

Statistical Highlights

ISSH26/20-21

Usage of electric vehicles in Hong Kong



Research Office

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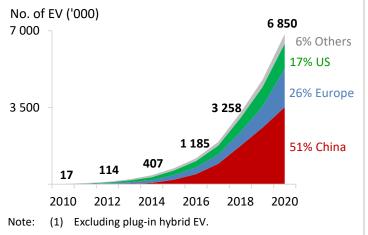
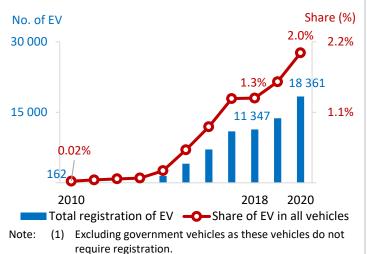
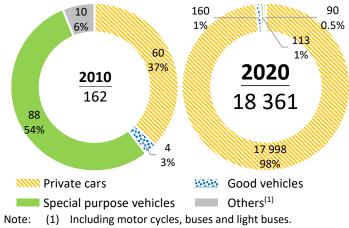


Figure 2 – EV in Hong Kong, 2010-2020⁽¹⁾







Highlights

- Electric vehicles ("EV") have become increasingly popular around the globe, precipitated by the technological breakthrough in battery and their environmental benefits of reducing roadside emission and mitigating climate change. According to the International Energy Agency ("IEA"), the global stock of pure battery EV has surged by over 400 times within a decade to 6.85 million in 2020 (Figure 1). China is the fastest-growing market, with its global share quintupling from 9% in 2010 to 51% in 2020. This was followed by Europe (26%) and the United States (17%).
- Total registration of EV in Hong Kong likewise has increased significantly from 162 in 2010 to 18 361 in 2020 (Figure 2). On top of lengthened mileage after battery charging, the EV popularization is partly attributed to the launch of the "One-for-One Replacement" Scheme in February 2018. Under the Scheme, a higher concession of first registration tax (i.e. from HK\$97,500 in 2017 up to HK\$287,500 in 2021) has been given to EV purchasers scrapping their old private cars ("PC"). In the light of this tax incentive, the proportion of EV in local vehicle fleet jumped from 0.02% to 2% over the past decade. This ratio was far higher than the neighbouring cities, such as Seoul (0.7%), Tokyo (0.2%) and Singapore (0.1%).
- Analyzed by type of local EV, there is a significant change in composition. In 2010, most (54%) of the EV were special purpose vehicles (e.g. fork-lift trucks and industrial tractors), with only 37% as electric private cars ("e-PC") (Figure 3). However, a decade later in 2020, e-PC accounted for 98% of the overall EV, on the back of tripling in e-PC models in five years to 81 in 2020, giving a wider choice to consumers.

Usage of electric vehicles in Hong Kong (cont'd)

Figure 4 – Public chargers for EV by type, 2015-2020 Highlights

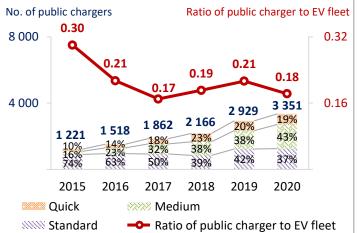
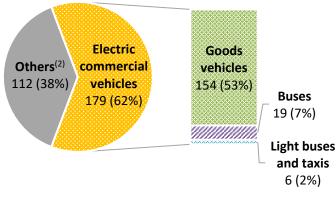


Figure 5 – New Energy Transport Fund as at end-March 2021⁽¹⁾



Notes: (1) Previously named as "Pilot Green Transport Fund". (2) Including 103 hybrid vehicles and 9 eco-devices.

Figure 6 – Share of EV in new ve	hicle sales
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	2015	2019	Year to ban sales of fuel-propelled vehicles
	16.1%	42.4%	2025
The Netherlands	0.6%	13.9%	2030
Hong Kong	5.2%	12.4%(1)	2035
Sweden	0.8%	4.4%	2030
Kina China	0.7%	3.9%	(2)
The United Kingdom	0.4%	1.5%	2030

Notes: (1) Latest data for e-PC only in 2020.

(2) Target to raise the proportion of pure battery EV as the mainstream in sales of new vehicles by 2035.

- Over the past six years, notwithstanding a tripling in the number of public chargers in Hong Kong to 3 351 in 2020, their ratio to the EV fleet has plunged from 0.30 to 0.18 (Figure 4). There are persistent concerns that inadequate charging facilities are holding back further usage of EV in Hong Kong. To address this issue, the Government sets a policy target in the "Roadmap on Popularisation of EV" in March 2021 to increase the number of public chargers to 5 000 or above by 2025. Moreover, the Government also aims to install more medium and quick speed chargers to shorten charging time. They make up 43% and 19% of all public chargers respectively at present.
- Electric commercial vehicles ("e-CV") is another • hurdle in EV popularization, largely due to (a) higher vehicle cost; (b) higher repair fee; and (c) insufficient battery capacity for frequent business usage and heavy loading. A total subsidy amounting to HK\$166 million has been offered for testing 291 green vehicles/devices under New Energy Transport ("NET") Fund since March 2011, 62% of which were e-CV (Figure 5). These e-CV could save 31%-91% of the energy costs compared with their conventional counterparts. In the Roadmap, the Government plans to "set out a more concrete way forward and timetable" for e-CV around 2025.
- In the sales of new vehicles, the market share of e-PC has doubled from 5.2% to 12.4% in Hong Kong during 2015-2020, on the back of the aforementioned tax incentive (Figure 6). Yet this is still far behind Norway (42%), the global leader. In the Roadmap, the Government sets an ambitious target to stop new registration of fuel-propelled PC (i.e. petrol, diesel and hybrid) by 2035, broadly in line with the regulatory trend in advanced places globally.

Data sources: Latest figures from International Energy Agency, Transport Department and Environmental Protection Department.

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