

LCQ20: Carbon emission reduction

Following is a question by the Hon Adrian Ho and a written reply by the Secretary for Environment and Ecology, Mr Tse Chin-wan, in the Legislative Council today (June 18):

Question:

In October 2021, the Government announced Hong Kong's Climate Action Plan 2050, which aims to reduce Hong Kong's carbon emissions by half from the 2005 level before 2035 and outlines four major decarbonisation strategies, namely net-zero electricity generation, energy saving and green buildings, green transport and waste reduction. In this connection, will the Government inform this Council:

(1) whether it will duly adjust its green policies in response to Hong Kong's actual carbon emissions in recent years to accelerate the overall pace of decarbonisation in Hong Kong and thus achieve its carbon reduction targets as scheduled;

(2) of the respective performances of various government departments over the past five years in key carbon reduction measures, such as energy saving, emission reduction, consumption and carbon emission reduction, as well as green procurement; whether government departments have set carbon reduction targets and timetables for the series of policy measures implemented in recent years, including the establishment of the Green Technology and Finance Development Committee and the implementation of the Uncertificated Securities Market initiative;

(3) as there are views that the broad participation of businesses in decarbonisation efforts is vital for Hong Kong to achieve carbon neutrality, how many businesses and organisations have, as of May this year, joined the "Green Hong Kong ½ Carbon Audit" campaign by signing the Carbon Reduction Charter and agreeing to undertake and implement activities in support of reducing greenhouse gas emissions; whether it has assessed the effectiveness of the participating businesses and organisations in formulating and implementing carbon reduction measures;

(4) as it is learnt that the Hong Kong Exchanges and Clearing Limited established the Hong Kong International Carbon Market Council and subsequently launched an international carbon marketplace "Core Climate" in 2022, whether Government is aware of the current operational status of both the Council and Core Climate, as well as their respective effectiveness in promoting the implementation of decarbonisation measures among businesses in Hong Kong; and

(5) given that green transport is one of the Government's decarbonisation strategies, which includes achieving zero vehicular emissions and zero carbon emissions in the transport sector before 2050 through promoting the

electrification of vehicles, and ceasing new registrations of fuel-propelled and hybrid private cars in or before 2035, whether the Government has assessed if the current progress of such efforts will enable the carbon reduction targets to be achieved on schedule?

Reply:

President,

In consultation with the Financial Services and the Treasury Bureau, the reply to the question raised by the Hon Adrian Ho is as follows:

(1) The Government has proposed four major decarbonisation strategies in the Hong Kong's Climate Action Plan 2050, namely net-zero electricity generation, energy saving and green buildings, green transport and waste reduction, to lead Hong Kong to halve its carbon emissions from the 2005 level by 2035, with a view to achieving carbon neutrality before 2050. With our efforts in recent years in these four decarbonisation strategies, Hong Kong is making steady progress towards the carbon reduction target of 2035.

Hong Kong's total greenhouse gas (GHG) emissions have been on a downward trend after reaching its peak in 2014. With the gradual replacement of coal-fired power generation by natural gas and zero-carbon energy, the popularisation of electric vehicles, the reduction of municipal solid waste disposal, and the increased recovery and use of landfill gas for energy generation in Hong Kong, the total GHG emissions in 2023 were reduced by about 20 per cent from the 2005 level and about a quarter from the peak in 2014. The per capita GHG emissions in 2023 was 4.58 tonnes, which is a new low since 1990. It is nearly 30 per cent lower than those in 2005 and 2014, and is about a quarter of that of the United States and 60 per cent of that of the European Union.

Combating climate change is a long-term task. In line with the spirit of the Paris Agreement, we will review the Hong Kong's Climate Action Plan 2050 about every five years to update the strategies and targets for decarbonisation and other climate actions, and expect to release the review result in 2026.

(2) To enhance the performance of government departments in energy conservation and carbon emissions, the Government has promulgated relevant internal circulars and guidelines to require departments to perform well in the area of environmental protection in their daily operations. Specific measures include energy conservation, adoption of renewable energy (RE), waste reduction and recycling, installation of electric vehicle charging facilities, water conservation and recycling, procurement of green products and services, etc. with a view to reducing carbon emissions. These government circulars and guidelines cover environmental targets for government buildings, carbon emission management, preparation of environmental reports by government departments, as well as green procurement, etc.

The Government strives to improve the overall energy performance of

government buildings and infrastructure by more than 6 per cent in 2024-25, compared to the 2018-19 baseline. To this end, the Electrical and Mechanical Services Department (EMSD) has requested all bureaux and departments (B/Ds) to provide information on the energy consumption and RE of government buildings and facilities annually, and organised briefing sessions to discuss energy performance, and provides technical advice on energy-saving measures and planning of RE projects. As at 2022-23, the Government's overall energy performance has improved by about 5.3 per cent. While the data for 2023-24 is still being compiled, based on the recent trends in energy performance, the Government is confident that the target of over 6 per cent improvement can be achieved. The Environment and Ecology Bureau (EEB) will continue to encourage all B/Ds to take measures to enhance energy performance and explore means to leverage innovative technologies to promote cost-effective solutions for improving energy efficiency in government buildings.

To assist government B/Ds in setting emission reduction targets and implementing emission reduction measures in a more scientific way, the Government promulgated the "Carbon Management in Government Buildings" circular in 2017 which requires all major government buildings to conduct regular carbon audits, the results of which should be disclosed to the public through the publication of annual environmental performance reports or other means.

Furthermore, the Government has conducted a three-year (from 2020-21 to 2022-23) energy-cum-carbon audit in about 250 government buildings, to review systematically the energy consumption equipment and systems in these buildings, collect and compile activity data on relevant emission sources to identify energy and carbon management opportunities. To further enhance the Government's carbon management efforts, we progressively extend the carbon audit practice to typical major government infrastructure, including water treatment works, sewage treatment facilities, fresh water and salt water pumping facilities, road lighting systems and ventilation systems at public transport interchanges, etc. The results of the carbon audits will not only help relevant B/Ds formulate carbon reduction strategies for the above infrastructure and similar facilities, but will also assist them in establishing a mechanism and guidelines for conducting carbon audits, which will in turn facilitate the carbon management efforts for other infrastructure in the future. The Buildings Energy Efficiency (Amendment) Bill 2025 was passed by the Legislative Council on June 11 and will come into full effect in September 2026. By then, most government buildings will be statutorily required to conduct regular energy audits. The EEB and the EMSD will provide technical support to various B/Ds to assist and encourage them to implement energy-saving opportunities identified in energy audits.

The Government has been adopting green procurement to implement environmental protection. The EEB has developed a green procurement list, setting out green specifications for the products and services commonly used by the Government, so that B/Ds may practise green procurement. In July 2021, the Government expanded the scope of green procurement by increasing the number of products and services covered in the green procurement list from 150 items to 183 items, as well as updating the green specifications of each

item. In 2024, B/Ds altogether procured green products and services with a total value of \$8.42 billion, which is an increase of about 19.3 per cent as compared to \$7.06 billion in 2023.

The Green Technology and Finance Development Committee (Committee) was established in June 2023 under the chairmanship of the Financial Secretary to assist in the formation of an action agenda for promoting the development of Hong Kong into an international green technology and financial centre. Members include representatives from relevant policy bureaux, departments and financial regulators, as well as non-official members from finance, technology, academic, professional services sectors, etc. The Committee's discussions cover promoting the development of a green technology ecosystem, green finance, green transport, green buildings, etc., as well as promoting and publicising Hong Kong's strengths in these areas. The Committee will continue to explore accelerating the development of green technology and green finance in Hong Kong across various areas.

In April this year, the Government implemented new arrangements to allow companies to adopt implied consent mechanism for disseminating corporate communication by publication on their websites, in order to promote paperless corporate communication for listed and unlisted Hong Kong companies, thereby improving cost-effectiveness and efficiency of companies and promoting a green business environment.

(3) The Government launched the "Green Hong Kong¹ Carbon Audit" campaign with a view to encouraging organisations of various sectors to support greenhouse gas emission reduction activities. The participating organisations would, according to their respective situations, formulate and implement carbon reduction measures such as promoting carbon audits, establishing environmental management systems, and installing and replacing energy-efficient office equipment. Currently, over 140 organisations, including property management companies, universities, professional bodies, non-profit-making organisations and other business organisations, have joined the "Green Hong Kong¹ Carbon Audit" campaign. In addition to raising the awareness of participating organisations in carbon reduction and encouraging these organisations to conduct carbon audits and implement carbon reduction plans, the campaign also helps corporates prepare for addressing new climate-related disclosure requirements.

The Government launched in December last year the Roadmap on Sustainability Disclosure in Hong Kong (Roadmap), injecting new impetus into the carbon management work of large publicly accountable entities (PAEs) (including large listed issuers and non-listed financial institutions carrying a significant weight). As the first step, Hong Kong Exchanges and Clearing Limited (HKEX) has introduced new climate-related disclosures requirements (New Climate Requirements) which have been developed based on International Financial Reporting Standards (IFRS) S2 Climate-related Disclosures. The New Climate Requirements, covering, among others, mandating all listed issuers to disclose scope 1 and scope 2 GHG emissions, have been implemented in phases starting from January 2025.

To assist and facilitate sustainability reporting by corporates and financial institutions in Hong Kong, the Green and Sustainable Finance Cross-Agency Steering Group (Steering Group), formed by relevant Government bureaux, financial regulators and HKEX, launched the "Climate and Environmental Risk Questionnaire" for non-listed companies/ small and medium enterprises (SMEs); and GHG emissions calculation and estimation tools in collaboration with the Hong Kong University of Science and Technology. Available for free public access on the Steering Group's website, these tools help SMEs manage their environmental footprint and encourage market participants to improve sustainable business practices.

(4) HKEX launched the Hong Kong International Carbon Market Council (the Council) in July 2022, with members comprising Mainland, Hong Kong, and international corporates and financial institutions, to facilitate the development of an efficient and effective Hong Kong-based international carbon market with best-in-class market infrastructure, products and services, promoting the transition to a low-carbon economy in the region.

Subsequently, HKEX launched the Core Climate, an international carbon marketplace, in October in the same year, facilitating effective and transparent trading of carbon credits and instruments to support the global transition to Net Zero. It offers quality carbon credits from internationally-certified projects in Asia, South America and Africa, covering forestry, solar, wind and biomass initiatives. Core Climate is currently the only carbon marketplace that offers HKD and RMB settlement for the trading of international voluntary carbon credits. The platform's participant number reached 100 by end of 2024. Core Climate has facilitated carbon credit trading by various corporates through the provision of trustworthy settlement services, enhancing efficiency and mitigating risks, including Cathay Pacific Airways Limited's settlement of 50 000 tonnes of voluntary carbon credits in December last year, fully demonstrating the important role of Core Climate in supporting corporates on their climate transition journey.

The Government will continue to work closely with the financial regulators and stakeholders to collaboratively enhance the carbon market ecosystem, expand related products and services, and optimise trading mechanisms and infrastructure to promote the orderly and healthy development of the carbon market, contributing to the decarbonisation targets of Hong Kong, our country, as well as the world.

(5) The Government is committed to promoting the use of electric vehicles (EV). The Hong Kong Roadmap on Popularisation of Electric Vehicles announced in March 2021 covers policy directions and targets in various areas in promoting the adoption of new energy transport technologies, so as to guide Hong Kong towards zero vehicular emissions before 2050. In recent years, Hong Kong has achieved remarkable results in the popularisation of EV. The number of EV was eightfold from about 14 000 five years ago to about 110 000 at the end of last year. Currently, about seven out of every ten newly registered private cars are electric private cars (e-PC), and the proportion is among the highest in the world, with a good growth momentum.

Charging network is critical to the popularisation of EV. As of March 2025, Hong Kong had nearly 100 000 parking spaces equipped with charging infrastructure. There are 11 180 public charging facilities, of which about 2 000 are quick or fast charging facilities. We will continue to adopt a multi-pronged approach to increase charging facilities, including (i) tightening the exemption measure for calculating the gross floor area of buildings to encourage parking spaces in new private buildings to be equipped with charging infrastructure; and (ii) launching the \$3.5 billion "EV-charging at Home Subsidy Scheme" to assist existing private residential buildings and housing estate car parks to install EV charging infrastructure. It is estimated that by mid-2027, more than 200 000 parking spaces in private buildings will be equipped with charging infrastructure.

In terms of public charging facilities, the Government's Green Transformation Roadmap of Public Buses and Taxis published at the end of last year listed a number of measures to continue to expand the public charging network, including converting petrol filling stations into fast charging stations or adding fast chargers, and opening up chargers in bus depots, etc. The Chief Executive's 2024 Policy Address also announced the launch of a \$300 million incentive scheme, with the target to provide and put into service 3 000 fast chargers from 2026 to the end of 2028 to support about 160 000 EV. It is expected that the incentive scheme will be launched and start to receive applications in the coming one to two months.

Furthermore, EEB has set up an interdepartmental working group to coordinate and resolve difficulties encountered by various parties in setting up charging facilities.

Through the above measures, we are confident that Hong Kong's increasingly complete charging network will further promote vehicle electrification and ultimately achieve the relevant carbon reduction goals.