

Executive Summary

Direct Investigation Report

Government's Planning and Arrangements for Ancillary Facilities for Electric Private Vehicles

Introduction

In order to encourage the use of electric vehicles (“EVs”) for reducing roadside air pollution, the Government has fully or partially waived the first registration tax (“FRT”) for EVs since April 1994. The number of electric private vehicles (“EPVs”) surged rapidly within a few years, but the growth in the number of public charging facilities has lagged far behind that of EPVs.

2. The focus of this investigation is not on whether the Government should promote the replacement of conventional petrol vehicles with EVs. We consider that the Government must set a clear policy and practicable measures (including planning, installation and development of ancillary facilities) with specific targets, so that various stakeholders (such as the two power companies, the automotive sector, vehicle owners and car park owners) would be motivated to offer their support in response.

Our Findings

3. Our investigation revealed inadequacies on the part of the Environment Bureau (“ENB”) and Environmental Protection Department (“EPD”) in the following seven aspects regarding the planning and arrangements for ancillary facilities for EPVs.

(I) Failing to Clearly Explain to the Public the Change in EV Policy

4. The Government started promoting the use of EVs as early as the 1990s and explicitly supported the implementation of such a policy in its policy documents. However, the Government has subsequently changed its policy and measures without clearly explaining to the public the reasons and justifications behind. As a result, the public cannot fully grasp the Government's stance in promoting the use of EVs.

5. Since 2016, the Government has undertaken to focus its policy on promoting the use of EVs in the public transport system, while the promotion of EPVs is no longer mentioned. In 2017, the Government reduced the FRT concession for EPVs. Meanwhile, the number of charging facilities in government public car parks has not shown any significant increase. Moreover, regarding the statement “the Government’s longer term target is that as far as private cars are concerned, 30% are EVs or hybrid by 2020” in the Hong Kong Planning Standards and Guidelines (“HKPSG”), ENB explained that the figure merely represents a hypothetical scenario rather than an objective. The original “target” has been changed into a “vision”. All those changes would inevitably give the public an impression that the Government is not as proactive in promoting the use of EPVs as before.

6. Promoting the use of EVs in Hong Kong is a long-term policy which requires clear and long-term planning. The Government, therefore, must clearly explain to the public its policy direction and specific targets, and its reasons and justifications for formulating the relevant measures (including the planning and arrangements for ancillary facilities). Where the Government finds it necessary to adjust the policy and modify the measures, it should also take the initiative to explain to the public the reasons in detail, and inform the parties affected of what can be done in the light of the change.

(II) Insufficient Charging Facilities

7. While the number of EPVs has surged since 2014, there has been no significant increase in the number of public charging facilities. It can be foreseen that EPV users will have greater difficulty than before in finding a public charger to charge their vehicles.

8. Regarding car parks managed by the Government, in the 24 hours public car parks under the Transport Department (“TD”), on average, 7.45% of the parking spaces have charging facilities. Furthermore, for the car parks under the Government Property Agency (“GPA”), which provide workplace parking spaces for some civil servants, on average only 15.79% of the parking spaces have charging facilities. As for the Hong Kong Housing Authority (“HKHA”) and the Hong Kong Housing Society, which provide public and subsidised housing, the ratio of parking spaces equipped with charging facilities remains relatively low. Among the 161 car parks under HKHA, only 28 are equipped with charging facilities. Overall, the number of parking spaces equipped with charging facilities in government car parks remains relatively low. At present, the Government has not set any long-term or achievable targets for installation

of charging facilities in existing buildings.

9. In respect of promoting the installation of charging facilities in private buildings, the actions currently taken by the Government are merely issuing letters to encourage private building owners, and providing technical guidelines. In the lack of statutory requirements and financial incentives, and legal concerns regarding provisions under the land lease or deed of mutual covenant of the building often arise, existing private building owners are generally not so interested or determined in installing charging facilities. The Government has obviously underestimated the resistance to the installation of EV charging facilities at the car parks in private buildings. The Government needs to explore other means to encourage the installation of charging facilities in existing buildings.

10. As for new building developments, since 2011 the Government has granted gross floor area (“GFA”) concessions to encourage developers to provide EV charging infrastructure for the private car parks of new building developments. Nevertheless, the Government makes no requirements for installing chargers and electricity meter connection at the parking spaces already provided with such infrastructure, nor has it any data on the specific charging facilities available at those venues and their charging speed.

(III) Underestimating the Demand for Charging Facilities

11. The Government sees no urgent need to increase the number of public charging spaces, because its statistics show that the current utilisation rate of charging facilities at public car parks is still relatively low. However, this can be due to the fact that charging spaces are often occupied by non-EVs. Besides, the charging spaces in some government public car parks are only equipped with standard chargers which require longer charging time, leading to slower turnover. The overall utilisation rate therefore becomes lower.

12. We believe that the current data on utilisation rate may not have fully reflected the actual demand for the charging facilities at public car parks, and the utilisation rate has been underestimated.

(IV) Information Sharing Inadequate

13. While information about public charging facilities is already uploaded to the EPD website, the Government does not have data on the utilisation of public charging facilities at non-government public car parks. This Office considers that collecting data on the utilisation of charging facilities will enable effective analysis and better estimation of the demand and supply for public charging facilities. The Government obviously lags behind in the application of information technology and in the setting up of information sharing platforms.

(V) Poor Management of Charging Spaces at Government Public Car Parks

14. Charging spaces at government car parks are frequently occupied by non-EVs or EVs that are already fully-charged. Although the Government claimed that charging spaces would be reserved for priority use by EVs during non-peak hours, the measure is not a statutory requirement and is implemented largely on a voluntary basis by the outsourced car park contractors. Lax monitoring also renders full and effective implementation impossible. Besides, many charging spaces are located near the entrances/exits of car parks and, therefore, readily taken up by non-EVs. We have also received comments from the public that some charging facilities at government car parks frequently broke down and were out of service.

15. Given the resources invested by the Government in installing more and better charging facilities, we consider it unsatisfactory, from the perspective of proper use of public resources, that the facilities could not be fully utilised because of poor management.

(VI) Failing to Formulate Clear Fee-charging Policy for Charging Service

16. Free charging service is the main incentive for people to buy EVs. At present, the Government is paying around \$1 million a year in electricity bills of the charging facilities at its car parks. It already indicated that in the long run, it intends to charge a fee for public charging service. However, the Government has never announced when the free charging service will cease and the subsequent arrangements. In our view, no matter the charging service is provided free or not, and when it intends to start charging a fee, the Government should properly manage expectations and let the public know the related arrangements as soon as possible.

(VII) Lack of Other Long-term Support Measures

17. At present, EV owners mainly rely on the maintenance service provided by the original manufacturers. With the growing popularity of EVs, demand for EV maintenance service would become greater. We are of the view that the Government should urge the trade and training institutions to provide systematic training to EV mechanics and those who are interested in joining the profession. Furthermore, EVs as a category is not included under the Voluntary Registration Scheme for Vehicle Mechanics introduced by the Government. The relevant authorities should review the current guidelines and update the relevant codes of practice for the trade's reference.

18. Another important issue is the treatment for retired batteries for EVs, which normally have a lifespan of around seven years. With the growing popularity of EVs, the number of retired batteries is expected to soar. The Government now mainly relies on the EV manufacturers to recycle the batteries. No specific proposals or long-term planning for the disposal of retired batteries have been formulated.

Recommendations

19. In the light of the above, The Ombudsman makes 15 recommendations for improvement to **ENB** and **EPD**:

Policy Implementation

- (1) to explain more to the public the reasons and justifications behind any adjustments to the measures and arrangements regarding the policy on the promotion of EVs;
- (2) to review as soon as possible the contents relating to EV in the HKPSG, and make corresponding amendments and updates to match the Government's current policy direction and targets;
- (3) to set an example by actively promoting the use of EVs among Government departments;

Ancillary Charging Facilities

- (4) to consider installing more charging facilities at car parks managed by Government departments and public organisations (such as HKHA/ Hong Kong Housing Society/ GPA) in order to support the Government's current policy of encouraging EV owners to charge up their vehicles at their homes and workplaces;
- (5) to coordinate and assist other Government departments and public organisations in enhancing the efficiency of charging facilities;
- (6) to install more charging facilities at government public car parks;
- (7) to collect data on the utilisation of public charging facilities at non-government car parks for assessing the need for and scale of expansion of public charging facilities;
- (8) to discuss with TD and GPA, the departments that manage government public car parks, ways to improve the management of charging spaces. This should include a review on how to enhance the current measure of “priority use of charging spaces by EVs” and arrangements for setting up new charging facilities at locations further away from the entrances/exits and passageways of car parks;
- (9) to expedite the setting up of a smart system for the public EV charging network;
- (10) to formulate a clear fee-charging policy and announce the arrangements as soon as possible;

Support Measures

- (11) to strengthen liaison with owners' corporations and owners' committees of private buildings, and explore other means to encourage existing buildings to install charging facilities;
- (12) to review the arrangements for granting GFA concessions to the car parks of newly constructed buildings, and to update the Technical

Guidelines for Electric Vehicle Charging-enabling for Car Parks of New Building Developments;

- (13) to collect data on the charging facilities in newly constructed buildings and the charging speed of the facilities;

Long-term Planning

- (14) to urge related institutions to step up training for EV mechanics and repair technicians for charging facilities, as well as review the current guidelines and update the relevant codes of practice; and
- (15) to discuss with the trade and EV suppliers issues relating to the recycling and disposal of retired EV batteries.

**Office of The Ombudsman
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