



**Innovation and Technology Commission**

**Environmental Report 2010**



## **1. Introduction**

This is the eleventh Environmental Report published by the Innovation and Technology Commission, covering the Commission's environmental policy, targets and achievements in different environmental aspects in calendar year 2010.

The mission of the Innovation and Technology Commission is to spearhead Hong Kong's drive to become a world-class, knowledge-based economy. We strive to enhance Hong Kong's competitiveness and develop our city into an innovation and technology hub. We have been working on the following initiatives:

- Promoting and supporting applied research and development (R&D) activities which can contribute to innovation and technology upgrading in industry;
- Fostering university-industry collaboration;
- Promoting technological entrepreneurship in Hong Kong and providing essential support to technology-based entrepreneurial activities;
- Supporting the formulation and coordination of innovation and technology policies and sustain public awareness of innovation and technology;
- Developing world-class support infrastructure including the Science Park and industrial estates, the five R&D centres and the Hong Kong Productivity Council to facilitate technological upgrading and development of the industry and to promote innovation and technology;
- Promoting internationally accepted standards and conformity assessment services to underpin technological development and international trade; and
- Promoting the development of the testing and certification industry in Hong Kong.

## **2. Environmental Policy**

Innovation and technological development cut across different fields, of which environmental management is one. We aim at providing support to Hong Kong industries to develop and implement advanced technologies for environmental management.

This Commission is also committed to providing a green office environment at the workplace and to ensuring that our operation is conducted in an environmentally conscious and responsible manner. We also educate and train our staff to ensure that they are aware of our departmental environmental policy, initiatives and their responsibilities such that they can participate actively in protecting the environment.

## **3. Support Measures to the Industry on Environmental Matters**

Local industries and the society at large were more conscious about the environment than before. Industries recognised the need to adopt cleaner and more environmentally friendly technologies. The Commission continued to provide funding support to the development and adoption of clean environmental technologies and processes in Hong Kong. Funding was available for environmental technology-related projects under the Innovation and Technology Fund (the Fund).

The assessment panels for the respective programmes under the Fund would vet those environment-related applications. The panels also monitor the implementation these funded R&D projects.

In 2010, the Fund provided funding support to 16 environment-related R&D projects with a total commitment of about \$29 million. Examples of these projects are:

- Development and Investigation of High-energy Density Fuel Cell for Portable Electronic Devices
- Development of a Single, Integrated UV/Self-Generated Ozone Advanced Oxidation Reactor for Water Treatment
- Automated and Continuous Monitoring of Polycyclic Aromatic Hydrocarbon in Air Pollutants
- Development of Highly Efficient Semiconductor Nanoparticles as Photocatalysts for the Degradation of Organic Pollutants in Water under Visible Light
- Nanoporous Materials for Oil Spill Cleanup and Filtering

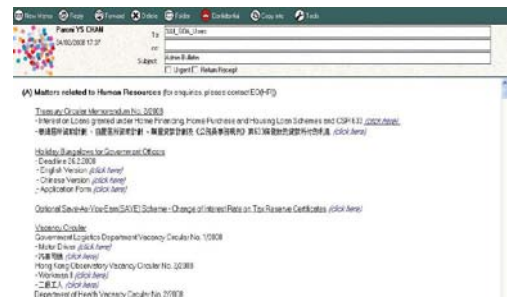
- Distributed Hollow-core Fiber Sensor for Green-house Gas and Hazardous Gas Detection
- High-Nutrient Compost Production from Food Waste
- Integrated Concentrating Photovoltaic Module (CPV module)

#### 4. Green Housekeeping Measures

In support of the Government's efforts to protect the environment, this Commission is committed to ensuring that our internal operations are conforming to environmental protection principles and practices. In 2010, we continued to adopt the following green practices:

##### *Paper Consumption*

- We continued the use of the electronic modes for internal and external communications, official correspondences and information circulation.
- We provided all staff with an individual e-mail account and access to computer terminals connected to the departmental network.
- We continued to use the electronic Admin Bulletin board to disseminate information including telephone directories, training activities, newsletters, circulars, etc.
- We sent festive greetings electronically.
- We put circulars, statistics, directories etc. commonly used on the shared drive.
- We issued press releases and distributed application forms for funding support to members of the public through our website.
- We continued to critically review the subscription of newspapers and periodicals and, where possible, replace them by e-version of magazines and periodicals.
- We provided divisional Green Executives with regular reports on paper consumption to facilitate monitoring at divisional level.
- We used recycled paper in place of white paper.



- We discouraged colleagues from using fax cover sheets.
- We avoided delivering unclassified documents in envelopes.
- We used photocopiers and network printers capable of producing double-sided printouts.
- We regularly reminded colleagues to keep the number of paper printouts to the minimum and to use both sides of paper.
- We placed boxes holding single-side used paper beside photocopiers and printers to encourage the use of the blank side of used paper.



### ***Energy consumption***

- We used energy saving fluorescent lamps in our offices.
- We reduced lighting to the minimum acceptable level.
- We installed automatic sensor in each cellular office to ensure that lights would automatically be switched off when the room was not in use.
- We kept reminding colleagues to switch off lights and electrical appliances when not in use.
- We affixed “Save Energy” stickers on sockets to remind colleagues to save energy.
- We designated a staff member to turn off all unnecessary lights and electrical appliances after normal office hours. All lights in store rooms, conference rooms and public areas were switched off when not in use.
- We enabled the energy saving feature of computers and office equipment.
- We installed timer switches to automatically switch off unnecessary equipment after office hours.



- We adopted Environment Bureau's initiative in setting room temperature at 25.5°C to reduce energy consumption.
- We fixed thermometers at various locations to cross check the temperature setting to avoid excessive cooling.
- We installed window blinds with better heat insulating capabilities to reduce direct sunlight during summer.
- We consolidated the computer servers via the latest virtualisation technology for better server utilisation rate and reduction of energy consumption.

### ***Water Conservation***

- We used self-closing water taps in washrooms to reduce water consumption.

### ***Waste Management***

- We participated in the Programme on Source Separation of Commercial and Industrial Waste.
- We collected 16.5 kg of plastic wastes and 7.68 kg of metal wastes in 2010.
- We continued to provide green bags in the office for the collection of waste paper for recycling. 7,274 kg of waste paper was collected in 2010.
- We continued the collection of unwanted Compact Disc (CDs) for recycling. 2,159 CDs were collected in 2010.
- We continued the collection of rechargeable batteries for recycling. 18 rechargeable batteries were collected in 2010.
- We collected used printer toner cartridges for recycling.
- We reused envelopes, loose minute file jackets and tags as far as practicable.
- We placed boxes holding used envelopes in common areas to facilitate re-use.
- We reused decorative accessories for festival decorations.



### ***Compliance with Clean Air Charter***

- We adhered to the commitments stated in the Clean Air Charter to help improve Hong Kong's air quality.
- Our departmental cars run on petrol instead of diesel fuel.
- Our drivers have been repeatedly reminded of and are observing the instruction of switching off vehicle engines while waiting.
- We were conscious of the need to reduce energy consumption and implemented energy-efficient measures in our offices.



### ***Indoor Air Quality***

- We participated in the Indoor Air Quality (IAQ) Certification Scheme launched by the Environment Bureau and the Environmental Protection Department. Our offices at Wu Chung House and Immigration Tower were certified complying with the "Good Class of the IAQ Objectives".
- We installed Nano Air Cleaner in the conference/meeting rooms to degrade pollutants and kill bacteria in the air.



### ***Green Procurement***

- We took into account environmental considerations when procuring goods and services.
- We procured environmental friendly products such as recycled paper and clutch pencils.

### ***Environmental Education***

- We organised environmental seminars to arouse staff consciousness in environmental protection.
- We issued e-mails to colleagues regularly to appeal for their support of our green initiatives.

- We reminded colleagues of our green measures regularly through an internal circular.

## **5. The Way Forward**

In 2011, the Commission shall continue to promote and implement green measures and housekeeping practices. To ensure that the green efforts will be maintained and further improved, we are committed to:

1. providing funding support to environment-related R&D projects;
2. promoting and encouraging the adoption of effective green measures to provide a green working environment;
3. encouraging and promoting staff participation through various channels, such as dissemination of green messages and organisation of environmental seminars;
4. implementing various energy-efficient measures;
5. adhering to the commitments stated in the Clean Air Charter;
6. conducting Indoor Air Quality Measurement in our offices with a view to pursuing a good air quality;
7. encouraging wider use of information technology to minimise paper and energy consumption;
8. adopting a green IT approach in planning future computer projects; and
9. equipping our staff with adequate computer facility to facilitate the efficient transaction of departmental business by electronic means.

## 6. Feedback

We welcome your valuable feedback on this Environmental Report. Please contact the Green Manager of the Commission by :

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This report is also available on the homepage of the Commission at <http://www.itc.gov.hk>.

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