Sustainability Report | 2008

Architectural Services Department

ArchSD Sustainability Report 2008 - Table of Contents

About this report

This is the fifth annual sustainability report for the Architectural Services Department of the Government of the Hong Kong Special Administrative Region (HKSAR). Evolving from an Environmental Report in 1998, we have now been reporting our environmental performance for 10 years. Our goal is to continue this tradition of providing transparent and credible information for our stakeholders.

To demonstrate how we embrace environmental, social and economic aspects into our core business activity, this report is structured in order to facilitate readers' understanding of our sustainable management at each level of our operation cycle and corresponding performances.

Reporting Scope and Boundary

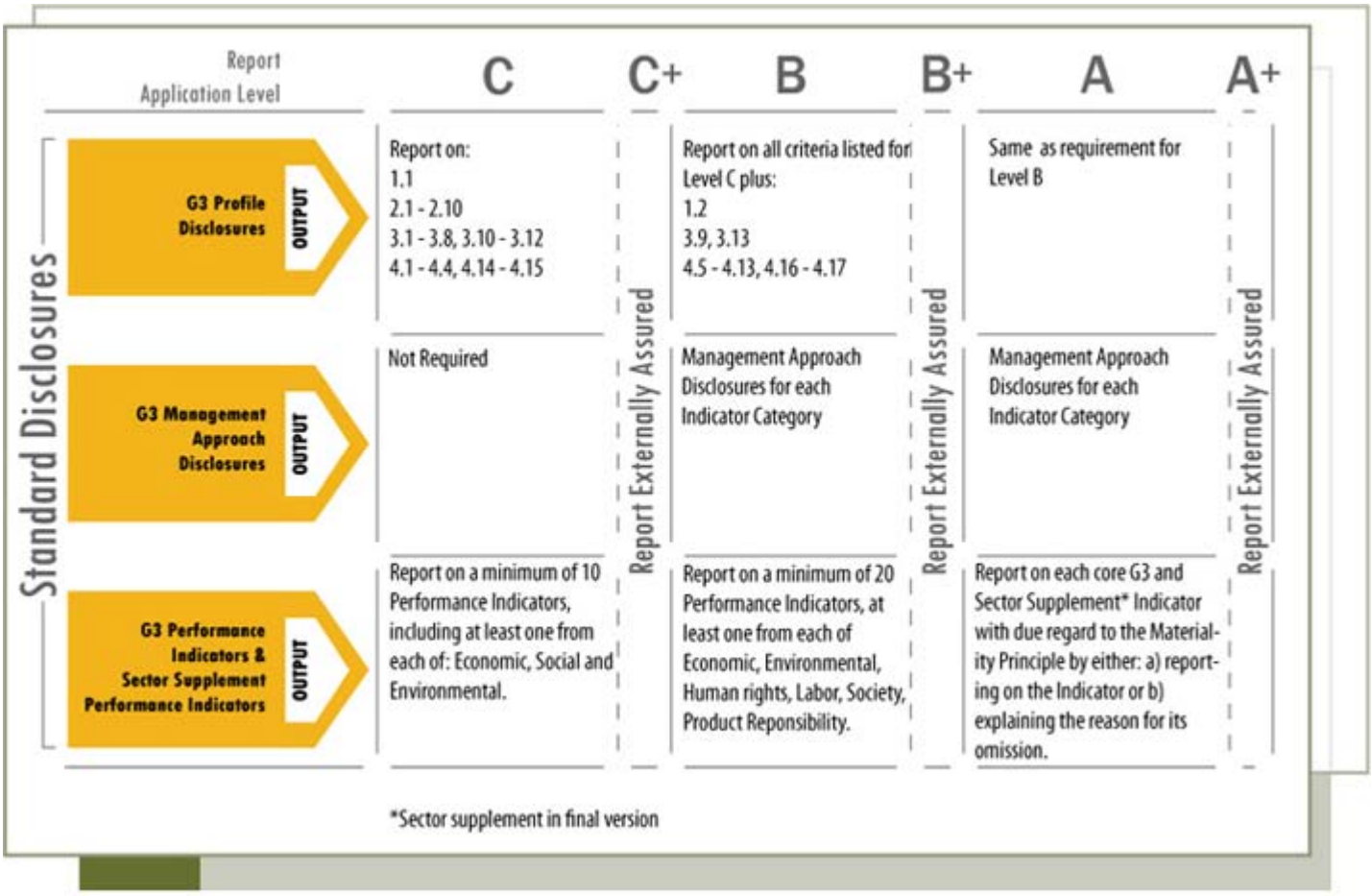
This Sustainability Report 2008 covers the status and performances of our sustainability management from 1 January 2007 to 31 December 2007. There was no significant change during the reporting period regarding the size, structure and ownership of the department.

Data are presented as absolute figures and, for priority issues, normalised into comparable terms where appropriate and practicable. Quantitative data are presented for all our six branches, excluding data from contractors and suppliers, unless otherwise stated. Qualitative information covers all our direct activities unless otherwise stated. Financial data are recorded according to financial year ended 31 March 2008. All monetary values are in Hong Kong Dollars.

Reporting Principles

We prepared this report based on the HKSAR Government's Circular Memorandum No. 1/2007 "Controlling Officer's Environmental Report", the Global Reporting Initiative (GRI) G3 Guidelines and its Sector Supplement for Public Agency.

The content of the report fulfils the requirements of "A+" level defined in the application level system of GRI G3 Guidelines. Corresponding GRI indicators are denoted in each section, and a GRI Content Index is provided for easier reference.



Working together among our Integrated Management Unit, representatives from various branches, our external consultant, and under the direction of our Deputy Director, the report content is devised and prioritised in meeting the G3 Guidelines and our key stakeholders' expectations. This report is also subjected to an independent assurance review.

Note to Reader:

This Report is published on the internet and CD-rom, in a web-based interactive html version and text version in three languages (English, Traditional Chinese and Simplified Chinese) respectively.

The content accessibility is enhanced by the following features:

- On-screen font size setting provides more comfortable reading options for various users.
- Text only version allows readers using assistive tools for web browsing.

Director's Introduction

Dear Stakeholders,

Welcome to the Sustainability Report 2008 (SR 2008) of Architectural Services Department of the Government of the Hong Kong Special Administrative Region. This year, we present our sustainable performance and stakeholder relationships from a different point of view, that of the life cycle of our operations. This report also follows on from our last year's sustainability report which achieved the A+ level of the Global Reporting Initiatives' (GRI) G3 guidelines.

It is our mission to provide services in a professional and environmentally friendly manner. We highlight our roles as works agent and technical advisor on recent Government led mega-projects such as the Tamar Development Project, Shenzhen Western Corridor boundary crossing facilities and other sub-vented projects. We endeavour to design and construct environmentally friendly facilities which are easily accessible for people with different needs. Our focus areas included the expansion of green roof practices and energy efficient installations in new and existing public buildings, and the adoption of universal accessibility measures for external areas.

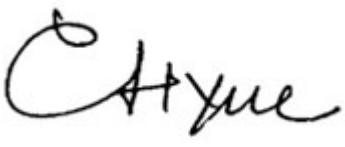
Climate change is another important item that we need to consider. We continue to strive for cleaner air with the ongoing implementation of green building features in our projects and give due consideration to energy and water conservation, waste reduction, good air quality etc. In addition, we will set an example by carrying out a carbon audit on the Tamar Development Project.

As well as developing new and sustainable buildings, we are mindful of our existing heritage. When circumstances arise and the approach is appropriate, we restore old buildings and give them a new lease of life for the benefit of the community. The Kom Tong Hall has been one such example following its conversion into a museum commemorating Dr. Sun Yat-sen. Another is an existing grade III building converted into the Administration Building at Tuen Mun Children and Juvenile Home which is reported on further in Case Study 3.

We are committed to providing a safe working environment for people working on our behalf. The award of the OHSAS 18001:2007 certification in 2007 marks a significant milestone in strengthening our integrated management system. Internally, we continued to consolidate our sustainability strategy by setting new performance objectives and targets that facilitate the Department in moving forward.

Our sustainability performance over the past five years shows that our ongoing efforts have been successful in enhancing our services and internal operations. We will continue to build on our past experience, and maintain our position as the leading practice for procuring and maintaining community facilities.

We welcome your views on our performance and this report. Please let us know your views through the feedback form.



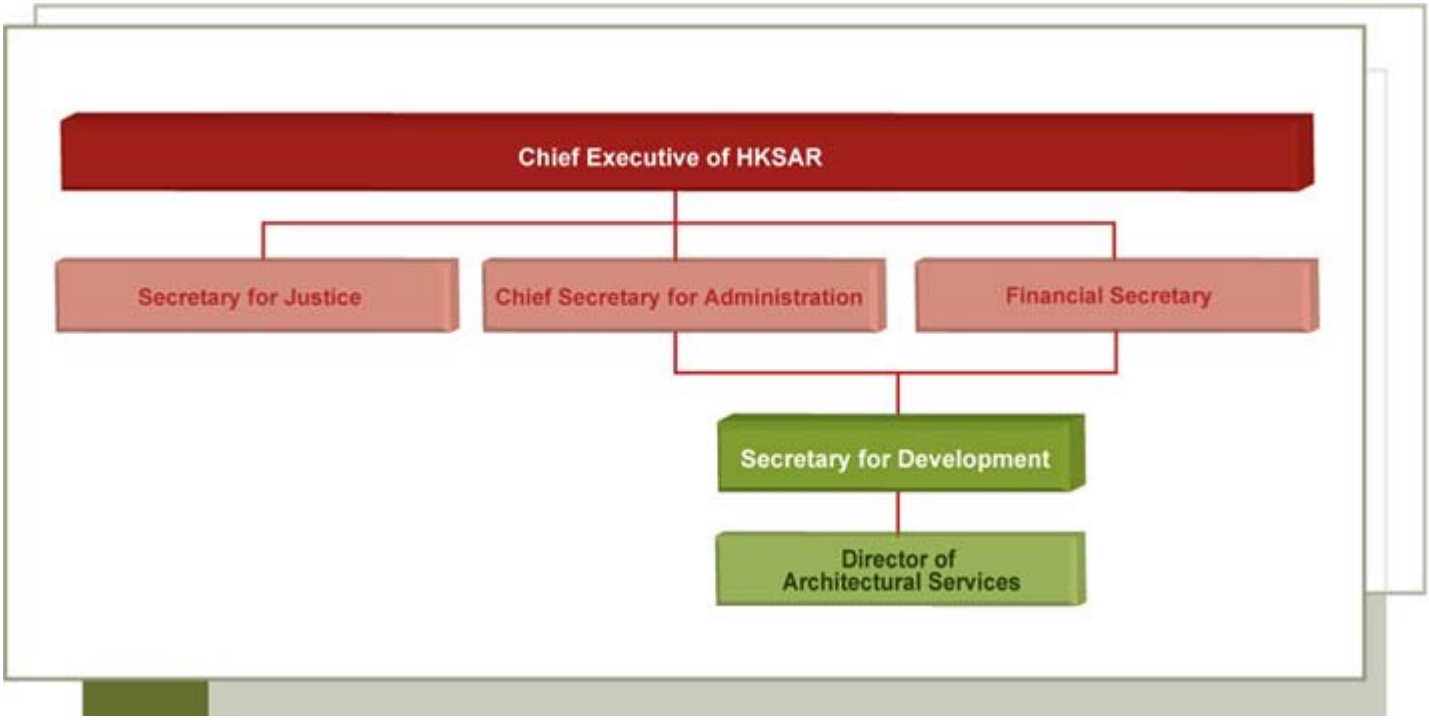
Yue Chi Hang, JP
Director of Architectural Services

About Us

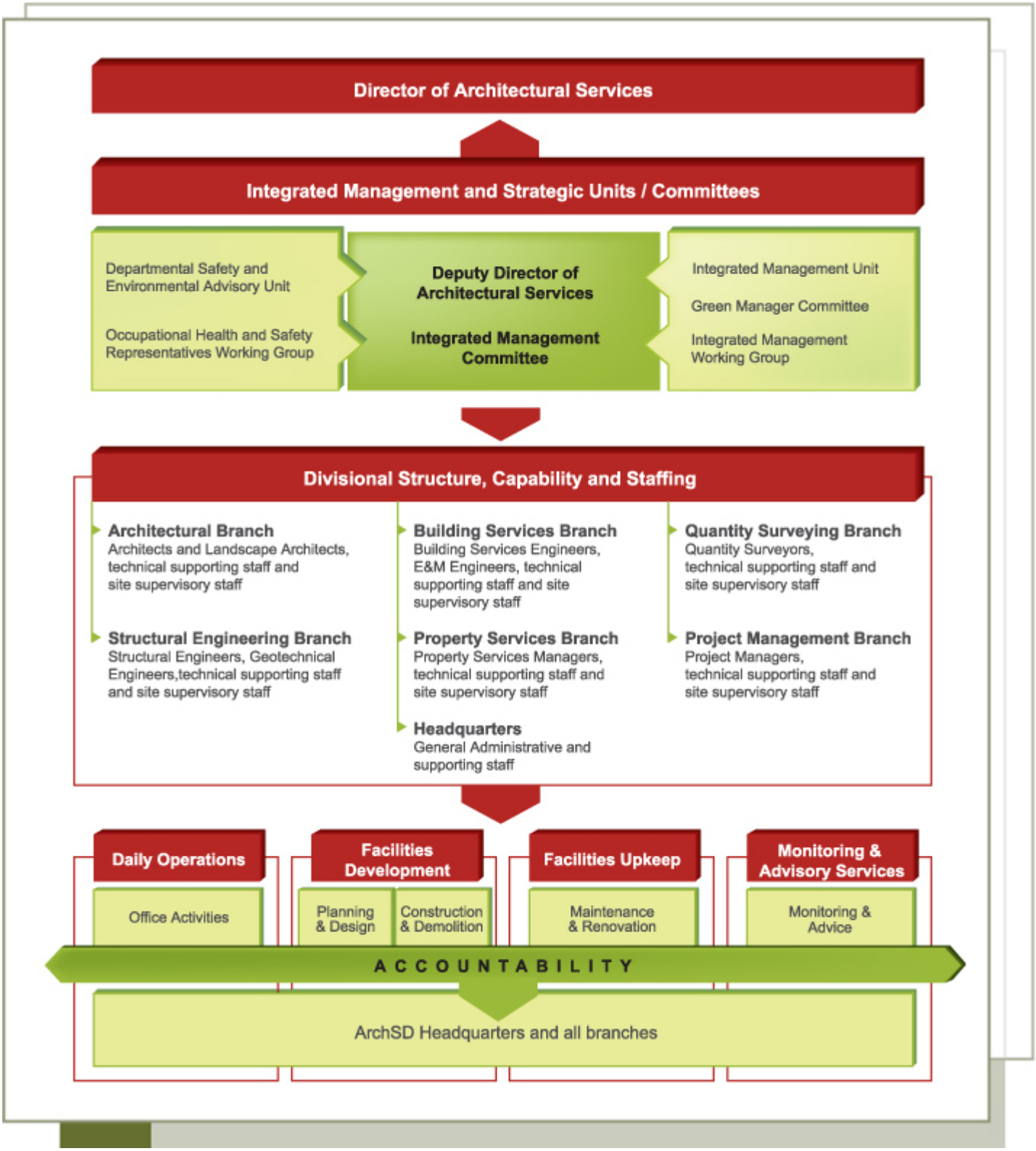
The Department

We are the works agent for the HKSAR Government facilities development.

ArchSD role in the HKSAR Government



Organisational Structure



Key Facts about ArchSD

Founded on: 11 April 1986

Staff Establishment: 1,766 (as of 31 March 2008)

Headquarters: Queensway Government Offices, 66 Queensway, Hong Kong

Other Office Locations: APB Centre, Hunghom, Kowloon
17/F-19/F, 410 Kwun Tong Road, Kwun Tong, Kowloon

Total Office Spaces: Approximately 23,000 m^2 (as of 31 December 2007)

Scale of Services: (as of 31 March 2008)

- Number of Subvented / Entrusted projects reviewed: 869 (as of 31 December 2007)
- Number of Facilities Development Projects completed: 54
- Building Floor Area of Properties maintained: 27,984,000 m^2
- Expenditure on Facilities Development Projects: HK$ 3,996 million
- Expenditure on Facilities Upkeep works: HK$ 3,362 million
- Value of the Subvented / Entrusted projects reviewed: HK$ 43.7 billion (as of 31 December 2007)
- Value of New works under development: HK$ 54 billion

Our Services

The three main areas of our services are:

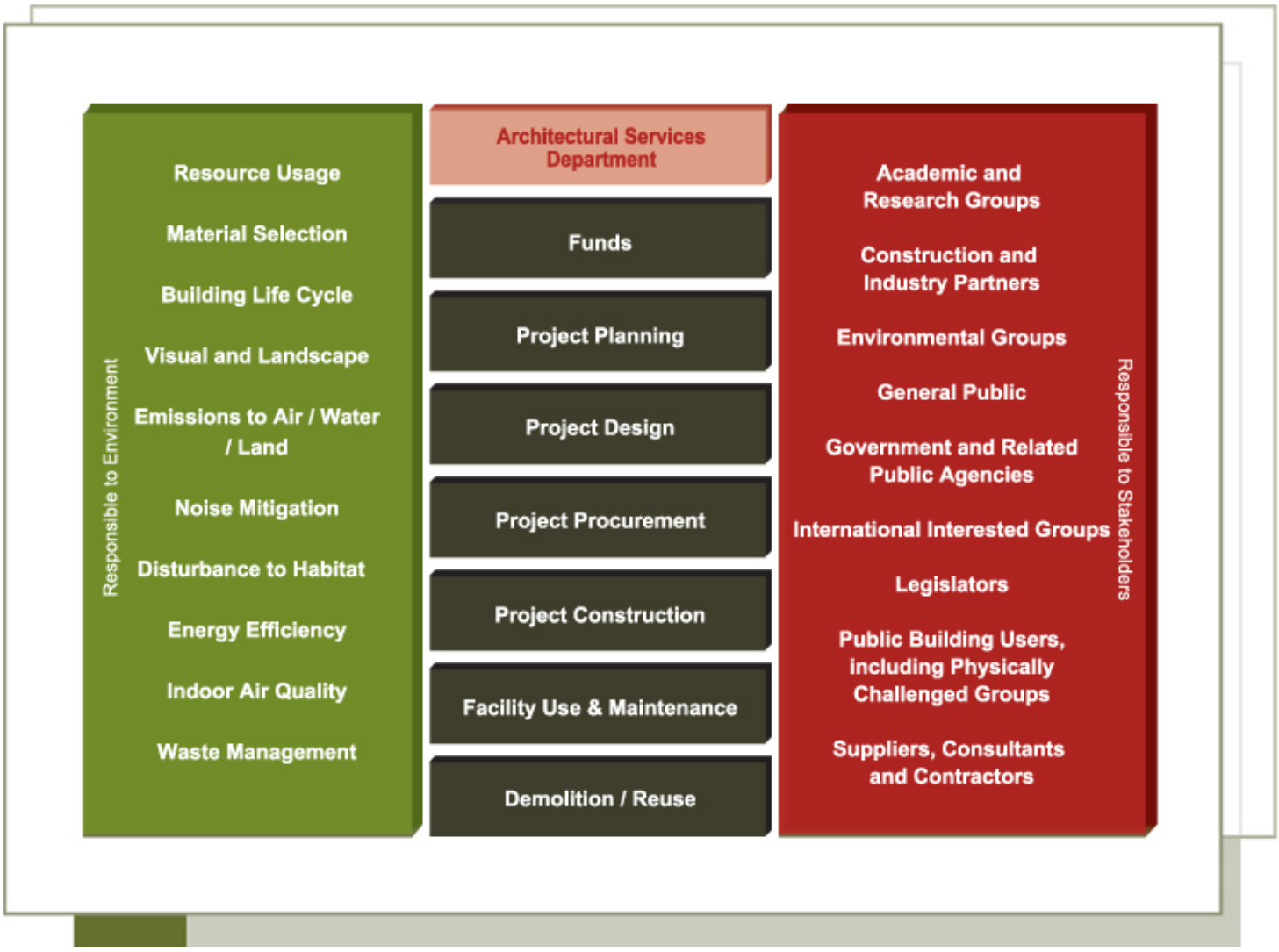
- **Monitoring and advisory services** - to provide effective professional and technical advice to the Government and quasi-government organisations and to oversee subvented, joint-venture and entrusted projects;
- **Facilities development** - to provide efficient, cost-effective and timely architectural and associated professional and project management services for the design and construction of buildings and related facilities; and
- **Facilities upkeep** - to provide efficient and cost-effective professional and project management services for the maintenance and refurbishment of buildings and facilities.

About Us

Strategy and Management

Our Integrated Management System handles the impact from our services on the environment and on our stakeholders. This has been developed primarily under the requirements, policies and principles engaged by us. The association between the environment, stakeholders and our operations is illustrated below.

Strategy Management



Our Commitments

Our Vision

To maintain our position as the leading practice for procuring and maintaining community facilities

Our Mission

To provide services in a professional manner

Our Core Values

Cost and time efficient project delivery
High professional quality standards
Responsible practices and sound environmental, health and safety performance

Quality, Environmental, Health & Safety Policy

To plan, design, procure, maintain property and advise professionally

Architectural Services Department, when offering our Clients a comprehensive range of multi-disciplinary professional and technical services for public buildings and facilities, is committed to:

- Fulfil the agreed requirements of our Clients to the highest professional standards.
- Deliver our services in an environmentally responsible manner by implementing conservation of energy, preventing pollution and reducing the consumption of natural resources.
- Manage our health and safety risks to ensure a safe and healthy environment for our staff, our contractors and other people who may be affected by our work.
- Comply with all relevant legislations and other requirements, and wherever practicable, to achieve standards beyond those that are legally required.
- Provide adequate resources and training to all staff and provide appropriate training to persons working for or on behalf of ArchSD, to continually improve our quality, environmental, health and safety performance and effectiveness.
- Promote ArchSD's principles of quality, environmental sustainability, health and safety to our partners in work, the construction industry and the general public.

Governance

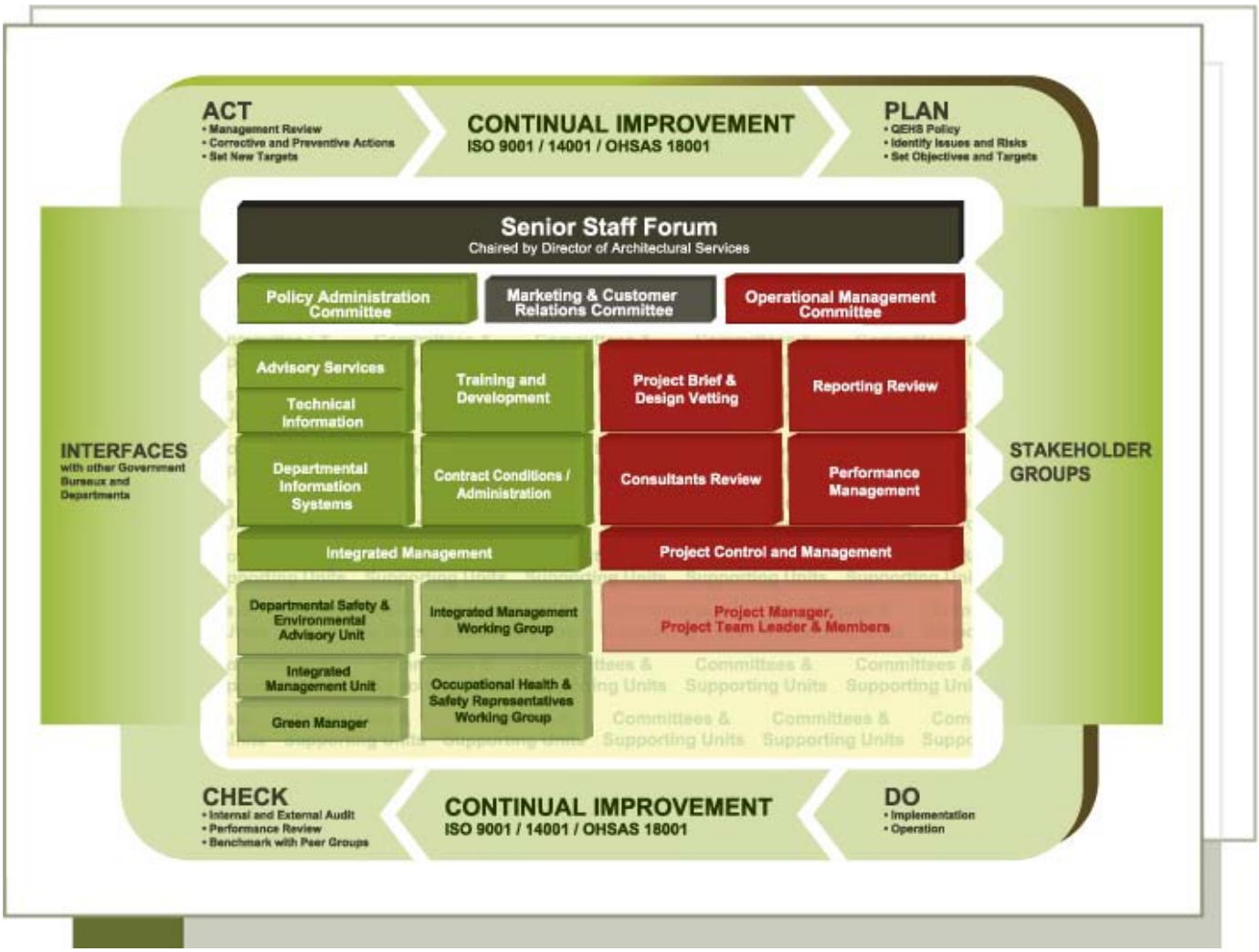
As a government department, our operations tally with the policies of the HKSAR Government and the initiatives of other government departments in working towards the sustainable development of our society. By engaging our core values into our public works, our Integrated Management System aligns our strategies and performance management to emerging sustainability challenges while conforming with the international standards (ISO 9001, ISO 14001 and OHSAS 18001).

With the support of the Civil Service Bureau and Development Bureau, social issues such as labour and human rights are managed through our human resources management and ethical supply chain management in alignment with the HKSAR Government policy framework.

The Integrated Management System is administered by the Integrated Management Committee under the direction of the Senior Staff Forum and Policy Administration Committee. Representatives from various branches and functions are members of both the Forum and Committees to ensure a uniform and systematic approach is taken to effectively handle the sustainability impacts on our stakeholders and the environment.

Performance pledge of our services is assessed annually and is available on our website for stakeholders interest. Through years of annual sustainability reporting experience, we identify our key stakeholders' and prioritise our report content with the consideration of their valuable feedback and comments.

Governance Structure in 2007



Focus Area

In 2007, we continued to manage in a sustainable way our operations and services. Our concerns included the enhancement in building sustainability, a healthy and safe working environment for our staff and people working on our behalf, and involvement in public and infrastructure works.

The following sections will discuss some of these major achievements.

- Sustainable Buildings
- Safer Practices
- Mega-Projects

Focus Area

Sustainable Buildings

Sustainable building design ensures an accessible, secure, healthy and productive environment, and mitigates impacts on the environment and the community. We pursue the delivery of best quality services for our clients, and highlights of our works in 2007 include: green roofing, universal accessibility and building energy efficiency.

Green Roofing

A Green roof is a vegetated space integrated on top of a man-made structure. It is a means to improve urban greenery, air quality and to reduce heat island effect.

Green roof project at Diamond Hill Crematorium

Green roof project at Tat Tung Road Garden

A Green Roof Study focusing on the technical aspects of rooftop landscaping was completed in 2007. The Study provided an overview of the latest concepts and technology on green roofs and design & technical guidelines for local applications. The Study is available for download at our website.

In March 2007, a public presentation of the Study was made to joint professional institutes including Hong Kong Institute of Architects (HKIA), Hong Kong Institution of Engineers (HKIE), Hong Kong Institute of Landscape Architects (HKILA), Hong Kong Institute of Planners (HKIP), Professional Green Building Council (PGBC) etc. It attracted a lot of attention and was well received by the public.

As a follow up to the study on green roofs, we will further look into the application of extensive green roofs under the directive of the Greening Committee, Development Bureau. To demonstrate government's commitment, we incorporate rooftop greening in our new buildings, wherever practicable, under the capital works programme. This includes schools, hospitals, community centres, toilet blocks and government quarters. In 2007, we achieved our target of providing usable landscaped roof area in over 90% in the design of our new buildings. Retrofit green roofs in existing government buildings and planting trials for extensive green roof plants commenced in 2007. More details are discussed in Facility Use and Maintenance.

To further promote public awareness on the greening of buildings, we participated in the Hong Kong Flower Show 2007. A vertical wall was built across the exhibition site, symbolizing high rise buildings in our urban environment. Plant species of different texture, colours and shapes made up a vertical green mural covering a "high rise" structure and demonstrated the many possibilities of vertical and roof greening. Our exhibition won the Best Design Award.

Vertical greening showcase at the Hong Kong Flower Show 2007

Our team and showcases at the Hong Kong Flower Show 2007

Universal Accessibility

We adopt a holistic approach in meeting the needs of society, including those with different abilities, the young and the elderly, to help bring harmony into the community. We also hope to raise the awareness of our stakeholders and to facilitate designers to produce more holistic and inclusive designs in order to improve accessibility in the built environment.

Universal Accessibility for External Areas, Open Spaces and Green Spaces published in 2007

Facilities that cater to users with various needs

Following the first publication of "Universal Accessibility – Best Practices and Guidelines" in 2004, the second research study on this subject, "Universal Accessibility for External Areas, Open Spaces and Green Spaces" was completed in 2007. It is an in-depth study on the ways in which access opportunities may be enhanced in the external environment and indicates our ongoing commitment to raise awareness and promote best practices on accessibility.

On-site data collection and testing for the research study

Presentation on Universal Accessibility at international conference in Kyoto, Japan in 2006

The best practices described in the two research studies are incorporated as far as practicable into the design of new government buildings.

For existing government buildings, we would work closely together with the management departments to include barrier free facilities as far as practicable when carrying out refurbishment, alteration and improvement works. More information is shown in Facility Use and Maintenance.

Building Energy Efficiency

Efficient energy performance of a building is no longer a voluntary practice, but is a compulsory standard for new public buildings in Hong Kong. We explore various technologies and management tools to develop a systematic approach in incorporating energy efficiency considerations at the initial stage of a project life cycle.

A comprehensive review on the General Specification for Building (GS 2007) and a series of General Specification for building services installations in Government Buildings of the HKSAR became effective on 1 September 2007. To raise the overall building environmental performance, more updated environmentally-friendly specifications, specifically for energy efficient installations, are the essential requirements for buildings. Feasibility and potential cost implications for using renewable energy in a new project is also evaluated upon project planning.

Since the launch of Building Energy Codes (BEC) in 1998, our building projects have been registered with BEC which stipulate the minimum energy performance standards on five types of installations. These installations cover lighting, air conditioning, electrical and lift & escalator installations. The BEC were reviewed and published in 2007. A series of in-house seminars were conducted by facilitators from the Electrical and Mechanical Services Department in order to explain the new requirements. All our designs which commenced after the release date follow the new codes and are registered in the Hong Kong Energy Efficiency Registration Scheme for Buildings (HKEERSB). More information is discussed in Facility Use and Maintenance.

We supported a study of Electrical and Mechanical Services Department on the Life Cycle Energy Analysis of Building Construction. The Study aimed at developing an assessment tool and subsequent databases to facilitate building design professionals to evaluate the life cycle performance of building developments in Hong Kong, in respects of their environmental and financial impacts. Apart from providing professional comments on the assessment tool, four buildings were selected to appraise their performance using this new assessment tool. The results could be used for the preliminary benchmarking of the life cycle energy performance of buildings.

Focus Area

Safer Practices

Occupational Health and Safety Management System

Providing a safe and healthy working environment for our staff and people working on our behalf of us is one of our top priorities. In 2005, we took a step forward by adopting a systematic approach in managing our risks on health and safety at work.

Our Occupational Health and Safety Management System (OHSMS) was established in accordance with the international standard OHSAS 18001 (Occupational Health and Safety Assessment Series, 2007 version). The implementation of the OHSMS helps improve the efficiency of internal operations, reduces risks and potential accidents, enhances the overall health and safety performance of staff and raises our awareness of contingency planning in times of emergencies. It also showcases our best OHS practices to stakeholders in the construction industry.

Upon the development stage of the OHSMS, the OHS Representatives Working Group was established. This comprised officers of all grades and ranks. The Working Group facilitated an efficient communication and consultation mechanism throughout the system implementation.

In October 2007, we successfully registered the Certification of the OHSAS 18001:2007 and are the first HKSAR government department to have the registration under the new 2007 version which was officially launched in July 2007.

ArchSD received OHSAS 18001:2007 Certificate in October 2007

Organisation Structure for OHSMS

Workshop on safety awareness provided for staff

A celebration tea party for OHSAS 18001 certification was held on 5 December 2007

The certification also laid the foundation of the integrated management system in our department, which comprises ISO 9001:2000, ISO 14001:2004 and OHSAS 18001:2007. We continue to strive for "Integrated Management" with the mutual cooperation of management, staff, our partners and our stakeholders.

ArchSD Improvement Plan

Apart from a systematic approach for risk management in public works projects, an ArchSD Improvement Plan was initiated to review our site safety supervision system and improve the overall site safety performance. The Plan is summarised in the following table:

	Existing Control Measures	Enhanced Control Measures
General	Safety training courses (legal requirements)	Arrange specific safety training courses (including consultant)
	Safety & environmental info on intranet	Enhance info on intranet and homepage for public access, and update info regularly
Project Team including consultant	Day-to-day supervision by project team	Effective address of problematic area; Review contractor's safety performance (audit / review); Identify high risk activities
	Contractor's performance report based on 3-grade system	Adopt 5-grade system; Review scorecard findings with contractors
DSEAU	Independent site checking by Departmental Safety & Environmental Advisory Unit (DSEAU)	Enhanced 'Plan-Do-Check-Act' mechanism to assess effectiveness of follow-up action by contractor / project staff

To assess the effectiveness and identify any deficiencies in the Plan, a survey was conducted in 2007. A two-page questionnaire was devised to examine three areas: familiarization, application and effectiveness, and feedback was invited from both in-house and consultants' staff.

The survey findings revealed that over 85% of our staff have at least an average understanding on the Improvement Plan after it had been implemented for a year. More effort is envisaged to continually promote the Improvement Plan to project officers and site staff in addition to some other identified enhancement measures that became apparent during the survey.

We will continue to solicit support from all staff and partners working on our behalf not only to adopt the Improvement Plan, but also to actively participate in improving those areas where they have influence.

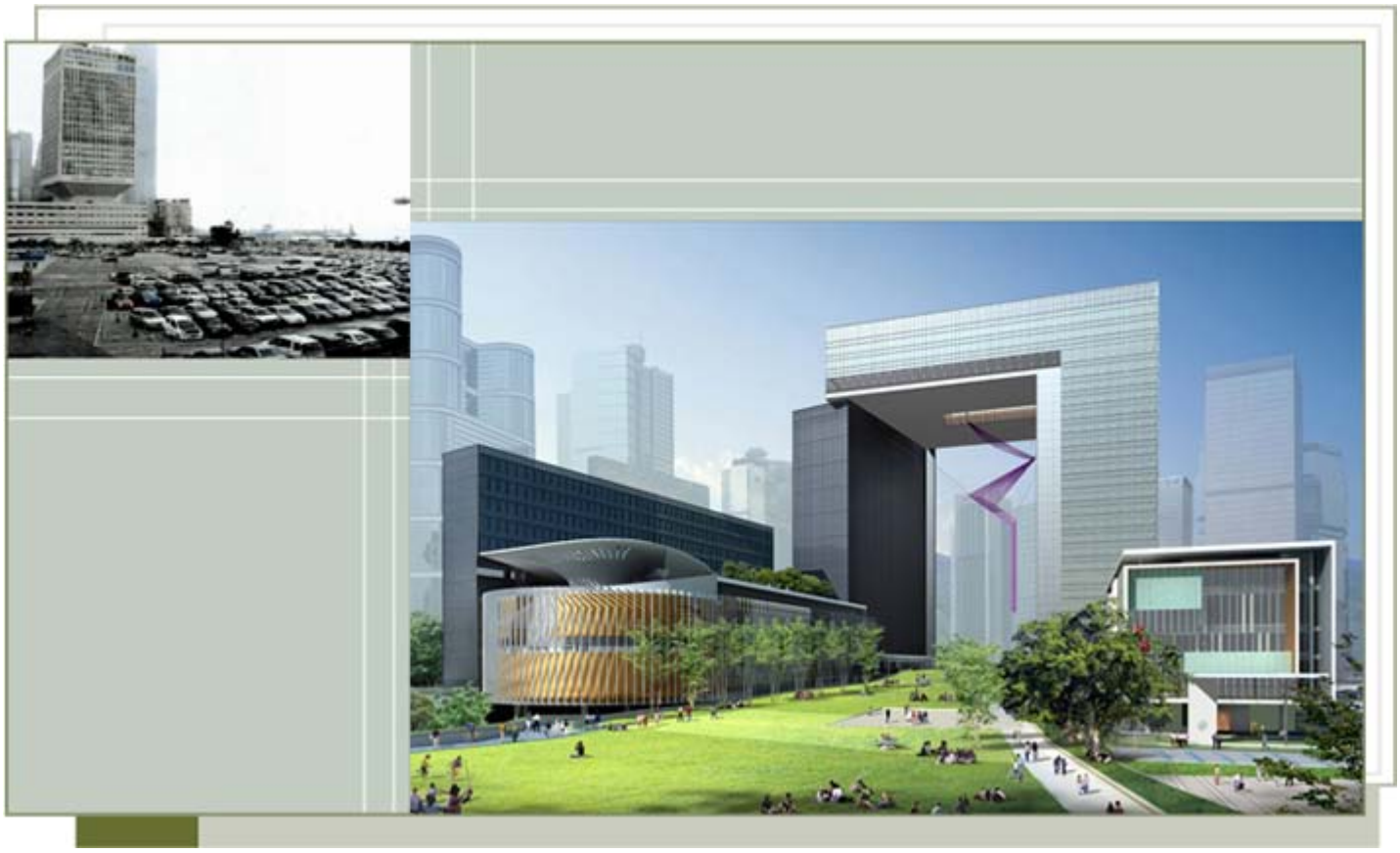
Focus Area

Mega-Projects

Continuous Infrastructure Development is one of the key topics delivered in the 2005-06 Policy Address to maintain Hong Kong's vitality as Asia's World City. We undertook some of the major building projects as described below:

Tamar Development Project

In 2002, the HKSAR Government commenced the planning for the development of the Tamar site as Hong Kong's prime civic centre. The project was shelved later in view of the impact of the SARS outbreak. In October 2005, following the improvement in the economy and also to public finances, the Government announced a re-launch of the Tamar Development Project.



Tamar site

The tender invitation period for the design-and-build contract of the Tamar Development Project ended in February 2007 and this was followed by a two-month exhibition of the design proposals submitted by the four tenderers. The contract was later awarded to the Gammon-Hip Hing Joint Venture and works commenced in early 2008 for completion in 2011.

Overview of proposed design

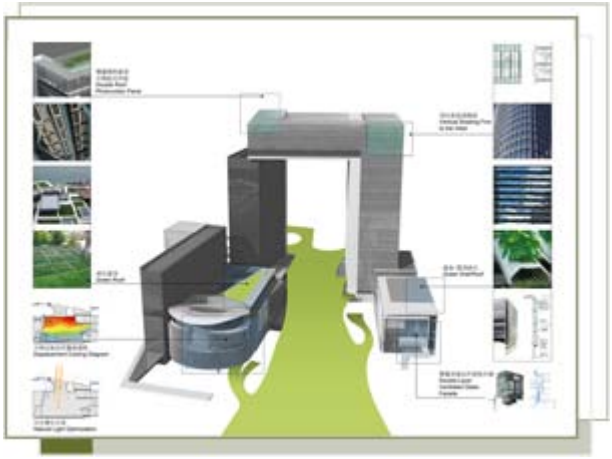
The Tamar Development Project consists of the Central Government Complex, the Legislative Council Complex, an open space, two covered pedestrian footbridges and other ancillary facilities.

The open space, with an area of some two hectares is designed in the form of a 'green carpet', and provides venues for different types of outdoor activities for public enjoyment.

The Tamar Development Project also contains a large number of green features, such as solar electricity panels, an automatic refuse collection system, sea-water cooled chiller plants and green roofs.

It is estimated that a workforce of more than 3,000 will be engaged at the peak of the project's construction period and this will enhance employment in the industry.

View of the 'green carpet'



Environmental features of the Tamar Development Project

Our role is to provide ongoing professional and technical support in implementing the Tamar Development Project and represent the Government as the Employer in the execution of the Design and Build Contract. We are also responsible for ensuring the timely completion of the Contract and, as the Vote Controller, to monitor expenditure within the approved project estimate.

Shenzhen Western Corridor

The Hong Kong-Shenzhen Western Corridor is the fourth vehicular boundary crossing between Hong Kong and Mainland China. It starts from the new reclamation area in Shenzhen, runs along Shenzhen Bay and connects to the north western New Territories of Hong Kong via the Shenzhen Bay Bridge.

The Shenzhen Bay Port is the first boundary-crossing point in China implementing the 'co-location'[1] arrangement, and is the most advanced and intelligent control point of its kind in the world. The passenger terminal building and its auxiliary facilities occupy an area of about 1.18 million square metres with a total floor area of about 153,000 square metres. The passenger terminal is divided into individual cargo clearance area and passenger clearance area for Shenzhen and Hong Kong.

The Shenzhen Bay Port project is special as it implements a new concept of providing a one-stop mode of customs and immigration clearance for visitors. Moreover, the collaboration between the consultants from Shenzhen and Hong Kong on the design and construction management of the whole project, particularly on the development of the main passenger terminal building, set a precedent in the architectural history of Shenzhen and Hong Kong.

Our team at the opening ceremony of Shenzhen Bay Port

The design and construction of Shenzhen-Hong Kong port areas was managed by Shenzhen, but the inspection departments of both parties will be required to work under their corresponding legal systems within the same building or location. The port area should also fulfil the construction and acceptance standards of both parties, and in order to fulfil these requirements, a consultant company, which was familiar with Hong Kong regulations, was engaged to actively participate in the project design and construction. Through close co-ordination between the designers of both parties, the design concept fulfilled all the requirements and acceptance standards and also solved the issues on different requirements such as:

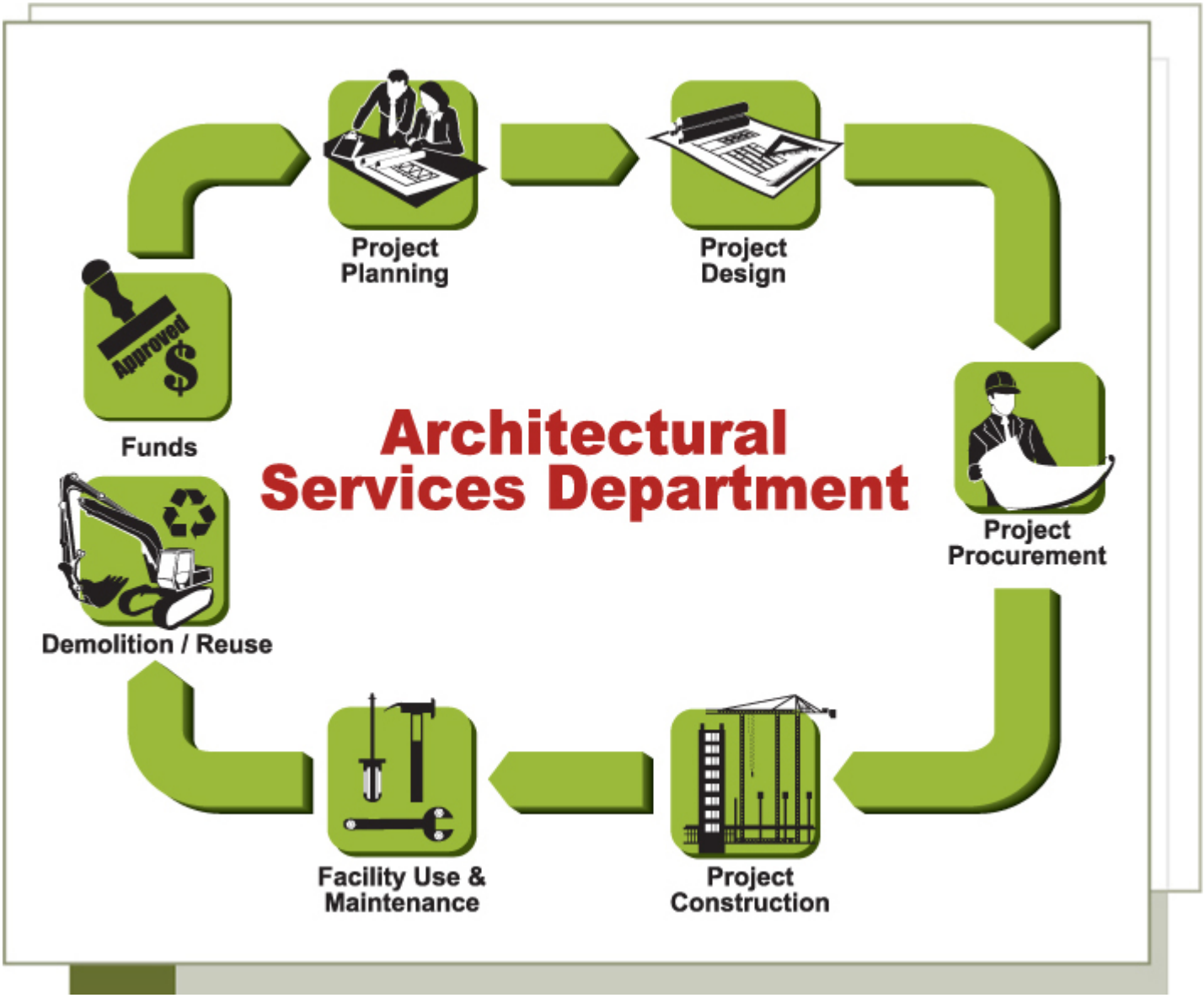
- Construction standards and materials selection
- Collaboration approach between professionals
- Procedures on design and approvals
- Design codes (e.g. earthquake resistance design, wind load value, materials and their physical performance, acceptance standards, drawing standards)

After several consultation exercises between both parties, a special arrangement was established to satisfy both Hong Kong's and Shenzhen's requirements which permitted the project to be completed on schedule.

[1]Hong Kong's customs and immigration facilities are co-located with those of the Mainland

Sustainable Operations

With the integration of sustainable development concepts into our operation cycle, environmental, social and economic issues are identified and managed at every stage, from project planning to demolition or reuse.



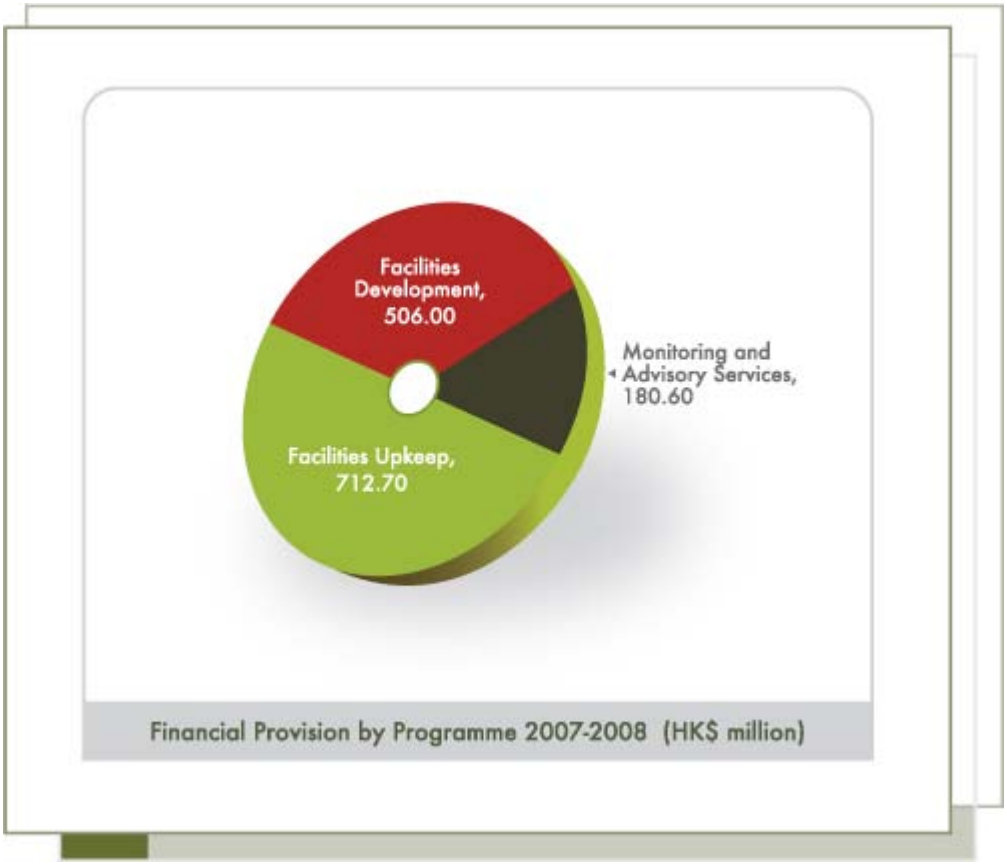
Sustainable Operations

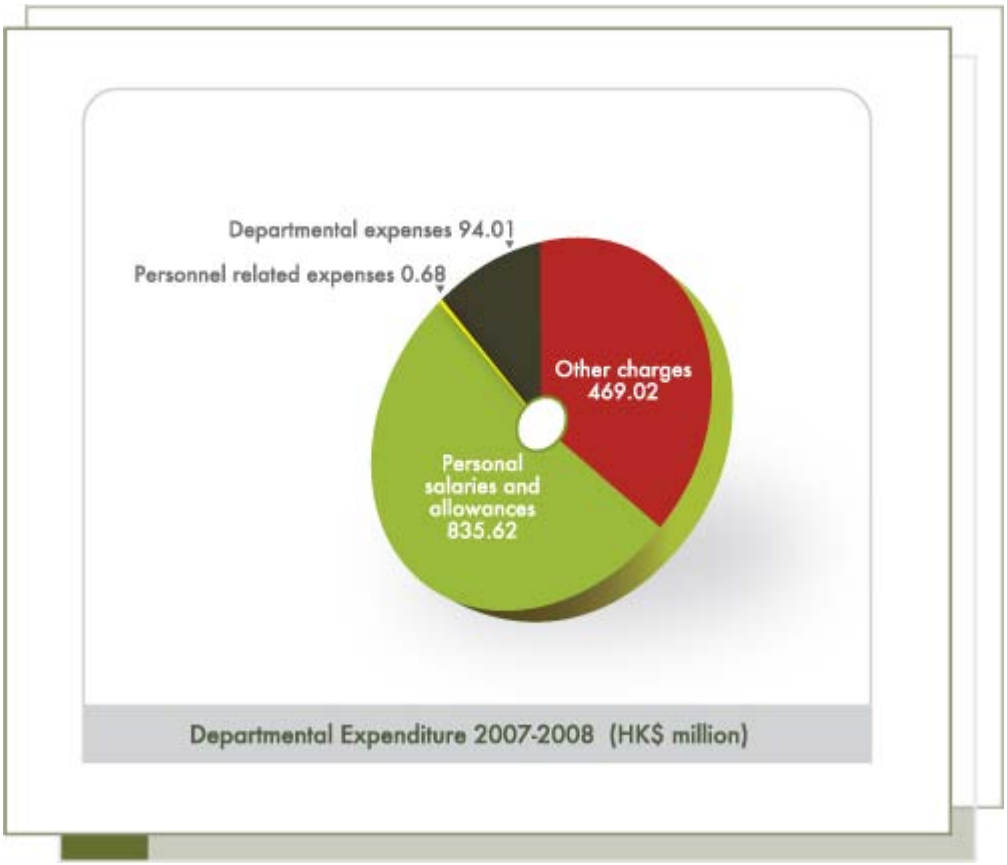
Departmental Funds

Departmental funds originate from public funds and are approved, monitored and reviewed by the Legislative Council. We strive to maximise the value of our buildings and provide a safe and clean environment for the public.

During 2007-08, the department began 284 new works projects. With the increase in provision for strengthening project management services as well as an increase in operating expenses due to inflation, our expenditure increased 2.8% to HK$1,399.3 million during the fiscal year 2007-2008 when compared with the previous year.

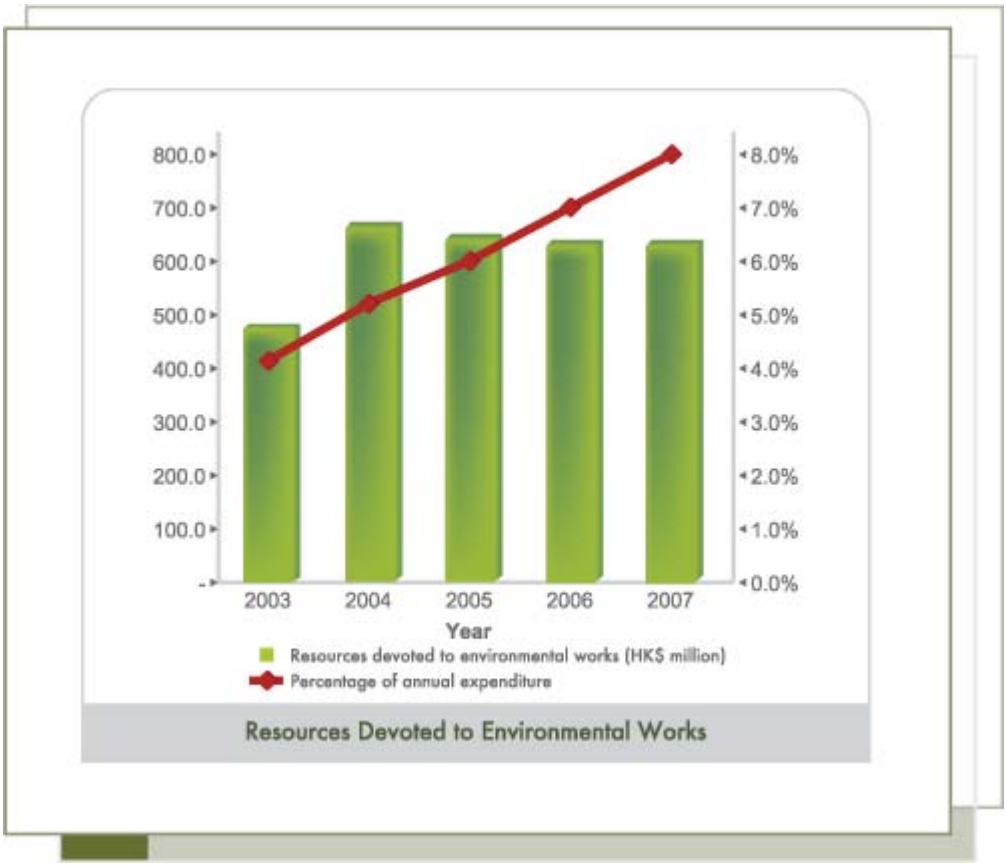
Due to the nature of our projects, no direct economic value was generated that could be quantified. The overall expenditure and financial provisions within our department are outlined in the summary breakdown below. This information is drawn from the Controlling Officer Report of the 2007-08 Estimates of the Government of the HKSAR. Further information is available in www.budget.gov.hk.





Resources Devoted to Environmental Works

In order to implement our green initiatives, we allocated a total of $639.7 million to environmental works in 2007. This included the construction of projects that helps migrate pollution like sewage treatment plants, parks and open spaces etc and improvement schemes for public toilets, installation of energy efficient systems and equipment etc. In addition, in 2007-08, about $7 million was budgeted for provisions of universal accessibility in existing government buildings.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8.0%
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6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
2003
2004
2005
2006
2007
Year
Resources devoted to environmental works (HK$ million)
Percentage of annual expenditure
Resources Devoted to Environmental Works

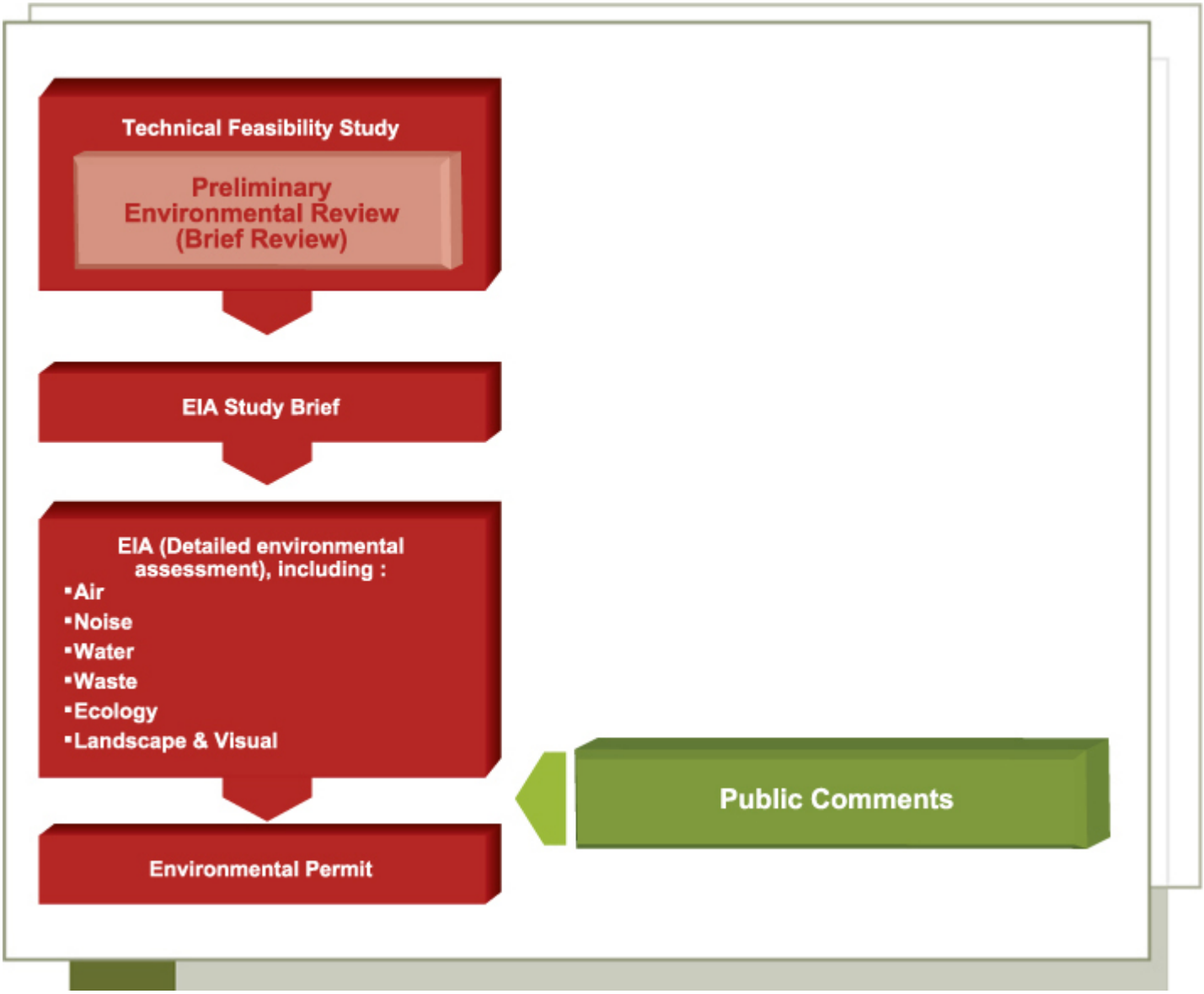
Sustainable Operations

Project Planning

Sustainable project planning means a balanced consideration of environmental, social and economic issues.

Environmental Review

In the technical feasibility stage of a new project, we are required to carry out a Preliminary Environmental Review for projects with potential environmental impacts. For projects classified as "designated projects" under the Environmental Impact Assessment Ordinance (EIAO), an EIA is required.



In 2007, all our projects were situated in developed areas and had no significant impact on their sites' biodiversity.

A project profile for the Phased Reprovisioning of Cape Collinson Crematorium and the Development of a Poultry Slaughtering and Processing Plant in Sheung Shui were submitted for application for EIA Study Brief. An Environmental Permit was given to the project: Proposed Joint User Complex and Wholesale Fish Market at Tuen Mun.

Greening and Tree Preservation

In full support of Government's greening policy, we aim to maximise greening opportunities in all government projects in order to improve the quality of our living environment.

During the planning and early design stage of projects, consideration is given to optimise the preservation of trees on site. A tree survey is carried out within and, if appropriate, adjacent to the site to identify trees or tree groups with a high conservation or amenity value and which deserve to be retained. During April 2007 – March 2008, 3,809 trees were newly planted in our project sites, which is equivalent to a removal of 87.6 tonnes CO_2e annually.

Public Consultation – Tamar Development Project

Addressing public concerns at the earliest stage helps to alleviate possible future conflict, gain mutual understanding and ensure the smooth progress of a project.

For the case of the Tamar Development Project, a two-month Public Viewing Exercise was launched in March 2007. Physical models of the design options were exhibited and the public could express their opinions through Comment Cards, Written Submissions, Exit Polls and Telephone Polls. The results of the exercise revealed that the greatest public concern regarding the design proposals related to "Visual Attractiveness", "Green Features" and "Environmental Friendliness".

Exhibition of Design Proposals for Tamar Development

Economic Assurance

Being the public agency responsible for a large portfolio of construction projects, we have a wealth of knowledge and experience covering the costing of design, procurement and maintenance on various types of government projects. Our estimates are essentially based on cost information from previous projects and professional estimating techniques. Our Quantity Surveying Branch has the role of providing and collating all this information in a comprehensive cost database for the department. This database of cost information maintains and enables the implementation of Life Cycle Costing provision of our cost advisory service at the highest possible standard.

The project team also provides technical input on project estimates using cost analysis tools such as "Simple Payback Analysis" and "Life Cycle Analysis", specifically for environmentally-friendly initiatives such as renewable energy and energy efficient installations.

Life Cycle Costing (LCC)

A research study on developing a database framework to present comprehensive cost data of building components and materials throughout their life cycles was conducted in 2007 as one of the initiatives to meet our objective of green and sustainable construction and improved delivery of our services. This Life Cycle Costing[2](LCC) database for capturing, archiving and presenting LCC data in compliance with international standards is produced for use during the project planning/design stage. Moreover, the 310 LCC comparators generated provide ready information to facilitate alternative design considerations and ultimately the implementation of the economically most advantageous tender for our projects.

Subvented / Entrusted Projects

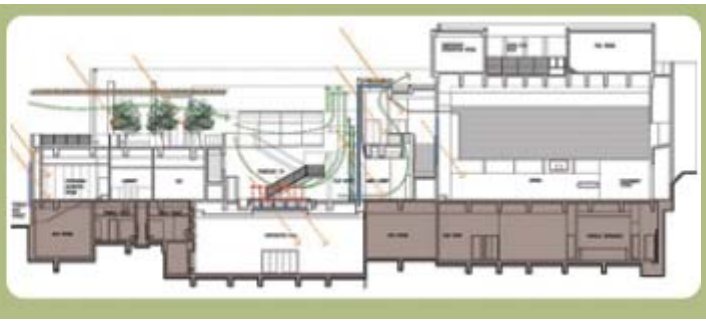
Our Subvented Projects Division is responsible for ensuring that government subvented, joint-venture and entrusted projects conform to government requirements. The work involves vetting budgets, design standards, tender documents, tender recommendations and final accounts as well as identifying non-conformities in design standards and tendering procedures.

Subvented Projects Division commits to provide technical advice in an environmentally responsible manner, and promote conservation of energy, prevention of pollution and reduction in consumption of natural resources. We have also encouraged participation in the Considerate Contractors Site Award Scheme to promote environmental awareness and performance.

[2] Life cycle costing includes not only the initial investment, but also the future costs of operation, maintenance and ultimate disposal.

Sustainable Operations

Project Design



We as the Government Architect always try to take new initiatives for delivering sustainable facilities to our clients, other government departments and the public.

Construction Design and Management (CDM)

With the aim of identifying potential health and safety hazards, and cost-effective mitigation measures at the design stage of a project which continues throughout the project delivery, Development Bureau and Works Departments took the lead to implement Construction Design and Management.

This system ensures the early involvement and effective co-operation of all the stakeholders of construction projects through the timely provision of relevant information. In 2007, three projects implemented CDM and obtained endorsement of their health and safety concerns which recorded all major potential hazards identified by stakeholders together with the designers' initial responses and decisions taken or actions required:

- Sun Yat Sen Memorial Park and Swimming Pool Complex
- Tin Shu Wai Public Library cum Indoor Recreation Centre
- Swimming Pool Complex in Area 1 (Sun Wai Court), Tuen Mun

Energy Conservation

One of our core values is to adopt energy efficient measures in order to deliver our services in an environmentally responsible manner and to reduce the consumption of natural resources and the emission of greenhouse gases. Starting from the initial project planning and design stage, we integrate energy saving technologies and installations and renewable energy systems into the building design. In particular, several new energy efficiency requirements are incorporated in the series of newly published General Specification for building services installations in Government Buildings of the HKSAR. For example, solar heating installation, heat pipe, total energy heat pump, automatic condenser tube cleaning system, dehumidifier and fresh air pre-conditioner etc.

The Building Energy Codes (BEC) 2007 Edition issued by the Electrical and Mechanical Services Department became effective in October 2007. The design of our projects has fully complied with the new Codes since then. A review was also taken to uplift our baseline for calculating the estimated energy saved from completed projects by adopting the new Codes as minimum requirements and also taking into account of the technology development. We are glad that though the projects completed in 2007 had not been designed with full consideration of BEC 2007 edition, there is more than 5% energy savings when using the new baseline.

Indoor Air Quality

Achieving good indoor air quality in our buildings is one of our goals in order to continually improve Hong Kong's environment. Our design teams adopt a total energy approach in achieving an acceptable IAQ in buildings, design building envelopes to stop the ingress of contaminated air and moisture, select low emission building materials, properly segregate contaminated areas from clean areas through innovative architectural design as well as taking other initiatives.

Green Building Performance

In exploring more opportunities to incorporate green elements in our projects, we benchmark the performance of our new buildings against local recognised standard such as Building Environmental Assessment Method (BEAM). BEAM provides environmental standards for a building from cradle (design) to grave (demolition). Our BEAM certification status in 2007 is discussed in "Facility Use and Maintenance" section.

Leadership in Energy and Environmental Design (LEED)

In 2006-07, our R&D section carried out research on the potential adaptation of LEED Certification on our future projects. A comparison between the BEAM & LEED Certification programmes on Green Buildings was conducted. Furthermore, case studies of projects in China and Asia that satisfactorily completed the LEED certification programme have also been investigated.

In 2007, we took a step forward by selecting a trial project at the early design stage to go through the LEED certification programme of Green Building: Kai Tak Government Offices.

Universal Accessibility

In 2007, we promulgated the design guideline and checklist on universal accessibility. When submitting the project for vetting by the internal Project Brief and Design Vetting Committee, PBDVC, a proposal on the universal accessibility design considerations has to be included and the designs of new government buildings have to meet the requirements stipulated in the design guideline.

For example, in the Lam Tin Social Services Family Unit project and the Madam Yung Fung Shee Health Centre modification projects, the installation and modification of tactile path, railings, main entrance glazed door, service counter, sign, induction loop and lift were identified during the project design.

Passenger lift and tactile paths allow all building users to move easily from one floor to another

Desk with knee space and movable chair accommodates the needs of different users

Economic Consideration

Please refer to Project Planning section.

Sustainable Operations

Project Procurement

Responsible procurement of products and services, which takes into account public accountability, value for money, transparency, equal opportunities and a balance between environment, cost and performance, certainly contributes to the sustainable and healthy development of our industry as well as the community.

Procurement of Consultants, Contractors and Suppliers

Almost 90% of our projects are outsourced to other partners. We now take on the project management and supervisory roles in handling public works while the design and procurement are carried out by our consultants and contractors. In order to ensure the quality and sustainability of their performances, we maintain approved lists of consultants, contractors and suppliers and would only hire those who are included in the two approved lists established by Works Branch of Development Bureau.

Similar to the contractor controlling mechanism, there is a List of Consultants of the Architectural and Associated Consultants Selection Board (AACSB) maintained by AACSB, which consists of six categories, namely Architectural, Building Services, Building Surveying, Landscape Architectural, Quantity Surveying and Structural Engineering. Only those firms who are in the appropriate categories will be eligible to undertake consultancies under the purview of AACSB.

Following Works Bureau Technical Circular No. 13/2001, Quality Management System Certification of Consultants and Contractors for Public Works Administered by the Works Group of Departments, they must also obtain certification of their quality management systems to the ISO 9001:2000 standard.

As an ethical commitment, consultants and contractors should advise their employees not to offer or give any advantage or excessive entertainment to government officials or their families. Although the human rights performance of contractors is not a separate evaluation criterion, we award projects to contractors who do not hire illegal immigrants.

During tender assessment stage, the past performance of contractors and consultants is also considered and this includes environmental and safety issues.

Fairness and equal opportunities are also our priorities during procurement. We have no preference between local contractors and suppliers and those from overseas. They are all treated equally.

Green Specifications

General Specification for Building

Series of General Specification for building services installations in Government Buildings of the HKSAR

We use the General Specification for Building (GS 2007) and a series of General Specification for Building Services installations in Government Buildings of the HKSAR to control standards relating to overall quality and environmental sustainability, and our 2007 Edition was rewritten and updated with sustainability as the key objective. The use of energy efficient equipment is stressed. Other additions are the further greening of the Specification and, where applicable, the updating of the BS standards. Some examples include the requirement to survey trees and shrubs, and the investigation of asbestos containing materials. The implementation of the new General Specification for Building (2007 Edition) became effective on 1 September 2007.

Sustainable Timber

We enhanced the existing Timber Purchasing Policy to encourage the use of sustainable timber in our projects under Section 13 of GS 2007. We specified the requirement of obtaining all timber from a responsibly managed forest or plantation that is preferably Forest Steward Council (FSC) certified or at least from a Known Licensed Source (i.e. other acceptable forest certification system).

Volatile Organic Compounds (VOC) Content

We tightened the maximum allowable VOC content in paints in our General Specification for Building (2007 Edition) in order to reduce the emission of greenhouse gases.

Ozone-depleting Substances

The General Specification for Air-conditioning, Refrigeration, Ventilation and Central Monitoring and Control System Installation in Government Buildings of the HKSAR was revised and updated to tie in with sustainability concerns and technology advancement. The 2007 Edition tightened the use of refrigerants, in which only non-CFC refrigerants are allowed.

Economic Assurance

We adhere to the Government's procurement policy including public accountability, value for money, transparency, open and fair competition and equal opportunities to be open to all eligible local and overseas suppliers and services providers.

Various procurement approaches (e.g. design and build contract) are also considered for our capital and maintenance works to permit flexibility in project management.

Sustainable Operations

Project Construction

We strictly implement systematic management for environmental performance, supply chain and financial implications in order to ensure that our projects are delivered in an efficient, effective and environmentally friendly way.

Best Practices on Site

To reduce the impact of our construction activities on the environment and surrounding neighbours, we take various environmental mitigation measures:

Noise barrier to minimise potential noise impact on a nearby residential area

Hard paving construction to reduce nuisance of dust when site vehicles travelling

Vehicles leaving the site are first washed to prevent them carrying dirt outside the site

Using mobile sprinkler to minimise fugitive dust emission

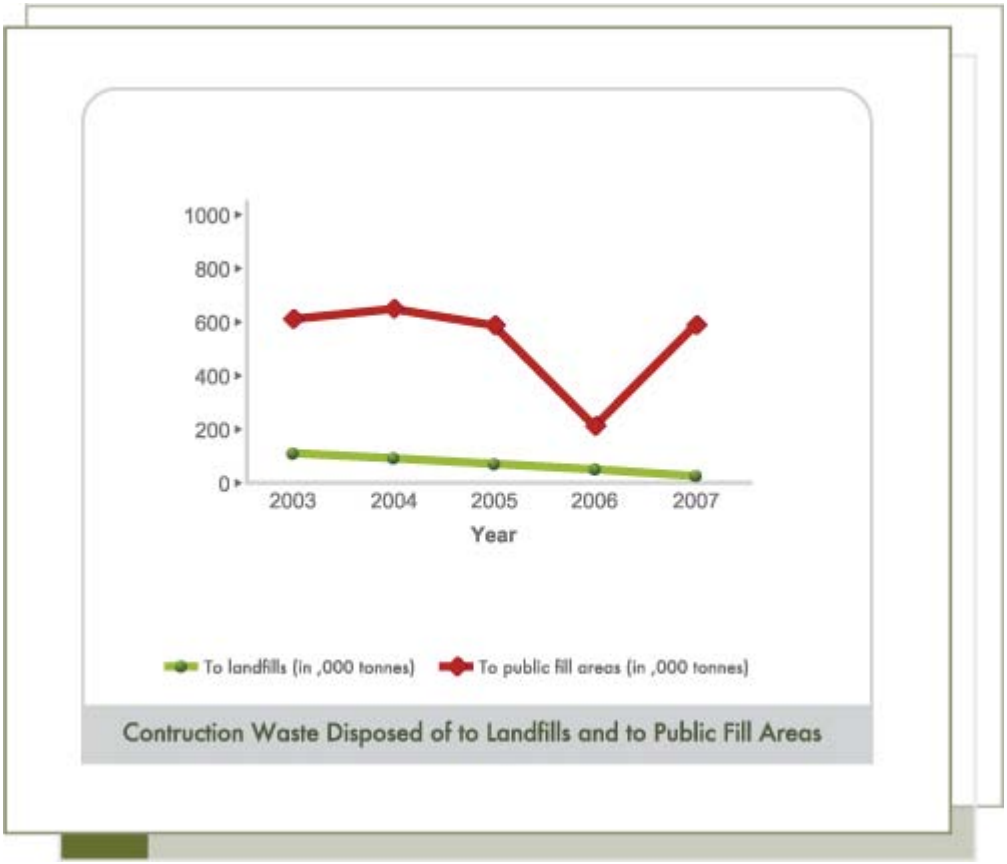
Dump truck equipped with a mechanical cover to prevent fugitive dust emission

Checking water sample taken from wastewater treatment plant

Construction Waste Management

In collaboration with the Public Fill Committee of the HKSARG Civil Engineering and Development Department, we proactively carry out construction waste management in all our construction sites. We plan and implement strategies to minimize waste disposal at landfills and to maximize the re-use of waste and use of recycled materials. We closely supervise our contractors to ensure they fully comply with requirements when handling the construction waste on their sites and also to prevent them from any malpractice.

An in-house Task Force that was set up in early 2006 and completed a thorough review of construction waste generated from our construction sites. Some enhancement measures in the approach of the plan-do-check-act cycle were recommended such as setting and monitoring targets throughout the construction stage, collecting and verifying waste data and accurate estimating with reference to similar projects. The construction waste disposed of to landfills has been decreasing over the past 5 years, and that sent to public fill areas for reuse was, in 2007, back to its previous level.



On-site Construction Waste Sorting

Discharge of Construction Waste at landfill

Site Safety

We implement OHSAS 18001 occupational health and safety management system and develop risk assessments and control measures for our daily operations. In particular, we established safety rules for lifting operations, demolition works, working on virgin land and visitors on site etc.

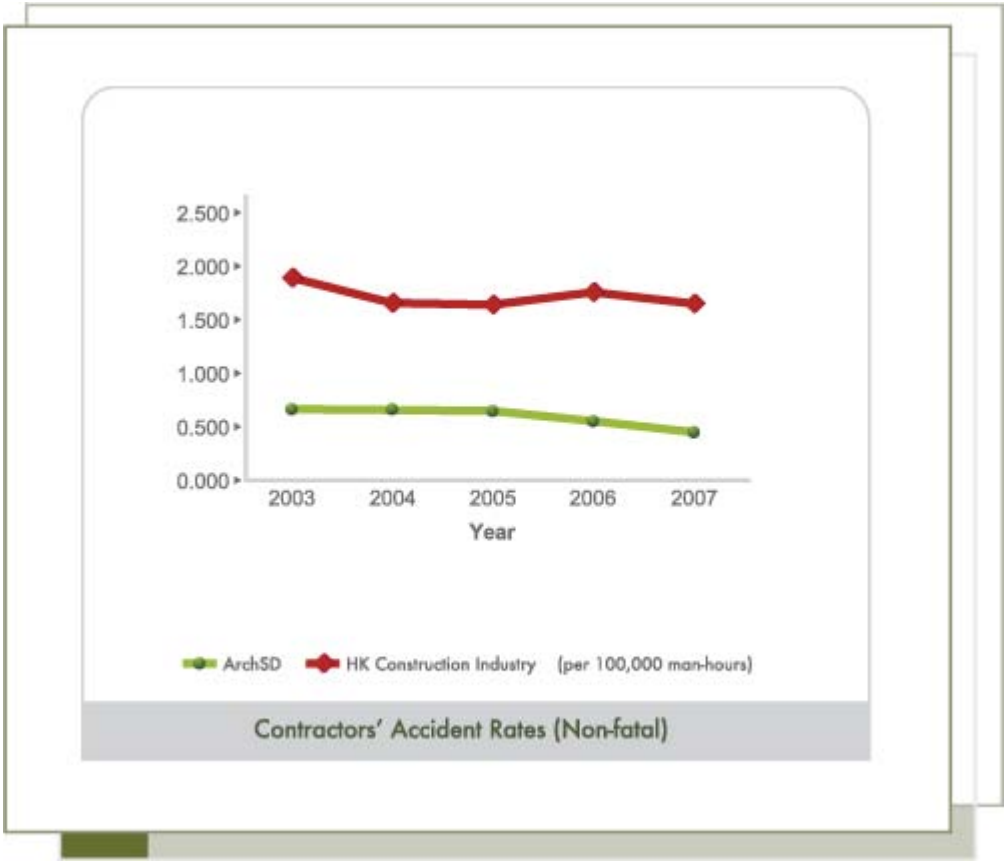
Safety Walks for both our offices and construction sites are conducted quarterly to ensure safe and healthy work places and, if an occupational injury occurs, we will conduct an incident investigation and formulate control measures to avoid any recurrence.

We realise that the close involvement of our contractors is very important for improving site safety performance. Therefore we organised various safety awareness training and experience sharing sessions for contractors as well as our colleagues, as illustrated below.

Material Hoist Safety Workshop

Personal Protective Equipment Workshop

The safety performance of our contractors continued to improve. Fatal and non-fatal accident rates decreased when compared to previous years, and both rates are lower than those for other construction sites in Hong Kong. In 2007, we had no record of any fatal accident. The results are encouraging and reflect our determination to provide a safe working environment for our people.



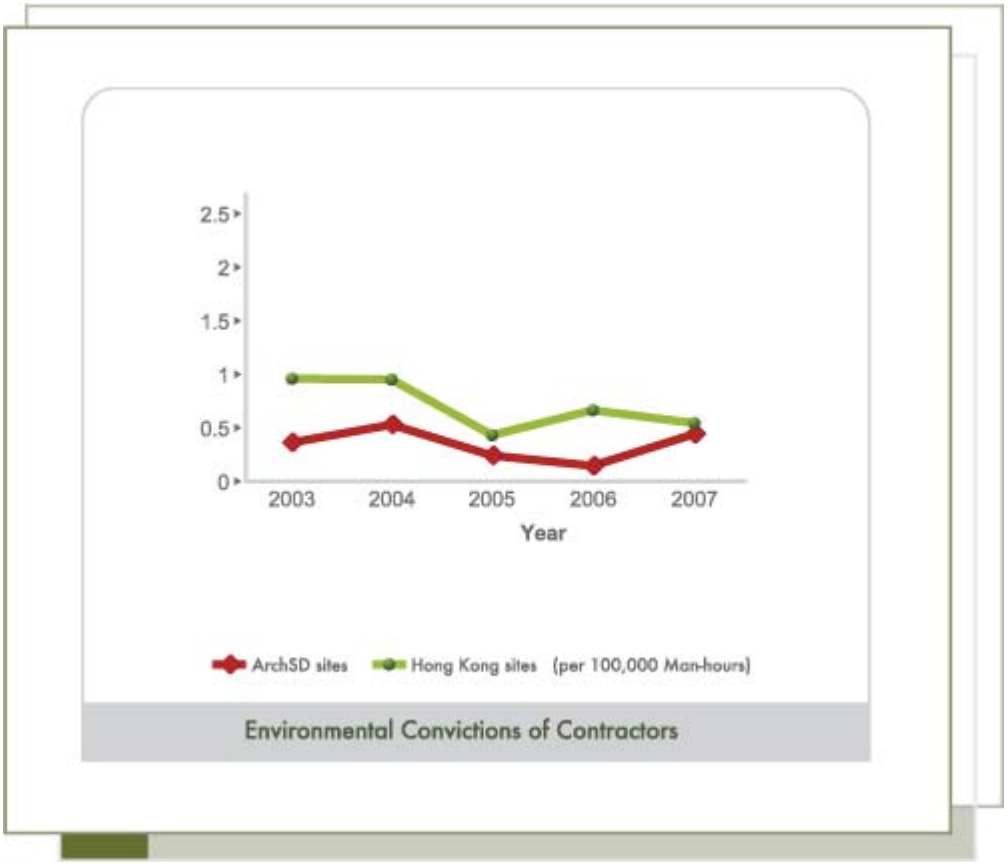
Contractors' Accident Rates (Non-fatal)

Contractor and Supplier Management

We apply the Contractor Performance Index System to closely monitor the all-round performance of our contractors. Apart from their environmental health and safety performance, we keep track on their convictions of employing illegal immigrants and incidents on wage disputes.

Environmental Offences

In 2007, as in previous years, the rate of environmental convictions by our contractors is lower than the average in all Hong Kong sites. However, the environmental convictions increased by two fold to 0.424 convictions per 100,000 man-hours in comparison with year 2006. Half of the cases were due to the failure in making a billing account application in accordance with the new construction waste charging regulations. We took corresponding corrective actions and will enhance the contractor monitoring mechanism in the future.



Contractor Awards

We recognise good performance of our contractors and provide encouragement for them to focus on the environmental, health and safety aspects of their work, by organising several award schemes. These include the Considerate Contractors Site Award Scheme by Development Bureau and our ArchSD Green Contractor Award Scheme. In 2007, 8 of our contractors won 14 awards in these 2 Award Schemes.

Considerate Contractors Site Award Scheme 2007 is to acknowledge contractors and project teams for their considerate attitude towards their neighbours and the public when carrying out their works, outstanding site safety, environmental performance and good site management. There are two types of awards namely Considerate Contractors Site Award (CCSA) and Outstanding Environmental Management Performance Award (OEMPA).

Silver Award for CCSA
Gold Award for OEMPA
The Construction of a Primary School in Area 31, Sheung Shui - Wan Chung Construction Company Limited

Bronze Award for CCSA
Silver Award for OEMPA
Two Primary Schools in Area 13, Yuen Long - Chevalier (Construction) Company Limited

Bronze Award for CCSA
Bronze Award for OEMPA
Design and Construction of Indoor Recreation Centre cum Library Area 17, Tung Chung - Shui On Construction Company Limited

Bronze Award for CCSA
Bronze Award for OEMPA
Design and Construction of Sports Ground, Town Park and Indoor Recreation Centre in Area 45, Tseung Kwan O - Phase 1 (Sports Ground) - China State Construction Engineering (Hong Kong) Limited

Merit Award
Term Contract for Alterations, Additions, Maintenance and Repair of Buildings and Lands for which the Architectural Services Department (Property Services Branch) is Responsible. Designated Contract Area - Wong Tai Sin and Shatin - Sun Fook Kong Joint Venture

The ArchSD Green Contractor Award Scheme is organized annually and this year we added a new award category - Term Contractor Award - to reward the maintenance of a green environment on existing sites.

Gold Award to Chevalier (Construction) Company Limited - Two Primary Schools in Area 13, Yuen Long

Silver Award to Yau Lee Construction Company Limited - Design and Construction of the Redevelopment of Lo Wu Correctional Institution and Design and Construction of the Prince of Wales Hospital - Extension Block at Shatin, HK

Bronze Award to Hsin Chong - Yau Lee Joint Venture - Design and Construction of the Prince of Wales Hospital - Extension Block at Shatin, HK

Bronze Award to Wan Chung Construction Company Limited - The Construction of a Primary School in Area 31, Sheung Shui

Term Contract Award to Shui On Building Contractors Limited
Term Contract for Alterations, Additions, Maintenance and Repair of Buildings and Lands for which our Property Services Branch is Responsible.
Designated Contract Area – Hong Kong Central, Peak and Mid-Levels

We also encouraged construction workers to participate in our Site Safety Model Worker Award Scheme to enhance their awareness of health and safety. In 2007, 41% of our contracts participated in the Site Safety Model Worker Award Scheme which was higher than the departmental target of 24%.

Mosquito Control

With rising concern over the proliferation of Dengue Fever and Japanese Encephalitis diseases, we strengthened our site supervision and independent audit checks on site, in particular during the critical wet season. The most effective way of controlling mosquitoes is to eliminate their breeding grounds, and in this respect, we promoted "Good Practice for Slope Work and Construction Site" to increase the mosquito prevention awareness of site staff and contractors.

Some good practices in mosquito prevention are:

Conduct slope improvement work to enhance water runoff from slope

Materials are fully and smoothly covered with tarpaulin sheets. Regular checks are made to identify any undulating surfaces.

Use of light duty sump pumps to clear stagnant water on the floor

Bamboo poles are cut close to the node or their ends are wrapped up

Catch Pit is filled with granular material to avoid stagnant water and so eliminates a black spot for mosquito breeding

Conduct routine slope maintenance work to prevent vegetation and clear blockage of surface channels

Economic Assurance

An effective cost control and monitoring system is crucial to our project managers throughout the construction phase to mitigate any potential overrun of the budget. Several levels of project costs monitoring systems are implemented for our projects and these include:

- a web based Contract Variation Management System that enables a real-time access of project financial information by the project team;
- a Dispute Resolution Advisors System for overall contract administration which can trace possible problematic areas and claims throughout the project period; and
- a series of professional and independent audits throughout the project period, including audits or checking by the Commissioner of Audit and Independent Commission Against Corruption (ICAC).

Sustainable Operations

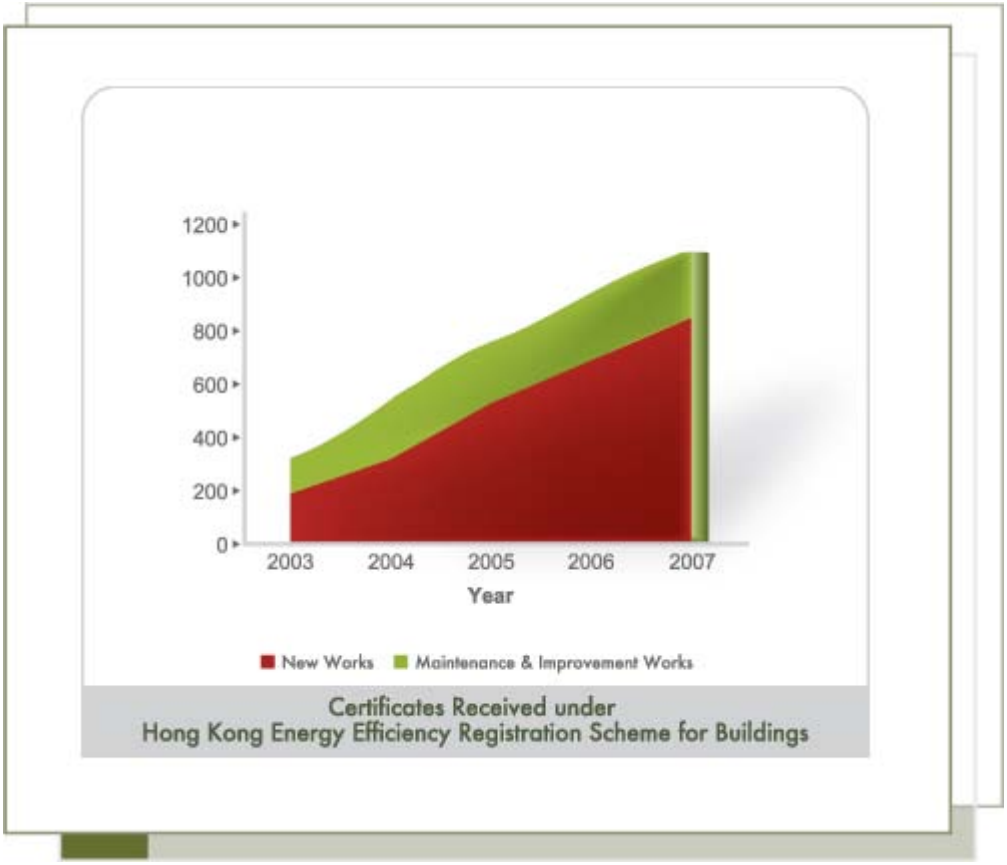
Facility Use and Maintenance

Our belief in sustainable development also extends to the operation and maintenance of public facilities.

Certification Schemes for Building Performance

We actively participate in the local voluntary building performance benchmarking programmes, such as Hong Kong Energy Efficiency Registration Scheme for Buildings (HKEERSB), and the Building Environmental Assessment Method (BEAM), in order to deliver high quality services.

We are committed to ensuring that every new building complies with and is registered for the HKEERSB. In 2007, a total of 191 projects comprising 142 new projects and 49 maintenance and improvement projects were issued with certificates of Energy Efficient Buildings Register. The following charts display the number of certificates received in previous years.



Since HK-BEAM was established in 1996, we submitted almost 30 buildings for BEAM registration, contributing a significant portion of the total registered public and private buildings.

Green Roof

To educate our colleagues more on green roofs, we organized a series of technical seminars focusing on topics such as horticulture, plant types, design themes, plant selection considerations, maintenance and installation works. Summary reports of the seminars were uploaded onto our Intranet for reference.

Also in 2007, we selected several buildings as samples for the Retro-Fit Green Roof Projects:

Green Roof on Sheung Shing Street Park Public Toilet

Before commencement

After six months

Roof garden at Sir Ellis Kadoorie (Sookunpo) School

Before commencement

After six months

Indoor Air Quality (IAQ)

In 2007, we successfully conducted eight certifications for the indoor air quality of government offices and public places under the Indoor Air Quality Certification Scheme for Offices and Public Places, these included:

Government Office / Public Place	Class of Certification
Exhibition Gallery, Exhibition Path & Lecture Theatre of Electrical and Mechanical Services Department Headquarter	Excellent
New Territories South Regional Police Headquarters and Operational Base	Excellent
7/F of Tai Kok Tsui Complex Phase 2	Good
Education Resources Centre cum Public Transport Interchange	Good
International Wetland Park & Visitor Centre at Tin Shui Wai – Phase II Works	Good
Rock Hill Street Joint User Building	Good
Science Park at Pak Shek Kok, Phase 1C – Building 9	Good
Stanley Complex	Good

Apart from joining the above Scheme in 2000, we formed an independent IAQ Inspection Unit to consolidate our expertise and technical experience. In light of the new quality assurance requirement for IAQ Certificate Scheme by the Environmental Protection Department, we established a comprehensive quality system with systematic documentation for assessments on instruments, facilities, staff competence and applied for the accreditation as an IAQ Certificate Issuing Body. Results of the accreditation will be reported in 2008.

Client Satisfaction Survey

Following the consultancy to enhance our existing Client Satisfaction Survey in December 2006, the modified survey was put into place in mid 2007. The 2007 Survey adopted the following enhancements measures:

- 'tailor made' questionnaires with the more technical aspects now removed;
- follow-up mechanism to obtain individual client's critical responses; and
- increase in the sample size.

Every quarter, Project Directors select nine projects for survey. Of these, at least three must have been completed, handed over, and in operation for about a year.

The independent survey team members conduct the survey by way of a face-to-face or telephone interview, or as a client self-administered survey, depending on the nature and stage of the project.

The Overall Satisfaction Index for the enhanced survey in 2007 was 80.7 as compared with 77.04 in 2006 and the percentage of 'Totally Satisfied & Very Satisfied' ratings was 74%.

In order to further enhance the client satisfaction on our projects, we are now pursuing Post Occupancy Evaluation (POE) for both architectural and building services works in addition to our current surveys. A project case study on POE experience is discussed in Case Study section.

Sustainable Operations

Case Studies

We manage over 100 works projects every year, and those with outstanding sustainable performance are recognised both internally and externally through various awards schemes and commendation programmes. This section illustrates some of our more notable projects in 2007:

- Public Facilities for Pak Shek Kok Waterfront Promenade – ArchSD Annual Award 2007 – Annual Award
- New Infectious Disease Centre attached to Princess Margaret Hospital – ArchSD Annual Award 2007 – Merit Award
- Tuen Mun Children & Juvenile Home – ArchSD Annual Award 2007 – Merit Award
- Stanley Post Office – major renovation undertaken in 2007
- Post Occupancy Evaluation – project experience on adopting POE for a multi-purpose municipal services building

Case Study 1 – Public Facilities for Pak Shek Kok Waterfront Promenade

The 2 km stretch of promenade fronting the Hong Kong Science Park is one of Hong Kong's best known waterfront promenades. Here, 8 buildings are erected to provide convenient facilities for cyclists and walkers. They include a pavilion, a management office, an open air café, a refreshment kiosk, 3 public toilets and a refuse store.

Refreshment kiosk

Public toilet

The buildings are designed as sculptural elements using a co-ordinated range of colours and textures, such as fair-face concrete, steel and timber. As the waterfront promenade is adjacent to the bicycle track, interesting forms are designed to create lively images for the many youngsters who use them. The detailing of the buildings also matches the contemporary style of the nearby Hong Kong Science Park. With the thoughtful use of inexpensive materials, these simple buildings are elegant yet practical and include the following sustainable design considerations:

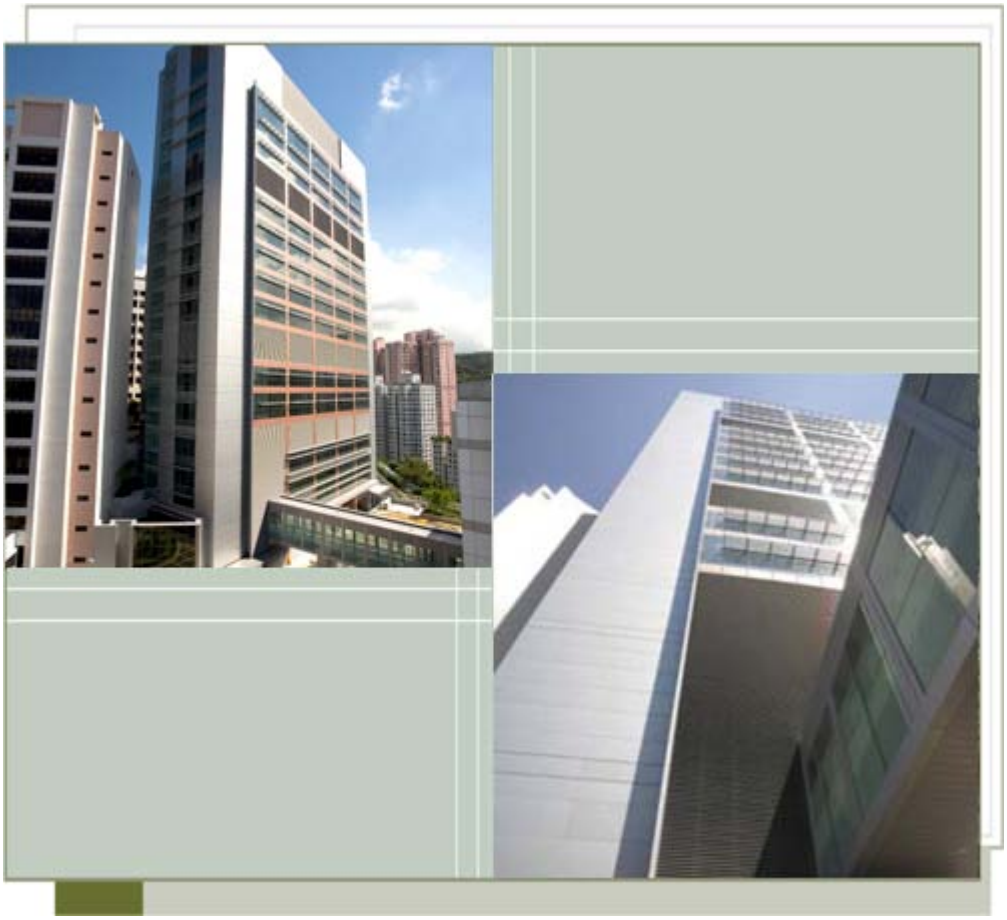
Fo Yin Road toilet

Management Office

- Natural ventilation for three public toilets. To avoid contamination, mechanical extraction is also provided at the back of the toilets and urinals.
- Natural lighting with artificial lighting for night time and during bad weather. This minimises energy consumption.
- External basin areas with planting to enhance greening, natural lighting and ventilation for two of the toilets.
- Sensors installed to control water taps and automatic urinal flushing systems in order to conserve water and enhance hygiene.
- A vertical greening feature on timber frame walls at one of the toilet blocks to provide shading and to minimise any heat gain from the external wall.
- Pre-treated soft wood from sustainable sources in order to support the principle of sustainable construction.
- A vertical timber screen in the shape of a sail faces south-west at the refreshment kiosk providing shading for the outdoor sitting area.
- The installation of timers and light sensors for internal and external lighting control in some of the buildings, as well as energy efficient light fittings.

Case Study 2 – New Infectious Disease Centre attached to Princess Margaret Hospital

One lesson learnt from the outbreak of Severe Acute Respiratory Syndrome (SARS) in 2003 was that such outbreaks could be dealt with more effectively by equipping frontline acute hospitals with specialized and dedicated infection control facilities. The new Infectious Disease Centre at the Princess Margaret Hospital is such a facility and the first of its kind in Hong Kong.



New Infectious Disease Centre attached to Princess Margaret Hospital

The Centre provides 108 isolation beds located on 8 floors of wards. A comprehensive range of facilities are provided for infectious disease treatment which include a procedure room, radio-diagnostic imaging facilities, clinical laboratory with biosafety level (BSL) 3 and staff infection control facilities.

Due to space limitations, the 58m X 22m site of the 17-storey Centre was created by cutting into a 16m high steep rock slope. Together with the stringent infection control requirements, extensive and specialized research was devoted to the planning and design of this complex building, in particular the segregation of clean areas (cold zones) from dirty areas (hot zones).

All clinical facilities were classified into 3 different hygiene zones, i.e. clean, transitional and dirty. Taking into consideration the logistics flow such as patients, staff, clean supplies, dirty disposals, air, etc, the isolation facilities were located in an arrangement for ease of operation and minimizing cross contamination. Two separate lift cores were provided: a 'clean' core for hospital staff and delivery of clean supplies and a 'dirty' core for the removal of contaminated materials and patient access. Moreover, special layout planning and colour coding were introduced to segregate clean and dirty zones. Buffer areas in the form of anterooms equipped with hand-washing facilities were provided for each isolation room.

In order to control, contain and remove contaminants, the Centre is equipped with the following special systems and provisions:

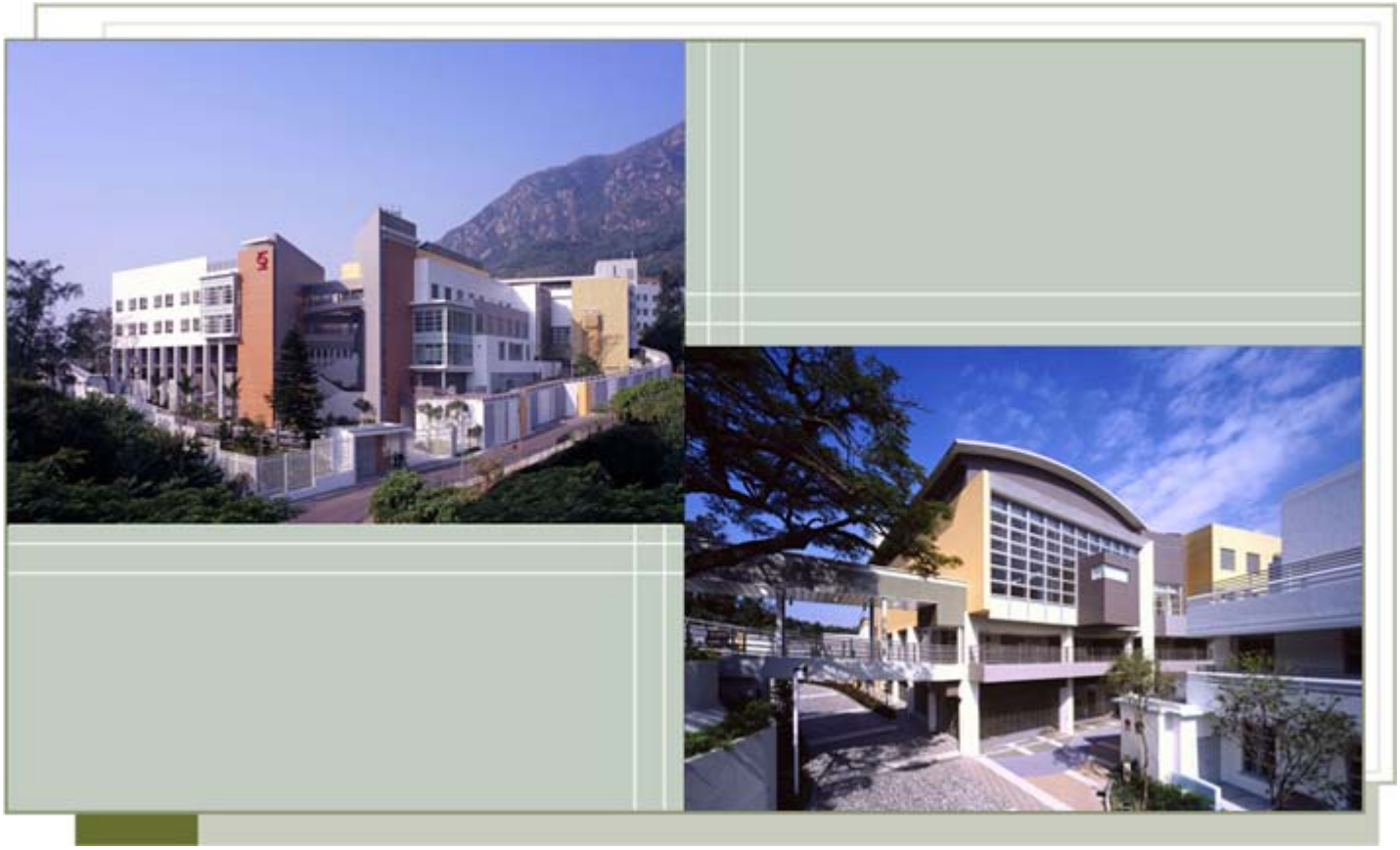
- Directional airflow from cold zone to hot zone;
- Air-tight wards with descending air pressure from cold zone to hot zone;
- 100% outdoor air supply in wards with a minimum of 12 air changes per hour with high-level supply and low-level exhaust;
- Air treatment equipment including HEPA filter, air purifier and UV sterilizers;
- Toilet waste disinfection system;
- Automatic hermetic doors in wards; and
- Sensor taps and automatic flushing toilets

Facilities for thorough cleaning before entering an Isolation Room

The transportation of patients is separated from general hospital deliveries with patients being transported to the Centre along Princess Margaret Hospital Road while material delivery and refuse collection would be via Kwai Chung Hospital Road on 4/F level. To facilitate the sharing of facilities and the movement of materials in the Hospital complex, a new 30m footbridge across Princess Margaret Hospital Road is built to connect the New Infectious Disease Centre at 1/F to the existing Block E/F. There is also a connection linking the Centre with the adjacent Block G.

Case Study 3 – Tuen Mun Children & Juvenile Home

The Tuen Mun Children & Juvenile Home is built for troubled juveniles. It is a residential and training complex comprising of a multi-service block, an administration building, a training block, a boys' dormitory and a girls' dormitory.



View of Tuen Mun Children & Juvenile Home

Training Room

A campus design is developed to reflect its mission to rehabilitate the youngsters. This is based on the concept of creating a non-institutional environment which, while still being secure, provides a warm sense of well being and support for the residents in a family-like atmosphere.

Buildings are located along the main vehicular access through the site. Hierarchy of security zones and open areas are carefully designed to meet specific requirements. Pedestrian walkways and bridges create a pedestrian axis that connects up the buildings throughout the site. Some of the green features are:

- Solar thermal system captures and converts solar energy into heat energy for domestic hot water supply;
- Daylight and natural ventilation to reduce building energy consumption;
- High efficiency air-to-water heat pump for domestic hot water generation, whereas the waste cool air discharged from heat pump machines is used for kitchen spot cooling;
- Various energy efficiency apparatus such as compact fluorescent lamps, electronic ballasts, photo sensors, timer control, occupancy sensors, etc.;
- Carbon dioxide monitoring sensors to control the amount of fresh air in centralised air conditioning system; and
- UV sterilising lamps, bio-oxygen purifiers and high efficiency air filters to achieve the indoor air quality objectives.

Heritage preservation is also a characteristic of this project as a 1930's Grade III building has been retained on site. This is converted into a new Administration Building and carefully integrated into the new complex. Both old

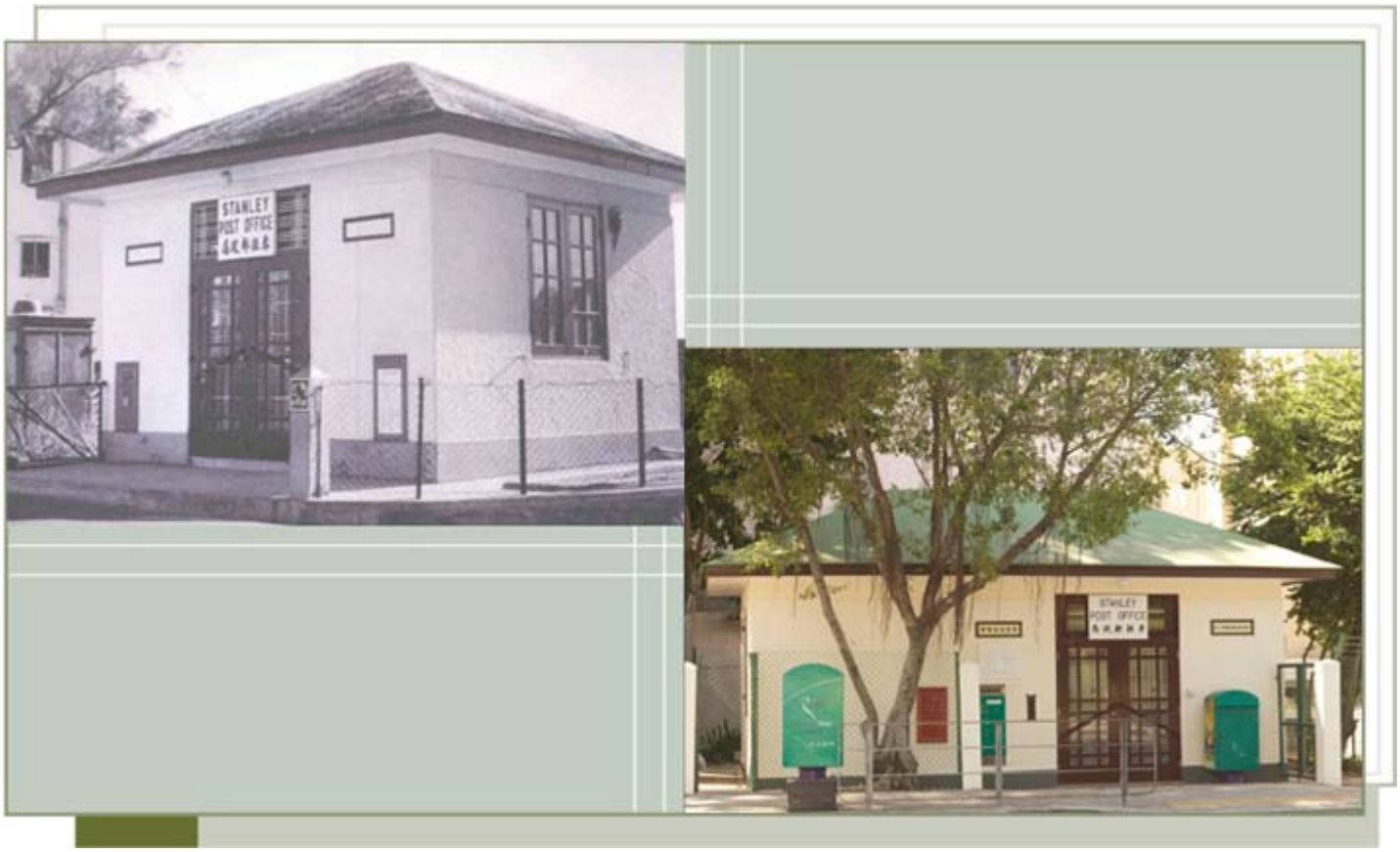
and new buildings relate sympathetically to each other through the use of extensive landscaping and the treatment of external works. The 1930's building is considered as a centre piece, and its elevation treatment is picked up as a design theme for both external facades and also the design of some internal spaces. Outside, existing trees and plants are also retained to create a variety of different landscaped areas throughout the grounds.

Boys' Dormitory

Administration Building (An original 1930's building)

Case Study 4 - Stanley Post Office

Stanley Post Office is located at 2 Wong Ma Kok Road. It was opened in 1937 and is now Hong Kong's oldest post office still in service in its original building. The post office itself is single-storey with a pitched roof supported on timber trusses and boards. It has little decoration except for the ornamental window grilles with the 'GR' (George Rex) insignia on them. As the post office had not undergone any major changes over the past seventy years, renovation works became necessary in order to extend its serviceable life. This restoration work was also part of Hong Kong Post Office's programme of celebrations for its 70th Anniversary.



The original post office (Source: Hong Kong Post Office)

The post office after renovation

The main theme of the restoration work was to preserve and reinstate the original characteristics of the post office and to keep it as a "time capsule of postal history". The renovation works began in July 2007 and were completed three months later.

The main exterior restoration works included:

- Reinstalling an original manual stamp vending machine and cast iron post box bearing the royal cipher of King George VI.
- Refurbishing the original window grilles with the GR insignia.
- Replacing the waterproofing on the roof
- Restoring a ceramic signage panel with hand writing,
- Paving the surrounding outdoor area and installing a ramp at the main entrance to assist the disabled.
- Providing tree rings for the existing trees

The main interior restoration works included:

- Reconstructing the counters with security grilles to resemble its appearance in the 1930s.
- Removing the PVC floor tiles to expose the original terrazzo floor beneath.
- Removing the false ceiling to reveal the wooden trusses and boards of the original roof structure.
- Reinstalling exposed timber panelling to match the original interior design.

Although small, this building has an interesting heritage and has contributed over the years to the special charm of Stanley village. Today it lives on, not only as an attractive tourist attraction but also, and importantly, as a functioning post office.

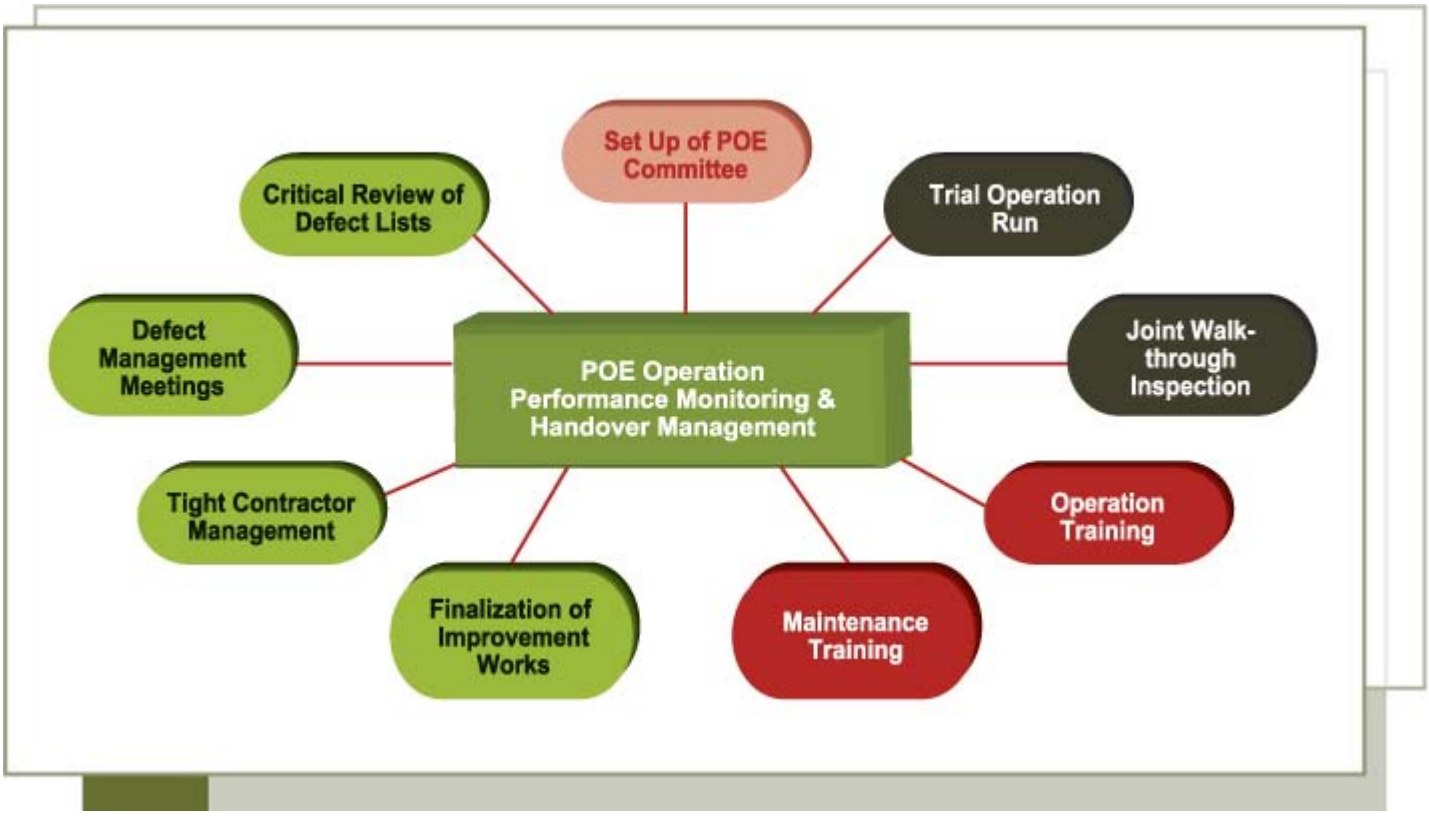
Case Study 5 - Post Occupancy Evaluation

We have adopted a Post Occupancy Evaluation (POE) [3] approach on our projects. This project is a 8-storey multi-purpose municipal services building with a total construction floor area of approximately 24,000 m^2. Market stalls, poultry stalls, small stalls and cooked food centre are located at G/F, 1/F and 2/F. Public library, swimming pools and leisure facilities are distributed from 3/F to 7/F.

The POE exercise was implemented in August 2005, with the objective of overseeing the performance of the building services systems for not only functioning satisfactorily and meeting the client's operational requirements, but also for operating with optimum energy efficiency. Three major tasks were successfully completed for:

- Operational Performance Monitoring and Handover;
- Energy Review; and
- Evaluation of New Technology.

Operational Performance Monitoring Management of POE Exercise



Operational Performance Monitoring and Handover (OPM) Task

A systematic and structural management framework had been specifically developed to strategically handle the various challenges from the initial operation of the building, in particular as this municipal building is mainly for public use. In this regard, the building services defects were critically reviewed for prompt rectification by the contractors. Improvement works were quickly finalized and critical ones completed prior to the opening of the building. A number of training sessions on operation and maintenance were conducted for the clients and their maintenance agent. Trial operation runs and joint walk-through inspections on building services systems were conducted before the building opening to strengthen the clients' confidence.

Energy Review Task

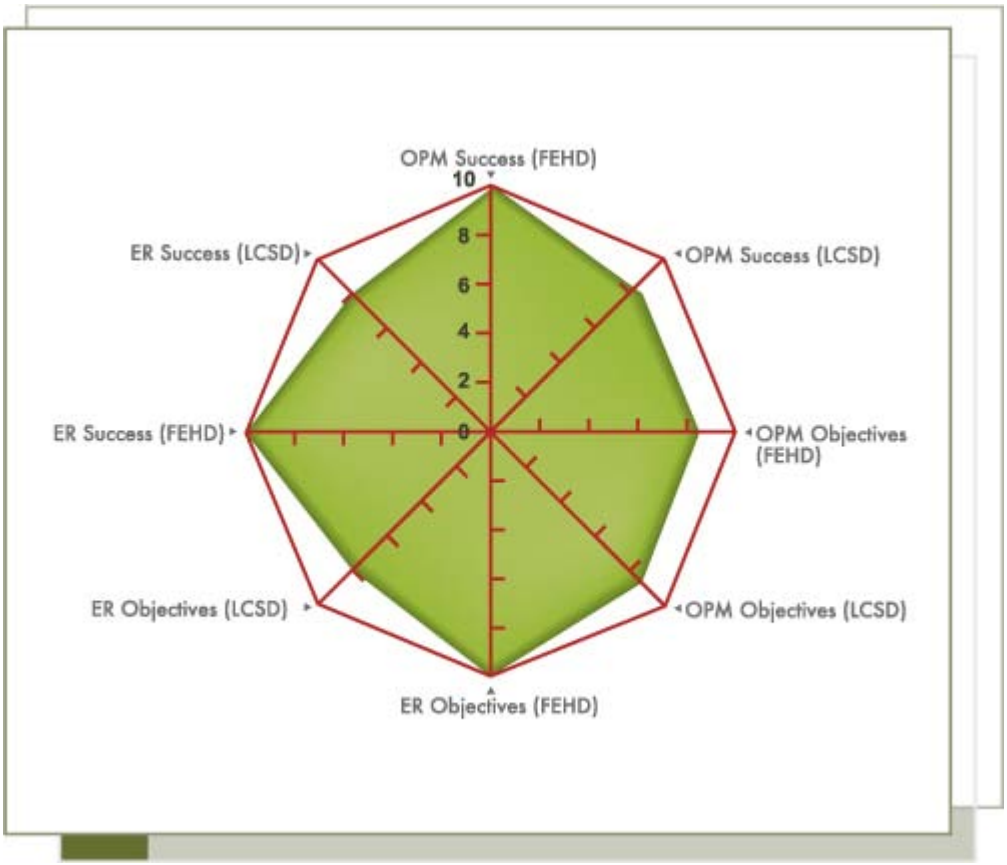
An energy audit was conducted to identify the potential energy saving measures. Detailed analysis in annual energy consumption was carried out for the building, in particular the individual energy analysis for Market & Cooked Food Centre, Public Library, Swimming Pools and Sports Facilities. A set of energy consumption indicators for the building was devised to provide a good reference for benchmarking database for similar municipal services buildings. Prominent energy consumption saving was also recorded after the implementation of the recommended Energy Management Opportunities.

Evaluation of New Technology Task

A Total Energy Heat Pump (TEHP), installed in this building as the pilot site, was selected for the performance evaluation. It was observed that a significant portion of waste heat was recovered which would otherwise be dumped to the environment. Electrical energy had also been saved.

Client satisfaction surveys for this POE were conducted in June 2007, and very positive and encouraging feedback was given. The conclusion is that the POE exercise conducted for this building is very successful.

With increasing concern from clients on the functional performance of the building services systems and energy consumption of buildings, particularly for large or complicated projects, POE will be a good exercise to address their concerns.



[3] POE is a management tool tailor-made to evaluate the performance and assess the effectiveness of sophisticated building services systems after client occupancy, and to address clients' concern on the functional requirements and energy consumption of their recently completed building projects.

Sustainable Workplace

Within an organisation, the successful implementation of sustainable management requires the continuous support of the workforce and stakeholder groups. We endeavour to maintain a good working atmosphere for our staff.

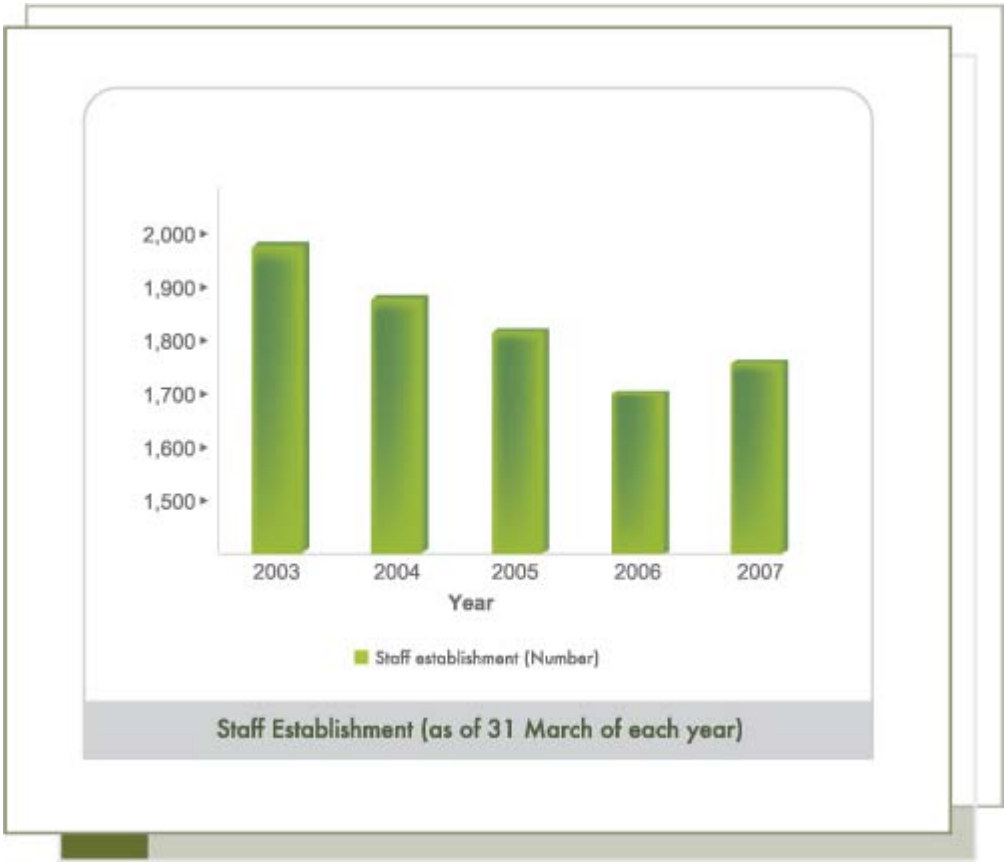
These topics are covered in the following sections:

- Human Resources – scope and diversity of our workforce, employee benefits and contributions,
- Conduct and Discipline – integrity,
- Staff Relations – communication between staff and ArchSD
- Staff Development – enhancement in staff personal skills
- Green and Healthy Office – environmental, health and safety initiatives and performance in our offices

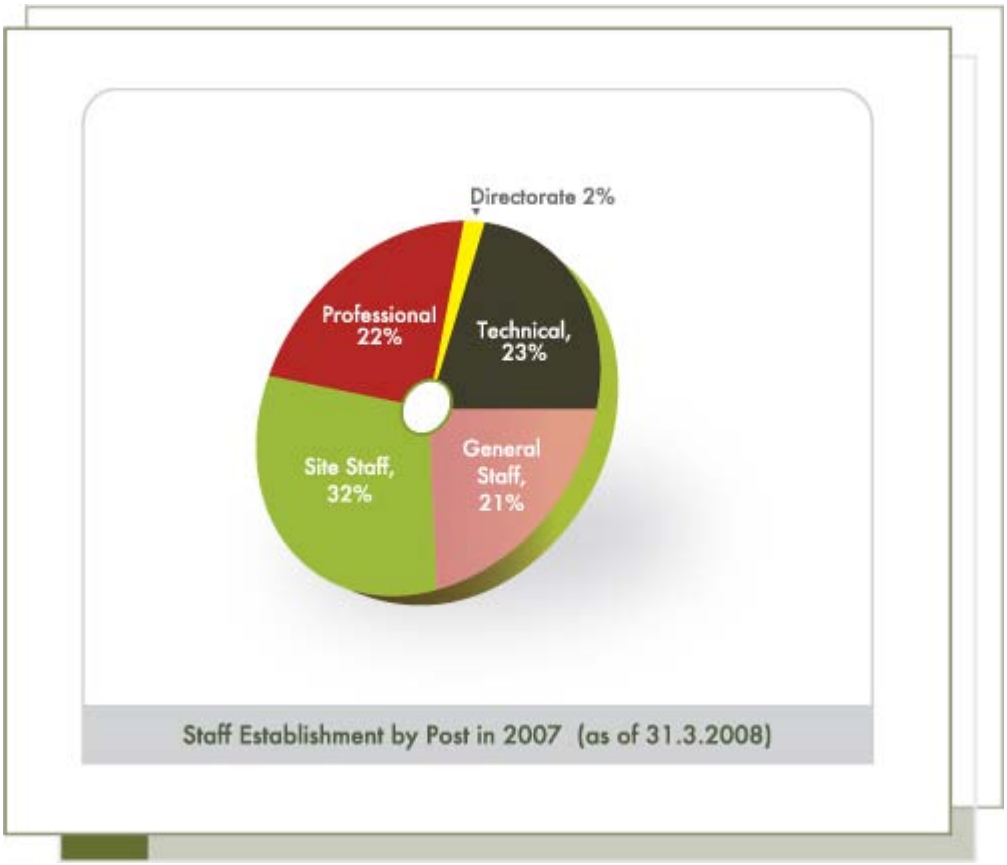
Sustainable Workplace

Human Resources

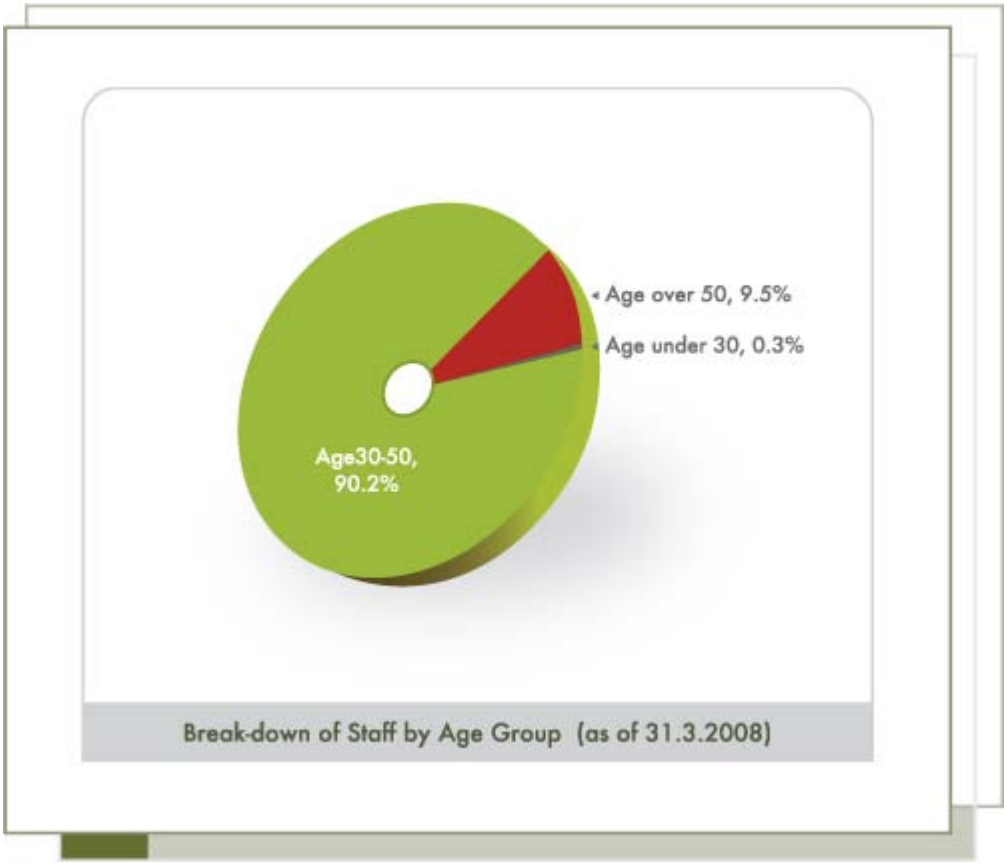
People are the major asset of our department. Under the principle of "small government" to control the size of the civil service, our staff establishment had been decreasing over the past few years through process re-engineering and a recruitment freeze on the voluntary retirement grades.



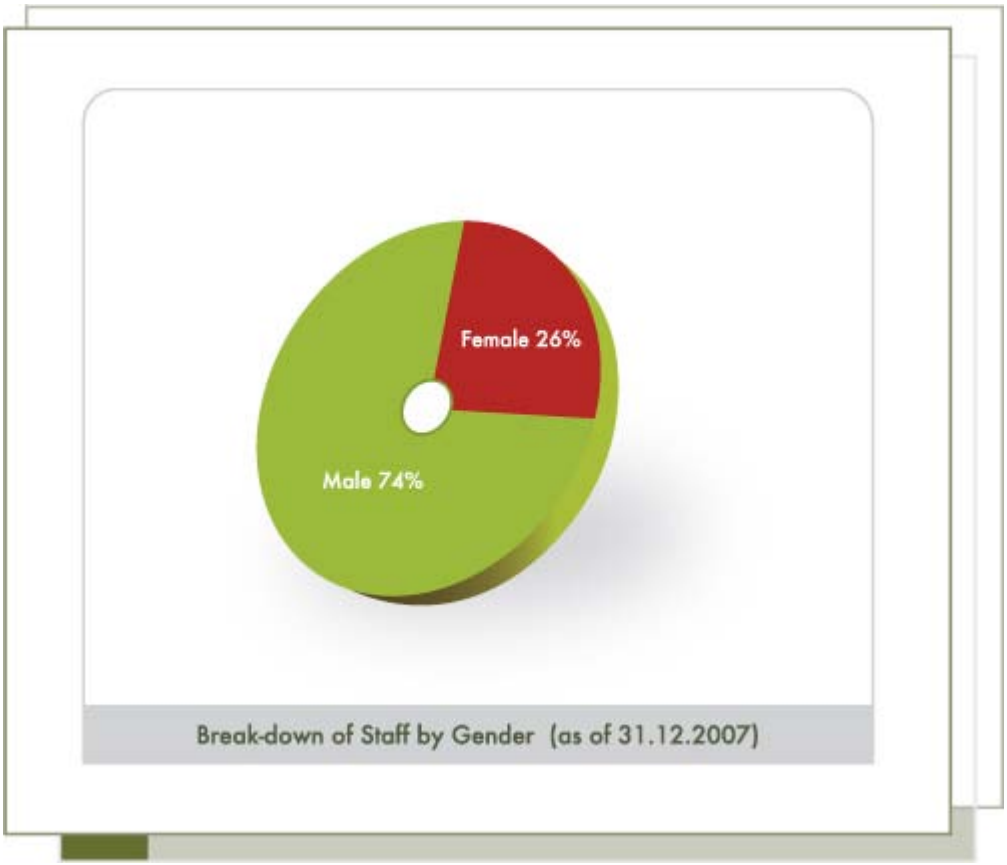
Staff Establishment (as of 31 March of each year)



Staff Establishment by Post in 2007 (as of 31.3.2008)

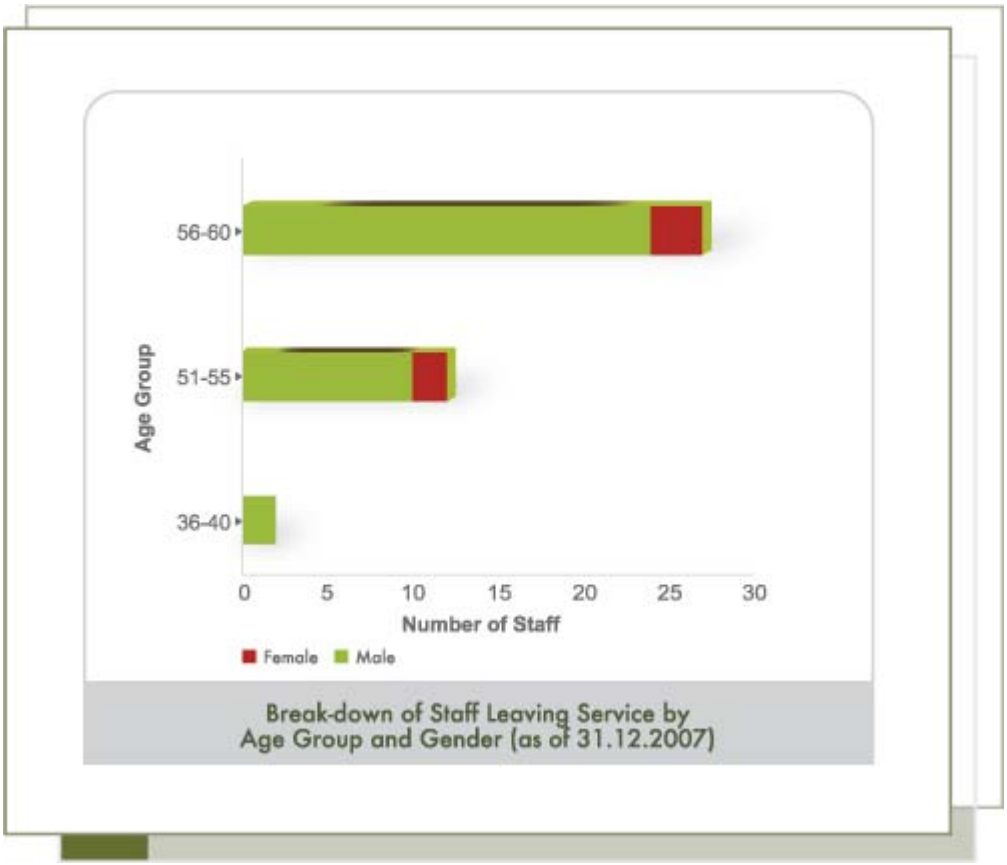


Break-down of Staff by Age Group (as of 31.3.2008)



Break-down of Staff by Gender (as of 31.12.2007)

Break-down of Staff by Ethnicity (as of 31.12.2007)



Break-down of Staff Leaving Service by Age Group and Gender (as of 31.12.2007)

Employee Pay Structure and Benefits

Remuneration of civil servants in Hong Kong follows the pay scales with respect to the employee's grade and rank, notwithstanding the employee's gender, ethnicity, and age. We normally receive one increment in our respective rank scales annually, up to a certain maximum, provided that our performance is satisfactory. Our performance on conduct, diligence and efficiency, is reviewed at least annually. We endeavour to ensure fair treatment between both genders in terms of salary, promotion and compensation.

In 2007, the Government implemented new starting salaries for both civilian and disciplined services grades in order to bring civil service entry pay closer to the levels within the private sector. The new starting salaries were developed based on the 2006 Pay Level Survey, which will be conducted every three years from now on.

Our employees can enjoy various fringe benefits subject to their rank, length of service, terms of appointment and other rules. The benefits include medical and dental services, education allowances, housing benefits, leave, passages and retirement benefits.

Sustainable Workplace

Conduct and Discipline

Being an honest and incorrupt civil servant is crucial for upholding our stakeholders' trust in the civil service and the government. In order to maintain high standards of integrity and conduct, a set of shared core values have been established for the Civil Service:

- commitment to the rule of law
- honesty and integrity
- accountability for decisions and actions
- political neutrality
- impartiality in the execution of public functions
- dedication, professionalism and diligence in serving the community

Anti-Corruption

We are committed to complying with the anti-corruption policies and procedures established by the Civil Service Bureau and Development Bureau. Stringent requirements on integrity issues are stipulated in our internal guidelines and they deal with such issues as avoidance of conflict of interest and the acceptance of advantages and entertainment. The Development Bureau's Integrity Management Manual and various internal circulars are distributed to every employee.

From December 2006 to March 2007, a series of Integrity Management Training Workshops were organized for staff having official dealings or contacts with consultants or contractors, and for staff having supervisory roles. Over 1,000 officers attended the workshops. Also, a half-day workshop on "Corruption Prevention Capacity Building" with a speaker from the ICAC was held in September 2007 for site staff from our contractors and ArchSD.

We are also subject to close monitoring and independent analysis on our integrity performance by the ICAC. Since 2000, there have been 16 assignment studies conducted to identify areas of improvement for the department. Any instances of bribery to any government official should be reported to the ICAC.

Anti-Discrimination

Staff appointments are based on open and fair selection process to appoint the best person for the job. We conform to the Employment Ordinance which prohibits child labour and forced labour. Following local legislation, we do not hire youths aged 15 years or younger, nor students aged 18 or younger. We also comply with the Disability Discrimination Ordinance and the Code of Practice on Employment issued by the Equal Opportunities Commission upon employment of the disabled.

Being an equal opportunities employer, we are committed to eliminating discrimination in employment particularly in terms of disability, sex, marital status, pregnancy, age, family status, sexual orientation and race. To encourage integration of the disabled into the community, proper preference for job appointments is given to disabled persons if they are found suitable for employment.

In 2007, there were no significant incidents within our department related to discrimination, activities against freedom, child labour, forced labour or corruption.

Sustainable Workplace

Staff Relations

Good staff relations not only create a harmonious working atmosphere, but also improve communication and overall departmental productivity.

Communication

Two-way communication between the management and our staff is actively encouraged. Staff members are consulted on matters that affect them mainly through the Departmental Consultative Committee, DCC, and the Joint Staff Consultation Group, JSCG.

The DCC is chaired by our Deputy Director with staff representatives' participation. The Group meets on a quarterly basis and provides open dialogue on matters such as promotions, recruitment and office accommodation.

In other circumstances, the JCSG, which also contains management and staff members, serves as an interactive platform for discussion on issues relating to any restructuring of the Department.

With the support of the Civil Service Bureau, we also have a dedicated Staff Relations Unit that co-ordinates our staff relations' matters, staff welfare and motivation schemes. An internal newsletter "ArchSD Express" is published regularly to inform our staff on various issues such as departmental changes, government initiatives, and news on volunteer and recreational activities.

Tai Chi class for staff

Employee Rights

According to the Article 27 of Hong Kong's Basic Law supplemented with the Employment Ordinance, Hong Kong residents, including our staff, are guaranteed to have freedom of association and the freedom to form and join trade unions.

We fully support our staff to join employee-based organisations. There are nine staff unions within the department, these include ArchSD Architect's Association, Arch SD Quantity Surveyors' Association, Arch SD Structural Engineers' Association, Arch SD Maintenance Surveyors' Association, Arch SD Landscape Architects Association,

Government Arch SD Employees Association, Arch SD Site Supervisory Staff Association, Hong Kong Chinese Civil Servant's Association Technical Officer (Architectural) Branch, and Public Services Employees General Union (PSEGU) – Government ArchSD Technical Officer (BS&EM) Unit.

Over 20% of our staff are registered as members of the Arch SD Staff Association. All activities organised by the Staff Association are eligible not only to members, but also to all staff and families, as well as retired colleagues. Throughout the year, various sports and recreational activities are arranged by them to foster good staff relationships and to encourage members to have a healthy work-life balance.

Annual Dinner 2007

Director's Cup Soccer Tournament 2007

Dragon Boat teams participated in the Shatin races in June 2007

One Day Eco Tour to Tung Ping Chau and Double Haven

Sustainable Workplace

Staff Development

It is always important to maintain our staff competency and performance at a high standard in order to deliver professional services to our stakeholders.

Skill Management and Lifelong Learning Programme

We are pledged to provide our staff with on-going training opportunities that would equip them with the necessary skills, knowledge and mindset. We provide vocational training for meeting job-related needs and management training for acquiring leadership skills. In 2007, the following training exercises were organised:

- Integrity Management Training Workshops
- Team Building Workshops
- Seminars on Stress Management
- Management Development Programmes
- Advanced Management Workshops for Directorate Officers
- Supervision of Tree Works
- Training Course for Certified Workers of Confined Space Operation
- Basic Accident Prevention Course
- Occupational Safety and Health Management Course

In 2007, arrangements were made for about 2,600 trainee number to participate in a variety of over 200 training events and activities organized both internally and externally. The average training time per employee in 2007 was about 12.75 hours.

Training type	No. of trainees	No. of training hours
Leadership & Management	7	666
Professional & Vocational	2,160	18,162
Career Development	430	3,690

Staff Motivation Scheme

Since 1993, a Staff Motivation Scheme has been implemented with the objective of fostering a sense of belonging among staff and of achieving greater efficiency and productivity. In 2007, we invited staff to participate in various presentations and competitions on debate, project programming, slogan and an environment, health and safety poster design.

Staff Motivation Scheme Awards

Performance Review

From time to time, our Director acknowledges staff for their consistent outstanding performance and valuable contributions to the department.

Recipients of the Director's Commendation Letter 2007

Our staff, Mr. LAM Man-tim, John, received the "Award for Public Organization (Complaint-related)" from the Ombudsman at the Award Presentation Ceremony in 2007

The performance of all our staff is reviewed annually. It aims to identify the effectiveness of the objectives and expectation of the job, motivate staff to perform better, improve communication and identify any constraints from achieving these targets. The review covers the strengths and weaknesses of the staff member and the career development and training needs to fulfil departmental objectives. It also forms the basis for manpower planning and career advancement.

Sustainable Workplace

Green and Healthy Office

Following the implementation of our integrated management system, we pursue best practices in maintaining a green and healthy office.

Paper Conservation

Paper is the major resource used in our offices, and its usage is monitored to find any possible opportunities to reduce its consumption. In 2007, an Electronic Document Management System (eDMS) was introduced to our offices. The eDMS is a Content Collaboration System that is designed for managing the incoming and outgoing correspondence in a paperless way.

In 2007, we also increased our purchasing of recycled A3 and A4 size paper to 91.8% of the total purchased paper. We also expanded our ongoing green practices by issuing a more stringent guideline on minimising woodfree paper[4] usage.

Energy Efficiency

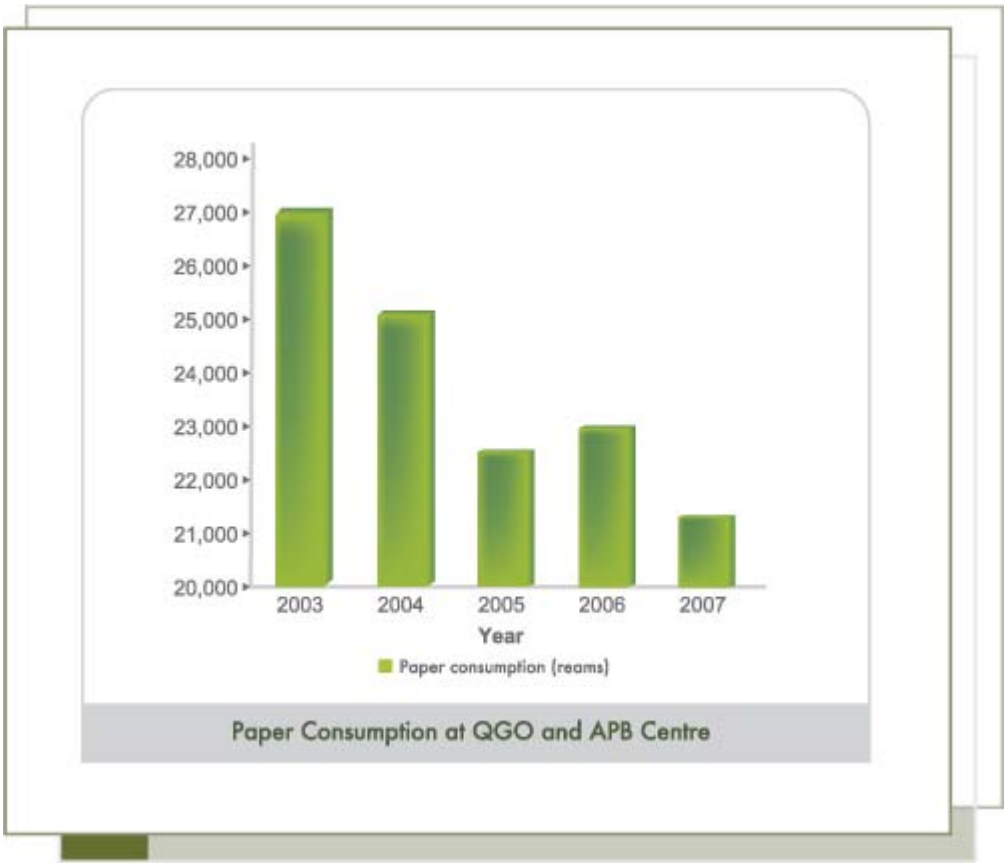
Energy conservation is always a priority in our green agenda. The last phase of replacement of the lighting system by use of T5 fluorescent tubes and motion sensors was completed in July. In addition, various energy saving initiatives were implemented in our offices in 2007 such as the installation of timer switches to turn off office equipment after working hours and the installation of occupancy sensors for switching off lighting at APB Centre.

Our team of Energy Wardens is responsible for watching over the implementation of various energy saving initiatives through a bi-weekly checking exercise that was initiated in early 2007. This exercise not only strengthened overall staff awareness on energy saving, but also helped to identify areas for further improvement.

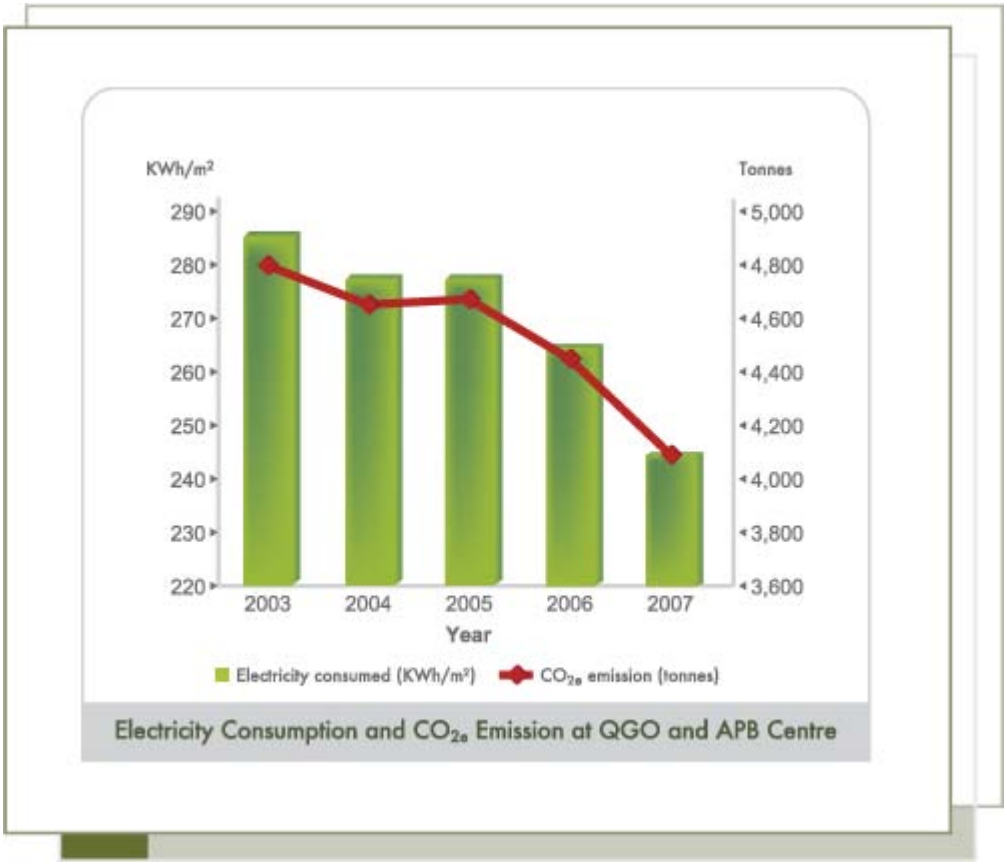
Meeting the Targets

In financial year 2002-03, the Government decided that by 2006-07, it would reduce its power consumption by 6% and its consumption of photocopying paper by 10%. Moreover, annual electricity consumption in all government office buildings was required to be reduced by 1.5% annually from 2003. All bureaux and departments were encouraged to achieve these targets.

In 2007, we attained all reduction targets by achieving 21% saving compared to paper consumed in 2003 (both A3 and A4 size); and a significant reduction of 14% in electricity consumption in 2007 as compared with 2003.



Paper Consumption at QGO and APB Centre

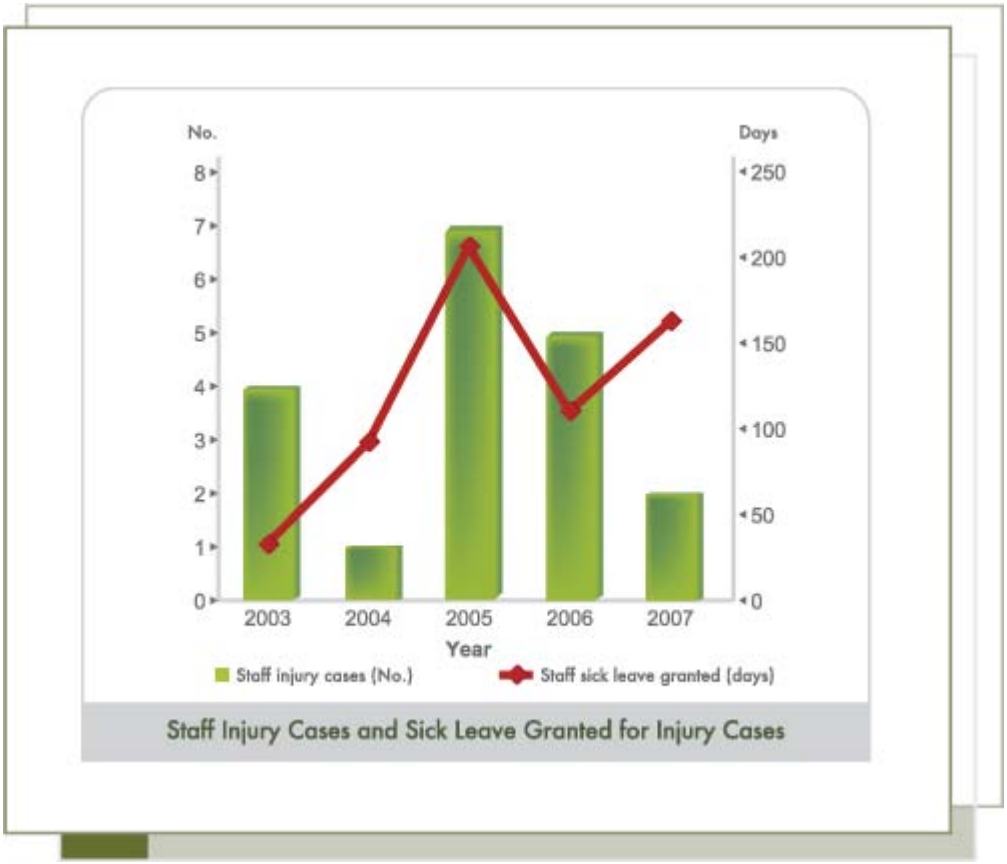


Electricity Consumption and CO_{2e} Emission at QGO and APB Centre

Improvement in Occupational Health and Safety

Following the implementation of the occupational health and safety management system in 2005, the number of staff injury cases continued to decrease for the third consecutive year as a result of enhanced employee awareness

on health and safety issues. In addition, our staff also attended seminars organised by Civil Services Bureau in Prevention of Musculoskeletal Disorders for better understanding on main causes of musculoskeletal disorders and preventive measures such as proper posture, workstation design, administrative control, relaxation exercise and etc.



Staff Injury Cases and Sick Leave Granted for Injury Cases

[4]Woodfree paper is a printing and writing paper which contains little or no mechanical woodpulp.

Community Involvement

Caring for our community is our duty as a responsible public agency. We share our experience and interests with our partners in the construction sector, people with different abilities and the general public.

The following sections will discuss some of these major achievements.

- Sharing with Industry – displays our past year's activities and publications in sharing our knowledge with local, regional and international industries.
- Community Relations – interfaces with the community including community and volunteer work.

Community Involvement

Sharing with Industry

Engaging our key stakeholders in the construction industry ensures not only the improvement of our services, but also overall standards of the local construction sector.

Engaging with External Initiatives

We take a proactive approach in involving local and international sustainability initiatives. The websites of these initiatives and associations are provided as follows:

Sustainability Initiatives:

Clean Air Charter – Hong Kong based
Volunteer Movement – Hong Kong based
Global Reporting Initiatives – The Netherlands based

Membership Entries:

Hong Kong Institute of Architects – Hong Kong based
Hong Kong Institution of Engineers – Hong Kong based
The Hong Kong Institute of Surveyors – Hong Kong based
Institution of Structural Engineers – United Kingdom based
The Chartered Institution of Building Services Engineers – United Kingdom based
Royal Institution of Chartered Surveyors – United Kingdom based
Chartered Institute of Architectural Technologists – United Kingdom based
American Society of Heating, Refrigerating and Air-Conditioning Engineers – The United States based
International Council for Research and Innovation in Building and Construction – The Netherlands based

Experience Sharing

Highlights of the 2007 events in which we participated:

- Speech on "At the Crossroads for Sustainable Urban Development" at the Hong Kong Institution of Engineers (HKIE) Building Division Annual Dinner by our Director in May 2007;
- Speech at the programme "Hong Kong Letter" of Radio Television Hong Kong by our Director in June 2007; and
- Speech on "To Build and Keen to be Green" at the Hong Kong Construction Association (HKCA) Luncheon by our Director in June 2007.

Representatives from Shenzhen government departments visited ArchSD for two-weeks under the Mainland and Hong Kong Staff Exchange Programme.

List of Selected Presentation in 2007

Presentation Topic	Presented in Conference / Seminar / Workshop
Hong Kong Wetland Park - a Multidisciplinary Exercise in Sustainability	Wetland Link International Asia Symposium (Agriculture, Fisheries and Conservation Department) January 2007, Hong Kong
Hong Kong Wetland Park – a Multi-disciplinary Exercise in Sustainability	Joint Hong Kong Institution of Engineers (HKIE) / The Hong Kong Institute of Landscape Architects (HKILA) CPD Event March 2007, Hong Kong
Free Air Cooling and its Application in Hong Kong	Zhejiang-Hong Kong Joint Symposium 2007 July 2007, Hangzhou, China
Sustainable Building Design by ArchSD	Joint Hong Kong and Hangzhou Seminar for Sustainable Building, Hangzhou 2007 (Hong Kong Professional Green Building Council HKPBGC and Zhejiang University) September 2007, Hangzhou, China
Sustainable Design – Ideas Illustrated by the new EMSD Headquarters Building	Hong Kong Institute of Surveyors (HKIS) Building Surveyors Conference – Future Development in Hong Kong - Foresight, Innovation & Sustainability September 2007, Hong Kong
Study on Application of Green Roof in Hong Kong	Briefing Seminar to Joint Professional Institutes (HKIA, HKILA, HKIE, HKIS, HKIP and HKPBGC) September 2007, Hong Kong
Green Construction	The Environmental Council of Macau Special Administrative Region October 2007, Macau SAR
Application of Renewable Energy at HKSAR Government Buildings	Science in the Public Service (Hong Kong Observatory) November 2007, Hong Kong
Methodology and Experience in Post Occupancy Evaluation of Government Projects	Sustainable Building Conference 07 (HKPBGC) December 2007, Hong Kong

List of Selected Papers Completed in 2007

Paper Topic	Presented in Conference / Seminar / Workshop
Enhancing Energy Efficiency of Built Environment through Daylighting	International Conference on Climate Change May 2007, Hong Kong
Development and Applications of the Total Energy Heat Pump in ArchSD Projects	Seminar on Advanced Heat Pump Technologies 2007 by China Light Power Company Ltd. June 2007, Hong Kong
Free Air Cooling and its Application in Hong Kong	Zhejiang-Hong Kong Joint Symposium 2007 – Innovative Building Design and Technology-Challenges of Climate Change July 2007, Hangzhou, China
Emergency Egress Lighting Design for Government Projects	The International Conference on Electrical Engineering 2007 July 2007, Hong Kong
Overview of Building Integrated Photovoltaic Installation in Hong Kong Government Building	Conference on Sustainable Building South-East Asia November 2007, Kuala Lumpur
Asset Management and Energy Usage Analysis though Web-based Monitoring System	Hong Kong Joint Symposium 2007 November 2007, Hong Kong
Methodology and Experience in Post Occupancy Evaluation of Government Projects	The Hong Kong Regional Sustainable Building Conference 2007 December 2007, Hong Kong

A Visit by a group of academics from the National University of Singapore

Community Involvement

Community Relations

Our contribution to society is not just limited to our building sustainable public facilities, but also includes our initiatives to support needy groups through community service.

Volunteer Service

Our ArchSD Volunteer Service Team was founded in 2003. Since then, it has carried out many hours of volunteer service in renovation work for elderly singletons; home visits; performances for residents of elderly centres and disabled persons' homes; taking the residents out to shopping malls, beaches and teahouses; teaching Tai Chi; knitting of well-wish knots and others.

Our Volunteer Service Team was one of a few government departments presented with a Certificate of Recognition for sustained community contributions by the Tung Wah Group of Hospitals in a ceremony on 1 February 2007.

Our team visited the TWGHs Hui Mok Tak Yu Care and Attention Home in Sheung Wan and hosted a variety show for the residents' enjoyment

Jointly organised with Civil Service Bureau and the Tung Wah Group of Hospitals, 240 volunteers from 33 government departments redecorated 40 homes of elderly singletons in Eastern District

Civil Service Volunteer Action

To celebrate the 10th Anniversary of the establishment of the HKSAR, the Civil Service Bureau initiated a campaign called "Civil Service Volunteer Action" encouraging civil servants to take part in voluntary work during their spare time. The theme of the campaign included the sharing of our work with the community and the promotion of protecting and conserving our environment.

Staff from ArchSD, Civil Service Bureau and Agricultural, Fisheries and Conservation Department briefed civil service volunteers on sustainable construction at the Wetland Park

Charity Activities

Our staff also supports local charity organisations both practically and financially through a variety of activities such as Dress Special Day, Skip Lunch Day, and TrailWalker.

A total of 14 colleagues formed 4 teams to participate in Trailwalker 2007. One of the teams completed the walk in 28 hours and 48 minutes!

Certificate of Appreciation presented by Community Chest for our contributions in 2007/08.

Performance Summary

Resources

⬇21% saving in paper consumption = saving 28 trees

⬇14% saving in electricity consumption = reduction in 1,258 tonnes CO_2e emission or the planting of nearly 55,000 trees

⬆2500% increase in application of A4/A3 paper with recycled content

⬆33% increase in financial resources devoted to environmental works, whereas our Departmental funds were reduced by 6%

Waste

⬇75% less C&D waste disposed of to landfills = 1/5 Millennium Stadium of UK

Staff Development

⬆345% increase in total number of training courses arranged

Community Involvement

⬆340% increase in total number of voluntary work hours carried out by our staff

Note: All the above figures for 2007 are compared with our performance in 2003.

Performance Summary

Recognitions in 2007

Stanley Complex was highly commended at the **Chartered Institute of Architectural Technologists – 2007 Open Award in Technical Excellence** organised by Chartered Institute of Architectural Technologists (CIAT).

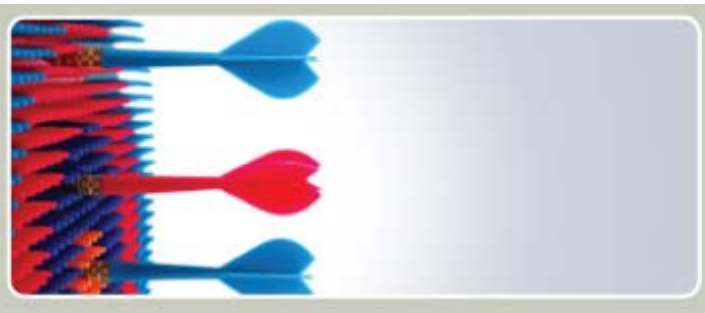
This UK-based award requires entrants to demonstrate their achievement of technical excellence in construction by illustrating the composition of ideas put into practice and presented in a working format.

New Headquarters for the Electrical and Mechanical Services Department received Honorary Mention at the **ARCASIA Awards for Architectural Excellence in Asia** organised by Architects Regional Council ASIA (ARCASIA). The award received 91 submissions from 11 institutes.

Best Design Award in the Hong Kong Flower Show 2007 organised by the Leisure and Cultural Services Department, HKSAR.

Performance Summary

Objectives and Targets Review



Environmental Objectives

Long Term Objectives	Targets for 2007	Achievement
Reduce water consumption	To install water-saving devices for 85% of sanitary appliances in new buildings	Not achieved 79.81% of sanitary appliances Due to few relevant projects encountered
Reduce energy consumption	To achieve Overall Thermal Transfer Value (OTTV) standard of less than 23 W/m^2 for 100% of all new projects with air conditioning installations; and not more than 18W/m^2 for 65% of projects	Achieved 100% for all new projects achieved with OTTV less than 23W/m^2; and 66.66% for projects achieved with less than 18W/m^2
Improve energy efficiency of building services installation	To use water-cooled heat rejection system in central air-conditioning system for at least 85% of new projects	Not achieved 75% of new projects Due to few relevant projects encountered
	To adopt Building Energy Management System for all new joint user buildings *	Achieved 100% of new joint user building projects
	To apply services-on-demand control for escalator / travellator for 60% of new projects *	Achieved 100% of new projects
	To use T5 fluorescent light for passenger lift car illumination for 60% of new projects *	Achieved 95.8% of new projects
Improve visual and air quality of our city	To landscape usable roof area /or terrace for 90% of new projects	Achieved 100% of new projects
	To incorporate landscaping in buildings for 100% of new projects	Achieved 100% of new projects
	To incorporate vertical greening in new projects *	Achieved 45.23% of new projects

Social Objectives

Long Term Objectives	Targets for 2007	Achievement
Minimising accident rate for ArchSD staff	Accident rate for ArchSD staff should be not more than 15 occupational injuries per 1,000 staff per year	Achieved 1.1 occupational injuries per 1,000 staff per year
Minimising accident rate in ArchSD contracts	Accident rate in ArchSD contracts should be less than 0.75 reportable accident per 100,000 man-hours worked	Achieved 0.43 reportable accident per 100,000 man-hours worked
Maintaining safety and health awareness of professional, technical and site supervisory staff, consultants and contractors with in-house briefing	To organise at least four in-house workshops on safety and health	Achieved Five in-house workshops / seminars were organised with a total of 229 attendants
Encourage practice of environmental protection measures and communicate our environmental policy to other Government departments / organisations	To record and monitor general technical advice on environmental protection measures	Achieved 1,916 environmental advices were given to various Government departments / organisations
Promote environmental awareness among consultants, contractors & the public	To promote the concept of environmental protection to the public through knowledge sharing in ArchSD website	Achieved Study on Green Roof Application in Hong Kong Final Report Green Contractor Award 2006
Provide continuous training to staff on matters related to environmental issues	To organise staff participation in courses / seminars / visits related to environmental issues	Achieved 18 external events were attended by staff More information can be found in Sharing with Industry
Strengthen health and safety knowledge for project staff with external training	At least 70% of site supervisory staff to attend safety course on "Basic Accident Prevention" and "Occupational Safety & Health Management"	Achieved A total of 1,213 places for different kinds of safety and environmental courses had been attended / arranged.
Improve the quality of our services and project delivery	To achieve 92% of the completed projects with at least Satisfactory Level or above on the overall performance in Client Satisfaction Survey	Achieved 100% of completed projects

Economic Objectives

Long Term Objectives	Targets for 2007	Achievement
Improve the quality of our services and project delivery	To ensure timely delivery of at least 80% of Capital Projects	Achieved 100% of projects met the target
	To monitor and ensure the expenditure on Public Works Programme projects not to exceed 5% under-spending and 10% over-spending of the budgeted amount	Achieved 0.6% over-spending
	To harness the resources of the private sector through outsourcing of public projects	Achieved 89.7% value of capital works projects was outsourced

* New targets in 2007

Performance Summary

Performance Data

Environmental Performance

Resources Usage – Energy

	Units	2007	2006	2005	2004	2003
Electricity consumed (QGO and APB Centre) [1]	kWh/m^2	245	265.2	277.5	277.5	285.6
CO_2 emission equivalent to electricity consumption (QGO and APB Centre) [2]	Tonnes CO_2e	4,089	4,644	4,858	5,130	5,347
Building with OTTV less than 23W/m^2	% & no. of total no. of projects	100% & 15 of 15	100% & 7 of 7	100% & 11 of 11	100% & 10 of 10	100% & 14 of 14
Building with OTTV less than 18W/m^2	% & no. of total no. of projects	66.7% & 10 of 15	85.7% & 6 of 7	63.6% & 7 of 11	70% & 7 of 10	36% & 5 of 14
Energy saved due to energy efficient installations	GWh	4.9	39	84	119	108
Equivalent monetary savings	HK$ million	4.9	39	84	119	108
Avoided CO_2 emissions [3][4]	in ,000 Tonnes CO_2-e	3.43	27.3	58.8	83.3	75.6

[1] Offices in QGO and APB Centre represent 94% of total ArchSD office space.

[2] Power-company specific GHG emission factors were used based on the Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for buildings (Commercial, Residential or Institutional Purpose) in Hong Kong issued by the Environmental Protection Department, HKSAR in July 2008. Previous data were adjusted accordingly.

[3] Territory-wide default GHG emission factor 0.7 tonnes / MWh was used based on the Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for buildings (Commercial, Residential or Institutional Purpose) in Hong Kong issued by the Environmental Protection Department, HKSAR in July 2008.

[4] A revised baseline for calculating the estimated energy saved was adopted in 2007 by taking into the account of the requirements of the BEC 2007 Edition and also the technological development. Direct comparison of data before and after 2007 is therefore inappropriate.

Resource Usage – Fuel

	Units	2007	2006	2005	2004	2003
Fuel consumption by ArchSD's pool cars	Litre	18,690	19,639	24,169	N/A	N/A
GHG emission equivalent to fuel consumption by ArchSD pool cars [5]	Tonnes CO_2e	44.1	46.4	57.1	N/A	N/A

[5] GHG emission factors for mobile combustion are based on the Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for buildings (Commercial, Residential or Institutional Purpose) in Hong Kong issued by the Environmental Protection Department, HKSAR in July 2008. Previous data were adjusted accordingly.

Resource Usage – Non-Ozone Depleting Substances

	Units	2007	2006	2005	2004	2003
Refrigerants installed	No. of application	11	23	26	47	34
Fire extinguishing agents	No. of application	5	4	11	8	9

Resource Usage – Office Materials

	Units	2007	2006	2005	2004	2003
A4 paper consumption	Reams	20,263	21,765	21,182	23,700	25,238
A3 paper consumption	Reams	1,063	1,241	1,378	1,417	1,822
Envelop consumption	Number	55,323	70,812	77,119	65,818	63,324
A4/A3 paper with recycled content consumption	Reams / % of total paper purchased	18,515 / 91.8%	18,984 / 79.5%	12,622 / 64.2%	5,753 / 21.3%	700 / 2.8%
Types of eco-friendly office consumables	Types	13	13	13	18	17

Resource Usage – Timber & Water Use

	Units	2007	2006	2005	2004	2003
Timber saving	Volume of Timber Saved in m^3 (Ratio Normalised [6] by Contract Value)	1,424.29 (0.22)	284.69 (0.20)	1,382 (0.56)	1,461 (0.46)	1,566 (0.29)
Water saving	No. of Water-saving Sanitary Appliances (Ratio Normalised by Contract Value)	6,254 (0.94)	1,473 (1.00)	2,831 (1.15)	3,312 (1.29)	3,760 (0.71)

[6] The normalised ratio is an indication of the extent ArchSD has improved in an area after taking into account the changes in contract value each year, so as to facilitate better comparisons over time. Such data in 2004 & 2005 are re-adjusted due to incorporation of data from all contract works, also including works for maintenance and improvement.

Waste Management

	Units	2007	2006	2005	2004	2003
Construction & demolition materials						
C&D waste disposed of to landfills	Tonnes	24,952	46,858	76,536	96,793	107,126
C&D materials disposed of to public fill areas	Tonnes	564,284	206,209	585,447	651,057	616,664
Recyclable waste collected at APB Centre						
Waste paper	kg	2,286	2,475	4,570	6,859	5,600
Aluminium cans	No.	231	220	254	546	1,248
Plastic bottles	No.	250	265	424	629	1,113

Environmental Convictions of Contractors

	Units	2007	2006	2005	2004	2003
Convictions per 100,000 man-hours	ArchSD sites (HK sites)	0.424 (0.546)	0.140 (0.518)	0.231 (0.417)	0.515 (0.848)	0.307 (0.953)

Environmental Expenditure

	Units	2007	2006	2005	2004	2003
Resources devoted to environmental works	Value ($ million)	639.7	639.45	664.1	675.3	480.0
Percentage of annual expenditure		8.0%	7.1%	6.0%	5.2%	4.1%

Social Performance

Staff

	Units	2007	2006	2005	2004	2003
Staff establishment (As at March 31 each year)	No.	1,766	1,813	1,887	1,981	2,037
Trainee number	No.	2,597	2,548	1,255	1,293	4,323
No. of training courses (including internal and external seminars/ workshops/ training courses/ visits)	No.	207	324	180	237	60
Staff injury cases	No.	2	5	7	1	4
Staff sick leave granted for staff injury cases	Days	163	110	207.5	91	32

Contractor's Accident Rate

	Units	2007	2006	2005	2004	2003
No. of fatalities	ArchSD	0	2	3	1	1
Fatal accident rate per 100,000 man-hours	ArchSD (HK Construction Industry)	0 (0.010)	0.0085 (0.008)	0.0099 (0.012)	0.0024 (0.0072)	0.0021 (0.011)
No. of non-fatal accidents	ArchSD	93	126	185	279	330
Non-fatal accident rate per 100,000 man-hours	ArchSD (HK Construction Industry)	0.44 (1.69)	0.54 (1.79)	0.61 (1.67)	0.67 (1.68)	0.68 (1.90)

Community Work

	Units	2007	2006	2005	2004	2003
Total number of voluntary work hours carried out by our staff	Hours	2,526	2,005	1,194	1,360	577
Number of active Voluntary Service Team members	No.	35 out of 1,766	35 out of 1,699	47 out of 1,813	41 out of 1,887	33 out of 1,981
Number of staff received commendation for voluntary service	No.	20	12	14	1	6

Economic Performance

	Units	2007	2006	2005	2004	2003
Personal salaries and allowances	HK$ million	835.62	805.58	823.81	872.64	933.23
Personnel related expenses	HK$ million	0.68	0.70	0.75	0.81	1.09
Departmental expenses	HK$ million	94.01	65.15	66.69	68.69	78.31
Other charges	HK$ million	469.02	475.33	475.63	480.02	478.70

Priorities in 2008

Energy Efficiency

We share the rising concern of climate change as one of the top priorities in the international community. As the public works agent in Hong Kong, it is our responsibility to deliver "climate friendly" services and facilities in order to alleviate the burden on our delicate environment. We will support the HKSAR Government on the proposed mandatory implementation of the Building Energy Codes by means of legislation. We will also set an example by conducting a Carbon Audit in the new Central Government Complex at Tamar.

Greener Buildings

A comprehensive review of the General Specification for Building and a series of General Specification for building services installations in Government Buildings of the HKSAR, and green roofing consultancy study were completed in 2007. The subsequent development projects will incorporate the updated environmental requirements, energy efficient installations, and greening work to bring about environmental, social and economic benefits in the community. We will also endeavour to pursue local and international recognitions in sustainability.

Heritage Conservation

Sustainable development for the community is not only focused on strengthening our efforts in environmental protection, but also on conserving our unique heritage through the preservation and revitalisation of historic buildings. We will examine the opportunities to revitalise these buildings in order that they may become an integral and lively part of the local community, which in turn will generate wider social and economic benefits.

Report Assurance

Hong Kong Productivity Council (HKPC) was commissioned by the Architectural Services Department (ArchSD) to verify its Sustainability Report 2008 (SR 2008). The SR 2008 Report covers the economic, environmental and social performance of ArchSD during the calendar year of 2007.

Hong Kong Productivity Council 香港生產力促進局

Objectives

The objective of HKPC's verification work is to provide a third-party assurance on the completeness, accuracy and reliability of information presented in the SR 2008 and, more specifically, to:

- Assess whether the scope of the SR 2008 covers all significant aspects in relation to ArchSD's performance;
- Evaluate whether the selected statements and data presented in the SR 2008 are accurate;
- Review whether the data collection and information management mechanisms used to prepare the SR 2008 are reliable;
- Provide independent opinions on the conformance of the SR 2008 to the A+ Application Level of the Global Reporting Initiative (GRI) G3 Guidelines; and
- Provide recommendations for future reports.

Approach

Our verification procedures comprised a comprehensive review of the SR 2008 followed by the selection of a representative sample of statements and data for verification. Through a series of interviews with ArchSD's representatives, we reviewed and examined the data collation systems and supporting materials relating to the selected statements and data as well as ArchSD's relevant management practices and initiatives.

Results

Report Completeness

The SR 2008 presents a structured and balanced overview of ArchSD's economic, environmental and social performance with respect to its major services, activities and initiatives. The SR 2008 clearly illustrates ArchSD's sustainability initiatives through a life cycle assessment approach and case studies.

The SR 2008 conforms to A+ Application Level of GRI G3 Guidelines and has reported six more GRI indicators compared with the last year report.

Report Accuracy and Reliability

The selected statements and data examined during the verification process, with minor amendments subsequently made, are consistent with the source materials reviewed. It reflects a fair and accurate account of ArchSD's economic, environmental and social performance. The data collation and information management systems adopted are considered to be effective, reliable and organized.

Recommendations for Future Reports

ArchSD is commended for providing extensive internet links in the SR 2008 to direct readers to a variety of information sources for further details in specific areas of interest. We encourage ArchSD to consider the inclusion of the following aspects in the preparation of its future reports:

- To engage stakeholders in the reporting process;
- To report the progress of more annual targets and provide an overview of achievements on all annual sustainability targets; and
- To continue enhancing the data collection mechanism to enable reporting of all core GRI indicators, in addition to the six newly reported indicators, in future reports.

K L Tsang General Manager
Environmental Management Division
Hong Kong Productivity Council
12 December 2008

GRI Content Index

The GRI's G3 Guidelines recommended reporting elements are represented below and provided with either linkage to the reported section(s) or explanation for omission. Our performance is characterised by reporting on all the core GRI performance indicators and also some additional indicators defined by G3 and the Sector Supplement for Public Agencies under the area of Economic (EC), Environmental (EN), Labour (LA), Human Rights (HR), Society (SO), and Product Responsibility (PR).

Additional indicators

We only report on EN5, EN6, EN18, EN30, LA11 and LA12 as additional GRI indicators.

Reported		Not Reported	
Partially Reported		**Text in Green**	Link to Reported Section

	GRI Element (Link to Reported Section)	Reporting Status	Comment
1.	**Strategy and Analysis**		
1.1	Statement from the most senior decision-maker of the organisation about the relevance of sustainability to the organisation and its strategy		
1.2	Description of key impacts, risks, and opportunities		
2.	**Profile**		
	Organisational Profile		
2.1	Name of the organisation		
2.2	Primary brands, products and services		
2.3	Operational structure of the organisation		
2.4	Location of organisation's Headquarters		
2.5	Number of countries where the organisation operates		
2.6	Nature of ownership and legal form		Part of the Hong Kong SAR Government
2.7	Markets served		
2.8	Scale of the reporting organisation		
2.9	Significant changes during the reporting period regarding size, structure, or ownership		
2.10	Awards received in the reporting period		
3.	**Reporting Parameters**		
	Report Profile		
3.1	Reporting period		
3.2	Date of most recent previous report (if any)		
3.3	Reporting Cycle		
3.4	Contact point for questions regarding the report or its contents		
	Report Scope and Boundary		
3.5	Process for defining report, including determining materiality, prioritising topics within the report, identifying stakeholders the organisation expects to		

	use the report		
3.6	Boundaries of the report	≡	
3.7	State any specific limitations on the scope or boundary of the report	≡	No specific limitations
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities	≡	No joint ventures
3.9	Data measurement techniques and the bases of calculations	≡	
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	≡	No re-statements
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	≡	No significant changes
	GRI Content Index		
3.12	Table identifying the location of the Standard Disclosures in the report	≡	
	Assurance		
3.13	Policy and current practice with regard to seeking external assurance for the report About this report Report Assurance	≡	
4.	**Governance Structure and Management Systems**		
	Governance		
4.1	Governance structure of the organisation	≡	
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	≡	Development Bureau, led by Secretary for Development, is the highest governance body for ArchSD, which is led by Director of Architectural Services
4.3	For organisations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members	Not applicable	Within the HKSAR Government, it does not adopt unitary board structure. Development Bureau is the highest governance body for ArchSD
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body Strategy and Management Staff Relations	≡	Apart from our employees, Development Bureau also obtains feedbacks from general public and other stakeholders regularly
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives, and the organization's performance	≡	The appointment and promotion of senior management are to be advised by the independent Public Service Commission in accordance to the Public Service Commission Ordinance
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	≡	No specific processes for the highest government body All government departments follow internal circulars
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organisation's strategy on economic, environmental, and social topics	≡	The appointment and promotion of senior civil servants are to be advised by the independent Public Service Commission in accordance to the Public Service Commission Ordinance
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	≡	
4.9	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	≡	
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	≡	Audit Commission and the Legislative Council act as the evaluation framework for general performance of Government,

			including Development Bureau
	Commitments to External Initiatives		
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organisation Strategy and Management Project Planning		
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organisation subscribes or endorses		
4.13	Memberships in associations and/or national/international advocacy organisations		
	Stakeholder Engagement		
4.14	List of stakeholder groups engaged by the organisation		
4.15	Basis for identification and selection of stakeholders with whom to engage		
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group		
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting About this Report Strategy and Management		
	Public Agency Specific		
PA1	Describe the relationship to other governments or public authorities and the position of the agency within its immediate governmental structures The Department Strategy and Management		
PA2	State the definition of sustainable development used by the public agency, and identify any statements or principles adopted to guide sustainable development policies		
PA3	Identify the aspects for which the organisation has established sustainable development policies		
PA4	Identify the specific goals of the organisation for the each aspects listed in PA3 Strategy and Management Objectives and Targets Review		
PA5	Describe the process by which the aspects and goals in both PA3 and PA4 were set		
PA6	Monitoring of each goal		
PA7	Describe the role of and engagement with stakeholders with respect to the items disclosed in PA6		
	ECONOMIC PERFORMANCE INDICATORS		
	Disclosure on Management Approach (Economic) Departmental Funds The Department Strategy and Management		Legislative Council examines and approves departmental budget. Audit Commission conducts regulatory audits and value for money audit, which provides information for Legislative Council to evaluate ArchSD's financial performance
	I. Economic Performance		
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments		No direct economic value generated
EC2	Financial implications and other risks and opportunities for the organisation's activities due to		

	climate change		
EC3	Coverage of the organisation's defined benefit plan obligations Human Resources Performance Data		No direct economic value generated
EC4	Significant financial assistance received from government		No subsidies but direct public fund from government
	II. Market Presence		
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation		No direct economic value generated
EC7	Procedure for local hiring, and proportion of senior management hired from the local community at locations of significant operation		In accordance with Article 99 of the Basic law, new recruits appointed to the Civil Service on or after 1 July 1997 must be permanent residents
	III. Indirect Economic Impacts		
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in kind, or pro bono engagement		Our operations do not involve with infrastructure investments
	IV. Expenditures (Public Agency)		
PA8	Gross expenditures broken down by type of payment Departmental Funds Performance Data		
PA9	Gross expenditures broken down by financial classification		
PA10	Capital expenditures by financial classification		
PA11	Describe procurement policy of the public agency as relates to sustainable development Project Planning Project Procurement		
PA12	Describe economic, environmental, and social criteria that apply to expenditures and financial commitments		
PA13	Describe linkages between the public agency's procurement practices and its public policy priorities Project Planning Project Procurement		
PA14	Percentage of the total value of goods purchased that were registered with voluntary environmental or social labels and/or certification programmes, broken down by type		
	ENVIRONMENTAL PERFORMANCE INDICATORS		
	Disclosure on Management Approach (Environment)		
	I. Materials		
EN1	Materials used by weight or volume Green and Healthy Office Performance Data		
EN2	Percentage of materials used that are recycled input materials		
	II. Energy		
EN3	Direct energy consumption by primary energy source		
EN4	Indirect energy consumption by primary source Green and Healthy Office Performance Data		
EN5	Energy saved due to conservation and efficiency improvements Green and Healthy Office		

	Performance Data		
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives Building Energy Efficiency Project Design		
	III. Water		
EN8	Total water withdrawal by source	✕	No measurement mechanism in place as not necessary to pay for water usage but will investigate opportunity to have separate meters and provide information in future reports by mid-term
	IV. Biodiversity		
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		No data is available because all our projects in 2007 were situated in developed areas and had no significant impact on their sites' biodiversity. But will consider to provide information in future reports if our projects have significant impacts.
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas		No data is available because all our projects in 2007 were situated in developed areas and had no significant impact on their sites' biodiversity. But will consider to provide information in future reports if our projects have significant impacts.
	V. Emissions, Effluents, and Waste		
EN16	Total direct and indirect greenhouse gas emissions by weight Green and Healthy Office Performance Summary Performance Data		No data collection mechanism in place but will consider to provide information in future reports
EN17	Other relevant indirect greenhouse gas under emissions by weight evaluation	✕	No measurement mechanism in place as we have captured major direct and indirect emission. But will consider to provide information in future reports by mid-term
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved Sustainable Buildings Project Planning Project Design Project Procurement Facility Use and Maintenance Green and Healthy Office Objectives and Targets Review Energy Efficiency		No measurement mechanism in place as we have captured major direct and indirect emission
EN19	Other relevant indirect greenhouse gas under emissions by weight evaluation		We do not use any ozone-depleting substances in our refrigerants and fire extinguishing agents
EN20	NOx, SOx and other significant air emissions by type and weight		No measurement mechanism in place as we do not generate significant NOx, SOx emissions
EN21	Total water discharge by quality and destination	✕	No measurement mechanism in place, but the discharge quality and destination are parameters included in the site environment checklist and monitored during site inspection. We will report in the future by mid-term
EN22	Total weight of waste by type and disposal method Project Construction Performance Data		
EN23	Total number and volume of significant spills	✕	No measurement mechanism in place but any significant spills identified during site inspection will be recorded in site

			environment checklist. We will report in the future by short-term
	VII. Products and Services		
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation Project Procurement Facility Use and Maintenance		No measurement mechanism in place but any significant spills identified during site inspection will be recorded in site environment checklist.
EN27	Percentage of products sold and their packaging materials that are reclaimed by category		No products sold
	VIII. Compliance		
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations Project Construction Performance Data		Environmental offences of contractors show the number of cases. The total monetary value involved is $51,000.
	X. Overall		
EN30	Total environmental protection expenditures and investments by type Departmental Funds Performance Data		
	SOCIAL PERFORMANCE INDICATORS		
	Disclosure on Management Approach - Labour Strategy and Management Human Resources Staff Relations		
	Disclosure on Management Approach - Human Right Strategy and Management Conduct and Discipline		
	Disclosure on Management Approach - Society Strategy and Management Project Planning Conduct and Discipline		
	Disclosure on Management Approach - Product Responsibility		
	SOCIAL PERFORMANCE INDICATORS: LABOUR PRACTICES AND DECENT WORK		
	I. Employment		
LA1	Total workforce by employment type, employment contract, and region Human Resources Performance Data		
LA2	Total number and rate of employee turnover by age group, gender and region		
	II. Labour/ Management relations		
LA4	Percentage of employees covered by collective bargaining agreements		
LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements		Following government internal circulars, no minimum notice period is required. But staff are informed and consulted regarding significant changes beforehand, and notices are issued as soon as possible. We will report in mid-term when relevant procedures are developed.
	III. Occupational Health and Safety		
LA7	Rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities by region Green and Healthy Office Performance Data		

LA8	Education, training, counselling, prevention and risk-control programmers in place to assist workforce members, their families or community members regarding serious diseases Safer Practices Green and Healthy Office		
	IV. Training and Education		
LA10	Average hours of training per year per employee, by employee category Green and Healthy Office Performance Data		No measurement mechanism in place for identify total training hours within each employee category, but will be able to report by short-term.
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings		
LA12	Percentage of employees receiving regular performance and career development reviews		
	V. Diversity and Equal Opportunity		
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity		
LA14	Ratio of basic salary of men to women by employee category		
	SOCIAL PERFORMANCE INDICATORS: HUMAN RIGHTS		
	I. Investment and Procurement Practices		
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening		Our operations do not involve with investments
HR2	No measurement mechanism in place as it is not a formal practice in local public agency, but we award projects to contractors who do not hire illegal immigrants. All contractors are closely monitored on their convictions of employing illegal immigrants and incidents on wage disputes, and we will report in mid-term.	✗	No measurement mechanism in place as it is not a formal practice in local public agency, but we award projects to contractors who do not hire illegal immigrants. All contractors are closely monitored on their convictions of employing illegal immigrants and incidents on wage disputes, and we will report in mid-term.
	II. Non-discrimination		
HR4	Total number of incidents of discrimination and actions taken		
	III. Freedom of Association and Collective Bargaining		
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights		
	IV. Child Labour		
HR6	Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour		
	V. Forced and Compulsory Labour		
HR7	Operations identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of forced or compulsory labour		
	SOCIAL PERFORMANCE INDICATORS: SOCIETY		
	I. Community		
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting		
	II. Corruption		
SO2	Percentage and total number of business units analyzed for risks related to corruption		

	Conduct and Discipline Community Relations		
SO3	Percentage of employees trained in organisation's anti-corruption policies and procedures Conduct and Discipline Staff Development	≡	
SO4	Actions taken in response to incidents of corruption	≡	
	III. Public Policy		
SO5	Public policy positions and participation in public policy development and lobbying Project Planning Sharing with Industry Energy Efficiency	≡	
	V. Compliance		
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	≡	No significant non-compliance with laws and regulations
	SOCIAL PERFORMANCE INDICATORS: PRODUCT RESPONSIBILITY		
	I. Customer Health and Safety		
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures Safer Practices Project Design Project Procurement Project Construction Facility Use and Maintenance	≡	
	II. Products and Services Labelling		
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements Project Procurement Facility Use and Maintenance Case Studies	≡	
	III. Marketing Communication		
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	✕	As public agent, ArchSD is required to comply with all local regulations. However, there is no specific programme in Hong Kong to secure adherence to laws and guidelines related to marketing communications for public agency. We will report by long term when relevant programmes are developed.
	V. Compliance		
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	≡	No significant non-compliance with laws and regulations
	SOCIAL PERFORMANCE INDICATORS: Administrative Efficiency		
	I. Administrative Efficiency		
PR15	Results of assessments of the efficiency and effectiveness of services provided by the public agency, including the actions taken to achieve improvements in service delivery Facility Use and Maintenance Case Studies Strategy and Management	≡	

Note: For the indicators that are not applicable or not available, the reason for omission is provided for each of this indicator.

Feedback

Sustainability Report

Thank you for reading our report. Your comments and suggestions on it are important as they help us not only to improve our sustainability performance, but also to improve the quality of our next report. We would be very grateful if you could take a few minutes to complete the following form and send it back to us.

1. How strongly do you agree with the following statements about the report?

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	**Additional comments**
Most relevant issues are covered.	○	○	○	○	○	
Content is balanced and reliable.	○	○	○	○	○	
Content is clear and easy to understand.	○	○	○	○	○	
Structure and layout are rational and easy to use.	○	○	○	○	○	

2. Overall how would you rate the report?

Excellent	Good	Adequate	Marginal	Poor	**Additional comments**
○	○	○	○	○	

3. In accordance to the report, how would you rate our sustainable performance?

Excellent	Good	Adequate	Marginal	Poor	**Additional comments**
○	○	○	○	○	

4. What information would you like to see in future reports

5. Other comments:

6. Which of the following best describes you?

- ☐ Client of ArchSD
- ☐ Government Department
- ☐ Consultant / Contractor / Supplier / Construction Industry
- ☐ Architect / Engineer / Landscape Architect / Surveyor
- ☐ Environmental NGO
- ☐ Social NGO
- ☐ Academic / Education Sector
- ☐ Staff of ArchSD
- ☐ General Public
- ☐ Other

If you would like to receive future reports / information from us, please provide your contacts:

Your Name:

Your Organisation:

Your Telephone:

Your Email address:

Submit Reset

Thank you and we appreciate your feedback.
You may also print this page and fax to: +852 2596 0361 or contact our Integrated Management Unit by email to imu@archsd.gov.hk.

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