

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 foreshores 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** to conserve local marine environments, covering about 4,050 hectares. The Southwest Lantau Marine Park was newly designated on April 1, 2020 and the new fisheries management strategy in marine parks was implemented on the same day for better conservation of marine habitats.
- The designation process of a new country park and two new marine parks in the western waters is under way.
- The 2021-22 Budget sets aside \$500 million to improve facilities in country parks to enrich visitors' experience.

Astonishing Biodiversity

- **The Hong Kong Biodiversity Strategy and Action Plan 2016-2021** is being implemented to step up biodiversity conservation and support sustainable development in Hong Kong.
- Hong Kong has over 3,300 species of vascular plants; 55 species of terrestrial mammals; over 550 species of birds (one-third of all bird species recorded throughout China); 115 species of amphibians and reptiles; 193 species of freshwater fish; 245 species of butterflies and 128 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.
- **Rich and wonderful biodiversity** is a precious natural resource. The Government on average plants more than one million trees and other plants in the countryside and urban areas annually to green Hong Kong.

Efforts in Ecological, Nature and Countryside Conservation

- To deter illicit trade in endangered species, the Government has phased out the local ivory trade and imposed heavier sentences under the new 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.
- 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**. The **restricted period has also been extended** from five months to seven months 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 17 projects involving about \$100 million in total has been approved up to February 2021. 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 tackle the challenges of countryside conservation/revitalisation.

Low Carbon and Emission Reduction

- 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 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 ultimate targets under the Air Quality Guidelines of the World Health Organization.
- Major efforts are being made to achieve the target of **reducing Hong Kong's carbon intensity by 65-70%** by 2030 compared to the 2005 level. Hong Kong will strive to achieve **carbon neutrality before 2050**. To this end, the Government will update the Hong Kong's Climate Action Plan in second half of 2021 to set out more proactive strategies and measures to reduce carbon emissions.
- Since 2013, concentration levels of **major air pollutants** (including ambient and roadside nitrogen dioxide, sulphur dioxide and fine suspended particulates) have **reduced by around 40-60%**.
- 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.
- A new ex-gratia scheme was launched in October 2020 with an aim of progressively **phasing out about 40,000 Euro IV diesel commercial vehicles**. HK\$7.1 billion (US\$910 million) has been earmarked for ex-gratia payments to vehicle owners.
- Hong Kong's first road map on the popularisation of electric vehicles (EV) was unveiled in March 2021. Key measures include ceasing the new registration of fuel-propelled private cars by 2035 or earlier, expanding the EV charging network and promoting its marketisation, training EV technical and maintenance practitioners, and formulating a Producer Responsibility Scheme (PRS) for retired EV batteries. The Government will also take the lead in using more EVs.
- A \$2 billion **EV-charging at Home Subsidy Scheme** was launched in October 2020 to subsidise installation of electric vehicle charging-enabling infrastructure in car parks of existing private residential buildings. The scheme is estimated to cover more than 60,000 private parking spaces in three years.
- 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 and 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 spa pools established 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** (EMSD) 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.

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.

- Premising on the principle of “polluter pays” and the element of “eco-responsibility”, the Government has been putting forward various 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 one-year pilot scheme has been rolled out to assess the application of reverse vending machine in Hong Kong.
- The Government plans to introduce municipal solid waste charging to achieve waste reduction by driving behavioural changes, and developing **“GREEN@COMMUNITY”** recycling facilities in the entire territory to enhance support for waste separation at sources and clean recycling. The Government will continue to co-operate with the Bills Committee of the Legislative Council on the scrutiny work of the relevant bill.
- A **“food wise” culture** is being promoted to reduce food waste.
- 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, enough to power about 3,000 households, and transmit to the grid annually. The Organic Resources Recovery Centre Phase 2 (O-PARK2), with daily treatment capacity of 300 tonnes of food waste, is scheduled for commissioning in 2023.
- Additional funding of **\$1 billion** will be injected into to the **Recycling Fund** to upgrade and transform operations of the recycling industry through better use of technologies. The Fund will be 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.
- In Q2 of 2021, the Government will 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 is in the process of making arrangements for 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 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.

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