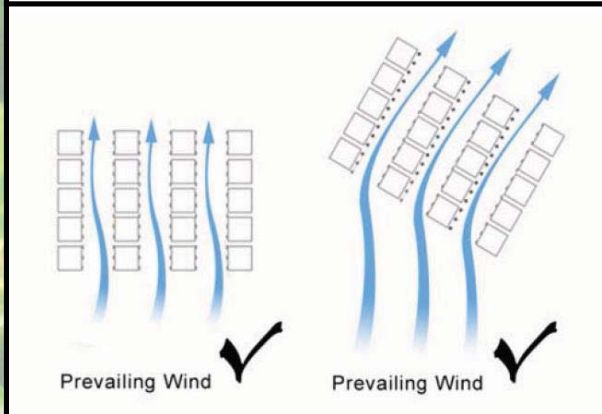
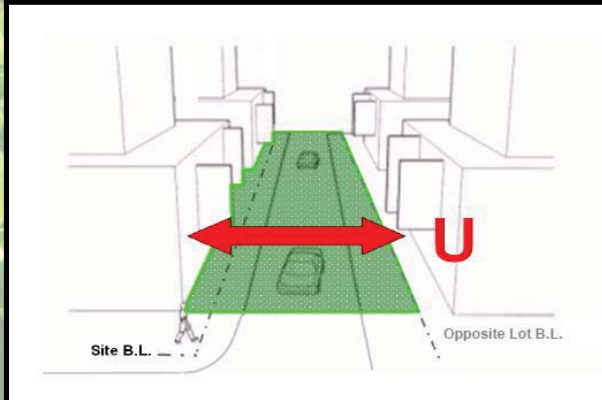
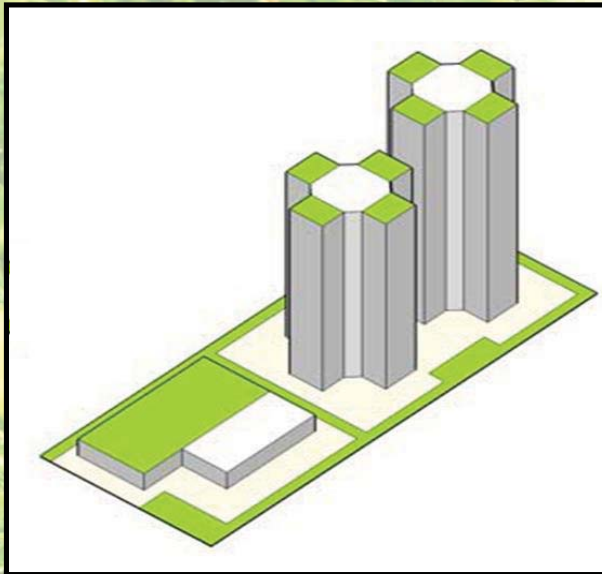


# BUILDINGS DEPARTMENT ENVIRONMENTAL REPORT 2011



# **Table of Contents**

**Page**

## **FOREWORD**

**1**

## **Chapter 1 BUILDINGS DEPARTMENT AND THE ENVIRONMENT**

### 1.1 ORGANIZATION CHART

**3**

### 1.2 MANAGEMENT COMMITMENT

**4**

## **Chapter 2 ENVIRONMENTAL PERFORMANCE**

### 2.1 PROMOTING A SUSTAINABLE BUILT ENVIRONMENT

#### 2.1.1. Modernizing Building Design Standards

**5**

#### 2.1.2. Promoting Green and Sustainable Building Developments

**7**

#### 2.1.3. Facilitating Conservation of the Built Heritage

**10**

#### 2.1.4. Reducing Construction and Demolition Wastes

**11**

#### 2.1.5. Improving Environmental Hygiene

**11**

#### 2.1.6. Promoting Timely Maintenance and Building Repair

**12**

### 2.2 IMPLEMENTATION OF GREEN OFFICE MANAGEMENT

#### 2.2.1. Accomplishing the Clean Air Charter

**17**

#### 2.2.2. Promoting Smoke-free Government

**20**

#### 2.2.3. Moving towards a Paperless Office

**21**

#### 2.2.4. Saving Resources

**23**

#### 2.2.5. Procuring Green Products

**25**

### 2.3 EDUCATION AND TRAINING

#### 2.3.1. Educating the Public on Sustainability

**26**

#### 2.3.2. Training our Staff

**27**

## **WAY FORWARD**

**28**



# FOREWORD

*Joining hands with building owners and stakeholders in the property and construction sector, we strive to create quality homes and greener living environment for the enjoyment of all and our future generations.*



I am pleased to present our thirteenth Environmental Report covering our environmental performance in 2011.

The tragic building collapse incident at Ma Tau Wai Road in early 2010 and the fatal fire incident at Fa Yuen Street in Mong Kok in December 2011, sent alarm bells ringing and heightened public concern over building safety. The general problem of lack of timely and proper building maintenance in our older building stock was given urgent attention – we have amended the legislation to enhance our control regime to tackle the defective/dangerous buildings and sub-divided flats.

“Prevention is better than cure” was promoted through public education and publicity to generate greater awareness and understanding amongst building owners of their responsibility for building safety and maintenance. The introduction of the Mandatory Building Inspection Scheme (MBIS) and Mandatory Window Inspection Scheme (MWIS) under the Buildings Ordinance in mid 2011 further empowered the Building Authority (BA) to tackle the problem of building neglect. Under the MBIS and MWIS, the BA may issue statutory notices to building owners requiring them to undertake prescribed inspections and, as necessary, prescribed repairs of their buildings and windows every 10 years and 5 years for buildings aged 30 years and 10 years or above respectively.

Since April 2011, we have adopted a multi-pronged approach to further enhance building safety in Hong Kong, including Large Scale Operation on sub-divided flats. The BD will also inspect 200 target buildings each year from April 2012 to tackle irregularities of building works associated with sub-divided flats.

The full implementation of the Minor Works Control System (MWCS) since 31 December 2010 provides members of the public a simplified procedure to carry out minor works speedily, safely and lawfully in private buildings thereby help improve building safety in Hong Kong.

In response to Chief Executive’s 2010-11 Policy Address and public concern over the quality and sustainability of the built environment, including issues regarding building bulk and height, air ventilation, greening and energy efficiency in buildings, we announced in April 2011, a package of measures to foster a quality and sustainable built environment, covering three major elements: sustainable building design guidelines on building separation, building set back and site coverage of greenery; gross floor area concession; and energy efficiency of buildings.

Through our continuous and persistent efforts, we make headway into building safety in Hong Kong from four major areas, Legislation; Enforcement; Support and assistance to owners; and Public Education and Publicity. Joining hands with building owners and stakeholders in the property and construction sector, we strive to create quality homes and greener living environment for the enjoyment of all and our future generations.

**AU Choi-kai, JP**  
Director of Buildings

# CHAPTER 1

## BUILDINGS DEPARTMENT AND THE ENVIRONMENT

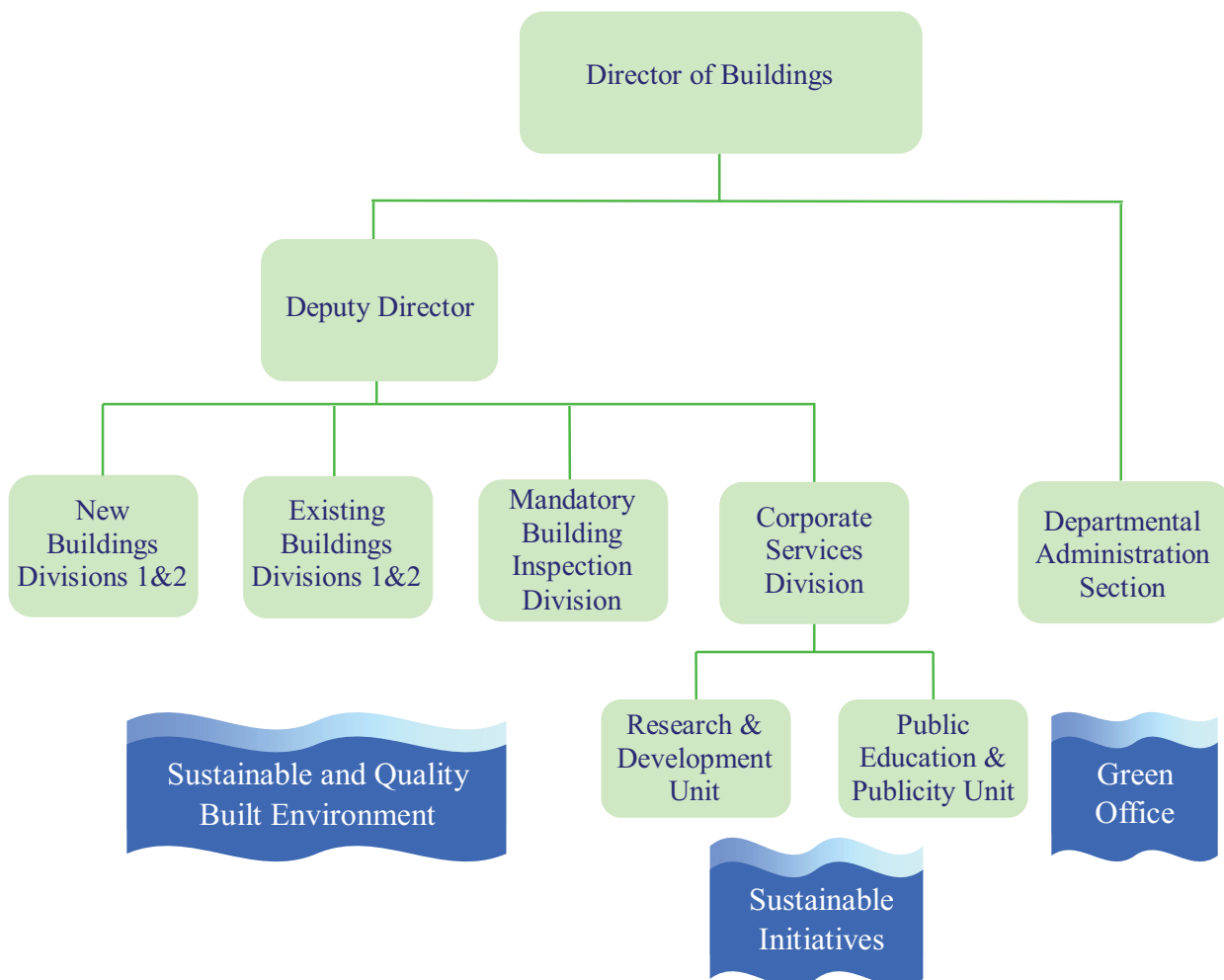
**Our Vision:** To make the built environment safe and healthy for our community.

**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.

Under the ambit of the Buildings Ordinance (BO) and its subsidiary legislation, we are devoted to providing services to the public: facilitating and promoting the construction and maintenance of quality buildings in the private sector. We also take a proactive role in supporting the Government's objective of creating a better and sustainable living environment in Hong Kong.

### 1.1. Organization Chart



## 1.2. Management Commitment

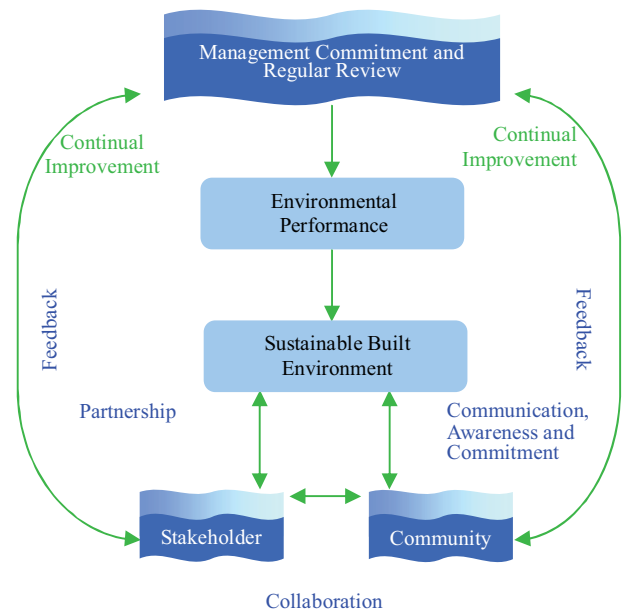
Our commitment and approach to environmental management are established by our determination towards a sustainable environment.

We continue to review our policies and strategies to identify any potential impacts to the sustainable built environment and seek continual improvement in our environmental performance.

Through administering and enforcing the BO, we aim to ensure building safety; we set and enforce building standards, and aim to improve the quality of private building developments. We are committed to:

- (a) taking an active role in partnership with the building industry and other government departments or agencies to promote a sustainable built environment in Hong Kong;
- (b) ensuring that all services and operations are developed and conducted in an environmentally responsible manner, meeting the commitments of the Clean Air Charter;
- (c) implementing good practices of green management in our workplace; and
- (d) raising the awareness of both the public and our staff of the importance of a sustainable environment in our community.

We joined the Hong Kong Green Building Council as an Associate Member in 2010 and took part in the Committee work to promote environmental performance assessment.



*The most important ingredients of sustainable developments are all levels of commitment and the continual development.*

## ENVIRONMENTAL PERFORMANCE



### 2.1. 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 facilitate the adaptive re-use of heritage buildings with a view to providing a quality living environment for both the present and future generations of Hong Kong.

#### 2.1.1. Modernizing Building Design Standards

As an ongoing initiative of enhancing sustainable development, we continue our review of the Buildings Ordinance and allied regulations.

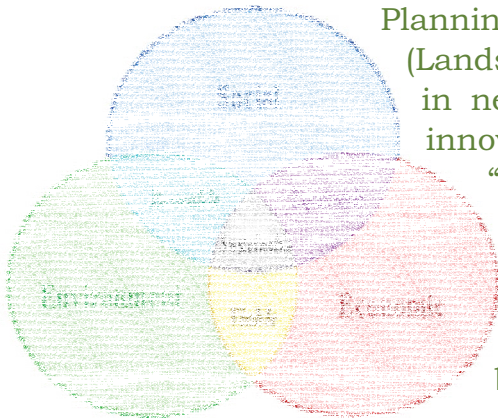
Targets	Performance in 2011
<ul style="list-style-type: none"> <li><b>Review of the Buildings Ordinance</b></li> </ul> <p>To review the Building (Planning) Regulations and the Building (Construction) Regulations by including <b>provision of performance-based requirements</b> in addition to the prescriptive standards, where appropriate.</p>	<ul style="list-style-type: none"> <li>The amended Regulation 17 of the Building (Construction) Regulations and the Code of Practice for Dead and Imposed Loads 2011 came into effect on 1 August 2011.</li> <li>Review of the remaining Building (Construction) Regulations has been completed. We aim to introduce the proposed legislative amendment to the Building (Construction) Regulations to the Legislative Council (LegCo) in 2012/2013.</li> </ul>
<ul style="list-style-type: none"> <li><b>Review of the sanitary fitments, plumbing and drainage provisions for buildings</b></li> </ul> <p>To continue with the review of the <b>current plumbing and drainage standards</b> for private buildings aiming to take cognizance of the built environment, environmental and material conservation, as well as environmental science and technologies.</p>	<ul style="list-style-type: none"> <li>The proposed amendments to the drainage regulations and the draft Code of Practice prepared in 2008 had to be refined to take into account of the views from the stakeholders. Preparatory work for the legislative amendments is being made.</li> <li>We planned to introduce the proposed legislative amendments to the drainage regulations to the LegCo when the refinements to the proposal are finalized.</li> </ul>

Targets	Performance in 2011
<ul style="list-style-type: none"> <li>● <b>Review of the Building (Energy Efficiency) Regulation</b></li> </ul> <p>To conduct a review of the standards and scope of application as stipulated in the Building (Energy Efficiency) Regulation (B(EE)R) and the Code of Practice for <b>Overall Thermal Transfer Value (OTTV) in Buildings (the OTTV Code)</b>, with a view to improving the energy efficiency of buildings.</p> 	<ul style="list-style-type: none"> <li>◆ The OTTV standards on external walls and roofs of commercial buildings and hotels have been tightened up by 20% and the relevant Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP) – APP-67 was issued in January 2011 for implementation with effect from April 2011.</li> <li>◆ The revised OTTV standards were promulgated in January 2011.</li> </ul>
<ul style="list-style-type: none"> <li>● <b>Consultancy Study on Design and Construction Requirements for Residential Buildings for Energy Efficiency</b></li> </ul> <p>To conduct a consultancy study to develop a set of design and construction guidelines for improving energy efficiency in residential buildings.</p> 	<ul style="list-style-type: none"> <li>◆ The consultant has completed the review of the local legislation and the research on the requirements and practices of selected overseas countries, and conducted quantitative assessments to identify the practical measures in improving energy efficiency in residential buildings applicable to the local environment.</li> <li>◆ Multi-stakeholders consultation forums on the measures identified were held in July and August 2011. The consultant is refining the proposed measures and formulating the set of design and construction guidelines for improving energy efficiency in residential buildings. Further consultation with the stakeholders on the draft guidelines is scheduled for the 2<sup>nd</sup> quarter of 2012.</li> </ul>




# CHAPTER 2

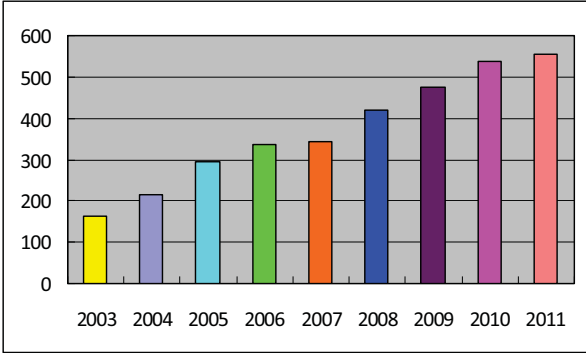

## 2.1.2. Promoting Green and Sustainable Building Developments



We have since 2001 introduced, jointly with the Planning Department (PlanD) and the Lands Department (LandsD), incentives for developers to provide green features in new building developments for promoting green and innovative buildings and quality living space. Following “A First Sustainable Development Strategy for Hong Kong (2005)” issued by the Sustainable Development Unit under the Office of the Chief Secretary for Administration, BD has been tasked to take forward the initiative of further enhancing sustainable building design guidelines.

Targets	Performance in 2011
<p>● <b>Sustainable building design</b></p> <p>Following the extensive “Public Engagement Exercise on Building Design to Foster a Quality and Sustainable Built Environment” (the Public Engagement Exercise) conducted in conjunction with the Council for Sustainable Development (SDC), the Administration announced in October 2010 a new policy to foster a quality and sustainable built environment through building design. The BD has been tasked to promulgate the measures recommended in the SDC’s report on the Public Engagement Exercise.</p>	<ul style="list-style-type: none"> <li>◆ In January 2011, 15 new and revised Joint Practice Notes (JPNs) and PNAPs were issued to promulgate a package of measures covering the following major elements:             <ol style="list-style-type: none"> <li>1. Sustainable building design guidelines on building separation, building setback and site coverage of greenery of buildings;</li> <li>2. Gross floor area (GFA) concessions with an overall cap of 10% for the design incorporating desirable facilities and features such as green or amenity features and certain non-mandatory/non-essential plant rooms;</li> <li>3. Disregarded GFA for car parking spaces provided these are placed underground where possible and are electric vehicle-charging enabled; and</li> <li>4. Improved energy efficiency of buildings by tightening up the OTTV standards as described in para. 2.1.1 above.</li> </ol> </li> <li>◆ The new policy is applicable to all new building plans for development proposals submitted to the BD for approval on or after 1 April 2011.</li> </ul>

Targets	Performance in 2011
<p>● <b>Promulgating sustainable practices</b></p> <p>To issue practice notes to promulgate building design guidelines in order to <b>improve the standards of living space.</b></p> 	<p>◆ The 15 new and revised JPNs and PNAPs issued to promulgate the package of measures are as follows:</p> <ol style="list-style-type: none"> <li>1. JPN 1 - Green and Innovative Buildings;</li> <li>2. JPN 2 - Second Package of Incentives to Promote Green and Innovative Buildings;</li> <li>3. JPN 4 - Development Control Parameters;</li> <li>4. PNAP APP-2 - Calculation of Gross Floor Area and Non-accountable Gross Floor Area – Building (Planning) Regulation 23(3)(a) and (b);</li> <li>5. PNAP APP-19 - Projections in relation to site coverage and plot ratio – Building (Planning) Regulations 20 &amp; 21;</li> <li>6. PNAP APP-42 - Amenity Features;</li> <li>7. PNAP APP-67 - Energy Efficiency of Buildings – Building (Energy Efficiency) Regulation;</li> <li>8. PNAP APP-89 - Provision of Better Lift Service;</li> <li>9. PNAP APP-93 - Planning and Design of Drainage Works;</li> <li>10. PNAP APP-104 - Exclusion of Floor Areas for Recreational Use;</li> <li>11. PNAP APP-111 - Design of Car Parks and Loading / Unloading Facilities;</li> <li>12. PNAP APP-126 - Plans for Signboards;</li> <li>13. PNAP APP-151 - Building Design to Foster a Quality and Sustainable Built Environment;</li> <li>14. PNAP APP-152 - Sustainable Building Design Guidelines;</li> <li>15. PNAP ADM-2 - Centralized Processing of Building Plans</li> </ol>

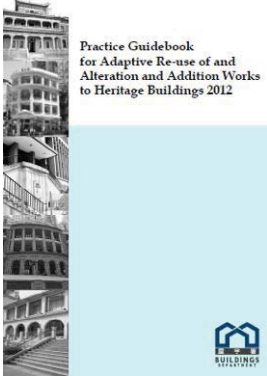
Targets	Performance in 2011																				
<p>● <b>Wider adoption of green features</b></p> <p>(a) To promote <b>environmentally friendly construction</b> in private building developments.</p>  <table border="1"> <caption>Number of environmentally friendly building projects (2003-2011)</caption> <thead> <tr> <th>Year</th> <th>Number of Projects</th> </tr> </thead> <tbody> <tr><td>2003</td><td>160</td></tr> <tr><td>2004</td><td>220</td></tr> <tr><td>2005</td><td>300</td></tr> <tr><td>2006</td><td>350</td></tr> <tr><td>2007</td><td>360</td></tr> <tr><td>2008</td><td>430</td></tr> <tr><td>2009</td><td>480</td></tr> <tr><td>2010</td><td>540</td></tr> <tr><td>2011</td><td>560</td></tr> </tbody> </table> <p>(b) To monitor the <b>implementation of JPN 1 &amp; 2</b> aiming to promote green and innovative buildings.</p> <p>(c) Promoting <b>BEAM Plus</b> Assessment</p> 	Year	Number of Projects	2003	160	2004	220	2005	300	2006	350	2007	360	2008	430	2009	480	2010	540	2011	560	<p>◆ Since the issue of JPN 1 and JPN 2 in 2001 and 2002 respectively by BD, PlanD and LandsD till end of 2011, a total of 555 building projects with one or more green features such as balconies, wider common corridors and lift lobbies, communal podium/sky gardens, non-structural prefabricated external walls etc., were approved by BD.</p> <p>◆ In light of the recommendations of the SDC, the CE's policy address in October 2010 has announced that the policy on granting GFA concessions will be tightened in order to strike a proper balance between fulfilling environmental performance and comfort requirements of buildings on the one hand, and minimizing the impact on the surrounding environment as far as possible on the other.</p> <p>◆ The JPN 1 &amp; 2 have been revised accordingly.</p> <p>◆ Following the new policy on GFA concessions as stated in para. 2.1.2(b) above, we will require certification by BEAM Plus Assessment conferred by the Hong Kong Green Building Council (but without mandating the rating obtained) for all new buildings as well as estimation of energy consumption of the common parts of a domestic development and of the entire non-domestic development as pre-requisites for granting GFA concessions for green and amenity features in new building developments. Such information will be posted on BD's website to enhance transparency of information on energy performance of a building.</p>
Year	Number of Projects																				
2003	160																				
2004	220																				
2005	300																				
2006	350																				
2007	360																				
2008	430																				
2009	480																				
2010	540																				
2011	560																				

# CHAPTER 2

## 2.1.3. Facilitating Conservation of the Built Heritage



We take a proactive approach to support the Government's initiative and to facilitate private sector's participation in heritage conservation.

Target	Performance in 2011
<ul style="list-style-type: none"><li>● <b>Enhancing heritage conservation</b></li></ul> <p>To conduct research on the building control regime on adaptive re-use of heritage buildings in some overseas countries with a view to formulating guidelines for compliance with building safety and health requirements for <b>adaptive re-use of and alteration and addition works to heritage buildings</b> in Hong Kong under the BO.</p> 	<ul style="list-style-type: none"><li>◆ A dedicated team continued to offer technical advice and process building plan submissions involving adaptive re-use of and alteration and addition works to heritage buildings.</li><li>◆ A consultancy study on “Building Design Guidelines for Adaptive Re-use of Heritage Buildings” was commissioned in 2009 to identify key elements in heritage buildings commonly found in Hong Kong that do not meet the current building safety and health standards, study relevant international legislation and practices and draw up practical solutions to achieve the equivalent building safety and health standards prescribed under the BO for adaptive re-use of and alteration and addition works to heritage buildings. The consultancy has been completed.</li><li>◆ Based on the findings from the consultancy study, we have revised the interim edition of the “Practice Guidebook on Compliance with Building Safety Requirements for Adaptive Re-use of and Alteration and Addition Works to Heritage Buildings under the BO” and will issue the Practice Guidebook in 2012 after consultation with building stakeholders.</li></ul>



# CHAPTER 2

## 2.1.4. Reducing Construction and Demolition Wastes

Landfills in Hong Kong will be running out of space in the early 2010's. In response, we have continued to review the current building and construction practices, and to encourage the stakeholders to minimize construction and demolition wastes.

Target	Performance in 2011
<ul style="list-style-type: none"> <li><b>Minimizing construction and demolition wastes</b></li> </ul> <p>We will continue to collaborate with the stakeholders on the review of the use of environmentally friendly construction methods with a view to minimizing construction and demolition wastes.</p>	<ul style="list-style-type: none"> <li>A total of 34 plan submissions adopting the precast concrete construction were processed by BD in 2011.</li> </ul>

## 2.1.5. Improving Environmental Hygiene



In response to the public concerns on the possible dire consequences of building neglect and the perennial environmental hygiene problems, BD, as a core member of Team Clean, has continued to participate in improving environmental conditions of some identified black spots through large-scale operations.

Targets	Performance in 2011
<ul style="list-style-type: none"> <li><b>Rectifying drainage defects</b></li> </ul> <p>To work in collaboration with the Home Affairs Department and other relevant government departments to <b>improve environmental conditions</b> of identified blackspots under the Hygiene Blackspots Clearance programme.</p>	<ul style="list-style-type: none"> <li>The Hygiene Blackspots Clearance programme (Phase IV) under the Team Clean Operation continued in 2011. Under this programme, a total of 235 buildings were involved and some 428 unauthorized building works (UBW) were removed.</li> </ul>
<ul style="list-style-type: none"> <li><b>Handling water seepage problems</b></li> </ul> <p>To continue the operation of the <b>Joint Office (JO)</b> with the Food and Environmental Hygiene Department in handling public complaints about water seepage problems.</p>	<ul style="list-style-type: none"> <li>The operation of the <b>Joint Office (JO)</b> with the Food and Environmental Hygiene Department in handling public complaints about water seepage problems would continue for two more years from April 2012.</li> </ul>

Targets	Performance in 2011
<ul style="list-style-type: none"> <li>● <b>Promulgating operation and maintenance practices</b></li> </ul> <p>To issue practice notes to promulgate operation and maintenance guidelines in order to improve the <b>environmental hygiene</b> and in turn the <b>standards of living space</b>.</p>	<ul style="list-style-type: none"> <li>◆ A circular letter was issued to remind the practitioners to take preventive measures proactively to ensure that no adverse drainage impacts would be caused by the construction sites on the public stormwater drainage systems.</li> <li>◆ Subsequent to the publication of the "Technical Guidelines on The Design, Installation &amp; Maintenance Of Cast-in Anchors At External Walls Of New Buildings" by the Construction Industry Council, PNAP ADV-14 is being revised to recommend the practitioners to provide cast-in anchor devices in the design and construction of new buildings. The anchors will provide for the direct attachment of personal fall protection systems and equipment for use of workers to prevent falls and/or arrest falls from height when working on the external walls of buildings during repair and maintenance works. The revised PNAP will be issued after consultation with building stakeholders.</li> </ul>

## 2.1.6. Promoting Timely Maintenance and Building Repair

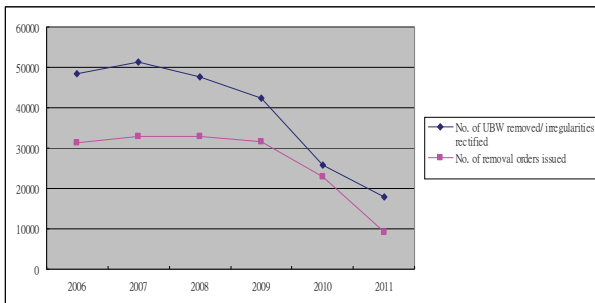
We have put in place a holistic strategy to tackle the long-standing building dilapidation problems. A Mandatory Building Inspection Scheme (MBIS) and a Mandatory Window Inspection Scheme (MWIS) are scheduled for full implementation in the 2<sup>nd</sup> quarter of 2012 as the long-term measure to address the building neglect problems, foster a building care culture in the community and contribute to a sustainable living environment.

To achieve the dual objectives of creating more job opportunities for construction sector as well as promoting building safety and improving the cityscape and living environment, the Development Bureau, in collaboration with the Hong Kong Housing Society (HKHS), the Urban Renewal Authority (URA) and the Buildings Department, has launched the Operation Building Bright to provide subsidies and technical assistance to help owners of old and dilapidated buildings carry out repair and maintenance works.

Targets	Performance in 2011
---------	---------------------

- **Tackling UBW and rectifying building dilapidation**

(a) To continue the clearance of UBW in target buildings through among others, the **Blitz UBW Clearance (BUC) Operation** and to rectify identified building dilapidations including drainage defects in one go.



(b) To continue the **Clearance Operation of UBW** in buildings along **Pedestrian Streets (COUPS)** against unauthorized large glass panels, advertisement signboards and TV displays on the external walls.



◆ 9,176 removal orders related to UBW were issued and 17,879 UBW were removed or irregularities rectified.



◆ Commencing in 2006 until 2008, removal orders were issued against large unauthorized structures namely, glass panels, advertisement signboards and TV displays on the external wall of 393 target buildings under COUPS. In 2011, resources were allocated to the follow-up enforcement actions of the outstanding orders issued under COUPS in the preceding years. At the end of 2011, 21 removal orders were served against unauthorized glass panels, 124 removal orders were served against unauthorized advertisement signboards. A total of 6 and 27 removal orders against unauthorized glass panels and advertisement signboards respectively were complied with or withdrawn.

Targets	Performance in 2011
<ul style="list-style-type: none"> <li>● <b>Clearance Operation on Unauthorized Roof Structures Ensemble (COURSE)</b></li> </ul> <p>To continue the COURSE operation to assist building owners to improve the conditions of their industrial buildings by carrying out clearance of UBWs on rooftops, flat roofs, yards and lanes constituting safety hazard or environmental nuisance.</p> <p>To launch another COURSE operation since 1st April 2011 on the clearance of UBWs on rooftops, flat roofs, yards and lanes of 500 target domestic/composite buildings per year, as part of BD's new building safety initiatives.</p>	<ul style="list-style-type: none"> <li>◆ 410 industrial buildings were targeted in 2011 in the COURSE operation. Upon completion of the building surveys, removal/repair orders would be issued in the first quarter of 2012. Since the launch of the operation in late 2009 and up to the end of 2011, 810 industrial buildings had been targeted with a total of 3,300 removal orders and 27 repair/investigation orders issued. Among these orders, 653 had been complied with.</li> <li>◆ From April to December 2011, 371 domestic/composite buildings aged 30 years or above were targeted in the new operation.</li> </ul>
<ul style="list-style-type: none"> <li>● <b>Improving fire safety measures in certain premises/buildings</b></li> </ul> <p>To improve the existing fire safety measures in <b>prescribed commercial premises</b>, (i.e. banks, off course betting centres, jewellery shops, supermarkets and shopping arcades), as well as <b>pre-1987 commercial buildings and composite buildings</b>.</p>	<ul style="list-style-type: none"> <li>◆ 150 prescribed commercial premises, 40 specified commercial buildings and 1,150 composite buildings were inspected for enforcement action under the Fire Safety (Commercial Premises) Ordinance Cap. 502 and the Fire Safety (Buildings) Ordinance Cap. 572.</li> <li>◆ A total of 7,863 fire safety directions were issued for improvement of the fire safety construction in such premises/buildings by upgrading to modern standards.</li> </ul>





Targets	Performance in 2011
<ul style="list-style-type: none"> <li>● <b>Establishing long-term measures to tackle building maintenance problems</b></li> </ul> <p>To tackle the building maintenance problems on buildings aged 30 or above, the Mandatory Building Inspection Scheme (MBIS) will be commenced in 2012, while Coordinated Maintenance of Buildings Scheme (CMBS) will not be launched after the full implementation of the MBIS.</p> <p>To tackle the building maintenance problems on buildings aged below 30, the new operation named as “<b>Repair or Investigation of Buildings, for Enhancement, with Age Under Thirty Years (REIN-BEAUTY)</b>” commenced in April 2011. The operation would include enforcement action on actionable UBWs identified during the inspections.</p>	<ul style="list-style-type: none"> <li>◆ In 2011, the resources for CMBS were allocated to the Operation Building Bright. In 2012, the resources for CMBS will be allocated to the MBIS. However, BD, in collaboration with six other government departments, continues to assist owners and owners’ corporations of the target buildings of the CMBS commenced in previous years in carrying out building maintenance.</li> <li>◆ In 2011, 355 dilapidated buildings aged below 30 were selected for inspections under “REIN-BEAUTY”.</li> </ul>
<ul style="list-style-type: none"> <li>● <b>Providing financial assistance to building owners</b></li> </ul> <p>To continue administering the <b>Building Safety Loan Scheme</b> to provide loans to private building owners for the carrying out of repair works or removal of UBW.</p>	<ul style="list-style-type: none"> <li>◆ A total amount of HK\$ 56M was committed in 2011.</li> </ul> <div data-bbox="916 1442 1369 1742" data-label="Image"> </div>

Targets	Performance in 2011
<ul style="list-style-type: none"> <li>● <b>Mandating building inspection and maintenance</b></li> </ul> <p>To continue working out the implementation details of the <b>Mandatory Building Inspection Scheme (MBIS)</b> and the <b>Mandatory Window Inspection Scheme (MWIS)</b> scheduled for full implementation in the 2<sup>nd</sup> quarter of 2012.</p> 	<ul style="list-style-type: none"> <li>◆ The legislation for the Mandatory Building Inspection Scheme (MBIS) and Mandatory Window Inspection Scheme (MWIS) including the Building (Amendment) Ordinance 2011 and the Building (Inspection and Repair) Regulation were passed by the LegCo in June and December respectively in 2011.</li> <li>◆ A draft edition of the Code of Practice for MBIS and MWIS was issued in August 2011.</li> <li>◆ The registration of registered inspectors under the Buildings Ordinance for the carrying out of building inspections under the MBIS commenced on 30 December 2011.</li> <li>◆ The preparatory work for full implementation of MBIS and MWIS are in progress.</li> </ul>
<ul style="list-style-type: none"> <li>● <b>Operation Building Bright (OBB)</b></li> </ul> <p>To assist owners of dilapidated target buildings who are having difficulties in coordinating repair works, the BD in exercise of its statutory power arranges to carry out repair works in common areas of the target buildings in default of the building owners who are eligible to a grant under the Operation.</p>	<ul style="list-style-type: none"> <li>◆ In 2011, BD continued to engage consultants and contractors to carry out the repair works for 229 OBB target buildings in default of the owners. Since launching of the Operation, BD has engaged consultants and contractors to carry out the repair works in default of the owners for 638 target buildings and the repair works for 335 target buildings have been completed.</li> </ul>
<ul style="list-style-type: none"> <li>● <b>Removal of abandoned/dangerous signboards</b></li> </ul> <p>To continue the enforcement action against abandoned/dangerous signboards.</p>	<ul style="list-style-type: none"> <li>◆ In 2011, BD has caused a total of 1,637 abandoned/dangerous signboards removed/repaired.</li> </ul>

# CHAPTER 2

## 2.2 IMPLEMENTATION OF GREEN OFFICE MANAGEMENT

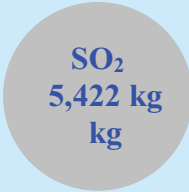


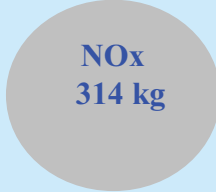

It is our continuous target to ensure effective implementation of in-house green measures in all our offices, and to increase the awareness of our staff on green office management. We strive to fulfill the commitments set out in the Clean Air Charter to make sustained improvement to air quality.

### 2.2.1. Accomplishing the Clean Air Charter



In November 2006, the Government signed the Clean Air Charter launched by the Hong Kong General Chamber of Commerce and the Hong Kong Business Coalition on the Environment, to join forces with the business sector and the community to foster the improvement of air quality in Hong Kong. We strive to fulfill the six commitments in the Charter to implement environmentally friendly measures in our daily operations.

Commitments	Performance in 2011
<p><b>①</b> Operate by a recognized world class standard, or the standards established by the Hong Kong/Guangdong governments on emission of air pollutants, even if it is not a requirement to do so here.</p>	<ul style="list-style-type: none"> <li>◆ In our operation, we continued to observe and comply with the ordinances and regulations on environmental protection related to our operation, where applicable.</li> </ul>
<p><b>②</b> Use continuous emissions monitors at significant sources.</p>	<ul style="list-style-type: none"> <li>◆ This commitment was not applicable to our operation which was mainly office-based and would not generate significant air emission.</li> </ul>
<p><b>③</b> Publish information on energy and fuel use, as well as total emission of air pollutants annually and timely, if emissions are significant.</p>	<ul style="list-style-type: none"> <li>◆ The source of energy and fuel consumption related to our operation included the <b>Use of Electricity</b> and <b>Vehicle Fleet</b>. Such sources produce air pollutant emission of sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and respirable suspended particulates (RSP).</li> <li>◆ Our total electricity consumption in 2011 was 2,838,939 kWh, which was 99,572 kWh or 3.39% less than that consumed in 2010.</li> </ul>

Commitments	Performance in 2011
	<p><b>Estimation of the air pollutant emission:</b></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p><b>SO<sub>2</sub></b> 5,422 kg kg</p> </div> <div style="text-align: center;">  <p><b>NO<sub>x</sub></b> 3,293kg</p> </div> <div style="text-align: center;">  <p><b>RSP</b> 170 kg</p> </div> </div> <p>◆ We owned a fleet of 31 vehicles and 6 of them were Hybrid Electric Vehicles. The 31 vehicles traveled 348,853 km in 2011 and the total fuel consumption was 41,136 litres of petroleum. The consumption of fuel per km was more or less the same as that in 2010.</p> <p><b>Estimation of the air pollutant emission:</b></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p><b>NO<sub>x</sub></b> 314 kg</p> </div> <div style="text-align: center;">  <p><b>RSP</b> Negligible</p> </div> </div>
<p><b>(4) Undertake to adopt energy-efficient measures in our operations.</b></p>	<p>◆ We continued to adopt the following energy-efficient measures in our office-based and transportation operation to minimize energy consumption through:</p> <ul style="list-style-type: none"> <li>– Maintaining the air-conditioning temperature at 25.5°C and monitoring the room temperature regularly.</li> <li>– Encouraging our staff to dress casual and smart in summers and lightly in winters to minimize the use of air-conditioning.</li> <li>– Installing high output, energy-saving lighting fixtures (T5 fluorescent lamps) in our offices.</li> <li>– Reminding our staff to turn off lights, air-conditioners and office equipment while they were not in use by affixing “Energy Saving” stickers on power switches.</li> <li>– Enabling the hibernation mode or standby mode setting of office equipment and turning them off when they were not in use.</li> </ul>



# CHAPTER 2

Commitments	Performance in 2011
	<ul style="list-style-type: none"> <li>- Appointing energy wardens in all divisions to ensure implementation of energy saving measures and arranging last-man-out to check and turn off all air-conditioning, lighting and office equipment.</li> <li>- Adopting other energy saving practices such as encouraging our 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 tips.</li> <li>- Encouraging our staff to walk or use public transport whenever possible.</li> <li>- Sharing the use of pool car in order to fully utilize each government vehicle.</li> <li>- Reminding motor drivers to switch off idling engines.</li> <li>- Requesting motor drivers to drive at a steady speed and avoid sudden braking.</li> </ul>
<p><b>(5) Identify and encourage business-relevant measures to be taken in days when air pollution is high.</b></p>	<ul style="list-style-type: none"> <li>◆ We continued to encourage our staff to adopt the following measures in our general office and transportation operation:               <ul style="list-style-type: none"> <li>- Sharing pool car or using public transport where possible.</li> <li>- Combining trips to maximize the use of departmental vehicles and plan routes to minimize the journey distance and time.</li> <li>- Avoiding the use of the products with high Volatile Organic Compound (VOC) content.</li> </ul> </li> </ul>
<p><b>(6) Share air quality expertise in business with others.</b></p>	<ul style="list-style-type: none"> <li>◆ We shared our experience on energy saving and pollution reduction by publishing our Environmental Report on our website. Interested parties are welcome to contact us if they wish to obtain further information or details.</li> </ul>

# CHAPTER 2

## 2.2.2. Promoting Smoke-free Government

With the enactment of the Smoking (Public Health) (Amendment) Ordinance on 1 January 2007, except for certain exempted areas, all indoor areas in workplace and public places are required by law to be smoke-free. We strive to comply with the Ordinance and improve indoor air quality for all our staff.



We continued to:-

- discourage smoking and protect our colleagues and the public from passive smoking to the maximum extent possible; and
- improve the working environment for all our staff.

Targets	Performance in 2011
<ul style="list-style-type: none"><li>• <b>Promoting Smoke-free policy</b></li></ul> <p>To issue guidelines to ensure that the statutory requirements of <b>smoking ban</b> could be fully complied with.</p>	<ul style="list-style-type: none"><li>◆ The Administration Circular issued in May 2008 continued in force to remind all staff of the need to observe the statutory requirements and set out the departmental instructions in compliance with the government’s smoke-free policy. Failure to observe such instructions might lead to disciplinary action.</li><li>◆ Each Section/Unit head nominated an officer as their venue manager to undertake the monitoring role to ensure the smoking ban was properly implemented in our office.</li></ul>

## 2.2.3. Moving towards a Paperless Office

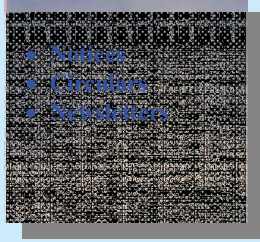

We are taking advantage of the information technology to move towards a paperless office by introducing computerized management systems and encouraging communication within the workplace as well as with our stakeholders and public via electronic means.

Targets	Performance in 2011						
<ul style="list-style-type: none"> <li>● <b>On public front</b></li> <li>(a) To disseminate information to the stakeholder and the public via <b>BD's website</b> as a communication platform.</li> </ul>	<ul style="list-style-type: none"> <li>◆ BD's website continued to provide information on the functions and services of the Department including among others, the following:               <table border="1" data-bbox="722 763 1495 1081" style="width: 100%; text-align: center;"> <thead> <tr> <th data-bbox="722 763 981 799">Publications</th> <th data-bbox="981 763 1240 799">Notices</th> <th data-bbox="1240 763 1495 799">Publicity</th> </tr> </thead> <tbody> <tr> <td data-bbox="722 799 981 1081"> <ul style="list-style-type: none"> <li>◆ Monthly Digest</li> <li>◆ Codes of Practice &amp; Design Manual</li> <li>◆ Practice Notes &amp; Circular Letters for AP/RSE/RGE/RC</li> </ul> </td> <td data-bbox="981 799 1240 1081"> <ul style="list-style-type: none"> <li>◆ Candidates and Contract Tender Notices</li> <li>◆ Recruitment</li> </ul> </td> <td data-bbox="1240 799 1495 1081"> <ul style="list-style-type: none"> <li>◆ Pamphlets</li> <li>◆ Press Release</li> <li>◆ TV Announcements of Public Interest</li> </ul> </td> </tr> </tbody> </table> </li> <li>◆ To put Green Culture in action, we have prepared "BD e-Briefcase" containing electronic format of all PNAPs and other useful materials for dissemination to Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (AP/RSE/RGE).</li> <li>◆ All AP/RSE/RGE and Registered Contractors (RC) have been informed via email of any new/ revised PNAPs/ PNRCs and/ or circular letters which can be downloaded from BD web-site.</li> <li>◆ To cease distributing hardcopies of PNRCs in 2012, an e-notification in the form of e-mail or Short Message Service (SMS) would be arranged to notify all RC and Registered Inspectors (RI) when new/revised PNRCs or circular letters are issued.</li> </ul>	Publications	Notices	Publicity	<ul style="list-style-type: none"> <li>◆ Monthly Digest</li> <li>◆ Codes of Practice &amp; Design Manual</li> <li>◆ Practice Notes &amp; Circular Letters for AP/RSE/RGE/RC</li> </ul>	<ul style="list-style-type: none"> <li>◆ Candidates and Contract Tender Notices</li> <li>◆ Recruitment</li> </ul>	<ul style="list-style-type: none"> <li>◆ Pamphlets</li> <li>◆ Press Release</li> <li>◆ TV Announcements of Public Interest</li> </ul>
Publications	Notices	Publicity					
<ul style="list-style-type: none"> <li>◆ Monthly Digest</li> <li>◆ Codes of Practice &amp; Design Manual</li> <li>◆ Practice Notes &amp; Circular Letters for AP/RSE/RGE/RC</li> </ul>	<ul style="list-style-type: none"> <li>◆ Candidates and Contract Tender Notices</li> <li>◆ Recruitment</li> </ul>	<ul style="list-style-type: none"> <li>◆ Pamphlets</li> <li>◆ Press Release</li> <li>◆ TV Announcements of Public Interest</li> </ul>					

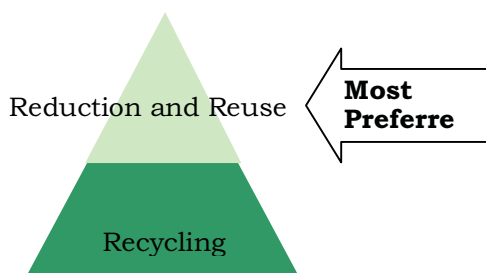
Targets	Performance in 2011
<p>(b) To simplify the viewing and copying of building records through the implementation of Buildings Records Access and Viewing On-line (BRAVO) system over the Internet.</p>	<ul style="list-style-type: none"> <li>◆ The BRAVO system offers round-the-clock service which allows members of public to view building records through the Internet at anytime and anywhere in Hong Kong.</li> <li>◆ In 2011, the total number of applications for viewing electronic records handled by BD was 75,450 of which 48,400 were processed by the BRAVO system over the Internet</li> <li>◆ The BRAVO system was further enhanced to provide the viewing and copying services for minor works records.</li> </ul>
<p>(c) To accept <b>submission of documents in electronic format.</b></p>	<ul style="list-style-type: none"> <li>◆ By virtue of the Electronic Transactions Ordinance, we continued to accept simple electronic submissions under the BO through our e-Counter.</li> </ul>
<p>● <i>In our workplace</i></p> <p>(a) To disseminate information and to introduce more green measures through increasing usage of LAN as a communication platform.</p>	<ul style="list-style-type: none"> <li>◆ We continued to disseminate information through electronic notice board, BD Local Area Network (LAN) and emails. In-house surveys via electronic questionnaires facilitated the collection and compilation of information in an environmentally friendly manner. Discussion forums were set up for knowledge sharing among our staff in a paperless environment. Our email system was upgraded to provide advance functions to improve collaboration of work via the email network. A web-based photo library system was also launched to facilitate the sharing of site inspection photos among sections/units for better co-ordination of work.</li> </ul>



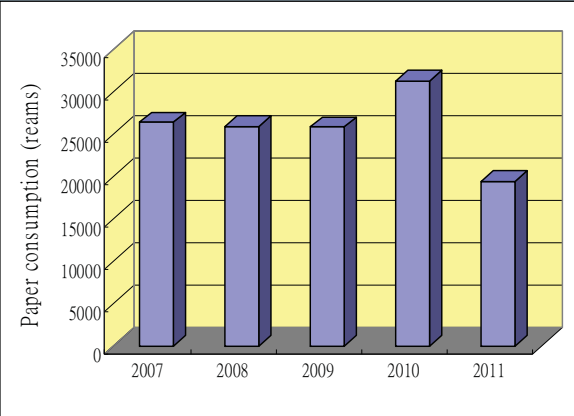



Targets	Performance in 2011	
	<b>Electronic Notice Board</b> 	<b>BD's LAN</b> 
<p>(b) To implement the <b>Accessibility Program</b> to provide all staff with email address.</p>	<p>◆ All our staff were provided with email addresses for communication. More e-services were hosted in the Departmental Portal and the WAN Link speed would be upgraded to further improve the efficiency for dissemination of information.</p>	
<p>(c) To implement the <b>electronic leave system (e-Leave)</b></p>	<p>◆ E-Leave continued to provide speedy and paperless leave application and processing services for all our staff.</p>	
<p>(d) <b>Green Management of Data Centre and Green IT Measures</b></p>	<p>◆ Server virtualization technology was used in our network operating system upgrade project. This had reduced the no of physical servers required in the project by more than 50% thus cutting down electricity power consumption.</p> <p>◆ Unless overridden by users still working in the office, their computers would be turned off automatically at a preset time to reduce unnecessary power consumption.</p>	

## 2.2.4. Saving Resources



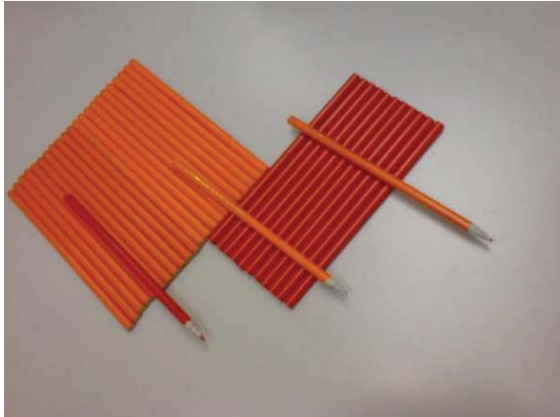
The best approach to manage waste is “reduction” at source. We adhere to the principles of “Reduction, Reuse and Recycling” in the Department to minimize waste produced from our office operation.

Targets	Performance in 2011													
<p><b>Reduction</b></p>	<ul style="list-style-type: none"> <li>◆ Our total paper consumption in 2011 was 19,426 reams, which was 37.9% less than that in 2010.</li> <li>◆ We reduced the use of paper by:                             <ul style="list-style-type: none"> <li>– Adopting double-sided printing and photocopying.</li> <li>– Using emails instead of paper memos and faxes for internal and external communications.</li> <li>– Minimizing the production of hardcopies of documents.</li> <li>– Sending e-cards.</li> </ul> </li> <li>◆ Recycled paper in lieu of virgin paper had continuously been used in the Department. In 2011, 48.7% of the total amount of paper consumed was recycled paper.</li> </ul>	 <table border="1"> <caption>Paper consumption (reams) by year</caption> <thead> <tr> <th>Year</th> <th>Paper consumption (reams)</th> </tr> </thead> <tbody> <tr> <td>2007</td> <td>~28,000</td> </tr> <tr> <td>2008</td> <td>~27,000</td> </tr> <tr> <td>2009</td> <td>~27,000</td> </tr> <tr> <td>2010</td> <td>~33,000</td> </tr> <tr> <td>2011</td> <td>~20,000</td> </tr> </tbody> </table>	Year	Paper consumption (reams)	2007	~28,000	2008	~27,000	2009	~27,000	2010	~33,000	2011	~20,000
Year	Paper consumption (reams)													
2007	~28,000													
2008	~27,000													
2009	~27,000													
2010	~33,000													
2011	~20,000													
<p><b>Reuse</b></p>	<ul style="list-style-type: none"> <li>◆ We promoted the reuse of resources by:                             <ul style="list-style-type: none"> <li>– Encouraging our staff to use blank side of used paper for drafting, filing and printing.</li> <li>– Reusing envelopes for internal circulation.</li> <li>– Using ball pens with refills.</li> <li>– Placing paper with a blank side near high paper usage equipment e.g. photocopying machines, to facilitate reuse.</li> </ul> </li> </ul>													
<p><b>Recycling</b></p>	<ul style="list-style-type: none"> <li>◆ We collected recyclable waste materials by:                             <ul style="list-style-type: none"> <li>– Placing collection bags in offices for recycling of waste paper.</li> <li>– Placing recycling boxes near high paper usage equipment in our workplaces.</li> <li>– Requesting our staff to return used printer cartridges to the Supplies Unit.</li> </ul> </li> </ul>													
	<ul style="list-style-type: none"> <li>◆ With support from our staff, we collected a total of 24,595 kg waste paper and 2,337 units of used printer cartridges for recycling in 2011.</li> </ul>													

# CHAPTER 2

## 2.2.5. Procuring Green Products

We purchased green products to save the Earth and also to support the recycling industry.



Pencils made of recycled materials



Office equipment with energy saving functions



Recycled paper



Rechargeable batteries

# CHAPTER 2



## 2.3. 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.

### 2.3.1. Educating the Public on Sustainability

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

To enhance the awareness of the community on the importance of building safety and timely maintenance, the Public Education and Publicity Unit was established in April 2011 to promote and publicize the current and new building safety initiatives and educate the stakeholders.

Target	Performance in 2011
<p>To sustain public education and <b>publicity campaign</b> on the need for ensuring building safety, fire safety and timely maintenance of buildings.</p>	<ul style="list-style-type: none"><li>◆ Participating in the Fire Protection Campaign broadcasted in TV on 11 Nov 2011. </li><li>◆ Proactively raising public awareness of fire safety at district levels. </li></ul>



- ◆ BD staff attended 66 meetings of Fire Safety Committees of Home Affairs Department in 18 Districts.



- ◆ BD staff attended 85 meetings with the Owners Corporations to explain the improvement of the fire safety construction.

## 2.3.2. Training our Staff

Our training and development programme places great emphasis on equipping our staff to play appropriate roles in facilitating sustainable developments by offering a variety of training courses on the subject.

The Environmental Protection Department was invited to deliver a green talk on “Consultation Document on Hong Kong’s Climate Change Strategy and Action Agenda” and “Low Carbon Living” in November 2011 to equip our staff with useful knowledge and practical tips which helped raise their awareness and facilitate developing good habits on environment protection.

34 nos. of our professional officers attended the BEAM Professionals (BEAM Pro) Training organized by The Hong Kong Green Building Council (HKGBC) in 2011 and became accredited BEAM Pro. They are responsible for scrutiny of building plans submission including BEAM Plus certification for all new buildings applying for GFA concessions.

Target	Performance in 2011
<p>To provide more than 500 training man-days on topics related to green building, sustainability and building repairs in 2011.</p>	<ul style="list-style-type: none"> <li>◆ 52 local seminars / courses / conferences on environmental issues and building repairs were arranged to provide 567 training man-days. 6 site visits to environmentally friendly and innovative buildings were organized to provide 141 training man-days. 3 overseas duty visits were made for attending international conferences on sustainable and innovative buildings.</li> </ul>



## **WAY FORWARD**

Buildings Department implemented a package of measures in April 2011 to foster a quality and sustainable built environment which encompass elements such as sustainable building design guidelines on building separation, building set back and site coverage of greenery; gross floor area concessions; and energy efficiency of buildings.

We look forward to the implementation of the Mandatory Building Inspection Scheme and Mandatory Window Inspection Scheme in the coming year to make our built environment a safe and sustainable place to live now and in the future.

Going forward, we will continue to:

- Review and upgrade the building design standards to achieve positive environmental outcomes
- Promote green, eco-efficient and sustainable building designs and developments which reduce environmental impacts in terms of energy, carbon, waste and water
- Facilitate preservation of identity and culture of the built heritage
- Promote building hygiene and improve building maintenance
- Implement green office management
- Educate our staff and the public in social responsibility and practices to contribute towards sustainability

Your views and suggestions are most welcome. It will help formulate our sustainable policies and strategies and support our continual improvement.

### **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](http://www.bd.gov.hk/english/documents/index_env.html)(English version) or  
[http://www.bd.gov.hk/chineseT/documents/index\\_env.html](http://www.bd.gov.hk/chineseT/documents/index_env.html) (Chinese version)**

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

**Email : [enquiry@bd.gov.hk](mailto:enquiry@bd.gov.hk) or Website : <http://www.bd.gov.hk/>**

**Hotline : 2626 1616**

**(BD hotline is handled by “1823 Call Centre”)**

**Fax : 2537 4992**

**Post: 12/F Pioneer Centre, 750 Nathan Road, Mongkok, Kowloon, Hong Kong**