

## 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 in Hong Kong, which attracts some 12 million visitors every year.
- Many Hong Kong **hiking trails** are near urban areas and easily accessible. For example, it takes less than 20 minutes by bus from the bustling downtown area on eastern 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 **six marine parks** and **one marine reserve** covering about 4,050 hectares to conserve local marine environments, including the Southwest Lantau Marine Park which was designated on April 1, 2020. The Government also implemented the new fisheries management strategy in marine parks on the same day for better conservation of marine habitats.
- The Government will complete designation of the **South Lantau Marine Park** by June 30, 2022. Designation process of the proposed **North Lantau Marine Park** and a **new 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 Policy Address and Northern Metropolis Development Strategy, the Government will implement a proactive conservation policy and establish a **system of wetland conservation parks** through the gradual resumption of several hundred hectares of private wetlands and fish ponds with conservation value for better conservation of wetlands in Hong Kong and thus creating 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 560 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** was established in July 2018 to co-ordinate work related to countryside conservation and revitalisation. It launched the **Countryside Conservation Funding Scheme** in October 2019 and a total of 30 projects involving about \$156 million in total has been approved up to April 2022. These projects are expected to enhance the management of areas with high ecological value and revitalise local villages. They will also increase public appreciation of village culture and identify novel solutions to promote countryside conservation.

### **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** 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 and fine suspended particulates) have **reduced by around 30% to 60%**.
- Starting from January 1, 2019, all vessels in Hong Kong waters are required to use compliant fuel, such as fuel with sulphur content not exceeding 0.5% or liquefied natural gas.
- 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 and \$7.1 billion has been earmarked for ex-gratia payments to the affected vehicle owners.

- 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, training EV technical and maintenance practitioners, and formulating a Producer Responsibility Scheme for retired EV batteries. The Government will also take the lead in using more EVs.
- A \$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 for four years 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** and expanded its scope to cover additional types of electric commercial vehicles.
- \$350 million earmarked to provide subsidies to ferry operators to test out electric ferries on Victoria Harbour routes from 2023.
- \$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**

- Target of reducing Hong Kong's energy intensity from the 2005 level by 40% by 2025.
- Measures outlined in "**Energy Saving Plan for Hong Kong's Built Environment 2015~2025+**" include: setting an energy saving target and timeline; development of green buildings; tax concessions; expanding the Mandatory Energy Efficiency Labeling Scheme; running the "Energy Saving for All" campaign.
- Upon completion of all energy saving measures, the annual reduction in CO2 emissions will be about 1.7 million tonnes, equivalent to about 4% of Hong Kong's total emissions in 2016.
- The first "**Green Energy Target**" aims to further improve government energy use by 6% in five years from 2020-21 to 2024-25.
- The 2021-22 Budget allocated an additional \$1 billion, making it \$3 billion in total, to install more **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 **T-PARK** sludge treatment facility at Nim Wan, Tuen Mun, 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 provide heating for 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 will inject an additional \$200 million into the Fund..

## **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 will introduce **municipal solid waste (MSW) charging** 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. The bill to implement MSW charging was passed by the Legislative Council in August 2021. The preparatory period of 18 months as a basic arrangement has begun. The Government is now actively taking forward relevant preparatory work to enable itself, various stakeholders and the public to prepare for the implementation of MSW charging.
- 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 has been rolled out to assess the application of reverse vending machine in collection of plastic beverage containers in Hong Kong.
- A **“food wise and waste less” culture** is being promoted to reduce food waste at source.
- Under the Food Waste Plan, the **Organic Resources Recovery Centre** Phase 1 (O-PARK1) started receiving commercial and industrial 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.
- Additional funding of \$1 billion was injected into to the **Recycling Fund** in April 2021 to upgrade and transform operations of the recycling industry through better use of technologies. The Fund has been extended until 2027 to benefit more than 1,000 SME recycling businesses.
- 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 has invited tender for the development of 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 2024.

- 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 \$6.6 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.

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