



屋宇署

BUILDINGS
DEPARTMENT

Buildings Department Environmental Report 2010



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Forward

Moving towards a more sustainable and low carbon built environment in Hong Kong is something that can only be achieved with the commitment and action from all stakeholders in the property and construction sector.



I am pleased to present our twelfth Environmental Report covering our environmental performance in 2010.

Year 2010 was unforgettable for all of us working in the Buildings Department – a tragic building collapse incident at Ma Tau Wai Road happened in early 2010 has aroused territory-wide concern about the problems of ageing and deteriorating building stock and unauthorized sub-division of flats.

A special team was then deployed to carry out a territory-wide inspection of some 4,000 buildings aged 50 or above so as to seek out defective/ dangerous buildings requiring remedial action. While the ultimate responsibility on building safety and maintenance rests with the building owners, we would expedite the legislation work for the implementation of the Mandatory Building Inspection Scheme and Mandatory Window Inspection Scheme.

After years of consultation and legislative procedures, we finally implemented the Minor Works Control System on 31 December 2010 with a view to facilitating members of the public to carry out minor works safely in private buildings lawfully through simplified procedures and thereby improving the building safety in Hong Kong.

Taking into account the ageing condition of the existing buildings and maximizing synergy amongst the various stakeholders, we intend to adopt a new multi-pronged approach to enhance building safety in Hong Kong covering four major areas, Legislation; Enforcement; Support and assistance to owners; and Public Education and Publicity.

Concerted efforts have been put towards a sustainable and quality built environment during 2010 – we took a more proactive approach to support the Government's initiative and to facilitate the private sector's participation in heritage conservation; promulgated sustained building design guidelines and practices; proposed the Mandatory Building Inspection Scheme and Mandatory Window Inspection Scheme to enhance building maintenance; and we also started to prepare a teaching kit on building safety for liberal studies in secondary school and a quick guide on building safety for the general public.

While keeping the momentum to serve the community in providing and maintaining a quality and sustainable built environment, we strive to foster and sustain a building safety culture in our community, especially for our future generations as a long-term goal. With the support of the people of Hong Kong and the building industry, we can nurture a green living environment.

AU Choi-kai, JP
Director of Buildings

Buildings Department and the Environment

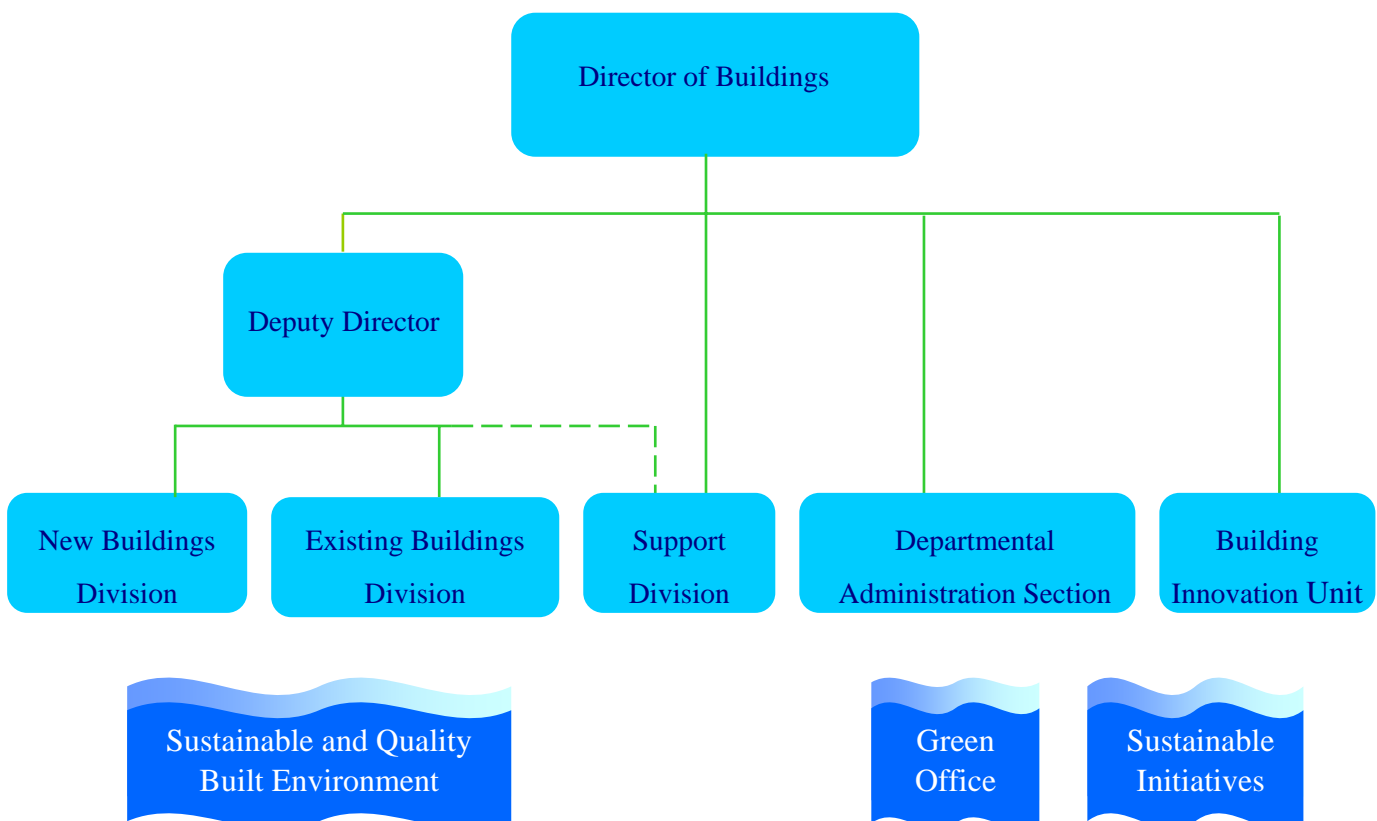
Our Vision: To make the built environment safe and healthy for our community.

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

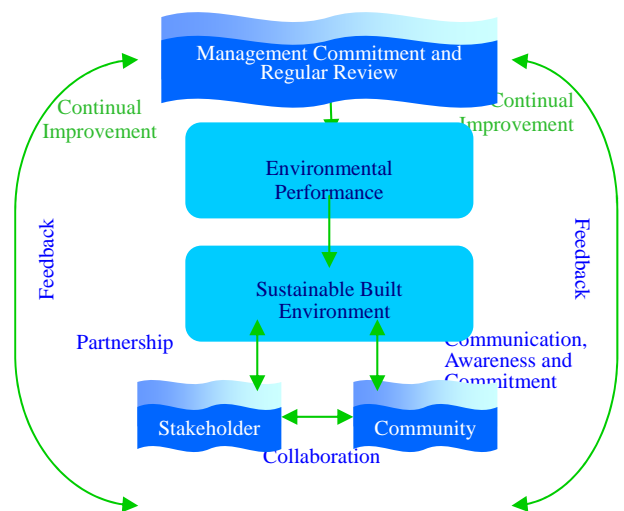
Our commitment and approach to environmental management are established by our determination towards a sustainable environment.

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

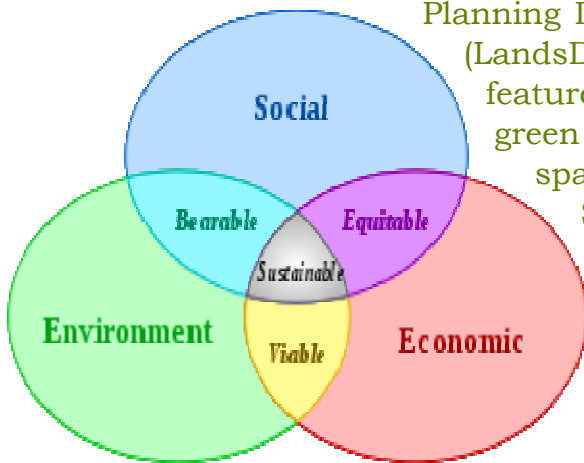
As an ongoing initiative of enhancing sustainable development, we continue our review of the Buildings Ordinance and allied regulations.

Targets	Performance in 2010
<ul style="list-style-type: none"> ● Review of the Buildings Ordinance <p>(a) To review the Building (Planning) Regulations and the Building (Construction) Regulations by including provision of performance-based requirements in addition to the prescriptive standards, where appropriate.</p>	<ul style="list-style-type: none"> ➤ The review on fire safety standards in buildings and related codes of practice was on-going. The building industry is being consulted on the draft new Code of Practice for Fire Safety in buildings. ➤ Review of the Building (Construction) Regulations related to loads on building, street, building works and street works had been completed. We have programmed to introduce the amendment regulation to Regulation 17 of the Building (Construction) Regulations to the Legislative Council (LegCo) on 19 January 2011. The drafting of a new Code of Practice for Dead and Imposed Loads for Buildings providing comprehensive technical guidance on loading requirements has been completed. ➤ Review of the remaining Building (Construction) Regulations is underway.

Chapter 2

Targets	Performance in 2010
<p>(b) To introduce a statutory minor works control system to rationalize the carrying out of minor works and to improve building safety.</p> <ul style="list-style-type: none"> ● Review of the sanitary fitments, plumbing and drainage provisions for Buildings <p>To continue with the review of the current plumbing and drainage standards 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"> ➤ The legislations for the minor works control system including the Buildings (Amendment) Ordinance 2008, Building (Minor Works) Regulation and Building (Minor Works) (Fees) Regulation were passed by the LegCo in 2008 and 2009. The registration of minor works contractors commenced in December 2009 and the minor works control system had been fully implemented since 31 December 2010. ➤ The proposed amendments to the drainage regulations and the draft Code of Practice had been finalized in 2008. Preparatory work for the legislative amendments was being made. ➤ We planned to introduce the proposed legislative amendments to the drainage regulations to the LegCo in the 2011/12 legislative session.
<ul style="list-style-type: none"> ● Review of the Building (Energy Efficiency) Regulation <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 Overall Thermal Transfer Value (OTTV) in Buildings (the OTTV Code), with a view to improving the energy efficiency of buildings.</p>	<ul style="list-style-type: none"> ➤ The working group completed the review of the B(EE)R and the OTTV Code in August 2010 and recommended that the current OTTV standards be tightened up by 20%. ➤ The revised OTTV standards were agreed by the industry and scheduled for implementation with effect from April 2011.

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 2010
<ul style="list-style-type: none"> Sustainable building design <p>Based on a consultancy study on “Building Design that Supports Sustainable Urban Living Space in HK” completed in 2009 and the public views sought via the “Public Engagement Exercise on Building Design to Foster a Quality and Sustainable Built Environment” (the Public Engagement Exercise) conducted by the Council for Sustainable Development (SDC) from June to October 2009, BD has been tasked to promulgate measures recommended in the SDC’s report on the Public Engagement Exercise in promoting sustainable building design features and to draw up the corresponding sustainable building design guidelines. They include:</p> <ul style="list-style-type: none"> - sustainable building design requirements on building separation and permeability, building setback and site coverage of greenery of buildings; - gross floor area (GFA) concession; and - energy efficiency of buildings. 	<div style="text-align: center;"> </div> <ul style="list-style-type: none"> ➤ In the report of the Public Engagement Exercise submitted by the SDC in June 2010, a series of measures to enhance the design standard of new buildings to foster a quality and sustainable built environment in Hong Kong has been recommended. ➤ In response to the recommendations of the SDC, the Administration announced new policy measures on enhancing the design standard of new buildings and control on GFA concession in October 2010. ➤ A dedicated working group has been formed in BD to promulgate the implementation of the new policies on sustainable practices.

- **Promulgating sustainable practices**

To issue practice notes to promulgate building design guidelines in order to **improve the standards of living space.**

Three Joint Practice Notes (JPNs) and 10 Practice Notes (PNs) have been revised, and 2 new PNs have been drawn up by the working group. They were circulated among industry stakeholders for consultation in November 2010.

The JPNs and PNs were scheduled for issue in January and implementation in April 2011 respectively.

Revised Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP) - APP-98 was issued in February 2010 to provide updated design standard and provisions of lighting and ventilation for bathrooms and lavatories in domestic buildings having regard to advances in the ventilation technology and the need for greater freedom in the design of buildings.

Revised PNAP - APP-122 was issued in September 2010 to provide updated design guidelines and requirements for communal sky gardens in refuge floors with reference to the “Study on Green Roof Application in Hong Kong Final report”.

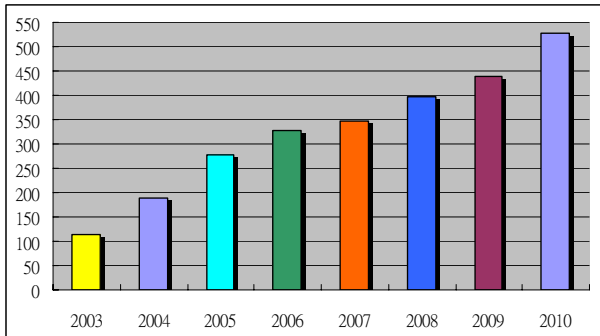
Revised PNAP - APP-130 was issued in September 2010 to provide updated alternative performance standards on the provisions of natural lighting and ventilation in habitable rooms and domestic kitchens as well as the wholesale conversion of existing industrial buildings or other types of buildings to office use for the purposes of Building (Planning) Regulations 30, 31 and 32.

New PNAP - APP-150 was issued in September 2010 to provide guidelines and provisions to encourage the revitalization of the existing industrial buildings through wholesale conversion of vacant or under-utilised industrial buildings in a more sustainable way.

Chapter 2

- **Wider adoption of green features**

(a) To promote **environmentally friendly construction** in private building developments.



Targets

(b) To monitor the **implementation of JPN 1 & 2** aiming to promote green and innovative buildings.

(c) Promoting **BEAM Plus** Assessment

➤ Since the issue of the Joint Practice Notes No. 1 (JPN 1) and No. 2 (JPN 2) in 2001 and 2002 respectively by BD, PlanD and LandsD till end of 2010, a total of 527 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.

Performance in 2010

➤ 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.


➤ The JPN1 & 2 will be revised accordingly.

➤ 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.

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 2010
<p data-bbox="169 636 515 710">Enhancing heritage conservation</p> <p data-bbox="169 757 719 1111">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 adaptive re-use of and alteration and addition works to heritage buildings in Hong Kong under the BO.</p> 	<ul style="list-style-type: none"> <li data-bbox="743 757 1484 913">✦ 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 data-bbox="743 949 1484 1458">✦ 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 is scheduled for completion in early 2011. <li data-bbox="743 1494 1484 1733">✦ Meanwhile, we are refining 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” taking into account the findings from the consultancy study.

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 2010
<p>Minimizing construction and demolition wastes</p> <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>	<p>↗ We issued in April 2010 the revised PNAP APP-143 (previously known as PNAP 299) and the revised PNRC 63 on the precast concrete construction. A total of 35 plan submissions adopting the precast concrete construction were processed by BD in 2010.</p>

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 blackspots through large-scale operations.

Targets	Performance in 2010
<ul style="list-style-type: none"> ● Rectifying drainage defects <p>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.</p>	<p>↗ The Hygiene Blackspots Clearance programme (Phase IV) under the Team Clean Operation continued in 2010. Under this programme, a total of 235 buildings were involved and some 417 unauthorized building works (UBW) were removed.</p>
<ul style="list-style-type: none"> ● Handling water seepage problems <p>To continue the operation of the Joint Office (JO) with the Food and Environmental Hygiene Department in handling public complaints about water seepage problems.</p>	<p>↗ Commencing in April 2009, the JO extended its operation for another three years. In 2010, the JO continued to examine and implement various measures to further and continued to enhance its services.</p>

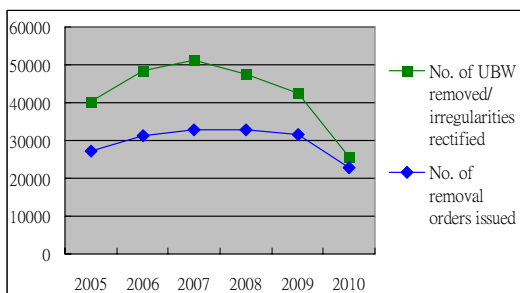
Targets	Performance in 2010
<ul style="list-style-type: none"> Promulgating operation and maintenance practices <p>To issue practice notes to promulgate operation and maintenance guidelines in order to improve the environmental hygiene and in turn the standards of living space.</p>	<p>➤ A circular letter 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.</p>

2.1.6. Promoting Timely Maintenance and Building Repair


We have 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 proposed 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 2010
<ul style="list-style-type: none"> Tackling UBW and rectifying building dilapidation <p>(a) To take vigorous enforcement action to tackle UBW through among others, the Blitz UBW Clearance (BUC) Operation for clearance of UBW in target buildings in one go, and to rectify identified building dilapidations including drainage defects.</p>	<p>➤ 217 buildings were targeted for enforcement action under the BUC Operation in 2010.</p> <p>➤ 22,903 removal orders related to UBW were issued and 25,751 UBW were removed or irregularities rectified.</p>



Targets	Performance in 2010
<p>(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.</p> 	<p>➤ 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 2010, resources were allocated to the follow-up enforcement actions of the outstanding orders issued under COUPS in the preceding years. At the end of 2010, 300 removal orders were served against unauthorized glass panels, 123 removal orders were served against unauthorized advertisement signboards and one removal order was served against unauthorized TV display. A total of 182 and 70 removal orders against unauthorized glass panels and advertisement signboards respectively were complied with or withdrawn.</p>
<ul style="list-style-type: none"> ● Clearance Operation on Unauthorized Roof Structures Ensemble (COURSE) <p>To assist building owners to improve the conditions of their buildings by carrying out clearance of UBWs on rooftops, flat roofs, yards and lanes constituting safety hazard or environmental nuisance, the new operation “COURSE” commenced in late 2009. The operation would include such type of unauthorized structures in predominately industrial buildings in 2010.</p>	<p>➤ On top of the first batch of 40 industrial buildings at launching of COURSE in late 2009, 360 industrial buildings were targeted for enforcement action in 2010. A total of 1,075 orders for 83 buildings were issued for removal of UBWs and necessary building repair. More removal orders would be issued in early 2011.</p> 

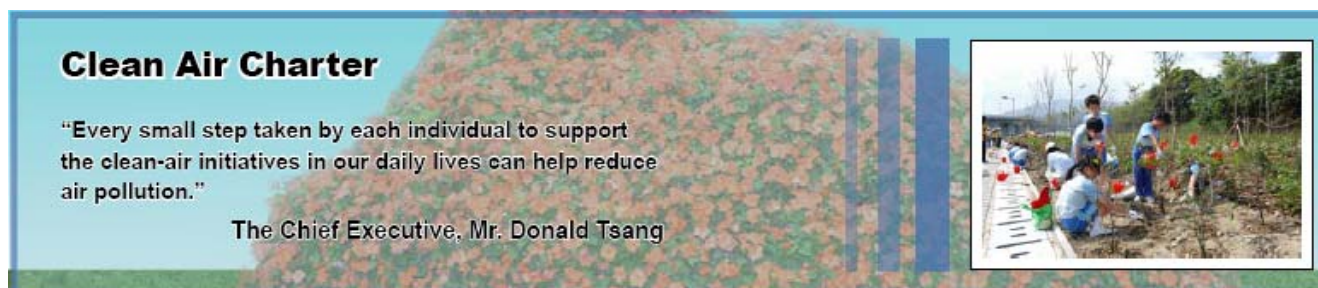
Targets	Performance in 2010
<ul style="list-style-type: none"> ● Improving fire safety measures in certain premises/buildings <p>To improve the existing fire safety measures in prescribed commercial premises, (i.e. banks, off course betting centres, jewellery shops, supermarkets and shopping arcades), as well as pre-1987 commercial buildings and composite buildings.</p> 	<ul style="list-style-type: none"> ➤ 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. ➤ A total of 8,716 fire safety directions were issued for improvement of the fire safety construction in such premises/buildings by upgrading to modern standards.
<ul style="list-style-type: none"> ● Providing a comprehensive network of assistance to building owners to carry out building maintenance <p>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.</p>	<ul style="list-style-type: none"> ➤ In 2010, the resources for CMBS were allocated to the Operation Building Bright. 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.
<ul style="list-style-type: none"> ● Providing financial assistance to building owners <p>To continue administering the Building Safety Loan Scheme 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"> ➤ A total amount of HK\$ 99.7M was committed in 2010.

Targets	Performance in 2010
<p>● Mandating building inspection and maintenance</p> <p>To work out the implementation details of the Mandatory Building Inspection Scheme (MBIS) and the Mandatory Window Inspection Scheme (MWIS).</p>  <p><small>Webpage: http://www.bd.gov.hk/English/services/index_MBIS_MWIS.html</small></p>	<p>Based on the community consensus gathered in the two-stage public consultation launched by the then Housing, Planning and Lands Bureau (HPLB) in 2003 and 2005, the then HPLB published the Report on the Public Consultation on Mandatory Building Inspection in May 2007. Taking into account the feedback from the consultation, the following preparatory work for MBIS and MWIS was in progress:</p> <ul style="list-style-type: none"> – The Buildings (Amendment) Bill 2010 for introduction of the MBIS and MWIS was submitted to LegCo in February 2010; – establishing the requirements and registration criteria of service providers; – compiling a code of practice for inspection and repair of buildings and windows; – compiling an internal manual for implementation and management of the MBIS & MWIS; and – formulating implementation measures to provide financial and technical assistance to owners.
<p>● Operation Building Bright (OBB)</p> <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>	<p>➤ In 2010, BD has engaged consultants and contractors to carry out the repair works for 286 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 409 target buildings and the repair works for 111 target buildings have been completed.</p>
<p>● Removal of abandoned/dangerous signboards</p> <p>To continue the enforcement action against abandoned/dangerous signboards.</p>	<p>➤ In 2010, BD has caused a total of 3,371 abandoned/ dangerous signboards removed/ repaired.</p>

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 2010
<p>① 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>	<p>✔ In our operation, we continued to observe and comply with the ordinances and regulations on environmental protection related to our operation, where applicable.</p>
<p>② Use continuous emissions monitors at significant sources.</p>	<p>✔ This commitment was not applicable to our operation which was mainly office-based and would not generate significant air emission.</p>
<p>③ Publish Information on energy and fuel use, as well as total emission of air pollutants annually and timely, if emissions are significant.</p>	<p>✔ The source of energy and fuel consumption related to our operation included the Use of Electricity and Vehicle Fleet. Such sources produce air pollutant emission of sulphur dioxide (SO₂), nitrogen oxides (NO_x) and respirable suspended particulates (RSP).</p> <p>✔ Our total electricity consumption in 2010 was 2,938,511 kWh, which was 44,664 kWh or 1.5% less than that consumed in 2009.</p>

Commitments	Performance in 2010
	<p>Estimation of the air pollutant emission:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid gray; border-radius: 50%; padding: 10px; background-color: #d3d3d3; text-align: center;"> <p>SO₂ 5,613 kg</p> </div> <div style="border: 1px solid gray; border-radius: 50%; padding: 10px; background-color: #d3d3d3; text-align: center;"> <p>NO_x 3,409 kg</p> </div> <div style="border: 1px solid gray; border-radius: 50%; padding: 10px; background-color: #d3d3d3; text-align: center;"> <p>RSP 176 kg</p> </div> </div> <p>➤ We owned a fleet of 31 vehicles and 6 of them were Hybrid Electric Vehicles. The 31 vehicles traveled 363,278 km in 2010 and the total fuel consumption was 42,348 litres of petroleum. The consumption of fuel per km was 1.7% less than that in 2009.</p> <p>Estimation of the air pollutant emission:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid gray; border-radius: 50%; padding: 10px; background-color: #d3d3d3; text-align: center;"> <p>NO_x 327 kg</p> </div> <div style="border: 1px solid gray; border-radius: 50%; padding: 10px; background-color: #d3d3d3; text-align: center;"> <p>RSP Negligible</p> </div> </div>
<p>(4) Undertake to adopt energy-efficient measures in our operations.</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"> - Maintaining the air-conditioning temperature at 25.5°C and monitoring the room temperature regularly. - Encouraging our staff to dress casual and smart in summers and lightly in winters to minimize the use of air-conditioning. - Installing high output, energy-saving lighting fixtures (T5 fluorescent lamps) in our offices. - 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. - Enabling the hibernation mode or standby mode setting of office equipment and turning them off when they were not in use. - 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.

Commitments	Performance in 2010
	<ul style="list-style-type: none"> - 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. - Encouraging our staff to walk or use public transport whenever possible. - Sharing the use of pool car in order to fully utilize each government vehicle. - Reminding motor drivers to switch off idling engines. - Requesting motor drivers to drive at a steady speed and avoid sudden braking.
<p>(5) Identify and encourage business-relevant measures to be taken in days when air pollution is high.</p>	<p> We continued to encourage our staff to adopt the following measures in our general office and transportation operation:</p> <ul style="list-style-type: none"> - Sharing pool car or using public transport where possible. - Combining trips to maximize the use of departmental vehicles and plan routes to minimize the journey distance and time. - Avoiding the use of the products with high Volatile Organic Compound (VOC) content.
<p>(6) Share air quality expertise in business with others.</p>	<p> 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.</p>

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 2010
<p>Promoting Smoke-free policy</p> <p>To issue guidelines to ensure that the statutory requirements of smoking ban could be fully complied with.</p>	<ul style="list-style-type: none"> ➤ 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. ➤ 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.

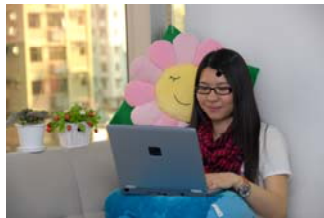
2.2.3. Moving towards a Paperless Office

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 2010						
<ul style="list-style-type: none"> ● On public front <p>(a) To disseminate information to the stakeholder and the public via BD's website as a communication platform.</p>	<p>➤ BD's website continued to provide information on the functions and services of the Department including among others, the following:</p> <table border="0" data-bbox="699 539 1473 860"> <thead> <tr> <th data-bbox="699 539 954 584">Publications</th> <th data-bbox="962 539 1201 584">Notices</th> <th data-bbox="1209 539 1473 584">Publicity</th> </tr> </thead> <tbody> <tr> <td data-bbox="699 584 954 860"> <ul style="list-style-type: none"> • Monthly Digest • Codes of Practice & Design Manual • Practice Notes & Circular Letters for AP/RSE/RGE/RC </td> <td data-bbox="962 584 1201 860"> <ul style="list-style-type: none"> • Consultancy and Contract Tender Notices • Recruitment </td> <td data-bbox="1209 584 1473 860"> <ul style="list-style-type: none"> • Pamphlets • Press Release • TV Announcements of Public Interest </td> </tr> </tbody> </table> <p>➤ 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).</p> <p>➤ 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.</p>	Publications	Notices	Publicity	<ul style="list-style-type: none"> • Monthly Digest • Codes of Practice & Design Manual • Practice Notes & Circular Letters for AP/RSE/RGE/RC 	<ul style="list-style-type: none"> • Consultancy and Contract Tender Notices • Recruitment 	<ul style="list-style-type: none"> • Pamphlets • Press Release • TV Announcements of Public Interest
Publications	Notices	Publicity					
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Chapter 2

- (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.



- 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.
- In 2010, the total number of applications for viewing electronic records handled by BD was 70,700 of which 35,250 were processed by the BRAVO system over the Internet
- The BRAVO system was further enhanced to provide the viewing and copying services for minor works records.



- (c) To accept **submission of documents in electronic format.**

- By virtue of the Electronic Transactions Ordinance, we continued to accept simple electronic submissions under the BO through our e-Counter.

Targets	Performance in 2010
<ul style="list-style-type: none"> ● In our workplace (a) To disseminate information and to introduce more greenhouse measures through increasing usage of LAN as a communication platform. 	<ul style="list-style-type: none"> ➤ 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 being upgraded to provide advance functions to improve collaboration of work via the email network. Development of a new web-based photo library system was also underway to facilitate the sharing of site inspection photos among sections/units for better co-ordination of work.

Electronic Notice Board

- Notices
- Circulars
- Newsletters

BD's LAN

- Office Instructions
- Office Manuals
- Discussion forums
- Questionnaires
- Site inspection photos

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

➤ 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.

(c) To implement the **electronic leave system (e-Leave)**

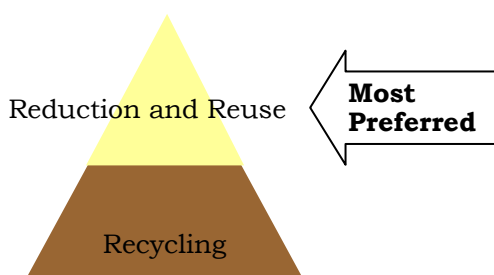
➤ E-Leave continued to provide speedy and paperless leave application and processing services for all our staff.

(d) **Green Management of Data Centre and Green IT Measures**

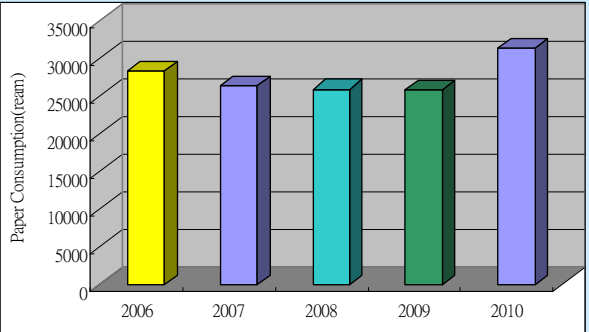
➤ Server virtualization technology was used in our network operating system upgrade project. This had reduced the no of physical servers required in the project by more than 50% thus cutting down electricity power consumption.

➤ 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.

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 2010													
<p>Reduction</p>	<p>Our total paper consumption in 2010 was 31,297 reams. The increase of 5,513 reams or 21% in consumption in comparison to 2009 was mainly due to the launching of some large scale operations and publicity activities.</p> <p>We reduced the use of paper by:</p> <ul style="list-style-type: none"> - Adopting double-sided printing and photocopying. - Using emails instead of paper memos and faxes for internal and external communications. - Minimizing the production of hardcopies of documents. - Sending e-cards. <p>Recycled paper in lieu of virgin paper had continuously been used in the Department. In 2010, 41% of the total amount of paper consumed was recycled paper.</p> <p>In 2010, 1,565 nos. of roll-film and 41,430 nos. of sheet photos were developed and printed respectively. With wider usage on the digital cameras, we expected that the use of roll-film would continue to reduce in 2011.</p>	 <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>2006</td> <td>~30,000</td> </tr> <tr> <td>2007</td> <td>~28,000</td> </tr> <tr> <td>2008</td> <td>~28,000</td> </tr> <tr> <td>2009</td> <td>~27,000</td> </tr> <tr> <td>2010</td> <td>31,297</td> </tr> </tbody> </table>	Year	Paper Consumption (reams)	2006	~30,000	2007	~28,000	2008	~28,000	2009	~27,000	2010	31,297
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2010	31,297													
<p>Reuse</p>	<p>We promoted the reuse of resources by:</p> <ul style="list-style-type: none"> - Encouraging our staff to use blank side of used paper for drafting, filing and printing. - Reusing envelopes for internal circulation. - Using ball pens with refills. - Placing paper with a blank side near high paper usage equipment e.g. photocopying machines, to facilitate reuse. <p>A total of 498,700 nos. of envelopes were consumed in 2010 which was 77% of the consumption in 2009.</p>													

Chapter 2

Recycling

- We collected recyclable waste materials by:
 - Placing collection bags in offices for recycling of waste paper.
 - Placing recycling boxes near high paper usage equipment in our workplaces.
 - Requesting our staff to return used printer cartridges to the Supplies Unit.



- With support from our staff, we collected a total of 17,898 kg waste paper and 1,049 units of used printer cartridges for recycling in 2010.

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

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 instil the concept of timely maintenance of existing buildings and green buildings into the public through our publicity programmes.

Target	Performance in 2010
<p>To sustain public education and publicity campaign on the need for ensuring building safety, fire safety and timely maintenance of buildings.</p>	<ul style="list-style-type: none"> <li data-bbox="555 801 1458 875"> <p> Proactively raising public awareness of fire safety at district levels.</p> <div data-bbox="758 904 1241 1267" data-label="Image"> </div> <li data-bbox="555 1323 1458 1397"> <p> BD staff attended 69 meetings of Fire Safety Committees of Home Affairs Department in 18 Districts.</p> <div data-bbox="767 1426 1251 1742" data-label="Image"> </div>

➤ Promoting fire safety of building to building management professionals in seminars held on 16 and 30 November 2010



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.

Environmental Protection Department was invited to deliver a green talk on “Improving Hong Kong’s Air Quality and Low Carbon Living” in November 2010 to equip our staff with useful knowledge and practical tips which helped raise their awareness and facilitate developing good habits on environment protection.

16 nos. of our professional officers have been nominated to attend the BEAM Professionals (BEAM Pro) Training organized by The Hong Kong Green Building Council (HKGBC) in 2010. Upon completion of the training, they are responsible for integrating the principles of green building and facilitating the process of BEAM Plus certification being promoted by the building industry.

Target	Performance in 2010
<p>To provide more than 500 training man-days on topics related to green building, sustainability and building repairs in 2010.</p>	<p>➤ 31 local seminars / courses / conferences on environmental issues and building repairs were arranged to provide 384 training man-days. 3 site visits to environmentally friendly and innovative buildings were organized to provide 94 training man-days. 5 overseas duty visits were made for attending international conferences on sustainable and innovative buildings.</p>

Way Forward

The Public Engagement Exercise on Building Design to Foster a Quality and Sustainable Built Environment conducted by the Council for Sustainable Development was completed in 2009. The exercise pointed to a need for putting in place a package of new measures to foster a quality and sustainable built environment. A package of measures to promote a quality and sustainable built environment covering the following major elements will be promulgated by early 2011:-

- Sustainable building design guidelines on building separation, building set back and site coverage of greenery
- Gross floor area concessions
- Energy efficiency of buildings

Moving forward, we will continue to:

- Update 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

Rapid environmental deterioration and climate change have become some of the biggest challenges faced by the human race. Such changes are not due to naturally occurring phenomenon but largely arising from human actions. Many believe the situation is still reversible. We must act NOW, for the well-being of our future generations depends on it. Let us join hands to make our world a better and harmonious place to live. 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(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:

Email : 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