

# **Environmental Report**

2003

**Education and Manpower Bureau** 



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## Foreword

We are committed to improving our environment performance and providing our services in an environmentally responsible manner.

We are responsible for formulating and reviewing education policy and overseeing the effective implementation of education programmes. In particular, we undertake to promote environmental education in schools, fully comply with environmental legislation, and initiate housekeeping measures to preserve common resources and nurture civic responsibility for the environment. To support Government's policies on environmental protection and sustainable development in Hong Kong, we will continue to pursue our environmental goals and policies and seek continual improvement in our environmental performance.

This report aims at outlining our policies and management measures with respect to environmental issues as well as our past performance and new targets for the coming year.



## Environmental Policy



#### **Environmental Goals**

The Education and Manpower Bureau is committed to instilling in students a life-long and forward-looking concern for the environment, and preparing them for making well-informed, justified and practical decisions and taking action leading to the creation of a sustainable environment in which they and the ensuing generations can live and work. In pursuance of these goals, we have adopted the following principles:

#### Communication & Training

We encourage staff participation in environmental protection activities and foster in them an environmentally friendly culture. We arrange appropriate training to keep staff abreast of the latest knowledge on environmental protection.

#### **Compliance**

In conducting our business, we fully comply with the environmental legislation.

#### **Environmental Education**

We incorporate appropriate elements of environmental education in school syllabuses at all levels, issue guidelines to help schools in the planning, implementation and evaluation of environmental education, conduct school inspections and visits to give advice on the implementation of



environmental education, provide resources to schools and training support to teachers, and organise school activities on environmental education in conjunction with other government departments and non-government organisations.

#### **Minimisation of Consumption**

We adopt responsible environmental housekeeping practices and review regularly and seek continual improvement in the efficient use of resources and energy.

#### **Management** Review

The Bureau Green Management Working Group monitors the progress and reviews the strategy for green management, aiming at seeking continual improvement.

## A chievements



#### Environmental Education

We adopt a cross-curricular approach in the promotion of environmental education. We also promote school-based and action-oriented activities to encourage pupils in protecting the environment.

To fulfil the goal of promoting environmental education, various initiatives have been undertaken in the past, which include-

- issue of "Guidelines on Environmental Education in Schools";
- setting up Environmental Resources Corners at Education Resources Centres;
- production of multimedia packages and education television programmes on environmental education;
- organisation of school events on environmental education together with various government departments and green groups;
- incorporation of appropriate environmental education elements in school syllabuses at all levels and updating curriculum guides and exemplars to assist schools to plan their environmental education programmes;
- organisation of a 15-hour Professional Enhancement Programme on Environmental Education for Primary Teachers; and
- production of a reference handbook on "Education for Sustainable Development for Primary Teachers".

#### Achievements in 2003

*Key Action Area*: We conduct school inspections and visits to give advice on the implementation of environmental education.

We visited primary and secondary schools which started operation in 2001/02 & 2002/03 school years and provided school-based support on promotion of environmental education to all existing schools.



*Key Action Area*: We provide resources to schools and training support to teachers.

We organised 30 in-service teacher education programmes.

- We maintained and updated a webpage on environmental education. (http://cd.emb.gov.hk/ee)
- We maintained and updated the web-based environmental education self-learning package for teachers: Environmental Education Site (<u>http://resources.emb.gov.hk/envir-ed</u>).



## *Key Action Area*: We organise school activities aiming at promoting environmental awareness.

We organised 109 residential field study courses in Sai Kung Field Studies Centre, Ho Koon Nature Education Cum Astronomical Centre and Caritas Chan Chun Ha Field Studies Centre.



We funded 400 school visits to the Mai Po Nature Reserve.

## Student Environmental Protection Ambassador Scheme (SEPAS) 2002/03

A total of 666 primary, secondary, International/English Schools Foundation schools participated in the Scheme and over 11 800 Student Environmental Protection Ambassadors were appointed, which represent a 5% increase in the number of student ambassadors in comparison with last year. special schools and



#### School Environmental Award Scheme 2002/03

- The Aldrich Bay Government Primary School, Belilios Public School and Sir Ellis Kadoorie Secondary School (Shatin) were granted the School Honours Awards.
- Students of the Belilios Public School, South Tuen Mun Government Secondary School and Clementi Government Secondary School were granted the ECC AEON JUSCO Environmental Award for Schools, and students of the Belilios Public School and South Tuen Mun Government Secondary School were granted the ECC MTR Environmental Award for Schools.
- Teachers of Aldrich Bay Government Primary School, Belilios Public School and Sir Ellis Kadoorie Secondary School (Shatin) were granted the Outstanding Environment Protection Teachers Awards.

#### Hong Kong Green School Award

The event was jointly organised by the Environmental Campaign Committee, the Manpower the Education and Bureau. Environmental Protection Department, and

co-organised by the Hong Kong Institute of Education and Hong Kong Productivity Council. About 180 primary and secondary schools participated in the award scheme.



#### Waste Separation and Recycling Scheme in Schools

We worked together with the Environmental Campaign Committee to organise the Scheme with an aim to promoting the concept of the "4Rs"

of reusing, reducing, recycling and replacing disposable products. About 1 200 primary and secondary schools

participated in the scheme. As at end of 2003, the schools have collected 476150 participating kilograms of waste paper, 14 082 kilograms of plastic bottles and 2 966 kilograms of aluminium cans.







\* Due to outbreak of SARS, there was no collection of waste between March and May 2003. The waste collected in that year was thus less than that in the previous year.

#### **Building Partnerships**

We work together with various government departments and green groups in the promotion of environmental protection. We actively participated in the following working groups and committees to provide advice on the organisation of school events and production of resource materials to schools to promote environmental protection-

- Clean Hong Kong : Publicity and Public Education Group
- Country and Marine Parks Board
- Environmental and Conservation Fund Committee
- Environmental Campaign Committee
  - Environmental Campaign Committee Education Working Group
  - Environmental Campaign Committee Environmental Educational Regional Committees (Hong Kong Island, Kowloon, New Territories East and New Territories West)
  - Environmental Education & Community Action Projects Vetting Committee (Environment and Conservation Fund)
  - Kindergarten Sub-working Group of the Environmental Campaign Committee
- **Hong Kong Environmental Education Group**
- Mai Po Management and Development Committee
- Wetland Advisory Committee
- World Wide Fund
  - Hoi Ha Wan Education Sub-committee
  - Hong Kong Education Committee



清潔養港

CLEAN HONG KONG

### School Design

We incorporate environmentally friendly concepts in the design of school buildings, including -

- reduction in construction wastage resulting from the increased use of precast and prefabricated building elements;
- increased application of reusable materials, in particular metal framework, site hoarding and recycled products;
- improvements to indoor air quality resulting from the use of fresh air pre-conditioners in classrooms;
- **use of environmentally friendly coolant air-conditioners;**
- use of energy saving devices such as sun shading on external elevations and solar-sensitive lighting;
- increased landscaping in school playgrounds and upper levels of school to promote greener environment for both the schools and their surrounding areas;
- provision of varied plant species and designated green areas in schools to stimulate students' interest in natural science and encourage students to develop horticultural skills;

introduction of photovoltaic cell arrays to a primary school in Ma Wan on pilot scheme. In addition to harnessing solar power, it is intended to use the installation as an educational tool to encourage awareness in students to the benefits of natural energy;

- use of shared facilities among schools in a school cluster which has enabled a greener, more spacious environment in those schools; and
- introduction of hygiene improvement measures to schools on pilot scheme, including toilet provision without main entrance doors, sensor-type taps to wash-basins, improved refuse stores and hand washing facilities in playgrounds.







For the implementation of School Improvement Programmes, we have achieved the following environmentally friendly design concepts -

- for 92% of new school improvement projects with air conditioning installation, the Overall Thermal Transmission Value (OTTV) calculations were not more than 23 W/m<sup>2</sup>; and for 30% of all school improvements projects, OTTV calculations were not more than 18 W/m<sup>2</sup> (please refer to Hong Kong Building Environmental Assessment Method (HKBEAM) classification statutory requirement of 30 W/m<sup>2</sup>);
- 40% of sanitary appliances in new buildings were installed with water-saving devices;



- use of occupancy sensor to control lighting and ventilation/air-conditioning in disabled toilets and some infrequently-used rooms (e.g. conference rooms, interview rooms, etc.);
- efficiency of driving motors for lift and escalator installations was not less than 85%;



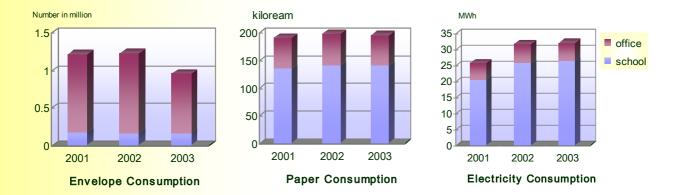
- use of the less toxic Ni-MH battery in Fire Services panels and emergency lighting; reducing the use of timber by alternative structural solutions such as metal hoarding and other structural means; and
- enforcement of prohibition in the use of diesel hammers for percussive piling works.

#### Bureau Green Management

Under the chairmanship of our Bureau Green Manager, Principal Assistant Secretary (Administration), a Bureau Green Management Working Group with representatives from all divisions has been set up to develop the Bureau's environmental objectives and oversee the implementation of a green housekeeping programme within the Bureau. The Working Group monitors the progress and reviews the overall strategy for green management in the Bureau. The Working Group has focused on minimising waste in the Bureau and implementing **green measures on a continuous basis** to economise the use of resources and reduce pollution.

#### **Consumption of Resources**

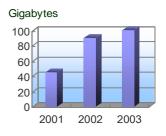
As continuous efforts were made in economising the use of paper, envelope and electricity, the consumption of envelope and paper in both offices and schools dropped in 2003. But a steady increase was recorded in the consumption of electricity due to longer office working hours, more school activities, etc. We are actively exploring more concrete measures to seek improvements in this area.



### Highlight of Green Measures in 2003

**Using electronic means for communication** 

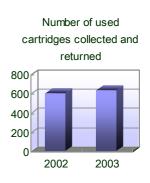
- Use of electronic mails becomes the most popular means of communication in the bureau. We had 2 250 Lotus Notes Mail user accounts with the mail database size of 425 gigabytes; there were around 7 000 Intranet accounts with a database size of 120 gigabytes.
- The Intranet platform has been widely used to disseminate bureau information including telephone directory, training activities, newsletters, etc. and process administrative matters e.g. booking of conference rooms with a view to promoting paperless operation in the daily work and reducing the use of paper in turn.







• We support procurement of green products for use in the Bureau. In arranging tenders, we include common environmentally friendly terms such as trade-in clause, recycling arrangement, etc. as far as practicable. In 2003, two bulk contracts with trade-in arrangement for the supply of ink and toner printer cartridges were arranged. Against the two contracts, a total of 628 used cartridges were returned to the contractors concerned for recycling.



- A total of 63.34 tons of compost produced by Environmental Protection Department have been consumed as a green product in the nurseries and gardens of more than 100 primary and secondary schools.
- The purchase of green products by this bureau through the Government Logistics Department amounted to around \$360 000.

Improvement in Indoor Air Quality

• We implemented ventilation improvement measures regularly, including indoor air quality check and cleaning of air outlets to ensure the indoor air quality meeting the standard promulgated by the Environmental Protection Department.



Conserving Energy

• We continued to carry out the project of saving electricity consumption and installed energy saving fluorescent tubes with electronic ballasts.



Collecting Waste

• Throughout the year, we collected a total of 126 628 kilograms of waste paper for recycling.



#### **Promotional** Activities

• We organised a series of activities to promote Green Management in the year 2003, including:

#### The Fourth Paper and Envelope Saving Competition

We organised the fourth Paper and Envelope Saving Competition to encourage colleagues working in government schools and

offices to save the use of papers and envelopes in their daily operation.



| Prize                                     | Winning Team                                       |   |
|---|--|---|
| Best Performance Award<br>in Paper Saving | School<br>Tsuen Wan Government<br>Secondary School | Office<br>Professional Development and<br>Training Division |
| Best Performance Award                    | Ma Tau Chung Government                            | Education Commission and                                    |
| in Envelope Saving                        | Primary School                                     | Planning Division   |
| Best Progress Award in                    | South Tuen Mun Government                          | Information Technology                                      |
| Paper Saving                              | Secondary School                                   | Management Division   |
| Best Progress Award in                    | Wong Tai Sin Government                            | Education Commission and                                    |
| Envelope Saving                           | Primary School                                     | Planning Division   |

#### **Promotional Messages on Newsletter and Bureau Intranet**

We disseminate green messages on the bureau newsletter -"EMB Pulse" and EMB Intranet's pop-up window to promote green management.



Green Article on Newsletter



Green Message on Intranet

#### **Green Christmas**

#### Donation of Clothing and Small Electrical Appliances

We collected and donated 18 packs of clothing and small electrical appliances to the Salvation Army during Christmas.



#### Electronic Christmas Cards

We designed and sent e-cards during Christmas and Chinese New Year to our working partners, same as what we did in the last few years.



## Way Forward

We will continue to help schools develop a green culture in which students will be empowered with the necessary knowledge, skills and attitude to become environmentally friendly citizens. To support schools to implement environmental education, we will continue to provide a broad range of services including school visits, teacher education programmes, territory-wide green activities, teaching guidelines and learning resources. Our latest effort is to help schools to make use of students' life experiences to promote values conducive to environmental protection and conservation, such as values of commitment to society and well beings of human kind, interdependence of living things and the concept of sustainable development. Within the Bureau, we will strive to reduce electricity consumption as far as possible having regard to actual operational requirements.



#### **Environmental Education**

Our targets for promotion of environmental education in the school year 2003/04 are:

| Key Action Area |   | Targets for 2003/04 School Year   |  |  |
|-----------------|---|---|--|--|
| •               | We provide advice to<br>schools on the<br>implementation of<br>environmental<br>education by means<br>of conducting school<br>inspections and visits. | • To provide school-based support on promotion of environmental education to schools on a need basis. |  |  |

|   | Key Action Area  | Targets for 2003/04 School Year   |
|---|--|---|
| • | We provide resources<br>to schools and<br>training support to<br>teachers. | • To organise 6 in-service teacher education programmes.  |
|   |  | • To maintain and update the webpage on environmental education.  |
|   |  | • To maintain and update the web-based environmental education self-learning package for teachers.  |
| • | We organise school activities aiming at                                    | • To fund 400 school visits to the Mai Po Nature Reserve.   |
|   | promoting<br>environmental<br>awareness.                                   | • To organise activities in collaboration with various government departments and non-government organisations to promote environmental protection. |

#### Bureau Green Management

In conducting our business, we will continue to adopt practicable environmental housekeeping practices to economise use of resources and minimise waste. In the coming year, we will continue to -

- promote environmentally friendly housekeeping practices;
- promote the use of electronic means in communication within the Bureau; and
- organise activities and training to promote staff's awareness and participation in green management.

## Contact Us

We welcome your valuable feedback on the Environmental Report 2003, which would be most useful for improving our report in the coming year. Please complete this form and send it back to Senior Executive Officer (Administration Support) 2, Education and Manpower Bureau, 10/F Wu Chung House, 213 Queen's Road East, Wan Chai, Hong Kong or fax it to 2893 0858. You may also send any comments by email to embinfo@emb.gov.hk. Thank you.

#### Feedback Form

| 1.  | Do you find the Report informative? Yes No                       |  |  |  |  |
|-----|--|--|--|--|--|
| 2.  | Do you find the content of the Report easy to Yes No understand? |  |  |  |  |
| 3.  | Which topics would you like the Report to cover?                 |  |  |  |  |
|     |  |  |  |  |  |
| 4.  | What improvement would you recommend?                            |  |  |  |  |
| 5.  | What is your overall view of the Report?                         |  |  |  |  |
|     | Excellent Good Adequate Poor                                     |  |  |  |  |
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