
Chapter 5

Environment and Conservation

Preamble

Sustainable development is premised on a proper balance among environmental protection, heritage conservation, economic development and provision for social needs.

The current-term Government has mapped out clear targets and work plans for improving air quality, waste management and energy conservation in three published blueprints. We are committed to achieving the targets in the blueprints through implementation of various measures and programmes in proactive partnership with various sectors.

For conserving our natural environment, we are developing a Biodiversity Strategy and Action Plan (BSAP) for Hong Kong under the United Nations Convention on Biological Diversity.

To combat climate change, we have introduced various initiatives to achieve higher energy efficiency, promote green building and encourage a less carbon intensive lifestyle in our community.

To make Hong Kong a better city for all, we will continue to enhance our infrastructure to provide a safe and quality living environment. At the same time, we will improve the greening, landscape and tree management regime by promoting a holistic approach to enrich biodiversity and enhance place ecology.

We wish to preserve the city's charm while respecting the need for development. We are implementing the recommendations of the Antiquities Advisory Board pursuant to the policy review on conservation of built heritage.

New Initiatives

We will:

Air Quality

- Review the Fifth Technical Memorandum with a view to further tightening the air pollutant emission caps on power companies from 2021 onwards in the light of the installation progress of the new gas-fired generation units in the coming years. (ENB)
- Prepare for tightening vehicular emissions standards to Euro VI for newly registered vehicles. (ENB)
- Enhance the charging network for electric vehicles to promote their wider use. (ENB)
- Embark on a review of the Air Quality Objectives. (ENB)

Energy

- Discuss with the two power companies the terms of the new Scheme of Control Agreements (SCAs) as the current ones will expire in 2018. We will take into account the views received during the Public Consultation on the Future Development of the Electricity Market in finalising the new SCAs. (ENB)
- Step up the monitoring of liquefied petroleum gas vehicle fuel systems and the inspection of facilities and workshops that are engaged in the maintenance and repair of such systems to ensure compliance with statutory gas safety requirements. (ENB)

Combating Climate Change and Energy Conservation

- Expand the scope of the Mandatory Energy Efficiency Labelling Scheme to cover more types of electrical appliances so as to help the public choose more energy-efficient electrical appliances for energy conservation. (ENB)
- Arrange for high-level discussions between the Chief Executive and the private sector to understand their preparations for climate-readiness and explore collaboration on combating climate change. (ENB)
- Set up an inter-departmental steering committee to be chaired by the Chief Secretary for Administration to steer and co-ordinate the climate actions of various departments. (ENB)
- Step up publicity and education efforts to encourage different sectors of the community to join together in combating climate change. (ENB)

Enhancing Waste Management

- Implement the findings of the review of the Construction Waste Disposal Charging Scheme with a view to achieving full-cost recovery, and continue to explore other necessary measures to enhance construction waste management in Hong Kong. (ENB)

- Step up efforts in mobilising the community to engage in the food wise culture under the Food Wise Hong Kong Campaign and implementing the Food Wise Eateries Scheme to prevent and reduce food waste at source. We will continue with the food waste recycling and reduction projects at housing estates and give more support to NGOs in collecting surplus food for donation to the needy, with a view to achieving the win-win objective of waste reduction and caring for the needy. (ENB)
- Commence a study for the planning of future waste management and transfer facilities. Based on the concepts of circular economy and smart city, the study will establish the requirements for additional waste facilities for bulk transfer and treatment of municipal solid waste and construction waste to meet Hong Kong's needs for sustainable development up to 2041. (ENB)
- Commence the Food Waste/Sewage Sludge Anaerobic Co-digestion Pilot Trial to confirm the feasibility of food waste/sewage sludge anaerobic co-digestion and determine the technical requirements for using such technology to convert food waste to energy. Results of the trial will provide the basis for our formulation of medium to long-term development roadmaps and action plans. (ENB)
- Introduce administrative regulatory measures to ensure that waste cooking oils produced by local licensed food premises are recycled through legitimate means, and consider making amendments to the Waste Disposal Ordinance to strengthen the regulation of waste cooking oils. (ENB/FHB)

Promoting Nature Conservation

- We are very concerned about the poaching of elephants in Africa. In this connection, we will initiate the legislative procedures as soon as possible to ban the import and export of elephant hunting trophies and actively explore other appropriate measures. Meanwhile, we will continue to strengthen enforcement and to take vigorous actions against the smuggling and illegal trade in ivory. (ENB)

Water Quality of Victoria Harbour

- With the commissioning of Stage 2A of the Harbour Area Treatment Scheme in 2015, and all sewage from both sides of Victoria Harbour being properly treated at the Stonecutters Island Sewage Treatment Works before disposal, we are planning to construct dry weather flow interceptors and rehabilitate trunk sewers in Kowloon and Tsuen Wan to reduce residual pollution discharge in Victoria Harbour as soon as possible to further improve water quality. (ENB)

Greening, Landscape and Tree Management

- Promote a holistic approach to landscape based on the enrichment of biodiversity and enhancement of place ecology. (DEVB)
- Enforce “Right Tree, Right Place” through developing the concepts of lifecycle planning and life expectancy for trees and a street tree selection guide. (DEVB)
- Devise a strategy to more effectively manage the risk of stonewall trees. (DEVB)

- Improve the current risk management strategy for urban tree assets to assess risk quantitatively and set priorities to identify and handle trees with the highest risk. (DEVB)
- Launch the Handbook on Tree Management for private property owners and incorporate the Handbook into the Code of Practice issued under the Building Management Ordinance (Cap. 344). (DEVB/HAB)

Safeguarding Drinking Water Quality

- Launch a raft of measures to restore public confidence in the quality of drinking water to address the grave public concern about the incidents of excessive lead content in drinking water in public housing estates and other premises. The measures include stepping up control of materials used in plumbing installation of inside service, enhancing the inspection and approval regime for inside service, extending the monitoring scope and requirements for water sampling, studying overseas practices on water safety, and considering legislative amendments to the current Waterworks Ordinance and its Regulations. (DEVB)

Water Management

- Strengthen enforcement action against leakage, collaborate with government departments in launching a pilot scheme for proper maintenance of water pipes, and promote leakage detection and rehabilitation and replacement of private water pipes, in order to minimise water loss caused by the lack of proper maintenance or prolonged repairs of inside service. (DEVB)

On-going Initiatives

We are:

Improving Air Quality

(a) Greening Road Transport

- Encouraging the transport sector and non-profit-making organisations to test out green and innovative transport technologies through the Pilot Green Transport Fund. (ENB)
- Providing funding support for franchised bus companies to retrofit Euro II and III franchised buses with selective catalytic reduction devices to reduce roadside air pollution. (ENB)
- Continuing to procure more electric vehicles, subject to the availability of suitable models on the market and the operational needs of bureaux and departments. (ENB)
- Continuing to implement an incentive-cum-regulatory scheme to phase out progressively by the end of 2019 some 82 000 highly polluting diesel commercial vehicles which only comply with pre-Euro or Euro I to III emission standards to improve roadside air quality. (ENB)
- Running hybrid buses and electric buses on a trial basis. (ENB)
- Designating low emission zones for franchised buses on busy roads in Causeway Bay, Central and Mong Kok, allowing only low-emission buses to run in these zones. (ENB)

(b) Regional Co-operation

- Implementing the Pearl River Delta Regional Air Quality Management Plan together with the Guangdong Provincial Government to continue to improve regional air quality. (ENB)
- Conducting a mid-term review with the Guangdong Provincial Government to assess the achievements made in emission reduction of air pollutants in the two places in 2015 and finalise the emission reduction targets for 2020. (ENB)
- Conducting a study with the governments of Guangdong and Macao on fine suspended particulates (PM_{2.5}) for the Pearl River Delta region to provide a robust scientific basis for mapping out the strategies for further improvement in regional air quality. (ENB)
- Co-operating with the Guangdong Provincial Government to foster exchanges and trainings in the two places in respect of regional air pollution forecasting technology. (ENB)
- Implementing the Cleaner Production Partnership Programme in collaboration with the Guangdong Provincial Government to continue to promote cleaner production technologies and practices among Hong Kong-owned factories in Guangdong and Hong Kong to enhance energy efficiency and reduce pollutant emissions, thereby improving quality of the regional environment. (ENB)

(c) Others

- Commencing operation of the general air quality monitoring station in Tseung Kwan O in the first quarter of 2016. (ENB)

Enhancing Waste Management

(a) Reducing Waste and Promoting Recycling

- Continuing with the preparation for implementation of quantity-based municipal solid waste charging and supporting extensive community involvement projects with funding from the Environment and Conservation Fund. (ENB)
- Continuing to promote the “clean recycling” campaign, encourage public participation in waste reduction at source and improve the recycling facilities to increase the recycling value and recovery rate of waste materials, thereby alleviating the pressure on landfills and facilitating the sustainable development of the recycling industry. (ENB)
- Promoting the development of the recycling industry through infrastructural support, green procurement, subsidies for technology research and development, support for manpower training of the industry and implementation of a registration system. (ENB)
- Promoting and implementing the measures and action plan under A Food Waste & Yard Waste Plan for Hong Kong to reduce, recycle and treat food waste and yard waste. (ENB)
- Actively encouraging the recycling sector to apply for the Recycling Fund, which facilitates the upgrading of the operational capabilities and efficiency of the recycling industry in support of the industry’s sustainable development, thereby promoting recovery and recycling of waste. (ENB)

(b) Implementing Producer Responsibility Schemes

- Continuing with the legislative work and development of treatment facilities for the mandatory Producer Responsibility Scheme on waste electrical and electronic equipment and enhancing the relevant publicity and education efforts. (ENB)
- Continuing with the legislative work for the mandatory Producer Responsibility Scheme on glass beverage containers and the efforts to promote voluntary recycling of glass containers at community level. (ENB)

(c) Developing Waste Treatment and Disposal Facilities

- Pursuing landfill extension. (ENB)
- Taking forward the phase 1 project of the Organic Waste Treatment Facilities, monitoring its progress, and working out the operational arrangements for the facilities to convert food waste collected into renewable energy and compost products. (ENB)
- Preparing for tendering of the phase 2 project of the Organic Waste Treatment Facilities. (ENB)
- Commencing the tendering exercise for the phase 1 project of the Integrated Waste Management Facilities for municipal solid waste treatment. (ENB)

Combating Climate Change and Energy Conservation

- Mapping out implementation strategies and detailed recommendations for promoting green building, as well as launching the dialogue platform proposed under the Energy Saving Plan for Hong Kong's Built Environment 2015~2025+ for discussion with built environment stakeholders on ways to expedite green building practices in the private sector. (ENB)
- Revising the Building Energy Codes issued under the Buildings Energy Efficiency Ordinance to enhance the energy performance standards for building services installations such as air-conditioning, lighting, electrical installations, lifts and escalators. (ENB)
- Completing energy-cum-carbon audits for 120 government buildings and public facilities, and continuing to encourage bureaux and departments to conduct carbon audits so as to identify room for carbon reduction. (ENB)
- Launching the Charter on External Lighting based on the recommendations of the Task Force on External Lighting to encourage owners or persons-in-charge of external lighting installations to switch off external lighting of decorative, promotional or advertising purposes at the preset time, and organising educational and publicity activities to enhance public awareness of issues associated with external lighting. (ENB)

- Continuing to achieve the target of reducing electricity consumption by 5% for government buildings in the financial years from 2015-16 to 2019-20 under comparable operating conditions (taking the 2013-14 financial year as the baseline). (ENB)

Improving Water Quality

- Continuing to monitor the performance of Stage 2A of the Harbour Area Treatment Scheme commissioned in 2015 and assess the improvement in the water quality of Victoria Harbour. (ENB)
- Conducting a consultancy study to explore various practicable options to effectively reduce near-shore pollution and enhance the water quality of the coastal waters with a view to improving the overall environment of both sides of Victoria Harbour. (ENB)

Total Water Management Strategy

- Engaging a consultant to conduct a review of the Total Water Management Strategy to ensure sustainable use of precious water resources and timely introduction of new initiatives to strengthen our resilience and preparedness against uncertainties and challenges. (DEVB)

Development of Desalination

- Continuing with the phased implementation of the design work for the desalination plant at Tseung Kwan O and its associated infrastructure. (DEVB)

Water Intelligent Network

- Continuing with the study and progressive establishment of a Water Intelligent Network with sensors installed in the water supply networks to continuously monitor their health condition. We are also continuing with the study of various intelligent network management systems and other technologies, including using data mining technique to predict the possible burst of water mains, to facilitate collection and analysis of data for early identification of defective water mains and follow-up actions. (DEVB)

Water Conservation and Reclamation

- Adopting a multi-pronged approach and more proactive strategy to step up the promotion of water conservation in Hong Kong. In respect of promotion, flow controllers have been distributed to nearly 140 000 participating households so far in the Let's Save 10L Water Campaign. On the education front, the Integrated Education Programme on Water Conservation for Water Conservation Campus was introduced to primary schools in the new school year in 2015. Furthermore, a Water Resources Education Centre at Tin Shui Wai is under design to replace the existing temporary centre. As regards high water consumption industries, we have developed water efficiency practice guidelines for the catering sector and encouraged the private sector to conduct water efficiency review. (DEVB)

- Continuing with the initiative of using reclaimed water for toilet flushing and other non-potable purposes in the north-eastern part of the New Territories (including Sheung Shui and Fanling). This includes taking forward the design of related infrastructure and commissioning a consultancy study on the financial and legal framework for the supply of reclaimed water. (DEVB)

Green Construction

- Implementing measures for low carbon construction, emission reduction and use of recycled materials in public works projects, including:
 - promoting the use of electric vehicles in works projects;
 - using biodiesel as fuel for construction machineries in construction sites;
 - adopting green site offices; and
 - continuing to conduct trials on the use of waste glass as fill materials in site formation, backfilling and reclamation. (DEVB)

Supporting Community Green Actions

- Enhancing community participation in environmental protection through district-based environmental education, promotion and publicity programmes, as well as collaboration with DCs in organising promotion activities on “Use Less, Waste Less” and “clean recycling” at district level. (ENB)

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- Providing long-term and sustained support for green actions initiated by the community through the investment returns generated from the Environment and Conservation Fund. (ENB)
 - Continuing with the development of Community Green Stations in phases in each of the 18 districts. (ENB)
 - Supporting the Council for Sustainable Development in conducting public engagement exercises on issues of public concern, and funding community education and publicity projects through the Sustainable Development Fund. (ENB)

Promoting Green Economy

- Actively applying green specifications in government procurement as well as cleansing and vehicle hiring service contracts. We also seek to widen the scope of green procurement in public works projects. (ENB)
- Supporting the local environmental industry in participating in environmental exhibitions, trade missions and related events to promote the industry and explore business opportunities in the Mainland and overseas markets. (ENB)
- Actively promoting green procurement. The Government has expanded the list from 103 items to 150 items with updated green specifications. The Government will encourage the public and the business sector to adopt green procurement practices, and will also ask professional bodies, industry groups and trade associations to appeal to their members to adopt green procurement practices as far as possible. (ENB)

Promoting Nature Conservation

- Implementing the Convention on Biological Diversity and the Cartagena Protocol on Biosafety. We are consulting the public on the BSAP being formulated. Subject to the outcome of the public consultation, we would finalise the BSAP as soon as practicable, with a view to implementing enhanced measures on nature conservation and supporting sustainable development in the coming years. (ENB)
- Implementing measures to better protect country park enclaves. (ENB)
- Taking forward the proposal to improve marine ecosystems and the statutory procedures to designate the Brothers Marine Park, and providing better protection for marine organisms. (ENB)

Greening, Landscape and Tree Management

- Delivering higher quality landscape planning and design in the upstream and more diligent vegetation management and maintenance in the downstream. (DEVB)
- Strengthening co-ordination amongst departments and communication with stakeholders and the public. (DEVB)

Heritage Conservation

- Implementing the recommendations of the Antiquities Advisory Board pursuant to the policy review on conservation of built heritage, including the establishment of a fund for built heritage conservation. (DEVB)

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- Working closely with the selected non-profit-making organisations to continue implementing the first four batches of projects under the Revitalising Historic Buildings Through Partnership Scheme. (DEVB)
 - Launching Batch V of the Revitalising Historic Buildings Through Partnership Scheme. (DEVB)
 - Taking forward the conservation and revitalisation of the Central Police Station Compound in partnership with the Hong Kong Jockey Club. (DEVB)

Safe and Quality Living Environment

- Continuing with the Landslip Prevention and Mitigation Programme to:
 - upgrade and landscape government man-made slopes;
 - mitigate the landslide risk of natural terrain with known hazards; and
 - conduct safety screening studies for private slopes. (DEVB)
- Conducting studies to:
 - assess the flood risk levels of rivers in rural areas; and
 - develop flood warning systems and mitigation measures for flood-prone rivers. (DEVB)

- Continuing with Phase 2 construction works of an underground stormwater storage tank in Happy Valley to further relieve the flood risks in the district and adjacent areas. (DEVB)
- Reviewing the Drainage Master Plans of Sha Tin, Tai Po, Sai Kung and North Hong Kong Island to assess the flood risks in these districts and formulate improvement measures. (DEVB)
- Continuing with the reconstruction and rehabilitation works of the Kai Tak River to alleviate the flood risks in the areas concerned. (DEVB)
- Continuing with the design of the improvement works for the Yuen Long Town Centre Nullah to enhance the quality of the local environment and the ecological value of the nullah. (DEVB)
- Undertaking a consultancy study for exploring the practicable options for applying the concept of revitalising water bodies to nullahs and river channels when carrying out large-scale drainage improvement works and drainage planning for new development areas. Apart from achieving efficient drainage, such objectives will promote greening, biodiversity, beautification and water friendliness; build sustainable drainage facilities; and provide a better living environment. (DEVB)
- Continuing the implementation of the Restored Landfill Revitalisation Funding Scheme for early conversion of the restored landfill sites for recreational, sports, environmental protection and other appropriate community uses. (ENB)

Conservation of Marine Living Resources

- Following up the drafting of legislation to set up a control scheme for the trading of toothfish in Hong Kong to meet the requirements of the Convention on the Conservation of Antarctic Marine Living Resources. (FHB)