BUILDINGS DEPARTMENT ENVIRONMENTAL REPORT 2013





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FOREWORD

Buildings Department Environmental Report 2013

We hope to develop a culture of proper care and responsibility to our built environment so as to enhance our standard of living.



I am pleased to present our fifteenth Environmental Report covering our environmental performance in 2013.

The year 2013 marked the 20th anniversary of the Buildings Department.

Throughout 2013, we continued addressing sustainability by setting and enforcing safety, health and environmental standards; improving the quality of building development; and promoting building safety in the private sector. Measures were implemented in our offices dispersed in 8 different buildings to increase the awareness of our staff on green office management.

To promote the construction of environmentally friendly and sustainable buildings, we kept working in partnership with the building professionals to help them fulfill the requirements under the Sustainable Building Design Guidelines. Legislation and standards were also reviewed to facilitate modern and innovative building design as well as coping with the advancement in technology and rising public In particular, we commissioned a aspiration. consultancy study to comprehensively review the Building (Planning) Regulations and make recommendations on the planning and design standards of buildings.

The Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme have been fully implemented since June 2012 to promote timely maintenance of buildings so as to enhance the sustainability of the existing building stock. Practice notes, guidelines and pamphlets were issued, and district briefing sessions were organised to publicise the schemes and to help building owners understand their responsibilities and the requirements. We continued our efforts in various Large Scale Operations (LSO) and took rigorous enforcement action against dangerous and newly erected unauthorised building works, dangerous buildings, defective drains and signboards. 300 domestic/composite/industrial buildings were inspected under the LSO on inspection of sub-divided flats.

The Validation Scheme for Unauthorised Signboards was fully implemented in September 2013 to enhance the safety of the existing unauthorised signboards. These signboards may be retained for continued use after inspection, strengthening (if required) and certification of the structural safety by building professional and/or registered contractors.

To further enhance the awareness of the public on the importance of building safety. timelv maintenance and our various building control systems and schemes, and hence the sustainability of our built environment, we launched a new thematic website "Care For Your Building" in December Sustaining our public education and 2013. publicity efforts, we hope to develop a culture of proper care and responsibility to our built environment so as to enhance our standard of living.

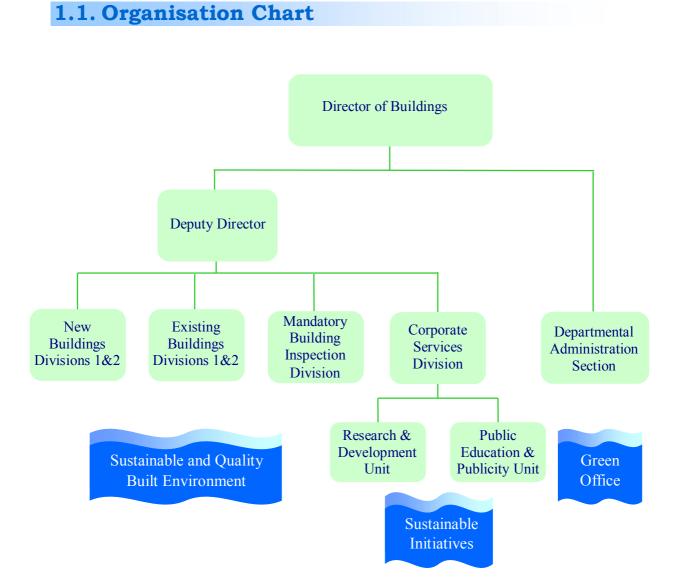
> HUI Siu-wai, JP Director of Buildings

BUILDINGS DEPARTMENT AND THE ENVIRONMENT

Our Visi	on: To make the built environment safe and healthy for our community.
Our Miss	sion: To set and enforce safety, health and environmental standards for private buildings and sustainable building development.
Our Cult	ure: To go the extra mile in serving our customers and the

community as a harmonising regulator.

Under the ambit of the Buildings Ordinance (BO) and its subsidiary legislation, we are devoted to providing services to the public in 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.



1.2. Management Commitment

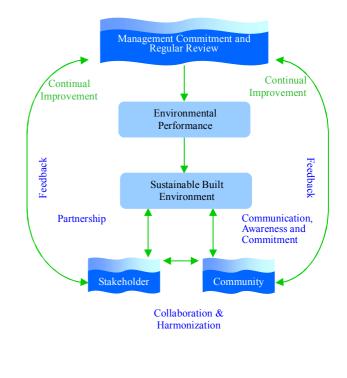
Our commitment and approach to environmental management stemmed from our determination towards a sustainable environment.

We continue to review our policies and strategies to identify any potential impacts to our 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 have joined the Hong Kong Green Building Council (HKGBC) as an Associate Member since 2010 and have been taking part in its Committee work to promote environmental performance assessment.



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

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 and built environment for both the present and future generations of Hong Kong.

2.1 Modernising Building Design Standards

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

Targets	Performance in 2013
• Review of the Building (Construction) Regulations and Building (Planning) Regulations	
To review the Building (Planning) Regulations (B(P)R) and the Building (Construction) Regulations (B(C)R) by including performance-based requirements in addition to the prescriptive standards, where appropriate.	• Subsequent to the taking effect of the amended regulation 17 of the B(C)R and the Code of Practice for Dead and Imposed Loads 2011 on 1 August 2011, the proposed amendments to the remaining parts of the B(C)R were being finalised. We aimed to introduce the proposed legislative amendments to the B(C)R to the Legislative Council (LegCo) in 2014/2015.
	• We commissioned a consultancy study in November 2013 to comprehensively review the B(P)R and make recommendations on the planning and design standards of buildings stipulated therein so as to keep abreast with the advancement of technology and energy efficiency in building design. The study would also seek to update the B(P)R generally to facilitate modern and innovative building design with a view to developing a performance-based regulatory system.

Targets

APTER 2

 Review of the sanitary fitments, plumbing and drainage provisions for buildings

To continue with the review of the **current plumbing and drainage standards** for private buildings by replacing the prescriptive standards with performance-based requirements taking account of the need for environmental protection and material conservation, as well as advancement in environmental science and technologies.

Review of the Building (Energy Efficiency) Regulation

To keep under regular review of the use of the Code of Practice for Overall Thermal Transfer Value (OTTV Code) in Building (Energy Efficiency) Regulation on the energy efficiency of buildings as well as the forthcoming Guidelines on Design and Construction Requirements for Energy Efficiency of Residential Buildings (EE Guidelines).

Preparatory work was in progress for setting up a Technical Committee to collect views and consider comments or feedback arising from the use of the OTTV Code, EE Guidelines, relevant advancement in design, technologies and construction methods, and latest relevant overseas regulatory control and standards.



Performance in 2013

The proposed amendments to the drainage regulations and the draft Code of Practice were further refined to take into account of the views from stakeholders. We planned to introduce the proposed legislative amendments to the LegCo in 2014/15.

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Targets

New design and construction requirements for energy efficiency of residential buildings

To implement a set of design and construction guidelines for improving energy efficiency in residential buildings based on the recommendations of a consultancy study.

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- The consultant completed the review of the legislation, requirements and practices to identify practical measures in improving energy efficiency in residential buildings applicable to the local environment.
- Consultation with professional institutions and stakeholder organisations on the draft Guidelines on Design and Construction Requirements for Energy Efficiency of Residential Buildings (EE Guidelines), and Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineer (PNAP) commenced in August 2013.
- We planned to issue the EE Guidelines in 2014.

Targets

 Consultancy study on introducing seismic-resistant building design standards in Hong Kong

To engage a consultant to formulate a Code of Practice on Seismic-resistant Design Standards for Buildings in Hong Kong.

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- We launched a consultation exercise on 18 October 2012 to collect views of the stakeholders of the building industry and the general public on whether statutory seismic-resistant building design standards should be introduced in Hong Kong.
- The consultation exercise ended on 28 February 2013. Both stakeholders of the building industry and the general public had expressed their support to the introduction of seismic-resistant building design standards for new buildings in Hong Kong and that a tailor-made local code of practice should be formulated for guidance and reference of the building professionals.
- Preparatory work for commissioning a consultant to formulate a Code of Practice on Seismic-resistant Design Standards for Buildings in Hong Kong had commenced. The consultancy would commence in early 2015 and would last for three years. The extant BO and its subsidiary Regulations would be reviewed and corresponding legislative amendments would be proposed, if necessary, to introduce the new design standards.

2.2. Promoting Green and Sustainable Building Developments

We have since 2001 introduced, jointly with the Planning Department and the Lands Department, incentives for developers to provide green features in new building

developments for promoting green and innovative buildings and quality living space. Following the extensive public engagement exercise on building design to foster a quality sustainable built environment conducted and 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 Economic The Buildings Department (BD) has design. implemented the measures recommended in the SDC's report on the Public Engagement Exercise since April 2011.

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	5.	

• Promulgating sustainable practices

Equitable

APTER 2

Social

Suzainable

Viable

Bearable

Environment

To update PNAPs for promulgating building design guidelines in order to **improve the standards of living space**.



- Revised PNAP APP-42 was issued in January 2013 to incorporate the design requirements of satellite dishes/satellite master antenna for television, radio base stations and outdoor prefabricated structures and the revised design guidelines for trellis.
- Revised PNAP APP-2 was issued in November 2013 to reduce the maximum thickness of curtain wall systems in domestic and non-domestic buildings to be disregarded from the gross floor area (GFA) and site coverage calculations.

Targets

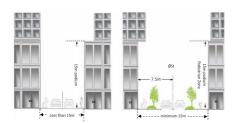
Promoting sustainable building design

To monitor the implementation of the new GFA concessions policy under PNAP APP-152 and the Sustainable Building Design Guidelines (SBD Guidelines) to promote building separation, building setback and site coverage of greenery of buildings as promulgated in PNAP APP-152.



Building Separation

Building Separation Distance

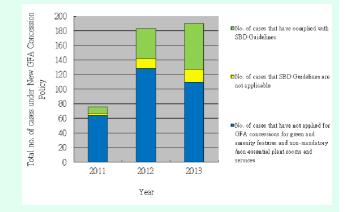


Building Set Back



Site Coverage of Greenery

- Since the implementation of the new GFA concessions policy on 1 April 2011, the BD had taken into account compliance with the SBD Guidelines, where applicable, as a pre-requisite in granting GFA concessions for certain green and amenity features and non-mandatory/non-essential plant rooms and services.
- Refresher seminars were arranged for professionals and stakeholders for sharing the experiences gained in the application of SBD guidelines.
- We provided pre-submission enquiry service to help designers fulfill and understand the SBD Guidelines, in the form of either a response to enquiry submissions or through informal discussions with the BD officers.
- Since the implementation of the new GFA concessions policy in April 2011, a total of 449 new development proposals had been approved under the new GFA concessions policy comprising 113 proposals in compliance with the SBD Guidelines, 34 proposals to which the SBD Guidelines were not applicable and **302** proposals without applying for GFA concessions for green and amenity features and non-mandatory /non-essential plant rooms and services.



Targets

Performance in 2013

• Wider adoption of green features

- (a) To monitor the implementation of Joint Practice Notes 1 and 2 (JPNs 1 and 2) aiming to promote green and innovative buildings.
- (b) To promote better understanding on environmental performance of buildings through **BEAM Plus** Assessment conferred by the HKGBC.



- We continued monitoring the effectiveness of the incentives promulgated in the JPNs 1 & 2 in conjunction with the GFA concessions policy implemented since April 2011.
- ۲ Since April 2011, certification by BEAM Plus Assessment (but without mandating the rating to be achieved) for all new buildings as well as estimation of energy consumption of non-domestic development and the common parts of a domestic development had been the pre-requisites for granting GFA concessions for certain green and amenity features and non-mandatory/non-essential plant rooms and services in new building developments. Such information would be posted on the BD's website after the issuance of the occupation permit to enhance transparency of information on energy performance of a building.
- In 2013, 80 building projects registered for the BEAM Plus certification in order to apply for the GFA concessions.





2.3. 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.

Central Police Station

Target

Performance in 2013

• Enhancing heritage conservation

To continue to offer technical advice and process building plan submissions involving adaptive re-use of and alteration and addition works to heritage buildings which may adopt practical solution and alternative approach for compliance with the building safety and health requirements under the BO.







Mei Ho House

- 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.
 - Following the issue of the Practice Guidebook on Compliance with Building Safety and Health Requirements under the Buildings Ordinance for Adaptive Re-use of and Alteration and Addition Works to Heritage Buildings (Practice Guidebook) in May 2012, the Technical Committee on Building Safety Health Requirements for Historic and Buildings had been set up to collect views and consider comments or feedback received arising from the use of the Practice Guidebook, relevant advancement in design, technologies and construction methods, and latest relevant overseas regulatory control and standards.

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2.4. Reducing Construction and Demolition Wastes

APTER 2

Landfills take up a lot of valuable space in Hong Kong. The existing landfills will be exhausted by 2020. We have continued our efforts to review the current building and construction practices, and to encourage stakeholders to minimise construction and demolition wastes.

Target	Performance in 2013
 Minimising construction and demolition wastes 	
We will continue to collaborate with the stakeholders on the review of the use of environmentally friendly construction methods with a view to minimising	• We processed a total of 43 plan submissions adopting precast concrete construction in 2013.
construction and demolition wastes.	• Revised PNAP APP-2 was issued in November 2013. The thickness of curtain wall for exclusion from GFA calculation had been reduced from 300mm to not exceeding 200mm and 250mm for domestic and non-domestic buildings respectively.
	• We continued to operate the validation scheme for unauthorised household minor works to reduce the need for removal of such unauthorised structures. Unauthorised

2.5. Improving Environmental Hygiene



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

Targets

Performance in 2013

signboards had also been included in a similar validation scheme as further discussed below.

• Rectifying drainage defects

To work in collaboration with the Home Affairs Department and other relevant government departments to **improve environmental conditions** of identified blackspots under the Hygiene Blackspots Clearance programme. • The Hygiene Blackspots Clearance programme (Phase IV) under the Team Clean Operation continued in 2013. Under this programme, a total of 235 buildings were involved and some 439 unauthorised building works (UBW) were removed.

<u>CHAPTER 2</u>

Targets

Performance in 2013

• Handling water seepage problems

To continue the operation of the **Joint Office (JO)** with the Food and Environmental Hygiene Department (FEHD) in handling public reports about water seepage problems.

• Promulgating guidelines to facilitate operation and maintenance

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**.

• The operation of the **JO** was reviewed, with the conclusion of making permanent the operation of the JO so as to enhance the service of the JO in handling public reports about water seepage problems.

- A circular letter was issued in September 2013 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.
- Further to the issue of revised PNAP ADV-14 in June 2012 for the provision of cast-in anchor devices in the design and construction of new buildings for use by workers to prevent and/or arrest falls from height when working on the external walls of buildings during repair and maintenance, the BD joined the Construction Industry Council's task groups formed in December 2013 on preventing fall accidents through building design and preventing fall accidents in existing buildings relating to building repair and maintenance works respectively.

2.6. Promoting Timely Maintenance and Building Repair

HAPTER 2

We have put in place a holistic strategy to tackle the long-standing building dilapidation problems. The Mandatory Building Inspection Scheme (MBIS) and the Mandatory Window Inspection Scheme (MWIS) was fully implemented on 30 June 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, in collaboration with the Hong Kong Housing Society (HKHS) and the Urban Renewal Authority (URA), we have continued the Operation Building Bright (OBB) program to provide subsidies and technical assistance to help owners of old and dilapidated buildings carry out repair and maintenance works.

Targets	Performance in 2013
 Tackling UBW and rectifying building dilapidation 	
 (a) To continue the clearance of UBW in target buildings through large scale operations and to rectify identified building dilapidations including drainage defects in one go. 	 12,005 removal orders related to UBW were issued and 14,972 UBW were removed or irregularities rectified.
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<u>CHAPTER 2</u>

Buildings Department Environmental Report 2013

Targets

(b) To continue the clearance operation of UBW in buildings along pedestrian streets against unauthorised large glass panels, advertisement signboards and TV displays on the external walls.



Clearance Operation on Unauthorised Roof Structures Ensemble

To continue the clearance 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.

Performance in 2013

- In 2013, we continued to take follow-up enforcement actions of the outstanding orders issued against large unauthorised glass panels, advertisement signboards and TV displays on the external wall of 393 target buildings under the clearance operations in the preceding years.
- At the end of 2013, majority of these orders had been complied with. We would continue to step up efforts in clearing the remaining 64 outstanding orders.

In 2013, 500 domestic/composite buildings ۲ years or above and 100 aged 30 domestic/composite buildings aged below 30 years were targeted in the operation. Since the launch of the operation in late 2009 and up to the end of 2013, 810 industrial buildings and 1321 domestic/composite buildings had been targeted with a total of 14,031 removal orders and 43 repair/investigation orders issued. Among these orders, 3,733 had been complied with.

Targets

Performance in 2013

• Large Scale Operation on inspection of sub-divided flats

To continue the Large Scale Operation on inspection of sub-divided flats in target buildings and rectification of irregularities of building works associated with the sub-divided flats.

Improving fire safety measures in certain existing buildings and premises

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**.



 In 2013, 300 domestic/composite/industrial buildings were inspected (involving 1212 sub-divided flats). Irregularities of 217 sub-divided flats were rectified.

- In 2013, 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.
- In 2013, a total of 6,073 fire safety directions were issued to require improvement of the fire safety construction in such premises/buildings.

<u>CHAPTER 2</u>

Targets

Establishing long-term measures to tackle building maintenance problems

To tackle the building maintenance problems in buildings aged 30 or above, the MBIS commenced in 2012.

To tackle the building maintenance problems in buildings aged below 30 years, an operation was launched in April 2011. The operation would include enforcement action on actionable UBWs identified during the inspections.

Providing financial assistance to building owners

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.

- Performance in 2013
- In 2013, 3,328 repair/investigation/removal orders were issued to the target buildings of this special operation as launched in the previous two years.

• A total amount of loan of about HK\$ 141 M was committed in 2013.



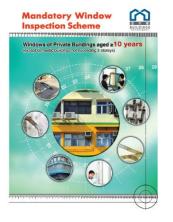
<u>CHAPTER 2</u>

Targets

• Mandating building inspection and maintenance

To continue the implementation of the **MBIS** and the **MWIS** and review the progress of the schemes, and fine-tune the modus operandi in the light of experience gained and feedback from stakeholders and the community.









- Full implementation of the MBIS and MWIS was commenced on 30 June 2012.
- General Guidelines and pamphlets on MBIS and MWIS were issued in June 2012 and updated in December 2013.
- The Code of Practice for the MBIS and MWIS was issued in December 2012. Preparation for setting up a Technical Committee in early 2014 for reviewing the use of the Code of Practice and making recommendations to the Building Authority was underway.
- Further to the issue of five Practice Notes for Mandatory Building and Window Inspection Schemes (PNBI) including best practices on tendering procedures for engagement of Registered Inspectors (RI)/Qualified Persons (QP) and Registered Contractors (RC) under the MBIS and the MWIS in 2012, we issued another Practice Note in 2013 regarding prescribed inspection in respect of projections of buildings.
- 1,576 and 3,943 buildings were targeted for implementation of MBIS and MWIS respectively.
- Each quarter, district briefing sessions would be conducted at various districts for the owners of targeted buildings under the MBIS and MWIS. Since the full implementation of the MBIS and MWIS, we had conducted 119 district briefing sessions (84 out of 119 sessions were held in 2013) in various districts to explain the details of the two schemes and, with the participation of URA/HKHS, the assistance packages available to eligible building owners.

Targets

• Operation Building Bright (OBB)

To assist owners of target dilapidated buildings who are having difficulties in coordinating repair works, the BD in exercise of its statutory power serves repair order in respect of common parts of the target buildings and arranges to carry out the repair works in default of the building owners who are eligible to a grant under the OBB.

Removal of abandoned/ dangerous signboards

To continue the enforcement action against abandoned/dangerous signboards.

• Minor Works Control System

To continue the implementation of the minor works control system (MWCS). The MWCS provides a lawful, simple, safe as well as convenient means for building owners to carry out small-scale building works in order to improve safety standard of building works and facilitate compliance.

• Household Minor Works Validation Scheme

То continue implementation of the Household Minor Works Validation Scheme which facilitate members of the public to retain, after validation, minor household air-conditioner installations including supporting frames, drying racks and small canopies constructed without the prior approval of plans from the BD before the date of commencement of operation of the Scheme

- In 2013, we continued to engage consultants and contractors to carry out repair works for 204 OBB target buildings in default of the owners. Since the launching of the Operation, we had engaged consultants and contractors to carry out repair works in default of the owners for 1,057 target buildings (183 out of 1,057 in 2013) and the repair works for 703 of them (195 out of 703 in 2013) have been completed.
- In 2013, we removed/repaired a total of 1,144 abandoned/dangerous signboards.
- In 2013, we received about 88,000 minor works (MW) submisssions. MW relating to (i) windows; (ii) rendering & tiling; and (iii) air-conditioner supporting frames were three main areas of works which amounted to around 35%, 21% and 14% respectively of the total submissions in 2013.
- In 2013, 18 minor household installations were validated. MW submissions related to air-conditioner supporting frames, drying racks and small canopies amounted to around 14%, 0.4% and 0.7% respectively of the total MW submissions in 2013.

Targets

Validation Scheme for unauthorised signboards under the Signboard Control System

To launch the Validation Scheme for Unauthorised Signboards (VS) to enhance the safety of the existing unauthorised signboards. Eligible unauthorised signboards that existed before the date of implemenation of the VS may be retained for continued use after inspection, strengthening (if required) and submission of certification of the structural safety by prescribed building professional and/or registered contractor to the BD.

Performance in 2013

• The VS was launched on 2 September 2013.

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.

3.1 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 2013
(1) Operate by a recognised world class standard, or the standards established by the Hong Kong/Guangdong governments on emission of air pollutants.	• In our operation, we continued to observe and comply with the ordinances and regulations on environmental protection related to our operation, where applicable.
(2) Use continuous emissions monitors at significant sources.	• This commitment was not applicable to our operation which was mainly office-based and would not generate significant air emission.

<u>CHAPTER 3</u>

Buildings Department Environmental Report 2013

Commitments

(3) Publish information on energy and fuel use, as well as total emission of air pollutants annually and timely, if emissions are significant.

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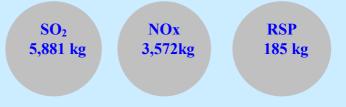
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The source of energy and fuel consumption related to our operation included the Use of Electricity and Vehicle Fleet. Such sources produce air pollutant emission of sulphur dioxide (SO₂), nitrogen oxides (NOx) and respirable suspended particulates (RSP).

Performance in 2013

• Our total electricity consumption in 2013 was 3,079,312 kWh, which was 109,324 kWh or 3.68% more than that consumed in 2012. The main reason for the rise was due to the increase in the number of office premises under the department in response to its manpower growth of 3.7%.

Estimation of the air pollutant emission:



We owned a fleet of 31 vehicles, 6 of them were Hybrid Electric Vehicles and 8 of them were Electric Vehicles. The 31 vehicles travelled 403,987 km in 2013 and the total fuel consumption was 40,650.91 litres of petroleum. The consumption of fuel per km was 12.96% less than that in 2012 which was due to the increase in the number of Electric Vehicles.

Estimation of the air pollutant emission:



<u>CHAPTER 3</u>

Buildings Department Environmental Report 2013

Commi	tments			Performance in 2013
(4) Undertake energy-efficient operations.	to measures	adopt in our	n	Ve continued to adopt the following energy-efficient neasures in our office-based and transportation peration to minimise energy consumption through:
			_	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 minimise 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.
			_	Using timer-switches on electric equipment and office appliances in various sections to save electricity in stand-by mode.
			_	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.
			_	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.
			_	Increasing the number of Electric Vehicles to substitute for old conventional vehicles.
				Encouraging our staff to walk or use public transport whenever possible.



Buildings Department Environmental Report 2013

Commitments	Performance in 2013
	 Promoting the use of pool car in order to fully utilise each government vehicle. Reminding motor drivers to switch off idling engines in compliance with the Motor Vehicles Idling (Fixed Penalty) Ordinance. Requesting motor drivers to drive at a steady speed and avoid sudden braking.
(3) Identify and encourage business-relevant measures to be taken in days when air pollution is high.	 We continued to encourage our staff to adopt the following measures in our general office and transportation operation: Sharing pool car or using public transport where possible. Combining trips to maximise the use of departmental vehicles and planning routes to minimise the journey distance and time. Avoiding the use of products with high Volatile Organic Compound content by incorporating
(6) Share air quality expertise in business with others.	 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.

3.2 Moving towards a Paperless Office

CHAPTER 3

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

	Targets	Performance in 2013	
•	On public front		
(a)	To disseminate information to the stakeholder and the public via the BD's website as a communication platform.	• Our website continued to provide information on the functions and services of the Department including among others, the following:	
	communication platform.	Publications Notices Publicity	
		 Monthly Digest Codes of Practice & Design Manual Practice Notes & Circular Letters for AP/RSE/RGE/RJ/ QP/RC Consultancy and Contract Tender Notices Recruitment Press Release TV Announcements of Public Interest 	
		• To put Green Culture in action, we have prepared an "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).	
		• We continued to inform all AP/RSE/RGE via email of any new/revised Code of Practice, Design Manual, PNAPs and/or circular letters which can be downloaded from our web-site.	
		• We continued to inform all Registered Contractors (RC) via email or Short Message Service (SMS) of any new/revised Code of Practice, PNRCs and/or circular letters which can be downloaded from our web-site.	
		• We continued to inform all Registered Inspectors (RI), Qualified Persons (QP) and RC via email or	

our web-site.

SMS of any new/revised Code of Practice, PNBIs and/or circular letters which can be downloaded from

	Targets	-	Performance in 2013
(b)	To create a thematic website on building safety to help the public and younger people in particular to understand their roles and responsibilities towards a safe and sustainable built environment.	•	We launched the BD's thematic website "Care for Your Building" in December 2013 providing an easy channel for the public to access useful information concerning building safety.
(c)	To simplify the viewing and copying of building records	•	The BRAVO system offers round-the-clock service which allows members of public to view building

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- through the implementation of Buildings Records Access and Viewing On-line (BRAVO) system over the Internet.
- records through the Internet at anytime and anywhere in Hong Kong.
- In 2013, we handled 103,200 applications for viewing electronic records (include minor works records), out of which 81,100 were processed by the BRAVO system over the Internet



	Targets		Performance in 2013
(d)	To accept submission of documents in electronic format.	 ↓ ↓	By virtue of the Electronic Transactions Ordinance, we continued to accept simple electronic submissions ander the BO through our Lotus Notes email system. According to the recommendations of the feasibility study on the implementation of an Electronic Submission System completed in October 2013, a full E-forms Submission System was scheduled to be mplemented in end-2015 to facilitate, among others, the online submission of forms. In view of the low usage of digital signature in Hong Kong, the BD would also explore other legally admissible alternatives, such as a password-protected system for electronic submission in the future.
		t t	Besides, as the feasibility study revealed that it would be difficult and not cost effective for the BD to set up a portal on its own to receive electronic plans, the BD would seek the assistance of the Office of the Government Chief Information Officer (OGCIO) and the Development Bureau to explore whether it would be possible to set up a cross-departmental portal to receive electronic plans in the future.



Targets

Buildings Department Environmental Report 2013 Performance in 2013

• In our work place

To disseminate information and (a) ♦ introduce more green to measures through increasing LAN usage of as а communication platform.

We continued to disseminate information through electronic notice board, our 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. The web-based photo library system continued to facilitate the sharing of site inspection photos among sections/units for better co-ordination of work.

Electronic Notice Board



Our LAN

- Office
 Instructions
- Office ManualsDiscussion
- 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. LAN Link speed in all BD offices were upgraded to further improve the efficiency for dissemination of information. Open Source Departmental Portal Solution would be implemented in February 2014 to improve the stability and efficiency of the Departmental Portal with more e-services hosted under single-sign-on functionalities.

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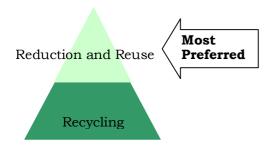
Buildings Department Environmental Report 2013

	Targets		Performance in 2013
(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 to reduce the number of physical servers required thereby cutting down electricity power consumption. Unless overridden by users still working in the office, their computers were turned off automatically at a preset time to reduce unnecessary power consumption. All new printers were equipped with EcoPrint or Energy Saving Mode with Duplex Printing feature. All Servers and Desktop Personal Computers were Energy Star Compliant. Network backup had been used to gradually replace manual backup thereby reducing transportation and storage of tapes. Electronic devices were provided to Chief Officers and above to facilitate paperless meetings. The BD was one of the user departments of the paperless meeting system developed by the OGCIO. The system was being upgraded to cater for the use of tablets other than notebooks. As tablets were more commonly used for meetings by our senior officers, we would keep in view the progress of the system upgrade and would consider using the system in meetings once the upgrade had been completed. Notifications to registered professionals and contractors were made via bulk SMS and emails instead of paper.

<u>CHAPTER 3</u>

Targets	Performance in 2013
 (e) Electronic Information Management (EIM) Strategy Study and Electronic Document Management System 	• We invited the Efficiency Unit (EU) to conduct an EIM Strategy Study in June 2013. The study would assist us to formulate the standards and roadmap for the implementation of the Electronic Document Management System. Such a system would help us reduce the use of paper and proper keeping of records in accordance with the requirements of the Government Records Service.

3.3 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 minimise waste produced from our office operation. Extant BD Administration Circular No. 5/2012 on "Green Practices and Waste Avoidance" has reminded all staff to set a green example by adopting green practices and waste avoidance measures and reducing the consumption of energy and paper.

Targets	Performance in 2013	
Reduction	 Our total paper consumption in 2013 was 29,013 reams, which was 36.89% more than that in 2012. The increase was mainly due to the launch of several major operations and publicity activities. We reduced the use of paper by: 	
	 Adopting double-sided printing and photocopying, and printing of multiple pages into one page. Using emails instead of paper memos and faxes for internal and external communications. Minimising the production of hardcopies of documents. Sending e-cards. Recycled paper in lieu of virgin paper had continuously been used in the Department. In 2013, 42.19% of the total amount of paper consumed was recycled paper. 	

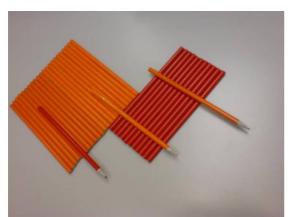
<u>CHAPTER 3</u>

Performance in 2013
 We promoted the reuse of resources by: 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 used paper with a blank side near high paper usage equipment e.g. photocopier, to facilitate reuse. A total of 393,900 nos. of envelopes were consumed in 2013 which was 47.16% lower than that consumed in 2012.
 We collected recyclable waste materials by: placing collection bags in offices for recycling of waste paper. placing paper recycling collection boxes near high paper usage equipment in our workplaces. requesting our staff to return used printer cartridges to the Supplies Unit. With the support from our staff, we collected a total of 33,106 kg waste paper

and 332 units of used printer cartridges for recycling in 2013.

3.4 Procuring Green Products

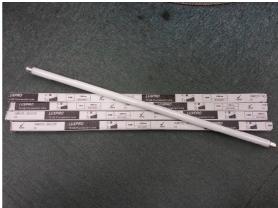
We purchased green products to show our responsibility to save the Earth and support for the recycling industry.



Pencils made of recycled materials



Recycled paper



T5 Fluorescent tube



Rechargeable batteries

3.5 Office Relocation Exercise

Targets	Performance in 2013
To take forward a relocation exercise for the BD offices aiming to enhance the operational efficiency and effectiveness and to promote a greener office as a whole	• Currently, our offices were dispersed in 8 different buildings in Mongkok, Yaumatei, Kwun Tong and Kwai Fong. A review on the office accommodation was conducted with the aims of enhancing coherence and communication amongst staff, and reducing file movement and paper consumption. An office relocation exercise was carried out in phases with the first phase commenced in May 2012. The whole exercise was completed in May 2013.

3.6 Knowledge Management System

Targets	Performance in 2013
To develop a knowledge management system for better sharing of information and knowledge.	 We commissioned the EU to conduct an EIM strategy study. The study would cover Contents Management, Record Management and Knowledge Management for all Divisions/Sections of the department. As short-term measures for sharing of information and knowledge, we set up a database called "BD Knowledge Hub" under the Lotus Notes platform to centrally store the knowledge-based information for staff reference. The knowledge management strategy was incorporated under the EIM Strategy Study being conducted by EU.

<u>CHAPTER 4</u>

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.

4.1. Educating and Engaging 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 has held a series of seminars, roadshows & exhibitions to promote and publicise the current and new building safety initiatives and educate the stakeholders. Also, a comic drawing competition for primary and secondary school students, a thematic website "Care for Your Building" and "Radio-On-Air" programmes were launched to help promote building safety to the younger generation as well as the general public.

Target

To promote and publicise all initiatives of the department to the public and educate the general public and the stakeholders in the building/construction fields on the importance of building safety and timely maintenance of buildings.

Performance in 2013

Organised 67 talks for schools and universities.



• Organised 103 talks for Owners' Corporations, building owners, property management companies and stakeholders in the industry.





Target

Performance in 2013

• Organised and participated in various roadshows & exhibitions



• Organised a Comic Drawing Competition 2013 for primary & secondary school students



• Launched a BD's thematic website "Care For Your Building"





Target	Performance in 2013
Target	Arranged "Radio-On-Air" programmes with Commercial Radio and Metro Radio
	Image: State Stat

4.2. 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.

We would continue to invite the Environmental Protection Department to deliver green talks to our staff to equip them with useful knowledge and practical tips which would help raise their awareness on green management and facilitate them to develop good habits on environmental protection.

25 nos. of our professional officers attended the BEAM Professionals (BEAM Pro) Training organised by HKGBC in 2013. Some of them are responsible for scrutiny of building plans submission including BEAM Plus certification for all new buildings applying for GFA concessions.

Target	Performance in 2013		
To provide more than 500 training man-days on topics related to green building and sustainability in 2013.	• 29 local seminars/courses/conferences on environmental and heritage conservation issues were arranged to provide 449 training man-days. 5 site visits to environmentally friendly and innovative buildings were organised to provide 43 training man-days. 4 overseas duty visits were made for visiting/attending international conferences on sustainable and innovative buildings to provide 22 training man-days.		

WAY FORWARD

We will sustain our enforcement efforts and push ahead to a sustainable living environment through implementing the Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme in target buildings. To enhance the safety of the existing unauthorised signboards, we will encourage signboard owners to join the Validation Scheme for Unauthorised Signboards.

The newly launched thematic website "Care For Your Building" has been a success attracting the public in particular our younger generation to learn more about building safety and our work under various building control systems and schemes. Our main website will also undergo a major revamp to provide an easier and faster service for the public to access useful information.

Looking ahead, we will continue to:

- Review and upgrade the building design standards to achieve more 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 preventive maintenance of buildings
- Implement green office management
- Educate our staff and the public in social responsibility and practices to contribute towards sustainability

FEEDBACK

Your views and suggestions are most welcome. It will help formulate our sustainable policies and strategies and support our continual improvement. For any suggestions/views in connection with this report, please contact us by:

Online Electronic Feedback Form Email : enquiry@bd.gov.hk Website : http://www.bd.gov.hk/ Hotline : 2626 1616 (Our hotline is handled by "1823") Fax : 2537 4992 Mail: 12/F Pioneer Centre, 750 Nathan Road, Mongkok, Kowloon, Hong Kong

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)

Feedback

We value your feedback on our Environmental Report to help us make improvements in the coming year. You may click here to complete and submit the following form (Question 1 to Question 5) online. Thank you in advance for your views.

Question 1. Which sector of the community are you from?

- □ Youth/Student
- Building professional
- □ General public

Question 2. How do you rate the readability of the Report?

- Good
- Average
- Poor

Question 3. Further information you would suggest for inclusion in the Report?

- □ Charts
- □ Tables
- □ Hyperlinks to other information
- □ Others, please specify

Question 4. How do you rate the Report's contribution to your understanding of our environmental performance?

- Good
- □ Average
- Poor

Question 5. Which part of the Report are you most interested in?

- Buildings Department and the environment
- □ Promoting a sustainable built environment
- □ Implementation of green office management
- Education and training

Other comments and suggestions:

The data collected by this feedback form is solely for statistic analysis purpose to help us make improvements in the coming year. Individual views/feedbacks will not be disclosed.