For discussion on 30 June 2025

LEGISLATIVE COUNCIL PANEL ON ENVIRONMENTAL AFFAIRS

Hong Kong's Climate Action Plan 2050

Purpose

This document aims to outline the latest progress of the key measures set out in the Hong Kong's Climate Action Plan 2050 and discuss Hong Kong's development in green and sustainable finance, green economy, and low-carbon transformation while addressing climate change.

Background

- 2. The global climate crisis is becoming increasingly severe. The World Meteorological Organization has indicated that 2024 was the warmest year on record. Extreme weather events pose threats to our communities and ecosystems. On 10 June, 2025, Hong Kong experienced extreme heat. The maximum temperature recorded at the Hong Kong Observatory Headquarters was 35.6 degrees, levelling the highest record for June since records began in 1884. The temperature recorded at Lau Fau Shan reached 38.9 degrees, the highest record since the station was established in 1985.
- 3. Our country has set the "3060" dual carbon targets, striving to achieve carbon peak by 2030 and carbon neutrality by 2060. Hong Kong has ceased the construction of coal-fired power generation facilities as early as 1997 and gradually transitioned to natural gas and nuclear energy. Hong Kong's total carbon emissions have been on a downward trend since reaching the peak in 2014. In 2023, total greenhouse gas emissions decreased by approximately 20% compared to 2005 levels, and by about a quarter compared to the peak in 2014. Per capita greenhouse gas emissions have also reached a new low since 1990, decreasing to about 4.58 tonnes, nearly a 30% reduction compared to 2005 and

2014 levels. This figure is approximately a quarter of that of the United States and 60% of the European Union.

Towards Carbon Neutrality: Four Decarbonisation Strategies

4. To align with our country's "3060" dual carbon targets, the Hong Kong Special Administrative Region Government has set the targets in the Hong Kong's Climate Action Plan 2050 (the "Plan") to reduce carbon emissions by half from 2005 levels by 2035, and achieve carbon neutrality by 2050. We are steadily advancing the four major carbon reduction strategies outlined in the Plan, namely "Net-zero Electricity Generation", "Energy Saving and Green Buildings", "Green Transport", and "Waste Reduction", with a view to laying a solid foundation for Hong Kong's quest for carbon neutrality.

(1) Net-zero Electricity Generation

5. Electricity generation is Hong Kong's major source of carbon emissions, accounting for about 61% of the city's total carbon emissions in 2023. In line with the overall objectives of the Plan, we are progressively changing the fuel mix of local power plants, including increasing the use of zero-carbon energy.

Phasing Out Coal-fired Power Generation

6. Hong Kong ceased the construction of coal-fired power generation units as early as 1997. The share of coal in Hong Kong's overall electricity generation fuel mix has decreased from about half in 2015 to about one-fifth currently. Our goal is to cease the use of coal for daily power generation by 2035 or earlier. The proportion of natural gas has increased significantly from about one-quarter in 2015 to over half currently.

Developing Zero-carbon Energy

7. We are actively developing zero-carbon energy, which currently accounts for about one-quarter of the total electricity generation fuel mix. Hong Kong's offshore liquefied natural gas receiving terminal successfully commenced operations in 2023. It does not only enable Hong Kong to procure natural gas at more competitive prices by diversifying the sources of natural gas supply, but also

enhances the stability and security of energy supply, providing strong support for Hong Kong's energy transition. Furthermore, with the expected completion of the reinforcement project of the clean energy transmission system in 2026, and the reservation of land in Area 132 of Tseung Kwan O for the construction of new power facilities, the capacity for electricity transmission from the Mainland to Hong Kong will be further enhanced. The proportion of zero-carbon energy in the electricity generation fuel mix will be increased to about 60% to 70% by 2035 or earlier.

<u>Increasing the Use of Renewable Energy</u>

8. In promoting the development of renewable energy, the government is leading by example and encouraging private sector participation. The goal is to increase the proportion of renewable energy in the fuel mix for electricity generation to 7.5% to 10% by 2035 or earlier. The Environmental Protection Department ("EPD") has commissioned three large-scale waste-to-energy facilities, namely T-PARK (sludge treatment facility), O-PARK1 (Organic Resources Recovery Centre Phase 1), and O-PARK2 (Organic Resources Recovery Centre Phase 2), and approved approximately HK\$2.2 billion to implement about 260 small-scale government renewable energy projects, such as developing solar power systems at water facilities and landfills. To encourage the private sector to develop renewable energy, the government has introduced a Feed-in Tariff Scheme and various support measures, including assisting the private sector in installing solar power systems in outdoor parking lots and formulating suitable non-combustible fire safety requirements and standards for building-integrated solar power systems. As of December 2024, the Feed-in Tariff Scheme has received approximately 26 000 applications. Through the aforementioned renewable energy projects, we expect to generate more than 500 million kilowatt-hours of electricity annually, reducing carbon emissions by about 540 000 tonnes.

Developing Hydrogen Energy

9. Hydrogen energy is a new energy source with significant decarbonisation potential. It produces no carbon emissions during combustion, and its "zero carbon emission" feature has been gaining traction internationally. Developing hydrogen energy can also encourage technological innovation and research and development, giving impetus to the development of relevant technologies and

facilities, creating job opportunities, and promoting economic growth. The Government announced the Strategy of Hydrogen Development in Hong Kong in June 2024, setting out the four major strategies of improving legislations, establishing standards, aligning with the market, and advancing with prudence to create an environment conducive to the development of hydrogen energy in Hong Kong in a prudent and orderly manner. As of June 2025, the Inter-departmental Working Group on Using Hydrogen as Fuel (the "Working Group") has given agreement-in-principle to 27 hydrogen trial projects, covering various application areas such as transportation, power generation and construction sites. The Government also introduced the Gas Safety (Amendment) Bill 2025 to the LegCo in April 2025 to establish a comprehensive and holistic regulatory framework. Not only does it reinforce the protection of public safety, it also creates an environment conductive to the local development of hydrogen energy. It can encourage more new technologies and products from the Mainland and overseas to conduct trials and demonstrations in Hong Kong by leveraging our advantages of enjoying strong support of the motherland and being closely connected to the world. Hong Kong can serve as a demonstration platform for hydrogen energy technologies, helping our country "go global and attract foreign investment".

10. To help Hong Kong achieve carbon neutrality, our goal is to adopt green hydrogen. There is currently no internationally recognised approach to certify green hydrogen. In view of this, the Government commenced a dedicated study in August 2024 to benchmark and analyse mainstream green hydrogen certification systems internationally and in the Mainland. The study will propose a preliminary green hydrogen certification framework that is backed by our country's standards, aligned with global practices, and tailored to Hong Kong's circumstances, with the goal of formulating the approach of hydrogen standard certification by 2027 to help Hong Kong take the lead in future global hydrogen energy market. In addition, to support the future development needs of hydrogen energy application, we will establish public hydrogen filling infrastructure to cover the Hong Kong Island, Kowloon, and the New Territories by 2027. Following the formal commencement of operations of Hong Kong's first public hydrogen filling station at Au Tau, Yuen Long in June 2025, the Government has identified and is studying a few potential sites for establishing hydrogen filling facilities in Hong Kong Island and Kowloon. The findings will be submitted to the Working Group to review and consider granting agreement-in-principle for the relevant trial projects. The two power companies are also actively researching pilot projects for natural gas mixed with hydrogen for power generation at their power plants, preparing for the eventual introduction of new energy for power generation in the long run.

(2) Energy Saving and Green Buildings

11. Energy demand in buildings accounts for about 90% of total electricity consumption in Hong Kong. The government is actively promoting energy saving and green buildings to reduce electricity demand and consumption by improving buildings' energy efficiency, which can in turn reduce the financial burden arising from energy transition. The government has set ambitious electricity consumption reduction targets (based on the 2015 operating environment): commercial buildings to reduce 30-40% by 2050; residential buildings to reduce 20-30% by 2050, and to achieve half of the above targets by 2035 or earlier. Through multipronged energy-saving measures, we estimate that a total of about 3.7 billion kilowatt-hours of electricity was saved in 2024 compared to 2015, equivalent to the annual electricity consumption of about 1 million three-person households.

Mandatory Energy Efficiency Labelling Scheme

12. To facilitate the public in choosing energy efficient appliances and raise public awareness of energy saving, the government continues to implement the Mandatory Energy Efficiency Labelling Scheme and fully implemented the fourth phase of the scheme on 1 December 2024, expanding the scope from eight to 11 types of products, by including LED lamps, gas cooking stoves, and instant gas water heaters, thereby significantly increasing the total energy consumption in the residential sector covered by the scheme from about 50% to about 80%. Meanwhile, we will comprehensively upgrade the energy efficiency grading standards for refrigerating appliances, washing machines, and storage type electric water heaters under the scheme by 30 September 2025. The entire scheme is expected to save about 1 billion kilowatt-hours of energy by then.

Buildings Energy Efficiency Ordinance

13. The Buildings Energy Efficiency (Amendment) Bill 2025 was passed by the Legislative Council on June 11 and will fully come into effect in September 2026, expanding the scope of regulation to more types of buildings, shortening the energy audit intervals, and mandating the disclosure of information in energy audit reports. It is estimated that by 2035, the above amendments will save an

additional 500 million kilowatt-hours of electricity annually, equivalent to the annual electricity consumption of 150 000 three-person households. The Electrical and Mechanical Services Department will continue its promotional work by informing relevant building owners of the latest statutory requirements and providing technical support to assist them in complying with the new regulations. The government also encourages the application of innovative energy saving technologies in buildings, such as applying i2Cool's electricity-free cooling technology on the roof of the Hong Kong Coliseum to reduce indoor temperatures and reduce energy consumption in the air-conditioning system. The government will continue to review the field test results and assess the cost-effectiveness of projects to consider promoting similar technologies to more government buildings.

(3) Green Transport

14. In 2023, the transport sector accounted for about 18% of Hong Kong's total carbon emissions. Promoting green transport is a key initiative for achieving carbon neutrality, and the government is leading the transport industry towards a zero-carbon future through comprehensive strategies. The government's long-term goal is to achieve zero carbon emissions in the transport sector by 2050, and has set a clear target to cease the registration of new fuel and hybrid private cars by 2035 or earlier.

Electric Private Cars

- 15. The proportion of electric private cars among newly registered private cars has increased from over 20% in 2021 to nearly 70% now, ranking among the top in the world. Currently, the number of electric vehicles ("EVs") in Hong Kong has exceeded 110 000, and increased eightfold in five years.
- 16. To accommodate the rapid growth of EVs, the government is vigorously expanding the EV charging infrastructure across Hong Kong. As of the end of March 2025, there were about 11 190 public EV chargers in Hong Kong, about three times the 3 350 at the beginning of 2021. The government aims to increase the total number of parking spaces with charging infrastructure in Hong Kong to about 200 000 by mid-2027. The EV-charging at Home Subsidy Scheme is expected to achieve the installation of EV charging-enabling infrastructure ("EVCEI") in about 140 000 existing private residential parking spaces, while the

gross floor area concessions encourage the installation of EVCEI in parking spaces of new private buildings, covering about 46 000 parking spaces as of December 2024. In addition, the government has earmarked HK\$300 million to launch the Fast Charger Incentive Scheme to provide support for some 160 000 EVs additionally, and it is expected that all fast chargers will be put into service gradually from 2026 to the end of 2028. The government is also gradually transforming some existing petrol filling stations ("PFSs") into fast charging stations ("FCSs") or petrol filling cum charging stations. In mid-2024, the Government awarded the first two vacant PFS sites in Kowloon Bay and Fo Tan to operators for use as FCSs. These two FCSs are expected to provide service by the third quarter of 2026 and will provide at least 20 fast chargers. In addition, the government is providing incentives to existing PFS operators, including extension of current land lease, to encourage them to retrofit EV charging facilities at existing PFSs. We expect that about 180 fast chargers could be retrofitted at about 60 existing PFSs by 2026.

17. To support the green transition of the transport industry, the government granted a site in the EcoPark in April 2024 to assist the industry in developing retired electric vehicle battery recycling facilities which are expected to commence operations in 2026. This measure can help solve battery disposal issues and promote the development of a circular economy.

Green Transition of Commercial Vehicles

18. For the green transition of commercial vehicles, the government published the Green Transformation Roadmap of Public Buses and Taxis in December 2024, with key measures including earmarking about HK\$470 million to subsidise franchised bus operators to purchase about 600 electric buses and HK\$135 million to subsidise taxi trade to purchase 3 000 electric taxis. With the implementation of net-zero electricity generation in future, the two subsidy schemes can reduce about 210 000 tonnes of carbon emissions annually. For electric public light buses, the government has earmarked HK\$80 million to implement a pilot scheme to subsidise operators to purchase electric public light buses for trial, so as to evaluate the feasibility of their application in Hong Kong.

Hydrogen Fuel Cell Heavy Vehicles

19. To promote hydrogen fuel cell ("HFC") heavy vehicles, the first HFC double-deck bus commenced trial operation in November 2023 and started to provide passenger service in February 2024; the trial of the hydrogen fuelled light rail vehicle was completed at the end of 2024; and three HFC street washing vehicles of the Food and Environmental Hygiene Department commenced trial operation in June 2025. In addition, to assist the transport industry in trying out HFC heavy vehicles, the government has launched the "Funding Scheme to Trial of Hydrogen Fuel Cell Heavy Vehicles" under the New Energy Transport Fund to subsidise the costs associated with the procurement of HFC heavy vehicles, relevant hydrogen fuel expenses and refilling facilities.

Green Aviation and Shipping Hub

- 20. In addition, we aspire to develop Hong Kong into a green aviation and shipping hub. In the field of green aviation, the Airport Authority Hong Kong ("AAHK") has committed to increasing the number of electric vehicles at Hong Kong International Airport to 3 000 and providing more than 1,320 charging points to support airport operations by the end of 2030. At the same time, AAHK plans to increase the number of electric ground services equipment ("GSE") from the existing 500 units to about 1 000 units, with at least 95% being electric GSE, making Hong Kong International Airport the first international airport to adopt GSE Pooling on such a large-scale.
- 21. In the maritime sector, the government has promulgated the "Action Plan for Green Maritime Fuel Bunkering", setting a multi-fuel strategy, with an aim to develop Hong Kong into a green maritime fuel bunkering and trading centre. The Pilot Scheme for Electric Ferries is also actively being implemented, with the first electric ferry "Xin Ming Zhu XXXIX" commencing passenger service in March 2025. The second electric ferry "Hong Kong Water Taxi 28" also began trial in May 2025. In addition, three hybrid ferries under the Vessel Subsidy Scheme progressively commenced trial at the end of December 2024. The government is also studying the introduction of onshore power supply facilities at the Kai Tak Cruise Terminal to support the low-carbon transformation of the international cruise industry.

(4) Waste Reduction and Recycling

22. In 2023, waste treatment accounted for about 8% of Hong Kong's total carbon emissions, mostly from landfill gas generated by waste decomposition in landfills. To more effectively control and reduce landfill gas emissions, the EPD and contractors have gradually added gas extraction wells and pipelines in landfills to collect more landfill gas for use within the landfill and for export to the Towngas and the power grid. In addition, the current term of the government has successfully reversed the long-term upward trend in waste disposal through reduction at source and the expansion of the recycling network. The amount of municipal solid waste disposal in Hong Kong has shown a downward trend, with daily per capita disposal decreasing from 1.53 kg in 2021 to 1.40 kg in 2024, while the overall recycling rate increased from 31% in 2021 to 33% in 2023, indicating that citizens' environmental awareness and recycling habits are gradually improving. Looking to the future, the government will continue to develop waste management in two major directions: first, to promote waste reduction and recycling upstream to reduce overall waste disposal; second, to build downstream waste-to-energy facilities to treat remaining municipal solid waste in a sustainable manner.

Waste-to-energy

23. On the development of waste-to-energy facilities, Hong Kong's first waste-to-energy facility using advanced incineration technology to treat municipal solid waste, I·PARK1, is expected to commence operation within 2025, with a daily processing capacity of 3,000 tonnes of municipal solid waste. We are also pressing ahead with full steam with the second facility, I·PARK2, in Tsang Tsui, Tuen Mun, with a daily processing capacity of 6 000 tonnes. The project commenced public tender in December last year. The two facilities will have a combined daily processing capacity of up to 9 000 tonnes of municipal solid waste, turning waste into electricity. When the proposed I·PARK2 commences operations, the Northeast New Territories Landfill will completely cease receiving municipal solid waste, and will receive construction waste only for the purpose of moving steadily towards "zero waste landfill".

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¹ The figure for 2024 is under compilation.

Waste Recycling

- 24. In promoting waste reduction and recycling, the government continues to improve the Green@Community recycling network. As of April 2025, there are more than 800 public recycling collection points across Hong Kong, including Recycling Stations, Recycling Spots, and Recycling Mobile Points, receiving nine common types of household recyclables. Green@Community collected about 41 800 tonnes of recyclables in 2024, an increase of nearly 60% compared to 2023. The "Green\$" electronic reward scheme is well-received, with over 1 million users as of the end of April 2025, effectively encouraging citizens to participate in resource recycling. In addition, the government is expanding the food waste recycling network, providing point-to-point collection services for commercial and industrial premises and residential buildings with large amounts of food waste. As of the first quarter of 2025, the total number of food waste collection points was about 1500, with an overall food waste recycling volume of about 320 tonnes per day on average, an increase of nearly 90% compared to the average daily food waste recycling volume in 2023.
- 25. To align with the "Plastic-free" policy, the relevant legislation controlling disposable plastic tableware and other plastic products came into effect on April 22, 2024, with positive response from society. Many citizens have become accustomed to bringing their own reusable tableware, and major chain restaurants have reported that over 80% of customers do not require takeaway tableware, indicating that a green lifestyle is taking shape in Hong Kong. To move on to the next stage of the "Plastic-free" work, the EPD is working with the industry and some large catering groups to conduct product tests in different restaurant operation scenarios in the middle of this year, with a view to identifying alternatives acceptable to the industry with the least impact on our daily lives. We need to gradually increase efforts to reduce the use of plastics to protect health, but we also need to consider the maturity, popularity, and affordability of relevant We need to move forward steadily having regard to actual circumstances, so that the measures can gain public acceptance and help establish a green lifestyle.

Nature-based Solutions

- 26. Healthy ecosystems can effectively absorb and store carbon dioxide (i.e. carbon sinks) and maintain biodiversity, which is crucial for addressing climate change and building a liveable city. Although Hong Kong is small in area, it has diverse habitats, nurturing a quarter of the nation's marine species, over one third of bird species, and rich terrestrial animal and plant resources. The Environment and Ecology Bureau ("EEB"), based on guidelines from the United Nations Intergovernmental Panel on Climate Change ("IPCC") and land area data from the relevant government departments, estimated Hong Kong's carbon sink in 2023 to be approximately 450 000 tonnes.
- 27. In Hong Kong, there are currently 25 country parks and 22 special areas, covering about 40% of the total land area, serving multiple functions such as ecological conservation, research and education, and carbon absorption. The government has planted more than 1.1 million tree seedlings between 2020 and 2024. The government continues to expand the protected area network, such as establishing the Robin's Nest Country Park in 2024 to conserve precious species like the red azalea and form a cross-border ecological corridor with Shenzhen. In the past five years, three additional marine parks have been established, increasing the protected sea area by 1.5 times to over 8 500 hectares, strengthening the protection of marine life such as the Chinese white dolphins. The Long Valley Natural Ecological Park which combines wetland conservation, farming, and education, was also opened in 2024.
- 28. In terms of wetland conservation, the approximately 1 500 hectares of wetlands in Mai Po and Inner Deep Bay are internationally important wetlands under the Ramsar Convention, of which over 400 hectares of mangroves are important blue-green carbon sinks. The Agriculture, Fisheries and Conservation Department has divided management zones based on ecological value and other factors to strengthen conservation. Hong Kong and Shenzhen signed a conservation cooperation framework in 2023 to jointly protect the Deep Bay wetlands and have achieved significant results, including conducting waterbird surveys, jointly removing about 15 000 alien mangroves, and enhancing the professional training of management personnel.
- 29. In addition, the government is actively advancing the establishment of a wetland conservation park system in the Northern Metropolis, and will first

establish the San Po Shui Wetland Conservation Park covering over 300 hectares to strengthen conservation, provide high-quality ecological recreational experiences, and create environmental capacity for development. The first phase of the park is expected to commence in 2026/27 and be completed by 2031 the earliest. The entire park is expected to be completed by 2039 or earlier. The government is also studying the establishment of a coastal conservation park from Tsim Bei Tsui to Pak Nai to conserve natural coastlines and mangrove ecosystems.

30. Protecting biodiversity is key to addressing climate change. Hong Kong formulated its first Biodiversity Strategy and Action Plan in 2016, with specific achievements including adding protected areas, completely banning the local ivory trade, and launching a biodiversity information station. The government is currently updating the plan based on the "Kunming-Montreal Global Biodiversity Framework" and national strategies. Public consultation has commenced, with the goal to complete the update and begin the next phase of work within 2025 to more effectively protect Hong Kong's precious natural assets and promote harmonious coexistence between humans and nature.

Adaptation and Response to Climate Change

Strengthening Infrastructure

31. In addition to mitigating climate change, enhancing Hong Kong's capacity to adapt to extreme weather is equally important to safeguard the lives and property of citizens. The government has conducted a comprehensive assessment of the potential impacts of climate change on critical public infrastructure and updated relevant design manuals, guidance notes, and practice notes² with reference to the latest assessment report published by the IPCC and related research findings.

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The updated design manuals, guidance notes and practice notes include Port Works Design Manual, Stormwater Drainage Manual, Guidance Notes on Road Pavement Drainage Design, Structures Design Manual for Highways and Railways, Enhanced Design Standards of Aboveground Drainage System, and updated provision for slope drainage design, design guide for drainage installation for government buildings, etc.

Coping with Sea Level Rise and Coastal Protection

32. To combat the risks due to sea level rise and intensified storm surges, the Civil Engineering and Development Department ("CEDD") has identified 26 coastal low-lying or windy residential areas and formulated improvement works and management measures. Among them, the improvement works in 16 areas have been completed, and the remaining improvement projects are expected to be completed by 2027 as scheduled.

Combating Extreme Rainstorms and Tropical Cyclones

33. To respond to extreme rainstorms, the Drainage Services Department (DSD) completed various major flood prevention projects, including stormwater drainage tunnels and stormwater storage schemes. Currently, there are 15 drainage improvement projects being conducted, which are expected to be completed progressively by the end of 2030, including the Yuen Long Barrage Scheme, nine stormwater storage schemes, and the construction, improvement, and rehabilitation of over 50 kilometers of stormwater drains, channels, and flood walls. The government will also introduce blue-green drainage infrastructure such as flood lakes and floodable areas in new development areas (NDAs) to align with the concept of "flood resilience". To cope with the landslide risk arising from more frequent extreme rainstorms under climate change, CEDD will continue to implement the "Landslip Prevention and Mitigation Programme" ("LPMitP") to upgrade government man-made slopes and implement risk mitigation measures for natural hillside catchments according to risk-based approach. The Hong Kong Observatory will also continue to strengthen meteorological forecasting capabilities, including utilising the latest technologies such as artificial intelligence, to provide early warnings of severe weather to the public.

Long-term Flood and Shoreline Management Integrated Strategies

34. DSD and CEDD completed the "Strategic Planning Study on Flood Management against Sea Level Rise and Extreme Rainfall" and the "Study on Shoreline Management Plan" in the end of 2024 respectively. The two studies holistically analysed major climate change scenarios, including the intermediate and very high greenhouse gas emissions scenarios at mid-century (2050) and the end of the century (2100), and formulated medium-term and long-term flood and shoreline management integrated strategies. In view of the commitment to carbon

neutrality made by various nations and their efforts on decarbonisation, as well as the uncertainty of climate change impacts, the government adopts the Progressive Adaptive Approach and an integrated strategy of Adaptation, Resilience and Management to address the potential increase in flood risks under the influence of climate change. Considering the climate changes risk for new development projects, the government has taken a long-term planning approach by incorporating the "Guidelines on Flood Resilience" and the draft guidelines for managing coastal risks into relevant design manuals for implementation and appropriately included them in the Hong Kong Planning Standards and Guidelines for reference. The Development Bureau, together with the DSD and CEDD, briefed the Legislative Council's Panel on Development on the above-mentioned long-term flood and shoreline management integrated strategies to cope with extreme rainstorms, sea level rise, and extreme storm surges on 27 May 2025.

Coping with Extreme Heat

35. To alleviate the urban heat island effect and respond to heatwaves, the government actively promotes urban forestry development. Over the past decade, about 4 million trees and about 60 million shrubs and other plants have been planted to help lower temperatures, absorb carbon dioxide, and enhance the city's climate resilience.

Opportunities

36. With the global trade wars and increasingly complex international situations, some countries and regions have begun to slow down environmental protection and carbon reduction efforts in view of the challenges. For example, the European Union has relaxed the carbon dioxide emission regulations for cars originally scheduled to take effect this year; the Canadian federal government cancelled the federal consumer carbon tax introduced in 2019 from 1 April this year; and the New Zealand government slowed down its emission reduction targets. As for Hong Kong, environmental protection is a national policy and a key to Hong Kong's long-term sustainable development. To address the current complex international situation and economic and trade challenges, we will act according to the times, implement environmental protection with minimal cost and maximum benefits, and make good use of Hong Kong's position as an international financial and trade centre to steadily move towards sustainable

development through low-carbon transformation. We will seek to turn challenges into opportunities and develop new forces to drive economic growth.

Green and Sustainable Finance

- 37. Hong Kong is committed to consolidating its position as a leading green finance hub in the region. In 2024, the total volume of green and sustainable debt issued in Hong Kong exceeded US\$84 billion, of which the total volume of green and sustainable bonds arranged was about US\$43 billion, ranking first in the Asian market for seven consecutive years, accounting for about 45% of the regional total.
- 38. The Government Green Bond Programme has expanded its scope to cover sustainable projects and has been renamed as the Government Sustainable Bond Programme. Since May 2019, approximately HK\$240 billion equivalent of government green bonds have been successfully issued, financing 116 local projects and achieving several global firsts, including the issuance of tokenised and digital native green bonds. Mainland local governments have also successfully issued green bonds, blue bonds, and sustainable bonds in Hong Kong, highlighting Hong Kong's key role in connecting international capital with Mainland green finance needs.
- 39. To assist the industry in identifying green economic activities, the Hong Kong Monetary Authority ("HKMA") published the Hong Kong Taxonomy for Sustainable Finance in May 2024 which aligns with standards of the Mainland and the European Union, covering four sectors in the first phase. The HKMA has now commenced the second phase of work to expand the scope of the taxonomy.
- 40. In terms of sustainability disclosure, Hong Kong is developing an ecosystem fully aligned with the International Financial Reporting Standards Sustainability Disclosure Standards ("ISSB Standards"). In June 2025, the International Financial Reporting Standards Foundation published the jurisdictional profiles on adoption of the ISSB Standards, which confirms Hong Kong as among the initial set of jurisdictions having set a target of fully adopting the ISSB Standards. The Hong Kong Institute of Certified Public Accountants has published local standards, and Hong Kong Exchanges and Clearing Limited ("HKEX") has implemented new climate disclosure requirements in phases since January 2025. To this end, the Green and Sustainable Finance Cross-Agency

Steering Group has launched a free online greenhouse gas emissions calculation tool to provide support.

- 41. The Government also supports market development and strengthens the local talent pool through various funding schemes. The government has extended the Green and Sustainable Finance Grant Scheme to 2027 and expanded its scope of subsidies. As of early June 2025, funding has been granted to debt instruments totalling over US\$160 billion. At the same time, the Pilot Green and Sustainable Finance Capacity Building Support Scheme aimed at talent training has been extended to 2028. The Government is also actively promoting green fintech and launched the "Prototype Hong Kong Green Fintech Map" and the brand new "Green and Sustainable Fintech Proof-of-Concept Funding Support Scheme" in March 2024 and June 2024 respectively.
- 42. To promote emission reduction and green investment, HKEX launched an international carbon marketplace Core Climate in October 2022, which is the only carbon market globally that provides both HKD and RMB settlement for the trading of international voluntary carbon credit product, with the number of participants continuing to grow. The government will continue to support HKEX in deepening cooperation with Mainland partners to jointly build a regional carbon market.

Development of Green Technology

43. The government is striving to assist the development of local green technology, and established Green Tech Fund which has been injected with HK\$400 million to support local green technology research and development and application. As of early 2025, the fund has approved 33 projects, involving a total grant of about HK\$147 million. The government also encourages the transformation of research results with application potential into commercially valuable technologies and products as well as the local production of such technologies and products. For example, the EEB is assisting Lumi Technology in identifying a location in Hong Kong to set up a production plant to upcycle waste plastics into acoustic metamaterials, which is expected to process about 3 500 tonnes of local household waste plastics in the first year of operation and planning to double the processing volume to 7 000 tonnes within three to five years. We are also assisting i2Cool in identifying a suitable location in Hong Kong to set up a production line to manufacture high-value core materials for electricity-

free cooling products using local recycled waste materials such as tiles, ceramics, and glass, achieving a circular economy through upcycling, while the establishment of production lines helps Hong Kong develop new quality productive forces and advance green and low-carbon transformation.

Carbon-neutral Community

44. In addition, the government will actively promote related planning and technology development. It is expected that the government will publish the Generalised Green Framework for the Planning of New Development Areas ("NDAs") in mid-2025 to provide clear technical guidance for future planning of NDAs. The framework will assist government bureaux and departments in giving due considerations to suitable smart, green and resilient measures for the planning of NDAs with a view to achieving the target of developing the NDAs into carbon neutral community. The government is also vigorously promoting green procurement, requiring bureaux and departments to consider environmental factors when procuring products and services, such as the plan to significantly increase the proportion of electric vehicles in works contracts, thereby driving the development of the green industry chain.

Concluding Remarks

45. Achieving carbon neutrality requires the participation of the general public, promoting low-carbon transformation through energy conservation and waste recycling. To enhance the understanding of climate action among all sectors of society, we have published the "Hong Kong's Climate Action Plan 2050 – Strategies and Progress" pamphlet (at Annex)³. Looking ahead, we will, in line with the spirit of the Paris Agreement, conduct a review once every five years to finetune and improve the carbon reduction measures, having regard to the latest developments in various zero-carbon technologies. Also, the Government has been actively participating in international platforms to address climate change, including participating in the United Nations Climate Change Conference ("COP") as a member of the China delegation, and, in 2024, hosting at COP 29 in Baku, Azerbaijan a side event at China Corner for the first time, demonstrating the Hong Kong's commitment to international cooperation to address climate

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https://cnsd.gov.hk/wp-content/uploads/2025/06/CAP2050-progress-pamphlet_EN_website.pdf

change. We will continue to actively participate in relevant international activities and support the country's work in addressing climate change.

Advice Sought

46. Members are invited to provide comments on the latest progress of the measures described above and Hong Kong's development in green and sustainable finance, green economy, and low-carbon transformation.

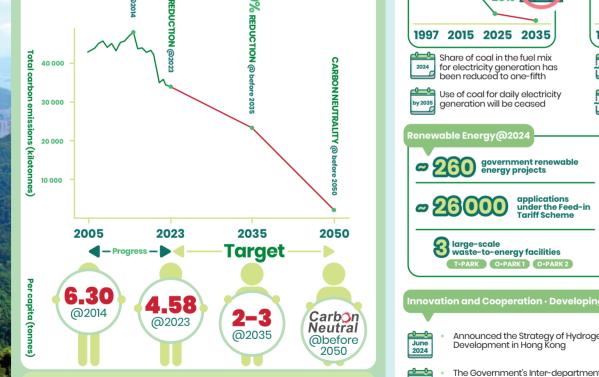
Environment and Ecology Bureau June 2025

Hong Kong's

STRATEGIES & PROGRESS

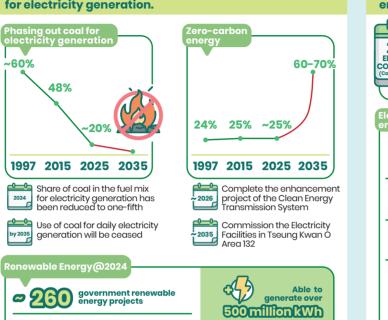


- Hong Kong's total carbon emissions have shown a downward trend after reaching its peak in 2014
- Hong Kong's per capita carbon emissions dropped to 4.58 tonnes in 2023 from 6.30 tonnes in 2014, a reduction of almost 30%



capita emissions **in other cities** (tonnes

In 2023, electricity generation accounted for about 61% of ons. Hong Kong will continue to increase the share of zero-carbon energy in the fuel mix





large-scale waste-to-energy facilities

T-PARK O-PARK 1 O-PARK 2

Announced the Strategy of Hydrogen Development in Hong Kong





Fuel has given agreement-in-principle to 26 hydrogen trial projects Introduced the Gas Safety (Amendment)

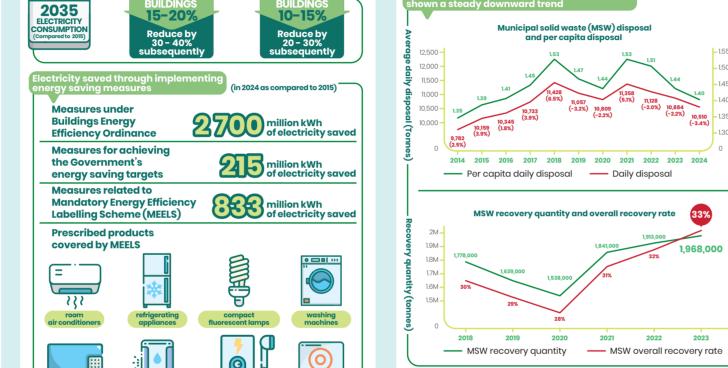
Bill into the Legislative Council



hydrogen standard certification To establish hydrogen filling stations across Hong Kong Island, Kowloon and the New Territories



generating electricity for buildings. Promoting energy in 2023. Developing waste-to-energy facilities and saving and green buildings can reduce the cost of promoting waste reduction and recycling can help achieve "zero landfill" by 2035,



7billionkWhofelectricit

To reduce plastic waste, legislation to regulate disposable plastic tableware and other plastic products has been implemented since 22 April 2024 Government is establishina a common leaislative framework for producer

responsibility scheme to facilitate future inclusion of different products

progressively, turning more waste into resources.

2022

and per capita disposal



Hong Kong's total land area.



mangroves



Established in 2024 the Robin's Nest

habitats for wild animals and plants,

ecological corridor to Shenzhen's

established in the past 5 years,

including Southwest Lantau Marine

Country Park, with its mountain

forming a cross-boundary

3 new marine parks were

North Lantau Marine Park to

Long Valley Nature Park was

conservation and agriculture

opened in 2024 to better achieve

the complementary objectives of

Hong Kong and Shenzhen signed

he Framework Arranaement for

the Conservation of Shenzhen Bay

iointly strengthen the protection of

mudflats at intertidal areas and

The development of Sam Po Shue

commence in 2026/2027, creating

synergy with the adjacent Mai Po

Nature Reserve to enhance the

conservation of wetland

Wetland Conservation Park will

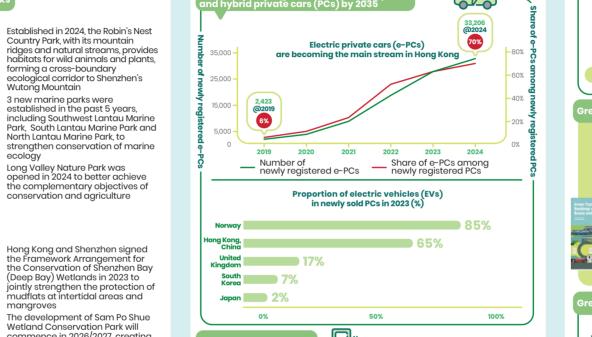
(Deep Bay) Wetlands in 2023 to

Wutong Mountain



ansport accounted for about 18% of total carbor

25 country parks and 22 special areas cover a total issions in 2023. We strive to achieve the long-term area of 44,842 hectares, accounting for about 40% of target of zero carbon emissions in the transport sector before 2050 by promoting new energy transport and improving traffic management measures.



ecosystem in the Deep Bay area

End-2024

Biodiversity Strateay and Action Plan (BSAP) Over 60 specific actions listed

Update BSAP with reference Provide gross floor area concessions to encourage installation to Kunmina-Montreal Global of charging infrastructure in parking spaces in new private Biodiversity Framework and

\$3.5 billion EV-charging at Home Subsidy Scheme to support installation of EV charging infrastructure in car parks of existing private residential buildings

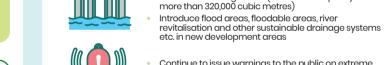




A hydrogen fuel cell (HFC)

double deck bus

commenced service in February 2024



≥3.000 electric taxis

≥700 electric buses

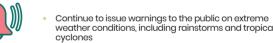
·

trials of 2 other

Government will set a target for sustainable

aviation fuel (SAF) consumption to expedite

the reduction of carbon emissions by the



weather conditions, including rainstorms and tropical

Conducted studies on potential effects of super

typhoons, extreme storm surges, rainstorms and

as port works, stormwater drainage systems and

Implement improvement works at 26 coastal

constructing or raising wave wall

emergency preparedness

low-lying or windy residential greas with higher risks to

cut off water pathways towards inland areas, such as

Formulate action plans on early alert systems and

Completed about 90 major flood prevention works

Carry out drainage improvement projects, including Yuen Long Barrage Scheme and 9 underground

stormwater storage tanks (with a total capacity of

temperatures on government critical infrastructure Update the design standards for infrastructure such



To promote urban forestry, about 4 million trees and over 60 million shrubs and other plants have been planted in the past decade to help reduce carbon emissions and enhance climate resilience



at the end of 2023 with a water production capacity of 135,000 cubic metres per day





The Generalised Green Framework for the Planning of New Development Areas will be promulgated in the first half of 2025

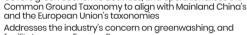
Green and Sustainable Bonds



Hong Kong is the largest hub for arranging green and sustainable bond issuances in Asia, accounting for around 45% of the region's market issuances Under the Government Sustainable Bond Programme, a

bonds has been issued, covering 116 eligible green projects

Hong Kong Taxonomy for Sustainable Finance Covers green economic activities, and operationalises the



- and the European Union's taxonomies Addresses the industry's concern on greenwashing, and facilitates green finance flow
- Commenced the second phase development to expand the coverage of the Taxonomy, including the introduction of

Carbon Trading



Hong Kong Exchanges and Clearing Limited's international carbon marketplace. Core Climate, is currently the only carbon marketplace offering settlement in both Hong Kong dollars and Renminbi for the trading of international voluntary carbon credits

The number of registered participants increased from over 20 in 2022 to 100 in 2024

Sustainability Disclosure



with the International Financial Reporting Standards -Sustainability Disclosure Standards Free online greenhouse gas emissions calculation and

he Government launched the Roadmap on Sustainability

estimation tools were launched in 2024 to assist corporates and financial institutions in preparing sustainability reports



amounts to HK\$400

As at 2025, 33 project have been approve







