

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 **protected country park and special areas** for the purpose of nature conservation. There are currently 24 country parks and 22 special areas, covering about 44,300 hectares, which attracts some 12 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 the **25th new country park** (proposed **Robin's Nest Country Park**) is under way.
- The 2021-22 Budget sets aside \$500 million to improve facilities in country parks to enrich visitors' experience.
- As announced in the 2021 and 2022 Policy Address, as well as the Northern Metropolis Development Strategy, the Government will implement a proactive conservation policy and establish a **system of wetland conservation parks** 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; over 570 species of birds (approximately one-third of total bird species recorded throughout China); 115 species of amphibians and reptiles; 194 species of freshwater fish; 245 species of butterflies and 130 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. Some species 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 continues implementing long-term actions under the Hong Kong Biodiversity Strategy and Action Plan 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 that came into effect in May 2018, and stepped up co-operation with Mainland authorities. The full ban on local ivory trade has been implemented since the end of December 2021.
- 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 conservation projects that promote sustainable development of remote countryside and revitalisation. It launched the **Countryside Conservation Funding Scheme** in October 2019 and a total of 33 projects involving about \$165 million in total has been approved as at end-2022, 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 universities, 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 will also set up a new Office of Climate Change and Carbon Neutrality to strengthen co-ordination and promote deep decarbonisation. Also, a dedicated advisory committee on combating climate change will be formed to encourage different sectors in the community, including young people, to participate actively in climate actions.
- 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.
- Since 2013, 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 60%**.
- Generating electricity for buildings accounts for over 60% 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 Mandatory Energy Efficiency Labelling Scheme will be expanded to include more household appliances, increasing from 50% to about 80% the total residential energy consumption of household appliances under the scheme.
- 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 formulating a Producer Responsibility Scheme for retired EV batteries. The Government will also take the lead in using more EVs. The Government will provide about 7,000 additional parking spaces with EV chargers in government premises by 2025. By end-2027, the Government will introduce about 700 electric buses and 3,000 electric taxis.
- To **encourage taxi owners to replace existing taxis with battery electric taxis**, the Government has proposed in the 2023-24 Budget to put in place a loan scheme with 100% guarantee, involving a total loan guarantee of \$6.4 billion.
- 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 2020, the Government allocated additional funding of \$800 million for the **New Energy Transport Fund**. In 2023, trials will be conducted on **new generation electric taxis**, as well as **hydrogen fuel cell electric double-deckers and heavy vehicles**.
- \$350 million earmarked to support ferry operators to test out electric ferries on Victoria Harbour routes from 2024.
- \$80 million earmarked to launch a pilot scheme on electric public light buses from 2023.
- **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.

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.
- **"Solar Harvest"** to install solar energy generation systems for schools and welfare NGOs for free.
- 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. Universities and start-ups can propose related I&T solutions for matching.
- A \$200 million **Green Tech Fund** is set up to support the R&D and application of decarbonisation and green technologies. The 2022-23 Budget injected an additional \$200 million into the Fund.
- A **Green Technology and Finance Development Committee** will be 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.
- An **International GreenTech Week** will be organised at end 2023 to pool together representatives, enterprises and investors from the green technology industries.

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** at the end of this year to achieve waste reduction by driving behavioural changes, and develop “GREEN@COMMUNITY” recycling facilities in the entire territory to enhance support for waste separation at sources and clean recycling.
- A bill was introduced into the Legislative Council in March 2023 to regulate disposable plastic tableware and other plastic products. The first phase of the regulation could be implemented toward the end of 2023 or in the beginning of 2024 at the earliest.
- To explore requiring by legislation major housing estates and single-block buildings with relatively large number of flats to separately collect common types of recyclable and pass them to downstream recyclers for proper processing, with effect from 2024 or earlier.
- 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. Besides, the Government is preparing to introduce a PRS on plastic beverage containers. To pave way for the PRS, a pilot scheme is being implemented with 120 reverse vending machines set up to assess their application in the collection of plastic beverage containers in Hong Kong.

- To achieve the goal of Zero Landfill by 2035, we 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.
- In 2023-24, an additional funding of **\$62 million will be allocated to gradually expand the scope of food waste collection** 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**.
- Under the Food Waste Plan, 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 (O·PARK2), with daily treatment capacity of 300 tonnes of food waste, is scheduled for commissioning in 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.
- Starting from 2020-21, no less than \$300 million is reserved each year for implementing the **territory-wide waste paper collection and recycling services** to enhance the quality and quantity of local 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 by 2025.
- 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 \$8.3 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 will be 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 19, 2023)

MAY 2023