

For Information

**Legislative Council
Panel on Environmental Affairs**

**Follow-up to the Meeting of 22 June 2009
Promoting the Use of Electric Vehicles**

PURPOSE

At the meeting of the Panel on Environmental Affairs held on 22 June 2009, Members requested the Administration to provide information on the progress in the promotion of electric vehicles (EVs) in Hong Kong. This paper provides the requested information for Members' reference.

HISTORY OF ELECTRIC VEHICLES

2. The design of electric cars is one of the oldest for automobiles. By the turn of 1900, the US was prosperous, and cars, available in steam, electric and gasoline versions, were becoming more popular. The years 1899 and 1900 were the high point of electric cars in the US, as they outsold all other types of cars. However, several developments in around 1920s, including the mass production and decline in prices of internal combustion engine vehicles and increase in vehicle range requirements, brought about the subsequent decline of EVs. EVs became popular only for some limited range application.

3. However, with growing concern on climate change, coupled with the oil price hike over the past few years, many major carmakers are developing new-generation EVs. These more advanced EVs equipped with much better batteries can travel a distance of 100 to 200 km on a full charge, which can be completed in six to eight hours. Some of these EVs can have their batteries charged up to 80% capacity under the quick charge mode in 30 minutes. We expect that the commercial production and worldwide distribution of these new-generation EVs will commence in late 2010 or 2011.

PROMOTION PLANS FOR ELECTRIC VEHICLES

4. We have already exempted the First Registration Tax of EVs. In this year's Budget, we further propose to set up a \$300 million "Pilot Green Transport Fund" to encourage the transport industry to introduce more innovative green technologies, including EVs. We also propose the acceleration of tax deduction for capital expenditure on environment-friendly vehicles, including EVs. These measures can lower the costs and provide incentives for car buyers to take up EVs.

5. As regards the development of standard charging infrastructure for EVs, we expect that the Government and the two power companies will have set up EV charging points in more than 60 locations by mid 2010. We will also work closely with our partners in the community on the extension of EV charging network. We have recently issued to property management companies and car park operators a pamphlet on the setting up of EV standard charging facilities at car parks. We will continue to encourage property management sector and car park operators to set up EV charging facilities at their car parks so as to meet the increasing demand for EV charging service.

6. On quick charging, the CLP Power Hong Kong Limited (CLP Power) launched the first quick charging station in Hong Kong based on the protocol adopted in Japan on 1 February 2010. They have installed a quick charger in the car park of their Centenary Building in Jordan, Kowloon to provide quick charging service for EVs. CLP Power is conducting a trial run of the quick charging station for a period of six months. During the trial period, CLP Power will monitor the usage and performance of the quick charger.

SUPPLY OF ELECTRIC VEHICLES

7. In late 2009, the Hong Kong Government and the two power companies have procured a total of 30 Mitsubishi EVs, "i-MiEVs". These "i-MiEVs" will all be delivered to Hong Kong by May 2010.

Hong Kong is the first market in Asia, other than Japan, where “i-MiEVs” were sold. Moreover, “MyCar”, a locally developed EV, had been launched for sale in Hong Kong in October 2009. A number of EV manufacturers, including Nissan, BYD and Smith, have also indicated their interest in bringing their EVs to the local market. While there is still a limited supply of EVs in the retail market at present, we expect that the commercial production and worldwide distribution of EVs will commence in late 2010 or 2011. We will continue to enhance our cooperation with EV manufacturers to conduct trials on EVs and invite them to supply their EVs to Hong Kong. We expect a supply of around 200 EVs for the local market in the 2010-11 financial year.

VEHICLES IN GOVERNMENT AND BUS FLEETS

8. The Government has set a target to introduce 10 to 20 EVs into its fleet in each financial year. In 2009-10, ten “i-MiEVs” were procured for use by various bureaux and departments. We are now preparing for the EV procurement in 2010-11 and our goal is to extend the trials on EVs by the Government to other types of EVs, where possible.

9. As for electric buses, we have all along encouraged bus operators to explore introducing suitable models of electric buses to Hong Kong. A local bus company is planning to introduce a “supercapacitor bus” to Hong Kong in July this year for on-site trial. We will continue to keep in view progress, and actively promote the development of EVs in Hong Kong.

DEVELOPMENT OF GREEN INDUSTRIES

10. In April 2006, the Government established the Hong Kong Automotive Parts and Accessory Systems R&D Centre to facilitate the transfer of technology of R&D findings to related industries. In this year’s budget, we also propose to set up a \$300 million Pilot Green Transport Fund for application by the industry, initially by the public transport operators. This Fund will encourage the industry to introduce

more innovative green technologies such as the use of buses, public light buses, taxis, and ferries that employ green technologies, and help nurture the budding of green technology in Hong Kong.

IMPACT ON ELECTRICITY SUPPLY

11. As at 30 April 2010, there were altogether 57 EVs for road use in Hong Kong. As the number of EVs running in Hong Kong is still small, their charging need should have no significant impact on electricity supply in Hong Kong. We will continue to work with the two power companies to develop the EV charging infrastructure in Hong Kong and monitor the possible impacts of the charging needs of EVs on electricity supply.

PROMOTION PLANS FOR ELECTRIC MOTORCYCLES

12. The Government's incentives to promote EVs are also applicable to electric motorcycles. For example, all newly registered electric motorcycles are waived from paying the First Registration Tax. As regards the use of electric motorcycles by the Government, the Police has introduced 12 electric motorcycles into its fleet for trial. We will continue to conduct trials on suitable models of electric motorcycles and consider introducing them into the government fleet. Moreover, electric motorcycles complying with the requirements of the Road Traffic Ordinance can be registered in Hong Kong. As at 30 April 2010, there were 17 electric motorcycles in Hong Kong.

13. Members are invited to note the above information on the promotion of EVs in Hong Kong

Environment Bureau
May 2010