type approval of EVs with battery swapping technology.

The TD will continue to maintain close communication with the trade and listen to the trade's views, update technical guidelines and streamline the approval process in a timely manner to facilitate the introduction of more vehicle models by the trade, while ensuring that these vehicles meet the relevant technical requirements.

At present, the approval time for vehicles using different fuel types (including EVs, plug-in hybrid vehicles, fossil fuel vehicles and non-plug-in hybrid vehicles) is similar, taking generally 90 days for approval, including the time required for local authorised dealers to submit supplementary information to the TD and arranging examination of sample vehicles. The number of applications for vehicle type approval and corresponding approvals are as follows:

Number of vehicle models passing type approval (by fuel type of vehicles)

|      | Electric vehicle | Plug-in hybrid vehicle | Fossil fuel and non-plug-in hybrid vehicle |
|------|------------------|------------------------|--|
| 2021 | 145 (167*)       | 1 (1*)                 | 725 (955*)                                 |
| 2022 | 122 (163*)       | 24 (27*)               | 555 (660*)                                 |
| 2023 | 164 (239*)       | 10 (15*)               | 515 (603*)                                 |

|                                 |          |         |            |
|---------------------------------|----------|---------|------------|
| 2024<br>(Up to May 31,<br>2024) | 6 (93**) | 0 (8**) | 91 (239**) |
|---------------------------------|----------|---------|------------|

Note:

(\*) Number of vehicle models applying for type approval

(\*\*) Number of vehicle models applying for type approval, some of the type approval work is still in progress

Number of vehicle models passing type approval (by region of vehicle brands)

|                                 | Mainland<br>China | Asia<br>(other<br>than<br>China) | Europe     | America  |
|---------------------------------|-------------------|----------------------------------|------------|----------|
| 2021                            | 55 (81*)          | 204 (245*)                       | 572 (747*) | 40 (50*) |
| 2022                            | 61 (77*)          | 252 (298*)                       | 362 (446*) | 26 (29*) |
| 2023                            | 83 (133*)         | 174 (195*)                       | 415 (506*) | 17 (23*) |
| 2024<br>(Up to May 31,<br>2024) | 10 (63**)         | 48 (87**)                        | 39 (189**) | 0 (1**)  |

Note:

(\*) Number of vehicle models applying for type approval

(\*\*) Number of vehicle models applying for type approval, some of the type approval work is still in progress

(2) There is a type approval section under the TD which is responsible for vehicle type approval works. The establishment of the team includes one Engineer, one Senior Motor Vehicle Examiner, two Motor Vehicle Examiner I and two Motor Vehicle Examiner II. The above establishment has not changed in the past three years, and the strength has remained approximately the same.

The TD has been streamlining the vehicle approval process to cope with the increasing workload of type approval applications. The TD issued new guidelines on the batch processing mechanism to the trade in December 2022, facilitating the trade in introducing EVs in batches and simplifying the approval application process for the same EV model. At the same time, the TD continues to hold a number of briefing sessions for the trade and issue corresponding guidelines to assist the trade in submitting complete vehicle technical information, so as to reduce the time for clarification on documents and thereby speeding up the progress of the overall vehicle type approval work. The TD will continue to maintain close communication with the trade and review the vehicle examination process and manpower arrangement to achieve better cost-effectiveness.

(3) Exhaust gas emission from vehicles is the primary source of roadside air pollution in Hong Kong and accounts for about 20 per cent of the carbon emission of the territory. Conversion to EVs can improve roadside air quality and help strive towards carbon neutrality. As for private cars (PCs), hybrid

PCs (including plug-in hybrid PCs) are not propelled solely by electric power and still have air pollutant and carbon emission. In comparison, pure EVs do not emit any exhaust gas and are more effective in improving roadside air quality in a high-density environment in Hong Kong. The supply of pure electric PC models on the market is increasing. Currently, about 70 per cent of the newly registered PCs are pure EVs. The Government has also set out the target to cease new registration of fuel-propelled and hybrid PCs in 2035 or earlier. Hence, we do not have plan to separately provide first registration tax concession for hybrid PCs which still have exhaust gas emission. On the other hand, to support the popularisation of EVs, the 2023 Policy Address has set out the target to increase the total number of public and private parking spaces with charging infrastructure in Hong Kong to about 200 000 by mid-2027.