### **Green Transport**

# Long-term target: Zero carbon emissions from vehicles and transport sector before 2050

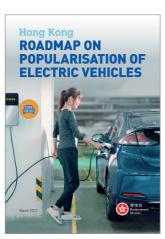
4.5.1 As shown from the development plans of car manufacturers around the world, adoption of electric transport is undoubtedly the trend. In addition, many manufacturers are actively developing other forms of new energy transport (e.g. hydrogen-powered heavy vehicles).

We expect to achieve the long-term target of zero carbon emissions from vehicles and the transport sector before 2050 through the electrification of vehicles and ferries, development of new energy transport and implementation of measures to improve traffic management.

# Medium-term target: Set a concrete timetable for adopting new energy public transport

4.5.2 The measures outlined in the Hong Kong Roadmap on Popularisation of Electric Vehicles announced by the Government in 2021 cover various aspects, including ceasing the new registration of fuel-propelled and hybrid private cars in 2035 or earlier, as well as setting strategies and targets for providing charging facilities. Besides private cars, commercial vehicles, including goods vehicles, buses, light buses and taxis, are also major sources of carbon emissions. The Government will play an active role in developing new energy transport, and will partner with different sectors in the coming years to actively test the technological and commercial viability of various electric and new energy public transport and commercial vehicles, with a view to setting a more concrete way forward and timetable in around 2025. A full-fledged charging network is also indispensable for supporting the popularisation of EVs. In around 2025, we will review this

year's target for the installation of charging facilities to keep up with the latest developments in EV.



Hong Kong Roadmap on Popularisation of Electric Vehicles

4.5.3 Apart from promoting the use of EVs, the Government announced the Clean Air Plan for Hong Kong 2035 in 2021, setting out the vision of "Healthy Living Low-carbon Transformation World Class". The Government will continue to push ahead with the work on reducing air pollutant emissions in Hong Kong and its neighbouring areas. The Plan also sets out policy directions to support application of green technologies in different areas to achieve low-carbon transformation, and the target of having air quality on a par with major international cities by 2035. Following the release of the Plan, the Government has set up an Interdepartmental Working Group on the application of hydrogen energy in Hong Kong. We plan to collaborate with the franchised bus companies and other stakeholders in the next three years to test out hydrogen fuel cell electric buses and heavy vehicles.



Clean Air Plan for Hong Kong 2035

### Hydrogen fuel cell vehicles

Hydrogen fuel cell EVs are gaining traction, especially in application for medium to large as well as medium-haul and long-haul vehicles. Cities in the Mainland, Europe and America have begun trials of hydrogen-fuelled singledeck and double-deck buses, and are planning for the establishment of hydrogen filling networks. Neighbouring Guangdong Province has established hydrogen production facilities which can provide a stable hydrogen supply to Hong Kong. We will also study the feasibility of using hydrogen-fuelled transport in Hong Kong, and consider the necessary supporting facilities, including construction of hydrogen filling facilities that meet the specifications, and train relevant technicians in the safe use and maintenance of hydrogen fuel cell EVs, etc.



Hydrogen-fuelled delivery vehicle in the Mainland



Overseas hydrogen-fuelled double-deck bus

### **Providing a convenient pedestrian network**

Enhancing the pedestrian network: TD is taking forward walkability enhancement measures and will implement a comprehensive pedestrian planning framework in suitable new development areas and built-up areas.

Universal Accessibility Programme: Launched in 2012 to retrofit more barrier-free access facilities (e.g. lifts) at public walkways. As of July 2021, 171 items have been completed.

Harbourfront promenade: Harbourfront enhancement projects can improve the pedestrian linkage system on both sides of the Victoria Harbour and create a pedestrian-friendly environment.

Facilitation Scheme for Provision of Pedestrian Links by the Private Sector: Developers can construct pedestrian links at their own costs with premium waiver.



Harbourfront Promenade: Boardwalk underneath the Island Eastern Corridor

4.5.4 We will also keep track of the latest technological developments of other heavy vehicles (e.g. container trucks, heavy goods vehicles and refuse collection vehicles, etc.) and introduce electric or other new energy vehicles for trial in a timely manner. As regards ferries, the Government will subsidise ferry operators to conduct trials for electric and hybrid ferries. Subject to the trial results and relevant technological developments, the Government will explore with the ferry operators the possibility of progressively replacing traditional ferries with new energy ferries before 2035. To tie in with the application of new energy in various means of transport, government departments will step up efforts to support and facilitate the development of relevant infrastructure and ancillary facilities.

4.5.5 The Government will continue the current approach of maintaining a public transport system with railway as the backbone, and will adopt different new technologies as well as traffic management measures. For instance, the Free-flow Tolling System will be rolled out at government tolled tunnels and the Tsing Sha Control Area, while "congestion charging" will be pressed ahead actively, with a view to charging different toll levels according to the traffic condition of the tunnels and the Control Area during different time periods. We commenced a traffic survey in September 2021 to collect the latest data and draw up preliminary proposals for "congestion charging" in 2022. We hope the above traffic management measures will be able to enhance the road network efficiency and reduce carbon emissions from traffic congestion. Furthermore, the Government will continue to promote cycling for short-distance commuting and enhance walkability.