

Environmental Report 2007



Education Bureau

Environmental Report 2007

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FOREWORD

Maintaining an environmentally friendly surrounding is crucial to the development of our future generations. As our standing policy, we are committed to conserving our environment through various means and delivering our services in an environmentally responsible manner. To take this forward, 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 as well as environmentally responsible attitude among our young generation for the environment. In supporting Government's policies on environmental protection and sustainable development in Hong Kong, we will keep on pursuing our environmental goals and striving for continual improvement in our environmental performance.

The objective of this report is to outline our policies and management measures with respect to environmental issues, our past performance in 2007 and our direction for the coming year. A separate chapter on our effort made in support of the Clean Air Charter has also been incorporated in the report.



CONTROLLING OFFICER'S PROFILE OF KEY RESPONSIBILITIES

We, the Education Bureau, are responsible for formulating and reviewing education policy, and overseeing the effective implementation of education programmes. Permanent Secretary for Education is responsible for the Policy Area 16: Education.

As the vision of our Bureau, we provide quality school education for our students, to develop their potential to the full and to prepare them for the challenges in life. One of our missions is to deliver professional services and ensure effective use of resources.

The Bureau had an establishment of 5789 permanent posts as at 31 December 2007. Apart from 72 Government primary and secondary schools, our offices are located in 21 venues throughout Hong Kong.



ENVIRONMENTAL POLICY

Our environmental policy is to promote environmental education in schools, to enhance our staff's environmental awareness by encouraging them to participate in environmental protection activities, to maintain a management system to improve the environmental quality of our activities, to fully commit to implementing the Clean Air Charter, to adopt responsible environmental housekeeping practice and to comply with relevant legislation and codes of practice.

We devote our green efforts in two main areas: to promote environmental education in schools as well as implement in-house green measures in offices and schools.



NEW REQUIREMENTS UNDER CLEAN AIR CHARTER

The Chief Executive kicked off the Action Blue Sky, a massive publicity campaign, in July 2006 to raise the community's awareness of improving the air quality in Hong Kong. In tandem with a public appeal for energy conservation, he also directed that the Hong Kong Special Administrative Region Government should take the lead in reducing energy consumption.



To show our strong commitment to environmental protection and concern about the well-being of our future generations, the Chief Executive, on behalf of the Hong Kong Special Administrative Region Government, signed the Clean Air Charter in November 2006. Accordingly, all government departments and bureaus are required to follow the principles and spirit of the Charter when designing and implementing measures having regard to the specific nature and need of their operation and activities.



(a) INSTITUTIONAL CHANGE: BUREAU GREEN MANAGEMENT

To put in place an effective management framework, Principal Assistant Secretary (Administration) has been appointed Green Manager of the Bureau to oversee the environmental protection issues. Under her chairmanship, a cross-divisional Bureau Green Management Working Group with representatives from all divisions has been set up since 1999 to develop the Bureau's environmental objectives and oversee the implementation of green housekeeping programmes.



Apart from serving as the focal point for directing and addressing energy and environmental management issues and to strengthen green effort in the Bureau,

the Working Group also initiates and monitors the progress of green measures, and reviews the overall strategy for green management in the Bureau.

To respond to the Clean Air Charter, we have further strengthened the function of the Green Management Working Group in 2007 with particular emphasis on energy conservation and air quality improvement.

A two-tiered Energy Manager scheme has been introduced to promote and monitor green measures in our Bureau:

(i) Green Managers at Divisional Level

14 Energy Managers have been nominated at Divisional level to oversee the implementation of energy-saving and green measures.

(ii) Assistant Energy Managers and Green Executives at Sectional Level

Environmental audit and inspection teams with 43 Assistant Energy Managers and 38 Green Executives have been set up at Sectional level to perform energy conservation duties and implement green measures, such as conducting regular checks, tendering advice to staff concerned and keeping in view the energy consumption situation closely. They take on the role of Energy and Emission Management Teams to co-ordinate measures to reduce energy and paper consumption.

Further, electricity consumption of all office venues have been critically reviewed and closely monitored at the Green Management Working Group meetings conducted on a bi-monthly basis.

(b) FOLLOW-UP ACTIONS TO THE CLEAN AIR CHARTER

Energy Audit



We work closely with Electrical and Mechanical Services Department (EMSD) to identify more energy saving opportunities. EMSD completed an energy audit in our Headquarters in Wu Chung House, our largest office venue, in 2007. Another energy audit in the Kowloon Tong

Education Services Centre was also completed in early 2008.

Reduction of Air Pollution

(1) Use of Fuel efficient types of Vehicles

Vehicular emissions are the major local source of air pollution and reducing emissions from vehicles is an effective way to improve air quality. Most of our vehicles are environment-friendly petrol saloon cars with lower emissions and more fuel-efficient engines.



With issue of “Environment-friendly Private Car Certificate”, our vehicles emit about 50% less hydrocarbons and nitrogen oxides and consume about 40% less fuel than the conventional petrol Euro IV private cars. Owing to their higher fuel efficiency, our saloon cars also emit about 40% less carbon dioxide, the

major contributor to global warming. Our new saloon cars are equipped with a “hybrid system”, which combines a gasoline engine and electric motor power to improve fuel economy and minimize emission of polluting particles. We have also been using unleaded gasoline in our vehicle fleet since 1991.



(2) Promotion of Green Driving

We have been following the “Environmental Friendly” Guidelines issued by the Government Logistics Department and promoting eco-driving practice widely. In particular, our drivers observe the running-in speed as recommended for that particular type of vehicle, take care not to labour the vehicle, avoid high engine revolutions in low gear and perform frequent checks for overheating or any other defects developing in order to maintain the vehicles at their best environmental friendly condition as well as with optimal fuel efficiency all the time. Moreover, to reduce idling emissions and achieve fuel saving, our drivers are always reminded to switch off engines while waiting. Also, they would choose the most efficient traveling route in order to avoid sticking in traffic congestions and minimize fuel consumption and emissions.

(3) Economical Pool Car Resources

Further, we have been practicing car pooling and task combination, i.e. to achieve multiple objectives in one journey instead of several separate trips.



Whenever circumstances permit, “car pool” orders from different users would be arranged to adjust transport demand and, the use of vehicles could be reduced.

Issue of Circulars To Schools

To help alleviate problem of global warming, we issued circulars to remind all schools to maintain air conditioning temperature at 25.5 degrees with a view to reducing the emission of carbon dioxide in Hong Kong. We also required all schools through circulars to formulate a school-based environmental policy and implement effective measures for energy saving so as to help improve air quality.



KEY ENVIRONMENTAL PERFORMANCE IN 2007

(a) ENVIRONMENTAL EDUCATION

Our mission is to enhance students' environmental awareness through education, and to enlist their participation in conserving the environment. To take this forward, we adopt a cross-curricular approach in the promotion of environmental education and promote school-based and action-oriented activities.

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

- issue of "Guidelines on Environmental Education in Schools";
- 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 in planning environmental education programmes;
- production of a reference handbook on "Education for Sustainable Development for Primary Teachers"; and
- support the 'Greening for the Chest' campaign organized by the Community Chest of Hong Kong.



INTERACTION WITH SCHOOLS

School inspections and visits

We conducted 34 school inspections and visits in 2007 giving advice on the implementation of environmental education.



- We provided school-based support on promotion of environmental education on a need basis and gave advice on various environmental issues including improving air quality and energy conservation. Schools were also encouraged to formulate a green policy and implement measures on energy saving.

Provision of Resources to Schools

- We provided resources to schools and training support to teachers.
- A seminar and a field trip on Climate Change with participation of 82 teachers from kindergartens, primary and secondary schools were organised. Energy saving was one of the major topics covered.
- A web-based environmental education learning package titled “Education for Sustainable Development in Schools in Hong Kong” was further enhanced in 2007. Resources and school exemplars on energy saving, air pollution and climate change are available in the website for teachers’ reference.
- About 50 sets of bilingual teaching resources on clean air and energy conservation were developed. These resources were in the form of news rewrite, photos, comics, statistics and stories, and uploaded onto the Moral and Civic Education Resource Net for teachers’ use.
- 400 school visits to Mai Po Nature Reserve were funded.



School Activity to Promote Environmental Awareness



- We organised school activities to promote environmental awareness, some in collaboration with various government departments and non-government organisations.

- In 2007, we organised 4 Professional Development Programmes for primary and secondary schools teachers on “Quality Life-wide Learning Activity Workshop Series” together with Kadoorie Farm and Botanic Garden, HKWWF Mai Po Nature Reserve, Hong Kong Wetland Park and Hong Kong Ocean Park Academy. A total of 8 events were organised, 4 for primary and 4 for secondary school teachers.



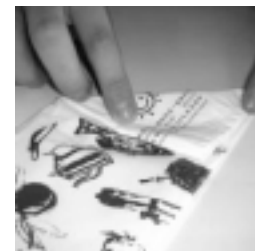
- Student Environmental Protection Ambassador Scheme (SEPAS) 2006/07
 - Student Environmental Protection Ambassador Scheme (SEPAS) was organised in collaboration with Environmental Protection Department and Environmental Campaign Committee to promote environmental protection in schools. The major themes were energy saving and conservation, with focus on clean air.
 - A total of 890 primary and secondary schools participated in the Scheme and some 18,300 Student Environmental Protection Ambassadors (SEPAAs) were appointed.
 - All SEPAAs were also appointed as the Blue Sky Ambassadors to assist teachers in organising environmental education activities related to air quality improvement.



6th Hong Kong Green School Award

Secondary School Category

Green School-Merit	Homantin Government Secondary School
Green School	Belilios Public School
	Tang Shiu Kin Victoria Government Secondary School
Green School-Appreciation Certificate	Sir Ellis Kadoorie Secondary School (West Kowloon)



Primary School Category

Green School	Tai Po Government Primary School
Green School-Appreciation Certificate	Fuk Wing Street Government Primary School
	Ma Tau Chung Government Primary School (Hung Hom Bay)

Power Saving Action for Schools

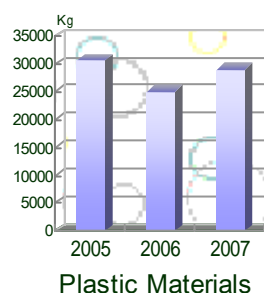
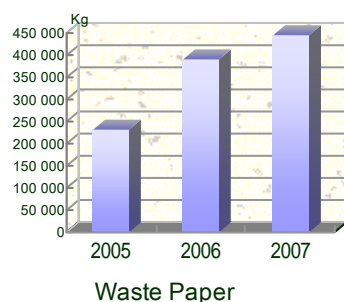
Secondary School Category

Merit	Tuen Mun Government Secondary School
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Waste Separation and Recycling Scheme in Schools



- We worked together with the Environmental Campaign Committee to organise the Scheme to promote the concept of "4Rs", i.e. reusing, reducing, recycling and replacing disposable products. As at end of 2007, the participating schools collected 445,779 kilograms of waste paper and 29,144 kilograms of plastic material.



- A Life-wide Learning Network Experience-Sharing Seminar related to environmental education was organised for primary school teachers.

BUILDING PARTNERSHIPS

We also collaborated with various government departments and relevant green groups to promote environmental protection. We participated in the following working groups and committees in 2007 to provide advice on the organisation of school activities and production of resource materials to schools -

- Clean Hong Kong : Publicity and Public Education Group
 - Community Involvement Committee on Greening
 - Country and Marine Parks Board
- 
- The logo for Clean Hong Kong features a stylized grey door with a white handle and a white arrow pointing to the right. To the right of the door, the Chinese characters '清潔香港' are written above the English text 'CLEAN HONG KONG'.
- Environmental and Conservation Fund Committee
 - Environmental Education & Community Action Projects Vetting Committee (Environment and Conservation Fund)
 - Wetland Advisory Committee
 - Environmental Campaign Committee
 - Environmental Campaign Committee Education Working Group
 - Hong Kong Environmental Education Group
 - World Wide Fund
 - Hong Kong Education Committee
- 
- The WWF logo consists of a black silhouette of a panda's head and shoulders, facing forward. Below the panda, the letters 'WWF' are printed in a bold, black, sans-serif font.



In response to the Clean Air Charter, we encouraged the above Working Groups and organisations to cover air quality improvement and energy saving in their work plans, such as projects, competitions and resource materials for schools.



(b) IN-HOUSE HOUSEKEEPING MEASURES

DESIGN AND CONSTRUCTION WORKS FOR NEW SCHOOLS

Energy conservation and environmental friendliness continued to be the core elements in the planning and design of new schools with the following environmentally friendly features -

- reduction in noise and air pollution during construction through implementation of mitigation measures;
- installation of photovoltaic system and grey water recycling system where feasible;
- reduction in construction wastage by using more precast and prefabricated building elements;
- increased application of re-usable materials, in particular metal framework, site hoarding and recycled products;
- improvements to indoor air quality by installing fresh air pre-conditioners in classrooms and using low volatility organic compound-emitting building materials;
- the use of environmentally friendly refrigerant for air-conditioners;
- the use of energy saving devices such as sun shading on external elevations, occupancy sensors, photo-sensor controlled lighting, T5 fluorescent lamps, electronic ballasts and variable refrigerant volume air-conditioning system;
- the use of water-saving devices such as dual-flush toilet system and sensor-taps for wash basins;
- increased landscaping in school playgrounds and upper levels and roof of school including vertical greening for a greener environment in schools and campuses;



- provision of varied plant species and designated green areas in schools to foster students' interest in natural science and enable students to develop horticultural skills;
- the use of shared facilities among schools in a school cluster which has enabled a greener, more spacious environment in these schools; and
- introduction of hygiene improvement measures to schools, including toilet provision without main entrance doors and hand-washing facilities in playgrounds.



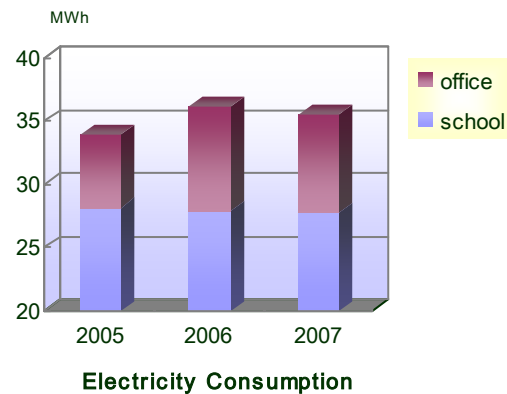
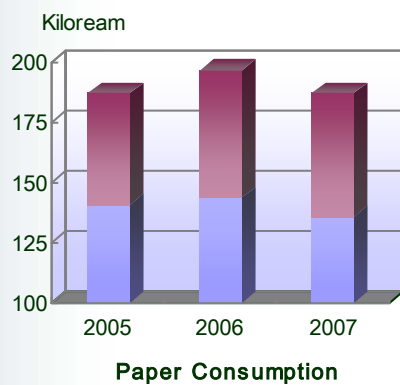
Regarding works under the School Improvement Programmes, we have implemented the following environmentally friendly design measures with green elements –



- water-saving devices were installed in 63% of sanitary appliances in new buildings;
- occupancy sensor were used 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 85% or higher which is better than the acceptable industrial level of not smaller than 60%;
- less toxic Ni-MH battery was used in Fire Services panels and emergency lighting when battery capacity required was less than 15 Ah. Alternative structural solutions such as metal hoarding and other structural means were used to reduce the use of timber; and
- the use of diesel hammers were not allowed as specified in all piling contracts.

CONSUMPTION OF RESOURCES

We are making continuous efforts in economising the use of paper and reducing electricity consumption. Both our paper and electricity consumption reflected a reduction in 2007, by about 4.8% and 1.7% respectively. We shall continue to explore other effective measures to achieve further saving in electricity and paper consumption in 2008.



Conserving Energy

We continue to adopt energy-efficient measures and sustain our efforts in reducing energy consumption.



- We are widely installing energy saving fluorescent tubes with electronic ballasts and light bulbs.
- We have been strictly following Government policy to maintain the ambient office temperature at 25.5 °C.

- In 2007, we attended experience sharing workshops of The Second Hong Kong Energy Efficiency Award, workshops on Clean Air Charter-Controlling Officer's environmental report, briefing sessions for green managers on monitoring of electricity consumption, and workshops on monitoring government electricity consumption. Electricity consumption reports were compiled on a quarterly basis, and internal energy audits conducted periodically.



HIGHLIGHTS OF OTHERS GREEN MEASURES IN 2007

We have all along adhered to the 4Rs, “Reduce, Re-use, Re-cycle and Replace disposable products” principles and focused on minimising waste and implementing various green measures on an on-going basis.

(1) Minimizing and Reducing Wastes

Using Electronic Means of Communication



With a view to promoting paperless operation in our daily work and reducing the use of paper, use of electronic mails becomes the most popular means of communication in the Bureau. We had 2,780 Lotus Notes Mail user accounts with the mail database size of 920 gigabytes. There were around 4,670 internet accounts with a mail database size of 66 gigabytes.

Most EDB staff are provided with Intranet accounts. The Intranet platform has been widely used to disseminate Bureau information including telephone directory, training activities, newsletters, etc. and process administrative and personnel matters e.g. booking of conference rooms and processing of leave applications. We encourage staff to issue documents through electronic means to save paper.



(2) Reuse and Waste Recycling

As an integral part of our green strategy, we had put in place the following recycling programmes.

Green Purchasing

- In procurement of products, we took into account environmental factors such as recyclability and energy efficiency as far as applicable. We also purchased green products like re-cycled ink and toner cartridges.



- We supported procurement of green products for use in the Bureau. In arranging tenders, we included common environmentally friendly terms such as trade-in clauses, recycling arrangements, etc. as far as practicable. Trade-in arrangements for the supply of ink and toner printer cartridges were arranged. In this connection, a total of 1,654 used cartridges were returned to the suppliers concerned for recycling or public auction in 2007, representing about 26% increase as compared with 2006.



Further, we collected a total of 2,761 pieces of computer waste for recycling either by contractors under the disposal contracts or through public auction, 7% increase as compared with 2006.

- Tenderers were required to include use of recycled plastic bags and approved cleansing chemical and materials as the service schedule when inviting tenders for new cleansing contracts for our offices and schools.

Collecting Waste

- We provided green boxes in offices and schools for collection of paper wastes for recycling.
- We collected a total of 138,083 kilograms of waste paper for recycling throughout the year.



Use of Recycled Paper

- Following the Environmental Protection Department's recommendation of wider use of recycled paper, we used 5,558 reams of recycled papers in our Bureau in 2007.
- We continued with our efforts in reducing paper consumption and measures such as printing on both sides of paper and reusing envelopes.



Improvement in Indoor Air Quality

- Having participated in the EMSD's Indoor Air Quality Certification Scheme, we implemented ventilation improvement measures bi-yearly, including indoor air quality check and cleaning of air outlets to ensure the indoor air quality meets the standard promulgated by the Environmental Protection Department.

Promotional Green Activities

- We organised a series of activities to promote green management in our Bureau in 2007, including:



(1) The Eighth Paper Saving Competition

We organised the eighth Paper Saving Competition to encourage colleagues working in government schools and the offices to save paper in their daily operation.

Prize

Best Performance Award in Paper Saving

Best Progress Award in Paper Saving

Winning Teams

Curriculum Development Institute

Kwun Tong Government Primary School

School-based Support Services Office

Ho Man Tin Government Secondary School

(2) Green Christmas



- Donation of Clothing and Small Electrical Appliances
 - We collected and donated 12 packs of clothing and small electrical appliances to the Salvation Army during Christmas 2007.



● Electronic Christmas Cards

- As one of our paper-reducing measures, we designed and sent e-cards during Christmas and Chinese New Year to our working partners.



(3) Promotional Messages on Newsletter and Bureau Intranet

To invite direct participation of staff in protecting the environment, and appeal for their support and contribution in this aspect, we disseminated green messages and notices on the bureau newsletter “EDB Pulse” and EDB Intranet’s pop-up window to promote green management. We also disseminate green management useful tips through intranet and internal publications.

綠色聖誕
「舊物回收顯愛心」

日期：2007年12月10日(星期一)至12月17日(星期一)

收集地點：胡志大廈10樓1019室行政支援小組

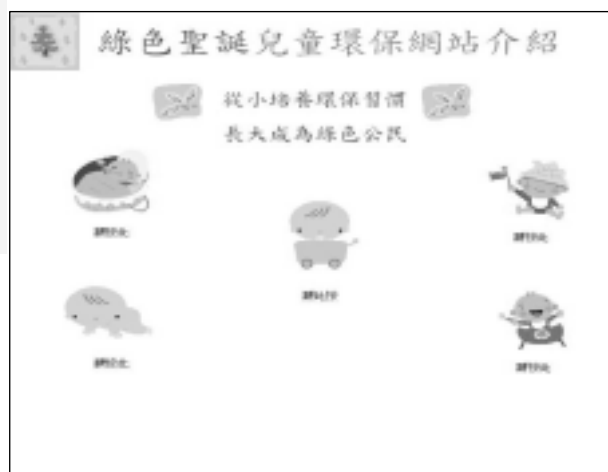
收集物品：
① 小電器
② 衣物玩具 備註：歡迎用時鐘可回收金銀的玩具
③ 所有便攜式充電電池(包括一般及電器/電子產品使用的充電電池)

查詢電話：2892 5776



綠色聖誕兒童環保網站介紹

從小培養環保習慣
長大成為綠色公民



WAY FORWARD

We fully recognize the importance of environmental protection and green management. The Bureau will continue to devote efforts and resources to maintaining a high level of green management practice and setting a good example to the community.

In terms of education, we will continue to encourage schools to develop a green culture, and to equip students with knowledge, skills and attitude to become



environmentally friendly citizens. To support schools in 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.



Within our Bureau, we will strive to reduce electricity consumption having regard to actual operational requirements. With completion of energy audits and review of enhanced green management measures, we would be in a better

position to work out more concrete energy saving targets in the future.



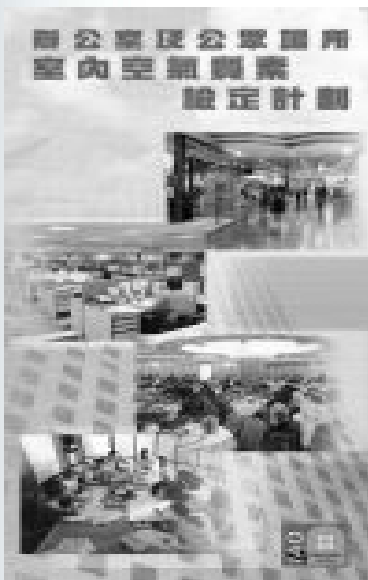
TARGETS FOR 2008

Our targets for promotion of environmental education in the 2007/08 school year were as follows:

<i>Key Action Area</i>	<i>Targets for 2007/08 School Year</i>
<ul style="list-style-type: none">■ We conduct school inspections and visits to give advice on environmental education■ We organise school activities to promote environmental protection 	<ul style="list-style-type: none">■ To advise schools on environmental education during seed project visits and school-based experience sharing sessions on life-wide learning activities.■ To fund 400 school visits to the Mai Po Nature Reserve.■ To organise activities in collaboration with various government departments and non-government organisations to promote green living.
<ul style="list-style-type: none">■ We provide advice on organisation of school activities and production of resource materials to schools to promote environmental protection. 	<ul style="list-style-type: none">■ To organise quality life-wide learning workshops to teachers with environmental protection as a main theme through joint ventures with the following organisations -<ul style="list-style-type: none">(i) Hong Kong Ocean Park Academy(ii) HKWWF Mai Po Nature Reserve(iii) HK Wetland Park(iv) Kadoorie Farm and Botanic Garden

In conducting our business, we will continue to economise use of resources and minimise waste. In the coming year, we will continue to –

- initiate and promote environmentally friendly housekeeping practices;
- conduct indoor air quality check and devise more effective measures to strive to improve air quality;
- conduct energy audits to help identify room for further energy conservation;
- 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 value very much your feedback on the Environmental Report 2007, which would be most useful for improving our report in the coming year. If you have any comments/suggestions, please complete this form and send it back to Senior Executive Officer (Administration Support) 2, Education 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 edbinfo@edb.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 understand? Yes No
3. Which other 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

Name : _____
Telephone : _____
Address : _____