

Green living

Overview

Hong Kong abounds in unexpected and delightful contrasts. Although renowned as a fast-paced business hub, Hong Kong offers a variety of landscapes and scenic vistas rarely matched in such a compact city, ranging from sandy beaches and rocky shorelines to open grasslands and mountain ranges.

Designated Places for Nature Conservation

- Around **40%** of Hong Kong's 1,110 square kilometres of land is designated as **country park and special areas** for the purpose of nature conservation. There are currently 24 country parks and 22 special areas, which covers about 44,300 hectares, and attracts some 13 million visitors every year.
- Many Hong Kong **hiking trails** are "next" to urban areas and easily accessible. For example, it takes less than 20 minutes by bus from the bustling downtown area on Hong Kong Island to reach the start of the Dragon's Back trail, which has been rated Asia's "Best Urban Hike".
- Hong Kong has **seven marine parks** and **one marine reserve** covering about 6,117 hectares to conserve local marine environments.
- Designation process of the 8th marine park (proposed **North Lantau Marine Park**) and that of the **25th country park** (proposed **Robin's Nest Country Park**) are under way.
- The 2021-22 Budget earmarked \$500 million to improve facilities in country parks to enhance visitors' experience.
- The Government will implement a proactive conservation policy and establish a **Wetland Conservation Parks System** in the Northern Metropolis, with the Sam Po Shue Wetland Conservation Park being the first park to be established, to better conserve wetlands and fish ponds with ecological value and create environmental capacity.

Astonishing Biodiversity

- Rich and wonderful biodiversity is a precious natural resource. Hong Kong has over 3,300 species of vascular plants; 55 species of terrestrial mammals; 578 species of birds (approximately one-third of total bird species recorded throughout China); 115 species of amphibians and reptiles; 196 species of freshwater fish; 245 species of butterflies and 132 species of dragonflies.
- There are more than 1,000 species of marine fish and 84 species of hard corals – more than the hard coral species found in the Caribbean, and some are endemic to Hong Kong.
- Hong Kong is also home to a number of globally threatened species, such as the rare Bogadek's Burrowing Lizard, Three-banded Box Turtle, Yellow-breasted Bunting, Short-legged Toad, Chinese Pangolin and Chinese Tiger Dragonfly.
- The Government on average plants more than one million trees and other plants in the countryside and urban areas annually to green Hong Kong.
- The Government will update and implement the Hong Kong Biodiversity Strategy and Action Plan based on the Kunming-Montreal Global Biodiversity Framework to promote biodiversity conservation and support sustainable development in Hong Kong.

Efforts in Ecological, Nature and Countryside Conservation

- To deter illicit trade in endangered species, the Government gradually phased out ivory trade and imposed heavier sentences under the Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018, and the full ban on local ivory trade has been in effect since the end of December 2021. In 2023, the government amended the list of controlled species under the Protection of Endangered Species of Animals and Plants Ordinance based on the latest decision of the Conference of the Parties to Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- To strengthen the **protection of endangered Green Turtles**, the Government has expanded the Sham Wan Restricted Area on Lamma Island to cover Green Turtles' breeding grounds in the adjacent waters since April 1, 2021. The restricted period has also been extended from five months to seven months (from April to October) each year.
- The **Countryside Conservation Office** (CCO) was established in July 2018 to co-ordinate the conservation and revitalisation of countryside areas. It launched the **Countryside Conservation Funding Scheme** in October 2019 and a total of 45 projects involving about \$236 million in total had been approved as at end-2023, with a view to conducting countryside conservation at different levels, including promoting to the public scenic countryside natural habitats and valuable historical architectural and cultural heritage, and supporting villagers and local non-profit-making organisations, etc., to undertake countryside conservation and revitalisation projects. The CCO is also utilising the earmarked funding of \$500 million to carry out countryside minor improvement works, such as repairing footpaths, renewing public sewerage system, examining flood prevention measures and introducing smart and low-carbon public washrooms.

Carbon Neutrality and Emission Reduction

- The Government announced the **Hong Kong's Climate Action Plan 2050** in October 2021. With the vision of "Zero-carbon Emissions · Liveable City · Sustainable Development", it sets four major decarbonisation strategies and targets for combating climate change and achieving carbon neutrality, i.e. net-zero electricity generation, energy saving and green buildings, green transport and waste reduction, to lead Hong Kong towards the interim target to reduce Hong Kong's carbon emissions by half before 2035 as compared to the 2005 level, and the goal to strive to achieve carbon neutrality before 2050.
- The Government will devote about \$240 billion in the coming 15 to 20 years to take forward various measures to mitigate and adapt to climate change. The Government has set up the Office of Climate Change and Carbon Neutrality to strengthen co-ordination and promote deep decarbonisation.
- The Government announced the **Clean Air Plan for Hong Kong 2035** (Clean Air Plan) in June 2021. Setting out the vision of "**Healthy Living · Low-carbon Transformation · World Class**", the Clean Air Plan covers six major areas of action, namely **green transport, liveable environment, comprehensive emissions reduction, clean energy, scientific management** and **regional collaboration**, leading Hong Kong to become a more liveable city with air quality on par with major international cities by 2035, and advancing towards the goal of having the air quality to fully meet the air quality guideline levels under the Global Air Quality Guidelines of the World Health Organization. A new round of review on the air quality objectives (AQOs) was completed in 2023 which will further tighten the AQOs.
- Since 2011, concentration levels of **major air pollutants** (including ambient and roadside nitrogen

dioxide, sulphur dioxide, respirable suspended particulates and fine suspended particulates) have **reduced by around 40% to 70%**.

- Generating electricity for buildings accounts for over 50% of Hong Kong's carbon emissions. The goal is to improve the overall energy performance of government buildings and infrastructure by more than 6% by 2024-25. The Government will accelerate the incorporation of district cooling systems in new development areas (including the Northern Metropolis) to reduce energy consumption. The Government consulted the trade on the proposal of amending the Buildings Energy Efficiency Ordinance and aimed to commence the legislative exercise in 2024.
- The fourth phase of the Mandatory Energy Efficiency Labelling Scheme (MEELS) was launched and will be fully implemented on December 1, 2024. Together with the first three phases, the total energy consumption in the residential sector covered by the MEELS substantially increased from 50% to about 80%.
- **The Cleaner Production Partnership Programme** is extended to March 2025 with funding of \$311 million to encourage Hong Kong-owned factories to adopt cleaner production technologies with a view to improving the regional environment.
- Funded by the Environment and Conservation Fund, the **Carbon Neutrality Publicity Campaign** (Campaign) is organised by the Environmental Campaign Committee and jointly organised by the Environment and Ecology Bureau, the Environmental Protection Department and the Electrical and Mechanical Services Department. Supporting the decarbonisation strategies set out in the "Hong Kong's Climate Action Plan 2050" announced by the Government in 2021, the objective of the two-year Campaign launched from the end of 2022 is to encourage members of the public to change their habits in respect of clothing, food, living and travel to reduce carbon emissions and achieve carbon neutrality by 2050. The Campaign focuses on three sub-themes, i.e. energy saving, green transport and waste reduction and recycling. With the slogan "Change habits to reduce carbon footprint" and through the various forms of traditional and social media platforms, the Campaign appeals for public of different age groups to participate in combating the climate change and committing to low carbon living.
- The Government is proceeding with the legislative amendments of the Ozone Layer Protection Ordinance (Cap. 403) to regulate and phase down the local manufacturing and consumption of hydrofluorocarbons (HFCs) with high global warming potential. Public consultation was conducted between July and September 2023 to tap the views of the trade and the general public. The target is to introduce the amendment bill to the Legislative Council by end 2024.

New Energy Transport Industry

- The Government is making every effort to promote the use and supply of new energy in sea, land and air transport to spearhead the green transformation of these sectors.
- The Transport and Logistics Bureau and Environment and Ecology Bureau have commissioned a feasibility study on providing green fuel bunkering centre for both local and ocean-going vessels, and will promulgate in 2024 an action plan for the development of bunkering facilities and supply chains.
- The Government is promoting the supply of sustainable aviation fuel and will monitor the development trend closely for forward-looking planning.
- The Government launched in October 2020 an incentive-cum-regulatory programme to progressively **phase out about 40,000 Euro IV diesel commercial vehicles** by the end of 2027.
- The first **Hong Kong Roadmap on Popularisation of Electric Vehicles** (EV) was unveiled in March

2021. Key measures include ceasing the new registration of fuel-propelled and hybrid private cars in 2035 or earlier, expanding the EV charging network and promoting its marketisation, and promoting education and training for technicians and mechanics on EV maintenance. The Government will also take the lead in using more EVs and aim to increase the number of public and private parking spaces with charging infrastructure to about 200,000 by mid-2027.

- The \$2 billion **EV-charging at Home Subsidy Scheme** (EHSS) was launched in October 2020 to subsidise installation of EV charging-enabling infrastructure in car parks of existing private residential buildings. The 2022-23 Budget set aside an additional \$1.5 billion to extend the EHSS to the 2027-28 financial year. The whole EHSS is expected to cover a total of about 140,000 private parking spaces.
- In 2024, the Government formulates a citywide green transformation roadmap and timetable for public buses and taxis, with a view to achieving zero vehicular emissions by 2050. By end-2027, the Government will introduce about 700 electric buses and about 3,000 electric taxis.
- To encourage taxi owners to replace existing taxis with **battery electric taxis** (e-taxis), the Government launched the Dedicated 100% Loan Guarantee Scheme for Battery E-taxis in early September 2023. The loan amount per battery e-taxi is its actual sales price, subject to a cap of \$350,000.
- \$50 million earmarked under the New Energy Transport Fund to subsidise the taxi owners to procure wheelchair accessible e-taxis.
- \$350 million earmarked to support four ferry operators to progressively test out electric ferries on Victoria Harbour routes, starting from the second half of 2024.
- \$80 million earmarked to commence a pilot scheme on electric public light buses in 2024.
- Funding earmarked under the New Energy Transport Fund to assist the transport trade to commence trials of hydrogen fuel cell heavy vehicles.
- The Government formulates the Strategy of Hydrogen Development in Hong Kong in the first half of 2024, and commence the preparatory work for the necessary legislative amendments pertaining to the production, storage, transportation and application of hydrogen fuel with a view to introducing a bill into the Legislative Council in 2025.

Green Building Design and Technology

- Setting aside \$3 billion in total to install **small-scale renewable energy systems** at government buildings and infrastructure.
- \$150 million set aside to conduct **energy audit** and **install energy-efficient appliances**, free of charge, for non-governmental organisations (NGOs) subvented by the Social Welfare Department.
- **"Green Schools 2.0"** to enhance energy efficiency in schools.
- The **Zero Carbon Building** in Kowloon Bay, which opened in 2012, is the city's first building with a zero carbon footprint, featuring over 80 types of green technology to reduce greenhouse gas emissions.
- The sludge treatment facility at Nim Wan, Tuen Mun (**T • PARK**), which opened in 2016, is one of the most technologically advanced facilities of its kind in the world. Heat produced from incinerating sludge at T•PARK is recovered for electricity generation, thus **transforming waste into energy**, which is also used to support the spa pools within the Environmental Education Centre at T•PARK, which people can enjoy for free.

Innovation and Technology (I&T) for a Green Future

- The Electrical and Mechanical Services Department has been working with the trade and academia to

promote I&T related to electrical and mechanical (E&M) services.

- **E&M InnoPortal** lists the service needs of various government departments, public organisations and the E&M trade. Academia/research institutes and start-ups can propose related I&T solutions for matching.
- The \$400-million **Green Tech Fund** supports the R&D and application of decarbonisation and green technologies.
- **Green Technology and Finance Development Committee** is set up, inviting industry representatives from green technology, green finance, green standard certification, etc. to help devise a plan to develop Hong Kong into an international green technology and finance centre.
- The **Hong Kong Green Week** in February 2024 covered a series of events, including those related to green technology.

Waste Management

- Waste Blueprint for Hong Kong 2035 was promulgated in early 2021. Advocating the vision of “**Waste Reduction-Resources Circulation-Zero Landfill**”, the Government will promote six major areas of action: **Waste Reduction, Waste Separation, Resources Circulation, Industry Support, Innovation and Co-operation**, and **Education and Publicity**, with a view to building a circular economy.
- The Government has been actively preparing for the implementation of **municipal solid waste charging** on August 1, 2024 to achieve waste reduction by driving behavioural changes, and continue to expand the “GREEN@COMMUNITY” recycling network and food waste collection services in order to enhance support for waste separation at sources and clean recycling.
- The Legislative Council passed a bill to regulate disposable plastic tableware and other plastic products. The regulation has come into effect on April 22, 2024 (Earth Day).
- The first modern waste-to-energy (WtE) incinerator is being built near Shek Kwu Chau, with the plan of developing the second WtE incinerator in Tuen Mun. Similar advanced facilities in the Northern Metropolis will also be explored.
- Premising on the principle of “**polluter pays**” and the element of “**eco-responsibility**”, the Government has been putting forward various producer responsibility schemes (PRSs), including the Plastic Shopping Bag Charging Scheme, the PRS on waste electrical and electronic equipment and the PRS on glass beverage containers, to promote waste reduction at source and facilitate the development of a circular economy. The Government will also introduce a bill to establish a common legislative framework applicable to different products and make relevant subsidiary legislation, gradually extending the PRSs to plastic beverage containers, beverage cartons, electric vehicle batteries, vehicle tyres and lead-acid batteries.
- To achieve the goal of Zero Landfill by 2035, the Government will strive to engage the entire community in waste reduction and waste separation for recycling. A “**food wise and waste less**” culture is being promoted to reduce food waste at source.
- Through an additional funding of **\$62 million, the scope of food waste collection is gradually expanded** to cover more public and private premises, including food establishments, markets, hotels, large shopping malls, etc. The trial scheme on food waste collection in **public rental housing estates will also be extended to cover a total of 100 blocks, involving about 150,000 residents**. Through these measures, not only can the volume of odorous food waste disposed at landfills be reduced, but the food waste can also be delivered to the Organic Resources Recovery Centre for **conversion into renewable energy**.

- The **Organic Resources Recovery Centre** Phase 1 (O-PARK1) started receiving food waste since July 2018. O-PARK1 can treat and convert 200 tonnes of food waste per day into biogas for power generation, and process the digestate to produce compost. O-PARK1 can generate about 14 million kWh of surplus electricity annually, which is exported to the grid and enough to power about 3,000 households. The Organic Resources Recovery Centre Phase 2, with daily treatment capacity of 300 tonnes of food waste, has commissioned in March 2024.
- The Government injected an additional funding of \$1 billion into to the **Recycling Fund** in April 2021 and extended the application period of the Fund to 2027, to upgrade and transform operations of the recycling industry through better use of technologies, so as to reduce waste disposal at landfills and foster the development of a circular economy.
- The Government launched the **territory-wide waste paper collection and recycling services** in September 2020 to enhance the quality and quantity of local recycled waste paper and promote the sustainable development of the local waste paper recycling industry.
- The Government awarded a lease for setting up a **modern pulping facility in EcoPark, Tuen Mun**, to diversify recycling outlets and transform local waste paper into resources more effectively. The facility is expected to commence operation in 2025 tentatively.
- The Government launched in late 2021 a two-year voluntary scheme for **phasing out personal care and cosmetic products containing microbeads**, aiming to encourage the trade to stop the production, importation and sale of these products, and to assist consumers choose microbead-free products.

Water Quality Management

- A total investment of \$10.7 billion over the past three years in providing and upgrading **sewerage and wastewater treatment infrastructure** for further improvement of water quality in all areas of Hong Kong, in particular Victoria Harbour.
- Since the formation of the Inter-departmental Working Group on Marine Environmental Management in 2012, additional annual funding of about \$150 million has been allocated to **clean shoreline work**. Hong Kong has a long coastline of about 1,178 km in length. To upkeep its cleanliness for public enjoyment, member departments of the working group closely monitor more than 180 hot spots vulnerable to accumulation of marine refuse and carry out clean up actions from time to time.

Leisure Facilities and Projects

More leisure facilities and projects will be developed, including:

- **Round-the-Island Trail** - Developing the Trail of about 60 km on Hong Kong Island, connecting the waterfront promenades on the northern shore and a number of existing waterfront and countryside walking trails in the Southern District. Studies and design as well as works were carried out from 2023 onward for connecting 90% of the Trail within five years.
- **Leisure and Recreation in Southern Lantau** - Studying southern part of Lantau including "Green Belt" zone for eco-tourism and recreation uses.
- **Weekend Bazaars** - organising weekend bazaars with local groups in five regions in the territory, fostering diverse local economic activities.

(Revision date: May 10, 2024)

