

2008 Environmental Report

Development Bureau

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1. INTRODUCTION

This report covers the Year 2008 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 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.

The Development Bureau would take up certain additional policy areas in 2009. In fact, a Development Opportunities Office was established in July 2009 to facilitate land development projects by the private sector and non-government organizations for an initial period of three years. Further, another new policy team – Greening, Landscape and Tree Management Office would be set up in late 2009/early 2010 to facilitate the adoption of a holistic approach in greening, landscape and tree management.



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 development-related heritage conservation. The major areas of policy responsibilities include:

- to oversee land policy, 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, 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, provision of off-street bicycle parking spaces, incorporation of the “Tree Preservation Clause” and the “Tree Maintenance Clause” in the existing and new short term tenancies.

Development Controls

As a positive response to public aspirations for quality city environment and increasing concerns about excessive development intensity, we have reviewed individual sites for sale in the 2008-09 Application List. Thus, for every site included in the 2008-09 Application List, we have examined the particulars of each site carefully and had 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 have also conducted air ventilation assessment 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 air ventilation in the surrounding area would not be adversely affected.

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 2008, the Lands Department handled 854 lease enforcement cases against private land owners in respect of nuisances, unauthorized building works or unauthorized conversion of permitted use. In the same year, 31 199 Government land notices under the Land (Miscellaneous Provisions) Ordinance had been posted for the clearance of unauthorized dumping or occupation of Government land.

A piece of Government land after demolition of unauthorized structures



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 2008 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).

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 creating “wall effect”.

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. 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 new individual land sale sites in the Application List, review of Outline Zoning Plans (OZPs), and planning studies. Appropriate development parameters, for example, site coverage, maximum gross floor area/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 in 2006. The Study will establish an Urban Climatic Analysis Map, an Urban Climatic Planning Recommendation Map, wind standards which can be practically adopted for AVA in Hong Kong and a refined methodology for conducting AVA. A draft Urban Climatic Analysis Map has already been completed. The whole Study is expected to be completed in 2010.

Review on Development Intensities

Pursuant to the Chief Executive’s 2007-08 Policy Address, the Planning Department has continued its review of 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, waterfront areas along Victoria Harbour and congested built-up areas. This involves about 43 OZPs. In 2008, 11 OZPs incorporating amendments on building height restrictions, were exhibited for public inspection.

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 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 2008, about 9 024 hectares (or 23%) 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”.

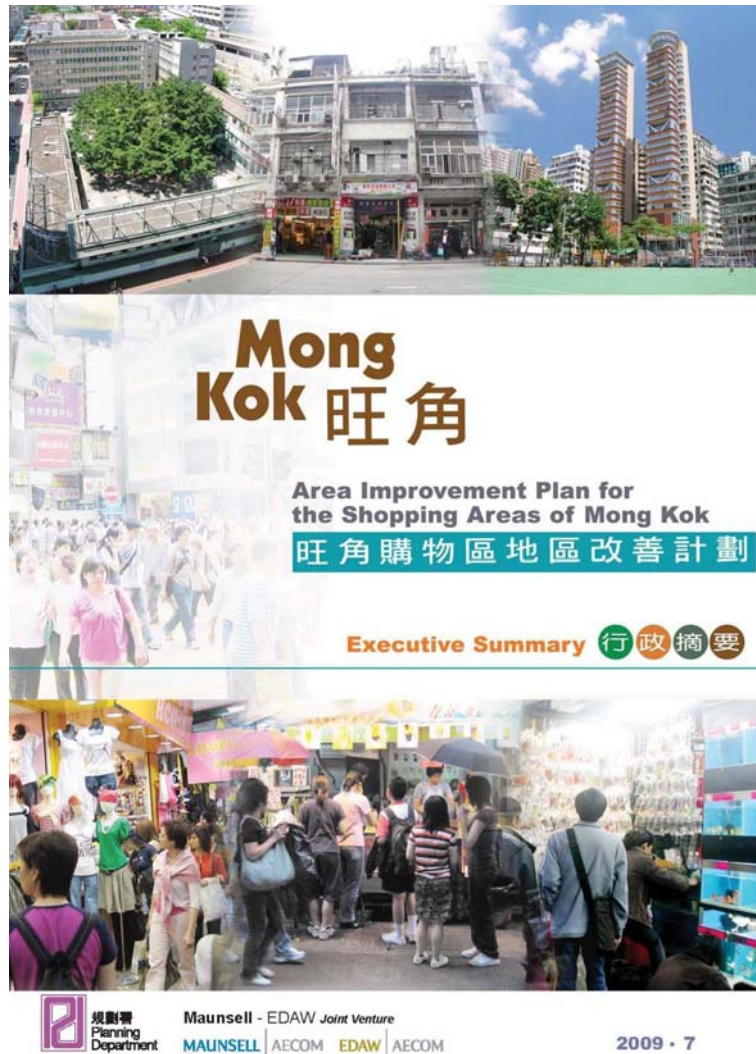
Hong Kong Planning Standards and Guidelines

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.

Pedestrian and Area Improvement Plans

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. In May 2007, an initial public consultation exercise was undertaken to solicit public views on the proposed planning framework and three early projects. The public was generally supportive of the planning framework and wished that more projects would be implemented with priority. From mid-April to mid-May 2008, a second public consultation exercise on the detailed design of six early projects was launched with a focus on consulting key stakeholders. No adverse comments were received. Based on the public views received, the Planning Department proceeded to draw up an Area Improvement Plan for the shopping areas of Mong Kok and conducted technical assessments to ascertain the feasibility and sustainability of the proposals. The study was completed in May 2009.

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. Relevant pedestrian and area improvement proposals will be taken forward for implementation under the existing mechanism and resource allocation system.

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 had continued with our effort to undertake a number of studies and projects in 2008 to enhance our harbourfront with a view to creating an attractive, vibrant, accessible and sustainable world-class harbourfront.

Amongst the on-going studies carried out by the Planning Department, the Hung Hom District Study was completed in early 2008 while the Urban Design Study for the New Central Harbourfront had undergone extensive public engagement, which provided inputs for the formulation/refinement of proposals for enhancing the Central harbourfront. The Planning Department will proceed to undertake the Hong Kong Island East Harbour-front Study and preparatory works had been carried out including formulation of a study framework.



Continuous efforts had also been made to carry out temporary harbourfront enhancement projects at sites pending permanent development. This included the design and construction of a temporary 200-metre promenade along the Kwun Tong Public Cargo Working Area for completion by end 2009 tentatively for public enjoyment. We will strengthen our work on harbourfront enhancement and continue to work hand in hand with the HEC to identify, plan and undertake harbourfront enhancement projects, including the Hung Hom Waterfront Promenade, Hoi Yu Street Waterfront Promenade, and Harbourfront Signage Scheme, and widely engage the public throughout the planning and implementation process.

Planning Enforcement against Unauthorised Development

Unauthorised developments (UDs) have led to environmental degradation in the rural New Territories, 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 public safety. Planning enforcement against UD is therefore necessary to help prevent further degradation of the rural environment.

In 2008, 334 new UD were detected in the rural areas. Most were related to unauthorised land/pond filling activities, open storage of vehicles, containers, construction machinery and construction materials, container trailer parks, public car parks and workshops. The Planning Authority has issued a total of 3 508 warning letters for 541 cases, 1 721 enforcement notices for 259 cases, 32 stop notices for 5 cases, 473 reinstatement notices for 85 cases, and 1 654 compliance notices for 237 cases. A total of 184 notice recipients who did not comply with the requirements of the notices were prosecuted, convicted and fined. During the year, enforcement actions have resulted in the discontinuation of 267 UD occupying 57 hectares of land, while another 112 UD covering 40 hectares of land were regularised through the planning permission system.

During the year, we also carried out publicity campaigns on planning enforcement with publicity on television and radio, publication 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 on these two projects.

Planning and Engineering Study on Development of Lok Ma Chau Loop

The Hong Kong and Shenzhen Governments will commission a joint study on the feasibility of development of the Loop. Both sides have initially considered that higher education could be the leading land use, complementing with high-tech research and development facilities, as well as cultural and creative industries, so as to provide impetus for human resources development in the South China region, enhance the competitiveness of the Pearl River Delta, as well as benefit the long-term economic development of the two cities. The overall objective of the study is to formulate a comprehensive plan for development and implementation of the Loop with a view to developing a sustainable, environmentally friendly, energy efficient and people oriented community. It should also be developed on the basis of mutual benefit to both Hong Kong and Shenzhen, providing quality environment and convenience to its occupants/users.

The Loop is situated in the upstream of Mai Po Inner Deep Bay Ramsar Site. The adjacent wetland is found to have high ecological value. The planning and engineering study will carry out a series of environmental assessments/studies as required under the Environmental Impact Assessment (EIA) Ordinance and propose mitigation measures to ensure that development in the Loop will be environmentally acceptable and the existing ecology of the surrounding areas will not be adversely affected.

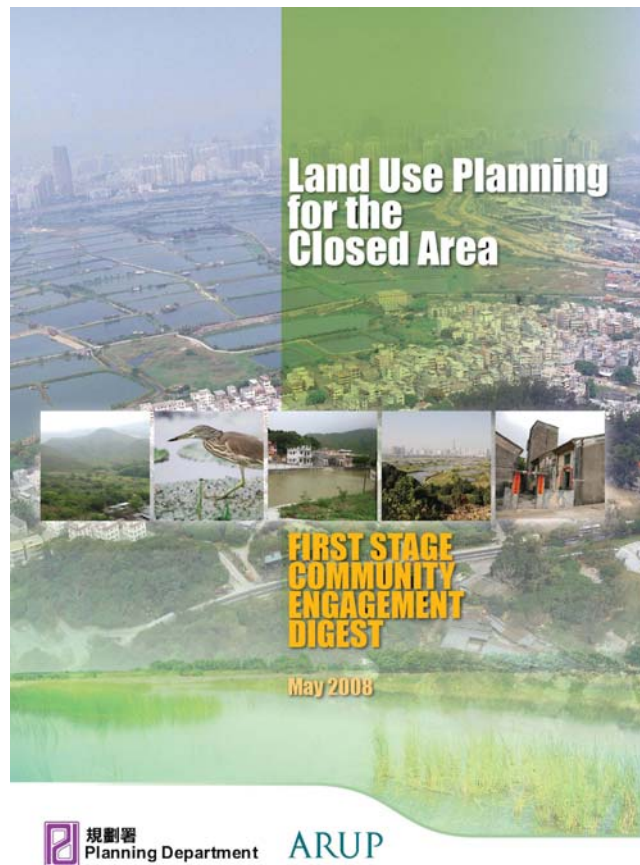
Boundary Control Point (BCP) at Liantang/Heung Yuen Wai

Two planning studies to examine relevant issues of the proposed BCP at Liantang/Heung Yuen Wai were completed in June 2008. 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. The findings of both studies confirmed the need for the new BCP. On 18 September 2008, the Hong Kong Special Administration Region and Shenzhen Municipal People’s Governments jointly announced the implementation of the new BCP with an aim to commencing operation of the new BCP not later than 2018. The Civil Engineering and Development Department will commission

consultants to undertake an investigation and preliminary design study for the development of the new BCP and its connecting road in 2009. An EIA for the project will be conducted to fulfill the requirements of the EIA Ordinance.

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) was undertaken in parallel with and as part of the study. The findings and recommendations of the SEA had served as input to various stages of the study, with a view to facilitating the formulation of an environmentally acceptable planning framework.



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.

NDA's are small-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, NDA's offer an alternative choice of quality living environment. The planning and design for NDA's will follow the sustainable development principle, with emphasis on urban design considerations and the adoption of environmental friendly and energy saving measures.

The Stage One Public Engagement of the North East New Territories NDA's Planning and Engineering Study commenced in mid November 2008 and lasted for about three months. Four major topics including the one on "Sustainable Living Environment" were discussed. The Stage Two Public Engagement, scheduled for the fourth quarter of 2009, will consult the public on the Preliminary Outline Development Plans. We shall continue to engage the public on the discussion of sustainable development for the planning of the NDA's.



As part of the work of the planning and engineering studies, an EIA will also 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. As committed in the 2008-09 Policy Agenda, the Government would, in collaboration with the Council for Sustainable Development, launch a public engagement exercise on appropriate measures to be taken to reduce the bulk of buildings and to foster the development of a better and more sustainable built environment.

We have also been developing a comprehensive target-based green performance framework for new and existing government buildings with a view to promoting green buildings in Hong Kong. The framework will cover green building rating, energy efficiency, greenhouse gas emission, renewable energy, waste reduction and management, water management as well as indoor air quality. With the support of the Construction Industry Council, the Hong Kong Green Building Council will soon be established. We will support its work to help raise public awareness of green buildings.



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 resource and improve the living environment, all of which contribute to a sustainable living environment. In 2008, the Buildings Department issued 32 847 removal orders and 8 272 warning notices to tackle unauthorized building works (UBWs) and removed 47 593 UBWs. In addition, in 2008, 43 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 89 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. The Legislative Council passed the Buildings (Amendment) Ordinance 2008 which set out the framework of the new control system in June 2008. Subject to the progress of scrutiny of the legislation, the scheme will be implemented in the legislative year 2009-10.

Mandatory Building and Window Inspection Schemes

We are working on the legislation on the proposed mandatory building and window inspection schemes 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 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 Urban Renewal Authority (URA), a statutory body which was established in May 2001 to undertake urban renewal.

Urban Renewal Work

By end-2008, the URA and its strategic partner, the Hong Kong Housing Society, have commenced a total of 35 redevelopment projects. On the preservation front, URA is preserving over 50 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, grants, technical advice and other assistance. Up to end 2008, the URA has assisted over 37 000 owners to rehabilitate their 480 buildings on a voluntary basis. The URA has also carried out revitalisation initiatives in various old districts, including older parts of Wan Chai, Tai Kok Tsui, Sham Shui Po and Tsuen Wan.



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 have completed a comprehensive study and formulated a Total Water Management (TWM) strategy with an aim to manage the demand and supply in an integrated, multi-sectoral and sustainable manner.

In regard to water demand management, we have stepped up public education on water conservation with particular focus on education programmes for the younger generation on the concept and details of water conservation. We will also introduce a Water Efficiency Labelling Scheme on a voluntary basis to facilitate consumers to select plumbing fixtures and appliances that will help conserve water.

On the other hand, we have been pressing ahead with our on-going effort to tackle water leakage through replacing and rehabilitating 3,000 km of aged watermains for completion by 2015. We have been implementing comprehensive pressure management to optimize watermains pressure, and enhance leakage detection and monitoring so that leakage can be reduced and detected for early remedial actions.

In regard to water supply management, we have been planning to start a major capital works project to improve the existing catchwater system for safe and effective collection of surface water. We have been exploring diversification of resources such as desalination and the use of reclaimed water for non-portable purposes such as toilet flushing and landscape irrigation. Besides, the renewal of the agreement for the supply of Dongjiang water in 2009-2011 will continue to give Hong Kong flexibility in managing the water supply and help conserve water from the Pearl River Delta.



2008 World Water Monitoring Day in Hong Kong at High Island Reservoir

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 2008, the number of designated areas where such systems can be used have been expanded to 85 as compared to the initial 6 nos. in 2000. 385 applications have been received for joining the Scheme and 149 installations of fresh water cooling towers have been completed and put into operation. The estimated annual energy saving of the completed installations is 117.8 million kilowatt-hour per year and reduction of carbon dioxide emission is about 82,460 tonnes per year. It proves to be a promising way to improve the energy efficiency of air-conditioning systems. In view of the support from the property owners and the environmental benefits, the Scheme has changed from the pilot status to a standing one from 1 June 2008.

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 with construction floor area of more than 10,000 m² 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.

5.7 Minimizing 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 minimize the generation of construction waste and maximize 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 wastewater pollution and minimize 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. To ensure proper disposal of construction waste, we have implemented the "trip ticket" system to track and monitor the disposal process for preventing illegal dumping.

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.

5.8 Greening

Policy

Government has been actively promoting greening in order to improve our living environment. There is a particular close relationship between greening and improvement of air quality. Green plants can help act as a sponge by sequestering carbon dioxide in the atmosphere while releasing oxygen. They can improve air quality by intercepting particulate matters and absorbing gaseous contaminants such as sulphur dioxide and nitrogen oxide in the atmosphere as well as help lower urban temperature.

Government strives 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 greening 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 8.9 million plants were planted under the programme for 2008.



Greening Works for Deep Bay Link

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.

Following the completion of the implementation of greening works in GMPs for Central and Tsim Sha Tsui in 2007, the implementation of greening works in GMPs for Mong Kok, Yau Ma Tei, Sheung Wan, Wan Chai and Causeway Bay started in August 2008 for completion by end 2009. In addition, we have completed the development of GMPs for the remaining urban areas including Kowloon West (Sham Shui Po and Kowloon City), Kowloon East (Wong Tai Sin and Kwun Tong) and Hong Kong Island (Eastern District, Southern District and Western District) in early 2009. Implementation of short-term greening measures for these areas is scheduled to commence before end 2009 for completion by mid 2011. Meanwhile, consultation work will start shortly for developing and implementing GMPs in the New Territories (NT). As an interim measure, various departments have implemented/will implement greening enhancement proposals at focal points in the NT.



Before

After



Greening works associated with GMP for Mong Kok and Yau Ma Tei – Cheong Wan Road

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 Management

A comprehensive range of legislative and administrative measures are in place for preserving existing trees. In particular, a register of old and valuable trees have been compiled 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 should 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. Regarding the quality enhancement of tree maintenance works, an inter-departmental working group was set up in April 2008 to review the technical requirements and management criteria of the approved list of landscaping contractors, with the aim to strengthen the entry requirements to become approved contractors for tree maintenance works.

We are providing training to front-line staff within Government to enhance their knowledge on tree preservation. To complement our efforts, various organisations such as the Construction Industry Council Training Academy and the Vocational Training Council are offering courses on horticultural work and tree preservation for landscape workers, supervisors as well as property managers.

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 looks as natural as possible, by using vegetation for slope surface protection and preserving existing vegetation wherever practicable. Hence, landscape treatments have been provided to all man-made slopes upgraded under the Landslip Preventive Measures (LPM) Programme. From 2004 to 2008, 62% of the slopes upgraded under the LPM Programme used vegetation cover as slope surface protection. We will launch a Landslip Prevention and Mitigation Programme (LPMitP) in 2010 to dovetail with the LPM in order to deal with the remaining landslide risks and the greening works on the slopes will continue.



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.

(i)



As-built photo taken in August 2003, concrete grill structure can be seen from distance.



Photo taken in April 2008, the slope has been covered with healthy vegetation and became very green.

(ii)



Landscaping work on an LPM slope along Bowen Road shows tree preservation, hard landscaping and at the same time maximizing planting opportunity.

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 2009

- To oversee Government's overall plan to plant about 7 million trees, shrubs and annuals with about 80% of them in urban areas;
- To further enhance the management of urban greenery and with more focus on quality planting in focal points/locations;
- To continue the task of preparing GMPs for the NT; 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

Since July 2007, the policy portfolio of heritage conservation has been transferred to DEVB. Comprises PLB and WB, DEVB is committed to ensure the needed balance is struck amongst development, environmental protection and heritage conservation. In April 2008, the Commissioner for Heritage's Office (CHO) was set up under WB to provide dedicated support at directorate level in implementing the policy on heritage conservation, taking forward a series of new initiatives, as well as serving as a focal point of contact.

The enabling legislation in Hong Kong for heritage conservation is the Antiquities and Monuments Ordinance (Chapter 53). Under the Ordinance, 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, 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.

An Advisory Committee on Revitalisation of Historic Buildings (ACRHB) was set up in May 2008 to assess applications and subsequent operation of the successful applicants under the Revitalising Historic Buildings Through Partnership Scheme and advise on other revitalisation projects. The ACRHB, which is a non-statutory body appointed by SDEV, plays a significant role in advising the Government on revitalisation of historic buildings and sites.

New Initiatives and Progress

Following the Chief Executive's Policy Address in October 2007, we have introduced a series of initiatives to press ahead on heritage conservation work, having regard to the rising public aspirations for the protection of valuable heritage in Hong Kong. Considerable progress was made in implementing these initiatives in 2008. These initiatives include:

➤ *Heritage Impact Assessment*

With effect from 1 January 2008, new capital works projects are required to conduct Heritage Impact Assessments (HIA) where necessary to give due consideration to conservation of sites or buildings of historic and archaeological significance at the planning stage. Details of the HIA mechanism were promulgated in a Technical Circular (Works). HIA has become a mandatory requirement in all funding submission to the Legislative Council on capital works projects.

➤ *Revitalising Historic Buildings Through Partnership Scheme*

The Revitalising Historic Buildings Through Partnership Scheme (the Scheme) was launched in February 2008. Under Batch I of the Scheme, non-profit-making organisations (NPO) with charitable status under section 88 of the Inland Revenue Ordinance were invited to submit proposals to revitalise selected historic buildings in the form of social enterprise. Following a vigorous and competitive process, and upon the advice of the ACRHB, six NPOs were selected to revitalise the Old Tai O Police Station, Fong Yuen Study Hall, Lai Chi Kok Hospital, Lui Seng Chun, Mei Ho House and North Kowloon Magistracy. Given the great community support for the Scheme, we plan to launch Batch II in 2009.

➤ *Economic Incentives to Owners of Private Historic Buildings*

Government recognises the need for economic incentives in order to encourage and facilitate private owners to preserve their historic buildings. We were successful in preserving the King Yin Lei through land exchange in that owner of King Yin Lei surrendered the mansion and the entire site to the Government for preservation and revitalisation, while the Government granted simultaneously an adjacent lot of the same size to the owner for private residential development. King Yin Lei was declared as a monument on 11 July 2008.

➤ *Financial Assistance for Maintenance Scheme*

We launched the Financial Assistance for Maintenance Scheme in August 2008 to help arrest privately-owned graded historic buildings from deterioration due to lack of maintenance. We provide financial assistance in the form of grants for owners to carry out minor maintenance works. In 2008, we approved the application from the Lo Pan Temple in Kennedy Town. In the light of the large number of applications and the proposed maintenance works, we plan to raise the ceiling of grant for each application from \$600,000 to \$1m to enable the maintenance works to be carried out in a more comprehensive manner.

➤ *Public Engagement and Publicity Programmes*

One of the most effective ways to enhance public awareness and knowledge of heritage conservation is to engage the public through promotional and publicity programmes. In 2008, we conducted a series of programme including public awareness campaign on heritage conservation, conservation and revitalisation of historic buildings photo competition, public activities for revitalisation of Former Police Married Quarters on Hollywood Road. We also launched the dedicated heritage website and published the free bimonthly heritage newsletter “活化@Heritage”. All these publicity programmes received encouraging public response.

Major Activities in 2008

In 2008, apart from implementing those new heritage conservation initiatives as mentioned above, we have performed the activities as listed in paragraphs below for the conservation of our valuable heritage.

➤ *Declaration of Monuments*

As at 31 December 2008, there were 86 declared monuments, including 68 historic buildings and 18 rock carvings, forts and archaeological sites. In 2008, Maryknoll Convent School at Waterloo Road, Kowloon Tong; King Yin Lei at 45 Stubbs Road, Mid-Levels and Green Island lighthouse compound were declared as monument.

➤ *Assessment of 1,444 Historic Buildings*

An Expert Panel appointed by the AAB was conducting an in-depth assessment of 1,444 historic buildings built before 1950, which were selected from the 8,800 surveyed buildings by the AMO in 2002-2004. The assessment results will provide the basis for reviewing the heritage value and grading status of the buildings. As the results would generate considerable interest in the community, AAB will consult the public, District Councils and stakeholders on the findings in 2009.

➤ *Restoration and Maintenance Works of Historic Buildings*

In 2008, restoration and repair works were carried out for a number of historic buildings, including Hau Ku Shek Ancestral Hall in Ho Sheung Heung, Fan Sin Temple in Wun Yiu, Yeung Hau Temple in Ha Tsuen, Tai Fu Tai in San Tin and the Helena May in Central. A conservation study and cartographic survey for Chik Kwai Study Hall in Pat Heung was also conducted in the year to provide the necessary information for preparation of the restoration of the Study Hall.

➤ *Archeological Excavation, Investigations and Monitoring*

In April 2008, the remains of Longjin Bridge adjoining the main gate of the old Kowloon Walled City were identified through the Archaeological Impact Assessment of the Kai Tak Development. Further investigation was conducted since November 2008 for completion in early 2009 and by then the mode of preservation would be considered. In November 2008, a large-scale rescue excavation was launched at So Kwun Wat, Tuen Mun to facilitate the construction of two schools. It was expected that the excavation would be completed in mid 2009. Experts from the Institute of Archaeology, Chinese Academy of Social Sciences were invited to recover the archaeological remains jointly with the AMO.

➤ *Major Heritage Exhibitions and Education Programmes Organised*

The AMO organised the “Building Together: 160 Years of Hong Kong – French Common Heritage and Perspectives” exhibition at the Heritage Discovery Centre in collaboration with the Chinese University of Hong Kong and the Consulate General of France in Hong Kong and Macau from September 2008 to February 2009. The exhibition was well received by the public.

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

We 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 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 achieve the target of reducing energy consumption in Government offices and buildings , 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 in summer season;• 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 14/F, 17/F, 18/F and 21/F. The electricity consumption of MB in 2008 is 6 517 100 kWh, which represents a reduction of 1.1% as compared with that in 2007.

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 2008, 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. 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 2008 has a reduction of 70 430 kWh i.e. 1.1% as compared with that in 2007. The contribution of DEVB in the reduction would be estimated as 23 476 kWh. In 2008, we helped reduce the emission of the major air pollutants, viz., 44.8 kg of Sulphur Dioxide (SO₂), 27.2 kg of Nitrogen Oxide and Nitrogen Dioxide (NO_x) and 1.4 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.

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