# 立法會

# Legislative Council

LC Paper No. CB(1)903/19-20 (These minutes have been seen by the Administration)

Ref : CB1/PS/1/19

# **Panel on Environmental Affairs**

## Subcommittee to Study Issues Relating to the Development of Electric Vehicles

# Minutes of the meeting on Monday, 11 May 2020, 10:45 am in Conference Room 2B of the Legislative Council Complex

Members present	:	Hon CHAN Hak-kan, BBS, JP (Chairman) Hon Frankie YICK Chi-ming, SBS, JP Hon Kenneth LEUNG Hon Elizabeth QUAT, BBS, JP Dr Hon Junius HO Kwan-yiu, JP Hon SHIU Ka-fai, JP Hon Tanya CHAN
Member attending	:	Hon LAU Kwok-fan, MH
Members absent	:	Ir Dr Hon LO Wai-kwok, SBS, MH, JP Hon HUI Chi-fung
Public Officers attending	:	Agenda item II
attenung		Mr TSE Chin-wan, BBS, JP Under Secretary for the Environment
		Mr Owin FUNG Deputy Director of Environmental Protection (3)

		Mr Dave HO, JP Assistant Director (Air Policy) Environmental Protection Department
		Mr Jemuel NG Principal Environmental Protection Officer (Corporate Affairs) Environmental Protection Department
		Dr MAK Shing-tat Principal Environmental Protection Officer (Mobile Source) Environmental Protection Department
Clerk in attendance	:	Mr Derek LO Chief Council Secretary (1)5
Staff in attendance	:	Ms Anki NG Council Secretary (1)5
		Ms Michelle NIEN Legislative Assistant (1)5

# <u>Action</u>

I. Date of next meeting and items for discussion

(LC Paper No. CB(1)557/19-20(01) — Letter dated 22 April 2020 from Hon Tanya CHAN (Chinese version only))

<u>Members</u> agreed to discuss the following items at the next meeting scheduled for Friday, 12 June 2020, at 10:45 am -

- (a) to study and set the targets and timetable in respect of the proportions of electric vehicles ("EVs") and electric public transport vehicles to the vehicle fleets; and
- (b) to study and make reference to the policies of overseas cities on promoting the use of EVs for formulating policy measures suitable for Hong Kong.

(*Post-meeting note:* The notice of meeting and agenda were issued to members vide LC Paper No. CB(1)615/19-20 on 11 May 2020).

# Scope of study on promoting the use of electric vehicles

2. With regard to the study mentioned in paragraph 1(b) above, the Chairman invited members' comments on the scope of study proposed by the Research Division of the Legislative Council ("LegCo") Secretariat ("the Secretariat"). He advised that the study would cover five overseas places, namely, Norway, Germany, Japan, Shenzhen and California of the United States of America, and policies such as financial incentives for purchasing EVs, fee deduction/exemption for using EVs, support on infrastructure and/or facilities, road use privileges and other supportive measures. The above-mentioned places were selected for their concerted efforts in promoting the use of EVs and most of them had set out a target for the development of EVs. For example, Norway had since the 1990s implemented a comprehensive policy to promote the use of EVs, currently it had the highest rate of EV adoption (over 10%) in the world, and Shenzhen had in recent years implemented targeted measures to boost wider adoption of EVs in public transport, and all buses in the city were now electric-powered.

3. <u>Ms Tanya CHAN</u> and <u>Mr Kenneth LEUNG</u> suggested that other overseas cities with characteristics, geographical situation, social background and city design similar to Hong Kong should also be included in the study, in particular to study their experience on implementing charging facilities. <u>Ms CHAN</u> suggested considering, for example, cities referred to in paragraph 7 of the Administration's paper (LC Paper No. CB(1)589/19-20(01)), i.e. Tokyo, Seoul, Singapore and Taipei. Singapore, same as Hong Kong, had no local EVs manufacturer and had to import EVs into the territory. <u>The Chairman</u> advised that Singapore was not selected in the study because its EV penetration rate remained low (e.g. just about 0.2% of private cars were EVs in 2019). Notwithstanding, members' views would be relayed to the Secretariat for further consideration.

# Invitation for public views

4. <u>The Chairman</u> advised that he would decide on the schedule of meetings of the Subcommittee as appropriate. As deputations had been invited to express their views on promoting the use of EVs in Hong Kong at the meeting of the Panel on Environmental Affairs on 22 January 2020, and on consideration of the latest situation of the coronavirus 2019 infection, <u>the Chairman</u> suggested and <u>members</u> agreed that written submissions be invited on issues relating to the development of EVs in Hong Kong.

(*Post-meeting note:* Members were informed vide LC Paper No. CB(1)616/19-20 on 11 May 2020 that the Subcommittee would invite written submissions on the development of EVs. A general notice to invite written submissions was posted on the LegCo website, and in line with usual practice, the 18 District Councils were also invited to submit their views.)

# **II.** Existing policies on electric vehicles and their effectiveness

# III. Number, distribution and usage of charging facilities for electric vehicles

(LC Paper No. CB(1)589/19-20(01) — Administration's paper on promoting the use of electric vehicles)

Relevant paper

(LC Paper No. CB(1)546/19-20(01) — Background brief prepared by the Legislative Council Secretariat)

# Discussion

5. <u>Members</u> agreed that agenda items II and III be discussed together as they were closely related.

6. <u>The Subcommittee</u> deliberated (Index of proceedings attached at **Appendix**).

(*Post-meeting note*: Power-point presentation materials were issued to members in electronic form vide LC Paper No. CB(1)614/19-20(01) on 11 May 2020.)

# Follow-up actions to be taken by the Administration

7. The Administration was requested to provide information on the breakdown of the number of additional public electric vehicle chargers by location as listed in Annex 1 of LC Paper No. CB(1)589/19-20(01) planned to be installed at government car parks in the coming three years.

(*Post-meeting note*: The Administration's supplementary information was issued to members vide LC Paper No. CB(1)721/19-20(02) on 8 June 2020.)

# IV. Any other business

8. There being no other business, the meeting ended at 12:45 pm.

Council Business Division 1 Legislative Council Secretariat 28 July 2020

## **Panel on Environmental Affairs**

## Subcommittee to Study Issues Relating to the Development of Electric Vehicles

## Proceedings of the meeting on Monday, 11 May 2020, at 10:45 am in Conference Room 2B of the Legislative Council Complex

Time Marker	Speaker	Subject(s)	Action Required		
Agenda ite	Agenda item I — Date of next meeting and items for discussion				
000508 – 000604	Chairman	Opening remarks			
000605 - 001300	Chairman Ms Tanya CHAN Mr Kenneth LEUNG	Discussion on the work plan, the dates for future meetings and selection of overseas cities/countries to be included in the study on policies on promoting the use of electric vehicles ("EVs")			
001301 - 001524	Chairman Ms Tanya CHAN	Schedule of Subcommittee meetings and invitation of written submissions			
0		s on electric vehicles and their effectiveness bution and usage of charging facilities for elect	ric vehicles		
001525 -	Chairman	Briefing by the Administration on LC Paper			
002923	Administration	No. CB(1)589/19-20(01) with the aid of power-point presentation materials (LC Paper No. CB(1)614/19-20(01))			
002924 – 003744	Chairman Mr Kenneth LEUNG Administration	<ul> <li>Mr Kenneth LEUNG enquired about –</li> <li>(a) whether there was any concession on annual vehicle licence fees for electric private cars ("e-PCs");</li> <li>(b) the reasons for the drop in the number of cases in which corporations applied for and earned full profits tax deduction in the first year of procurement of environmental-friendly vehicles (including e-PCs), given that the number had dropped from 194 in 2015-2016 to 69 in 2019-2020 (up to February 2020) as revealed in the information provided by the Administration; and</li> </ul>			

Time Marker	Speaker	Subject(s)	Action Required
		(c) whether there was adequate supply of electric light goods vehicles ("e-LGVs") models in the market.	
		The Administration advised that –	
		<ul><li>(a) the popularization of EVs would depend on the number of available EV chargers for public use and the number and range of EV models available in the market;</li></ul>	
		<ul> <li>(b) many places across the globe were reducing or withdrawing the financial incentives or subsidies for promoting EVs. As the number of e-PCs in Hong Kong had been increasing continuously, after reviewing the arrangement of First Registration Tax ("FRT") concession for e-PCs in 2017 and 2018, the Government introduced a revised FRT concession with an upper limit, and would consider gradually reducing the financial incentives in promoting EVs, including FRT concession, as e-PCs gradually became the main stream of vehicle supply;</li> </ul>	
		<ul> <li>(c) annual vehicle licence fees for e-PCs were already lower than those of private cars powered by fossil fuels, and the annual licence fees for e-PCs were calculated based on unladen weight, while that for private cars powered by fossil fuels were calculated based on cylinder capacity of the engine; and</li> </ul>	
		<ul> <li>(d) the drop in the number of cases in which corporations could earn full profits tax deduction in the first year of procurement of EVs might be due to insufficient EVs models for selection. More e-LGVs models would be available for use by enterprises, and currently, a few new models manufactured by Nissan, Renault and some Mainland EV manufacturers were available in the market. Under the Pilot Green Transport Fund ("PGTF"), the transport sector had indicated that it was more prepared to use e-LGVs as their driving range and payload came close to that of diesel LGVs.</li> </ul>	

Time Marker	Speaker	Subject(s)	Action Required
003745 – Chairman 004431 Ms Tanya CHAN Administration	Ms Tanya CHAN	<ul> <li>Ms Tanya CHAN enquired about –</li> <li>(a) whether the study on identifying suitable sites for setting up quick charging stations in various districts of Hong Kong also included identifying suitable on-street parking spaces for such purpose;</li> </ul>	Titgan eu
	(b) whether the Government would consider providing subsidies to non-Government sector providers of public EV chargers in various districts of Hong Kong in order to increase the number of EV charging facilities in their car parks; and		
		(c) the measures to be taken to enable the Hong Kong Housing Authority ("HA") to improve the public charging facilities at the car parks of public housing developments, and whether the Government would consider installing medium chargers at car parks of newly built public housing developments.	
		The Administration advised that –	
	(a) provision of on-street parking spaces mainly catered for short-term parking needs, and such spaces were usually installed with parking meters to expedite the turnover of parking spaces for use by more drivers. Taking into account relevant considerations including the power supply, space constraints, potential impact on nearby traffic and other drivers' parking needs, the Government had preliminarily identified around 10 possible sites for such installation and was assessing the feasibility in detail; and		
		<ul> <li>(b) HA would continue to provide EV charging facilities, including installation of chargers, at 30% of private car parking spaces in indoor and outdoor car parks of newly built public housing developments. HA would consider the technical feasibility and electricity loading of each location to determine the type of chargers to be provided in these developments.</li> </ul>	

Time Marker	Speaker	Subject(s)	Action Required
		The remaining 70% of private car parking spaces would also be equipped with EV charging-enabling infrastructure, and spaces would be reserved for the installation of EV charging socket outlets in future.	
004432 - 005303	Chairman Administration	<ul> <li>The Chairman enquired about –</li> <li>(a) whether a specific target would be set for promoting the use of electric commercial vehicles ("e-CVs") and if so, the targeted percentage of e-CVs out of the overall commercial vehicles and the relevant timetable for implementing such target;</li> <li>(b) regarding the requirement under the "One-for-One Replacement" Scheme for FRT concession that the owner of the private car ("PC") to be scrapped must have owned the PC "for 18 months or more without interruption", the method of calculating the vehicle ownership period, i.e. given that the Scheme would end on 31 March 2021, whether the owner must have owned the PC to be scrapped on or before 1 October 2019 in order to be eligible for the available FRT concession under the Scheme; and</li> <li>(c) details of the \$2 billion pilot scheme to subsidize the installation of EV charging facilities in private buildings, including whether there would be a requirement on the type of chargers to be installed.</li> <li>The Administration advised that –</li> <li>(a) the policy to promote the use of EVs must tally with the technological development. In recent years, e-PCs that were more technically mature with longer driving range had become gradually available in the market. Popularization of e-PCs required mass supply of affordable models and sufficient infrastructural support. As the number of e-PCs gradually increased, the financial incentives to promote the use of EVs would be reduced;</li> </ul>	

Time Marker	Speaker	Subject(s)	Action Required
		(b) more e-CVs models had become available for some local operators but the technologies were not yet mature. The focus would be to develop technologies for e-CVs to adapt to the local operating conditions. The Government had put in place PGTF to encourage the transport sector to try out green innovative transport technologies, and would devise suitable trial schemes for different electric public transport vehicles including taxis, public light buses ("PLBs") and buses when the technologies became more mature;	
		(c) a requirement under the existing "One-for-One Replacement" Scheme was that the owner must have owned the PC to be scrapped for 18 months or more without interruption in order to be eligible for the higher FRT concession for a new replacement e-PC. The Government was still considering the way forward for the Scheme which would expire on 31 March 2021; and	
		(d) the Government was preparing for a \$2 billion pilot scheme to subsidize the installation of EV charging-enabling infrastructure in car parks of existing private residential buildings, thereby facilitating owners of individual parking spaces to install chargers according to their own needs in future. The Government opined that the chargers to be installed would mostly be medium chargers, as quick chargers were not economical and require high electrical load. Load management facilities might also be required in some car parks to enable efficient distribution and management of the electrical load.	
005304 – 010409	Chairman Mr Kenneth LEUNG Administration	<ul> <li>Mr Kenneth LEUNG enquired about –</li> <li>(a) the progress of installing charging facilities for on-street parking spaces, the total number of on-street parking spaces at the 10 preliminarily identified possible</li> </ul>	

Time Marker	Speaker	Subject(s)	Action Required
		sites, the period for which the feasibility study on such installation would take, the criteria for evaluating the feasibility of such installation, and the difference in cost for installing quick chargers and medium chargers for those parking spaces;	
		<ul><li>(b) the Government's long term fee-charging policy for providing public charging services for EVs, such as whether a flat-rate fee would be imposed each time when charging facilities were used; and</li></ul>	
		<ul> <li>(c) the reasons for the slow progress of the \$2 billion pilot scheme to subsidize the installation of EV charging-enabling infrastructure in car parks of existing private residential buildings, including any difficulty in getting owners' consent or any problem faced by property management companies, and the measures to assist them in solving those problems.</li> </ul>	
		The Administration advised that –	
		<ul> <li>(a) the Government had been trying out 11 outdoor chargers at different government outdoor car parks for over a year. The results revealed that they were not affected by weather conditions, and remained safe even under rainy weather. Provision of on-street parking spaces mainly catered for short-term parking needs, and such spaces were usually installed with parking meters to expedite the turnover of parking spaces for use by more drivers;</li> </ul>	
		<ul> <li>(b) taking into account relevant considerations including the potential impact on nearby traffic, the Government was looking for suitable on-street parking spaces to install charging facilities. The Government had preliminarily identified around 10 possible sites for such installation and was assessing the feasibility in detail. The type of chargers intended to be installed would be medium chargers, as the cost for installing quick chargers would be much</li> </ul>	

Time Marker	Speaker	Subject(s)	Action Required
		more expensive and high electrical load would be required. In some locations, a transformer room might need to be built nearby to support the electrical load;	
		(c) in the long run, the Government intended to charge fees for public EV charging services, but the level of fees to be charged would depend on a number of factors, including the type of chargers used. It would be necessary to impose fees on public chargers in order to encourage proper and efficient use of those facilities and allow the private sector to follow suit to provide charging services with charging fees. The Government would explore a suitable proposal for setting the appropriate fees in due course; and	
		(d) the \$2 billion pilot scheme to subsidize the installation of EV charging-enabling infrastructure in car parks of existing private residential buildings had not been open for application as the scheme was still under planning. It was anticipated that the scheme would be rolled out for application in the second half of 2020.	
		Mr LEUNG opined that a simple fee-charging system would encourage EV owners to use the public charging services more frequently.	
		The Chairman advised that in some parking spaces which provided charging services, a high fee would be charged every unit of hours if EVs still occupied the parking spaces after a full charge. In some other parking spaces which provided free charging services, the time for charging EVs were limited to a fixed period of time. These measures could help reduce EVs from occupying the parking spaces designated for providing charging services.	
010410 – 011457	Chairman Ms Tanya CHAN Administration	Ms Tanya CHAN enquired about –         (a) whether the Government would consider providing support or financial incentives to non-Government sector providers of	

Time Marker	Speaker	Subject(s)	Action Required
		public EV chargers to increase the numbers of public EV chargers in various districts of Hong Kong, given that about 70% (2072) of such chargers (2929 in total) were provided by non-Government sector;	Inquintu
		<ul> <li>(b) measures that the Government would take to promote the use of EVs with regard to the procurement policy, as only one Director of Bureau used EV and a very small percentage of vehicles in the government vehicle fleet were EVs (e.g. e-PCs constituted only 9.2% of the government private cars fleet); and</li> </ul>	
		(c) whether the 30% of private car parking spaces in indoor car parks with EV chargers and the remaining 70% of private car parking spaces equipped with charging-enabling infrastructure in newly built public housing developments managed by HA would install medium chargers, and the relevant timetable for installing such chargers.	
		The Administration advised that – (a) it would not be appropriate for the Government to provide private sector with financial incentives for providing charging services at, for example, shopping malls, which were developed by private developers. Following the imposition of fees on public charging facilities in future, the Government intended to encourage the private sector to provide charging facilities with the imposition of fees. There should be sufficient incentives for private developers to equip with EV charging-enabling infrastructure in new buildings under the existing gross floor area concession arrangement;	
		<ul> <li>(b) senior government officials had been invited to use e-PCs but due to very limited e-PC models available in the market that could meet the requirements in the past, most of them were still using conventional vehicles. As more e-PC</li> </ul>	

Time Marker	Speaker	Subject(s)	Action Required
		models became available, senior government officials would be further invited to try out new e-PC models in due course;	noquiro
		(c) the use of e-PCs in the government vehicle fleet was adopted a few years ago. However, due to unsatisfactory operational performance of part of the electric cars procured by some government departments in earlier years, and the Audit Commission's recommendation in Part 3 of Chapter 3 of Report No. 71 on the accounts of the Government for the year ended 31 March 2018 which pointed out that the Government should critically examine the availability of suitable environmental-friendly vehicles in the market that could fully meet the operational needs of the Hong Kong Police Force when the EVs were due for replacement, departments might be hesitant on the use of EVs. In view of the improvement and technological advancement in the latest EV models, the Government policy with a view to further promoting the use of EVs in the government vehicle fleet; and	
		<ul> <li>(d) the Government would liaise with HA on the installation of medium chargers for private car parking spaces in newly built public housing developments, taking into account cost considerations and market needs. On the other hand, the Government had earmarked \$120 million to extend the public EV charging network at government car parks in the coming three years and would follow up the progress closely.</li> </ul>	
011458 – 012037	Chairman Ms Elizabeth QUAT Administration	Ms Elizabeth QUAT enquired about – (a) whether the Administration would follow up measures to stop vehicles from occupying the car parking spaces designated for providing charging services;	

Time Marker	Speaker	Subject(s)	Action Required
		(b) whether there was any requirement on the minimum number of car parking spaces with charging facilities in government car parks; and	
		(c) whether any measures could be taken to install additional quick chargers in government car parks to accelerate the turnover of car parking spaces with charging facilities for use by more EV drivers.	
		The Administration advised that –	
		<ul> <li>(a) apart from considering imposing fees on charging facilities, the Administration was also trying to install the new charging facilities in car parking spaces on higher floors and at locations further away from entrance/exit, so that they would less likely be occupied when there were other vacant spaces available;</li> </ul>	
		(b) there was no requirement on the minimum number of car parking spaces with charging facilities in government car parks. But the target was to increase the number of car parking spaces with charging facilities to about 30% of the total number of car parking spaces in the existing government car parks;	
		<ul> <li>(c) a total of 857 government public chargers were currently provided at government car parks. The Government had allocated \$120 million last year for extending the public EV charging networks at government car parks in the coming three years. Over 1 000 additional public chargers would be in place by 2022, bringing the total number of chargers to about 1 800. About 170 medium chargers had been installed in the first year, and about 570 and 460 medium chargers would be installed in 2020-2021 and 2021-2022 respectively; and</li> </ul>	

Time Marker	Speaker	Subject(s)	Action Required
		(d) the main difficulty for installation of quick chargers at existing government buildings being the high costs and the accommodation of switchboards and additional transformer rooms to support the high electrical load required, which meant enormous space would be necessary. As the public charging network only served to provide top-up charging in case of occasional needs while on the road, medium chargers could therefore serve the purpose.	
012038 - 012654	Chairman Administration	<ul> <li>The Chairman enquired about – <ul> <li>(a) whether the Administration would extend the "One-for-One Replacement" Scheme to beyond 31 March 2021;</li> <li>(b) supporting measures for public charging facilities available for the development of electric public transport; and</li> <li>(c) the level of fees to be imposed on the use of public charging facilities and measures to inform the public on the proposed fee-charging policy, as this would affect their decision on whether to purchase and use EVs.</li> </ul> </li> <li>The Administration advised that – <ul> <li>(a) it was reviewing the "One-for-One Replacement" Scheme which would expire on 31 March 2021 and would consider the way forward, taking into account general public's view;</li> </ul> </li> <li>(b) the Government's policy was that e-PCs should charge at home and/or offices. This explained the reason why the Government was making preparations to launch the \$2 billion pilot subsidy scheme at existing private residential buildings later this year. On the other hand, the Hong Kong Productivity Council had been invited to explore suitable locations across the territory for installing public transport</li> </ul>	

Time	Speaker	Subject(s)	Action
Marker		<ul> <li>transport, including taxis. Furthermore, electric public light buses ("e-PLBs") could be supported by installing charging facilities at the PLB termini. Electric buses could be charged at the bus termini or depots. The Administration aimed at developing a comprehensive public transport charging network for different modes of public transport; and</li> <li>(c) as the Government was formulating the roadmap on the popularization of EVs, the Administration would set out various targets including the plan to commence fee charging on the use of public charging facilities with a view to ensuring user-pay principle and efficient use of public facilities.</li> </ul>	Required
012655 - 013051	Chairman Ms Elizabeth QUAT Administration	Ms Elizabeth QUAT enquired about the progress and findings of the trial scheme on electric buses in Hong Kong. The Administration advised that the design and application of electric buses encountered more challenges in Hong Kong than other places, including the need to cope with Hong Kong's hilly topography, the low efficiency of the batteries, the lack of land and space for installing charging facilities, etc. The Government would continue to monitor the performance of single-deck electric buses under the trial scheme and to liaise with bus manufacturers for designing suitable bus models for use in Hong Kong. Installation of charging facilities at the public transport interchanges/bus termini would also be tried out to test the practicality and suitability to be applied in larger scale for charging electric buses at those locations.	
013052 – 013530	Chairman	Meeting suspended for voting at another meeting and meeting resumed after voting.	
013531 – 014504	Chairman Mr Kenneth LEUNG Administration	Mr Kenneth LEUNG declared that he had been requested by a Japanese bus company to advise on the management of electric buses in Hong Kong about ten years ago. He enquired about –	

Time Marker	Speaker	Subject(s)	Action Required
		<ul> <li>(a) the progress and performance of the two-year trial scheme on electric buses in Hong Kong, the chosen routes for the 36 single-deck electric buses under the scheme and the franchised bus companies ("FBCs") which took part in the scheme; and</li> </ul>	
		(b) whether electric buses could be assigned to run on specific chosen routes only, given the difficulties encountered in using electric buses in Hong Kong, and the interim target to be set on the use of electric buses in Hong Kong.	
		The Administration advised that –	
		<ul> <li>(a) the trial scheme on electric buses was operating in stages, and all the FBCs (i.e. Citybus Limited ("CBL"), New World First Bus Services Limited ("NWFB"), Kowloon Motor Bus Company (1933) Limited ("KMB"), Long Win Bus Company Limited and New Lantao Bus Company (1973) Limited ("NLBC") took part in the scheme. Ten buses of CBL and NWFB had completed the trial, buses of KMB had commenced operation and buses of NLBC was about to commence operation. Teething problems had been identified and resolved under the scheme;</li> </ul>	
		(b) the driving performance of electric buses was similar to that of diesel fuel buses, but the overall average daily driving range of electric buses during the trial was only about 190 kilometres ("km"). Under high ambient temperature demanding high loading of air-conditioning system, the driving range reduced to about 150 km, which could not meet the normal daily requirement of most of the single-deck buses of 200 to 300 km. The Administration was considering the arrangement of top-up charging for the single-deck buses in daytime to meet the needs as similar arrangement was currently adopted in Shenzhen. In	

Time Marker	Speaker	Subject(s)	Action Required
		addition, supercapacitor single-deck buses with lower driving range but quick charging would also be tested under the trial scheme to see if they could be used in the local operating environment; and	
		(c) about 95% of the franchised buses in Hong Kong were double-deckers and the remaining were single-deckers. The electric buses of the FBCs under the trial scheme would continue to run after the scheme. The technology of double-deck electric buses was still developing, and the most advanced technology was being developed in the Mainland. Given that there was room for the technology of the electric double-deckers to further develop, the Administration found it pre-mature to set any target for the use of electric buses in Hong Kong at this stage.	
014505 – 015356	Chairman Ms Elizabeth QUAT Administration	<ul> <li>Ms Elizabeth QUAT enquired about –</li> <li>(a) the way forward for developing electric public transport in Hong Kong, such as finding space for locating charging facilities for different modes of public transport, the long term action plan and the relevant timetable as the technological development in public transport vehicles was apparently slow; and</li> </ul>	
		(b) the timetable for changing all green PLBs to e-PLBs after the launch of the pilot scheme for e-PLBs.	
		The Administration advised that – (a) in view of the shortage of land supply in Hong Kong, it would not be possible to find enormous land and space to install charging facilities for public transport vehicles. However, rapid improvement and development in EV batteries and charging technologies would help to overcome some of the problems. The Administration further pointed out that with significant development in EV batteries and charging technologies in	

Time Marker	Speaker	Subject(s)	Action Required
		future, it would invite EV manufacturers to design suitable PLBs and bus models meeting local conditions and modus operandi;	
		(b) as for PLBs, each of them ran about 200 km on a daily basis. Since not all PLBs would be parked at the termini overnight to get charged, they needed to have quick charging opportunities a few times in daytime and each for about ten minutes to support a range of about 100 km; and	
		(c) as PLBs were almost unique to Hong Kong, the Government engaged a consultant in March 2019 to study and map out the specifications and requirements of local e-PLBs and the associated charging facilities that suited Hong Kong's operating environment. The study was about to complete, and generally positive feedbacks were received from the PLB trade, PLBs manufacturers and charging service providers which had been consulted. The next step would be to identify suitable PLB routes for trial under the pilot scheme and seek the trade's intention to join the pilot e-PLB scheme. The Government planned to engage about 40 e-PLBs running on various routes for a trial of about 12 months.	
015357 – 020017	Chairman Mr LAU Kwok-fan Administration	<ul> <li>Mr LAU Kwok-fan enquired about –</li> <li>(a) the progress of the Government's study on provision of charging facilities at on-street parking spaces, as such facilities were already available in the Mainland and Macao; and</li> <li>(b) whether the Government would consider</li> </ul>	
		adopting new technologies of installing top-up charging facilities at bus-stops for electric buses to facilitate their daily operation.	

Time Marker	Speaker	Subject(s)	Action Required
		The Administration advised that –	Kequiteu
		<ul> <li>(a) provision of on-street parking spaces was mainly to cater for short-term parking needs. Taking into account the power supply and space constraints, the Government intended to install medium chargers at suitable on-street parking spaces. Around 10 possible sites had initially been identified for such installation and their feasibility was under detailed study; and</li> </ul>	
		(b) the Government was conducting a trial scheme to subsidize FBCs to acquire different single-decked electric buses and use different technologies to test out their operational performance. Charging facilities for electric buses to top-up during the operational period had been installed for two routes at Sha Tin and Kai Tak respectively.	
020018 – 020350	Chairman Ms Tanya CHAN Administration	<ul> <li>Ms Tanya CHAN enquired about –</li> <li>(a) whether the Administration would cease installing standard public EV chargers in future and install medium chargers instead, given the low efficiency of standard chargers; and</li> <li>(b) the timetable for extending the public EV</li> </ul>	
		charging network at government car parks in the coming three years.	
		The Administration advised that –	
		<ul> <li>(a) medium public EV chargers would be the main type of chargers to be installed in future. In addition, the Administration would explore suitable options for developing public quick charging stations at different locations, which would be complementary to installing medium public EV chargers at government car parks; and</li> </ul>	
		(b) the Government had allocated \$120 million last year for extending the public EV charging networks at	

Time	Speaker	Subject(s)	Action
Marker			Required
		government car parks in the coming three years. Over 1 000 additional public chargers were expected to be in place by 2022, among them, about 170 medium chargers had already been installed in the first year. The Administration anticipated that about 570 and 460 medium chargers would be installed respectively in 2020-2021 and 2021-2022. The Administration was requested to provide information on the breakdown of the number of additional public electric vehicle chargers by location as listed in Annex 1 of LC Paper No. CB(1)589/19-20(01) planned to be	Paragraph 7 of the minutes
		installed at government car parks in the coming three years.	
Agenda item IV — Any other business			
020351 – 020353	Chairman	Closing remarks	

Council Business Division 1 Legislative Council Secretariat 28 July 2020