BUSINESS ENVIRONMENT COUNCIL 商界環保協會

4 August 2025

Accelerating Electrification of Commercial Vehicles in Hong Kong

Background

Transport accounted for 18.4% of Hong Kong's total carbon emissions in 2023, making it the city's second-largest source of emissions. In alignment with Hong Kong's Climate Action Plan 2050, decarbonising the transport sector is a critical priority. The Government has taken steps to promote new energy transport solutions, recognising their vital role in reducing emissions, improving air quality, and enhancing public health. Among the various decarbonisation pathways, vehicle electrification is widely acknowledged as one of the most effective and pragmatic approaches. It offers significant opportunities to lower the sector's carbon footprint, accelerate Hong Kong's transition to a low-carbon economy, and support the city's long-term sustainability goals.

Business Environment Council ("BEC") welcomes the Hong Kong Government's commitment to advancing electric vehicles ("EVs") adoption through a series of well-structured policies and incentives. For private vehicles, these efforts have yielded significant results: by April 2025, the number of registered private EVs in Hong Kong surpassed 110,000, representing approximately 18% of all private vehicles[1]. Notably, 7 out of 10 newly registered private cars are now electric, demonstrating the effectiveness of comprehensive measures set forth in the Roadmap on the Popularisation of Electric Vehicles released in 2021[2].

Despite these achievements in the private vehicle segment, it is vital to acknowledge that Hong Kong still has a long way to go to achieve zero vehicular emissions. This is largely because commercial vehicles, such as taxis, buses, light buses, and goods vehicles, remain the main source of both air pollutants and greenhouse gas emissions from road transport. The electrification rate of commercial vehicles in Hong Kong remains significantly lower than that of leading cities. Currently, only 1.49% of taxis, 0.86% of buses, 0.17% of minibuses, and 0.81% of goods vehicles are electric[3]. These figures underscore the considerable gap that Hong Kong must address to accelerate the transition to zero-emission commercial transport.

The Government's announcement of Green Transformation Roadmap of Public Buses and Taxis in December 2024 has provided clear support to these transport segments. Other commercial vehicles will also need further policy support. It is encouraging to note that the Government plans to unveil a dedicated roadmap for wider commercial vehicles in 2025, providing much-needed direction and support for the transition to low-carbon transport. To strengthen the effectiveness of this roadmap, and through our engagement with stakeholders related to the commercial vehicles in recent period, BEC has identified several critical enablers to accelerate electrification of commercial vehicles for the Government to consider.

[1] https://www.td.gov.hk/tc/transport_in_hong_kong/transport_figures/monthly_traffic_and_transport_digest/2025/202504/index.html
[2] https://cnsd.gov.hk/wp-content/uploads/2025/06/CAP2050-progress-pamphlet_EN_website.pdf
[3] https://www.td.gov.hk/tc/transport_in_hong_kong/transport_figures/monthly_traffic_and_transport_digest/2025/202504/index.html

Recommendations

1. Establish Clear Targets and Mandatory Measures

The Government should set up clear near- and medium-term deadlines for phasing out internal combustion engine commercial vehicles, such as taxis, buses, goods vehicles, and trucks in orderly manner. Clear targets will enable the industry to make timely investment decisions and plan more effectively for a low-carbon transition. In the absence of such targets, the business community often adopts a "wait-and-see" approach, slowing progress. For example, Singapore's Land Transport Authority has committed to phasing out all internal combustion engine vehicles by 2040, including medium- and heavy-duty vehicles. Furthermore, the UK, as part of its Net Zero Strategy and Transport Decarbonisation Plan, has set clear targets: phasing out the sale of new non-zero emission heavy goods vehicles ("HGVs") weighing 26 tonnes or less by 2035, with all new HGVs sold in the UK required to be zero emission by 2040[4]. In the Hong Kong context, the Government could consider setting ambitious yet practical phase-out targets for commercial vehicles. For example, aligning the phase-out of internal combustion engine ("ICE") sales for light goods vehicles ("LGVs") with private vehicles by or around 2035 would reflect increasing readiness in terms of total cost of ownership, technological maturity, and model availability. Additionally, subject to technology development, phasing out ICE sales of medium and heavy goods vehicles ("MGVs" and "HGVs") between 2035 and 2040 would support the achievement of Hong Kong's carbon neutrality targets by 2050, taking into account the typical 15- to 18-year lifecycle of these vehicles. Setting clear and ambitious transition timelines for good vehicles will provide certainty to the market, encourage early action, and ensure that Hong Kong remains competitive in the transition to low-carbon transport.

2. Update Regulations and Requirements

The Government is expected to update regulations, particularly those related to vehicle weight and charging infrastructure, to better accommodate EVs. Given the wide range of more affordable EV models available in the Mainland China, which offer greater choice to consumers, the Government should also simplify the type-approval process to reduce time-to-market and expand availability of EV model in Hong Kong, particularly for commercial trucks 5 tonnes and above. At the same time, relevant EV regulations should be updated to recognise and accommodate models that are already available in overseas markets. This will help remove unnecessary barriers and make it easier for more EV models to enter the local market, further encouraging the adoption of EVs.

The Government could also require all vehicle-related services (including third-party logistics) provided to Government to be zero-emission and encourage leading corporations to adopt similar standards within their own operations by offering suitable incentive schemes. Furthermore, the Education Bureau could collaborate with schools to develop transition plans and set achievable targets for electrifying school transport. The education sector operates a large number of minibuses and coaches, whose predictable usage patterns are well-suited to

[4] https://www.gov.uk/government/news/uk-confirms-pledge-for-zero-emission-hgvs-by-2040-and-unveils-new-chargepoint-design

electrification. Reducing emissions from these vehicles is particularly important, as they operate in close proximity to children and may pose health risks if left unaddressed.

3. Strengthen Incentives for the Goods Vehicles

The Government needs to incentivise the transition of goods vehicles to electrified alternatives through financial measures. Currently, financial support for businesses is viewed as lacking in adequacy, particularly as the New Energy Transport Fund ceased accepting applications for trials of all electric commercial vehicles from April 2025. Additional subsidy schemes are highlighted by many stakeholders to help reduce capital expenditure, which are two to three times more expensive for them to absorb on their own[5]. To address these concerns while mitigating risks of unintended price inflation by OEMs due to direct or broad subsidies, the Government may also consider the following targeted measures:

- Green Freight Programmes

  Introduce specific green freight or logistics programmes that provide financial incentives to companies transitioning their fleets to zero-emission trucks. For example, California's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project ("HVIP") offers vouchers for medium- and heavy-duty electric trucks, encouraging fleet-level adoption without distorting retail pricing for individual consumers.

- Targeted Charging Infrastructure Support

  Offer subsidies or grants for the installation of high-capacity charging infrastructure tailored to medium-duty trucks, such as depot-based chargers and highway fast-charging stations. This approach reduces operational barriers and supports fleet operators in adopting electric vehicles without directly influencing vehicle pricing.

- Fleet Electrification Mandates with Incentives

  As mentioned above, implement gradual electrification mandates for specific sectors—such as logistics, delivery services, and municipal fleets—while providing compliance credits or grants to early adopters. This creates predictable fleet-level demand, incentivising OEMs to scale up production and reduce costs through economies of scale, rather than through price increases.

- Government's Leadership in Aggregating Demands

  To expand the availability of affordable electric goods vehicle models in Hong Kong, the Government should explore strategies to aggregate demand. Given the city's relatively small vehicle market with right-hand driver rule, individual demand may not justify certain original equipment manufacturer ("OEM") investment in tailored models which are suitable to be used in Hong Kong. However, successful regional examples demonstrate the potential of demand aggregation. For instance, Shenzhen's Government unified demand for electric buses by coordinating with operators and offering subsidies, leading manufacturers to develop models specifically for the city, ultimately making Shenzhen the first city globally to fully electrify its bus fleet. Large fleet operators (e.g., LeasePlan, Uber) in the EU also collaborated to aggregate EV demand across Europe. Hong Kong could adopt a

[5] https://www.ey.com/content/dam/ey-unified-site/ey-com/en-cn/insights/emobility/documents/ey-hong-kong-transport-decarbonisation-blueprint-abstract-en.pdf

similar approach by collaborating with fleet operators to signal demand for specific and affordable electric goods vehicles, thereby encouraging manufacturers to develop suitable.

- Other Financial Measures

  Furthermore, offering special discounts on parking, toll fees and electricity price for electric commercial vehicles can effectively lower operational expenses.

4. Further Subsidise and Explore Public-Private Partnership for Public Transport

It is recognised that the Government has made significant investments to promote the adoption of electric buses, taxis, and minibuses. Since 2011, the New Energy Transport Fund has provided targeted support for the trial and deployment of low-carbon transport technologies, including recent funding for the purchase of 600 electric buses and 3,000 electric taxis. In the past, the Government also allocated HK$180 million to enable franchised bus companies to acquire 36 single-deck electric buses (comprising 28 battery-electric and 8 supercapacitor buses) for local pilot operations. A further HK$80 million was set aside to launch a pilot scheme for electric public light buses, which was closed for applications as of August 2024. Despite these efforts, the current penetration rates remain low, with only 1.49% of taxis, 0.86% of buses, and 0.17% of minibuses being electric. These figures are significantly lower than those in the nearby city Shenzhen, which achieved a fully electric fleet of buses and taxis by 2018. Given this gap, it is recommended that the Government consider reinstating subsidies for electric public light buses and further explore public-private partnership ("PPP") models for buses, taxis, and public light buses to enhance cost-effectiveness and accelerate electrification.

For example, Shenzhen successfully deployed the Truck-as-a-Service ("TaaS") model, a form of PPP, to facilitate the procurement of 4,930 electric buses between 2015 and 2019[6]. Hong Kong could derive valuable insights from this approach and evaluate whether this approach offers greater cost-effectiveness compared to the existing practice of providing direct purchase subsidies. Under a similar framework, private suppliers would assume responsibility for the ownership and maintenance of electric buses, minibuses, and taxis, providing these vehicles to transport operators through leasing or pay-per-use arrangements. This approach could ease the financial burden on both the Government and operators: the Government would be able to reduce the amount spent on purchase subsidies, while operators would face lower upfront costs for acquiring vehicles. At the same time, it would encourage greater private sector investment in electric vehicles and charging infrastructure. For smooth implementation, the Government should introduce enabling policies and regulatory frameworks to support innovative financing and alternative ownership models in the transport sector. Targeted subsidies and tax incentives should be offered to private suppliers providing TaaS solutions, and pilot schemes established to assess operational feasibility and identify potential challenges.

5. Optimise Charging Network

The sufficiency of charging facilities remains an important concern among operators. It is encouraging to note the Government's proactive efforts in this area, such as the introduction of the EV charging at Home Subsidy Scheme ("EHSS"), which concluded in December 2023, five years ahead of schedule, with all funds fully allocated, reflecting the scheme's

[6] https://mp.weixin.qq.com/s/4AFPhSNjQuVlkZ-koG0mXA

effectiveness. Furthermore, the launch of the Fast Charger Incentive Scheme ("FCIS") in July 2025, with a funding commitment of HKD 300 million to support the installation of 3,000 fast chargers (100 kW and above), demonstrates a continued commitment to expanding the charging network. Looking ahead, it is hoped that the Government will consider establishing designated policies for the introduction of more advanced charging facilities, such as superchargers, to further reduce charging times. For example, as of June 2025, Shenzhen has deployed over 420,000 charging points, including units with a capacity of 480 kW or above, offering valuable reference for future development. In addition, it is suggested that long-term planning give due consideration to the practical needs of commercial vehicles. Buses and trucks, for instance, typically park at dedicated commercial vehicle parking lots, open car parks, metered parking areas, and near industrial and logistics hubs. Key locations include major on-route destinations such as Kwai Tsing Container Terminals and Hong Kong International Airport, as well as industrial estates in areas like Tai Po, Fo Tan, Kwun Tong, and Yuen Long. By prioritising these areas, the Government can help ensure that charging facilities are conveniently located where commercial vehicles operate and park.

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Appendix

Table 1: Commercial Vehicle Registration Statistics by Fuel Type

Type of Vehicles		Petrol	Diesel	Electric	LP Gas	Hydrogen	Others	Total	Level of Electrification
Taxis (Urban)		67	0	232	14951	0	0	15250	
Taxis (NT)		2	0	35	2801	0	0	2838	
Taxis (Lantau)		0	0	3	72	0	0	75	
Taxis		**69**	**0**	**270**	**17824**	**0**	**0**	**18163**	**1.49%**
KMB	SD	0	117	26	0	0	0	143	
	DD	0	3813	44	0	0	0	3857	
Citybus	SD	0	35	5	0	0	0	40	
	DD	0	1671	1	0	1	0	1673	
LWB	SD	0	0	4	0	0	0	4	
	DD	0	299	0	0	0	0	299	
NLB	SD	0	83	4	0	0	0	87	
	DD	0	67	0	0	0	0	67	
MTR Buses (Northwest New Territories)	SD	0	11	0	0	0	0	11	
	DD	0	137	8	0	0	0	145	
Other Non-franchised Public Buses	SD	0	6500	26	0	0	0	6526	
	DD	0	173	0	0	0	0	173	
Private Buses	SD	0	835	2	0	0	0	837	
	DD	0	31	0	0	0	0	31	
Buses		**0**	**13772**	**120**	**0**	**1**	**0**	**13893**	**0.86%**
Public Light Buses		0	867	7	3466	0	0	4340	
Private Light Buses		0	2334	6	1064	0	0	3404	
Light Buses		**0**	**3201**	**13**	**4530**	**0**	**0**	**7744**	**0.17%**
Light Goods Vehicles		342	72705	912	0	0	0	73959	
Medium Goods Vehicles		0	33233	14	0	0	0	33247	
Heavy Goods Vehicles		0	8039	3	0	0	0	8042	
Goods Vehicles		**342**	**113977**	**929**	**0**	**0**	**0**	**115248**	**0.81%**

Note: The table was compiled based on data published by the Transport Department in April 2025.