

Together
We **Build**
a **Low Carbon City**



Cruise Terminal

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Welcome to our eighth Sustainability Report, which presents our sustainable development activities and achievements in 2010. Similar to past years, we have achieved the A+ application level of the Global Reporting Initiatives' G3 guideline for this Report.

The theme of this Report is 'Together We Build a Low Carbon City'. 2010 saw a number of our initiatives that enshrined our firm commitment to serve our community in a sustainable manner, embedding our sustainable development strategies and practices into all aspects of our architectural services. To realize our mission to build a low carbon city with our stakeholders, we have expanded our services beyond a hardware provider to a more proactive advisory role on sustainable design; and by sharing our experience and expertise with our stakeholders through exhibitions, publications, presentations, workshops, conferences etc., we have moved closer towards a more sustainable future for our community.

As we entered into our 25th year of service in April 2010, we launched our 5-year Departmental Business Plan for 2010/11 to 2014/15. We have developed our new organizational structure to allow for flexibility to meet new challenges and escalating public expectations, and we have devised our new operating strategies to foster future sustainable development. The Plan represents our collective wisdom and efforts in a critical phase of our organizational restructuring, and have launched us into a journey of continuous improvement, with ongoing concerted efforts in planning, execution and review. We will continue to forge ahead with our utmost efforts to make Hong Kong our better, greener and more sustainable home.



We hope you would find this Report informative. For our continuous improvement, please share your invaluable views by completing and returning the [feedback form](#) at the end of this report.

Mrs Marigold Lau JP
Director of Architectural Services

About This Report

Reporting Objectives

In order to communicate with our stakeholders on our latest development and achievement with regard to economic, environmental and social aspects, the Architectural Services Department (ArchSD) of the Government of the Hong Kong Special Administrative Region (HKSAR) has been producing 13 reports in the past, including this eighth annual Sustainability Report.

Year 2011 marks a milestone for the 25th Anniversary of the establishment of ArchSD. We wish this annual report could provide a great opportunity not only to demonstrate our last year success with your support, but also to serve you better in the future with our continuous efforts and improvement.

Reporting Scope

The Sustainability Report 2011 ("the Report") highlights our major activities and achievements on sustainable development from 1 January 2010 to 31 December 2010.

During the year, there was no significant change in our operational size and business ownership. However, following the development of our 5-year Departmental Business Plan (DBP), we have established a new organizational structure aiming to provide rapid responses to meet the future challenges.

Data in the Report are presented as absolute figures at our best knowledge. Statistics are normalized into comparable terms where appropriate and practicable. The Report covers the performance data of our six functional branches and two Central Management Divisions, but generally excluding those from our contractors and suppliers unless otherwise stated. By adopting the same principle, qualitative information reflects the outcomes brought by our direct activities. Financial data are reported on the financial year ended 31 March 2011. All monetary values are in Hong Kong Dollars.

Reporting Principles

This report is prepared with reference to the Global Reporting Initiative (GRI) G3 Guidelines and its Sector Supplement for Public Agency as well as the Environmental Protection Department (EPD)'s "[A Guide to Environmental Reporting for Controlling Officers](#)".

The contents of this Report fulfill the requirements of "A+" application level defined in the GRI G3 Guidelines. This demonstrates the comprehensiveness and accuracy of the materials presented in the Report. The GRI Content Index correlates GRI indicators with different associated sections in the Report. An independent third-party assurance has been employed to verify the credibility and reliability of this report and ensure its attainment to "A+" level.



Statement GRI Application Level Check

GRI hereby states that Architectural Services Department (HKSARG) has presented its report "Together we build a Low Carbon City" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level A+.

GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines.

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 28 September 2011

Nelmara Arbex
Deputy Chief Executive
Global Reporting Initiative



The "+" has been added to this Application Level because Architectural Services Department (HKSARG) has submitted (part of) this report for external assurance. GRI accepts the reporter's own criteria for choosing the relevant assurance provider.

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 12 September 2011. GRI explicitly excludes the statement being applied to any later changes to such material.

Report Application Level	C	C+	B	B+	A	A+
G3 Profile Disclosures OUTPUT	Report on: 1.1 2.1 - 2.10 3.1 - 3.8, 3.10 - 3.12 4.1 - 4.4, 4.14 - 4.15		Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17		Same as requirement for Level B	
G3 Management Approach Disclosures OUTPUT	Not Required	Report Externally Assured	Management Approach Disclosures for each Indicator Category	Report Externally Assured	Management Approach Disclosures for each Indicator Category	Report Externally Assured
G3 Performance Indicators & Sector Supplement Performance Indicators OUTPUT	Report on a minimum of 10 Performance Indicators, including at least one from each of: Economic, Social and Environmental.		Report on a minimum of 20 Performance Indicators, at least one from each of Economic, Environmental, Human rights, Labor, Society, Product Responsibility.		Report on each core G3 and Sector Supplement* Indicator with due regard to the Materiality Principle by either: a) reporting on the Indicator or b) explaining the reason for its omission.	

*Sector supplement in final version

Note to Reader

This Report is published online in a web-based interactive html version, PDF version and text-only version with 3 languages (English, Traditional Chinese and Simplified Chinese).

The readability and accessibility of the Report are 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;
- Search function facilitates readers to locate any specific interested sections or information efficiently;
- "My Report" function enables readers to temporarily store any selected section(s) for consolidation and printing; and
- "Glossary" section provides technical definitions of the technical terms using in or relevant to this report.

About Us

Role and Organizational Structure

Architectural Services Department (ArchSD) is the works agent acting as an executive arm for the Government of the HKSAR for the development and upkeep of public facilities, and as corporate advisor on architectural services.



Funding and Mode of Operation

Our departmental operation is funded by the Capital Works Reserve Fund which is then approved, monitored and reviewed by the Legislative Council (LegCo).

During the financial year 2010-11, there were a total of 12,880 jobs created in relation to both new capital and minor works projects. We commenced 14 new capital projects and a substantial amount of minor works projects in 2010.

Our role to build and maintain public buildings and facilities on behalf of the Government of the HKSAR involves a considerable amount of investment in terms of financial and human resources. Though it does not easy to quantify the economic value, it would improve or enhance the quality of the services and the facilities for the benefit of the public.

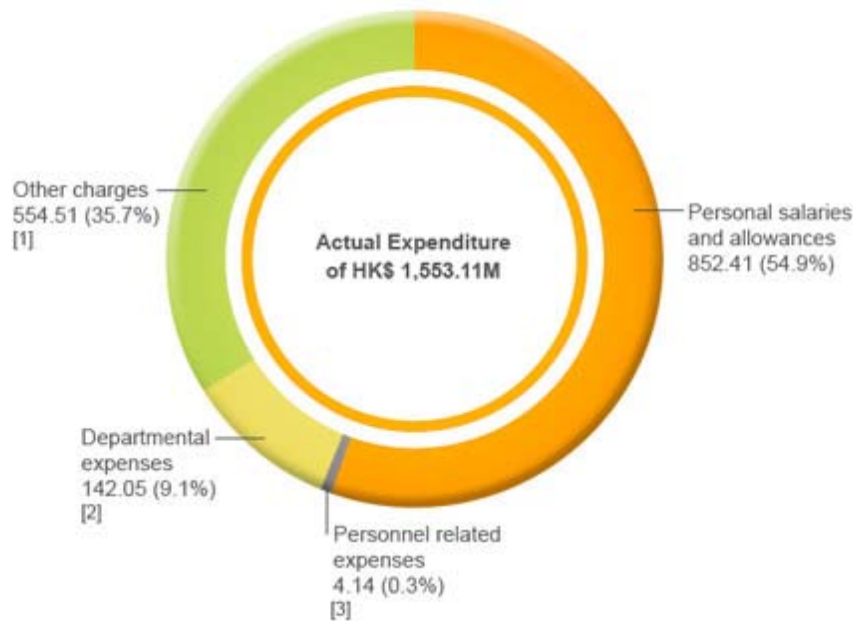
Departmental Expenditure

Comparing with the financial year 2009-10, we recorded an overall increase of around 2% [1] in departmental expenditure in the financial year 2010-11. Breakdown of our departmental expenditure and breakdown by programmes[2] in the financial year 2010-11 are provided below. Relevant information can be found from The ArchSD Controlling Officer's Report of the 2010-11 Estimates of the Government of the HKSAR available online at www.budget.gov.hk.

[1] The Departmental Expenditure 2010-2011 is HK\$1,553.11million, there is around 2% increase as comparing with the Departmental Expenditure 2009-2010 of HK\$1,525.02million.

[2] There are three programmes of ArchSD's services: Monitoring and advisory services, Facilities upkeep and Facilities development.

Departmental Expenditure in Financial Year 2010-2011

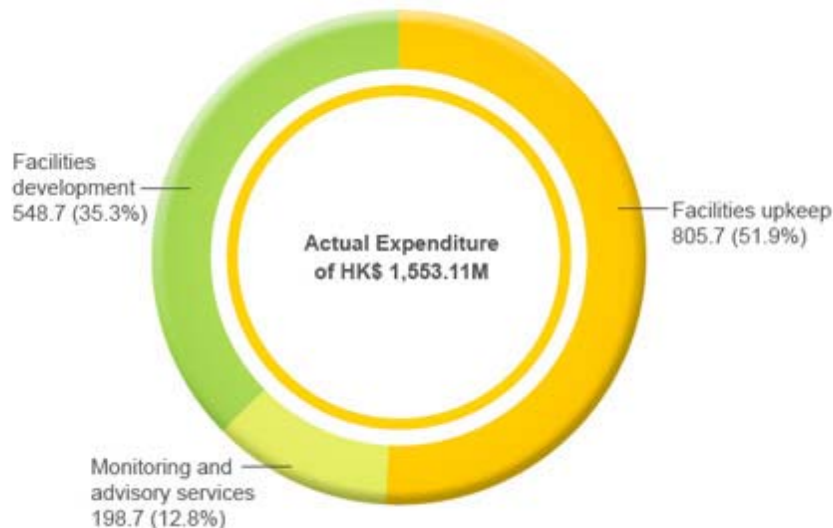


[1] Other charges are mainly the expenses on the maintenance of the government building occupied by ArchSD.

[2] Departmental expenses includes the cost of light and power, hire of services and professional fees, workshop services and general departmental expenses.

[3] Personnel related expenses include the expenses on Mandatory Provisional Fund and Civil Service Provident Fund contribution.

Expenditure Breakdown by Programmes



Key Facts

Founded on: 11 April 1986

Staff Establishment: 1,781 (as at 31 March 2011)

Headquarters: Queensway Government Offices, 66 Queensway, Hong Kong

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

Total Office Spaces: Approximately 25,000 m² (as at 31 December 2010)

Scale of Services: (from 1 January 2010 to 31 December 2010)

- Number of Subvented / Entrusted Projects Reviewed: 784
- Number of Facilities Development Projects Completed: 43
- Building Floor Area of Properties Maintained: 29,362,000 m²
- Government Spending on Facilities Development Projects: HK\$ 9,500 million
- Government Spending on Facilities Upkeep Works: HK\$ 4,258 million
- Value of the Subvented / Entrusted Projects Reviewed: HK\$ 54.24 billion
- Value of New Works under Development: HK\$ 79 billion

Our Services

The three areas of our services are:

- **Monitoring and advisory services** - to provide effective professional and technical advices to the Government and quasi-government organizations and to oversee subvented, joint-venture and entrusted projects;
- **Facilities upkeep** - to provide efficient and cost-effective professional and project management services for the maintenance and refurbishment of buildings and facilities; and
- **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.



We are committed to providing quality services to the public on the development and upkeep of government-owned buildings and facilities. We also promote green and sustainable architecture to the public for the betterment of the environment. During the year, we received the following recognitions and awards that honored our efforts in promoting sustainable development. We will continue to strive for better performance in the years to come.

China Architecture Media Awards 2010

The China Architecture Media Awards are presented biennially to outstanding construction projects located in the Mainland China, Taiwan and Hong Kong. Our project Reprovisioning of Diamond Hill Crematorium was one of the four finalists of Best Architecture Award.



Green Building Award 2010

Green Building Award is a biennial industry award jointly organized by the Hong Kong Green Building Council and the Professional Green Building Council. The Award aims to provide recognition to buildings and research projects with outstanding features and contributions in sustainability and environmental protection. It also encourages the industry in wider adoption of sustainable planning, design, construction, management, operation, maintenance, renovation and decommissioning of buildings.

In 2010, three of our projects were received recognitions in the Green Building Award.

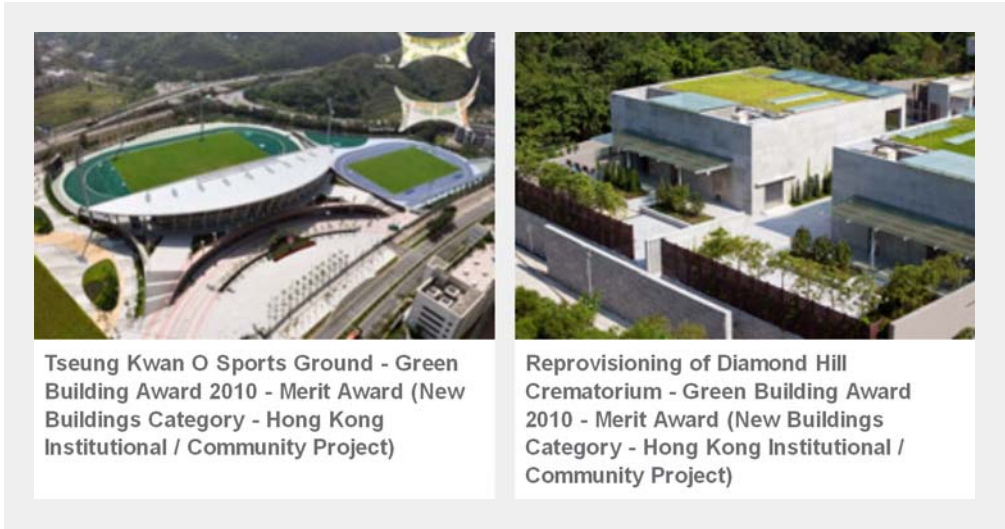
Redevelopment of Lo Wu Correctional Institution won the Grand Award under the New Buildings Category - Hong Kong Institutional / Community Project. The project featured the integration of various environmental measures in the building design and also in the construction stage.



Redevelopment of Lo Wu Correctional Institution - Green Building Award 2010 - Grand Award(New Buildings Category - Hong Kong Institutional / Community Project)

Architectural Services Department - Sustainability Report 2011 - Recognitions and Awards

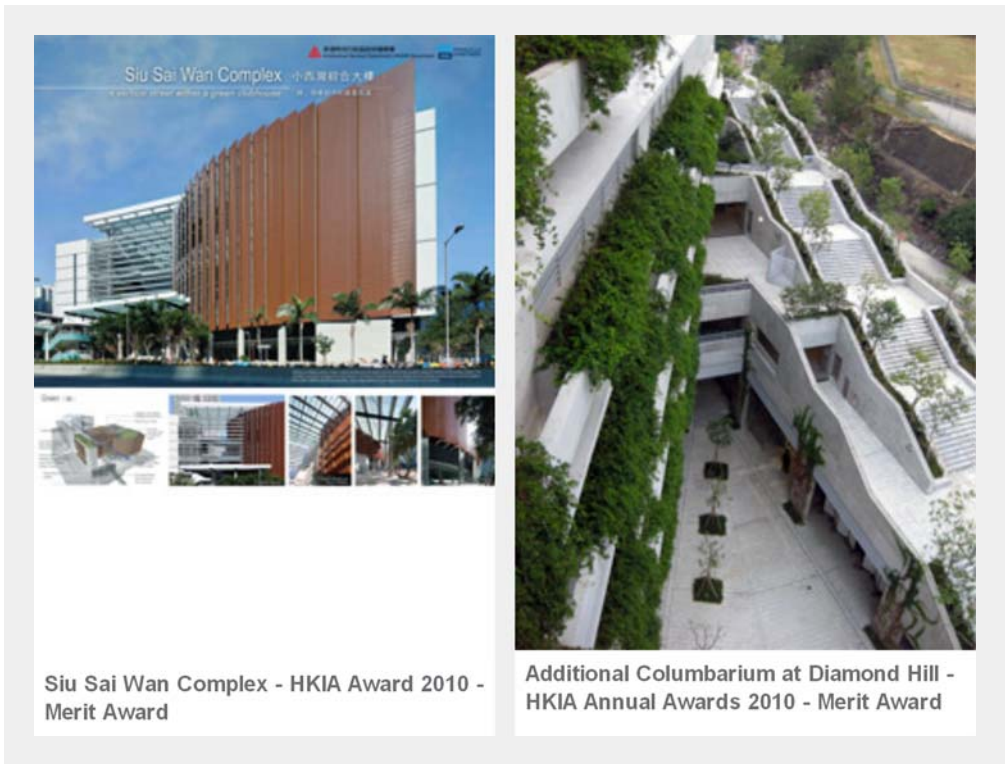
Both Tseung Kwan O Sports Ground and Reprovisioning of Diamond Hill Crematorium won the Merit Award under the New Buildings Category - Hong Kong Institutional / Community Project.



Hong Kong Institute of Architects (HKIA) Annual Awards 2010

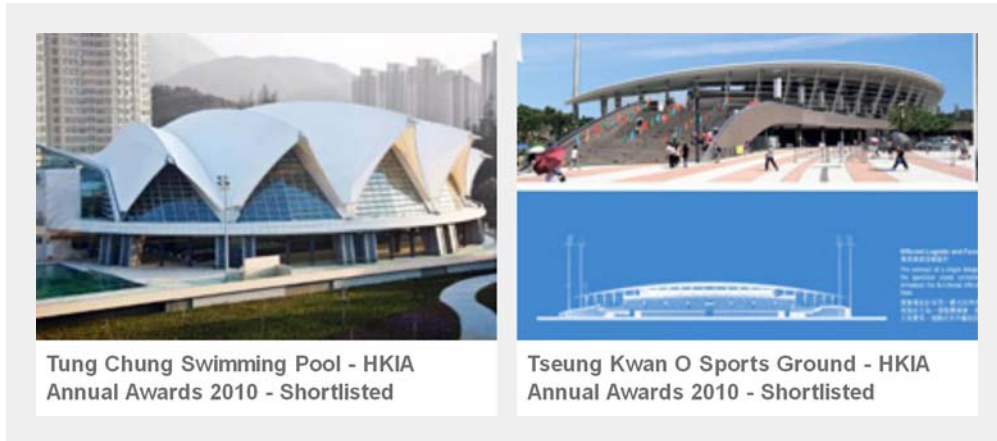
HKIA presents HKIA Annual Awards to recognize the outstanding achievements of architectural profession in Hong Kong and overseas.

In 2010, our projects Additional Columbarium at Diamond Hill and Siu Sai Wan Complex won the Merit Award.



Architectural Services Department - Sustainability Report 2011 - Recognitions and Awards

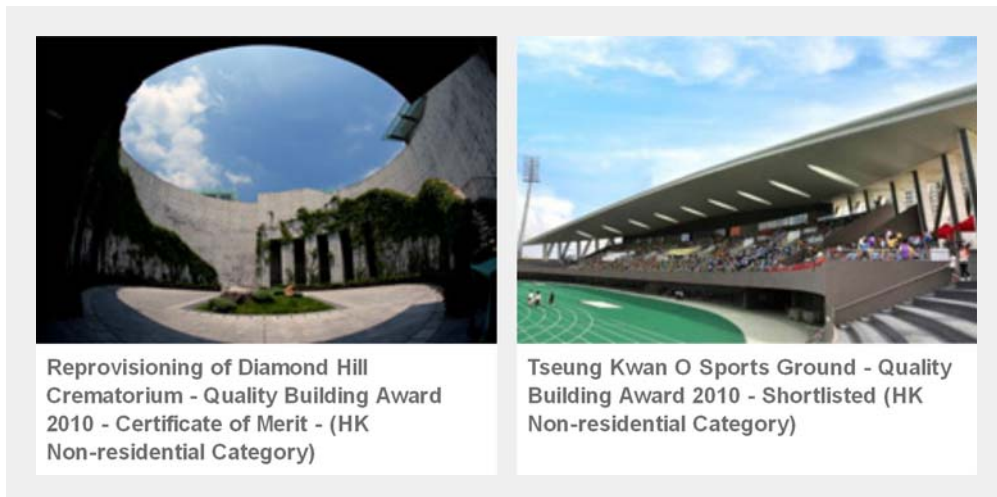
Our projects Tung Chung Swimming Pool and Tseung Kwan O Sports Ground were also shortlisted in the HKIA Awards 2010.



Quality Building Award (QBA) 2010

Jointly organized by nine professional organizations in Hong Kong, the Quality Building Award is held biennially to give recognition to buildings of meritorious quality that have demonstrated excellent teamwork. The Award aims to promote a collective commitment by the building industry to maintain the highest standards of professionalism and competitiveness.

Our project Reprovisioning of Diamond Hill Crematorium was awarded with Certificate of Merit under the Hong Kong Non-residential Category in QBA 2010. Another project Tseung Kwan O Sports Ground was also shortlisted in the Hong Kong Non-residential Category.



Civil Engineering Papers of the Year Awards 2010

Organized by the Civil Division of the Hong Kong Institution of Engineers, the Award aims to enhance the knowledge sharing among members for the advancement on civil engineering and promote the standing of professional civil engineers in society. The submitted paper requires to cover planning, study, investigation, design, construction or management aspects of a genuine civil engineering project or innovative and relevant research idea on a civil engineering project in Hong Kong, China or worldwide.

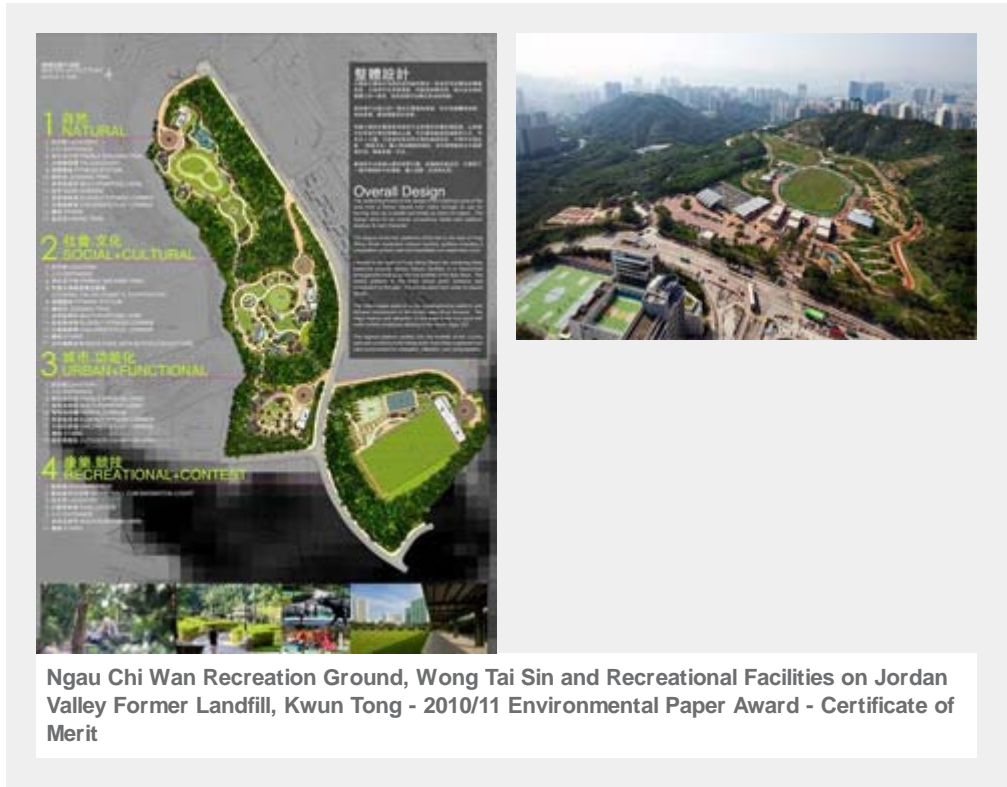
Our project Tin Shui Wai Public Library cum Indoor Recreation Centre has won the second runner-up of the Civil Engineering Papers of the Year Awards 2010.



2010/11 HKIE Environmental Paper Award

The Environmental Paper Award is organized by the Environmental Division of the Hong Kong Institution of Engineers to recognize engineers' efforts in any environmental research and project in which pollution control and/or energy conservation are fully and properly addressed. The award is intended to encourage widespread emergence of environmentally sound projects.

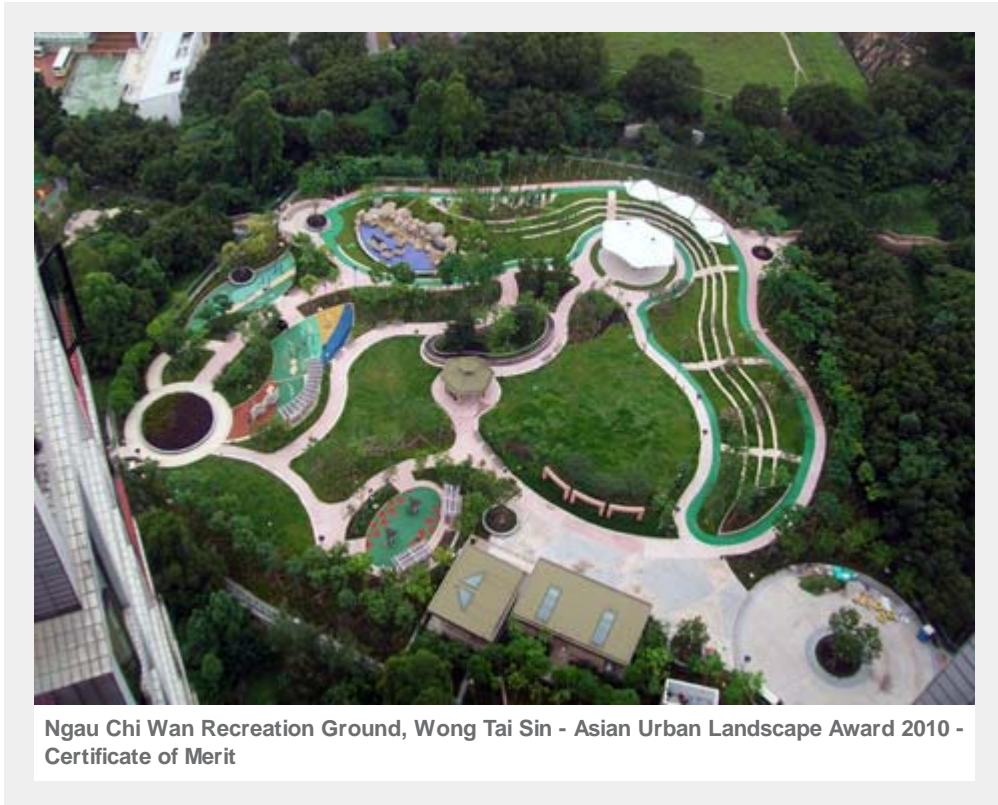
Two of our landfill projects, Ngau Chi Wan Recreation Ground, Wong Tai Sin and Recreational Facilities on Jordan Valley Former Landfill, Kwun Tong, were awarded with Certificate of Merit in the 2010/11 Environmental Paper Award.



Asian Urban Landscape Award 2010

This award is given by UN-HABITAT, the Asia Habitat Association, Fukuoka Asian Urban Research Institute and Asian Institute of Landscape Architecture, to encourage well-planned development of urban landscapes in Asia.

Our landfill project named (Ngau Chi Wan Recreation Ground, Wong Tai Sin) was awarded with a Certificate of Merit in the Asian Urban Landscape Award 2010.



HKILA Landscape Design Awards 2010

The HKILA Landscape Design Awards is organized by HK Institute of Landscape Architects to promote design excellence in landscaping planning, design and research, and to recognize outstanding achievements in landscape design.

Two of our projects Re provisioning of Diamond Hill Crematorium and HKSAR's Participation in the World Exposition 2010 Shanghai, China - The Hong Kong Pavilion were honoured with the Silver Medal Landscape Design and the Merit Landscape Design respectively.



Re provisioning of Diamond Hill Crematorium - HKILA Landscape Design Awards 2010 - Silver Medal



HKSAR's Participation in the World Exposition 2010 Shanghai, China - The Hong Kong Pavilion - HKILA Landscape Design Awards 2010 - Merit Award

Hong Kong Flower Show 2010

The theme of Hong Kong Flower Show 2010 was "Fairy Tales of Flowers". In order to cohere with the theme, our design featured sculptures formed by roof greening techniques with a variety of climbing plants on the feature walls together with foliage and flowers of vivid colour that successfully created a "wonderland" for the public to explore and enjoy. Our landscape design won the Gold Award for Design Excellence under the category of Landscape Display, Displays Section (Local).



The Landscape Design of our "wonderland"

Gold Award for Design Excellence under the category of (Landscape Display), Displays Section (Local).

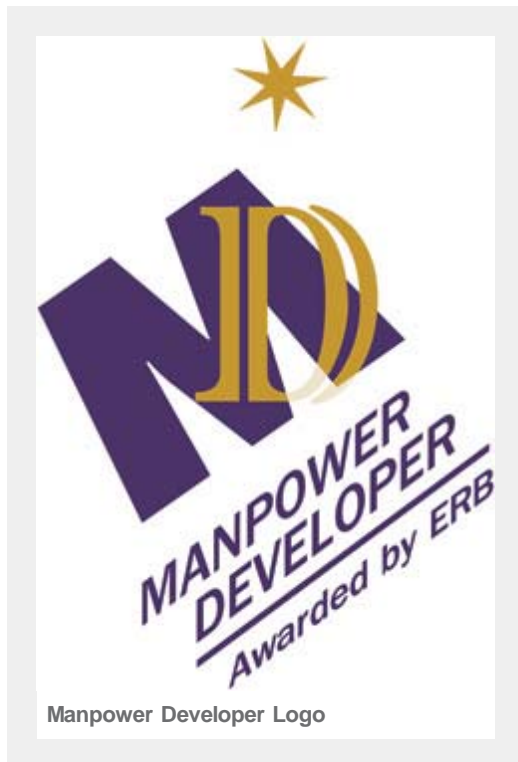
The Hong Kong Council of Social Service (HKCSS)

Organized by the HKCSS, the Caring Organization Label scheme is to recognize organizations which demonstrate caring spirit to the community, employees and the environment. We are granted with the Caring Organization Label for the second consecutive year to appreciate our efforts in achieving good corporate citizenship in respective areas.



Manpower Developer Award Scheme

The Manpower Developer Award Scheme is launched by the Employees Retraining Board to acknowledge organizations with outstanding accomplishments in local manpower development. The Scheme is held annually aiming at enhancing the quality of human resources in Hong Kong through the promotion of a corporate culture focusing on manpower training and development among organizations and heightening the awareness of the employers and employees of the importance of on-the-job training and continuous upgrading. During the year, we were awarded with the Manpower Developer Logo to appraise our strong commitments to manpower development in our Department.



2010 Hong Kong Awards for Environmental Excellence (HKAEE)

HKAEE encourages businesses and organizations to adopt green management and present them with an opportunity to benchmark their commitment towards environmental excellence.

Environmental Labels Scheme

The Environmental Labels Scheme is a voluntary scheme offering recognition to those that have attained a prescribed number of specific goals in different environmental aspects through a continuous self-improvement approach. In 2010, we have participated and received recognition in the Indoor Air Quality Label of the Scheme. IAQwi\$e Label to recognize our effort in improving indoor air quality respectively. We were graded with "Class of Good" for IAQwi\$e Label in Queensway Government Offices and APB Centre.



Sectoral Awards

Sectoral Awards is an annual competition to recognize organizations which have demonstrated all-round and outstanding environmental performance in designated sectors in terms of Green Leadership, Environmental Performance and Partner Synergy. We were bestowed with the Bronze Award in the sector of "Public Organizations and Utilities" in the 2010 HKAEE Sectoral Awards.



Green housekeeping measures

We have adopted several green housekeeping measures to save energy consumption.



Application of timer switches for office electrical appliances



Use of LED lights in meeting rooms



Adoption of T5 fluorescent tubes in offices



Strategy and Management

We provide the government departments with the following services: Monitoring and Advisory Services, Facilities Upkeep and Facilities Development. Our Monitoring and Advisory Services also cover quasi-government organizations. We work as the Government advisor, maintenance agent, works agent, and project manager for Government-owned and Government-funded facilities. The nature of our services allows us to adopt sustainability concept, promote and ensure sustainable development to our client and to the public at large.

To manage our operation and service in a systematic manner, we have adopted and implemented an Integrated Management System (IMS) to monitor and control our service quality, environmental impacts and occupational, health and safety risks. Our IMS, in compliant with ISO 9001, ISO 14001 and OHSAS 18001 standards, is governed by our senior management that aligns our operation with the departmental Vision, Mission and Values and identifies opportunities for further improvement in a sustainable manner.

In terms of staff relation and welfare, we follow the policies laid down by the Civil Service Bureau and manage effectively through our human resources management. We fully comply with the Employment Ordinance which prohibits hiring child labour and forced labour. We also follow the guidelines given by the Development Bureau, to allow sufficient safety-related provisions in our construction contracts (such as site safety training, pay for safety, safety model workers award scheme, etc.) aiming to safe-guard the well-being of the construction workers. We have also allowed the provision of a Labour Relations Officer in projects of substantial size so that workers can seek for assistance from relevant authorities directly. Thus, disputes between contractors and workers can be resolved at early stage.

Our senior management actively participates in a number of professional bodies and committees to provide statutory, professional and technical advices for the advancement of the industry and the drafting-up public policies on urban development. For instance, our senior staff members are involved in

- Council of the Lord Wilson Heritage Trust to administer the operation of the Trust;
- Committee on Planning & Land Development to consider and review policies on planning and land development issues;
- Property Strategy Group to consider and decide all matters related to the optimization of site utilization;
- Minor Building Works Committee to examine and approve minor building works applications; and
- Steering Committee on Greening, Landscape and Tree Management to set strategic direction on greening, landscape and tree management policies and oversee the implementation of the policies.



Vision, Mission and Values

As part of our 5-year Departmental Business Plan, we have redefined our Vision, Mission and Values to steer on the department's operating strategies. Our Vision, Mission and Values are as follows:

Our Vision

Serve and care for our community by enriching the living environment through quality professional services

Our Mission

- Ensure the quality and sustainable development of community facilities
- Ensure the quality upkeep of community facilities
- Provide quality professional advisory services on community facilities and related matters
- Promote best practices in the building industry.

Our Values

- Professionalism
- Commitment
- Accountability
- Integrity
- Versatility
- Continuous Improvement
- Team Spirit
- Partnering Spirit
- Caring Attitude

Quality, Environmental, Health and Safety Policy

The Quality, Environmental, Health and Safety Policy of our Department is 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:

- Fulfill 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.

Risk Management

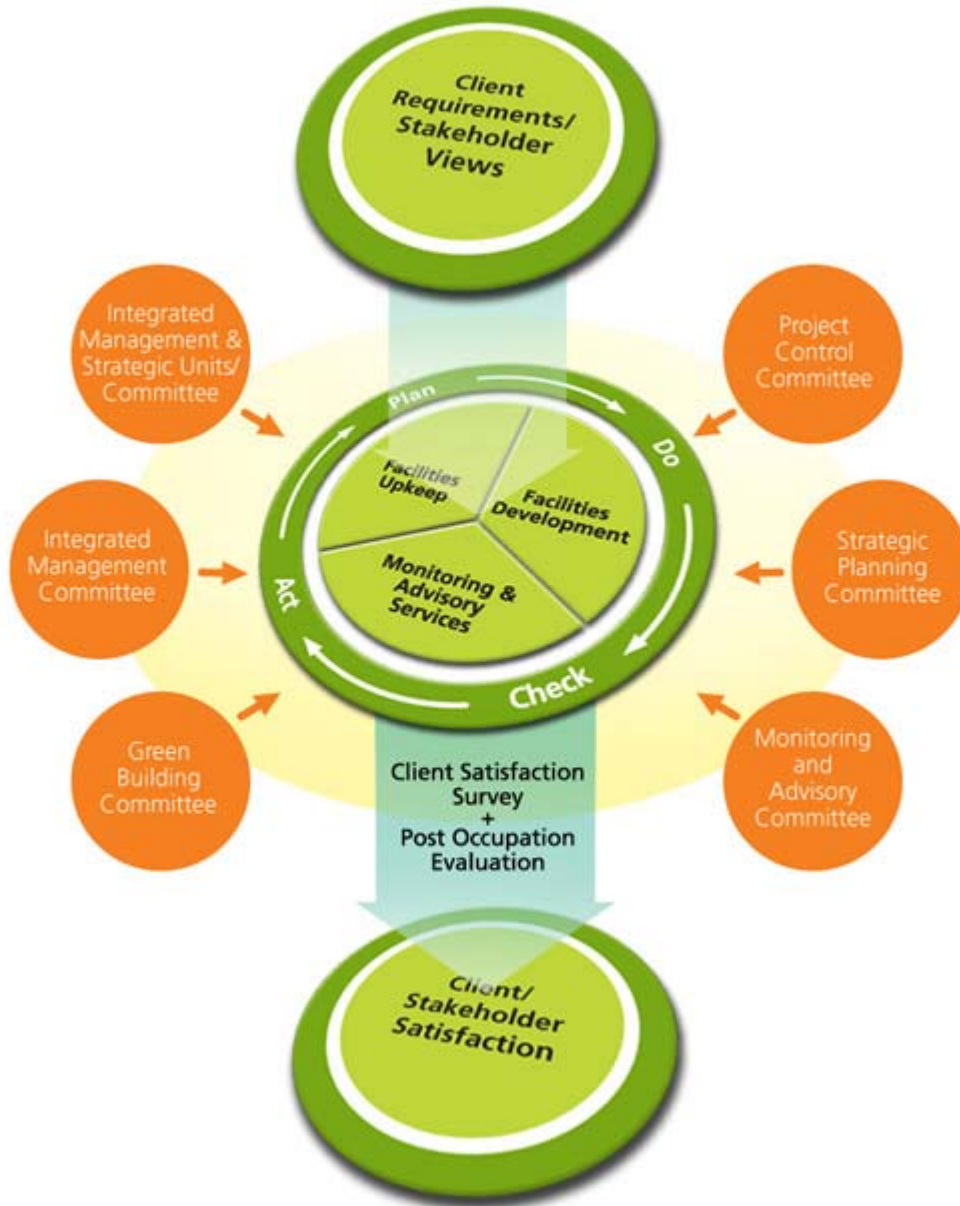
We identify and manage our risks at both departmental and project levels. At departmental level, we have adopted and implemented an IMS to identify and manage potential risks related to our operation and service by means of the "Plan-Do-Check-Act" cycle. Through the IMS, our senior management will consider carefully all potential risks on quality, environment, society and economy related to our service and operation so as to formulate all necessary preventive actions to minimize or eliminate the risks.

At project level, we manage our risks by observing and following guidelines issued by the Works Branch's Technical Circular (Works) No. 22/1993 on "Estimating Using Risk Analysis" and No. 6/2005 on "Implementation of Systematic Risk Management in Public Works Projects". Potential project risks are identified, managed and controlled at various stages from the project inception phase to the construction phase. Our project teams will also conduct integrated management workshops with various stakeholders throughout the project to facilitate the identification and analysis of potential risks at different project stages and devise effective measures to avoid or minimize the impacts to an acceptable level.

Integrity

As civil servants, staff integrity is of prime importance. All our staff are requested to strictly observe the Prevention of Bribery Ordinance to maintain high ethical standards in all operations. All bribery and corruption cases, if any, will be reported to the [Independent Commission Against Corruption \(ICAC\)](#). We fully cooperate with the ICAC in their investigations or studies on corruption prevention. During the reporting year, there was no bribery or corruption case discovered.

Governance Structure



Departmental Business Plan

To face new challenges and pave way for future development, we have established the Business Plan Core Group (BPCG) in August 2009 to steer the development of our 5-year Departmental Business Plan (DBP) for the financial years 2010/11 to 2014/15. The DBP has been developed based on an extensive staff consultation exercises launched since September 2009 through numerous communication meetings and workshops. We have analyzed our external operating environment from the political, economic, social, technological, legal as well as green perspectives and conducted a detailed review of our internal operating environment to identify our transformation priorities. We have also devised new operating strategies that will leverage on our strengths and address key improvement areas.

The 5-year DBP represents our collective wisdom and concerted efforts in a critical phase of our organizational development. It provides a framework and direction for our future development. It specifies five major objectives that we aim to achieve by the end of 2014/15. They are:

1. Develop and provide new service on government-wide total asset management;
2. Deliver prompt, high value-added advisory services;
3. Lead by example and promote best practice in construction, sustainable development and heritage conservation;
4. Enhance partnership and collaboration with our key/major stakeholders; and
5. Improve service capability and organizational effectiveness through organization restructuring, enhanced human resource management, and further development and better utilization of information and knowledge management technology.

The DBP will be implemented systematically through Annual Plans with operational details, specific performance indicators and clear timelines to fully meet our shared objectives and targets progressively. In 2010/11, we conducted the following activities to promote and deliver our 5-year DBP:

- Promulgated the DBP and 2010/11 annual plan through various channels including intranet website;
- Conducted five communication meetings with departmental grade staff to introduce main actions in departmental and branch annual plans for 2010/11;
- Enhanced partnership and collaboration with stakeholders by conducting the "Partnering To Serve with Care" exhibition;
- Started implementation of transitional organization structure to strengthen internal support to both the management and the department;
- Reviewed committee structure to enhance organizational effectiveness and governance;
- Reviewed Performance Management System for professional grades;
- Launched Pilot Mentorship Scheme for newly recruited professional staff and Pilot Job Shadowing Programme to nurture young professional officers; and
- Commenced the consultancy on organizational resources restructure to study and advise on resources and workload allocation mechanism for matrix mode of operation.

Architectural Services Department - Sustainability Report 2011 - Management Approach

The DBP undoubtedly launches us into a journey of continuous improvement with ongoing concerted efforts in planning, execution and review. We will continue to develop annual plans with specific operational details, performance indicators and clear timelines to meet the overall objectives of the 5-year DBP. Specifically, by 2014/15, we will transform:

- Our organizational structure to a matrix structure that facilitates greater staff exposure, allows more flexible deployment of resources, builds stronger teams, and reinforces accountability for results;
- Our operational management to an operating model that allows optimal use of resources, and focuses on delivering core functions and value adding services;
- Our human resources management to an effective system for managing staff performance and development; and
- Our partnership and collaboration to a proactive and planned approach to enhancing two-way communication, partnership and collaboration.

In terms of our service and operation, by the end of the DBP, we target to

- Elevate our role as Government's corporate advisor through the provision of value-added advice to support key policy objectives of the Government;
- Pioneer good practices and encourage the private sector to follow;
- Exercise effective monitoring to ensure delivery of cost-effective and quality service;
- Provide total facilities/asset management service;
- Advise on optimum maintenance strategy and undertake preventive maintenance to manage risks through improved risk assessment and value management;
- Provide holistic services to clients throughout a project from site selection to facilities upkeep;
- Mainly assume a project manager role during project delivery, exercising strategic control on time, cost and quality of projects, while retaining a certain proportion of projects to be delivered in-house to develop our staff; and
- Make even greater use of private sector resources and expertise through outsourcing and partnership approach.

Main Focus Areas

We treasure every opportunity to improve our performance with respect to relevant sustainability aspects. To better serve our clients and the general public, we have identified our major focus areas in relation to our service and operation through engagement with various stakeholders. Details of our engagement approach can be found in the [Stakeholder Engagement Section](#) in this report.

We have prioritized our sustainability issues for reporting with due consideration on stakeholders' views, verifier's comments on our previous report and [GRI G3 Guidelines](#). The priority issues and the associated sections are tabulated below in which our commitments and achievements were detailed.

	Priority Sustainability Issues	Reported Sections
Environmental	<ul style="list-style-type: none"> • Impact on climate change • Greenhouse Gas emissions • Waste generation and recycling • Wastewater discharge and reuse 	<ul style="list-style-type: none"> • Energy Saving Design; Greening and Landscaping • Energy Saving Design; Greening and Landscaping • Material Utilization • Material Utilization
Social	<ul style="list-style-type: none"> • Occupational health and safety • Staff relationship and development • Public facility quality • Community involvement 	<ul style="list-style-type: none"> • Health and Safety • Staff Development; Staff Engagement • Strategy and Management • Community Support and Engagement; Servicing the Community
Economic	<ul style="list-style-type: none"> • Corporate governance • Economic impact • Customer and supplier relationship 	<ul style="list-style-type: none"> • Strategy and Management; Departmental Business Plan • Funding and Support • Service Quality; Supply Chain Management



Energy Saving Design

The Government has been actively promoting green buildings. In 2009 the Development Bureau and the Environment Bureau jointly issued a technical circular which sets out a comprehensive target-based green performance framework for new and existing government buildings with a view to promote green buildings in Hong Kong.

As stated in the technical circular, all new government buildings with construction floor areas of more than 10,000m² should aim to obtain the second highest grade or above under a locally recognized building environmental assessment system such as Hong Kong Building Environmental Assessment Method (BEAM) developed by the Hong Kong Green Building Council (HKGBC). In addition, all new government buildings with construction floor areas of more than 10,000m² should aim to outperform the Building Energy Codes issued by the Electrical and Mechanical Services Department (EMSD) by designated percentages.

In view of the above, we have been actively playing an advisory role for relevant bureaux and departments on energy performance. We have been working closely with the EMSD in providing information for benchmarking energy performance of various building types for continuous improvement. In addition, when we work on the design for new development projects we always have strong intentions of applying climate-responsive design and appropriate energy efficient installations to enhance the building's energy performance.

Case Study

Customs Headquarters Building at Tin Chiu Street, North Point

Project Description:

The Customs Headquarters Building is a 34-storey building which provides office accommodation, operational facilities and supporting facilities for the Customs & Excise Department.



Customs Headquarters Building at Tin Chiu Street, North Point



Photovoltaic Panels at Roof for Electricity Generation

Design and Features:

One of the sustainability features of the project is the utilization of renewable energy through:

- Installation of 60 nos. (110m² net area) photovoltaic panels with an estimated energy output of 15kW.

The following major energy saving features are adopted for the project:

- Installation of water-cooled heat rejection system for air-conditioning system;
- Installation of total energy heat wheel in primary air handling unit;
- Installation of variable air volume system for air-conditioning system;
- Installation of CO₂ sensors for control of primary air supply;
- Installation of occupancy & daylight sensors for control of air-conditioning and lighting systems;
- Installation of high efficiency T5 fluorescent lamps with electronic ballasts;
- Installation of LED exit signs; and
- Installation of service-on-demand control for escalators.

Prince of Wales Hospital Extension Block

Project Description:

The project is a new development situated at the original helipad location at the Prince of Wales Hospital. Site Area is about 16,279 square metres and total Gross Floor Area is 71,445 square metres. Equipped with the most advanced medical facilities, the 13-storey new block houses a comprehensive range of clinical areas for services in accident & emergency treatment, pharmacy, diagnostic radiology, cardiovascular intervention centre, rapid response laboratory, operating theatres, skin bank and burns centre, intensive care unit and various kinds of patient wards.

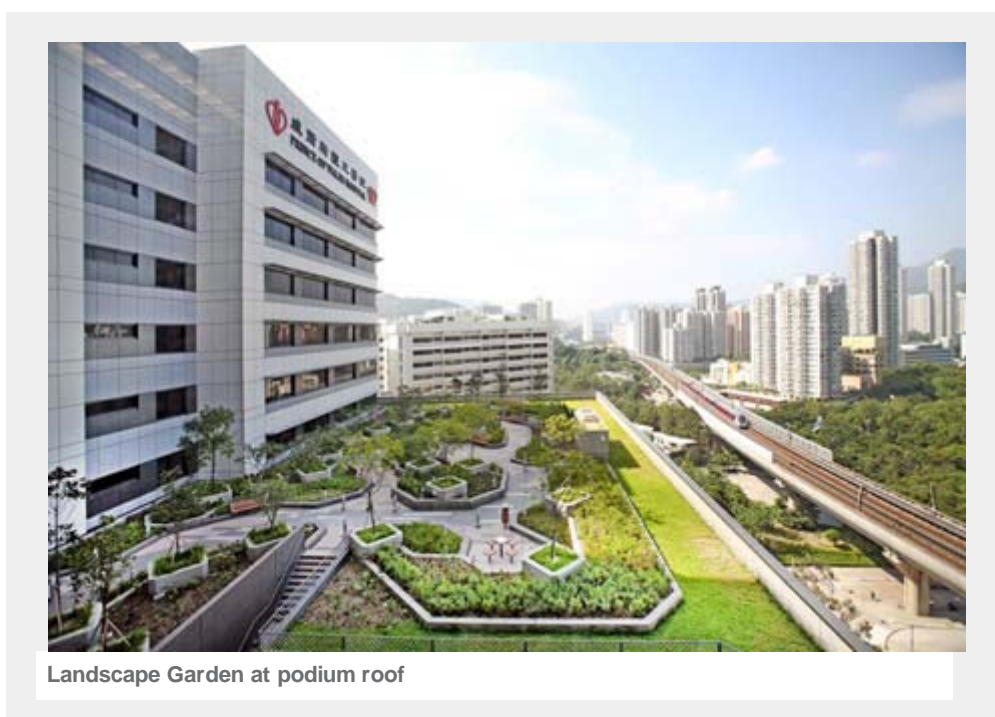


Prince of Wales Hospital Extension Block

Design and Features:

The block is a traditional reinforced concrete structure. Externally, the façade is composed of modular tinted glazed windows, aluminium sunshades, aluminium cladding panels and louvers. These features work as an insulation layer to reduce solar heat gain and help to reduce energy consumption for air conditioning. Internally, modular steel panel partition system and solid lightweight concrete infill wall system replace some parts of traditional block wall partitioning for reducing on-site construction waste.

The major public areas, such as main entrance foyer and typical passenger lift lobbies, are provided with glazed curtain wall and windows to maximize the use of day-lighting to achieve energy efficiency and enhance the ambience of internal space. The landscape gardens with existing trees at ground floor, podium roof at both level 6 and level 7, and on the roof can minimize heat gain and create a pleasant environment.



To enhance hygienic standard and water consumption efficiency, automatic sensor water taps and low-volume cisterns are installed. Energy saving LED light bulbs and T5 fluorescent tubes are installed. Heat recovery chillers are installed to recover waste heat for pre-heating potable/non-potable water and outdoor air dehumidification. Heat recovery air systems using heat wheels or heat pipes are provided for full outdoor air supply areas. The air handling system for ICU and ID wards has the built-in flexibility to switch to re-circulating mode when the rooms are used for patients with non-airborne infectious diseases, which consumes less energy. Demand control for air conditioning and electrical installations (e.g. variable speed pump for chilled and heating water supply systems, variable speed control of AHU and fans, air-conditioning systems using VAV system, outdoor air supply demand control by CO₂ level monitoring, winter reset of room temperature, automatic temperature and lighting setback control, motion detectors to switch on/off lighting and air-conditioning in small offices etc.) are adopted to further reduce energy consumption.

Greening and Landscaping

In 2010-11, ArchSD has continued to include roof greening where practicable in new government buildings which have usable roof area, and encourage the management departments of existing government buildings to consider the installation of green roofs whenever there are major works involving the roofs of the buildings concerned. ArchSD has also continued to explore opportunities for vertical greening in new government buildings and, with the accumulation of experience of successful installations, has encouraged the management departments of existing government buildings to consider installing vertical greening whenever practicable. In 2011-12, ArchSD will continue to encourage roof greening and vertical greening wherever practicable when giving advice to other government bureaux/departments, and to monitor the performance of roof greening and vertical greening applications in our projects.

As an ongoing initiative, ArchSD will continue to enhance greening and landscaping through maximisation of greenery coverage, including roof greening and vertical greening. On the enhancement of practices on tree management, ArchSD will pursue the various initiatives following the policy directives and guiding requirements from the Tree Management Office of Development Bureau. ArchSD will continue to carry out tree risk assessment in 2011-12 for the trees under its maintenance jurisdiction and those within the construction sites of its new works projects. ArchSD will continue to liaise closely with related professional institutes and organisations to enhance partnership and collaboration in promoting greening, landscaping and tree management in the industry and, where opportunities arise, will conduct seminars and workshops for experience sharing.

From 2001 to March 2011, ArchSD completed roof greening on 100 new buildings and 65 existing buildings and vertical greening on 14 new buildings. Energy is saved as a result as the greenery can reduce the solar heat transfer to buildings. The amount of energy saved depends on the shape of the building and the sun path over it, depth of the insulating planting soil and the type of greening.

Case Study - Redevelopment of Lo Wu Correctional Institution

Project Description:

The redevelopment comprises three new correctional facilities which include two medium-security and one minimum-security facilities with a capacity to accommodate 1,400 inmates. The new institution provides better facilities for inmates' rehabilitation, including a multi-media education centre, vocational training workshops, parent-child centres, recreational facilities, multi-purpose classrooms and counselling rooms.

Greening and Landscaping Features:

With careful site planning for this redevelopment project, the institution maximized the land-use and at the same time achieved a high level of greening despite various tight design guidelines for a correctional institute.

The design demonstrated a high degree of coherence between building structures with the existing rural setting. Vertical greening was provided at the retaining wall and soft landscaping was extensively applied at open area near the dormitories and buildings outside the security zone. In addition, green roofs were also provided at the dormitory blocks in order to reduce the heat gain of the building structure. With proper planning and placement of trees, shrubs and turf, the premises demonstrated a balance of the landscape with the environment.



Vertical Greening on the Retaining Wall

Case Study - HKSAR's Participation in the World Exposition 2010 Shanghai, China Hong Kong Pavilion

Project Description:

The design of the Hong Kong Pavilion originated from a Concept Design Competition staged by Constitutional and Mainland Affairs Bureau (CMAB) and ArchSD in 2008. ArchSD was responsible for the project management, from the Concept Design Competition, tendering and appointing the contractor to conduct the architectural design and construction, to project monitoring and supervision the building project.

The theme of the Pavilion is "Hong Kong – Potential Unlimited". The Hong Kong Pavilion was a three-storey building with an external aluminum and glass facade which showcased the infinite imagination and creativity of Hong Kong and its people in the World Exposition 2010 Shanghai. The Hong Kong Pavilion aimed to provide visitors with a stunning impression of Hong Kong as a modern, open, free and transparent society.

The Pavilion provided a total of 800 square metres of exhibition space, showing three exhibition themes namely "Connected to the Global Village", "Connected by Ideas, Information and Diversity" and "Connected to Nature" at three levels.

Greening and Landscaping Features:

The landscape design concept for the Hong Kong Pavilion was a celebration of the city's connectivity with the natural world. It showcased Hong Kong's rich natural heritage and the manner in which the dense urban cityscape co-exists sustainably with extensive swathes of greenbelt, wetland and woodland areas that cover almost 70 per cent of Hong Kong's land mass.

As such, we put substantial efforts in applying various landscaping features such as replicated wetland, shrubs, plantations and trees within the roof level of this modern structure. Visitors were surprised by the extent of natural landscape showcased in the Pavilion during their visits.

Architectural Services Department - Sustainability Report 2011 - Resources Utilization and Conservation

Highlights of the greening and landscaping features demonstrated in the Hong Kong Pavilion were:

- External pavers at ground level are recycled products consisting of recycled glass and aggregates. The pavers can remove air pollutants and significantly improve the air quality. With the incorporation of Titanium Dioxide (TiO₂), they are capable of removing Nitrous Oxides (NO_x), a major air pollutant and greenhouse gas, by at least 10%;
- Solar panels on the roof provide a sustainable energy source i.e. electricity for the landscape lighting on roof;
- Intimate natural wetland on roof of Hong Kong Pavilion, with miniature of aquatic, semi-aquatic and terrestrial habitats in the same area;
- Simple planter trays set on rooftop planted with low maintenance requirement species act as an insulation layer to reduce direct sunlight absorption by the concrete roof slab;
- Installation of Plasma Huts with multimedia effect and able to be viewed in different heights for users including people with disability, to showcase the variety of Hong Kong Wetland animals to the visitors;
- Installation of sky tubes and perforated aluminium claddings to allow natural lights entering the interior of the Hong Kong Pavilion
- Water elements such as the two vertical cascades down the facade improve the micro-climate around the Pavilion; and
- Folded aluminium cladding, which is detached from the glass enclosure to allow air to flow over the glass surface and helps to cool the building in hot weather.



Water Cascade along south facade



Perforated Panel to allow natural lights entering the interior of the HK Pavilion



Artificial aquatic habitat intimate natural wetland environment



Aquatic plants used on roof



Sky tube and timber deck



Installation of Plasma Huts with multimedia effect and able to be viewed in different heights for users including people with disability, to showcase the variety of Hong Kong wetland animals to the visitors



Solar Panel on roof with roof greening

Environmental Design

Sustainable green architecture can be regarded as a practice of designing buildings with responsible concerns in order to reduce the impact on the environment during both construction and operation of the buildings.

Throughout the years, we have been actively applying different environmental ideas in our projects. Examples of the green initiatives include adopting more energy efficiency design, using green construction materials, providing greening and landscaping features which can benefit the quality of life of the building occupants or users of the facilities.

To streamline our process in providing better environmental design in projects, we established guidelines in the Project Administration Handbook (PAH) to assist project teams in applying environmental measures during project implementation.

An example of the guidelines prepared in the PAH includes "Guidelines for Enhancement of Hoarding design for Construction Sites" which sets as a reference for Project Officers to consider different enhancement measures when designing site hoardings. In addition, we also issued a "Guidance Note for Tree Preservation and Protection" which assisted project teams to achieve better results in tree preservation and protection during works project delivery.

Case Study - Additional Columbarium at Diamond Hill

Project Description:

To cope with the rising need from the public, the new columbarium is an extension of the Diamond Hill columbarium which provides an addition of 18,500 niches with ancillary facilities including joss paper burners, joss paper pans, offices, public toilets, store rooms, passenger lifts and a landscaped sitting out area.

Design and Features:

Highlights of the environmental design in this project include:

- structures with large openings on the walls to facilitate air ventilation;
- climbing plants are planted on the rooftop and hung over the walls of the building structure; and
- soft landscaping is provided at the sitting-out area.



Southwest Elevation and the vivid building profile facing Po Kong Village Road



Planting – the melody propagates along the grand staircase



Soft landscape is forming part of the building elevation



Climbing plants are thriving on the structure to form a unity



Transplanted ficus is prospering at its new setting



Case Study - Siu Sai Wan Complex

Project Description:

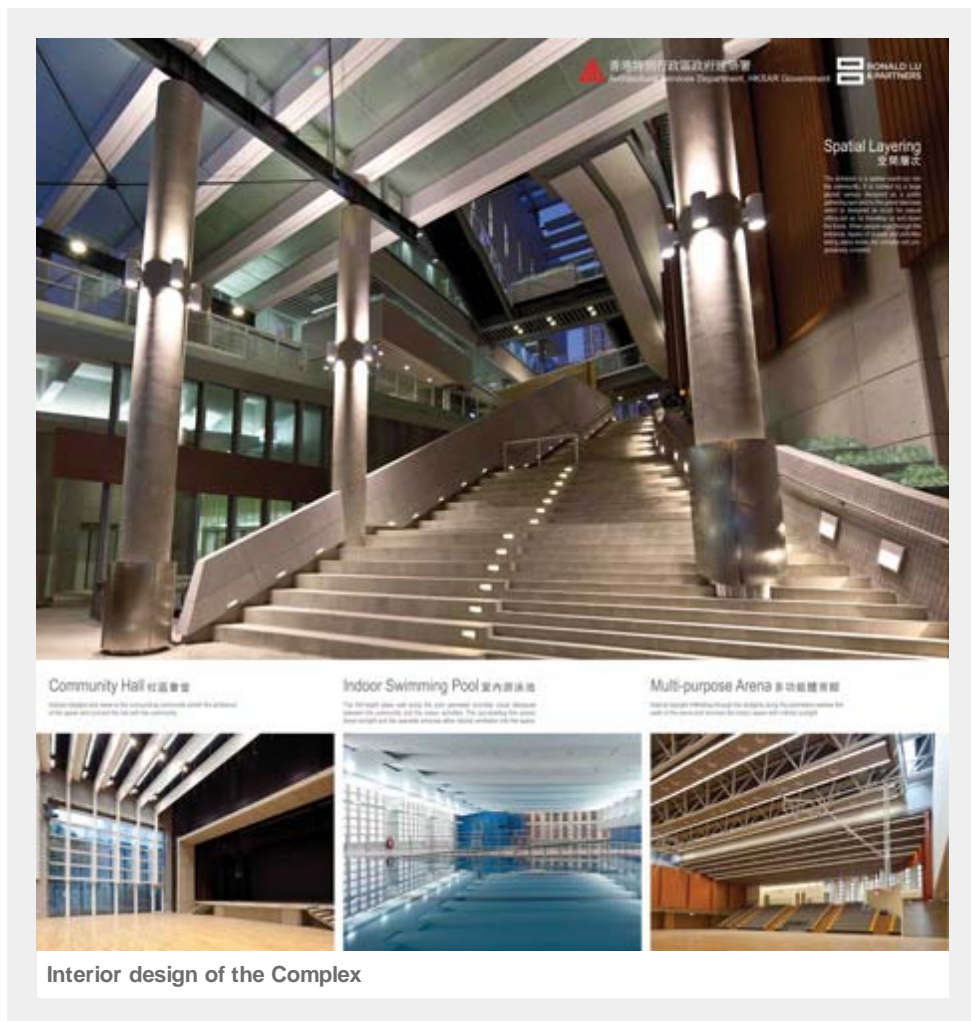
This municipal services building located in the Eastern District provides residents comfort leisure and recreational facilities. The complex is organized in two building blocks, comprising a 1,000-seat multipurpose arena, an indoor heated swimming pool, a library and activities rooms.

Design and Features:

Highlights of the environmental design in this project include:

- atrium design which allows natural ventilation and use of day-light in order to reduce the overall energy consumption;
- ample provision of operable windows, insulated low-E glass and external sun-shading devices in response to the solar path to reduce the heat gain of the building;
- establishment of a green roof for thermal insulation;
- installation of a rainwater and grey-water recycling system for green roof irrigation; and
- installation of service-on-demand escalators, photo-sensors for lighting control.





Case Study - Ngau Chi Wan Recreation Ground, Wong Tai Sin

Project Description:

The project of Ngau Chi Wan Recreation Ground, Wong Tai Sin made good use of a restored landfill on Jordan Valley to provide a wide range of recreational facilities for the community.

The major scope of the project comprises the establishment of an archery field with natural turfed ground; an elderly fitness corner with fitness stations; children's play areas; a central lawn with associated facilities; a landscaped garden with Tai Chi areas, sitting-out facilities, rain-shelters/pavilions and extensive planting of flowering trees and shrubs and ancillary facilities.

Design and Features:

The buildings in the park are characterized by their simplicity in design. In addition, to achieve the theme of sustainable development, the following features have been implemented in the premises:

- Solar light poles used in the lowest platform;
- Photovoltaic devices used for heating water for showers in the changing rooms;
- Recycled plastics used for decking, trellises, pebble walking trail and landscape features; and
- Recycle tyres used for safety matting in the children's play areas and jogging trail



Thematic landscape design of Ngau Chi Wan Recreation Ground, Wong Tai Sin



The environmentally friendly features of Ngau Chi Wan Recreation Ground, Wong Tai Sin

Heritage Conservation

Heritage Conservation is the recognition of traditions and times from long ago. It is an important component in promoting and achieving sustainable development. Heritage Conservation often includes a process of renovation, refurbishment, alteration and modernization of building structures with an aim to preserve and reuse the portions which are significant to their historical, architectural and cultural values. When heritage conservation is well implemented, managed and maintained, it can strengthen our community's identity and enhance our sense of cohesion.

Revitalizing Historic Buildings Through Partnership Scheme

In 2007-2008 Policy Address, the Chief Executive announced that the Government would seek non-governmental organizations to revitalize Government-owned historic buildings by introducing a scheme, namely the Revitalizing Historic Buildings Through Partnership Scheme. Since 2008, 11 historical buildings with historic values have been launched under the scheme for revitalization.

To support the government's works on heritage conservation, we work closely with the Commissioner for Heritage's Office in providing technical advice in various aspects. Since 2008, we have established a dedicated Heritage Unit, comprising ten officers at professional level in relevant professional disciplines, to provide advisory and supporting services.

Heritage Impact Assessment

To avoid or minimize adverse impact by the proposed work arising from Government's capital works projects on heritage sites, a Heritage Impact Assessment (HIA) report is required as a part of the documentation for new development. During the past years, we have carried out HIA for a number of developments including the Lung Fu Shan Environmental Centre, Yau Ma Tei Theatre and Red Brick Building.

In 2010, we carried out a HIA for the Transformation of the Former Police Married Quarters Site on Hollywood Road into a Creative Industries Landmark. In this project, we worked closely with the Heritage's Office and the future operator of the development to finalize the project design. Funding approval from Legislative Council was obtained in July 2011 for the implementation of the project.



Artist's impression from Hollywood Road



Material Utilization

Material utilization is definitely one of our focal areas when we start planning the development projects. During the design stage, we put substantial efforts in bringing ideas which can facilitate the reduction of energy, water and materials used as well as the enhancement of overall efficiency of buildings and facilities.

To ease the mounting pressure on the utilization of landfills and public filling areas, we encourage usage the use of prefabricated materials to minimize construction waste generated on site during fabrication. In addition, we support our contractors to implement on-site sorting to separate inert materials (e.g. excavated rock and soil) from non-inert materials (e.g. bamboo, timber, organic materials) before disposal. We recommend contractors to replace traditional timber formwork by more durable metal formwork, where practicable, to reduce timber consumption and disposal.

To increase the water usage efficiency for our development projects, we have been supporting the usage of water-saving devices that are recognized by the Water Efficiency Labelling Scheme (WELS). In addition, to better manage and fully utilize wastewater discharged from the building premises during their operation, two of our development projects Redevelopment of Lo Wu Correctional Institution and Siu Sai Wan Complex were installed with the grey-water recycling systems.



Watering grasses through grey-water recycling system in Lo Wu Correctional Institution



Siu Sai Wan Complex

Case Study - Redevelopment of Victoria Park Swimming Pool Complex

Project Description:

The project has been commenced since 2009 which involved the construction of a new indoor heated swimming pool complex at the former location of nine tennis courts and the roller skating rink in the Victoria Park. This redevelopment project will lead to the facilities in reaching standards that can host high-level swimming or other aquatic sports competitions in the near future.

The new complex, with a seating capacity for 2,500 spectators, basically comprises a main swimming pool and a multi-purpose pool with movable floors to allow adjustment for variable water depth. Diving platforms, springboards, a jacuzzi pool and other ancillary facilities will also be provided.

Design and Features:

Considerations have been taken during the planning and design stages to reduce the generation of construction waste where possible. For instance, we used metal site hoardings and signboards that can be recycled or reused in other projects. We imposed requirements for contractors to reuse inert construction waste on-site (e.g. use of excavated materials for filling within the site) or in other suitable construction sites as far as possible, in order to minimize the disposal of inert construction waste to public fill reception facilities. Contractors were encouraged to maximize the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimize the generation of construction waste.



Project Environmental Assessment

For new development projects, the environmental assessment plays an important role to ensure that the likely impacts to the environment have to be fully understood and taken into account before they commenced.

A preliminary environmental review (PER) is required to carry out during the feasibility stage of every ArchSD's project. The main purpose of conducting a PER is to evaluate the environmental impacts associated with the project activities and more importantly to identify practical mitigation measures and controls during project implementation.

In a typical PER, it should first clearly state the current environmental conditions of the project site and details of the proposed project. In addition, a PER should also contain an assessment of potential and probable environmental impacts associated with the project. Recommendations for mitigation measures and monitoring works should also be provided at a level which satisfies our requirements. The findings of the PER will then assist us in deciding whether the development project will require a detailed Environmental Impact Assessment (EIA) as stipulated under the Environmental Impact Assessment Ordinance (EIAO).

As all of our projects undertaken in 2010 were not regarded as designated projects under the EIAO, no EIA study was required.



Clients and
Business Partners

Clients and Business Partners

We value and appreciate all the clients and partners for their great support. Through various communication channels, they not only can learn about our latest development but also are encouraged to share with us their concerns and suggestions. It is with their valuable feedback that we are able to further strengthen our business competence over the years.

Service Quality

Based on years of experience in local market, we pride in the high level standard that our services are developed against. Besides satisfactory building quality, we strive to apply environmentally-conscious designs when applicable and maintain established structures for a longer lifetime through careful management.

During the past year, we have initiated and successfully completed 22 capital projects and 21 minor works in a timely manner. As for customers' enquiries/complaints are concerned, we have achieved 100% response rate within 3 days and 10 days for cases related to environmental hygiene and other issues respectively according to our internal guideline.

There are two main types of customer survey that we have carried out in order to gauge our service quality: Client Satisfaction Survey (CSS) and Post Occupancy Evaluation (POE). They are specified individually as follows.

Client Satisfaction Survey

We provide design, construction and maintenance services for government buildings and facilities. We highly value the opinions of our clients and have been conducting the Client Satisfaction Survey (CSS) since 2002. The objective is to obtain feedback from clients on projects delivered by ArchSD with a view to improve the quality of our services. Through the CSS, we can identify possible further improvement, facilitate better communication with the clients and achieve more efficiency in service delivery.

As the work nature of new works projects and maintenance works projects is different, different survey questionnaires are developed to conduct the CSS for these projects. Nevertheless, the CSS has been particularly designed to cover four main aspects: Satisfaction Research, Client Relationship Building, Project Performance Review, and Quality Improvement. Over the years, the CSS has continuously been strengthened its characteristics in a systematic approach with comprehensive content, interviews by independent professionals, detailed reporting, follow-up action initiation and lessons learnt sharing via the intranet.

Main aspects of Client Satisfaction Survey



For facilities development projects, several projects will be selected to conduct the CSS in each quarter of the year. In 2010, a total of 32 projects were selected and all projects were resulted in a rating at "Satisfied Level" or above.

For facilities upkeep works, we conduct two client satisfaction surveys to solicit the views of user departments:

- Telephone survey for minor repair works orders;
- Questionnaire for works orders of value of HK\$10,000 or above.

The respondents are randomly selected to provide better coverage of the survey.

In 2010, 98.6% for minor repairs sampled for telephone survey achieved satisfied level or above while 99.5% of works orders surveyed by the questionnaire achieved satisfied level or above on the overall performance.

We will continue our commitment to conduct the CSS as one important mean in recognizing client satisfaction and performing periodic reviews on client relationship, which are two key elements required to be certified for quality management system.

Post Occupancy Evaluation (POE)

As part of our commitment to high quality projects, we monitor the status of actual occupancy and performance of a building/structure after its establishment through POE on selected projects. POE assists us in capturing the relevant data related to the facilities effectiveness and identifying areas for improvement. The main objectives of POE include:

1. Encouraging stakeholder engagement;
2. Affirmation of the function against its original design intent;
3. Utilization of the integrated building systems;
4. Service customerized to meet users' practical needs; and
5. Energy review to enhance energy efficiency.

Supply Chain Management

In order to ensure steadiness of material supply and quality for delivering our projects and works, we have built up a strong business relationship with our suppliers, contractors and consultants throughout the years. Such collaboration provides a corner stone for sustainable development and various businesses along the supply chain.

In terms of procurement, we understand the strong position of government and public sector to influence the market place with their collective purchasing power. Practising such influencing power to purchase goods or services, that have more respect to the environment can make an important contribution towards sustainable development.

We are fully aware of existing Government's procurement policy which requires bureaux and departments to take into account environmental considerations when procuring goods and services. Specifically bureaux and departments are encouraged, as far as possible and where economically rational, to purchase green products.

In view of the above, we have been trying every effort to purchase goods which are considered as "environmentally friendly". For instance, during the year, we purchased 30,581 reams of printing paper with recyclable content.

To support the procurement of environmentally friendly construction materials, we contribute as one of the members of the Task Force on Carbon Labelling Scheme for Construction Materials under the Construction Industry Council. A research study is being arranged by the task force to establish a Hong Kong based carbon labelling framework for construction materials and also the implementation strategies.

When selecting products or services from the suppliers or contractors, we have applied a standard tender assessment procedure to evaluate not only their professional qualifications but also their approach in achieving sustainability. The key elements considered for supplier sustainability assessment are divided into two major aspects: Environmental Sustainability and Work-site Safety.

While keeping the pitching process open and fair for all potential suppliers and contractors located both locally and overseas, we proactively provide applicable training to suppliers, workers and contractors and acknowledge their valuable contribution. Three award schemes have been introduced to applause their significant contributions. They are Green Contractor Award Scheme, Considerate Contractors Site Award Scheme (CCSAS) and the Site Safety Model Worker Award Scheme (SSMWAS).

Green Contractor Award

The Green Contractor Award Scheme is set up to recognize contractors working on construction sites managed by ArchSD that have demonstrated good green practices in improving their environmental performance. The Scheme is applicable to all active ArchSD projects under construction including maintenance projects with contract sums over HK\$21 millions.

Following contractors have successfully won the Green Contractor Award 2010:

Gold Award - Gammon Construction Limited via the contract Redevelopment of Victoria Park Swimming Pool Complex

Silver Award - Gammon - Hip Hing Joint Venture via the contract Design and Construction of Tamar Development Project

Bronze Award - Hip Hing - Hanison Joint Venture via the contract Construction of Sports Centre and Community Hall in Area 101 of Tin Shui Wai and Construction of Lam Tin North Municipal Services Building

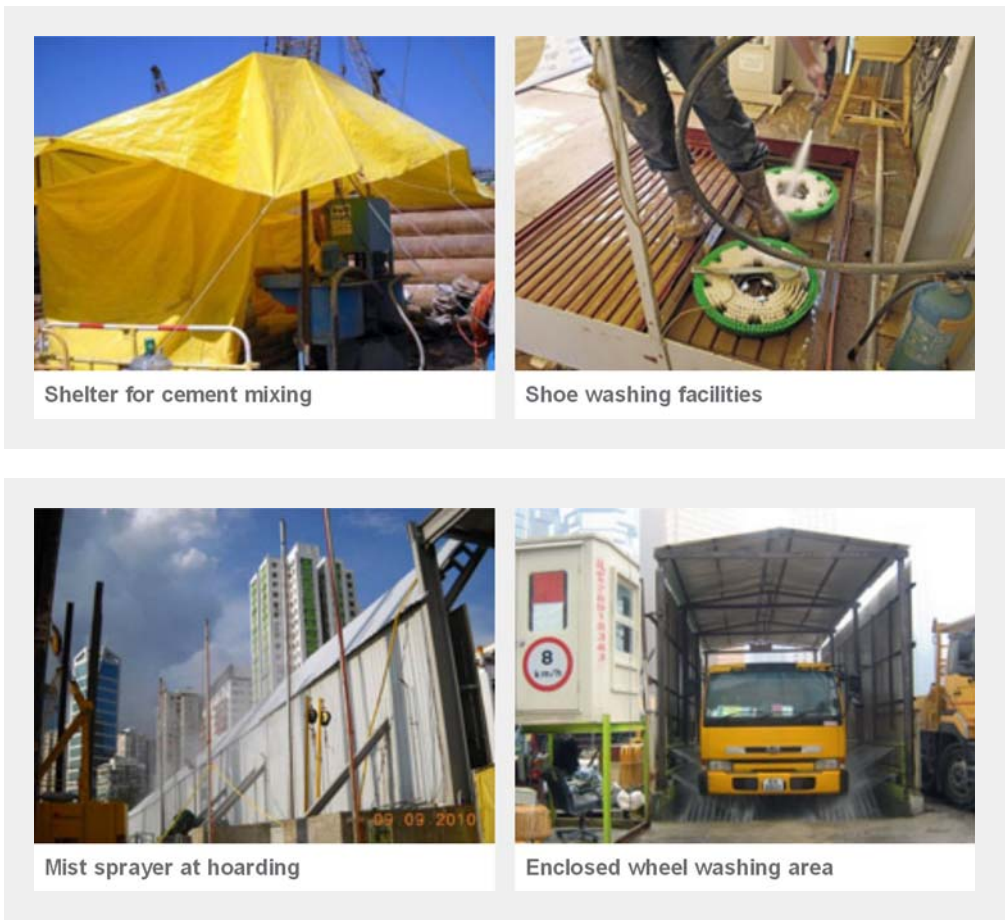
Contractor Representatives Receiving the 2010 Green Contractor Award





The Scheme, though not covers construction projects in the private sector, does set good examples for the industry to follow. These "green contractors" have observed and followed a high level of environmental standard in conducting their construction work. Some good practices are illustrated below.

Air



Noise



Acoustic enclosures on piling plants



Acoustic mat for noisy work



Use of hydraulic crusher



Quality powered mechanical equipment

Waste Management



Use of mechanical cover for trucks



Excavated materials reused for making sandbags and backfilling



Use of system formwork

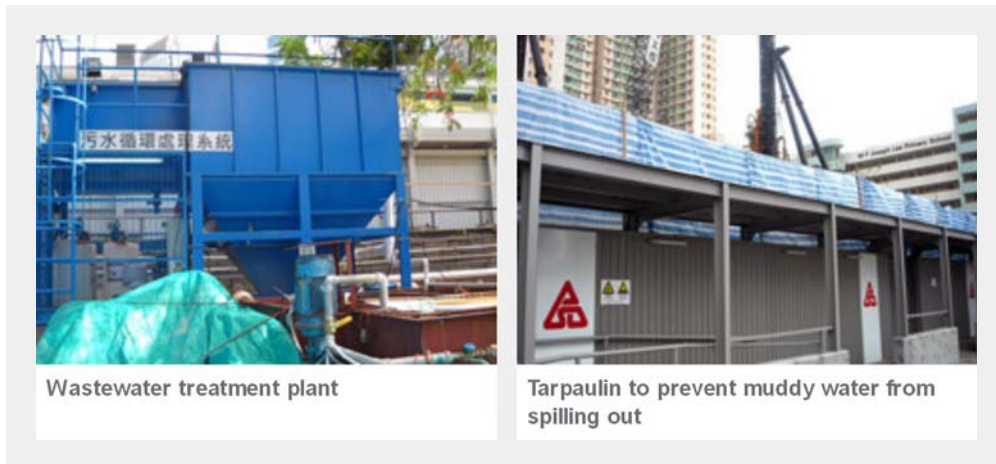


GPS On-board Unit on site to prevent illegal dumping

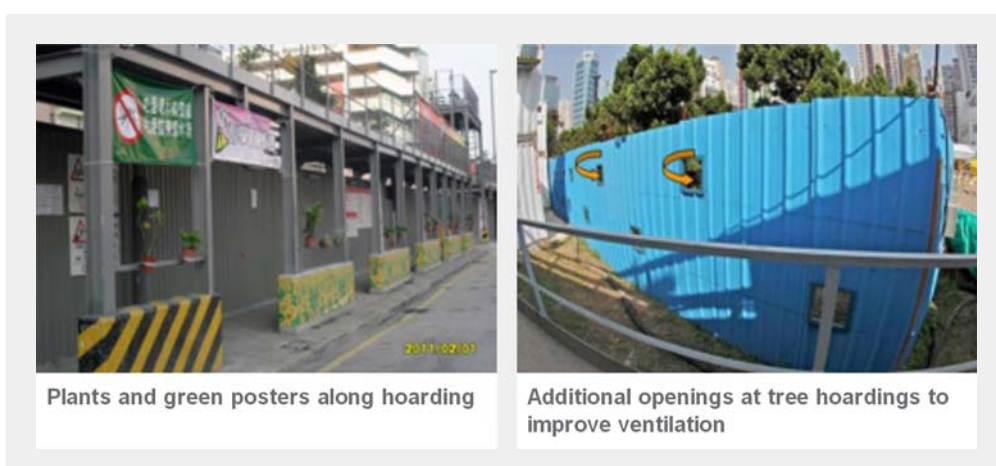
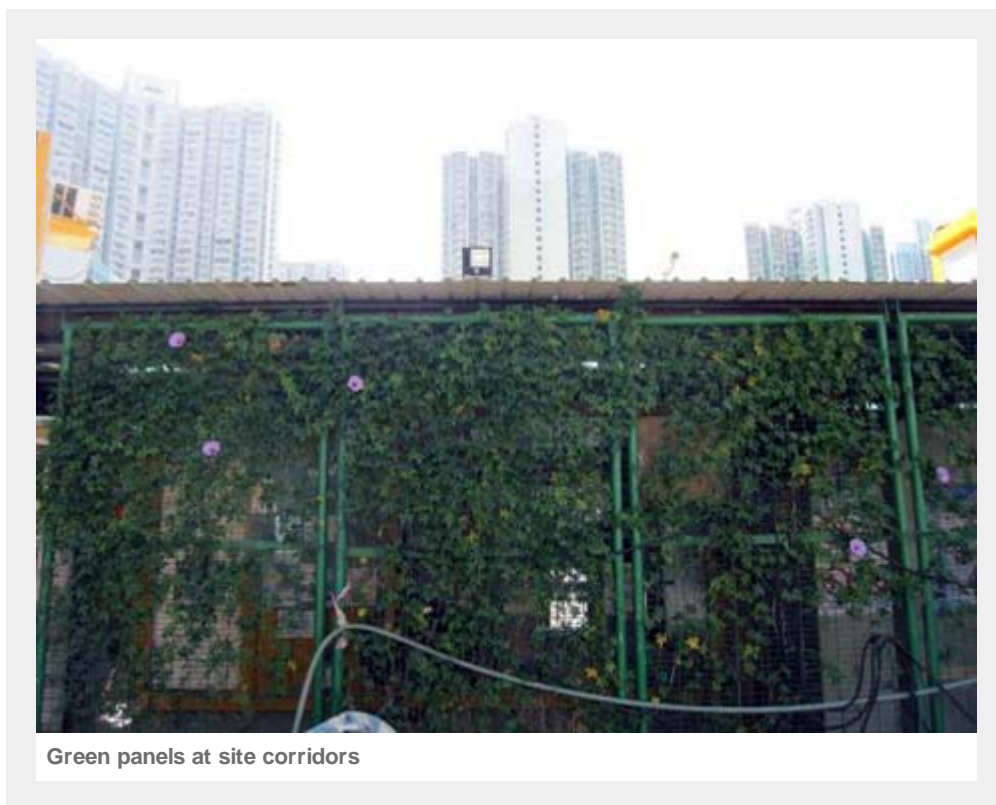


Reminder to truck drivers at prominent position

Water



Greening and Tree Protection





Hoardings erected for tree protection zones



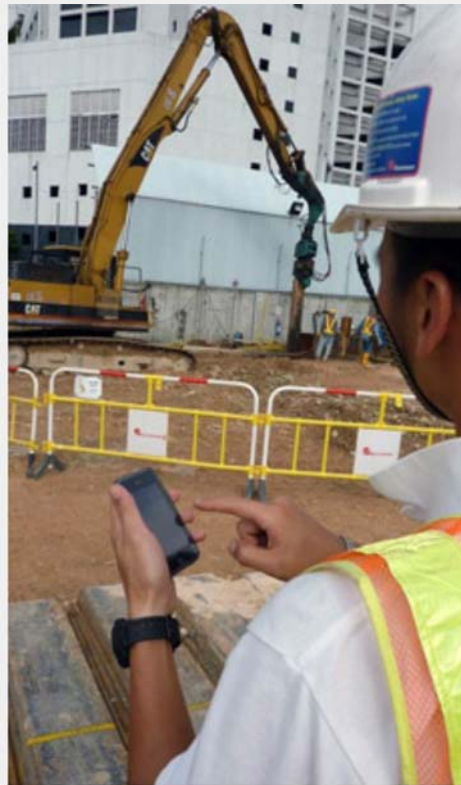
Resources Utilization and Conservation



White reflective paint to lower room temperature



Use of sustainable forest products



Paperless site inspection

Renewable Energy



Considerate Contractors Site Award

Since 1995, the Development Bureau (former Environment, Transport and Works Bureau) have organized the Considerate Contractors Site Award Scheme (the Scheme) to recognize works sites that have demonstrated a high level of safety / environmental performance and a caring attitude towards the community.

There were 225 contract-based public works and non-public works participated and competed in the Scheme 2010. The following categories of awards were thus developed to provide recognition to different work sites:

1. Considerate Contractors Site Awards for:
 - a. New Works Contracts;
 - b. Repair, Maintenance, Alteration and Addition (RMAA) Works Contracts.
2. Outstanding Environmental Management & Performance Awards for:
 - a. News Works Contracts;
 - b. RMAA Works Contracts.

In order to demonstrate a sustainable and reliable performance, the contractor of each entry is required to provide records and conduct quarterly assessment throughout the year with regard to on-site practices or measures including:

- Safety;
- Law Abiding;
- Site Management;
- Environmental Consciousness;
- Site Safety Performance;
- Being Considerate to Neighbourhood and Passers-by;
- Care of Workers and Others; and
- Adoption of Guidelines Issued by the Construction Industry Council.



A public ceremony was held to present these awards to the winning contractors on 9 May 2011. The complete list of recognized sites is available on the Development Bureau website.



These considerate contractors have demonstrated sustainable site practices, which set good examples for others in the industry.

■ **Training:**

- Regulatory requirements
- Industrial standards
- Site safety analysis
- Environmental impact assessment
- Risk prevention and mitigation



■ **Air Pollution Control:**

- Apply covers to suppress pollution to surrounding area
- Automatic system to wash vehicles before leaving site
- Paved path to minimize dust creation on site
- Adopt mitigation measures when conducting noisy works



■ **Waste Management:**

- Designated area on site for collection
- Construction waste separation for reuse and recycle



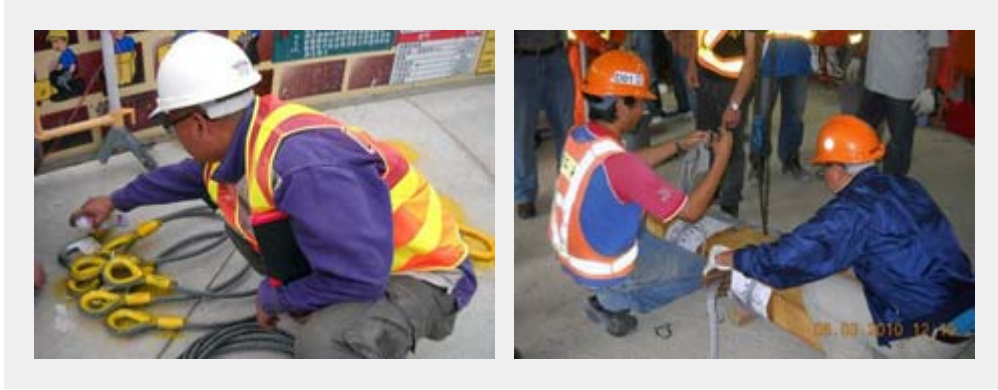
■ **Process Control:**

- Organize working area and tool bench to increase efficiency
- Guard heavy equipment and machinery to eliminate safety hazard
- Provide updated safety guidance and information to workers on site
- Build protection construction decorated with green plants for pedestrians



■ **Focus on Details:**

- Apply regular maintenance on personal safety equipment
- Check key components carefully before usage



Site Safety Model Worker Award

The Site Safety Model Worker Award of ArchSD has been introduced to encourage individual safety awareness and promote role models among construction workers.

Non-supervisory construction workers from various trades involved in contract-based works can be nominated according to their good safety practices on a monthly basis. The nominees are to be evaluated on the following major safety aspects:

- Be familiar with the site emergency procedures;
- Apply and maintain personal protective equipment properly;
- Maintain work area in a safe condition and minimize hazard to health;
- Strive to follow a safety system of work on site; and
- Encourage colleagues to practice safety measures.

Each Model Worker will be awarded with a certificate and cash prize which are often presented during on-site safety and environmental committee meetings.



Social Participation

ArchSD is committed to serving and caring for the community by enriching the living environment through a partnering approach. To highlight our commitment to the community, we launched the "Partnering to Serve with Care" exhibition on 29 May 2010 to 6 June 2010 to illustrate our partnering arrangement with stakeholders.



Launching Ceremony of Partnering to Serve with Care



Exhibition panels and models displayed for the Partnering to Serve with Care

We pride in the extensive experience and professional knowledge that we have accumulated through long-term service provided to the local communities. As a part of our social responsibility, we have been actively sharing these experiences and knowledge with the construction industries and the general public. In 2010, we have supported a number of public events to share our experience with local industries. Some of which are highlighted below:

Public Speeches

- Delivered a speech at the "Shui On Health, Safety & Environment Target Seminar 2010";
- Presented the organization of ArchSD and the Stanley Municipal Services Building to students from the School of Professional and Continuing Education of The University of Hong Kong;
- Delivered a speech on Application of Green Roof to Green Architecture from Designer Perspective at the 9th Annual Seminar of the Building Division of the Hong Kong Institution of Engineers;
- Presented a paper on "Optimizing the Environmental Performance of Government Buildings and Facilities" in International Sustainable Development Research Conference;
- Presented a paper on Design, Operation, Green and Energy Efficient Features of New Generation Crematorium at the Joint Symposium of Low Carbon High Performance Buildings; and
- Presented Ecological Park Design - Case Study of Hong Kong Wetland Park at the IFPRA World Congress 2010.

Media Interviews

- Interviewed by RTHK (Television) on the landscape of the Hong Kong Pavilion project;
- Aired "世紀藍圖" episode on Central-Wanchai Harbourfront in TVB Jade; and
- Interviewed by RTHK on Government House to mark its 155th year Anniversary for a TV Programme.

Site Visits

- Visited Ping Shan Heritage Trail by The Hong Kong Institute of Architects;
- Visited Diamond Hill Crematorium by the public.

Exhibitions

- Displayed 14 exhibition panels of ArchSD's event "Partnering to Serve with Care" at the premises of The Hong Kong Institute of Architects;
- Displayed exhibition panels under Science in the Public Service Campaign in the Innovation Carnival 2010 at the Hong Kong Science Park; and
- Submitted a poster in 12th International Conference on Mobility and Transport for Elderly and Disabled Persons.





Engagement Approach

Through daily operations and communication processes, we have already identified various stakeholders who have direct and/or indirect interests on ArchSD developments. We acknowledge their contributions and engagement through many different means, from website, reports, surveys, public events to face-to-face meetings. Their comments on our sustainability performance are valuable to us in formulating our direction for continuous improvement.

To gauge our performance and understand our clients' needs, we have conducted the Client Satisfaction Surveys, Post Occupancy Evaluations, public functions and meetings to engage our clients. We strive to provide a high level of quality services to our clients through the development of a steady and sustainable supply chain. By delivering presentations at public seminars and trade events, we hope to provide the latest information on our procurement activities to the existing and potential suppliers.

As for our professional partners, such as consultants and contractors, we acknowledge their contributions and collect their feedbacks through competitions such as the Green Contractor Awards and the Considerate Contractor Awards, site visits and functions organized by professional bodies.

To communicate with legislators and local district councillors, we organize various focused meetings for public works sub-committees and district councils, that we share green practices and/or achievement with participants. Research oriented conferences, training and overseas study missions are also provided to some academia groups.

Internally, through participating in Departmental Consultative Committee, Joint Staff Consultation Group, Staff Motivation Scheme, Web Forum, Staff Relation Units and other staff associations, our employees can exchange their insight and offer suggestions to ArchSD's sustainable development.

In addition, we realize that many more interested parties in the local and overseas market may want to communicate with us directly. Therefore, ArchSD has set up a user-friendly interface through the corporate website for visitors to comment on our sustainability performance. We welcome enquiries from media and NGOs.

In particular, we have conducted 5 formal interviews with individuals representing the 4 major stakeholder groups of staff, contractors, clients and professional organizations during the past year.

Stakeholder Interview

Comment from a Staff

ArchSD is committed to environmental protection. For instance, under the directive of Development Bureau, together with "Pay for site safety", ArchSD had adopted a scheme called "Pay for Environmental Protection". The scheme aims to encourage contractors to implement environmental measures and initiatives in construction sites by offering bonus to contractors. This incentive scheme has been proven very effective and successful in promoting environmental protection to construction contractors. In addition, ArchSD has already imposed stringent environmental requirements in its construction contracts to promote, drive and eventually achieve a "green" environment in construction sites. Internally, ArchSD has organized various activities to uphold staff morale and self-enrichment such as the Staff Motivation Scheme and the volunteer team. As Clerks of Works, we can participate in the volunteer team to contribute our hands-on experience through "Home Repair Service" to assist elderly in home renovation. I trust that ArchSD will continuously motivate contractors to improve their environmental performance and engage its staff to contribute to the society.

Mr. Ngai Kwok-kan
Chief Clerk of Works of ArchSD

Response from ArchSD:

We are devoted to protecting the environment during our daily operations. We will work with our staff and contractors to identify room for improving environmental performance continuously.

Comment from a Staff

ArchSD has striven for enhancing and balancing its economic achievements together with environmental and social performance. The Department has adopted numerous energy saving measures and accredited to ISO 14001 in order to better manage impacts on the environment. In terms of corporate social responsibility, the Department sets up a departmental volunteer team to serve the needy. For example, we cooperated with Tung Wah Group of Hospitals to serve the elderly and make souvenirs to the handicapped. The Department also organizes a wide range of sports and recreational activities as well as maintains open and effective communication channels for staff. I can feel high staff morale and team spirit within ArchSD.

Mr. Lee Fong Chung
Project Manager of Architectural Services Department
The Government of the Hong Kong Special Administrative Region
Chairman of the ArchSD Staff Association

Response from ArchSD:

Staff is always a valuable asset in our department. We have maintained an open and effective approach for staff management. We care for our staff and will make every effort to maintain and uphold staff morale and team spirit within the department.

Comment from an Association

Hong Kong Green Building Council (HKGBC) has worked with ArchSD mainly on green building initiatives through BEAM Plus, a renowned assessment scheme developed locally. ArchSD has contributed a lot in the development of green buildings and has demonstrated its willingness to drive the entire community to go "green". ArchSD is one of the advisors' group in the Green Labelling Committee of the HKGBC. We thank ArchSD's contributions to the Committee by providing professional advice to maintain the balance between economic efficiency and public concerns.

ArchSD not only adopts green design in its projects, but also shares its experience and professional knowledge with others through various means. Experts from ArchSD also participated in the BEAM Faculty which helps to support the BEAM Professionals (BEAM Pro) training, and advise on the technical issues in relation to BEAM Plus. We are happy to see that ArchSD has actively introduced and promoted sustainability concept to students through incorporating it into daily life.

Ms. Lillian Ma
Manager (Council Services) of Hong Kong Green Building Council

Response from ArchSD:

We will continue to introduce sustainability concepts into our building design and contribute our professional knowledge and advice to the industry. In addition, we will propagate the sustainability concepts to our business partners, clients and the general public through various means to maximize the benefit to the environment.

Comment from a Client

We have worked with ArchSD as close partners in various projects and ArchSD has been providing us with excellent supporting services. ArchSD often provides professional advice and valuable information which facilitates us in delivering our development projects. For instance, during the design stage, ArchSD provides us with accurate estimates and maintenance cost of the architectures. In addition, ArchSD often provides sound technical advice for better design to minimize the maintenance cost and enhance quality of the product. To provide better support, ArchSD has also established a team of specialists from different disciplines to closely communicate and assist us throughout the technical feasibility process. With their extensive experience in construction projects, we benefit from their role as a competent project manager to ensure effective and efficient cooperation among different stakeholders in the construction process.

Miss Priscilla Lam
Assistant Director-General (Air Services) of Civil Aviation Department
The Government of the Hong Kong Special Administrative Region

Response from ArchSD:

We are pleased to know that our efforts are highly appreciated by other government departments. We thank you for all our staff's contribution and are committed to providing valuable advice to all parties that we serve.

Comment from a Contractor

We support ArchSD's sustainable development approach in building construction and we are glad as one of the main contractors for the construction of a number of significant government architectures in Hong Kong. In order to inspire us to develop more social and green innovative measures for construction works, ArchSD has shared with us countless useful information and tips on good occupational health, safety and environmental protection practices. ArchSD follows Development Bureau's directives to include the "Pay for site safety" and "Pay for Environmental Protection" schemes in ArchSD's contracts that set up criteria/checklists of safety and environmental measures that should be implemented in construction sites. We will be rewarded with bonus if we achieve specified requirements and thus diminishing our overall expenditure. To further promote site safety and green practices, we will give parts of the bonus to site workers with outstanding performance on safety and environmental aspects in order to encourage and recognize good measures adopted at our construction sites. In addition, the Green Contractor Awards presented by ArchSD also recognize our effort in environmental performance and drive us to maintain high standards and continual improvement in our construction work. We are glad to work with ArchSD to create green and sustainable construction sites, as well as to foster and maintain a harmonious relationship with the community.

Ir David Kwok
Contracts Manager of Gammon Construction Limited

Response from ArchSD:

We understand that our operations involve many contractors. In addition to laying down specific requirements in the contract, we also encourage our contractors to adopt best practices through various incentive schemes. We will continue to motivate our contractors to further improve their performance in different sustainability aspects.

Community Support and Engagement

Community Support

Teaching Kits

Three sets of teaching kit with good practices using in the Government projects that requested by the Development Bureau are developed for students as education material for the liberal study in 2010. Three sets of teaching kit are "Cultural Heritage and Build Environment", "Sustainable Design for Buildings" and "Understanding the Building Process and Teamwork".



Teaching Kit of "Cultural Heritage and Build Environment", "Sustainable Design for Buildings" and "Understanding the Building Process and Teamwork"

Cultural Heritage and Build Environment

To appreciate the value of the historic buildings and to ponder how to protect these values in a sustainable manner through introduction of some well-known historic buildings in Hong Kong, this teaching kit is separated into two parts which includes "Living Archi Central" and "Ping Shan Heritage". This teaching kit covers history, building style, significance and value of historic buildings, field trip itinerary and questions for discussion.

For the part of "Living Archi Central", it is designed for studies in Module 2 of the Liberal Studies Curriculum - "Hong Kong Today" for secondary school teachers and students. This part has used the surviving western and colonial style buildings in Central to illustrate the societal, economical and cultural context in the early colonial days.

For the part of "Ping Shan Heritage", it is designed for primary school teachers and students. This part has used the surviving village buildings in Yuen Long Ping Shan settlement to examine the community life of early Chinese settlement in the New Territories.



Sustainable Design for Buildings

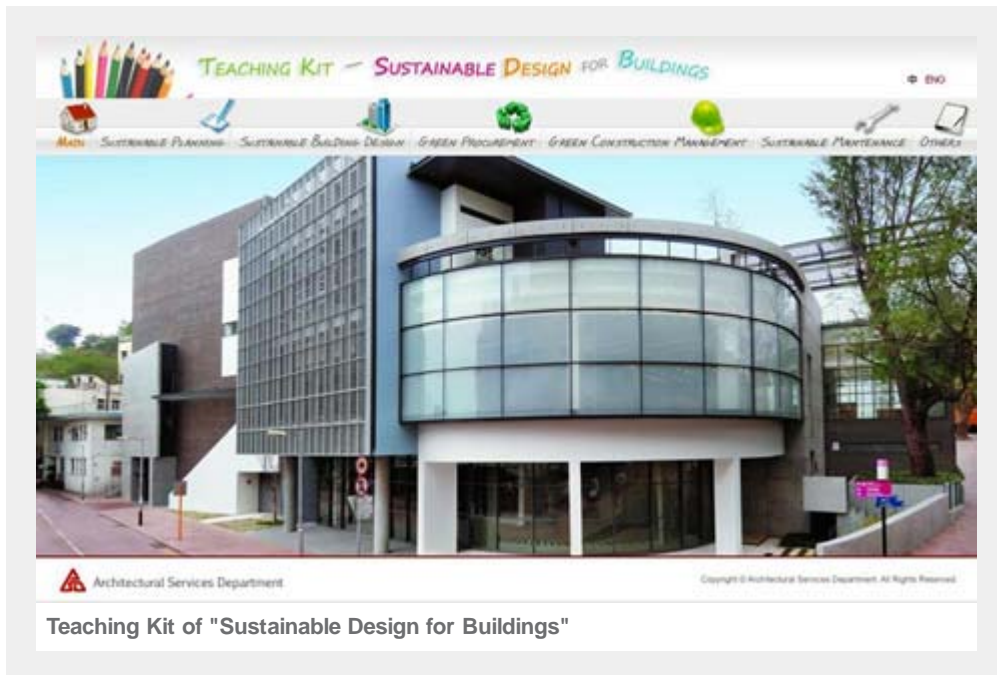
This teaching kit is designed for studies in Module 2 of the Liberal Studies Curriculum - "Hong Kong Today" to secondary school students.

The learning objectives of this teaching kit are:

- to understand the general concepts of sustainable building design that relate to the quality of human living;
- to appreciate how sustainable building design protects the environment's well-being; and
- to acknowledge how buildings could or should be designed, built, and maintained more environmentally friendly and efficiently.

Architectural Services Department - Sustainability Report 2011 - Stakeholder Engagement

Through the introduction of the basic approach on sustainable building planning and design, green procurement, green construction management and sustainable maintenance for government projects, the concept of environmental conservation is illustrated.



Understanding the Building Process and Teamwork

This teaching kit is designed for studies in Module 2 of the Liberal Studies Curriculum - "Hong Kong Today" to secondary school students.

The learning objectives of this teaching kit are:

- to recognize the eleven core team players involved in the construction of a building;
- to understand and appreciate the work of each of these professions; and
- to gain a general idea on the career paths of these professions.

Bringing a building from concept to reality is a long and complicated process. From initial project planning to completion, we rely on a professional team from various disciplines to bring their expertise on project outline, feasibility study, conceptual design, detailed design, tendering, construction, commissioning and maintenance together to complete the task.

The image shows a screenshot of a web-based teaching kit. At the top, there are navigation links for '主頁' (Home) and '中文 ENG' (Chinese/English). The main title is '建築工程的幕後團隊' (The Behind-the-Scenes Team of Building Engineering). The interface features a central video player with a play button and a progress bar. Below the video player, there is a caption: '重溫「建築工程的幕後團隊」短片' (Revisit the short film 'The Behind-the-Scenes Team of Building Engineering') with links for '在線觀看' (Watch Online) and '下載影片' (Download Video). The interface is flanked by two columns of red buttons, each representing a professional role: '工程策劃經理' (Project Planning Manager), '建築師' (Architect), '結構工程師' (Structural Engineer), '屋宇裝備工程師' (Building Services Engineer), '園境師' (Landscape Architect), '工料測量師' (Quantity Surveyor), '建築技術主任' (Building Technology Supervisor), '工料測量主任' (Quantity Surveying Supervisor), '工程監督' (Construction Supervisor), '承建商' (Contractor), and '屋宇保養測量師' (Building Maintenance Surveyor). Each button includes '在線觀看' and '下載影片' options. At the bottom right, there is a copyright notice: 'Architectural Services Department - Copyright © 2011 All rights Reserved'.

主頁 中文 ENG

建築工程的幕後團隊

工程策劃經理
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建築師
> 在線觀看 > 下載影片

結構工程師
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屋宇裝備工程師
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工料測量師
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建築技術主任
工料測量主任
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承建商
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屋宇保養測量師
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重溫「建築工程的幕後團隊」短片
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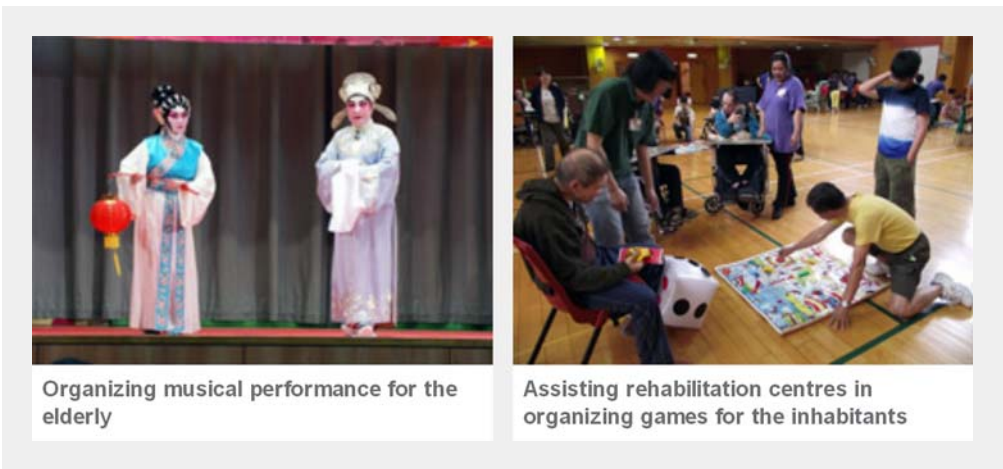
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Teaching Kit of "Understanding the Building Process and Teamwork"

Serving the Community

We endeavour to protect the well-being of the community. Our Volunteer Service Team actively participates in a number of community services to serve the needy. In 2010, our Volunteer Service Team served the community for over 1,500 hours through participating in 67 events. We reach out through assisting rehabilitation centres in organizing outdoor activities, birthday celebrations and games for the inhabitants, arranging musical performance and making beautiful handicrafts and gifts for the elderly, assisting non-governmental organizations in Flag Day and other fund raising activities, and conducting Tai-chi classes to the underprivileged. To maximize the possible use of our resources, professional expertise and services, our Volunteer Service Team also assists in renovating the homes of singleton elderly.

Year	Number of Voluntary Projects Completed
2008	53
2009	44
2010	67



Organizing musical performance for the elderly



Assisting rehabilitation centres in organizing games for the inhabitants



Assisting in renovation of elderly homes



Staff Development

We believe that one of the most critical ingredients for a success department is to establish and maintain a professional team with various talents and motivation. As such we place a lot of value on our staff development programmes and make all the necessary means available to them.

During the year, we organized different training programmes for staff at various levels, in which resources have been allocated for the aspects of Leadership & Management Skills, Professional & Vocational Training and Career Development.

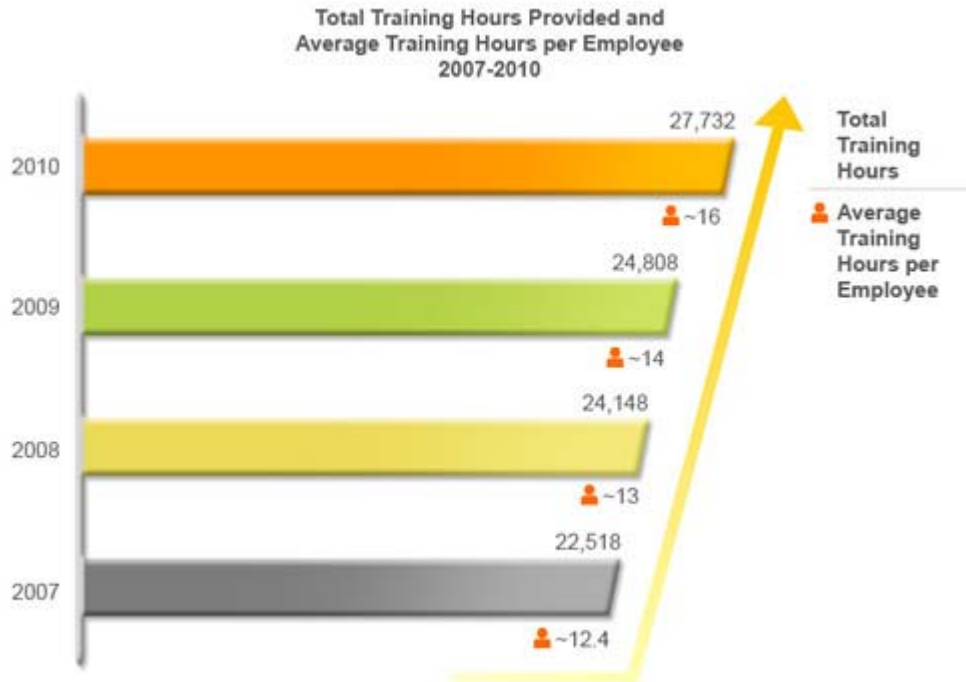


Highlights of the training courses organized during the reporting year were:



Architectural Services Department - Sustainability Report 2011 - Human Resources

Since 2007, there has been a rising trend on our average training hours provided for our staff. During the reporting period, a total of 160 training courses were organized which accounted for a total of 27,732 training hours. The average training hours per employee for the reporting year was about 16 hours.



To broaden our staff professional knowledge, we published the following technical papers which covered various research and development studies of architectural services.

- Review of ArchSD Completed Demolition Projects;
- Review of Specifications for Patch Repairs to Concrete;
- Study on VOC Limit for Paint System on Application in Structural Steelworks (Part II); and
- The Implication of Operable Windows in Curtain Wall Design.

In addition to the R&D studies completed in 2010, during the year the following R&D studies were also being conducted:

- Use of Epoxy Grout Structural Repair Works;
- Update of TI Paper 1/99 to particular Specification;
- Study on New Requirements Imposed by the Code of Practice for Structural Use of Concrete 2004;
- Application on Pivot Hinges to Glass Doors in New Construction Works, Fitting-out & Maintenance Projects;
- Guidelines on Design for Vibration Effect to Grandstands & Sensitive Equipment; and
- Review of Tensile Structure Procurement and Contract Administration Specification.

Staff Engagement

As a government department which encompasses more than 1,781 civil service posts, we take care of our staff equally in every aspect and we always strive to provide an environment which encourages all our staff to realize their full potentials. Throughout the year we organized a number of programmes and activities that promote good staff relationships within our department. In addition, we worked very closely with the existing eight staff associations which represent various areas of our services in order to build a good sense of teamwork.



Staff Motivation Scheme

Since 1993, we have been arranging various departmental activities for our staff under the Staff Motivation Scheme. The objectives of the Scheme are to:

- Promote greater interest in and general awareness of the department's Performance Pledges;
- Promote customers service culture in the department and improve skills in customer service;
- Foster a sense of belonging among staff of the department;
- Encourage improvement in performance and service quality; and
- Achieve efficiency and productivity gain.

During the year, there were eight activities organized under the Scheme and highlights of the activities included design competitions for uniform, staff access card holder, recycled bag and directional signs at our office lift lobbies.

Staff Recreational Activity

To foster better staff relations and team spirit, we encourage our staff to participate a wide range of recreational activities which include sports competition and other family-oriented activities.

Over the past years, we have been actively participating in dragon boat racings as we find that such events can provide an excellent opportunity for us to demonstrate our team spirit. We also find that by participating in these events our team can exhibit their leadership, coordination and communication skills that can be integrated into their working lives.

During the year, our dragon boat racing team participated in various competitions held in Chai Wan, Shatin, Tai O and Sai Kung and achieved satisfactory results.



Dragon Boat Racing

This year, we also organized a badminton competition for our site supervisory staff. In addition, we managed to support two teams for participating in the Oxfam Trailwalker 2010 and both teams received very satisfactory results.



Site Staff Badminton Competition



Oxfam Trailwalker 2010

Health and Safety

Our staff members are our most important resources and we strive to create workplaces where all of us are encouraged to be active contributors and participants in our health and safety activities. Our goals are to minimize danger, provide supports and promote a "Safety First" state-of-mind among ourselves, our contractors and other working partners.

Governance and Supervision of Site Health and Safety

We applied comprehensive governance systems for health and safety management in all of our projects. We developed the Guidance Notes on Site Safety and Environmental Supervision System to assist us and our stakeholders to manage health and safety issues in a practical and effective manner.

As indicated in the "Guidance Notes on Site Safety and Environmental Supervision System", the health and safety issues of our outsourced and internal projects are supervised in different levels. The supervisory duties on health and safety issues of resident site staff (RSS), of consultants or contractors, ArchSD project team members and our Departmental Safety and Environmental Advisory Unit (DSEAU) are clearly defined in this Guidance Notes so that the safety performance and the status of safety measures applied can be monitored and managed systematically.

We have also established a guidance document, namely "Guidance Notes on Proforma Site Safety and Environmental Management Committee Meeting Agenda", to streamline the effectiveness of conducting health and safety meetings. In this guidance document, common health and safety items which should be addressed during a health and safety meeting are clearly specified. The health and safety personnel and project team member can make reference to the items listed in this document and discuss the health and safety issues in an effective and systematic manner.

In addition to the above two guidance documents, we have also established "Guidance Notes on Safety Measures for Working in Hot Weather", which outlines common hazards related to working in hot weather. This guidance document provides comprehensive information for contractors to carry out risk assessments and identify relevant hazards and risks so that appropriate safety measures can be applied in projects.

Promotion of Health and Safety

Health and Safety promotion is a part of ArchSD approach to the support and development of our staff. As such a number of health and safety promotion programmes and initiatives were undertaken during the year.

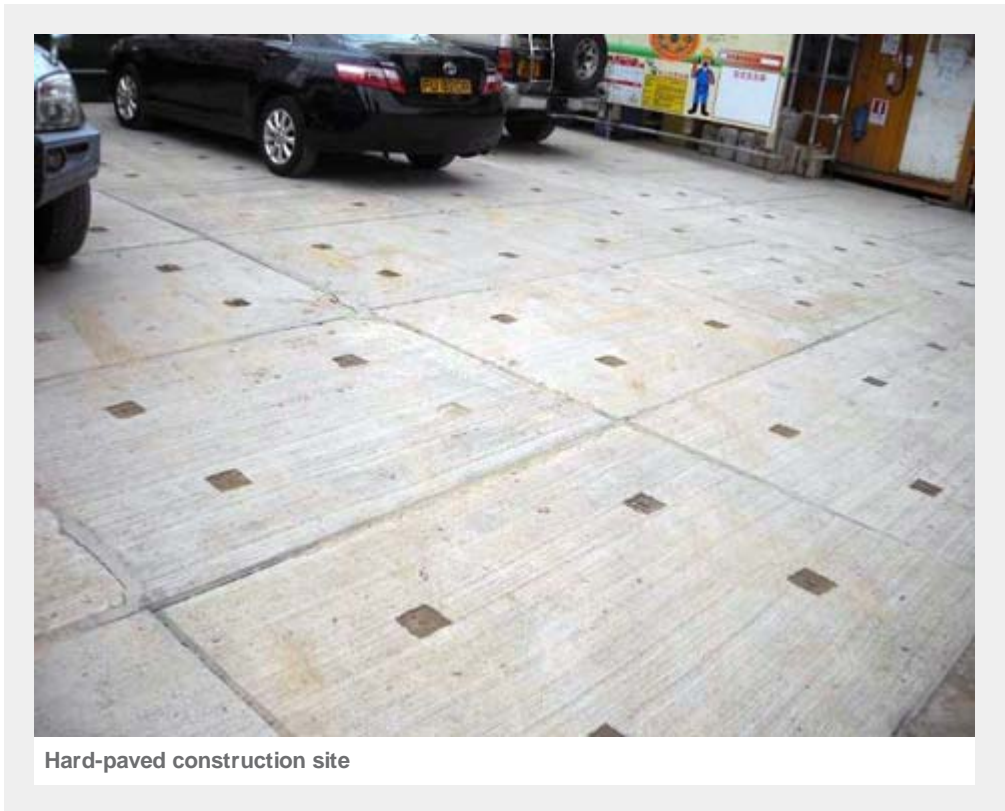
Throughout the years we have been encouraging our contractors and working partners to participate in the Development Bureau's (DEVB) Considerate Contractors Site Award Scheme (CCSAS). The Scheme aims to recognize both Public Works and non-Public Works sites which demonstrate considerate attitude and good site safety, health and environmental practices. During the year, 20 of our managed projects participated in the Scheme.

Our project for the construction of Lam Tin North Municipal Services Building (Contract SS W305) won the silver award under the category of Considerate Contractors Site Award and a Merit under the category of Outstanding Environmental Management and Performance Award of the CCSAS. In addition, a worker of this Contract was also selected in the Model Workers Award under the Scheme.



To further promote the site health and safety importance, our health and safety personnel worked with the frontline project staff to produce and launch an animated multi-media package in 2010. The package uses past accidents as case studies to provide preventative and remedial measures so that workers would have more information for accident prevention. It is one of the most effective means to promote our safety messages to the workers.

Throughout the years we have been promoting our projects to employ hard paving within the construction sites to improve site safety. During the year, we selected 8 contracts as pilot requiring the construction sites to be hard-paved. Starting in 2011 most of our projects would implement hard-paved surface within the construction sites.



Architectural Services Department - Sustainability Report 2011 - Human Resources

To promote health and safety a number of workshops and training courses were provided during the year. Highlights of health and safety training programmes for our staff are:

- Training courses on occupational safety management safety and health supervisor (construction);
- In-house safety & environmental promotional workshops on lifting operation and site safety cycle, site safety & environmental management and site safety experience sharing;
- In-house workshop on site safety, environmental management and excavation permit management arranged for newly engaged project staff;
- Safety training for certified workers of confined space operations; and
- Mandatory Basic Safety Training Course.



Training Workshop

Other Initiatives Concerning Health and Safety

During the year, a number of initiatives were undertaken in order to strengthen our health and safety performance:

- Development of safety guidelines for site visitors to ensure that every site visitors are well informed about site safety issues before visiting the construction sites.
- Enhanced contractual requirements by expanding the existing safety requirements to cover working in lift shaft, specifying safety requirements for minor works, and to facilitate the implementation of Construction Design and Management in various projects.
- Preparation and updating site safety & environmental promotion materials, including:
 - Lessons learnt on "Overturning of Mobile Crane in Lifting Operation";
 - Sample Tool-box Talk on Mosquito Control on Construction Sites (Version 2010);
 - Training Kit for Site Safety & Environmental Supervision (Version 2010);
 - Key notes on Supervising High Risk Activities on Construction Sites (Updated 04/2010); and
 - Safety of lifting operation - checklist for lifting plan prepared to facilitate monitoring of the safety of lifting operation.
- Monthly independent site audits on mosquito control for construction sites.
- Full scale independent audits for various health and safety issues including compliance of Silver Card training of workers, lifting safety and site tidiness & cleanliness.



In 2010, we achieved most of our environmental, project quality and social targets. We are committed to continually improving our sustainability performances. Details of our achievements in 2010 and the targets for 2011 are tabulated below.

On Environmental issues

Long Term Objectives	Targets for 2010	Achievements	Target Compliances	Targets for 2011
Reduce water consumption	To install water saving devices for 92% of sanitary appliances in new buildings	93% (3,807 out of 4,089 nos.) of sanitary appliances were installed with water saving devices	Complied	89% non-mixer taps in new projects (excluding residential quarters and non-mixer taps for clinical sinks and laboratory sinks) to be water efficiency type & 99% of water closets in new projects to be water efficiency type
Reduce energy consumption	To achieve OTTV standard of less than 23W/m ² for 100% of all new projects with air conditioning installations, and not more than 18 W/m ² for 70% of projects (with reference to BEAM classification)	100% (5 out of 5 projects) of all new projects with air conditioning achieved with OTTV less than 23 W/m ² , and 80% (4 out of 5 projects) of projects with BEAM reference achieved OTTV less than 18 W/m ²	Complied	2010 targets to be maintained in 2011
	To use water-cooled heat rejection system in centralized air-conditioning system exceeding 1,050kW (each chiller) for 100% of new projects	100% (3 out of 3 projects) of all new air-conditioning system exceeding 1,050kW were installed with water-cooled heat rejection system	Complied	It becomes a benchmark requirement in our projects
	For all new joint user buildings or urban complex building, Building Energy Management (BEM) System shall be adopted to calculate the energy charges for individual client	100% (2 out of 2 projects) of all new joint user building projects, Building Energy Management System was adopted	Complied	2010 targets to be maintained in 2011
	To use T5 fluorescent tube or Light Emitting Diode (LED) lamp for passenger lift car illumination for 100% of new projects	100% (6 out of 6 projects) of all new projects with passenger lifts were installed with energy efficient lighting for lift car illumination	Complied	It becomes a benchmark requirement in our projects

Architectural Services Department - Sustainability Report 2011 - Objectives and Targets

	100% of new projects where lighting effect of spot light and display lights required to be created by miniature tungsten halogen lamp, energy efficient lighting such as LED lamp should be employed	100% (5 out of 5 projects) of all new projects with spotlighting and display lights, energy efficient lighting were employed	Complied	It becomes a benchmark requirement in our projects
Improve visual and air quality of our city	100% of design stage projects to landscape usable roof area and/or terrace (excluding metal roof, pitch roof and roof on long span structure \geq 15m)	100% (13 out of 13 projects) of design stage projects had incorporated with roof greening	Complied	2010 targets to be maintained in 2011
	To incorporate vertical greening in 55% of design stage projects where roof greening were not possible	60% (3 out of 5 projects) of design stage projects where roof greening were not possible had incorporated with vertical greening	Complied	To incorporate vertical greening in 60% of design stage projects

On Project Quality issues

Long Term Objectives	Targets for 2010	Achievements	Target Compliances	Targets for 2011
Improve the quality of our services and project delivery	To ensure the timely delivery of at least 80% of Public Works Programme (PWP) projects that have been scheduled at the start of the financial year for completion in the year. (On the basis of financial year)	95.2% (20 out of 21 projects) of all PWP projects were completed on schedule.	Complied	2010 targets to be maintained in 2011
	To monitor the expenditure on PWP projects within ArchSD's purview against the original estimates, ensuring that the under-spending does not exceed 5% of the corresponding provisions in the Printed Estimates	Original Estimate was \$11,895.3 millions. The Outturn Forecast was \$11,903.9 millions, which represented an over-spending of \$8.6 millions (0.1%) when compared to the Original Estimates	Complied	2010 targets to be maintained in 2011
	100% of the surveyed projects to achieve Satisfied Level or above on the overall performance in Client Satisfaction Survey	100% (32 out of 32 projects) of the surveyed projects have achieved Satisfied Level or above on the overall performance	Complied	2010 targets to be maintained in 2011
	To prepare not less than 2 nos. of Proforma Specification / Guidance Notes for special / innovative BS installations	Proforma Particular Specification for Medical Gas Installation and Proforma Specification for Rainwater Recycling Installation were issued	Complied	To prepare not less than 2 nos. of Proforma Specification / Testing and Commissioning Procedures for BS installations
	To commence not less than 90% of new PWP scheduled in 2010 in accordance with the commencement dates committed in the 2009 Resource Allocation Exercise (RAE)	100% (9 out of 9 projects) of all 2009 RAE projects that committed to commence in 2010 commenced works on schedule	Complied	To commence not less than 90% of new PWP scheduled in 2011 in accordance with the commencement dates committed in the 2010 RAE

On Social issues

Long Term Objectives	Targets for 2010	Achievements	Target Compliances	Targets for 2011
Minimizing accident rate for ArchSD staff	Accident rate for ArchSD staff should be not more than 2 occupational injuries per 1,000 staff per year	2.25 occupational injuries per 1,000 staff per year	Not complied	2010 targets to be maintained in 2011
Minimizing the accident rate in ArchSD contracts	Accident rate in ArchSD contracts should be less than 0.75 reportable accident per 100,000 man-hours worked	0.33 reportable accidents per 100,000 man-hours worked	Complied	Accident rate in Arch SD contracts should be less than 0.6 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	At least 4 in-house workshops on safety and health should be organized	4 in-house workshops / seminars were organized with a total of 187 attendants	Complied	2010 targets to be maintained in 2011
Promoting the awareness on safety and health amongst construction workers	At least 30% of ArchSD contracts would participate in the ArchSD Site Safety Model Worker Award Scheme	46% (40 out of 87 contracts) of ArchSD contracts participated in Safety Model Worker Award Scheme	Complied	At least 35% (from 30%) of ArchSD contracts would participate in the ArchSD Site Safety Model Worker Award Scheme
Promoting the awareness on safety and health amongst contractors	At least 40% of ArchSD eligible new works contracts and 30% of eligible maintenance term contracts would participate in Development Bureau Considerate Contractors Site Award Scheme (CCSAS)	54% (14 out of 26 contracts) of eligible ArchSD new works contracts and 55% (6 out of 11 contracts) of eligible maintenance term contracts participated in CCSAS 2010	Complied	2010 targets to be maintained in 2011
Strengthening health and safety knowledge for project staff with external training	At least 10 external safety training courses on latest safety technology, current safety legislation, accident investigation, etc should be arranged for project staff per year	13 external training courses were arranged with 453 attendants from professionals & technical staffs and site staffs	Complied	2010 targets to be maintained in 2011



Moving
Forward



Major Projects

Throughout the years, we have already incorporated sustainability aspects into our service and operation. We will uphold our momentum to apply innovative yet practical ideas and technologies to continuously improve the sustainability performance of government buildings and facilities. Our progress of some of the remarkable projects is highlighted below.

New Cruise Terminal at Kai Tak

The new cruise terminal is located in the southern end of the former Kai Tak runway with a construction floor area of 143,600 square metres. The new cruise terminal comprises a terminal building and two alongside berths. The terminal building has been designed to be highly functional and efficient for providing world-class services to enable operators to clear 3,000 cruise passengers per hour, while the two berths can accommodate the largest cruise vessel in the world. The terminal building will be iconic with a number of environmental sustainability designs such as skylit atria to let in daylight and let out vehicle exhaust, renewable energy by using photovoltaic panels and solar hot water system and water recycling system to collect rainwater and air-conditioning condensate for irrigation. The construction works of the new cruise terminal have been commenced in May 2010. The terminal building and the first berth are expected to come into operation in mid-2013, while the second berth will be commissioned in 2014.



Civil Aviation Department (CAD) Development Project

The Chief Executive announced in the 2006-07 Policy Agenda an initiative to develop a new CAD Headquarters (HQ) on the Airport Island to reinforce Hong Kong's leading position in the regional aviation services and sustain long-term growth of the industry. The new CAD HQ building has a construction floor area of 65,000 square metres to accommodate a new air traffic control system, administration and regulatory offices, a dedicated aircraft accident facility, a multi-purpose auditorium, a library cum resource centre, a tour presentation room and an education path. To increase the overall efficiency of the construction programme, we have adopted a design-and-build approach by overlapping initial ground works and detailed internal design stages. We have also incorporated a number of green designs in the new CAD HQ building. These include utilization of renewable energy by installing 140 square metres photovoltaic panels and six solar lighting collectors with fibre-optics solar tracking system, adoption of water recycling system by collecting rainwater and condensate water from air-conditioning for irrigation and installation of vertical greening, green roof and green podium. Construction of the building has been commenced in May 2009 and is expected for completion in August 2012.



North Lantau Hospital Phase I

To cope with the development of North Lantau New Town and its growing population, we have assisted the Hospital Authority in building the first hospital in the region. The North Lantau Hospital is located in Tung Chung Area 25 and the whole project will be taken forward in two phases. Phase I of the hospital occupies an area of about 1.9 hectares and comprises a 7-storey C-shaped block atop a single storey podium, with provision of 160 in-patient beds and ambulatory care services as well as state-of-the-art diagnostic and treatment facilities. We have adopted various environmental designs to enhance the building's energy and water efficiency.

The green features include:

- low energy absorbing building envelop with sun-shading device;
- extensive soft landscaping with vertical greening, green roof & terraces;
- utilization of renewable energy using BIPV, PV and solar panels;
- energy saving T5 fluorescent lamps with electronic ballasts;
- energy efficient oil free chillers;
- extensive use of sensor water taps;
- harvesting rainwater for irrigation;
- light-emitting diode type exit signs and feature lights; and
- permanent electric charging points at carpark for electric cars.

We target to achieve Platinum rating of Building Environmental Assessment Method (BEAM) for the building. The construction works of Phase I have been commenced in January 2010 and is expected to be completed by the end of 2012.



Perspective View of North Lantau Hospital

Town park, Indoor Velodrome-cum-sports Centre in Area 45, Tseung Kwan O

The project involves the construction of a town park and an indoor velodrome-cum-sports centre in Tseung Kwan O. The site is adjoining the TKO Sports Ground, one of the venues for the 2009 East Asian Games in Hong Kong. The Town Park comprises a lawn, an artificial lake, a skateboard park, an amphitheatre and other recreational facilities for the public including children, youth and elderly. The indoor velodrome has a seating capacity of about 3,000 and will provide a 250-metre long cycling track with supporting facilities meeting international competition standards. The multi-purpose arena at the centre of the track will be for recreational uses such as ball games and other uses such as exhibitions, etc. The project is expected to be completed in 2013.

The project has adopted various forms of energy efficient designs including water cooled chillers, automatic condenser tube cleaning system, heat wheels for heat energy reclaim of exhaust air from toilets and changing rooms, heat pump for domestic hot water and dehumidification, light-emitting diode type exit signs and downlights, photovoltaic system and solar hot water system.



Perspective View of Indoor Velodrome-cum-sports Centre

Investments on Information Technologies

In an increasingly interconnected world, we are aiming to enhance existing and develop new information technology (IT) systems for improving efficiency and transparency. Some IT systems being developed, such as Knowledge Management Portal for managing knowledge in our department, and Extranet for the restricted access of our key stakeholders from outside via a private secured web portal, are illustrated below:

Knowledge Management Portal

A Knowledge Management (KM) Portal is being developed and configured to enhance our core competency by managing explicit knowledge, to encourage the formation of community of practice for on-going generation of ArchSD proprietary knowledge and to promote tacit knowledge harvesting. The KM Portal will be an integrated system for cross-branches information sharing among colleagues, and will be divided into three levels, i.e. knowledge community workspace, functional / branch KM hubs and ArchSD knowledge bank. In future, where appropriate, the KM portal may be extended to allow limited access by other stakeholders such as other related HKSAR department/bureau partners in order to enhance the cross department knowledge sharing.

Extranet

For promoting partnership and collaboration with key stakeholders, we are developing an ArchSD Extranet to enhance communication and information exchange with external users such as consultants and contractors, and to assist contract management in the works projects undertaken by the department. In addition to facilitate the users to navigate and access different application modules in the ArchSD Extranet, a web-based Project Document Management System (PDMS) will also be developed under our ArchSD Extranet to facilitate efficient communication among the ArchSD's project teams, the contractors, sub-contractors and designers, etc.

Data Summary

Performance Data

Environmental Performance

Resources Usage - Energy

	Units	2010	2009	2008	2007	2006
Electricity consumed (QGO and APB Centre) [1]	kWh/m ²	236	238	244	245	265.2
CO ₂ emission equivalent to electricity consumption (QGO and APB Centre) [2]	Tonnes CO ₂ e	4,001	4,027	4,071	4,089	4,644
Building with OTTV less than 23W/m ² [3]	% & no. of total no. of projects	100% & 5 of 5	100% & 16 of 16	100% & 24 of 24	100% & 15 of 15	100% & 7 of 7
Building with OTTV less than 18W/m ² [3]	% & no. of total no. of projects	80% & 4 of 5	68.75% & 11 of 16	75% & 18 of 24	66.7% & 10 of 15	85.7% & 6 of 7
Energy saved due to energy efficient installations [4]	GWh	16.66 [5]	1.35	1.7	4.9	39
Equivalent monetary savings	HK\$ million	16.66	1.35	1.7	4.9	39
Avoided CO ₂ emissions [6]	in ,000 Tonnes CO ₂ e	11.66	0.95	1.19	3.43	27.3

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

[2] Territory wide default GHG emission factors (0.7) 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 February 2010.

[3] The OTTV requirements apply to new buildings only. It is calculated based on the Code of Practice for Overall Thermal Transfer Value in Buildings issued by the Building Authority.

[4] The data obtained from 2007 onwards take Building Energy Code (BEC) 2007 as the baseline, energy efficient features refer to air-conditioning installations, lighting installations, hot water installations, lift & escalator installations, building energy management system and renewable energy technologies.

[5] In 2010, 2 large-scale completed projects including a Government Departmental Headquarters and a Hospital Extension Block contributed to the major increase.

[6] 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	2010	2009	2008	2007	2006
Fuel consumption by ArchSD's pool cars	Litre	17,723	17,236.2	14,697.4	18,690	19,639
GHG emission equivalent to fuel consumption by ArchSD pool cars [7]	Tonnes CO ₂ e	48.0	46.7	39.8	44.1	46.4

[7] 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 February 2010.

Architectural Services Department - Sustainability Report 2011 - Data Summary

Resource Usage - Office Materials

	Units	2010	2009	2008	2007	2006
A4 paper consumption	Reams	20,021	20,536	19,653	20,263	21,765
A3 paper consumption	Reams	1,068	1,203	1,054	1,063	1,241
Envelop consumption	Number	58,470	56,538	59,478	55,323	70,812
A4/A3 paper with recycled content consumption	Reams / % of total paper purchased	30,581 / 100%	22,715 / 99.02%	21,460 / 99.49%	18,515 / 91.8%	18,984 / 79.5%
Types of eco-friendly office consumables	Types	13	13	13	13	13

Resource Usage - Timber & Water Use

	Units	2010	2009	2008	2007	2006
Timber saving	Volume of Timber Saved in m ³ (Ratio Normalized [8] by Contract Value)	1,963.60 (0.18)	2,344.53 (0.34)	367.05 (0.05)	1,424.29 (0.22)	284.69 (0.20)
Water saving	No. of Water-saving Sanitary Appliances (Ratio Normalized by Contract Value)	4,847 (0.43)	4,555 (0.66) [9]	4,242 (0.56)	6,254 (0.94)	1,473 (1.00)
Flushing water use in APB Centre	Cubic Metre	26,405 [10]	28,461 [11]	33,789	N/A	N/A
Potable water use in APB Centre	Cubic Metre	5,325 [12]	4,331	N/A	N/A	N/A

[8] The normalized 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.

[9] The ratio normalized by contract value on the number of water-saving sanitary appliances is revised from 0.52 as stated in previous report to 0.66.

[10] A water check meter was out of order from March to April, September to November 2010, the data only represents the flushing water consumption in 8 months.

[11] Because the water check meter was out of order in July and August 2009, the data only represents the flushing water consumption in 10 months.

[12] A water check meter was out of order in May 2010, the data only represents the potable water consumption in 11 months.

Waste Management

	Units	2010	2009	2008	2007	2006
Construction & demolition materials						
C&D waste disposed of to landfills	Tonnes	69,716	56,529	26,833	24,952	46,858
C&D materials disposed of to public fill areas	Tonnes	894,710	930,831	839,097	564,284	206,209
Recyclable waste collected at APB Centre						
Waste paper	kg	26,630 [13]	18,164 [14]	2,331	2,286	2,475
Aluminium cans	No.	13,440 [13]	4,354 [14]	277	231	220
Plastic bottles	No.	6,805 [13]	1,467 [14]	286	250	265

[13] APB Centre was committed to the EPD's Source Separation Programme of Commercial and Industrial Waste for classifying daily recyclable wastes including waste paper, aluminum cans & plastic bottles. Our staff are well aware on this housekeeping arrangement.

[14] APB Centre joined the Source Separation Programme of Commercial and Industrial Waste in March 2009. The cleaners are requested to report the volume of the collected recycled items to our General Registry. The significant increase in the figure was that we enhanced our control to record the recycled items from monthly basis to a weekly basis and the figure would be reported to EPD.

Environmental Convictions of Contractors

	Units	2010	2009	2008	2007	2006
Convictions per 100,000 man-hours	ArchSD sites (HK sites)	0.164 (0.437)	0.138 (0.909)	0.501 (1.397)	0.424 (0.546)	0.140 (0.518)

Environmental Expenditure

	Units	2010	2009	2008	2007	2006
Resources devoted to environmental works	Value (\$ million)	951.76	864.7	789.3	639.7	639.45
Percentage of annual expenditure		7.9%	10.0%	10.3%	8.0%	7.1%

Social Performance

Staff

	Units	2010	2009	2008	2007	2006
Staff establishment (As at March 31 each year)	No.	1,781	1,781	1,766	1,766	1,813
Training						
No. of training courses (including internal and external seminars/ workshops/ training courses/ visits)	No.	160	148	152	207	324
Numbers of trainees	No.	3,836	4,460	3,492	2,597	2,548
Injury						
Staff injury cases [15]	No.	4	5	0	2	5
Staff sick leave granted for staff injury cases	Days	78	85	0	163	110

[15] The definition of staff injury cases is the reported cases of occupational injuries, under Employee's Compensation Ordinance, resulting in death or incapacity for work over 3 days.

Staff Establishment Breakdown

By Post		
Directorate	%	2
Professional	%	23
General Staff	%	22
Site Staff	%	31
Technical	%	22
By Employment Type		
Full-time	%	100
By Age		
Age under 30	%	3.34
Age 30-49	%	55.81
Age 50 or above	%	40.85
By Ethnicity		
Local	%	99.9
Non-local	%	0.1
By Gender		
Male	%	72.3
Female	%	27.7

Architectural Services Department - Sustainability Report 2011 - Data Summary

Staff Turnover

	Male	Female
Age 30-50	1.8% (30)	0.2% (4)
Age 51-55	0.3% (5)	0.1% (2)
Age 56-60	1.5% (25)	0.1% (2)

Contractor's Accident Rate

	Units	2010	2009	2008	2007	2006
No. of fatalities	ArchSD	0	2	1	0	2
Fatal accident rate per 100,000 man-hours	ArchSD (HK Construction Industry)	0 (0.005)	0.0072 (0.011) [16]	0.0053 (0.011)	0 (0.011) [19]	0.0085 (0.008)
No. of non-fatal accidents	ArchSD	117	100 [17]	91	93	124 [20]
Non-fatal accident rate per 100,000 man-hours	ArchSD (HK Construction Industry)	0.33 (1.45)	0.36 (1.52) [18]	0.48 (1.71)	0.44 (1.69)	0.54 (1.79)

[16] The actual fatal accident rate per 100,000 man-hours in 2009 is revised from 0.013 as stated in previous report to 0.011.

[17] The actual number of non-fatal accident rate in 2009 is revised from 99 as stated in previous report to 100.

[18] The actual non-fatal accident rate per 100,000 man-hours in 2009 is revised from 1.93 as stated in previous report to 1.52.

[19] The actual fatal accident rate per 100,000 man-hours in 2007 is revised from 0.010 as stated in previous reports to 0.011.

[20] The actual number of non-fatal accident rate in 2006 is revised from 126 as stated in previous report to 124.

Community Work

	Units	2010	2009	2008	2007	2006
Total number of voluntary work hours carried out by our staff	Hours	1,557	2,065	2,129	2,526	2,005
Number of active Voluntary Service Team members [21]	No.	21 out of 1,781	25 out of 1,781	26 out of 1,766	35 out of 1,766	35 out of 1,699
Number of staff received commendation for voluntary service [22]	No.	18	21	13	20	12
Number of Volunteers	No.	48	71	48	45	44
Number of Voluntary Projects Completed	No.	67	44	53	50	49

[21] Active Voluntary Service Team member is defined as team member contributes more than 20 hours on voluntary service.

[22] Staff who can receive commendation for voluntary service is defined as team member contributes more than 30 hours on voluntary service.

Economic Performance

	Units	2010-2011[23]	2009-2010	2008-2009	2007-2008	2006-2007
Personal salaries and allowances	HK\$ million	852.41	882.29	886.88	835.62	805.58
Personnel related expenses	HK\$ million	4.14	2.88	1.71	0.68	0.70
Departmental expenses	HK\$ million	140.02	125.31	100.79	94.01	65.15
Other charges	HK\$ million	554.51	505.24	480.76	469.02	474.28

[23] The actual expenditure is to be used for Economic Performance from 2010-2011 onwards.

Report Verification

Scope and Objective

Hong Kong Quality Assurance Agency (hereinafter called "HKQAA") was performed an independent verification of the Sustainability Report 2011 (hereinafter called "the Report") of Architectural Services Department (hereinafter after called "ArchSD"). The Report presents a review of ArchSD's sustainable development practices, performance and achievements for the period between 1st January 2010 and 31st December 2010 against Global Reporting Initiative (GRI) Sustainability Reporting Guideline Version 3.0 (G3.0).

The scope of the verification covered all reporting contents presented and included to:

- Verify the reliability of data and information management mechanism for gathering, collating, analyzing and presenting the data in the Report;
- Assess whether the information presented is accurate and represents the sustainability performance of ArchSD;
- Evaluate the overall reasonableness and balance of reporting with regard to the data and information presented;
- Identify and recommend opportunities for future improvement in reporting.

The overall aim of this verification statement is to provide assurance that the information stated in the Report is accurate, reliable, objective and has been audited and validated by an independent third party.

Methodology

The verification procedure was conducted through desktop review of report content, documentation review, interviews with responsible persons with accountability for preparing the Report and verify selected sample of qualitative and quantitative information consolidated in the Report. Accuracy of the sampled data and the underlying processes were tested through detailed examination of available evidence to support substantive comments and claims made in the Report. In this respect, the Report has been evaluated against the following criteria:

- Adherence to the principles as set out in the AA1000(2008), and
- The Global Reporting Initiative (GRI) Sustainability Reporting Guidelines Version 3.0(G3.0).

Conclusion

In our opinion, the Report meets the content and quality requirements of the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines Version 3.0 (G3.0). Among the different levels defined by the GRI, it is confirmed that the "A+ application level" has been met.

The information presented in the Report provided a structured, balanced and consistent representation of the sustainability management performance of ArchSD in the context of social wellbeing, environmental conservation and economic aspects. We are satisfied that the Report includes factual statements and the data contained and referred to within the Report is accurate and reliable. The Report is a fair and honest representation of ArchSD's initiatives, targets, progress and performance on its sustainable development achievements.

Recommendation

Opportunities for improvement on the reporting structure and content are separately submitted to ArchSD for their consideration on the compilation of future sustainability reports. These include such items as:

- Standardize the reporting period of the data presented
- Strengthen the data and information management mechanism
- Exploration for greater stakeholder input to the scope and content for future reporting

Signed on behalf of Hong Kong Quality Assurance Agency

The image shows two handwritten signatures in black ink. The signature on the left is stylized and appears to be 'Macy Wong'. The signature on the right is more legible and appears to be 'Winniss Kong'.

Macy Wong
Verifier

Winniss Kong
Verifier













GRI Content Index

This report is prepared with reference to the GRI G3 Guidelines. The reporting profiles and core performance indicators required to achieve application A+ level are presented below with either linkage to the reported section(s) or explanation for omission.















Additional indicators

Other than the mandatory information, we also report on EN5, EN6, EN18, EN30, LA11 and LA12 as additional GRI indicators.










	Reported		Not Reported
	Partially Reported		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 organization about the relevance of sustainability to the organization and its strategy Message from the Director		
1.2.	Description of key impacts, risks, and opportunities Strategy and Management		
2.	Profile		
	Organisational Profile		
2.1.	Name of the organisation About Us		
2.2.	Primary brands, products and services About Us		
2.3.	Operational structure of the organisation About Us		
2.4.	Location of organisation's Headquarters About Us		
2.5.	Number of countries where the organisation operates About Us		Hong Kong only.
2.6.	Nature of ownership and legal form About Us		Part of the Hong Kong SAR Government.
2.7.	Markets served Strategy and Management		
2.8.	Scale of the reporting organisation Key Facts Data Summary - Social Performance		
2.9.	Significant changes during the reporting period regarding size, structure, or ownership Reporting Scope		
2.10.	Awards received in the reporting period Recognitions and Awards		










Architectural Services Department - Sustainability Report 2011 - GRI Content Index

3.	Reporting Parameters		
	Report Profile		
3.1.	Reporting period Reporting Scope		
3.2.	Date of most recent previous report (if any) Reporting Objectives		
3.3.	Reporting Cycle Reporting Objectives		
3.4.	Contact point for questions regarding the report or its contents Feedback		
	Report Scope and Boundary		
3.5.	Process for defining report, including determining materiality, prioritizing topics within the report, identifying stakeholders the organization expects to use the report Reporting Principles Main Focus Areas		
3.6.	Boundaries of the report Reporting Scope		
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 Reporting Scope Data Summary		
3.10.	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement Data Summary		
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 GRI Content Index		
	Assurance		
3.13.	Policy and current practice with regard to seeking external assurance for the report Report Verification Reporting Principles		
4.	Governance Structure and Management Systems		
	Governance		
4.1.	Governance structure of the organisation Strategy and Management		












Architectural Services Department - Sustainability Report 2011 - GRI Content Index

4.2.	Indicate whether the Chair of the highest governance body is also an executive officer Role and Organization Structure Strategy and Management		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 organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members		HKSAR Government, it does not adopt unitary board structure
4.4.	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body Stakeholder Engagement Staff Engagement		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 with the Public Service Commission Ordinance.
4.6.	Processes in place for the highest governance body to ensure conflicts of interest are avoided Strategy and Management		No specific processes for the highest government body. All government departments follow internal guidelines.
4.7.	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization'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 Strategy and Management		
4.9.	Procedures of the highest governance body for overseeing the organization'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. Strategy and Management		
4.10.	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance Strategy and Management Service Quality		Audit Commission and the Legislative Council act as the evaluation framework for general performance of Government, including Development Bureau.













Architectural Services Department - Sustainability Report 2011 - GRI Content Index

Commitments to External Initiatives			
4.11.	Explanation of whether and how the precautionary approach or principle is addressed by the organization Strategy and Management		
4.12.	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses Strategy and Management Social Participation Serving the Community Reporting Principles		
4.13.	Memberships in associations and/or national/international advocacy organizations Strategy and Management		
Stakeholder Engagement			
4.14.	List of stakeholder groups engaged by the organization Stakeholder Engagement		Generally, we group our stakeholders into 5 groups: Staffs, Clients, Contractors/Consultants, Professional Bodies and General Public.
4.15.	Basis for identification and selection of stakeholders with whom to engage Stakeholder Engagement Service Quality		The five groups of stakeholders are closely associated with our daily operation.
4.16.	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group Strategy and Management Stakeholder Engagement Service Quality Social Participation Staff Engagement Staff Development Departmental Business Plan		Except for the Professional Bodies and General Public we have regular engagement with members of each group: (i) annual appraisals for staffs; (ii) quarterly performance reports for consultants and contractors; and (iii) Client Satisfaction Survey for clients (we select between 7 and 9 projects each quarter.)
4.17.	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting Stakeholder Engagement Service Quality		
Public Agency Specific			
PA1	Describe the relationship to other governments or public authorities and the position of the agency within its immediate governmental structures About Us 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 Strategy and Management		











Architectural Services Department - Sustainability Report 2011 - GRI Content Index

PA3	Identify the aspects for which the organization has established sustainable development policies <i>Strategy and Management</i>		
PA4	Identify the specific goals of the organization for the each aspects listed in PA3 <i>Objectives and Targets</i>		
PA5	Describe the process by which the aspects and goals in both PA3 and PA4 were set <i>Objectives and Targets</i>		
PA6	Monitoring of each goal <i>Objectives and Targets</i>		
PA7	Describe the role of and engagement with stakeholders with respect to the items disclosed in PA6 <i>Stakeholder Engagement</i>		
ECONOMIC PERFORMANCE INDICATORS			
	Disclosure on Management Approach (Economic) <i>Funding and Investment</i>		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 <i>Funding and Investment Data Summary - Economic Performance</i>		No direct economic value generated.
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change <i>Data Summary - Environmental Performance</i>		
EC3	Coverage of the organization's defined benefit plan obligations <i>Data Summary - Economic Performance</i>		
EC4	Significant financial assistance received from government <i>Funding and Investment Data Summary - Economic Performance</i>		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 <i>Supply Chain Management</i>		In 2010, all our purchases were from local suppliers (defined as companies registered in Hong Kong).









Architectural Services Department - Sustainability Report 2011 - GRI Content Index

EC7	Procedure for local hiring, and proportion of senior management hired from the local community at locations of significant operation Data Summary - Social Performance		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. All our senior management are local staff.
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 Funding and Investment		
PA9	Gross expenditures broken down by financial classification Funding and Investment		
PA10	Capital expenditures by financial classification Funding and Investment		
PA11	Describe procurement policy of the public agency as relates to sustainable development Strategy and Management Supply Chain Management		
PA12	Describe economic, environmental, and social criteria that apply to expenditures and financial commitments Strategy and Management		
PA13	Describe linkages between the public agency's procurement practices and its public policy priorities Strategy and Management Supply Chain Management		
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 Data Summary - Environmental Performance		
ENVIRONMENTAL PERFORMANCE INDICATORS			
	Disclosure on Management Approach (Environment) Strategy and Management		
I. Materials			
EN1	Materials used by weight or volume Supply Chain Management Data Summary - Environmental Performance		
EN2	Percentage of materials used that are recycled input materials Data Summary - Environmental Performance		











Architectural Services Department - Sustainability Report 2011 - GRI Content Index










II. Energy			
EN3	Direct energy consumption by primary energy source Data Summary – Environmental Performance		The direct energy consumption is mainly from the gasoline consumption by ArchSD’s pool cars. The direct energy from renewable source is zero and the direct energy from non-renewable source is 585.24GJ.
EN4	Indirect energy consumption by primary source Data Summary - Environmental Performance		The indirect energy consumption is mainly from electricity for lighting, A/C units and other building systems. The indirect energy from renewable source is zero and the direct energy from non-renewable source is 21,240 GJ.
EN5	Energy saved due to conservation and efficiency improvements Data Summary - Environmental Performance		
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives Energy Saving Design		
III. Water			
EN8	Total water withdrawal by source Data Summary - Environmental Performance		All water consumed is coming from the public water works system. At present, only the data of flushing water and potable water used in APB Centre are available, but we will continue to enhance the data collection mechanism with different parties and will report total water consumption in 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		Projects in progress or commenced in 2010 were situated in developed areas and had no significant impact on the biodiversity.
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas		Projects in progress or commenced in 2010 were situated in developed areas and had no significant impact on the biodiversity.
V. Emissions, Effluents, and Waste			
EN16	Total direct and indirect greenhouse gas emissions by weight Data Summary - Environmental Performance		
EN17	Other relevant indirect greenhouse gas emissions by weight		We do not report on this issue as the disclosure is not material to our business because ArchSD is a services provider, and the emission generated through our operation is considered as negligible when comparing with data in EN16.
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved Energy Saving Design Data Summary - Environmental Performance		

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EN19	Emissions of ozone-depleting substances by weight		Use of materials with ozone-depleting substances has been avoided in our projects. Considering all our refrigerants and fire extinguishing agents used during replacement are environmentally friendly models as well as the insignificant consumption amount, we will not report our non-ozone depleting substances consumption value in the future.
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.	X	We do not report on this disclosure, since the information is propriety.
EN22	Total weight of waste by type and disposal method Material Utilization Data Summary - Environmental Performance		
EN23	Total number and volume of significant spills		There have been no reported spills in 2010.
VII. Products and Services			
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation Strategy and Management Energy Saving Design Environmental Design		
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 Data Summary - Environmental Performance		Environmental offences of contractors show the number of cases. The total monetary value involved is \$35,500.
X. Overall			
EN30	Total environmental protection expenditures and investments by type Data Summary - Environmental Performance		

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SOCIAL PERFORMANCE INDICATORS			
	Disclosure on Management Approach - Labour Strategy and Management Staff Engagement		
	Disclosure on Management Approach - Human Right Strategy and Management		
	Disclosure on Management Approach - Society Strategy and Management		
	Disclosure on Management Approach - Product Responsibility Strategy and Management		
SOCIAL PERFORMANCE INDICATORS: LABOUR PRACTICES AND DECENT WORK			
I. Employment			
LA1	Total workforce by employment type, employment contract, and region Data Summary - Social Performance		All our establishment posts are filled by permanent staff or probational staff.
LA2	Total number and rate of employee turnover by age group, gender and region Data Summary - Social Performance		
II. Labour/ Management relations			
LA4	Percentage of employees covered by collective bargaining agreements Staff Engagement		
LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements Staff Engagement		No minimum notice period has been agreed. Senior Management would normally allow sufficient consultations time for any operation change.
III. Occupational Health and Safety			
LA7	Rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities by region Data Summary - Social Performance		
LA8	Education, training, counselling, prevention and risk-control programmes in place to assist workforce members, their families or community members regarding serious diseases Health and Safety		

IV. Training and Education			
LA10	Average hours of training per year per employee, by employee category Staff Development Data Summary - Social Performance		We do not report on this yet as we have thus far been unable to gather the data because no measurement mechanism in place to identify the total training hours within each employee category as training is identified by type (i.e. succession, vocational and career development) and not by employee category.
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings Staff Development		
LA12	Percentage of employees receiving regular performance and career development reviews		The performances of all our employees are reviewed at least annually.
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 Data Summary - Social Performance		
LA14	Ratio of basic salary of men to women by employee category		The Hong Kong SAR Government is not discriminatory about gender differences. There is no difference between male and female employees in the remuneration package. The ratio of basic salary of men to women of the same rank is 1:1.
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	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken		We do not report on this point since the disclosure as prescribed by the GRI Guidelines is not applicable to our business because ArchSD does not carry out any screening on human rights on our suppliers and contractors. However we only use suppliers and contractors registered with the Government Logistic Department and Development Bureau respectively.
II. Non-discrimination			
HR4	Total number of incidents of discrimination and actions taken		No incidents of discrimination and actions taken in 2010.
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 Strategy and Management Staff Engagement		No operations have been identified in which the right to exercise freedom of association and collective bargaining may be at risk.

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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 <i>Strategy and Management</i>		
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 <i>Strategy and Management</i>		
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 <i>Health and Safety</i> <i>Project Environmental Assessment</i>		
II. Corruption			
SO2	Percentage and total number of business units analyzed for risks related to corruption <i>Strategy and Management</i>		
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures <i>Strategy and Management</i>		The percentage of our staff whom attended anti-corruption/integrity management trainings in 2010 is 4.15%.
SO4	Actions taken in response to incidents of corruption <i>Strategy and Management</i>		In 2010, no incident of corruption was reported. In case incidents of corruption are encountered, we will report to Independent Corporation Against Corruption.
III. Public Policy			
SO5	Public policy positions and participation in public policy development and lobbying <i>Strategy and Management</i> <i>Energy Saving Design</i>		
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.

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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 <i>Health and Safety</i> <i>Service Quality</i>		
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 <i>Energy Saving Design</i>		
III. Marketing Communication			
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship		We do not report on this point since the disclosure as prescribed by the GRI Guidelines is not applicable to our business because we are a service provider to the Government, and we do not have any programs for marketing communication.
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			
PA15	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 <i>Service Quality</i>		

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

Glossary

Building Energy Codes (BEC)	Building Energy Codes is a suite of guidance covers 5 aspects of installation practices, includes lighting, air conditioning, electrical and lift & escalator installations. It stipulates the minimum energy performance standards (MEPS) of these installations.
Building Environmental Assessment Method (BEAM)	Quote from BEAM Society, <i>"A means by which to benchmark and improve performance in the planning, design, construction, commissioning, operation and management of buildings."</i>
Carbon Audit	A systematic and scientific approach to account for the greenhouse gas emissions arising from the operations of the buildings.
Carbon Footprint	The carbon footprint is the measurement of all greenhouse gases an individual produces in daily lives through burning fossil fuels for electricity, heating, transportation, etc, usually in the unit of tonnes (or kg) of carbon dioxide equivalent.
Considerate Contractors Site Award	It is an award to promote a considerate attitude and good site safety, health and environmental practices for both Public Works and non-Public Works sites.
Designated Projects	Designated projects are projects or proposals that may have an adverse impact on the environment. They are covered by the Environmental Impact Assessment Ordinance in which they are categorised into two schedules: Schedule 2 and 3. (Details please refer to "A Guide to the Environmental Impact Assessment Ordinance".)
Environmental Impact Assessment (EIA)	A process to assess the potential environmental impacts and environmental benefits (in quantitative and qualitative terms) of a project in the early planning stages as well as identify any alternatives or mitigation measures.
Environmental Impact Assessment Ordinance (EIAO)	An Ordinance to assess the impact on the environment of certain projects and proposals, for protecting the environment and for incidental matters through the application of the EIA process and the environmental permit system.
Global Reporting Initiative (GRI)	A multi-stakeholder-governed institution which provides a framework for sustainability reporting, which is commonly used all over the world. This framework sets out the principles and indicators that entities can use to measure and report their economic, social and environmental performance. More than 1,000 companies and other organisations, including the owners of many of the world's leading brands, have declared their voluntary adoption of the Guidelines which have been prepared in accordance with the GRI.
Greenhouse Gases	Greenhouse gases refer to those which are able to absorb and hold heat in the atmosphere, either occurring naturally (e.g. carbon dioxide, methane, ozone and water vapour) or exclusively resulting from human activities (e.g. hydrofluorocarbons).
Grey Water	Grey water is the wastewater generated from domestic activities such as hand washing and cloth laundering. It is suitable for reuse as landscape irrigation or even toilet flushing.
Hong Kong Energy Efficiency Registration Scheme for Buildings	This scheme launched by the Electrical & Mechanical Services Department for promoting the application of Building Energy Codes since October 1998. It provides an official platform for interested parties to register their buildings which comply with BECs.
Important Tree	Trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria: trees of 100 years old or above; trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event; trees of precious or rare species; trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or trees with trunk diameter equal or exceeding 1.0 metre (measured at 1.3 metre above ground level), or with height / canopy spread equal or exceeding 25 m.
Leadership in Energy and Environmental Design (LEED)	The Leadership in Energy and Environmental Design (LEED) Green Building Rating System, developed by the U.S. Green Building Council (USGBC), provides a suite of standards for environmentally sustainable construction.

Architectural Services Department - Sustainability Report 2011 - Glossary

Microclimate Study	Microclimate study acts as an environmental performance factor of the site providing environmental characteristic of the site for the purpose of creating a sustainable environment which provides the greater comfort for the development.
Overall Thermal Transfer Value (OTTV)	A measure of the energy transferred through the envelope of a building and has a direct correlation with energy consumption.
Preliminary Environmental Review (PER)	<p>It is a study that determines the current environmental conditions of the project site through inspecting the potential environmental impacts associated with the project and recommending corresponding mitigation measures.</p> <p>All Government Projects are required to carry out PER at the early stage of the projects (Feasibility Study Stage).</p>
Post Occupancy Evaluation (POE)	Post Occupancy Evaluation is a management tool tailor-made to evaluate the performance, assess the effectiveness of sophisticated building services systems after client occupancy, and to address clients' concerns on the functional requirements and energy consumption of their recently completed building projects.
Stakeholder	It refers to individuals, groups or organizations which experience directly or indirectly the actions and policies implemented by an organization.
Sustainable Development	Sustainable development is the development approach which meets the desires of the present and preserves the environment and natural resource for the future generations.
Testing and Commissioning (T&C)	Testing and Commissioning (T&C) is generally regarded as testing of equipment and systems separately, in order to ensure that they are safe and meet the design requirements.
Resource Allocation Exercise (RAE)	It is a practice to schedule activities and assign available resources in an economic way, so that predetermined constraints of resource availability and/or project time are not exceeded.
Universal Accessibility	The concept of Universal Design forms the backbone of Universal Accessibility. It is a design approach to a universally accessible standard in which all products, environments and communications will allow for the widest spectrum of our community regardless of diversity, age and ability.
U-value	The rate of heat flow through a material. It is measured as the amount of heat flow through 1m ² of the material for every degree difference in temperature each second.
Valuable Tree	Refers to the "valuable trees" in the Register of Old and Valuable Trees which are distinguished in the following categories: Trees of large size Trees of precious or rare species Trees of particularly old age (e.g. aged 100 or above) Trees of cultural, historical or memorable significance; and Trees of outstanding form.
Vertical Greening	Vertical greening is the application of a vegetative cover to a wall / vertical structure. It serves as the thermal insulation to building to moderate temperature and relative humidity to the site. It also helps in filtrating dust pollution, reducing noise pollution and enhancing the biological diversity of the building and its surroundings.

Feedback

Sustainability Report 2011

Thank you for reading our report. Your comments and suggestions for our continuous improvement are invaluable. Please take a few minutes to complete this 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.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Content is balanced and reliable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Content is clear and easy to understand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Structure and layout are rational and easy to use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

2. How would you rate the overall report?

Excellent	Good	Adequate	Marginal	Poor	Additional comments
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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

Excellent	Good	Adequate	Marginal	Poor	Additional comments
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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

5. Other comments:

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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:

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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