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Forward



The creation and maintenance of a sustainable built environment is crucial for the future generations

I am delighted to present our eighth Environmental Report covering the period from 1 January 2006 to 31 December 2006.

This Report is not only a measurement of our performance in achieving the targets relating to environmental commitments, but also a snapshot of our continual commitment in contributing towards a sustainable built environment.

Over the years, we spare no efforts in promoting building safety as well as setting standards for a healthy living environment. Our efforts have been well received and recognized.

We would not be complacent about our achievements. We will continue to support the building up of Hong Kong's competitive edge in the international arena through our professionalism and dedication. We aim to contribute towards a cleaner and better place for all to live and work.

While excellence achieving undoubtedly difficult task. a sustaining success can be even more Concerted difficult. effort everyone in Hong Kong is indispensable. We endeavour to work hand in hand with the people of Hong Kong to strive for a sustainable and quality built environment for the benefit of the future generations.

CHEUNG Hau-wai, JP Director of Buildings



Chapter 1 Buildings Department and the Environment

Our Vision To make the built environment safe and healthy for our

community.

Our Mission To set and enforce safety, health and environmental standards

for private buildings.

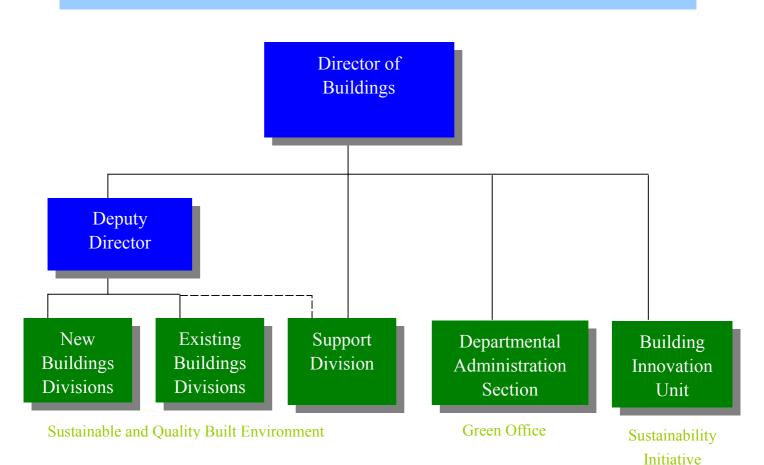
Our Culture To go the extra mile in serving our customers and the

community in general.

The Buildings Department takes a proactive role in supporting the Government's objective of achieving sustainable development in Hong Kong

The departmental Vision and Mission are our motto. We strive to pursue and promote a sustainable built environment.

ORGANIZATION CHART





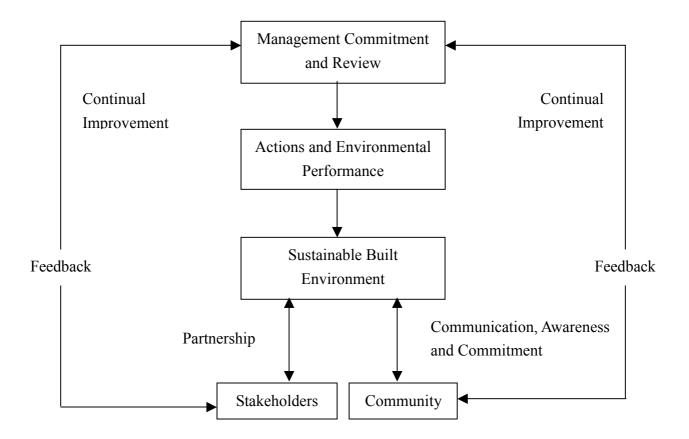
MANAGEMENT COMMITMENT

Through administering and enforcing the Buildings Ordinance (BO), we have the responsibility to promote building safety, to set and enforce building standards as well as to improve the quality of private building developments. We are committed to:

- (a) taking a leading role in and advocating a joint effort with the building industry and other government departments or agencies to promote a sustainable built environment in Hong Kong;
- (b) implementing good practices of green management in our workplace; and
- (c) raising the awareness of both the public and our staff of the importance of a sustainable environment in our community.

We reckon that sustainable development is a co-operative concept. It encompasses not only environmental protection and conservation, but also holistic thinking and integrated approaches in balancing social, economic, environmental and resource needs both for the present and the future generations. We will continue to review our policies and strategies in the light of the advancement in technology and ever-changing environment and seek continual improvement in our performance.

The most important ingredients of sustainable development are all levels of commitment and the continual improvement





A. PROMOTING A SUSTAINABLE BUILT ENVIRONMENT

It is our strategy to set out our statutory requirements as well as administrative guidelines to support the development of a sustainable built environment and to create a state conducive to its continual growth and advancement.

1. Modernizing the Legislation



As an ongoing initiative of enhancing sustainable development, a comprehensive review of the BO and its subsidiary legislation has commenced since 2000. We have completed the review of a number of regulations in the past years and the review continues in 2006 in respect of other regulations.

- (i) facilitate environmentally friendly and responsive building design; and
- (ii) modernize building standards to encourage more efficient and economic use of building materials, thus resulting in more rational and economical design.

Targets

Review of the Buildings Ordinance

To continue the review of the BO and incorporation of performance-based requirements addition to the prescriptive standards. where appropriate, into the Building (Planning) Regulations and the Building (Construction) Regulations.

Performance in 2006

✓ The review on fire safety standards in buildings and related codes of practice for the preparation of a draft performance-based Fire Code was ongoing. The consultant had commenced drafting of the performance-based Fire Code.



✓ The amendment to the Building (Construction) Regulations related to loads on building, street, building works and street works was underway. A Code of Practice for Dead and Imposed Loads for Buildings was being drafted and would be issued as a technical supplement to the amendment.



To introduce a statutory and pragmatic control system for ensuring safety and quality of carrying out minor works in buildings.

Performance in 2006

Extensive consultation with stakeholders on introducing the proposed minor works control system was conducted.



Review of Sanitary Fitments, Plumbing and Drainage Provisions for Buildings

To continue the review of the current plumbing and drainage standards for private buildings by taking cognizance of the built environment, environmental and material conservation, as well as environmental science and technologies.

- ✓ The consultant finalized the study report on the drainage regulations and proposed a number of recommendations, which included re-structuring and revamping the regulations, deleting obsolete provisions, introducing performance-based regulations and proposing a new set of requirements for the provisions of sanitary fitments.
- ✓ In response to comments and suggestions received through consultation with the stakeholders, the consultant finalized and submitted a Supplementary Report in December 2006.



✓ We planned to finalize the proposed legislative amendments to the drainage regulations and a new code of practice upon endorsement of the Supplementary Report by the Steering Committee.



Performance in 2006

Review of the Provision of Barrier Free Access for Buildings

To amend the relevant building regulations and the extant design manual with a view to:-

- (i) updating the design requirements for the provision of facilities for persons with a disability; and
- (ii) addressing the specific needs of the elderly to provide a safe and elderly-friendly living environment.

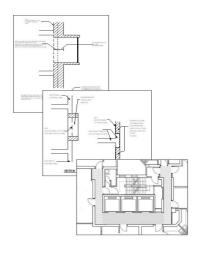


✓ A 6-month public consultation on the revised Design Manual, Barrier Free Access, and two public consultation forums were conducted.



✓ Taking into account the feedback, the consultant prepared a Supplementary Report for the Steering Committee's consideration.

2. Promoting Environmentally Friendly Buildings



Since 2000, our Building Innovation Unit has been tasked to conduct research and make recommendations on ways to promote the construction of environmentally friendly buildings. To promote green and innovative buildings and better living space, we have since 2001 introduced, jointly with the Planning Department (PlanD) and Lands Department (LandsD), incentives for developers to provide green features such as balconies, wider common corridors and lift lobbies, communal podium / sky gardens, non-structural prefabricated external walls etc. in new building developments.

- (i) minimize the energy consumption, construction and demolition wastes;
- (ii) **maximize** the use of natural renewable resources and recycled building materials; and
- (iii) **provide** impetus and find ways to entice the industry and building owners to upgrade the environmental performance of buildings.

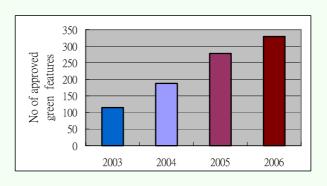


Performance in 2006

Wider adoption of green features in building developments

To promote environmentally friendly construction in private building development.

✓ Since the issue of the Joint Practice Note (JPN) No. 1 in 2001 and JPN No. 2 in 2002 till end of 2006, a total of 329 building projects with one or more green features were approved by the Buildings Department (BD).



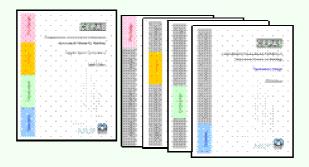
To monitor the implementation of JPN 1 and 2 which were jointly issued by BD, PlanD and LandsD in 2001 and 2002 aiming to promote green and innovative buildings.

✓ The interdepartmental working group continued with the review on the effectiveness of the incentives for the provision of green features promulgated in JPN 1 and 2, and formulation of the way forward in promoting the construction of green and environmentally friendly buildings.

Benchmarking green buildings

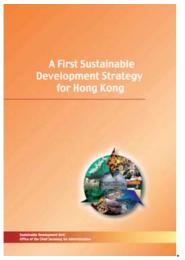
To devise a green building labeling scheme namely, Comprehensive Environmental Performance Assessment Scheme (CEPAS) for both new and existing buildings as a means of engaging market-driven force to promote environmentally friendly buildings.

- ✓ A Working Group on Building Environmental Performance Assessment Schemes set up under the Provisional Construction Industry Co-ordination Board had decided to adopt the Hong Kong Building Environmental Assessment Method (HK-Beam) as the integrated model for local application subject to taking on the desirable features of CEPAS.
- ✓ We planned to release CEPAS into the public domain for voluntary adoption by industry organizations in improving existing assessment schemes and in launching new schemes.





3. Enhancing Sustainable Building Developments



In 2005, the Sustainable Development Unit under the Office of the Chief Secretary for Administration issued the document "A First Sustainable Development Strategy for Hong Kong (2005)". BD has been tasked to take forward one of the key initiatives promulgated in the document - to consider further enhancing building design guidelines to upgrade the urban living environment.

Draw up building design guidelines to upgrade the urban living space such that Hong Kong will be an attractive and enjoyable place in which to live and work.

Target

To commission a consultancy study to review and make recommendations to promote sustainable building design features and to draw up the corresponding sustainable building design guidelines.

(The consultancy study would include the generic sustainable urban living space issues that the new building design should address including, among others, mitigating urban heat island, promoting better urban air ventilation and urban greenery.)

To issue revised/new practice notes to promulgate building design guidelines in order to improve the living standard.

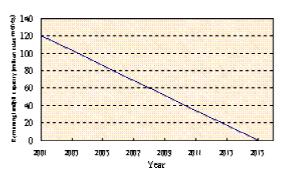
Performance in 2006

- ✓ The consultancy study was commissioned in April 2006.
- ✓ Review on local and overseas practices as well as formulation of recommendations on sustainable building design guidelines were in progress.

- ✓ The revised practice notes (PNAP 201, 207 and 248 as well
 as PNRC 47) on Access Facilities for Telecommunications
 and Broadcasting Services, Provision of Better Lift Service
 and Aluminium Windows were issued in 2006.
- ✓ A new practice note (PNAP 300) on Design and Construction of Run-in and Run-out on Public Road was issued in 2006.



4. Reducing Construction and Demolition Wastes



With the alarm of filling up the landfills in Hong Kong in the near future, we have continued to review the current building and construction practices and encourage the stakeholders to reduce construction and demolition wastes.

- (i) **minimize** the amount of solid wastes from construction and demolition activities; and
- (ii) **reduce** the depletion rate of land resources.

Targets

To issue a practice note on quality control of precast concrete construction in order to encourage the industry to widely adopt this environmentally

Performance in 2006

The new practice notes (PNAP 299 and PNRC 63) were issued in August 2006.

5. Improving Environmental Hygiene



friendly construction method.

The outbreak of the SARS in 2003 has heightened the public concerns on the possible dire consequences of building neglect and the perennial environmental hygiene problems. In response, BD, as a core member of Team Clean, has conducted a territory-wide survey to all private buildings on defective drains and participated in improving environmental conditions of some identified blackspots. BD has continued to enhance environmental hygiene through large-scale operations.

Establish and **promote** a sustainable cross-sectoral approach to improve environmental hygiene in Hong Kong.



Targets Performance in 2006

Enhancing environmental hygiene

To commission a consultancy study to review and to rationalize the building design requirements for improving the environmental hygiene. ✓ Preparatory work was in progress.

Rectifying drainage defects

To work in collaboration with the Home Affairs Department and other relevant government departments to improve environmental conditions of identified blackspots under the Hygiene Blackspots Clearance programme.

✓ Eradication of target backlanes and hygiene blackspots involving 230 buildings under Phase IV Team Clean Operation was commenced in the second quarter of 2006.

To take follow up actions on buildings with defects identified during the verification checks on the voluntary inspection reports submitted by Owners' Corporations or Management Companies.

✓ We closely followed up those buildings with drainage repair orders issued to ensure compliance with orders and monitored those buildings with drainage defects identified for which advisory letters had been issued.

Handling water seepage problems

To partner with Food and Environmental Hygiene Department to extend the mode of operation of the Joint Office to the entire territory under a three-year programme to provide a one-stop service to members of the public in handling complaints on water seepage.

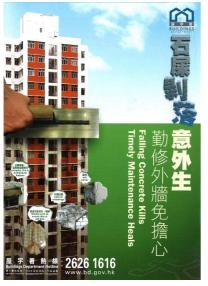
✓ With the experience gained from the pilot scheme in Shamshuipo district since December 2004, the Joint Office extended its operation to all other districts since July 2006.

To issue guidelines on simple methods to detect the source of water seepage found on ceilings. ✓ A pamphlet entitled "Do it yourself – Water Seepage Test" was published in July 2006 for distribution to the public.





6. Promoting Timely Maintenance and Building Repair



As a result of the prevailing weak building care culture, there are increasing number of old and dilapidated buildings in Hong Kong showing signs of urban decay. Proper building management and timely maintenance of existing buildings help prolong the overall life span of buildings, optimize the economic value of scarce land and improve the living environment, all of which contribute to a sustainable living environment. We have put in place a holistic strategy, including large scale operations in tackling unauthorized building works (UBW) and rectifying building dilapidation. A mandatory building inspection scheme is proposed to be a long-term measure in addressing the building neglect problems.

- (i) improve building safety and in turn the public safety;
- (ii) help prolong the useful life of buildings and improve the quality of the living environment; and
- (iii) resolve the long-standing building neglect problem and improve our cityscape.

Targets

Performance in 2006

Tackling UBW and rectifying building dilapidation

To take vigorous enforcement action to tackle UBW through, among others, launching Large Scale Operations such as the Blitz UBW Clearance Operation (BUC Operation) for clearance of UBW on the external walls and in common areas of buildings as well as rectification of building dilapidation including drainage defects at one go.

✓ 31,209 orders/warning notices related to UBW were issued and 48,479 UBW were removed or irregularities rectified.

- To initiate the Clearance Operation of UBW at Pedestrian Streets to take enforcement action against unauthorized large glass panels, advertisement signboards and TV displays on the external walls.
- ✓ Commencing in March/April 2006, this operation was initiated on 118 target buildings in areas with heavy pedestrian flow and commercial activities.
- ✓ A pamphlet entitled "Glass Panel External Walls Large Signboards and TV Displays in Pedestrianisation Areas" was published in 2006 outlining, among others, details of the Operation and the owners' and business operators' responsibility.





Providing a comprehensive network of assistance to building owners to carry out proper building management and maintenance

To advise owners and owners' corporation of the comprehensive management and maintenance works required, we continue to operate the Coordinated Maintenance of Buildings Scheme (CMBS) in collaboration with six other government departments.



✓ The modified CMBS launched in February 2005 with management and technical support by the Hong Kong Housing Society (HKHS) was successful in motivating the building owners to take up initiative to maintain their buildings. The formation of new Owners' Corporation and appointment of authorized persons to manage and co-ordinate the building maintenance and improvement works was enhanced. The second batch of the modified CMBS commenced in April 2006 to assist owners of about 150 target buildings in carrying out the required repair/improvement works.

Providing the necessary financial assistance to building owners

To provide loans to private building owners for the carrying out of repair works or removal of UBW, we continue to operate the Building Safety Loan Scheme.

✓ A total amount of \$ 75.06M was committed.



Public consultation on building management and maintenance

To work out the implementation details of the mandatory building inspection scheme (MBIS) through public building consultation the on management and maintenance matters. The Housing, Planning and Lands Bureau has conducted the first stage consultation in early 2004 and the second stage consultation in October 2005.

✓ Taking into account the feedback received, the preparatory works for implementation of MBIS and measures to enhance window safety were in progress.



B. IMPLEMENTATION OF GREEN OFFICE MANAGEMENT

It is our continuous target to ensure effective implementation of in-house green measures in all our offices, and to increase the awareness of our colleagues on green office management.

1. Minimizing Energy Consumption



We have continued to implement a series of energy efficient measures in our offices to minimize the energy consumption. In response to the Clean Air Charter signed by the Chief Executive in November 2006, we have reviewed our green management practices and committed to sustaining our efforts in adopting energy efficient measures being one of the commitments stated in the Charter.

Use energy efficiently with a view to reducing the consumption of scarce natural resources and the air pollution.

Targets

To achieve greater savings on energy

Performance in 2006

We :-

- set the air-conditioning temperature at 25.5°C and monitored the room temperature regularly;
- continued to install high output energy saving lighting fixtures (T5 fluorescent tubes) in our workplaces;
- adopted green procurement and procured office equipment with "Energy Label" or energy saving functions which consumed less energy and environmentally friendly items such as alkaline batteries;
- affixed "Energy Saving" stickers on power switches to remind colleagues to turn off lights, air-conditioners and office equipment when they were not in use;
- promoted setting of computers, photocopiers, fax machines, etc. to hibernation mode or standby mode during the office hours;
- encouraged colleagues to dress causal and smart in summers and lightly in winters to minimize the use of air-conditioning;



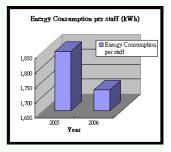






- appointed energy wardens in all divisions to remind colleagues of the energy saving measures, e.g. arranged the last-man-out to check and turn off all air-conditioning, lighting, office equipment, etc;
- adopted other energy saving practices such as encouraging staff to use staircase for inter-floor traffic, controlling the use of personal electrical appliances in office and circulating guidelines on energy saving and green tip; and
- controlled our total energy consumption. The total consumption in 2006 was 2,976,997 kWh, which was about the same as last year though there was an increase of 6% in our staff number from 1,633 in 2005 to 1,731 in 2006. It was encouraging that the energy consumption per staff has recorded a reduction of 9% from 1849 kWh in 2005 to 1720 kWh in 2006.





2. Moving towards a Paperless Office



We are moving towards a paperless office by introducing computerized management systems and encouraging communication via electronic means.

Save paper, save trees and save our environment.

Targets

To make use of Information Technology (IT) for information dissemination and to introduce more greenhouse measures through increasing usage of LAN as a communication platform.

Performance in 2006

✓ Information was disseminated through electronic notice board, BD Local Area Network (LAN), BD Website and emails.

Electronic Notice Board 1

BD's LAN

BD Website & Emails

- Notices
- Circulars
- Newsletters
- Office Instructions
- Office
- Manuals
- Minutes of Meetings
- Practice Notes for AP/RSE/ RGE/RC



To implement the **Accessibility Program** to provide all staff with email address.

Performance in 2006

✓ The system was completed in 2006. All staff had been provided with email addresses for communication. This had further improved the distribution of information in a paperless environment.

To implement **Training Administration System (TAS)**

✓ The system was completed in early 2006. It facilitated the launching of training courses for enrolment and streamlined the training application and endorsement process. It also allowed data exchange of training records between BD and the Civil Service Bureau, thus reducing paper consumption in the information compilation and submission process.



To enhance the electronic leave system (e-Leave)

To implement a computerized Building Records e-Search (BReS) (formerly known as Building Records Management System) for the electronic imaging, storage and retrieval of building records of all existing

buildings kept by BD.



- ✓ Enhancement to cater for the 5-day week had been completed and e-Leave continued to provide speedy leave application and processing services through a paperless environment for all our staff.
- ✓ BReS was rolled-out in June 2006 for use by our staff and other departments as well as members of the public at the Building Information Centre.
- ✓ This system won the eGovernment "Most Popular ePublic Service" Bronze Award in the HK Information & Communications Technology Awards 2006 organized by the Hong Kong Institution of Engineers and supported by Office of the Government Chief Information Officer. The BReS was also exhibited in the Government Pavilion in the The International Telecommunication Union Telecom World 2006 in December 2006, which was a flagship event in the IT industry.





3. Saving Resources



We have continued to exercise the principles of "Reduce, Reuse and Recycle" for efficient resources utilization.

Treasure our resources by reduction, reuse and recycling of wastes.

Performance in 2006 **Targets** To reduce the use of We Paper Consumption (ream) paper adopted double-side printing and 30000 photocopying; minimized the production of 25000 hardcopies of documents; and 20000 sent e-Greeting Cards instead of 15000 paper-made Greeting Cards. 10000 5000 Our paper consumption was 28,354 reams in 2006 and it marked an increase of 8% when comparing to the figure of 2005 due to the growth of manpower in the Department. Recycled paper in lieu of virgin paper was increasingly in use in the Department to reduce waste produced in order to protect the environment. To promote reuse of Staff were encouraged to resources use blank side of used paper for drafting, filing and printing; reuse envelopes for internal circulation; and

use ball pens which could be

Scrap paper with a blank side was

high

equipment to facilitate reuse of paper.

By reusing envelopes, our envelope

736,900 nos. in 2005 to 277,050 nos.

in 2006, which was about 62% less

consumption was reduced

than the figure in 2005.

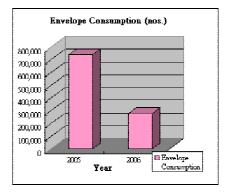
paper

refilled.

placed near



□ Recycled Paper □ Woodisee Paper

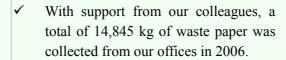


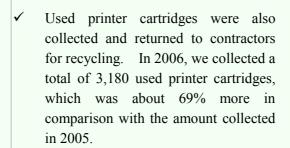


To collect recyclable waste materials for recycling

Performance in 2006

Recycling boxes were placed in our workplaces for collection of used paper, envelopes etc for recycling.







C. EDUCATION AND TRAINING

It is our belief that the success of moving towards sustainability depends upon the degree of all levels of commitment across the community.

1. Educating the Public on Sustainability

On top of engaging the community in the process of formulating strategies in relation to sustainable development, we instill the concept of timely maintenance of existing buildings and green buildings into the public through our publicity programmes.

Targets

To sustain public education and publicity campaign on the need for timely safety inspection and maintenance of buildings.

Performance in 2006

✓ A joint Building
Maintenance and
Management Carnival in
collaboration with HKHS
and Urban Renewal
Authority scheduled for 7
January 2007 was under
preparation.





2. Training our Colleagues

Our training and development programme puts great emphasis on equipping our colleagues to play the appropriate and facilitating role in sustainability development by offering a variety of training programmes on the subject.

Targets	Performance in 2006
To provide more than 500 training man-days on green building issues and building repairs in 2006.	✓ 30 local seminars / courses / conferences on environmental issues and building repairs were arranged to provide 470 training man-days. 6 site visits to environmentally friendly and innovative buildings or material laboratory were organized to provide 90 training man-days. 2 overseas duty visits for attending international conferences on sustainable development and innovative building technologies in Urumqui, China and Orlando, USA were made.
	✓ The Environmental Protection Department was invited to deliver a green talk on "Green Consumerism and "Eco-labeling" to our colleagues in 2006. Useful green tips were offered in the talk and our colleagues' awareness on environmental protection was aroused.



Chapter 3 Way Forward

We are facing a great challenge in the coming era – a need to change our practices for the benefits of economic prosperity whilst meeting our growing social and environmental aspirations. We are dedicated to move towards the vision for Hong Kong as formulated by the Council for Sustainable Development:-

"A healthy, economically vibrant and just society that respects the natural environment and values its cultural heritage".

We continue to incorporate the principles of sustainability as a cornerstone of upgrading the built and living environment with a view to balancing economic development, social harmony and environmental protection. We have the following highlights in 2007:-

- Developing a performance-based regulatory system to facilitate modern and innovative building design;
- Taking forward the government's initiatives in developing building design guidelines that support sustainable urban living space; and
- Promoting timely maintenance and building repair to address the building neglect problems.

Sustainable development cannot be achieved by setting out standards only, but requires a radical change in the values and attitudes of the community towards the challenges of the future. For industry stakeholders, we will continue to work in partnership with them to foster sustainable buildings and living environment. In our workplace, we will continue to review our green management practices, minimize wastes and adverse environmental impact arising from our daily office operation and keep our colleagues abreast of the latest development in sustainability.

The success of policies implementation hinges on public participation. We will continue to engage the public in formulating strategies, to sustain education and publicity campaign on the importance of sustainable living environment and effective upkeep of buildings. We will also continue our close partnership with the Home Affairs Department, Hong Kong Housing Society and Urban Renewal Authority in facilitating building owners to undertake proper building management and maintenance.

We sincerely invite you to give us your views and suggestions, these are important to our seeking continual improvement. Let us work in partnership towards Hong Kong's sustainable development.





Thank you for reading our report

This report is also available for viewing at our website

http://www.bd.gov.hk/english/documents/index_env.html (English version) or http://www.bd.gov.hk/chineseT/documents/index_env.html (Chinese version)

For any suggestions, please contact us via one of the following means:

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Email: enquiry@bd.gov.hk

Website: http://www.bd.gov.hk/

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