

# **2011 Environmental Report**

**Development Bureau**

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# 1. INTRODUCTION

This report covers the Year 2011 on the environmental performance of the Planning and Lands Branch (PLB) and Works Branch (WB) of the Development Bureau (DEVB).

The Development Bureau was established on 1 July 2007 following the reorganisation of the Government Secretariat's Policy Bureaux. It consists of two policy branches: the PLB and the WB. The Secretary for Development is the head of the Bureau. She is assisted by the Permanent Secretary for Development (Planning and Lands) and the Permanent Secretary for Development (Works). PLB oversees the operation of four departments, namely Planning Department, Buildings Department, Lands Department and Land Registry; while WB is responsible for the operation of five departments, namely Architectural Services Department, Drainage Services Department, Electrical and Mechanical Services Department, Civil Engineering and Development Department and Water Supplies Department.



## 2.

### ENVIRONMENTAL POLICY

We support the HKSAR Government's initiatives to improve the environment by :

- ensuring that sustainable development is the starting-point of all our planning for the development of Hong Kong;
- making available sufficient land for activities that are essential for the sustainable development of Hong Kong;
- promoting the development of sustainable buildings for Hong Kong;
- regenerating older urban districts in Hong Kong;
- requiring ourselves and our agents to minimise any possible environmental impacts in implementing public works;
- revitalising historical and heritage sites and buildings through sustainable approaches;
- promoting a new, strategic approach to greening, landscape and tree management with a view to achieving the sustainable development of a greener environment in Hong Kong;
- promoting waste reduction, recovery and recycling, and less consumption of resources;
- minimising the production of environmental pollutants and/or nuisance; and
- developing a culture of environmental protection and awareness among staff members.

# 3.

## KEY RESPONSIBILITIES

The Development Bureau is responsible for policy matters on land supply and disposal; land use planning; building safety; land registration; urban renewal; revitalizing industrial buildings; greening and tree management; water supply; slope safety; flood prevention; development-related heritage conservation and various works policies such as procurement, construction management and standards, safety and environmental management. The major areas of policy responsibilities include:

- to oversee land policy and the related legislation, land sale and disposal;
- to manage land resumption and clearance compensation, and coordinate land use for potentially hazardous installation;
- to oversee land use planning policy and the related legislation, and issue on territorial, sub-regional and district planning;
- to coordinate the overall planning of Lantau and maintain close liaison with mainland authorities on cross-boundary planning issues;
- to oversee building safety and land registration, and encourage innovation and environmentally friendly building design;
- to review the policy on building maintenance;
- to review the Urban Renewal Strategy and oversee the operation of the Urban Renewal Authority;
- to optimise the use of industrial buildings to meet Hong Kong's changing economic and social needs;
- to ensure the provision of a reliable, adequate and quality water supply and an efficient water supply service;
- to ensure effective planning, management and implementation of public infrastructure development and works programmes in a safe, environmentally responsible, timely and cost-effective manner and to maintain high quality and standards;
- to ensure a high standard of slope safety, and greener and visually more attractive slope appearance;

- to alleviate the risk of flooding and incorporate environmentally friendly measures in river widening works and channel design;
- to uplift the quality of the living environment by promoting sustainable urban greening; and
- to protect, conserve and revitalise historical and heritage sites and buildings through sustainable approaches for the benefit and enjoyment of present and future generations.

## **4.** ENVIRONMENTAL GOAL

Our goal is for all development in Hong Kong to be guided by principles of sustainability in order to balance social, economic and environmental needs, with a view to providing a high quality living environment for both the present and future generations of Hong Kong.





# 5.

## ENVIRONMENTAL PERFORMANCE OF MAJOR POLICY PROGRAMMES

### 5.1 Land Supply

#### *Policy*

Our land policy is to optimise the use of land within a framework set by the land use zoning. When government land becomes available for disposal, it is, whenever possible, disposed of to the private sector or allocated to Bureaux/Departments for permanent development in accordance with the plans/schemes approved under the statutory planning framework.

To this end, we are committed to providing an adequate supply of land to meet demand from the private market and to facilitate community and infrastructural development that are essential to the long-term social and economic development of Hong Kong.

To implement our land policy, we seek to achieve the optimum use of land resources and maintain an effective land administration system.

#### *Promoting Environmental Initiatives*

Through conscientious drafting of lease conditions in land grants, land exchanges and lease modifications, and engineering conditions in the allocation of government land to government departments, we provide one of the vehicles whereby the Government may implement its environmental initiatives. Examples include imposition of mandatory requirements for the provision of Liquefied Petroleum Gas filling facilities in petrol filling station leases, identification of suitable sites for the waste recycling industry in conjunction with the Environmental Protection Department, provision of off-street bicycle parking spaces, and incorporation of the “Tree Preservation Clause” and the “Tree Maintenance Clause” in the existing and new short term tenancies.

A system has been introduced to put on public notice a list of vacant government sites that can temporarily be made available for community and/or amenity purposes by application. Streamlined procedures have been devised in processing applications for the grant of short term tenancies or allocations to departments when made by interested parties. Sites granted for such purposes include community gardening, organic farm, eco-garden cum plant nursery and provision of landscape amenities, which are conducive to improving our environment and the promotion of green living.

### ***Development Controls***

As a positive response to public aspirations for a quality city environment and increasing concerns about excessive development intensity, we reviewed individual sites for sale in the 2011-12 Land Sale Programme. For every site included in the Land Sale Programme, we examined the particulars of each site carefully and specified in the Conditions of Sale the maximum Gross Floor Area (GFA) or plot ratio and building height limit, as well as, where appropriate, other development restrictions, such as site coverage limit, non-building areas, etc. Where necessary, we also conducted air ventilation assessment (AVA) to assess the impact of the development on the pedestrian wind environment and included the relevant restrictions in the Conditions of Sale for the sites concerned to ensure that the air ventilation impact on their surrounding area would not be unacceptable. Where required, pre-land sale tree surveys were conducted to identify trees of particular value for special attention and suitable requirements would be included in the Conditions of Sale.

### ***Land Control and Lease Enforcement Measures***

To improve the environmental conditions of all unallocated government land and private land, the Lands Department (LandsD) has implemented effective land control and lease enforcement measures. During 2011, LandsD handled 939 lease enforcement cases against private land owners in respect of nuisances, erection of structures or conversion of uses not permissible under the leases. In the same year, 50 529 Government Land Notices under the Land (Miscellaneous Provisions) Ordinance were posted for the clearance of unauthorised dumping or occupation of government land.

## **5.2 Land Use Planning**

### ***Policy***

We oversee the process of land use planning to achieve optimum and sustainable use of land, with the aim of making Hong Kong a better place in which to work and live. To this end, we continue to take various actions in 2011 to lower the development density of our city with a view to upgrading urban design, enhancing the vista of buildings, improving air ventilation to generally provide a better living environment. Based on the principle of sustainable development, we also took forward initiatives on pedestrian planning and area improvement, and embarked on the planning work for new areas for development (including areas in the New Territories and Boundary district).

## *Improving Air Ventilation and Urban Climate*

There is growing community aspiration for a better living environment. In recent years, the public has expressed concern about developments of high intensity and compact building bulk, which have visual and air ventilation impacts on the surrounding areas and are commonly called “wall buildings”. The public has also called for measures to prevent developments from creating “wall effect”.

We have examined the practicality of stipulating AVA as one of the considerations for all major development and redevelopment proposals in future planning. A “Feasibility Study for Establishment of AVA System” (AVA Study) was completed in late 2005. The performance-based AVA methodology and a set of qualitative guidelines to achieve better air ventilation objectives were incorporated into the Hong Kong Planning Standards and Guidelines (HKPSG) and promulgated in August 2006.

In July 2006, the then Housing, Planning and Lands Bureau and the then Environment, Transport and Works Bureau jointly issued a Technical Circular on AVAs. Proponent departments/bureaux or authorities responsible for major government projects are required to undertake AVA to ensure that air ventilation impact is given due consideration in the planning and design of the projects. We also encourage quasi-governmental organizations and the private sector to conduct AVA in the planning and design of their projects on a voluntary basis. In the case of redevelopment projects, the Urban Renewal Authority (URA) has adopted the guidelines set out in the Technical Circular and conducts AVA for its large-scale projects under planning. For railway property development, the MTR Corporation Limited would take into account the Government’s guidelines on air ventilation in the planning and design of the projects, and conduct AVA for projects yet to be approved, where required.

The Government has observed the Technical Circular and conducted AVA where necessary for new individual land sale sites in the Application List, and in reviewing of Outline Zoning Plans (OZPs) and carrying out planning studies. Taking into account AVA findings, appropriate development parameters such as site coverage, maximum GFA/plot ratio, building height, podium size, non-building area, building set back, etc. would be specified in the Conditions of Sale of the sites, on the OZPs and in planning briefs.

To provide a more scientific basis for urban climatic consideration in town planning, a Feasibility Study on “Urban Climatic Map and Standards for Wind Environment” was commissioned by the Planning Department (PlanD) in 2006. The Study will establish an Urban Climatic Analysis Map, an Urban Climatic Planning Recommendation Map, a set of planning and design measures to improve urban climate, a wind performance criterion which can be practically adopted for AVA in Hong Kong and a refined methodology for conducting

AVA. The technical investigation for the Study had been completed and a 2-month stakeholders engagement was conducted from December 2011 to February 2012. Taking into account stakeholders' views collected, the Study will be finalized in 2012.

### ***Review on Development Intensities***

Pursuant to the Chief Executive's 2007-08 Policy Address, the Town Planning Board and PlanD have been reviewing OZPs with a view to meeting rising public aspiration for a better quality living and working environment. Priority has been given to reviewing building heights in areas subject to high development/redevelopment pressures, and areas of special setting and character which warrant particular attention, such as waterfront areas along Victoria Harbour, areas within view corridors to important ridgelines and congested built-up areas. This involves about 43 OZPs. In 2011, 2 OZPs incorporating amendments on building height restrictions were exhibited for public inspection. As at end 2011, 29 OZPs and part of 3 OZPs had been reviewed with incorporation of building height restrictions.

The review of the OZPs takes into account the topography, local character, existing building height profile of the planning areas and its compatibility with the surrounding areas as well as the prevailing planning circumstances and urban design principles. AVAs are undertaken for the OZPs where appropriate to provide qualitative assessment of the wind environment within the area, identify problem areas and propose mitigation measures.

Apart from reviewing the OZPs, the Government has incorporated, where justified, specific development parameters in the Conditions of Sale for sites included in the Application List and modified leases of redevelopment sites.

### ***Conservation-related Zones***

The scarcity of land and increasing development pressure impose threats on our natural environment. Zoning designation helps safeguard our natural environment against undesirable development in areas of high conservation value.

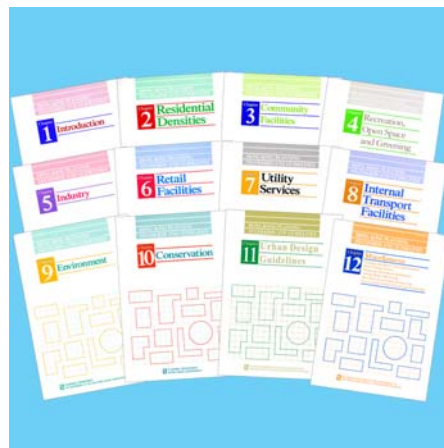
As at the end of 2011, about 9 250 hectares (or 21%) of land in the New Territories fell within the following conservation-related zones on the relevant statutory plan : "Conservation Area", "Site of Special Scientific Interests", "Country Park", "Coastal Protection Area", "Other Specified Uses" annotated "Comprehensive Development to include Wetland Restoration Area", "Comprehensive Development and Wetland Protection Area" and "Comprehensive Development and Wetland Enhancement Area".

Following the Chief Executive's 2010-11 Policy Address, to forestall

human damage, country park enclaves not yet covered by statutory plans will be either included into country parks, or have their proper uses determined through statutory planning. There are currently 77 country park enclaves, of which 23 are already covered by OZPs and 12 Development Permission Area plans have been prepared for 17 enclaves, namely, Mau Ping, Mau Ping Lo Uk, Mau Ping San Uk, Wong Chuk Shan; Tin Fu Tsai; Sam A Tsuen; Siu Tan; Kop Tong, Mui Tsz Lam, Lai Chi Wo; So Lo Pun; Pak A; Tung A; Pak Lap; Pak Tam Au; To Kwa Peng; Ko Lau Wan, Mo Uk, Lam Uk, Lau Uk, Tse Uk; Sai Wan; Hoi Ha; Luk Wu, Upper Keung Shan, Lower Keung Shan, Cheung Ting, Hang Pui; Ngau Kwo Tin and Shui Mong Tin.

### ***Hong Kong Planning Standards and Guidelines***

The HKPSG, comprising a total of twelve chapters, is a government manual of criteria for determining the scale, location and site requirements of various land uses and facilities. The purpose of the HKPSG is to provide specific standards and general guidelines to ensure that during the planning process, the Government will reserve adequate land to facilitate social and economic development and provide appropriate public facilities to meet the needs of the public. Apart from development purposes, the HKPSG also provides guidelines on environmental planning and conservation of our natural landscape, habitats, cultural heritage and townscape. The HKPSG is revised and updated from time to time to reflect and keep pace with government policies and the changing needs/aspirations of society.



Hong Kong Planning Standards and Guidelines

### ***Pedestrian and Area Improvement Plans***

PlanD has completed pedestrian plans for Causeway Bay, Kwun Tong, Tai Po Market and Central District, and area improvement plans (AIP) for Tsim Sha Tsui and Mong Kok with a view to bringing about an overall framework for improvement to congested urban areas. While some of the short-term pedestrian planning proposals have been completed, a number of the priority AIP projects are at various stages of implementation. The remaining

pedestrian and AIP proposals would be taken forward for implementation under the existing mechanism and resource allocation system.



Landscaped Area at Ashley Road

### ***Enhancement Projects for the Harbourfront***

We are committed to promoting the enhancement of the harbourfront as well as improving its accessibility. Subject to the actual circumstances of the harbourfront sites and through effective allocation of resources, we gradually construct various harbourfront promenades for public enjoyment. Apart from taking forward the development of the new Central harbourfront, the Administration has also actively carried out various enhancement works at both sides of Victoria Harbour. Projects completed for public use in 2011 include Aldrich Bay Park, the Hung Hom Promenade and Tsim Sha Tsui Promenade Extensions. PlanD also conducted planning studies related to the harbourfront such as the Hong Kong Island East Harbour-front Study, which aimed to formulate a comprehensive plan for enhancement of the Hong Kong Island East harbourfront areas, focusing on connectivity and pedestrian accessibility to the harbourfront. PlanD completed the Stage 3 Public Engagement Programme of the Study to solicit views on the preferred option of enhancement proposals in mid-2011, and the study was scheduled for completion in March 2012.

We will continue to strengthen our work on harbourfront enhancement and work closely with the Harbourfront Commission in identifying, planning and undertaking harbourfront enhancement projects, as well as widely engaging the public throughout the planning and implementation process.

### ***Planning Enforcement against Unauthorised Developments***

Unauthorised developments (UDs) have led to environmental degradation in the rural New Territories, and are causing nuisance to local communities. They have damaged the natural environment and also caused problems like

flooding, air and water pollution, traffic congestion, sometimes even posing a threat to public safety. Planning enforcement and prosecution actions against UDUs are therefore necessary to help prevent further degradation of the rural environment.

In 2011, 375 new UDUs, including mainly open storage, container-related uses, vehicle parks and land/pond filling, were detected in the rural areas. The Planning Authority has issued a total of 3 580 warning letters/ reminders for 624 cases, 1 997 enforcement notices for 314 cases, 13 stop notices for 2 cases, 357 reinstatement notices for 59 cases and 1 624 compliance notices for 269 cases. A total of 141 notice recipients, who did not comply with the requirements of the notices, were prosecuted, convicted and fined. During the year, enforcement and prosecution actions have resulted in the discontinuation of 200 UDUs occupying 52 hectares of land, while another 80 UDUs covering 20 hectares of land were regularised through the planning application system.

During the year, we also carried out publicity campaigns on planning enforcement including television and radio announcements of public interest, promulgation of pamphlets and posters, and outreach education programmes in secondary schools.

### ***Planning Studies in the Boundary District and Northern New Territories***

#### ***1. Hong Kong – Shenzhen Cooperation in Planning for the Boundary District***

Since its establishment in 2007, the Hong Kong – Shenzhen Joint Task Force on Boundary District Development (Joint Task Force), co-headed by the Secretary for Development and the Executive Deputy Mayor of the Shenzhen Municipal Government, has made continuous effort in planning for the boundary district of the two cities, including the Lok Ma Chau Loop and the proposed boundary control point at Liantang/Heung Yuen Wai. Working groups have been set up under the Joint Task Force to study various issues related to these two projects.

#### **Planning and Engineering Study on Development of Lok Ma Chau Loop**

The Planning and Engineering Study on Development of Lok Ma Chau Loop jointly commissioned by the Hong Kong and Shenzhen Governments commenced in June 2009. Both Governments agreed that higher education would be the leading land use in the Loop, to be complemented by high-tech research and development as well as cultural and creative industries. The Loop would be developed as a knowledge and technology exchange zone for cross boundary human resources development as well as a hub for exchange of knowledge and



technology between Hong Kong and the Mainland. A Preliminary Outline Development Plan (PODP) was formulated with a view to developing a sustainable, environmentally friendly, energy efficient and people oriented community. The Stage 1 public engagement on the PODP exercise on the PODP was completed in January 2011. The consultants then carried out detailed technical assessments to formulate a Recommended Outline Development Plan (RODP). The Stage 2 public engagement, which aimed at collecting public views on the RODP, was scheduled for mid 2012. The study is expected to complete by early 2013.



Lok Ma Chau Loop Study Area

The Loop is situated in the upstream of Mai Po Inner Deep Bay Ramsar Site. The adjacent wetland has high ecological value. In the study, environmental impact assessments are being carried out as required under the Environmental Impact Assessment Ordinance. Mitigation measures will be proposed to ensure that development in the Loop will be environmentally acceptable and the existing ecology of the surrounding areas will not be adversely affected. Moreover, green initiatives are being examined for adoption in the Loop.

## 2. *Planning and Engineering Studies for New Development Areas in Northeast New Territories and Hung Shui Kiu*

To cope with Hong Kong's population growth and the long-term demand for housing and employment, the development of the New Development Areas (NDAs) in Kwu Tung North, Fanling North, Ping Che/Ta Kwu Ling in Northeast New Territories (NENT) and NDA in Hung Shui Kiu in Northwest New Territories (NWNT) is being taken forward. NDAs are smaller-scale new towns to provide housing land and to meet other future land use requirements. With convenient access to mass transportation and community facilities and the



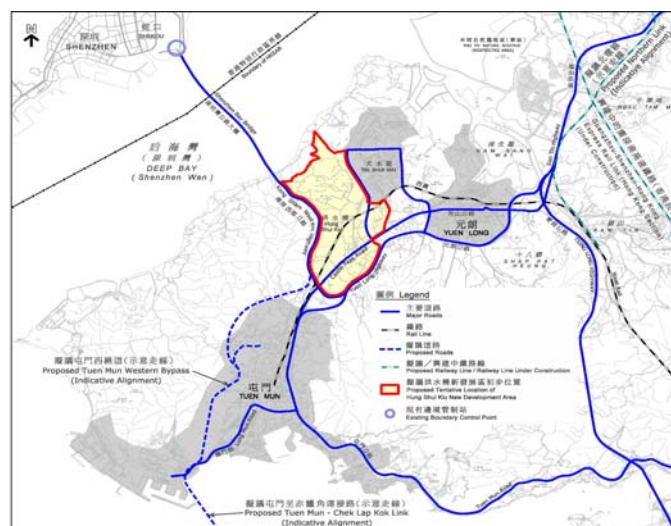
development of lower-density buildings, NDAs offer an alternative choice of quality living environment. The planning and design for NDAs in NENT has followed the sustainable development principle, with emphasis on urban design considerations and the adoption of environmentally friendly and energy saving measures.



Artist Impression of Fanling North Riverside

In response to the general public's aspirations for a better quality living environment, the PODPs for the NENT NDAs have accorded high priority to "green design". Subsequent to the completion of the Stage Two Public Engagement on the PODPs in early 2010, we are now formulating the RODPs taking account of the public views received and the findings of various technical assessments. We shall continue to engage the public on the discussion of sustainable development for the planning of the NDAs.

As regards the Hung Shui Kiu NDA Planning and Engineering Study, which commenced in August 2011, the Stage 1 community engagement activities would be completed in February 2012. The public views received will provide useful input for formulating the PODP.



## Location of Hung Shui Kiu New Development Area



Public Forum in Stage 1 Community Engagement

As part of the work of the planning and engineering studies, environmental impact assessments are being undertaken to confirm the environmental acceptability of the proposals.

### **5.3 Building Safety and Maintenance**

#### ***Policy and Vision***

Our vision is a safe and healthy built environment and an attractive city outlook worthy of a dynamic world-class city. We aim to achieve this through quality construction, proper building maintenance, clearance of illegal structures, public education and community participation in a culture of good building care.

#### ***Green Building***

##### Private Buildings

It has been an established Government policy to facilitate and encourage the provision of various building features which can enhance the living environment of the residents and the convenience of other users in private building developments through the granting of incentives such as GFA concessions.

In response to the rising public concerns over the effect of building bulk and height on the built environment, in January 2011, the Buildings Department (BD) issued 15 new and revised Practice Notes to the industry under the policy to foster a quality and sustainable built environment – a policy that was announced by the Chief Executive in his 2010-11 Policy Address. These practice notes promulgate a package of measures for controlling the

amount of GFA concessions; require new buildings to undertake the Building Environmental Assessment Method (BEAM) Plus Assessment conferred by the Hong Kong Green Building Council (HKGBC) as a pre-requisite of seeking GFA concessions; create sustainable building designs on building setback, building separation and greenery coverage; as well as tighten the overall thermal transfer value of external walls and roofs in commercial buildings. The policy is applicable to all new building developments, the plans of which were submitted to the BD for approval on or after 1 April 2011. The new package of measures was formulated following a public engagement process launched by the Council for Sustainable Development from June to October 2009.

### Government Buildings

In April 2009, we promulgated a comprehensive target-based environmental performance framework jointly with the Environment Bureau for new and existing Government buildings with a view to promoting green buildings in Hong Kong. The framework sets targets in various environmental aspects, such as energy efficiency, renewable energy, indoor air quality and greenhouse gas emissions. All newly-built Government buildings with construction floor areas of more than 10 000m<sup>2</sup> are required to obtain the second highest grade or above under the BEAM Plus green building rating system conferred by the HKGBC. Since the launch of the BEAM Plus green building label on 1 April 2010, over ten Government projects have been registered for the assessment.

We have been collaborating with the Construction Industry Council to develop a public open space in Kowloon Bay with the theme of “low carbon living”, which includes the construction of a landscaped area and a zero carbon building (ZCB). Scheduled to open by mid 2012, ZCB has adopted a variety of energy-saving, low-carbon building design and technologies with real-life applications in local home and office settings.

We have been actively taking part in various international events to promote exchange and sharing of experiences in green building issues with other regimes. In 2011, the Secretary for Development led a Hong Kong delegation comprising green building professionals, academia and Government officials to attend the World Conference on Sustainable Building held in Helsinki, Finland, to advocate the role of the HKGBC to become the leading body in sustainable buildings both locally and internationally.

### ***Enforcement Actions against Unauthorised Building Works and Building Dilapidation***

Proper building management and timely maintenance of existing buildings help prolong the overall life span of buildings, optimise the economic value of

our scarce land resource and improve the living environment, all of which contribute to a sustainable living environment. To this end, the BD has all along been taking enforcement action against both unauthorised building works (UBWs) and building dilapidation. In April 2011, the BD stepped up its enforcement upon the completion of a comprehensive review of the Government's building safety policy and measures. In particular, a new enforcement policy against UBWs was adopted, whereby the scope of UBWs that would be subject to priority enforcement was extended to include UBWs on rooftops and podiums, as well as in yards and lanes of buildings. The BD also launched three new large scale operations in April 2011, with an annual target to: (a) remove the UBWs situated on the rooftops and podiums, or in the yards and lanes of 500 target buildings; (b) inspect 150 buildings with subdivided flats; and (c) serve repair/investigation orders on 500 dilapidated buildings. Under the new enforcement policy, the BD issued 9 176 removal orders against UBWs and 796 repair/investigation orders on dilapidated buildings in 2011. A total of 17 879 UBWs were removed in 2011 as a result of BD's enforcement action.

In June 2011, we announced our policy, on the fundamental premise of ensuring building and public safety and compliance with the law, to strengthen control of unauthorised building works in New Territories Exempted Houses, through categorisation of the unauthorised building works and prioritisation of enforcement actions. We also announced a reporting and safety certification scheme to ensure the safety of a certain category of existing unauthorised structures in these New Territories Exempted Houses. The enhanced enforcement policy and the reporting and safety certification scheme will be implemented from April 2012.

### ***Minor Works Control System***

After years of preparation, the Minor Works Control System was fully implemented at the end of 2010. Compared with the existing approval and consent mechanism adopted by the BD, this regime has simplified the relevant procedures to provide a lawful, simple, safe and convenient means for owners to carry out a total of 118 minor works items, including the demolition of UBWs. With such simplified requirements, the regime will help reduce the number of UBWs in Hong Kong. So far, the implementation of the new regime has been smooth and the regime is generally welcomed by both the industry and the public. As at 31 December 2011, the BD had approved over 12 500 applications from industry practitioners for registration as Registered Minor Works Contractors. A total of over 40 000 minor works submissions were received in 2011, exceeding the original estimate of around 36 000 minor works submissions per year. In 2011, the DEVB also continued to work with the BD to widely promote the regime to both building professionals and building owners.

### ***Mandatory Building and Window Inspection Schemes***

The Buildings (Amendment) Ordinance 2011, which provides for the legislative framework of the Mandatory Building Inspection Scheme (MBIS) and the Mandatory Window Inspection Scheme (MWIS), was enacted on 29 June 2011. The proposed MBIS and MWIS cover all private buildings in Hong Kong (except domestic buildings not exceeding three storeys in height) that are aged 30 years or above and ten years or above respectively. Building owners are required to carry out prescribed inspection in relation to the common parts, external walls, projections and signboards of the buildings every ten years under the MBIS, and of the windows in the building every five years under the MWIS and, if necessary, prescribed repair. The BD will arrange to select around 2 000 and 5 800 target buildings every year for the MBIS and the MWIS respectively.

On completion of the Legislative Council's scrutiny of the relevant subsidiary legislation in December 2011, the BD commenced registration of registered inspectors for the MBIS on 30 December 2011. The two schemes will be fully implemented in 2012.

It is anticipated that the two schemes will be able to alleviate the problem of building dilapidation in Hong Kong, and hence improve our living environment. To assist owners in need to comply with the statutory requirements, the Administration and its partner organisations will provide the relevant technical and financial support to such owners.

### ***Operation Building Bright***

As one of the measures for "preserving jobs" amidst the financial tsunami, the DEVB, in collaboration with the Hong Kong Housing Society (HKHS) and the URA, launched the "Operation Building Bright" (OBB) in May 2009. The OBB aims to achieve the dual objectives of creating more job opportunities for the construction sector as well as improving building safety and the cityscape. The OBB does not have any asset or income means tests. Once an application is approved or a building is selected as a target building under the OBB, owners of the residential and commercial units can receive a grant amounting to 80% of the cost of repair, subject to a ceiling of \$16,000. Elderly owner-occupiers aged 60 or above can receive a grant to cover the full cost of repair, subject to a ceiling of \$40,000.

In 2009, the Government provided funding twice, with a total of \$1.7 billion, to the OBB, while the HKHS and URA injected \$300 million funding to the same. Subsequently, the Government had injected further funding to the OBB twice, thus increasing the total funding to \$3.5 billion. With a total budget of \$3.5 billion, it is anticipated that the OBB could in total assist over



3 000 target buildings and create more than 60 000 job opportunities for construction and maintenance workers as well as related professionals and technicians. Up to 31 December 2011, over 3 000 target buildings had been included for assistance under the OBB. Among these, 631 buildings had completed repair works and 833 buildings had repair works underway. The OBB has so far created over 28 000 jobs.

## 5.4 Urban Renewal

### *Policy*

The purpose of urban renewal is to improve the living environment of residents in older urban areas while endeavouring to preserve the areas' local character and social network. It involves redeveloping dilapidated buildings, rehabilitating poorly maintained buildings, revitalizing old districts, and preserving buildings of historical, cultural or architectural significance.



We formulate the overall urban renewal policy, and provide support and policy guidance to the URA, a statutory body which was established in May 2001 to undertake urban renewal.

DEVB conducted a review of the 2001 Urban Renewal Strategy (URS) between July 2008 and July 2010 to ensure that the URS is brought up-to-date and reflects changing public aspirations towards urban renewal. After an extensive three-stage public engagement and with the endorsement of the

Executive Council, a new URS was promulgated on 24 February 2011 reflecting broad public consensus. All major initiatives as set out below under the new URS have since been put in place:

- The first advisory District Urban Renewal Forum has been set up in Kowloon City to strengthen urban renewal at the district level, adopting a district-based and public participatory approach;
- The Urban Renewal Trust Fund with an endowment of \$500 million from the URA was set up in August 2011;
- The URA launched its new “facilitator” scheme and “demand-led” scheme in July 2011 to facilitate more diverse forms of redevelopment; and
- The URA has launched the “Flat-for-Flat” scheme as an alternative to cash compensation for owner-occupiers of residential properties affected by the URA's urban redevelopment projects.

### ***Work of the URA***

Under the new URS promulgated in February 2011, the URA is tasked to adopt “Redevelopment” and “Rehabilitation” as its core businesses.

By end 2011, the URA and its strategic partner, the HKHS, had commenced a total of 41 redevelopment and four preservation-cum-revitalisation projects. The URA is now preserving over 60 pre-war buildings for adaptive re-use within its project areas.

To assist owners in need to rehabilitate their buildings, the URA has provided them with materials, interest-free loans, grants, technical advice and other assistance. Up to end 2011, the URA had assisted about 43 000 owners to rehabilitate their 533 buildings on a voluntary basis under the various rehabilitation schemes provided by the URA (excluding the OBB). In 2009, in support of the Government’s initiative to create employment opportunities through the promotion of building rehabilitation, the URA agreed to contribute \$150 million and to provide other supporting resources to implement the OBB within the URA’s Rehabilitation Scheme Areas. Up to the end of 2011, the URA has been assisting about 1 330 buildings in its Scheme Areas under the OBB. The URA anticipates that, in total, about 1 400 buildings in its Scheme Areas will be rehabilitated under the OBB.

With a view to providing one-stop assistance to building owners in need to maintain and repair their buildings, starting from 1 April 2011, the various financial assistance schemes operated by the URA and HKHS have been amalgamated into a single scheme called the “Integrated Building Maintenance Assistance Scheme”.



The URA has also carried out revitalisation initiatives in various old districts. Following the Chief Executive's announcement in the 2009-10 Policy Address, the URA is working to conserve and revitalise the Central Market building to turn it into a new Central Oasis.



The ongoing Lee Tung Street project in Wan Chai is the first URA project implementing the Authority's comprehensive policy on environmental sustainability, which emphasises on energy efficiency, water conservation, facilities for collection of recyclable waste, use of environment-friendly and recycled materials, and reduction of construction waste.

In 2011, the URA received further industry environmental awards for its projects in the year including another BEAM Platinum Award and two further



provisional awards, in addition to the six BEAM Platinum Awards received in previous years. One further notable example of the URA's commitment to a sustainable environment was the completion of the relocation of a 40-year-old tree weighing over 300 tonnes from the URA's work site at Yuet Wah Street to a nearby park as part of the Kwun Tong Town Centre redevelopment project.



### ***Facilitating Redevelopment by Private Property Owners***

The LegCo enacted the Land (Compulsory Sale for Redevelopment) Ordinance (Cap 545) in 1998 to facilitate redevelopment by owners of their private buildings in multiple ownership. Under the Ordinance, any person or persons who owns or own not less than 90 per cent of the undivided shares of a lot may make an application to the Lands Tribunal for compulsory sale of the lot for redevelopment.

The Land (Compulsory Sale for Redevelopment)(Specification of Lower Percentage) Notice, which came into operation on 1 April 2010 after scrutiny by the LegCo, specifies a lower compulsory sale threshold of 80 per cent for three classes of lot. The lowering of the application threshold for certain classes of lot under the Notice will help further expedite urban redevelopment by the private sector so as to make better use of our valuable land resources.

To provide further support to minority owners affected by compulsory sale or voluntary acquisition prior to compulsory sale, DEVB launched two pilot

schemes, namely, the Pilot Mediation Scheme and Pilot Scheme on Outreach Support Service for Elderly Owners, in January 2011.

## **5.5 Revitalising Industrial Buildings**

The package of measures to promote revitalisation of vacant or under-utilised industrial buildings (“the revitalisation measures”) came into operation on 1 April 2010. The objective is to encourage the provision of more suitable premises through redevelopment or wholesale conversion of older industrial buildings to meet Hong Kong’s changing social and economic needs.

As announced by the Chief Executive in his 2011-12 Policy Address, we had completed a mid-term review on the revitalisation measures in September 2011 and decided to introduce a number of refinements to the measures to allow more flexibility in wholesale conversion and encourage adoption of green building design and features in the converted buildings. The refinements are now in place and we have also extended the deadline of application for the revitalisation measures for three years to 31 March 2016.

Wholesale conversion of existing vacant or under-utilised industrial buildings for more gainful uses is itself an environmentally friendly and sustainable way to provide suitable premises to support various social and economic activities, because this would help contain the generation of construction waste and thus extend the lifespan of landfills. We encourage wholesale conversion projects to go through BEAM Plus Assessment by the HKGBC. The BEAM Plus is Hong Kong’s unique assessment system for green building certification to enhance building environmental sustainability. The assessment would contribute to promoting healthy indoor environments, and reducing energy, water and resource consumption as well as carbon footprint of the proposed conversion projects.

The revitalisation measures will help regenerate older industrial areas, inject new vibrancy into the local communities and create jobs. In support of the principle of sustainable development, the measures to facilitate redevelopment of industrial buildings also encourage owners to go for less than maximum development scale by assessing land premium according to the proposed rather than the maximum permissible development intensity.

In June 2011, we secured the funding approval of the Legislative Council Finance Committee to purchase and convert an industrial building for accommodating Water Supplies Department’s New Territories West Regional Office and a new education centre to promote water conservation in Hong Kong. Conversion instead of redevelopment of an existing industrial building is in itself a sustainable way to reduce demolition waste and conserve natural resources during its demolition and construction phase. Green design,

environment-friendly features and water conservation measures will be adopted for the conversion works aiming to attain the second highest grade under the BEAM Plus certification. The experience gained will provide practical reference for incorporating green features in retrofitting buildings.

## **5.6 Water Quality and Conservation**

### ***Conservation of Fresh Water***

Hong Kong is an important financial centre and secured water supplies are of utmost importance for sustaining its development. In 2011, Hong Kong people consumed about 924 million cubic metres of fresh water and on average the per capita consumption is about 130 cubic metres. Even though our forecasted water demand will be met by the current water supply arrangement, it is prudent to better prepare ourselves for uncertainties such as acute climate changes and low rainfall. Furthermore, we would like to enhance Hong Kong's role as a good partner to other municipalities in the Pearl River Delta in promoting sustainable use of water in the light of rapid growth of water demand in the region. Therefore, in 2008, we formulated the Total Water Management strategy for the period up to 2030 that will provide a firm foundation to sustain the use of our precious water resources. We have continued to implement the initiatives to contain the growth of water demand and explore new technologies and innovative ways for developing new water resources to strengthen our water supply.

We consider that there is possible scope for reduction in consumption and this could be achieved through various water conservation measures. Apart from stepping up public education and promotion on water conservation, Water Supplies Department focuses on educating our younger generation. We continue launching the water conservation campaign entitled "Water Conservation Starts from Home" for primary students. Besides, we have published and distributed a set of booklets entitled "Water: Learn and Conserve" as a teaching kit for liberal studies of the secondary curriculum. In September 2011, we launched a new Water Conservation Competition encouraging households and secondary school students to submit creative water saving ideas. For the voluntary Water Efficiency Labelling Scheme (WELS), in addition to showers for bathing and water taps, washing machines have been included in March 2011 and urinal equipment will be included in March 2012. Up to end 2011, 165 models of showers for bathing, 72 models of water taps and 38 models of washing machines have been registered under the WELS.

We have also made good progress on the staged implementation of the Water Mains Replacement and Rehabilitation (R&R) Programme to replace/rehabilitate about 3 000 km of aged watermains. We also continue to reduce water mains bursts and leaks through active leakage control measures,

including establishment of pressure management schemes. With the completed R&R works and the implementation of control and management measures, the number of water mains burst incidents has decreased from the peak of about 2 500 per year in 2000-01 to about 320 per year in 2011-12. The water mains leakage rate has also been reduced from 25% in 2001 to 19% in 2011. We anticipate that the leakage rate will further decrease to 15% upon completion of the R&R programme by end of 2015.

To strengthen the management of water supply, consultants will be engaged to conduct a detailed planning and investigation study to investigate the feasibility and cost effectiveness for the construction of a desalination plant at Tseung Kwan O in 2012. We have also been investigating the feasibility of supplying reclaimed water to Sheung Shui, Fanling and new development areas in the north eastern part of the New Territories for flushing and other non-potable uses. A consultancy study has also been commissioned for completion by end 2012 to establish technical standards for recycling grey water and harvested rainwater for non-potable reuses.



Kick-off Ceremony of the Water Conservation Competition  
(18 September 2011 at Ma On Shan Treatment Works)

## 5.7 Energy Efficiency and Conservation

### *Water-cooled Air-conditioning Systems*

In collaboration with the relevant Government departments, a scheme was introduced in June 2000 to promote the use of water-cooled air-conditioning systems which are more energy efficient than the conventional air-cooled air-conditioning systems. Up to the end 2011, the number of designated areas for application to join the Scheme has been expanded to 107 as compared to the

initial 6 in 2000. 644 applications have been received for joining the Scheme and 349 installations of fresh water cooling towers have been completed and put into operation. The estimated annual energy saving of the completed installations is 239 million kilowatt-hour per year and reduction of carbon dioxide emission is about 167 000 tonnes per year. It proves to be a promising way to improve the energy efficiency of air-conditioning systems.

### ***Adoption of Energy Efficient Features and Renewable Energy Technologies in Government Projects and Installations***

The rapid depletion of fossil fuels and the emission of greenhouse gases from conventional power generation plants have drawn world-wide attention to the compelling need to conserve energy and to look for alternative energy sources. To advocate the adoption of more energy efficient features and renewable energy technologies in Government projects and installation, we have established guidelines for all Works Departments to incorporate such features into their designs. Further, in accordance with the comprehensive target-based green performance framework for new and existing Government buildings promulgated in April 2009, all new Government buildings with construction floor area of more than 10 000 m<sup>2</sup> should aim to outperform the Building Energy Codes issued by the Electrical and Mechanical Services Department by at least 5 - 10 % depending on the types of the buildings. On the other hand, all existing Government buildings should aim to achieve an energy performance in line with the prevailing energy performance in new Government buildings wherever there are major retrofitting works for building services installations in Government buildings.

Following the promulgation of the guidelines and procedures on the adoption of energy efficient features and renewable energy technologies in Government projects in December 2005, a total of 922 projects incorporating energy efficient features have been identified for implementation by works departments. We estimate that the total energy saving will be about 95.4 million kWh per annum upon completion. By September 2011, a total of 793 out of these 922 projects have been completed. The estimated annual energy saving of these completed projects is about 86.7 million kWh. Furthermore, a total of 106 renewable energy projects have been identified since December 2005 for implementation by Works Departments. The estimated total installed capacity will be about 7 MW upon completion of these projects. By September 2011, 90 projects with total installed capacity of 3 047 kW have been completed.

## **5.8 Minimising Environmental Impact by Public Works Policies**

The environmental issues associated with the construction industry are unique and complex. Notwithstanding these challenges, every practicable measure is taken to ensure that the environmental integrity of the projects under

the Public Works Programme is continually strengthened through improved management and enhanced controls. To achieve this, we have implemented a range of environmental improvement measures in public works projects, including the introduction of a systematic environmental management process, the application of more effective nuisance controls, the promotion of recycling and reduction of construction waste, the wider use of recycled aggregates, the strengthened enforcement of the Environmental Impact Assessment (EIA) Ordinance, the improved requirements of site cleanliness and tidiness, the enhanced tree preservation measures etc.

We have also set out comprehensive guidelines and procedures for conducting environmental impact assessment for projects not covered by the EIA Ordinance, in order to attain the highest standard in environmental performance, over and above statutory requirements. Contractual provisions have also been incorporated in public works contracts to require contractors to adopt the best environmental site practices. We will continue to improve the design and construction planning of our public works projects to further reduce their impact on the environment.

Specifically, we require, as part of our works policies, project proponents to prepare a Construction and Demolition Materials Management Plan for identifying and implementing measures to minimise the generation of construction waste and maximise their reuse/recycling through proper planning and design, as well as adoption of appropriate construction methods. We have promulgated specifications to promote the use of recycled aggregates in filling works, road sub-base construction and concrete production, etc. Also, site hoardings have been required to be made of metal material to facilitate reuse. Moreover, we have discouraged the use of tropical hardwood in false work, formwork and other temporary works. We have required contractors of public works contracts to prepare an Environmental Management Plan setting out concrete measures to control nuisances such as air, noise and water pollution, and to minimise the generation of construction waste. We have introduced the 'Pay for Environment' scheme to encourage contractors to invest more resources in environmental management. The scheme also serves as a good management tool for the project team to monitor the contractor's environmental performance.

In August 2011, we enhanced management of public fill by promulgating the control measures recommended by the Public Fill Committee (PFC). The control measures include the requirements of project proponents to seek PFC's endorsement of major changes to the forecast on generation and/or demand of public fill under the control of the PFC.

### ***Green Procurement in Public Works Projects***

The Chief Executive announced after the fifth meeting of the Task Force



on Economic Challenges on 22 June 2009 that the Government would take the lead in making Hong Kong a green city through a number of measures including the expansion of green procurement in the Government. In this connection, the Environment Bureau has set up an Inter-departmental Working Group on Green Government Procurement. To encourage the wider use of green materials in public works projects, we have set up a Sub-group on Green Procurement in Public Works Projects under the above Inter-departmental Working Group to identify and monitor the use of green materials in public works projects and to formulate guidelines, policies and strategies to promote their use. In January 2011, we further promulgated a comprehensive framework for the procurement of recycled and other green materials with a view to promoting their use in public works projects. Under the framework, Works Departments, Housing Department and the Environmental Protection Department have facilitated the use of paving blocks with recycled glass as constituent material in road maintenance contracts and selected housing projects since October 2010. Up to end 2011, over 170 000 square metres of such paving blocks have been laid in both public works projects and housing projects which accounted for about 3 400 tonnes of recycled glass.

### ***Control on Contractor's Environmental Performance***

Contractor's environmental performance has a major impact on the successful implementation of our environmental policies. In this regard, we have been monitoring and assessing the environmental performance of public works contractor, and regulating action in the form of suspension from tendering may be taken against any contractor who is on Works Branch's approved lists with repeated convictions in environment-related offences or poor site hygiene.

### ***Further Enhancement Measures***

Environmental management is an ongoing task that needs tenacity, vigilance and foresight. To achieve this and to set an example for the construction industry to follow, we will continue to promote the use of green materials in public works projects, to promote good waste management practices and measures through public awards, in-house training and workshops, to review and refine the operation of environmental management measures on public works sites, and to strengthen and enhance the "trip ticket" system. We are also planning to require public works contractors to obtain certification for environmental management systems to the ISO 14001 standard in order to raise their environmental awareness. The ISO 14001 certification will facilitate construction companies to ensure continual environmental improvement, comply with legislations, reduce environmental risks and liabilities, and enhance staff environmental awareness.

## **5.9 Greening, Landscape and Tree Management**

### ***Policy***

Green landscape can effectively enhance the quality of our living environment by improving the air quality, ameliorating heat island effect, reducing water runoff, and providing visual relief and shading effect.

Government has been actively promoting greening over the years to improve our environment for living and business through active planting, proper maintenance and preservation of trees and other vegetation. Our objective is to bring about noticeable improvement in urban greenery through quality landscape planning and design as well as professional vegetation management.

The Task Force on Tree Management, led by the Chief Secretary for Administration, published the “Report of the Task Force on Tree Management – People, Trees, Harmony” (“Report”) in June 2009 following a comprehensive review. The Report recognised that the tree management issue should be put under the overall context of Government’s broader greening and landscape policy. Pursuant to the Report’s recommendation, the Development Bureau has taken up the overall policy responsibility for greening, landscape and tree management. The Greening, Landscape and Tree Management (GLTM) Section in the Development Bureau was established on 1 March 2010, to promote the adoption of a holistic and visionary approach for developing a greener urban environment in Hong Kong and to implement the improvement measures recommended in the Report.

The GLTM Section is underpinned by two offices, namely the Greening and Landscape Office (GLO) and the Tree Management Office (TMO). The GLO is responsible for central coordination of policy matters and departmental efforts on greening and landscape planning and design, whereas the TMO is the central authority and provider of expertise to executive departments and the community at large on a quality-led approach to tree management.

### ***Steering Committee on Greening, Landscape and Tree Management***

The Steering Committee on Greening, Landscape and Tree Management (previously named Steering Committee on Greening) is a high-level cross departmental Committee to set strategic directions for Government’s greening efforts and to oversee the implementation of Government’s major greening programmes. It has three sub-committees, namely the Works and Maintenance Committee on Greening, the Community Involvement Committee on Greening and the Greening Master Plan Committee.

A greening programme is compiled every year to facilitate effective



planning and progress monitoring. About 8.9 million plants were planted under the programme in 2011.

### ***Identification of Enhanced Greening Opportunities***

With the increasing aspiration for enhancement of our living environment and faced with spatial limitation in the built-up areas, Government seeks to increase opportunities for greening by early involvement in the planning and design stages, by shifting the focus of greening works from “quantity” to “quality”, and making efforts to raise the professional standards of the landscape industry.

To promote long-term and sustainable greening, the GLO seeks to increase the provision of sufficient quality space for future greening during the urban planning process, in particular for new development sites and urban renewal sites. The GLO is liaising with other Government departments on other greening measures and will issue two technical circulars on allocation of space for quality greening on roads and calculation of site coverage of greenery in 2012. One of the key potential improvements in greenery is to enhance greening on public roads. As inadequate space and congested underground utilities are frequently major constraints in promoting greening on roads, clear guidelines on the allocation of adequate space for quality greening are necessary. The technical circular will outline the requirements for allocation of adequate space for greening on new at-grade public roads with a view to promoting quality greening. The technical circular on site coverage of greenery for Government building projects will require the provision of at-grade greenery areas and tree planting for the benefit of the public at large.

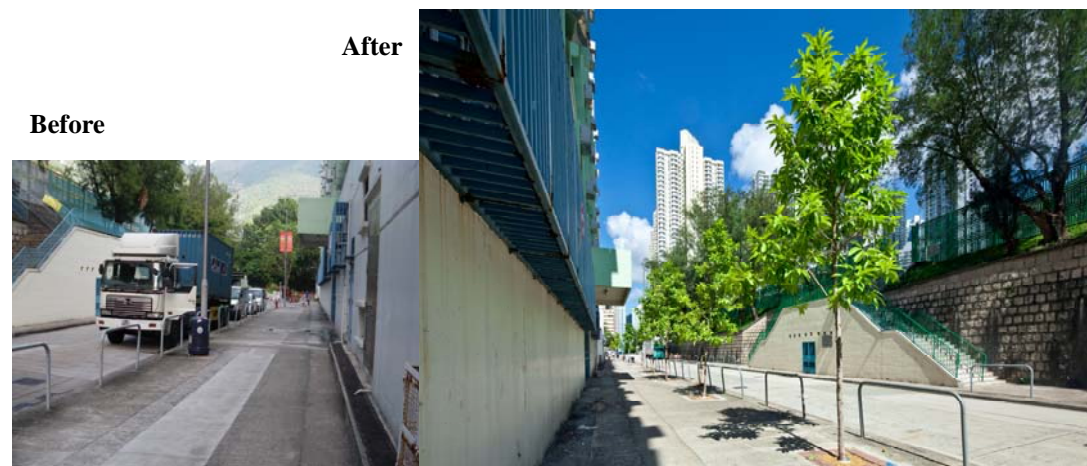
It is already an existing requirement to maximise greening opportunities for public works projects. For selected sites, e.g. Kai Tak Development (KTD), the GLO has imposed an even more stringent greenery coverage requirement in order to deliver the planning objective of turning KTD into a green hub. At the project level, the GLO has been working closely with departments to expand available greening opportunities under different types of works projects through innovative application of landscape design, e.g. greening of stormwater drainage channels, noise barriers, roofs, slopes, etc.

In the built-up urban areas, notwithstanding the space constraints, Government seeks to improve the cityscape through the Greening Master Plan (GMP) initiative. A GMP provides a coherent, overarching greening framework, defined by a greening theme and a palette of plant species, to guide the planning, design and implementation of greening works in an area/district. To date, the GMPs covering all nine urban districts were developed. Greening works under the urban GMPs that could be implemented without any alteration to the prevailing land use and traffic arrangements were completed in mid-2011, with a total of about 24 890 trees and 5.13 million shrubs planted.

In the light of the positive results achieved in the urban areas, Civil Engineering and Development Department (CEDD) has commenced with the development of GMPs for the nine New Territories districts in phases, with a focus on the enhanced provision of greenery at the more densely populated areas and tourist attractions as well as along major transportation routes. The GLO will continue to work with CEDD on this initiative with a view to enhancing quality greenery provision in the New Territories.



Greening works under the GMP for Wong Tai Sin - Yuk Wah Street



Greening works under the GMP for Kowloon City - Hereford Road

### ***Enhancement of the Quality of Landscape Design and Promotion of New Greening Technologies***

To achieve design excellence and coherence across projects undertaken by different departments and to achieve an overall coordinated greening effect with due regard to urban design, the GLO is developing an integrated landscape design framework to provide practical guidelines on the landscape

treatment for key types of public works such as public parks and gardens, road structures, roadside planting, slopes, etc.

The GLO has been formulating technical standards and guidelines on proper planting practices and guidelines, to promote a holistic and sustainable approach to landscape design that takes account of not only the aesthetic dimension, but also lifecycle maintenance considerations. A set of guidelines on greening of noise barriers to promote quality design will be ready for issue in early 2012.

To overcome the space constraint in our built-up city and to enhance greenery provisions, the GLO promotes the wider adoption of skyrise greening in the form of roof greening and vertical greening in both the public and private sectors; and through the formulation of guidelines and organisation of seminars to facilitate the sharing of professional expertise and experience. These measures help lower the technical barriers in the application of these greening techniques.

Skyrise Greenery Awards, the first awards of this kind in Hong Kong, will be launched in 2012 to give recognition to exemplary skyrise greenery projects and to promote this type of greening.



Roof greening at  
Shatin Sewage  
Treatment Works

### ***Development of Professional Expertise, Public Education and Community Involvement in Greening***

Enhanced training is essential for nurturing a professional workforce capable of providing quality landscape service and tree care service. The GLTM Section, in collaboration with relevant departments, is formulating a training and manpower development plan to ensure an adequate supply of professional staff within Government at the managerial, supervisory and frontline levels for the competent discharge of the full spectrum of functions in these areas. The GLTM Section will also look into the formulation of a manpower development strategy with a view to building up the capacity of the

industry to undertake greening, landscape and tree management works.

To upgrade the professional level of the industry on greening, landscape and tree management, the GLTM Section will conduct a comprehensive review on the management of consultants/contractors engaged by Government departments for landscape works and tree management service. In addition to the ongoing review on the qualification requirements for contractors interested in admission to Government's approved list of contractors, the GLTM Section will examine ways to promote continuous improvement in consultant/contractor performance, for instance, through more clearly-defined service requirements.

The GLTM Section proactively enlists community support for our greening effort to foster a culture of care in Hong Kong for greenery across the territory through a variety of community involvement and public education activities. We also collaborate with the non-government organisations and the private sector to beautify the cityscape through quality greening.

The 'Greening' newsletter issued on a quarterly basis provides a good communication tool with the general public on greening and landscape. The revamped 'Greening' website provides a useful platform for knowledge sharing as well as for publicity of greening and landscape policies, best practices and design.

In order to enhance the public's appreciation of Hong Kong's unique trees and green spaces, the GLO is preparing a series of Tree and Landscape Maps, with representative landscape assets in each electoral district such as significant trees, open spaces and landscape features. Apart from a printed version, an electronic version available for downloading from the Greening website and an Apps for smart phone users will also be provided to suit the needs of different groups.





Green volunteers assisting the greening works under the Leisure and Cultural Services Department's Green Volunteer Scheme.

### ***Tree Management***

As recommended in the Task Force Report, the TMO is focused on priority tasks that include enhancement of tree risk management, promotion of a quality-oriented approach to tree management, enhancement of the tree complaint handling mechanism and the emergency response arrangement, enhancement of training to raise the professional standard of tree management personnel, and enhancement of public education and community involvement.

The TMO introduced new tree risk assessment arrangements in 2010 with a priority on areas with high pedestrian and vehicular flow. Detailed guidelines on tree risk assessment have been promulgated for compliance by tree management departments, and associated training has been organised for over 1 490 Government officers and their contractors' staff in 2011.

Other guidelines issued by the GLTM Section include proper planting practices, proper pruning practices, identification of common tree problems, identification of brown root rot and tree protection measures in construction sites which aim at promoting a holistic and quality-oriented approach to tree care. To raise the professional standards of the industry, the GLTM Section organises a broad range of training (in addition to tree risk assessment) for both Government staff and members of the industry. A total of over 5 765 participants have been recorded in 2011.

The TMO has enhanced the handling mechanism for tree related public complaints by working closely with the round-the-clock "1823" Call Centre

and tree management departments. The TMO, tree management departments, Fire Services Department and the Hong Kong Police Force have been working together to enhance the procedures for handling emergency tree cases that involve major injuries or loss of human life, substantial damage to properties or serious or complete blockage to main pedestrian or vehicular access. The TMO also takes a lead in resolving complex tree cases which tree management departments may not be able to deal with on their own. The Expert Panel on Tree Management was set up in March 2011 to provide expertise in both policy and operational aspects of tree management, with the objective of promoting the well-being of trees in Hong Kong.

Public information about trees which require continuous monitoring is provided on the Tree Register at [www.trees.gov.hk](http://www.trees.gov.hk). A dedicated tree website ([www.trees.gov.hk](http://www.trees.gov.hk)) was launched in July 2010 to enhance transparency of information on trees on Government land. TMO has also been promoting community surveillance of trees in the territory with health or structural problems with a view to better protecting public safety.

In collaboration with other departments, District Councils, schools and non-government organisations, the GLTM Section has been organising a variety of public education and community involvement activities to foster a culture of care in Hong Kong for greenery across the territory. A total of over 3 578 participants have been recorded in 2011.



Staff undertaking Tree Risk Assessment on-site

## *Greening of Slopes*

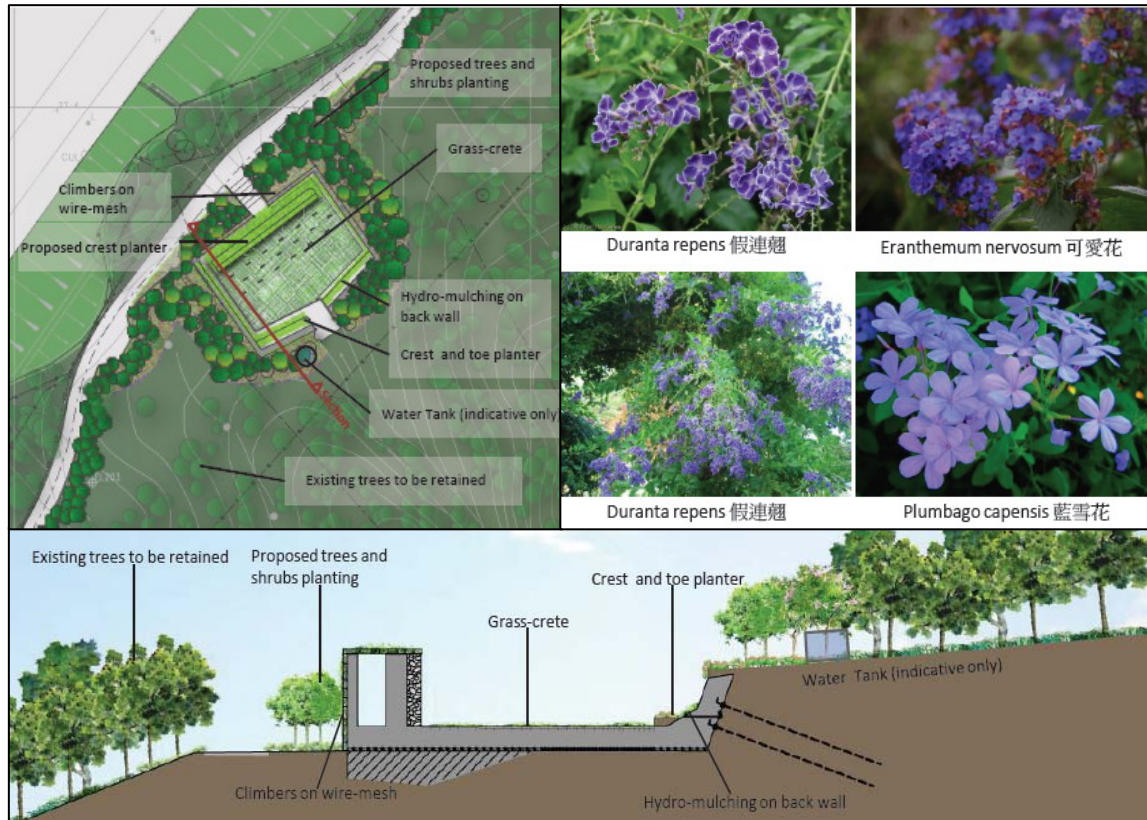
Under the now completed Landslip Preventive Measures Programme (LPM) and the ensuing Landslip Prevention and Mitigation Programme, the Government had upgraded about 4 800 substandard Government man-made slopes and implemented landslide risk mitigation measures to 22 natural hillside catchments. About 2.3 million of trees, shrubs and climbers were planted in association with the landslip prevention and mitigation works to make the slopes and mitigation measures look as natural as possible.



A man-made slope upgraded and greened under the LPM Programme

The Government will continue its policy of improving the environment and making the slopes and natural hillside being dealt with look as natural as possible in their surroundings. Hence, apart from maintaining the highest standard of slope safety, landscape treatments to all man-made slopes upgraded and natural hillside mitigation measures are integrated in the design. Existing trees are preserved and vegetation is planted on slopes, applying mitigation measures as far as practicable. Where the use of hard cover is unavoidable, landscape measures are implemented to minimise its visual impact.





Landscape proposal for natural terrain mitigation works at North Lantau

To improve the technology in greening, research has been conducted on the use of vegetation in landslide prevention and mitigation works experimenting with new techniques of providing erosion control measures and vegetation covers to steep slopes. The results of the research provide useful knowledge for establishing robust, cost-effective and eco-friendly vegetation cover for man-made slopes and natural hillside mitigation measures.

### *Quarry Rehabilitation Works*

As part of the quarry rehabilitation works, active quarries are being rehabilitated to attractive green areas suitable for a variety of uses. The rehabilitation works involve re-contouring of the quarry to a pre-designed profile and extensive planting to blend in with the natural environment. This would facilitate the establishment of suitable habitats for birds and other terrestrial animals.





A view of rehabilitated Lamma Quarry

### ***Targets for 2012***

The GLTM Section, established since March 2010, will continue to commit to deliver the following targets –

- provide advice on the policy and operational aspects of greening, landscape and tree management;
- formulate and promulgate standards, guidelines and best practices to promote quality-led greening, landscape planning and design, and tree management matters;
- provide input on the greening and landscape aspects of strategic Government infrastructure projects to identify enhanced greening opportunities and oversee the overall formulation and implementation of the Greening Master Plans for the New Territories;
- formulate measures to promote greening opportunities and the wider adoption of new greening techniques (such as skyrise greening in the form of roof greening and vertical greening) in both public and private sector projects;
- build up the capacity of Government and the industry in the field of greening, landscape and tree management through training, manpower development and research;
- further enhance the risk management approach to tree management and develop a new electronic Tree Management Information System in collaboration with the Efficiency Unit; and
- enhance community involvement and public education efforts to increase public awareness of greening, landscape and tree management and to foster a culture of tree care.

## **5.10 Heritage Conservation**

### ***Policy***

The Government's policy on heritage conservation is “to protect, conserve and revitalise as appropriate historical and heritage sites and buildings through relevant and sustainable approaches for the benefit and enjoyment of present and future generations. In implementing this policy, due regard should be given to development needs in the public interest, respect for private property rights, budgetary considerations, cross-sector collaboration and active engagement of stakeholders and the general public.”

### ***Current Framework of Heritage Conservation***

DEVB assumed policy responsibility for heritage conservation in July 2007. In April 2008, the Commissioner for Heritage's Office (CHO) was set up under DEVB to provide dedicated support in implementing the policy on heritage conservation, taking forward a series of new initiatives and serving as a focal point of contact.

Under the Antiquities and Monuments Ordinance (the Ordinance) (Chapter 53), the Secretary for Development (SDEV) is the Antiquities Authority who may, after consultation with the Antiquities Advisory Board (AAB) and with the approval of the Chief Executive, declare by notice in the Gazette a place, building, site or structure which she considers to be of public interest by reasons of its historical, archaeological or palaeontological significance to be a monument for statutory protection under the Ordinance.

AAB, comprising members from different sectors of the community, is a statutory body tasked to advise the Antiquities Authority on any matters relating to antiquities and monuments. The Antiquities and Monuments Office (AMO) under the Leisure and Cultural Services Department provides secretarial and professional support to AAB. AMO is also the expert advisor of the Government on heritage conservation.

The Advisory Committee on Revitalisation of Historic Buildings (ACRHB), a non-statutory advisory body, was set up in May 2008 to provide advice on the operation of the Revitalising Historic Buildings Through Partnership Scheme. It also advises on other matters relating to the revitalisation of historic buildings as referred by SDEV.

## *New Initiatives and Progress*

Following the announcement of the new heritage conservation policy in the Chief Executive's Policy Address in October 2007, we have introduced a series of initiatives to implement this policy, having regard to the rising public aspiration for the protection of the valuable built heritage in Hong Kong. Significant progress was made in implementing these initiatives in 2011. These initiatives include:

➤ *Heritage Impact Assessment*

Starting from 1 January 2008, it is a mandatory requirement for all new Government capital works projects to assess their heritage implications and to include the findings in their submissions for funding to the Legislative Council so that we will be able to give due consideration to the conservation need at the planning stage. Confirmation with AMO is required to determine if a project may affect heritage sites. A Heritage Impact Assessment (HIA) will need to be conducted if required by AMO. In 2011, AMO has requested five projects to carry out HIAs to assess their impact on heritage sites.

➤ *Revitalising Historic Buildings Through Partnership Scheme*

The Revitalising Historic Buildings Through Partnership Scheme (the Scheme) was launched in February 2008. Non-profit making organisations (NPOs) with charitable status under section 88 of the Inland Revenue Ordinance are invited to submit proposals to revitalise selected Government-owned historic buildings in the form of social enterprise. Under Batch I of the Scheme and upon the advice of the ACRHB, six NPOs were selected to revitalise Old Tai O Police Station, Fong Yuen Study Hall, Former Lai Chi Kok Hospital, Lui Seng Chun, Mei Ho House and North Kowloon Magistracy for a wide variety of uses with enhanced public access and community involvement. Batch II of the Scheme was launched in August 2009 and three NPOs were selected to revitalise three historic buildings, namely Old Tai Po Police Station, Blue House Cluster in Wan Chai and the Stone Houses in Kowloon City. We launched Batch III in October 2011 to invite proposals for revitalising four historic buildings, including King Yin Lei, Haw Par Mansion, Bridges Street Market and Former Fanling Magistracy. 34 applications have been received and the assessment is in progress. It is envisaged that the selection process will be completed by end 2012.

➤ *Economic Incentives for the Conservation of Privately-owned Historic Buildings*

Government recognises the need for economic incentives in order to

encourage and facilitate private owners to preserve their historic buildings. Successful examples in 2011 included the preservation of the clock tower of the CLP Administration Building (a Grade 1 building) through a minor relaxation of building height and plot ratio, as well as permission for using the clock tower as a place of recreation, sports or culture; and part of the façade of 47 Barker Road (a Grade 2 building) through a minor relaxation of plot ratio.

➤ *Financial Assistance for Maintenance Scheme*

Launched in August 2008, the Financial Assistance for Maintenance Scheme provides financial assistance in the form of grants for carrying out maintenance works on privately-owned graded historic buildings, thereby preventing these buildings from deterioration due to the lack of maintenance. Starting from 1 April 2009, the ceiling of the grant for each successful application has been increased from \$600,000 to \$1million to enable the maintenance works to be carried out in a more comprehensive manner. Up to the end of 2011, we approved 16 applications under the Scheme. Maintenance works of seven approved applications were completed.

➤ *Revitalisation Projects – Central Police Station (CPS) Compound and the Former Police Married Quarters (PMQ) on Hollywood Road*

The revitalisation of the CPS Compound, which comprises three groups of monument buildings, namely the CPS, the former Central Magistracy and the Victoria Prison, is a major heritage conservation project under the “Conserving Central” initiative. The Government is taking forward this project in partnership with the Hong Kong Jockey Club (HKJC). Following extensive consultation with the public and the local arts and cultural sector, a revised design for the project was announced in October 2010. The revised design respects the heritage value of the site, takes account of public views and concerns, complies with the building height restrictions and is financially sustainable. Under the revised design, the CPS Compound will be revitalised as a centre for heritage, art and leisure, complementing the organic development of the neighbouring area as a contemporary arts zone. All 15 historic buildings and F Hall in the Compound will be preserved. The Hong Kong Jockey Club Charities Trust will fund the capital cost of the project and all operational deficits until the project is financially self-sustainable. Construction works have commenced in November 2011 for completion in end 2014.

The revitalisation of the former PMQ on Hollywood Road is another heritage conservation project under the “Conserving Central” initiative. In March 2010, the Development Bureau and the Commerce and

Economic Development Bureau jointly invited non-profit making organisations for transforming the PMQ site into a creative industries landmark. In November 2010, following a competitive selection process and on the recommendation of the ACRHB, the Administration selected the “PMQ” proposal submitted jointly by the Musketeers Education and Culture Charitable Foundation Limited (the Musketeers Foundation) and three co-applicants. To expedite the implementation of the “PMQ” project, we have adopted a new partnership model under which the Architectural Services Department will carry out the conservation and revitalisation works under the Public Works Programme. It is not an objective of the “PMQ” project to maximise profit and the Musketeers Foundation has committed to ploughing back its share of the net operating surplus for the operation of the creative industries landmark. The Musketeers Foundation has also pledged to donate \$110 million for the project, including \$17 million for conservation and revitalisation works. We will implement tree preservation measures and landscaping proposals under the project, including preservation of all existing 17 trees; planting of 3 new trees, provision of about 1 400 m<sup>2</sup> of landscaped open spaces and a green roof, etc. We plan to commence the construction works in January 2012 for completion in December 2013.

➤ *Public Engagement and Publicity Programmes*

In 2011, apart from publishing the free bimonthly heritage newsletter “活化@Heritage”, CHO organised a number of public engagement and publicity programmes targeting at community groups as well as for the general public, including barrier-free guided heritage tours for the disabled up to March, Tai Tam Waterworks heritage tours for schools up to April, teaching kit on heritage conservation extension tours for secondary schools from October, and heritage tourism expo up to October featuring six heritage tour routes in Hong Kong with a booklet published for distribution at the event. These programmes received very enthusiastic participation from the community.

### ***Major Activities in 2011***

In 2011, apart from implementing various heritage conservation initiatives as set out above, we carried out the following activities for the conservation of our valuable heritage -

➤ *Declaration of Monuments*

In 2011, three historic buildings including the fortified structure at No. 55 Ha Pak Nai, Yuen Long; King’s College at No. 63A Bonham Road; and the School House of St. Stephen’s College at No. 22 Tung Tau Wan

Road, Stanley were declared monuments under the Antiquities and Monuments Ordinance. As at 31 December 2011, there were 101 declared monuments, including 83 historic buildings and structures as well as 18 rock carvings, forts and archaeological sites.

➤ *Assessment of 1 444 Historic Buildings*

Up to end 2011, AAB has completed the assessment of the grading of 1 191 items on the list of 1 444 historic buildings, taking account of the recommendations of the expert panel and the views received from the owners and members of the public. Of these 1 191 historic buildings, there are 160 Grade 1 buildings, 309 Grade 2 buildings, 440 Grade 3 buildings and 282 of nil grade.

In addition, AAB has also completed the assessment of 10 new items including two Grade 1 buildings, two Grade 2 building, four Grade 3 buildings and two of nil grade.

➤ *Restoration and Maintenance Works of Monuments and Historic Buildings*

In 2011, restoration and repair works were carried out for a number of monuments and historic buildings, including Green Island Lighthouse Compound, Chik Kwai Study Hall in Yuen Long, Morrison Building in Tuen Mun, Former Residence of Ip Ting-sz in Sha Tau Kok, Tai Fu Tai in San Tin, Tang Kwong U Ancestral Hall in Kam Tin, Tang Ancestral Hall in Ha Tsuen, Maryknoll Convent School in Kowloon Tong and St. John's Cathedral and The Helena May in Central.

➤ *Rock Carving Studies*

A consultancy on the conservation and management of ancient rock carvings and inscription had been completed, followed by another study to design new protection and visitor facilities, based on the recommendations of the consultancy. The new design was supported by AAB and will be implemented in phases.

➤ *Archeological Excavation, Investigations and Monitoring*

Archaeological investigations and excavations had been carried out in Tuen Mun, Yuen Long, Sai Kung, Sha Tau Kok and Lamma Island to prevent damage to underground archaeological deposits from infrastructural construction and small house development projects.

➤ *Hong Kong Archaeological Archive System*

The Hong Kong Archaeological Archive System was launched in November 2011. The public can now browse the important archaeological finds discovered in Hong Kong through the website of AMO.

➤ *Major Heritage Exhibitions and Public Education Programmes*

In 2011, the permanent exhibition “Explore Our Heritage” was completely opened at the Heritage Discovery Centre. To tie in with the centenary of China’s 1911 Revolution, the Residence of Ip Ting-sz in Sha Tau Kok and the Fortified Structure of Ha Pak Nai, Yuen Long have been open to the public since September 2011. In December 2011, CHO and AMO jointly organised the international conference “Conservation and Development – Partners or Rivals?” to provide opportunity for experience exchange among esteemed heritage conservation professionals and to showcase Hong Kong’s achievements after the implementation of new heritage conservation policy. To tie in with the conference, a series of side programmes including “Heritage Fiesta” featuring guided tours, open days at selected historic buildings and Bamboo Theatre Exhibition were also organised for public enjoyment and participation.



## **6. GREEN OFFICE MANAGEMENT**

We are committed to improving and conserving our environment, and to optimizing the use of resources to reduce pollution and waste. We strive to implement various green housekeeping measures in daily office operations with a view to maintaining a green workplace and setting a good example for our departments. Our main focus of the green office management is on reducing paper and energy consumption.

### ***Managing Paper Consumption***

We have adopted a wide range of green housekeeping practices in daily office operations. We will continue our advocacy of environmental conservation and adopt the following green initiatives :

- use recycled paper in office operations;
- print and photocopy on both sides of paper;
- reuse single-side used paper for drafting, printing and receiving fax;
- reuse envelopes, loose minute jackets and action tags for internal transmission of documents and correspondence;
- communicate and disseminate information by electronic means within bureaux/departments as well as with members of the public;
- avoid printing or photocopying documents unless hard copy is absolutely necessary;
- keep the number of paper publications and copies of circulars to the absolute minimum (e.g. by circulating a copy to staff only);
- distribute softcopies by emails, diskettes or CD-ROMs instead of print-outs;
- upload reports and consultation papers, circulars, posting notices, telephone lines and other publicity materials on e-bulletin board, intranet and internet website for circulation and general reference;
- avoid sending original documents which have been sent by fax or email; and
- reduce the use of fax leader sheet.

### ***Managing Energy Consumption***

To achieve the target of reducing energy consumption in Government offices and buildings, we have adopted the following energy saving measures:

<b>Energy Saving Measures Taken</b>	
Lighting	<ul style="list-style-type: none"> <li>• remind staff to switch off the lights in individual or open plan offices when not in use, e.g. during lunch hours;</li> <li>• installation of light sensors to reduce the use of lighting in public communal areas during lunch and after normal office hours; and</li> <li>• reduce the use of high power incandescent lamps.</li> </ul>
Air-conditioning	<ul style="list-style-type: none"> <li>• adjust daily central air-conditioning provision hours according to seasonal change;</li> <li>• set room temperature at 25.5 °C in summer season;</li> <li>• turn off some air-conditioning units when the occupancy is low;</li> <li>• switch on air-conditioning for pre-cooling no earlier than 15 minutes before conference rooms are to be occupied and switch off as soon as the room is unoccupied;</li> <li>• open windows to allow natural ventilation instead of turning on air-conditioning units during cold season;</li> <li>• dress lightly to minimise use of air-conditioning in hot months; and</li> <li>• lower window blinds or curtains before leaving office to reduce direct sunlight on the following day.</li> </ul>
Computers and photocopiers	<ul style="list-style-type: none"> <li>• activate the standby mode features of personal computers;</li> <li>• switch off the monitors during lunch and when the staff is away from the workplace for meeting;</li> <li>• switch off personal computers after office hours;</li> <li>• switch off non-essential servers after office hours; and</li> <li>• set all photocopiers to energy saving mode when they are not in use for over 15 minutes.</li> </ul>
Others	<ul style="list-style-type: none"> <li>• appoint energy wardens and assign last-man-out to check the effectiveness of energy saving measures;</li> <li>• encourage staff to walk up or down one or two storeys rather than using the lift; and</li> <li>• consult the Electrical and Mechanical Services Department to explore feasible energy saving opportunities.</li> </ul>

Before relocation to the new Central Government Offices at Tamar which was conducted between end November and end December 2011, DEVB was one of the tenants of Murray Building (MB), occupying office spaces from 9/F to 13/F; and part of 14/F, 17/F, 18/F and 21/F. The adoption of the above energy saving measures had helped in the saving of electricity consumption of MB.

### ***Green Purchasing***

“Green” stationery items supplied by the Government Logistics Department, such as clutch pencils, refillable ball pens, recycled pencils and furniture made of chip board, are now widely used in DEVB. Other green items e.g. recyclable laser printer toner cartridges and box files made of recycled paper are also ordered from contractors for office use. In 2011, more than 90% of the laser printer toner cartridges used in this Bureau were recycled.

It has all along been our practice to purchase only office equipment such as photocopiers, fax machines and printers with Energy Efficiency label. We also use e-tender whenever applicable.

### ***Staff Awareness***

The support and cooperation from staff members are always the key to the success of our green office management. Apart from the regular re-circulation of the relevant guidelines on paper and energy saving, we have from time to time actively encouraged our staff to support the green activities organised by other Government departments and organisations. These would enhance their awareness on environmental protection and green management. For the years to come, we will continue to work closely with our staff with a view to fostering a green culture and ensuring that our offices operate in an environmentally responsible manner.

## **7.**

### **ACTION BLUE SKY CAMPAIGN**

In support of the Government's Action Blue Sky Campaign, we will continue our energy saving efforts in reducing the electricity consumption and emission of air pollutants, with a view to improving the air quality of Hong Kong.

## 8.

### VIEWS AND SUGGESTIONS

If you have any views and suggestions in connection with this Environmental Report, you are welcome to contact us via email at [devbenq@devb.gov.hk](mailto:devbenq@devb.gov.hk) or by fax on 2523 5327 or write to us at 15/F, West Wing, Central Government Offices, 2 Tim Mei Avenue, Tamar, Hong Kong.

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