

2007 Environmental Report

Development Bureau

2007 Environmental Report Development Bureau

Contents

1. Introduction
2. Environmental Policy
3. Key Responsibilities
4. Environmental Goal
5. Environmental Performance of Major Policy Programmes
 - 5.1 Land Supply
 - Policy
 - Promoting environmental initiatives
 - Development controls
 - Land control and lease enforcement measures
 - 5.2 Land Use Planning
 - Policy
 - Measures to tackle 'wall effect'
 - Review on development intensities
 - Conservation - related zones
 - Hong Kong Planning Standards and Guidelines
 - Pedestrian and Area Improvement Plans
 - Enhancement projects for the harbourfront
 - Planning enforcement against unauthorized developments
 - Planning studies in the boundary district and Northern New Territories
 - 5.3 Building Safety and Maintenance
 - Policy and Vision
 - Green building
 - Enforcement actions against unauthorized building works
 - Minor works control system
 - Mandatory Building and Window Inspection Scheme

5.4 Urban Renewal

- Policy
- Urban renewal work

5.5 Water Quality and Conservation

- Conservation of fresh water

5.6 Energy Efficiency and Conservation

- Water-cooled air-conditioning systems
- Adoption of energy efficient features and renewable energy technologies in government projects and installations

5.7 Minimizing Environmental Impact by Public Works Policy

- Policy
- Enhance contractor's environmental performance
- Achievements and targets

5.8 Greening

- Policy
- Greening Master Plans
- Private Participation
- Tree preservation
- Greening of slopes
- Quarry rehabilitation works
- Targets for 2008

5.9 Heritage Conservation

- Policy
- Current Framework of Heritage Conservation
- New Initiatives
- Major Activities in 2007

6. Green Office Management

- Managing Paper Consumption
- Managing Energy Consumption
- Green Purchasing
- Staff Awareness

7. Action Blue Sky Campaign

8. Views and Suggestions

1. INTRODUCTION

This report covers the Year 2007 on the environmental performance of the Planning and Lands Branch (PLB) and Works Branch (WB) of the Development Bureau (DEVB).

Before the re-organisation of the Government Secretariat with effect from 1 July 2007, PLB together with the Housing Branch / Housing Department, were grouped under the former Housing, Planning and Lands Bureau (HPLB); while WB together with the Environment Branch and the Transport Branch were under the former Environment, Transport and Works Bureau. The Development Bureau was established on 1 July 2007 following the reorganization 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 & 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 minimize any possible environmental impacts in implementing public works;
- revitalising historical and heritage sites and buildings through sustainable approaches;
- promoting waste reduction, recovery and recycling, and less consumption of resources;
- minimizing 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; greening; water supply; slope safety; flood prevention and heritage conservation. The major areas of policy responsibilities include:

- to oversee land policy, related legislation, land sale and disposals;
- to manage land resumption and clearance compensation and coordinate land use for potentially hazardous installation;
- to oversee land use planning policy, 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 the building safety and land registration and encourage innovation and environmental friendly building design;
- to implement the policy review on building maintenance;
- to implement policy initiatives to review urban regeneration policy and oversee the operation of Urban Renewal Authority;
- 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 urban greening; and
- to protect, conserve and revitalize 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 optimize 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 developments, which is essential to the long-term social and economic development of Hong Kong.

To implement 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 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 with the Environmental Protection Department, and provision of off-street bicycle parking spaces, etc.

Development controls

To provide quality living environment, Government is in the process of reviewing relevant Outline Zoning Plans to incorporate the necessary development controls, in addition, we have made sure that sites to be sold by Government itself can live up to those public expectations. Thus, for every site included in the 2008-09 Application List, we have assessed the particulars of each site carefully to review the development parameters, to lower the development bulk as appropriate and to include relevant development restrictions.

Land control and lease enforcement measures

To improve the environmental conditions of all unallocated Government land and private land, the Lands Department has implemented effective land control and lease enforcement measures. During 2007, the Lands Department handled 934 lease enforcement cases against private land owners in respect of nuisances, unauthorized building works or unauthorized conversion of permitted use. In the same year, 11 595 Government land notices under the Land (Miscellaneous Provisions) Ordinance had been posted for the clearance of unauthorized 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 to work and live. To this end, we took various actions in 2007 to lower the development density of our city with a view to upgrading urban design, enhancing the vista of buildings, improving air ventilation and generally to 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).

Measures to tackle “wall effect”

With growing community aspiration for a better living environment, calls for action to prevent developments creating “wall effect” are more widely heard recently. While there is no particular definition of “wall effect”, this phenomenon generally refers to high density and compact building bulk having visual and air ventilation impacts on the surrounding areas.

We have examined the practicality of stipulating air ventilation assessment (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 in the Hong Kong Planning Standards and Guidelines 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 (Technical Circular). 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-government 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 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 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 has conducted AVA where necessary for individual land sale sites in the 2007-08 Application List. Appropriate development parameters, for example site coverage, maximum gross floor area/ plot ratio, building height, podium size, non-building area, building set back, etc. have been specified in the Conditions of Sale of the sites.

Review on Development Intensities

Pursuant to the Chief Executive's 2007-08 Policy Address, the Planning Department is progressively stipulating in outline zoning plans (OZPs) clear development restrictions, where justified, for all to follow. Priority is given to reviewing building heights in areas subject to high development/redevelopment pressures, waterfront areas along Victoria Harbour and congested built-up areas. This involves about 40 plans. Five were reviewed in 2007 in the first stage review which mainly dealt with building height restrictions, with amendments to the OZPs gazetted.

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 planning areas of each OZP to provide a qualitative assessment of the wind environment within the area, identify problem areas and propose mitigation measures.

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

Conservation-related zones

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

As at the end of 2007, about 8 950 hectares (or 22%) of land in the New Territories fell within the following conservation-related zones on the relevant statutory plans : 'Conservation Area', 'Site of Special Scientific Interests', 'Country Park', 'Coastal Protection Area', 'Other Specified Uses' annotated 'Comprehensive Development to include Wetland Restoration Area', and 'Comprehensive Development and Wetland Enhancement Area'.

Hong Kong Planning Standards and Guidelines

The Hong Kong Planning Standards and Guidelines (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 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 regularly revised and updated to reflect and keep pace with government policies and the changing needs/aspirations of society.

To turn Hong Kong into a pedestrian-friendly city, a strategy for pedestrian planning has been developed and recommended under the 'Study on Planning for Pedestrians' commissioned by the Planning Department. This has led to the revision of Chapter 8 'Internal Transport Facilities' - Section 5 on the planning guidelines on pedestrian planning and footpath width standards. The revised guidelines, which were promulgated in March 2007, provide guidance to improve our pedestrian environment through the adoption of a comprehensive and integrated approach in pedestrian planning throughout the development process from planning, design, implementation to management and maintenance.



Hong Kong Planning Standards and Guidelines

Pedestrian and Area Improvement Plans

During the year, the Planning Department commissioned a consultancy study with the objective of formulating an Area Improvement Plan which would enhance the overall attractiveness of the shopping areas and pedestrian experience in Mong Kok. A public consultation exercise was launched in May 2007 with a roving exhibition, a public forum, as well as presentations to various statutory and advisory bodies. The public was consulted on the proposed area improvement planning framework which included four streams of improvement initiatives and three projects proposed for priority implementation. The public was generally supportive of the planning framework. Based on the public views received, the Planning Department would proceed to draw up an Area Improvement Plan for the shopping areas of Mong Kok.

As regards other districts, the Planning Department has completed pedestrian plans for Causeway Bay, Kwun Tong and Tai Po Market, and an area improvement plan for Tsim Sha Tsui. The pedestrian plan for Central District is at its final stage of completion.

Enhancement Projects for the Harbourfront

We are committed to protecting and preserving the Victoria Harbour and enhancing it for the enjoyment of our residents and visitors alike. Working in collaboration with the Harbour-front Enhancement Committee (HEC), we undertook a number of studies and projects in 2007 to enhance our harbourfront with a view to creating an attractive, vibrant, accessible and sustainable world-class harbourfront.

Studies including the Hung Hom District Study and Urban Design Study for the New Central Harbourfront were carried out by the Planning Department to formulate detailed plans for enhancing the Hung Hom and Central harbourfronts. Pending permanent development, two pieces of harbourfront land in West Kowloon Cultural District and Wan Chai were developed as open space/waterfront promenade for public enjoyment. We will continue to work hand in hand with the HEC to identify, plan and undertake harbourfront enhancement projects and widely engage the public throughout the planning and implementation process.

**West Kowloon
Waterfront
Promenade**



Wan Chai Waterfront Promenade



Planning Enforcement against Unauthorised Development

Unauthorised developments (UDs) have led to environmental degradation in the rural areas, causing nuisance to local communities and damage to the natural environment. They have also created problems like flooding, air and water pollution, traffic congestion, sometimes even posing a threat to life and property. Planning enforcement and prosecution of unauthorised developments are therefore necessary for protecting the rural environment from further degradation.

In 2007, 421 new UD's were detected in the rural areas. Most were related to uses such as open storage of vehicles, containers, construction machinery and related materials; and container trailer parks, public car parks and workshops. The Planning Authority issued to offenders a total of 3 788 warning letters and reminders for 671 cases, 2 150 enforcement notices for 352 cases, 10 stop notices for three cases, 234 reinstatement notices for 35 cases, and 1 668 compliance notices for 249 cases. A total of 157 defendants in 43 cases were convicted. The average fine meted out was \$14,916. Fines ranged from \$1,500 to \$400,000. During the year, enforcement actions resulted in the discontinuation of 304 UD's which occupied 56 hectares of land, and the regularisation through the planning application system of another 70 UD's covering 27 hectares of land.

In 2007, we also carried out publicity campaign including publicity on television and radio, publication of pamphlets and posters, and outreach education programmes in secondary schools.



UD site before taking enforcement action



Site cleared after taking enforcement action

Planning Studies in the Boundary District and Northern New Territories

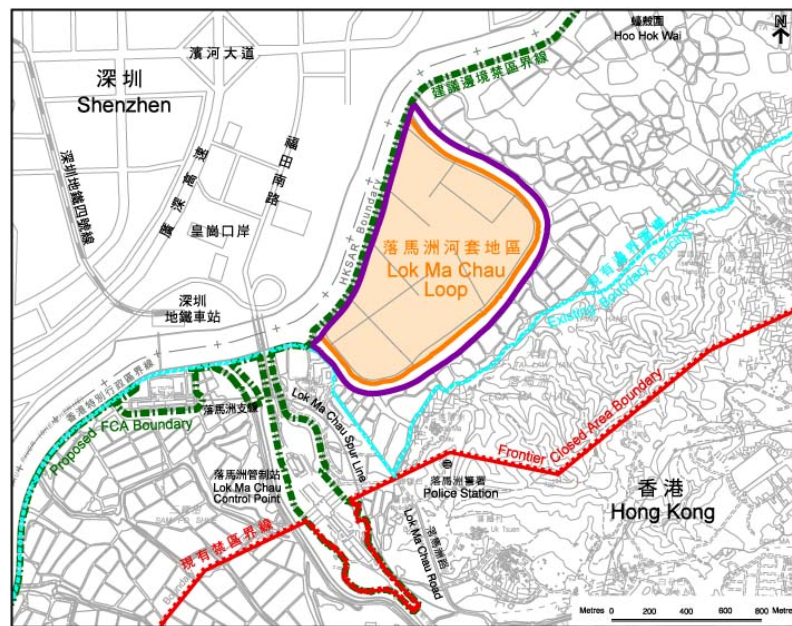
1. Hong Kong – Shenzhen Cooperation in Planning for the Boundary District

With a view to jointly establishing a high-level coordinating mechanism to explore the feasibility of developing the Lok Ma Chau Loop ('the Loop') and steer further research and planning work on other cross-boundary issues, a Hong Kong – Shenzhen Joint Task Force on Boundary District Development (Joint Task Force) was set up on 18 December 2007 under the "Cooperation Agreement on Recently Initiated Major Infrastructural Projects" signed by Hong Kong and Shenzhen. The Joint Task Force is co-headed by the Secretary for Development and the Executive Deputy Mayor of the Shenzhen Municipal Government. It meets at an interval of every six months.

The recent work of Hong Kong – Shenzhen cooperation in planning for boundary district is focused on the development of the Loop and the proposed boundary control point at Liantang / Heung Yuen Wai. Working groups will be set up under the Joint Task Force to study various issues on these projects.

The Lok Ma Chau Loop

The Loop, with an area of about 100 hectare, is situated in the upstream of Mai Po Inner Deep Bay Ramsar Site. The wetland around it is found to have high ecological value. The Hong Kong and Shenzhen sides, in considering the future land use and development of the Loop, will carry out careful planning studies and technical analysis so as to ensure that development in the Loop will be in compliance with the principle of sustainable development and that the existing ecology of the area will not be affected. On the other hand, being a reinstated dumping ground, part of the soil in the Loop has been contaminated. In taking forward any land use and development proposals, the environmental impacts and any mitigation measures required will be taken into consideration. Moreover, as the Loop is located in the HKSAR, all works and development are subject to the laws of Hong Kong, including the Environmental Impact Assessment (EIA) Ordinance.

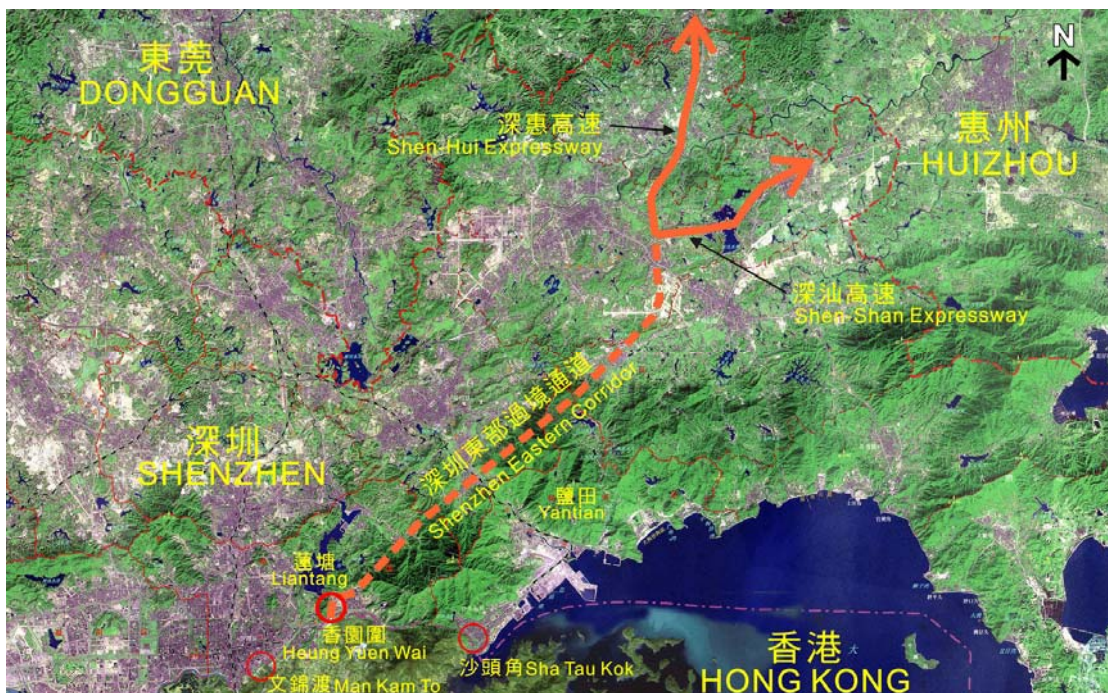


More Hong Kong – Shenzhen Collaboration in the Planning and Development of the Loop

A comprehensive consultancy study will be commissioned to explore the feasibility of developing the Loop and land uses covering such aspects as land use planning, EIA, traffic and engineering feasibility. To address the possible environmental impacts of developing the Loop, the Shenzhen Municipal Environmental Protection Bureau has also commissioned a consultant to conduct a preliminary environmental baseline study including soil sample and ecological studies. Findings of these studies will provide environmental baseline for the forthcoming comprehensive study.

Boundary Control Point (BCP) at Liantang / Heung Yuen Wai

Two planning studies have been commissioned to examine relevant issues of the proposed BCP at Liantang / Heung Yuen Wai. The first is the joint study with the Shenzhen Municipal Government, namely “Hong Kong/Shenzhen Joint Preliminary Planning Study for Construction of Liantang / Heung Yuen Wai Control Point”, to examine the need, function and benefits of developing the new BCP from a strategic and macro perspective. The second is the “Planning Study on Cross-boundary Control Point and its Associated Connecting Roads in Hong Kong” which aims to look into the land and infrastructural requirements of the new BCP, and the associated connecting road and relevant environmental, engineering and traffic impacts of the BCP within Hong Kong. Both studies are nearly completed. The Hong Kong and Shenzhen Governments will make reference to the recommendations of the studies and consider the way forward for the proposal. Should the proposed BCP be taken forward, an EIA will be conducted and appropriate mitigation measures implemented in order to fulfill the requirements of the EIA Ordinance.



Proposed Boundary Control Point at Liantang / Heung Yuen Wai

2. *Study on Land Use Planning for the Closed Area*

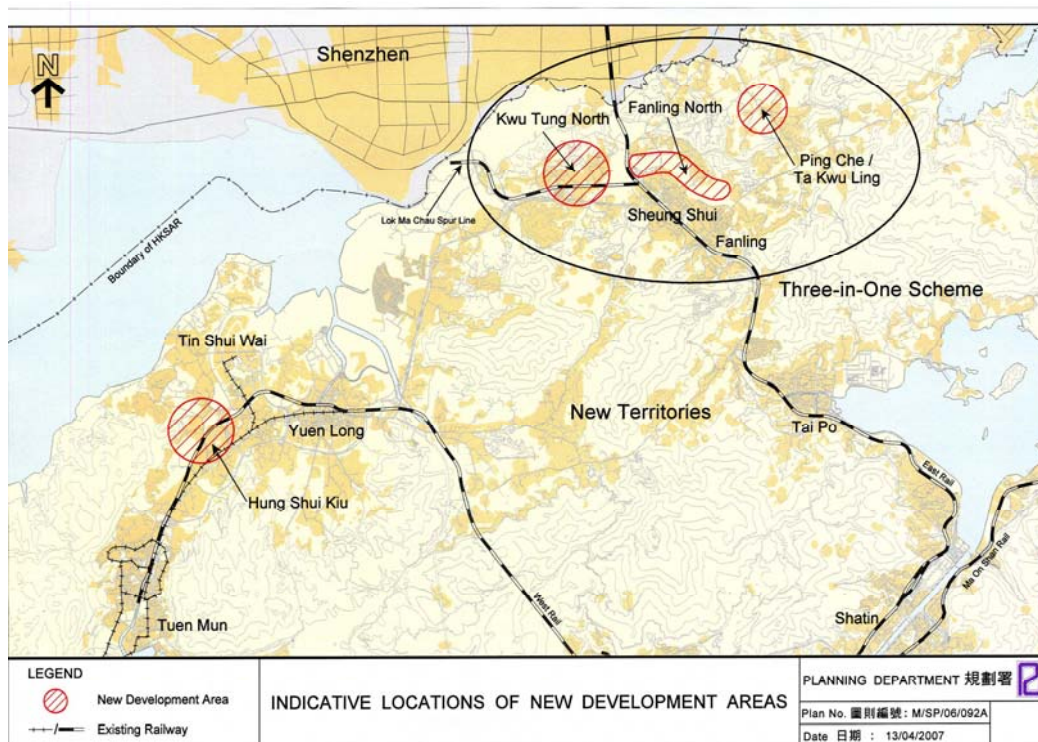
The objective of the study is to examine the development potential and constraints of the land to be released from the Closed Area, and to formulate a planning framework for the preparation of statutory town plans to guide the conservation and development of the land based on the principle of sustainable development. A Strategic Environmental Assessment (SEA) will be undertaken in parallel with and as part of the study. The findings and recommendations of the SEA will serve as input to various stages of the study, with a view to facilitating the formulation of an environmentally acceptable planning framework.



Lok Ma Chau in the Closed Area

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

The Chief Executive announced in his 2007-08 Policy Address the revival of planning and engineering studies on New Development Areas (NDAs) in Kwu Tung North, Fanling North, Ping Che and Ta Kwu Ling in Northeast New Territories and in Hung Shui Kiu. NDAs are small-scale new towns to provide housing land and to meet other land use requirements in the future. 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 will follow the sustainable development principle, with emphasis on urban design considerations and the adoption of environmental friendly and energy saving measures. As part of the work of the planning and engineering studies, an EIA will be 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.

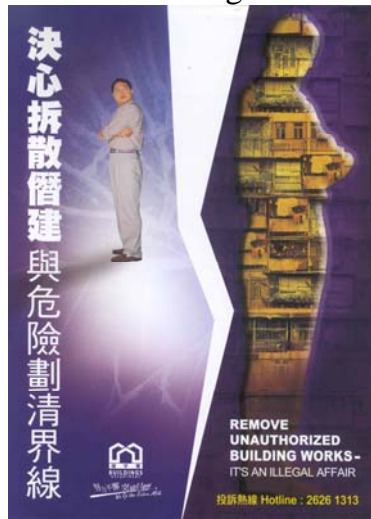
Green building

To promote green and innovative buildings and better living space, the Government has since 2001 introduced incentives for the provision of green features such as balconies, wider common corridors and lift lobbies, communal podium/sky gardens, non-structural prefabricated external walls, etc. in building projects. Actions were also taken to reduce construction and demolition wastes.



Enforcement actions against unauthorized building works

Proper building management and timely maintenance of existing buildings help prolong the overall life span of buildings, optimize the economic value of our scarce land and improve the living environment, all of which contribute to a sustainable living environment. In 2007, the Buildings Department issued 32 898 orders and 8 621 warning notices to tackle



unauthorized building works (UBWs) and removed 51 312 UBWs. In addition, in 2007, 91 buildings in areas of heavy pedestrian flow and commercial activities were targeted for enforcement action against unauthorized large glass panels, advertisement signboards and TV displays installed on the external walls of these buildings. About 170 unauthorized structures were identified in the operation and the department would issue removal orders to the relevant owners.

Minor works control system

The proposed minor works control system will provide a simplified statutory route for building owners to carry out minor works, including the demolition of UBWs. The regime will help reduce the number of UBWs in Hong Kong. Subject to the progress of scrutiny of the legislation, the scheme will be implemented by late 2009 at the earliest.

Mandatory building and window inspection scheme

We are working on the legislation on the proposed mandatory building and window inspection scheme for submission to the Legislative Council as soon as practicable.

5.4 Urban Renewal

Policy

The purpose of urban renewal is to improve the living conditions of

residents in older urban areas while endeavouring to preserve their local character and social network. It involves redeveloping dilapidated buildings, rehabilitating old buildings, revitalizing old districts, and preserving buildings of historical, cultural or architectural interest.

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

Urban renewal work

By end-2007, the URA and its strategic partner, the Hong Kong Housing Society, have commenced a total of 32 redevelopment projects, including the massive Kwun Tong Town Centre redevelopment project which was commenced in March 2007. On the preservation front, URA has preserved over 25 pre-war buildings for adaptive re-use.

To assist owners in need in rehabilitating their buildings, the URA has provided them with materials, interest-free loans, grant and other assistance. Up to end 2007, the URA has assisted over 29 000 owners to rehabilitate their buildings on a voluntary basis. The URA has also carried out revitalisation initiatives in various old districts. In 2007, we and the URA announced to adopt a district-based approach to holistically revitalise the older part of Wan Chai.



Kwun Tong Town Centre Redevelopment Project



Before building rehabilitation



After building rehabilitation

5.5 Water Quality and Conservation

Conservation of fresh water

Fresh water is a scarce resource. With growing population and economic activities, there is an ever-increasing demand for this limited resource. From a sustainability perspective, water conservation is one of the fundamental elements to ensure a reliable and sufficient water supply to the people in Hong Kong. Against this backdrop, we are continuing with a comprehensive study to formulate a programme based Total Water Management (TWM) strategy. The TWM strategy to be adopted is proactive management of demand and supply in an integrated, multi-sectoral and sustainable manner including enhancement of water conservation, protection of water resource and exploration of new water resources.

In 2007, we achieved good progress towards water conservation through continued implementation of the following measures -

- public education to promote voluntary water conservation;
- active leakage control through a large-scale programme of replacement and rehabilitation of water mains, and application of new technologies in leakage detection and reduction;
- use of seawater for toilet flushing in metropolitan areas and most of the new towns;
- a tiered water tariff structure for domestic consumption to encourage water conservation; and
- reduction of unauthorized use of water by strengthening the established procedures and exploration of more effective and efficient policies.

The water supply agreement between Guangdong and Hong Kong authorities has given Hong Kong flexibility in receiving water from Dongjiang that help conserve water for the Pearl River Delta. In addition, we continue to conduct pilot schemes in Ngong Ping and Shek Wu Hui for recycling treated sewage effluent for toilet flushing, irrigation and other non-potable uses. We have also completed the pilot desalination plant study after two years' trial operation at Tuen Mun and Ap Lei Chau on the reverse osmosis technology.



2007 World Water Monitoring Day cum 40th Anniversary of the Commissioning of the Plover Cove Reservoir

In the year 2008, the following initiatives on conservation and management of water resources will be pursued -

- completing the consultancy study on the strategy of TWM for Hong Kong;
- devising a plan to step up public education on water conservation;
- continuing the implementation of the 15-year plan for large-scale replacement and rehabilitation of aged water mains to reduce water losses due to leakage and main bursts;
- employing the latest pressure management technologies to step up active leakage control; and
- completing the pilot schemes in Ngong Ping and Shek Wu Hui on the use of reclaimed water for non-potable purpose such as toilet flushing.

5.6 Energy Efficiency and Conservation

Water-cooled air-conditioning systems

In collaboration with the relevant government departments, a pilot 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 of 2007, 82 areas have been identified where such systems can be used as compared to six when the scheme was first launched in 2000. We have received over 319 applications for installation of the water-cooled air-conditioning

systems. So far, 108 installations have been completed and all were reported to be running in good conditions. When all the applications are approved and implemented, it is estimated that the energy consumption will be reduced by 208 million kilowatt per year, (or a reduction of about HK\$187 million in the electricity cost) and carbon dioxide emission will be lowered by 145,600 tonnes per year¹. A review on the pilot scheme was conducted in 2007 and we will formulate a long-term policy to promote the wider use of water-cooled air-conditioning systems in the territory in the light of the findings.

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 design. For example, all new government buildings are to be designed to comply with the Building Energy Codes issued by the Electrical and Mechanical Services Department as the minimum energy performance standard for energy efficiency.

5.7 Minimizing Adverse 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 a systematic environmental management process, more effective nuisance controls, promoting recycling and reduction of construction waste, wider use of recycled aggregates, strengthened enforcement of the Environmental Impact Assessment (EIA) Ordinance, improved site cleanliness and tidiness, 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. We will continue to improve the design and construction planning of our public works projects

¹ With effect from 1 January 2007, the electricity savings of existing buildings with air-cooled installations converted to water-cooled installations and new buildings adopting water-cooled installations are estimated to be 28 kilowatt-hour per m² per year.

to further reduce their impact on the environment. Contractual provisions are also incorporated in public works contracts to require contractors to adopt the best environmental site practices.

Policy

Specifically, we require, as part of our works policies, the following-

Environmental Management

- project proponents are required to prepare a Construction and Demolition Materials Management Plan (C&DMMP) for identifying and implementing measures to minimize the generation of construction waste and maximize their reuse/recycling through proper planning and design, as well as adoption of appropriate construction methods;
- the Public Fill Committee will also “match” projects having surplus construction and demolition (C&D) materials with those where C&D materials could be reused as fill;
- specifications have been promulgated to promote the use of recycled aggregates in filling works, road sub-base construction and concrete production etc. Also, site hoardings are required to be made of metal material to facilitate reuse. Moreover, we discourage the use of tropical hardwood in false work, formwork and other temporary works;
- contractors of public works contracts are required to prepare an Environmental Management Plan (EMP) setting out concrete measures to control nuisances such as air, noise and wastewater pollution and minimize the generation of construction waste;
- contractors are also required to appoint an ‘environmental officer’ to oversee the implementation of the EMP;
- 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;
- all capital works contracts are to implement on-site sorting of construction waste to maximize the recovery of reusable construction waste for recycling; and

- to ensure proper disposal of construction waste, we implement the “trip ticket” system to track and monitor the disposal process for preventing illegal dumping.

Enhancing contractor’s environmental performance

Contractor’s environmental performance has a major impact on the successful implementation of our environmental policies. In this regard, the following control measures have been implemented -

- the environmental performance of public works contractor is closely monitored and regularly assessed, and the assessment will be taken into consideration in the evaluation of tenders submitted by the contractor for future public works contracts;
- 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; and
- regulating action will also be taken against contractors with repeated convictions on poor site hygiene.

Achievements and targets

Environmental management is an ongoing task that needs tenacity, vigilance and foresight. To achieve this, we initiated a number of key measures last year to improve the environmental performance of public works projects, as summarised below -

Achievements

- we reduced significantly the amount of public fill (e.g. soil, broken rock and broken concrete etc) generated from public works contracts from about 11 million tonnes in 2005 to about 5 million tonnes in 2006 and about 4 million tonnes in 2007;
- we commenced a consultancy study on developing a sustainable construction management framework for public works (civil engineering) projects; and.
- we promulgated the installation of mechanical truck covers in public works contracts to cover dusty materials effectively.

Targets

- formulating a sustainable construction management framework for public works (civil engineering) projects;
- consulting the trades about an environmental “score card” system to facilitate a systematic assessment of the contractor’s environmental performance in public works contracts;
- continuing to promote the use of recycled C&D materials in public works projects, so as to set an example for the construction industry to follow;
- continuing to promote good waste management practices and measures through public awards, in-house training and workshops; and
- continuing to review and refine the operation of environmental management measures on public works sites.

5.8 Greening

Policy

The greening policy of Government is to uplift the quality of our living environment through active planting, proper maintenance and preservation of trees together with other vegetation. Our target is to bring about noticeable improvements in urban greenery, to enhance existing green areas and to maximise greening opportunities in planning public works projects.

We established in December 2002 a Steering Committee on Greening to set the strategic direction and oversee the implementation of major planting or beautification programmes. This Steering Committee is underpinned by three working committees, namely, the Greening Master Plan Committee, the Community Involvement Committee on Greening and the Works and Maintenance Committee on Greening.

A greening programme is compiled each year to facilitate effective planning and progress monitoring. About 11 million plants were planted under the programme for 2007.



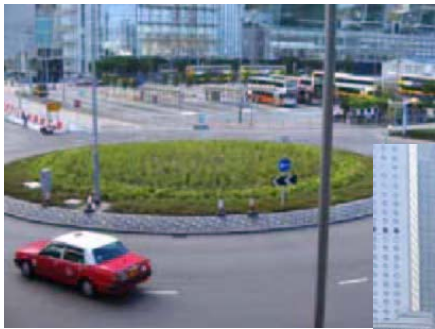
Infrastructure for Penny's Bay Development

Greening Master Plans

The Greening Master Plan Committee coordinates the preparation of Greening Master Plans (GMPs) and the implementation of related greening measures for selected areas. A GMP seeks to define the overall greening framework of an area by identifying suitable locations of planting selected species so as to build up desirable themes. GMPs also serve as guides to planning, design and implementation of greening works to achieve continuous and consistent results. As greening opportunities arise under different timeframes, GMPs embody a full spectrum of short, medium and long-term measures.

Implementation of the GMPs for Central and Tsim Sha Tsui drawn up in mid-2005 and the associated short-term greening measures was completed in March 2007.

Studies on development of GMPs for Sheung Wan, Wan Chai, Causeway Bay, Mong Kok and Yau Ma Tei were completed in December 2007 and the associated greening works will commence in September 2008 for completion by end 2009. The drawing up of GMPs for the remaining urban areas has started and will be completed in early 2009. We will then proceed to draw up GMPs for the New Territories. Before that, we will implement greening enhancement proposals at focal points/locations as an interim measure.



Before



After

Pilot Greening Schemes associated with GMP for Central – Roundabout near Pier 7

Private Participation

We are proactively enlisting community support for greening and are collaborating with private sector organisations to promote greening and to beautify cityscape.

Tree preservation

A comprehensive range of legislative and administrative measures are in place for preserving existing trees. In particular, we have compiled a register of old and valuable trees to provide better protection to trees of special value. We promulgated in May 2006 an enhanced tree preservation strategy setting out the framework for tree preservation and strengthening control on tree felling. Under the framework, if felling of trees is unavoidable, compensatory planting will be provided as far as practical. The Lands Department issued an updated practice note in August 2007 to strengthen the control on tree felling in private projects.

We are providing training to government front-line staff to enhance their knowledge on tree protection. To complement our efforts, the Construction Industry Council Training Academy is offering courses on horticultural work for landscape workers and supervisors, and has also developed a training course for property managers on tree preservation.

Greening of Slopes

Hong Kong's hilly terrain, coupled with dense building and infrastructure developments, has resulted in some 57,000 man-made slopes. We are committed to making every newly formed or upgraded government man-made slope look as natural as possible, by using vegetation for slope surface protection and preserving existing vegetation wherever practicable. Hence, landscape treatments are provided to all man-made slopes upgraded under the Landslip Preventive Measures (LPM) Programme. From 2004 to 2007, 62% of the slopes upgraded under the LPM Programme used vegetation cover as slope surface protection.



Greening work on the LPM slopes along South Lantau Road, Lantau

The Civil Engineering and Development Department has an on-going study on the application of various vegetation species for landscape use on man-made slopes, with a view to expanding the range of suitable vegetation species for use in greening slopes and enhancing biodiversity of the slope vegetation covers. Due emphasis is also given to self-regenerating, in particular, native species, and smaller species such as shrubs that are more suitable for use in steep slope settings.

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.



Shek O Quarry rehabilitation work in progress

Targets for 2008

- To plant about 7 million trees, shrubs and annuals with about 73% of them in urban areas;
- To further enhance the management of urban greenery and shift the focus to quality planting in focal points/locations;
- To continue the task of preparing GMPs for the remaining urban areas; and
- To encourage private sector and community participation in greening.

5.9 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

Hong Kong's heritage is a testimony to our unique past and helps define our cultural identity. Historic buildings are part of our cultural heritage and can help the community better understand our past and build up the sense of belonging. Since July 2007, the policy portfolio of heritage conservation has been transferred to DEVB. Comprises PLB and WB, DEVB will ensure the needed balance is struck amongst development, environmental protection and heritage conservation.

The enabling legislation in Hong Kong for heritage conservation is the Antiquities and Monuments Ordinance (Chapter 53), which commenced operation in 1976. Under the Ordinance, the Secretary for Development is the Antiquities Authority who may, after consultation with the Antiquities Advisory Board (AAB) and with the approval of the Chief Executive, by notice in the Gazette, declare 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 protection. The AAB, consisting of 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 AAB is an important partner of the Government on heritage conservation work in Hong Kong. The Antiquities and Monuments Office (AMO) under the Leisure and Cultural Services Department provides secretarial and professional support to the AAB. AMO is also the expert advisor of the Government on heritage conservation.

New Initiatives

As announced in the Chief Executive's Policy Address in October 2007, we have introduced a series of initiatives to press ahead on heritage conservation work in the years to come, having regard to the rising public aspirations for the protection of valuable heritage in Hong Kong. These initiatives include:

- Requiring new capital works projects to conduct Heritage Impact Assessments where necessary to give due consideration to conservation of sites or buildings of historic and archaeological significance at the planning stage;
- Implementing a scheme for adaptive re-use of Government-owned historic buildings by engaging non-profit making organizations for running social enterprises;
- Providing economic initiatives for conservation and maintenance of privately-owned historic buildings;

- Setting up the Commissioner for Heritage's Office to provide a focal point for the Government's heritage conservation work and local and overseas networking; and
- Conducting public engagement and publicity programmes to enhance public awareness and interest in heritage conservation.

Major Activities in 2007

In 2007, we have performed the activities as listed in paragraphs below for the conservation of our valuable heritage.

- *Monuments and Proposed Monuments*

As at 31 December 2007, there were 82 declared monuments, including 64 historic buildings and 18 rock carvings, forts and archaeological sites. In 2007, Chik Kwai Study Hall and the Tang Ancestral Hall in Ha Tsuen were declared as Monument. In addition, 128 Pokfulam Road and King Yin Lei were declared as Proposed Monuments.

- *Restoration and Maintenance Works of Historic Buildings*

AMO carried out 63 restoration works and maintenance projects for historic buildings in 2007. It is planned to conduct restoration and maintenance works for 60 declared monuments and graded historic buildings in 2008, including Tai Fu Tai, Yan Dun Kong Study Hall, Chik Kwai Study Hall, Tang Ancestral Hall, Guest House and Yau Kung School in Ha Tsuen etc.

- *Built Heritage Impact Assessment*

In 2007, AMO completed 6 built heritage impact assessments under EIAO while another 10 were still in progress.

- *Archeological Excavation, Investigations and Monitoring*

The Archaeology Unit of AMO conducted 16 archaeological excavations/ investigations (including the former Mountain Lodge and Central School as well as other small scale development projects) and 174 site visits for monitoring purpose.

➤ *Heritage Venues*

With the full support of the Ping Shan Tang Clan, the Ping Shan Tang Clan Gallery cum Heritage Trail Visitors Centre was opened to public since April 2007. Converted from the Old Ping Shan Police Station built in 1899, the Centre introduces local folk culture and heritage along the Trail. Also, some schools had organised exhibitions with different heritage-related topics at the Centre.

➤ *Major Heritage Exhibitions and Education Programmes Organised*

“Postal Items Exhibition on Celebration of Hong Kong’s Return to the Motherland and China’s Diplomacy” was held in July and August 2007 in collaboration with the Office of the Commissioner of the Ministry of Foreign Affairs of the People’s Republic of China in the HKSAR and the Better Hong Kong Foundation.

In November and December 2007, AMO organised an exhibition “Out West: The Great American Landscape” with the Meridian International Center of Washington, D.C., USA and with the full support of the U.S. Consulate General of Hong Kong and Macau.

An international conference on “Evolution and Rehabilitation of Shophouse” co-organised with the UNESCO-ICCROM Asian Academy for Heritage Management was held in mid May 2007 with the support of the Lord Wilson Heritage Trust and the Hong Kong Institute of Architects.

Conference on “Heritage Conservation and Prehistoric Archaeology of South China” was co-organised with the Chinese University of Hong Kong in mid-December 2007.

➤ *Electronic Media for Publicity Purposes*

To reduce paper consumption, we have been using more electronic media, including internet and webpage, for publicity. Information on heritage conservation is disseminated via the homepage of Work’s Branch.

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 therefore 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

Before the establishment of DEVB in July 2007, both PLB and WB had respectively adopted a wide range of green housekeeping practices in daily office operations. Under the new bureau, 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 and loose minute jackets 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;
- distribute softcopies by emails, diskettes or CD-ROMs instead of print-outs; and
- upload reports, circulars and other publicity materials on e-bulletin board, intranet and internet website for general reference.

Managing Energy Consumption

To meet the Chief Executive's pledge that all Government offices and buildings achieve the target of reducing the total electricity consumption by 1.5% annually starting from 2006, we have adopted the following energy saving measures:

Energy Saving Measures Taken	
Lighting	<ul style="list-style-type: none"> • turn off some lighting when the occupancy is low; • switch off unnecessary lighting in public communal areas during lunch and after normal office hours; and • reduce the use of high power incandescent lamps.
Air-conditioning	<ul style="list-style-type: none"> • reduce daily central air-conditioning provision hours in summer and winter time; • set room temperature at 25.5°C; • turn off some air-conditioning units when the occupancy is low; • 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; • open windows to allow natural ventilation instead of turning on air-conditioning units during cold season; • dress lightly to minimize use of air-conditioning in hot months; and • lower window blinds or curtains before leaving office to reduce direct sunlight on the following day.
Computers	<ul style="list-style-type: none"> • activate the standby mode features of personal computers; • switch off the monitors during lunch and when the staff is away from the workplace for meeting; • switch off personal computers after office hours; and • switch off non-essential servers after office hours.
Others	<ul style="list-style-type: none"> • appoint energy wardens and assign last-man-out to check the effectiveness of energy saving measures; • encourage staff to walk up or down one or two storeys rather than using the lift; and • consult the advice of Electrical & Mechanical Services Department to explore feasible energy saving opportunities.

The adoption of the above energy saving measures has contributed positively to the significant savings of the total electricity consumption of Murray Building (MB) where DEVB is one of the major tenants occupying office spaces from 9/F to 13/F; and part of 17/F, 18/F and 21/F. The electricity consumption of MB in 2007 is 6,587,530 kWh, which represents a substantial reduction of 4.3% as compared with that in 2006. The reduction has far exceeded the 1.5% target.

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 2007, more than 90% of 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 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 organized by other government departments and organizations, such as Green Power Hike, etc. 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 continued our energy saving efforts in reducing the electricity consumption. As mentioned in Chapter 6, the electricity consumption of MB in 2007 has a reduction of 292,640 kWh i.e. 4.3% as compared with that in 2006. The contribution of DEVB in the reduction would be estimated as 97,547 kWh.

In 2007, we helped reduce the emission of the major air pollutants, viz., 186.3 kg of Sulphur Dioxide (SO₂), 113.2 kg of Nitrogen Oxide and Nitrogen Dioxide (NO_x) and 5.9 kg of Respirable Suspended Particle (RSP).



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 or by fax on 2869 6657 or write to us at 10/F., Murray Building, Garden Road, Central, Hong Kong.

Development Bureau

Murray Building,
Garden Road, Hong Kong

Fax No.: 2869 6657

E-mail Address : devbenq@devb.gov.hk

Website : <http://www.devb.gov.hk/>