

Sustainability  
Report 2012

From Planning to Design  
Through Operation to Maintenance >>



Low Carbon Buildings for a Greener Future

## ArchSD Sustainability Report 2012 - Table of Contents

Message from the Director	1
About This Report	2
About Us	5
Recognitions and Awards	9
Management Approach	
- Strategy and Management	18
- Departmental Business Plan	22
- Knowledge Management	24
- Extranet	25
- Main Focus Areas	26
- Engagement Approach	27
Resources Utilization and Conservation	
- Low Carbon Building Design	32
- Greening and Landscaping	37
- Heritage Conservation	42
- In-house Green Management	46
Clients and Business Partners	
- Project Quality Management	54
- Social Participation	69
- Community Support and Engagement	73
- Servicing the Community	85
Human Resources	
- Staff Development	89
- Staff Engagement	90
- Health and Safety	93
Objectives and Targets	97
Data Summary	100
Report Verification	105
GRI Content Index	106
Glossary	116
Feedback	119



Dear Stakeholders,

Welcome to our ninth Sustainability Report, which outlines our sustainability achievements and initiatives in 2011. The theme of this Report is "Low Carbon Buildings for a Greener Future", stating our green commitment to our community.



Throughout the past few years, we managed to uphold our momentum to serve the community by collaborating with our industry partners, user departments and the general public. Last year, we implemented a range of carbon and energy efficiency initiatives and sustainable practices in the development of green buildings, demonstrating to our stakeholders our commitment to go 'green'. These include unreserved adaptation of active and passive building design in appropriate projects to maximize environmental and amenity benefits. We envisage our endeavour not only serves as demonstration for sustainable design but also strikes the balance between economic efficiency and public concerns.

We have implemented a Knowledge Management Portal to manage our explicit knowledge and harvest tacit knowledge from our experienced staff for sharing with others to enhance departmental working efficiency and performance. We have also developed our Extranet for better communication and information exchange with our consultants and contractors. With the collective wisdom, experience, creativity and concerted efforts, we are better equipped to meet the escalating public expectations by providing services in a sustainable manner.

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

LEUNG Koon-kee, JP  
Director of Architectural Services

## About This Report



### Reporting Objectives

The Architectural Services Department (ArchSD) of the Government of the Hong Kong Special Administrative Region (HKSAR) has produced 14 reports in the past, including this ninth annual Sustainability Report aiming to communicate with stakeholders on our latest development and achievement with regard to economic, environmental and social aspects.

We wish this annual report could provide a great opportunity not only to demonstrate our last year success with your support, but also to ensure you of our commitment to serving better in the future with continuous efforts and improvement.

### Reporting Scope

The Sustainability Report 2012 ("the Report") highlights our major activities and achievements on sustainability development from 1 January to 31 December 2011. During the year, there was no significant change in our operational size and business ownership.

Data in the Report are presented as absolute figures as of 31 December 2011 (unless otherwise stated) 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. By adopting the same principle, qualitative information reflects the outcomes brought by our direct activities. Financial data are reported for the financial year ended 31 March 2012. All monetary values are in Hong Kong Dollars.

### Reporting Principles

This report is prepared with reference to the Global Reporting Initiative (GRI) G3.1 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 G3.1 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 materiality, 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 "Low Carbon Buildings for a Greener Future" (2012) 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 G3.1 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 G3.1 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, 21 September 2012



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](http://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 13 September 2012. GRI explicitly excludes the statement being applied to any later changes to such material.

<https://www.globalreporting.org/reporting/reporting-framework-overview/application-level-information/Pages/default.aspx>

Report Application Level	C	C+	B	B+	A	A+
Profile Disclosures	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, 3.11 4.5 - 4.13, 4.16 - 4.17		Same as requirement for Level B	
Disclosures on Management Approach	Not Required	Report Externally Assured	Management Approach Disclosures for each Indicator Category	Report Externally Assured	Management Approach disclosed for each Indicator Category	Report Externally Assured
Performance Indicators & Sector Supplement Performance Indicators	Report fully on a minimum of any 10 Performance Indicators, including at least one from each of: social, economic, and environment.**	Report Externally Assured	Report fully on a minimum of any 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility.***	Report Externally Assured	Respond on each core 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.	Report Externally Assured

\* Sector supplement in final version  
 \*\* Performance Indicators may be selected from any finalized Sector Supplement, but 7 of the 10 must be from the original GRI Guidelines  
 \*\*\* Performance Indicators may be selected from any finalized Sector Supplement, but 14 of the 20 must be from the original GRI Guidelines

<https://www.globalreporting.org/resource/library/Application-Level-Table.pdf>

## **Architectural Services Department - Sustainability Report 2012 - About This Report**

### **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:

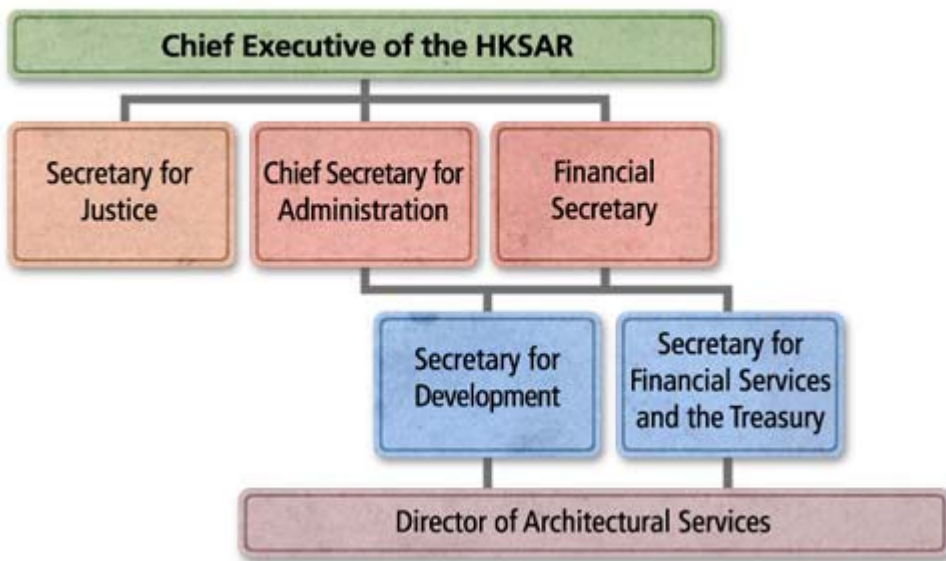
- On-screen font size setting provides more comfortable reading options for various users;
- Picture Enlargement function presents larger and clear photo images, graphics and charts to users;
- Text-only version allows readers using assistive tools for web browsing;
- Search function facilitates readers 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

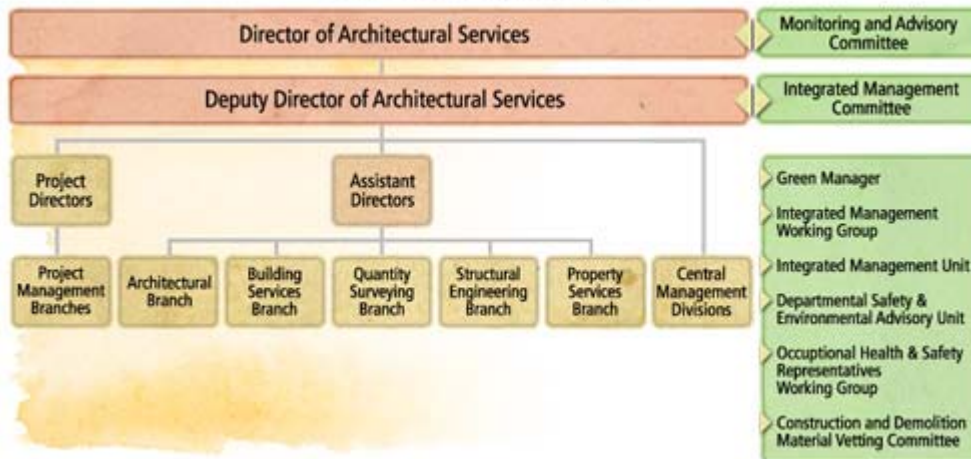
## Role and Organizational Structure

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.

### ArchSD Role in the Government of the HKSAR



### Organizational Structure



## 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).

In 2011, we created a total of 5,428 jobs by awarding works contracts and consultancies in relation to both new capital and minor works projects. During the year, we commenced 7 new capital works projects and a substantial amount of minor works projects.

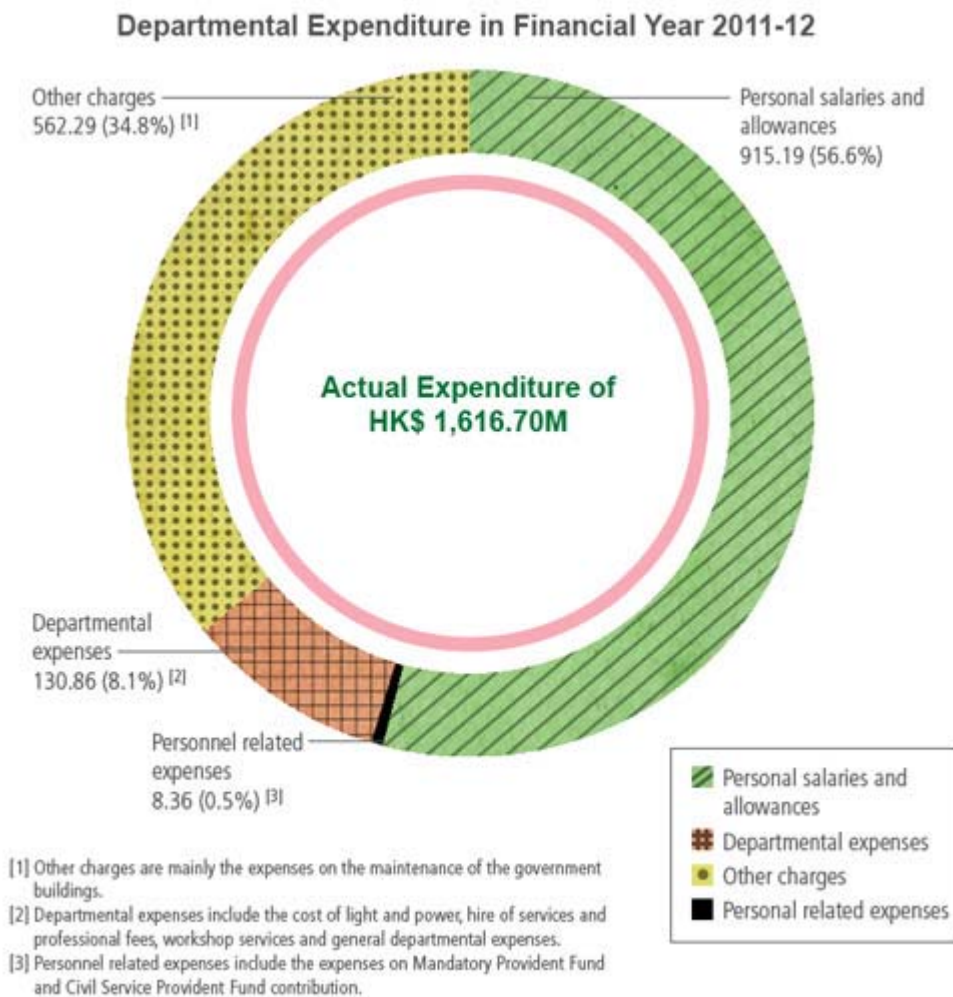
Our role to build and maintain government buildings and facilities involves a considerable amount of investment in terms of financial and human resources. Though it does not easy to quantify the economic value, it would improve or enhance the quality of the services and the facilities for the benefit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

## Departmental Expenditure

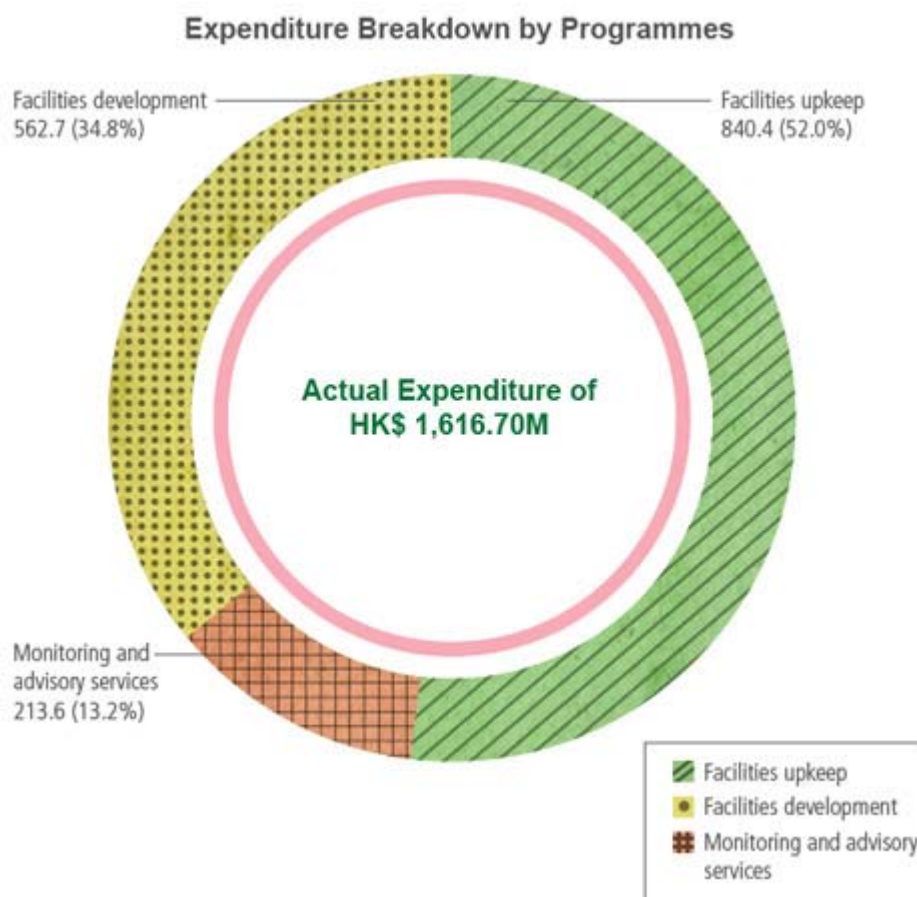
Comparing with the financial year 2010-11, we recorded an overall increase of around 4.1% [1] in departmental expenditure in the financial year 2011-12. Expenditure breakdown of our department and by different programmes [2] for the financial year 2011-12 are provided below. Details of our financial information and key performance can be found from The ArchSD Controlling Officer's Report of the 2012-13 Estimates of the Government of the HKSAR available online at [www.budget.gov.hk](http://www.budget.gov.hk).

[1] The Departmental Expenditure 2011-2012 is HK\$1,616.70million, there is around 4.1% increase as comparing with the Departmental Expenditure 2010-2011 of HK\$1,553.11million.

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







## Key Facts

Founded on: 11 April 1986

Staff Establishment: 1,781 (as at 31 March 2012)

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 m<sup>2</sup> (as at 31 December 2011)

Scale of Services: (from 1 January 2011 to 31 December 2011)

- Number of Subvented / Entrusted Projects Reviewed: 714
- Number of Facilities Development Projects Completed: 45
- Building Floor Area of Properties Maintained: 30,069,000m<sup>2</sup>
- Government Spending on Facilities Development Projects: HK\$ 10,166 million
- Government Spending on Facilities Upkeep Works: HK\$ 3,577 million
- Value of the Subvented / Entrusted Projects Reviewed: HK\$ 54.38 billion
- Value of New Works under Development: HK\$ 85 billion

## Our Services

The three areas of our services are:

- **Monitoring and advisory services** - to provide effective professional and technical advice 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 commit to build quality government facilities to cater for public needs, and to promote sustainable development to maximize benefits to the community, the environment and the economy in addition. We will continue to explore the feasibility to integrate innovative and sustainable elements into our projects for the betterment of our society. In 2011, a number of our projects were granted with recognitions and awards as listed below.

### Hong Kong Institute of Architects (HKIA) Annual Awards 2011

HKIA Annual Awards are organized by HKIA with an aim to recognize the outstanding achievements of architectural profession in Hong Kong and overseas.

In 2011, our "Ping Shan Tin Shui Wai Leisure and Cultural Building" and "Kwun Tong Promenade, Stage 1" projects were awarded with the "Medal of the Year of Hong Kong" and "President's Prize" respectively.



Medal of the Year of Hong Kong - Ping Shan Tin Shui Wai Leisure and Cultural Building



President's Prize - Kwun Tong Promenade, Stage 1



HKIA Annual Awards Certificates (Left: Medal of the Year of Hong Kong, Right: President's Prize)

## American Institute of Architects Hong Kong Chapter's Design Awards 2011

The American Institute of Architects Hong Kong Chapter's Design Awards Program is presented annually to recognize projects undertaken by the Chapter's members with excellence architectural design. Our project "Siu Sai Wan Complex" was granted with the Honor Award for Architecture and Sustainable Design Award.



Siu Sai Wan Complex



Certificates of American Institute of Architects Hong Kong Chapter's Design Awards 2011 (Left: Honor Award for Architecture, Right: Sustainable Design Award)

## Quality Building Award (QBA) 2012

QBA is jointly launched by nine professional organizations in Hong Kong at biennial intervals to present public recognition to buildings of outstanding 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. In 2011, we have submitted the following 4 entries for the competition and the Award will be presented in 2012:

### Non-Residential Building in Hong Kong (New Building)

- Redevelopment of Lo Wu Correctional Institution
- Siu Sai Wan Complex
- Swimming Pool Complex in Area 2, Tung Chung, Lantau Island

### Project outside Hong Kong (Non-Residential)

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



Swimming Pool Complex in Tung Chung

Interior View of the Swimming Pool

## Green Building Award (GBA) 2012

Jointly organized by the Hong Kong Green Building Council and the Professional Green Building Council, GBA is another biennial industry award which aims to provide recognition to building-related projects with excellent performance and contributions in sustainability and the built environment. It also encourages the industry to transform the mainstream market towards wider adoption of sustainable planning, design, construction, management, operation, maintenance, renovation and decommissioning of buildings. We submitted 7 entries for the GBA 2012 including:

### Hong Kong New Buildings (Completed Buildings) Category

- Secondary School near Choi Wan Road and Jordan Valley, Kwun Tong
- District Open Space at Po Kong Village Road, Wong Tai Sin
- Siu Sai Wan Complex
- Swimming Pool Complex in Area 2, Tung Chung, Lantau Island
- Ambulatory Care Block, Tseung Kwan O Hospital

### Hong Kong New Buildings (Buildings under Construction) Category

- Cruise Terminal Building for the Kai Tak Development Area
- Design and Construction of New Civil Aviation Department Headquarters on Airport Island



Secondary School near Choi Wan Road and Jordan Valley, Kwun Tong



Artist's Impression of New Civil Aviation Department Headquarters on Airport Island

## Landscape Institute Awards 2011

To encourage and reward outstanding works of the landscape profession, the Landscape Institute Awards are held annually to promote the knowledge and public understanding of the discipline.

Our "Study on Green Roof Applications in Hong Kong" was honored with Highly Commended Award in the Landscape Policy category.



Certificate of the Highly Commended Award of the Landscape Institute Awards 2011

## Xi'an International Horticultural Exposition 2011

With a theme of "Eternal peace & harmony between nature & mankind, nurturing the future earth - a city for nature, co-existing in peace", the Xi'an International Horticultural Exposition 2011 was held from April to October 2011.

HKSAR's participation was presented with various awards including Gold Award, Low-Carbon Demonstration Award, Excellent Waterscape Award, Excellent Designing Award, Silver Construction Award and Best Organizer Award (to the Hong Kong Economic and Trade Office in Chengdu of HKSARG), etc.



HKSAR's Participation in the Xi'an International Horticultural Exposition 2011

## Hong Kong Flower Show 2011

The theme of Hong Kong Flower Show 2011 was "Symphony of Spring Flowers". To echo the theme of the Show, we designed "The Symphony Garden" featured with meandering boardwalk, green walls and fences, as well as plant species such as Zantedeschia species and Liliium species to conjure up images of different musical instruments like pianos, harps and trumpets. Being in the garden that offered a variety of experiences, visitors felt as though they were immersed in a wonderful symphony. Our landscape design won the Grand Award for Outstanding Exhibit under the category of Landscape Display, Displays Section (Local).



Our Landscape Design of "The Symphony Garden"

## Civil Service Outstanding Service Award Scheme 2011

Organized by the Civil Service Bureau, the Civil Service Outstanding Service Award Scheme is held biennially. The Scheme aims to recognize the efforts of government departments and teams which provide excellent service, to promote a customer-focused culture in the civil service, and to inspire departments and civil servants to emulate the best practices of award-winning departments and teams for continuous improvement in the delivery of public services.

In 2011, our project "Redevelopment of Lo Wu Correctional Institution" won the Inter-departmental Partnership Award - Silver Prize. Hong Kong's Participation in Expo 2010 Shanghai China was awarded with the Inter-departmental Partnership Award - Meritorious Award.



The Visitor Registration Centre of the Lo Wu Correctional Institution

The Green Roof of the Lo Wu Correctional Institution





Hong Kong's Participation in Expo 2010 Shanghai China

## The Caring Organization Label Scheme

The Caring Organization Label scheme is launched by the Hong Kong Council of Social Service to recognize organizations which demonstrate caring spirit to the community, employees and the environment. We were awarded with the Caring Organization Label for the third consecutive year to recognize our effort to set a good example of corporate citizenship in respective areas.



Caring Company Label Award Presentation

## Manpower Developer Award Scheme

Organized by the Employees Retraining Board, the Manpower Developer Award Scheme is held annually to recognize the organizations' efforts in cultivating a common value to attach great importance to manpower training and development. In 2011, we were awarded with the Manpower Developer Logo to acknowledge our outstanding achievements in manpower development within the Department.



Manpower Developer Logo

## 2011 Hong Kong Awards for Environmental Excellence (HKAEE)

Organized by the Environmental Campaign Committee alongside the Environmental Protection Department and in conjunction with nine organizations, HKAEE aims to encourage businesses and organizations to adopt green management and present them with an opportunity to benchmark their commitment towards environmental excellence.

Under HKAEE, the Environmental Labels scheme is a voluntary scheme to recognize organizations which demonstrate their commitments to self-improvement in specific environmental aspects. In 2011, we were awarded with three Environmental Labels of the Scheme namely Wastewi\$e Label, Energywi\$e Label and IAQwi\$e Label to recognize our effort in waste reduction, energy conservation and improving indoor air quality respectively. We were awarded with "Class of Good" for each of these Labels for the following offices:

- Wastewi\$e Label: our Queensway Government Offices, APB Centre and Kwun Tong Office
- Energywi\$e Label: our Queensway Government Offices and APB Centre
- IAQwi\$e Label: our Queensway Government Offices and APB Centre



"Class of Good" Wastewi\$e Label



"Class of Good" Energywi\$e Label

Architectural Services Department - Sustainability Report 2012 - Recognitions and Awards



"Class of Good" IAQwi\$e Label



Presentation of HKAEE Environmental Label Certificates (Left: Energywi\$e Label and Wastewi\$e Label, Right: IAQwi\$e Label)



## Strategy and Management

We perform the following three core functions in relation to Government-owned and Government-funded facilities:

- Monitoring and Advisory Services;
- Facilities Upkeep; and
- Facilities Development.

Our Monitoring and Advisory Services also cover quasi-government organizations. We play a number of roles including the Government advisor, maintenance agent, works agent, and project manager. The nature of our services allows us to promote and ensure sustainable development to our client and to the public at large.

We are one of the first among government departments to adopt and implement an Integrated Management System (IMS) to monitor and control our service quality, environmental impacts and occupational, health and safety risks. Governed by our senior management, our IMS, in compliant with ISO 9001, ISO 14001 and OHSAS 18001 standards, aligns our operations with the departmental Vision, Mission and Values and identifies opportunities for improvement in a sustainable manner.

As a government department, we strictly follow the policies laid down by the Civil Service Bureau and fully comply with the Employment Ordinance which prohibits hiring both 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.) to safe-guard the well-being of the construction workers. We have provided a channel for staff and workers to seek for assistance from relevant authorities directly. For projects of substantial size, a Labour Relations Officer is assigned to resolve the disputes between contractors and workers at early stage.

In terms of local community involvement, our senior management sits on 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. Some of the public missions of our senior staff members include:

- 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.



The Senior Staff Forum is administrated by our Director and overviews the management and operation of ArchSD. Photo was taken in May 2012, from left to right:

Mrs. P. TAM, PD/1; Mr. C.P. CHOW, PD/3; Mr. W.W. LI, AD(SE); Mr. M.B. TANG, DDArchS; Mr. K.K. LEUNG, DArchS; Mr. S.K. HO, AD(BS); Mr. S.W. FONG, AD(PS); Ms. S. LI, AD(QS); Mrs. A. YU, AD(A); Miss U. CHUNG, PD/2.

## Vision, Mission and Values

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**

When offering our Clients a comprehensive range of multi-disciplinary services for public buildings and facilities, we commit 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**

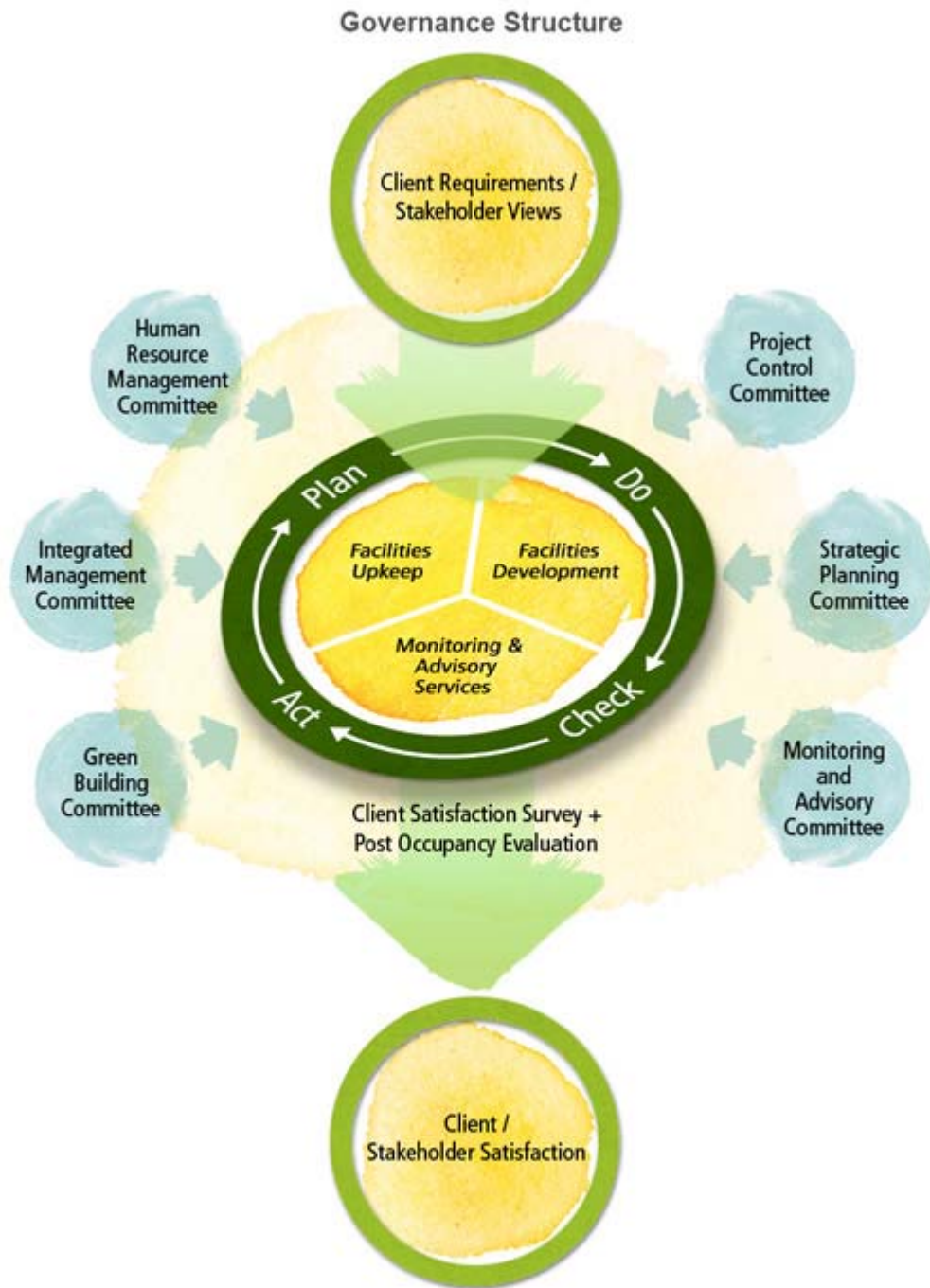
To identify and manage our risks effectively, we conduct risk assessments at both departmental and project levels.

At departmental level, we rely on our IMS by means of the "Plan-Do-Check-Act" cycle to identify and manage potential risks related to our operation and service. The system enables our senior management to evaluate any potential risks on quality, environment, society and economy in relation to our services and operations, and to formulate the necessary preventive actions to minimize or eliminate the risks.

At project level, we identify, manage and control the potential project risks from the project inception phase to the construction phase by 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". In addition, our project teams will conduct integrated management workshops with various stakeholders throughout the construction to facilitate the identification and analysis of potential risks at different project stages and devise effective measures to avoid or lessen the associated impacts.

### **Integrity**

All our staff members are required to strictly observe the Prevention of Bribery Ordinance and maintain high ethical standards and staff integrity in all operations. Any identified bribery and corruption cases will be reported to the Independent Commission Against Corruption (ICAC) for investigation. During the reporting year, there was no bribery or corruption case discovered.





## Departmental Business Plan

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 exercise. It aims to cater for new challenges and pave way for future development. 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 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 better utilization of information and knowledge management technology.

The DBP has already been implemented systematically through Annual Plans with operational details, specific performance indicators and clear timelines to fully meet our shared objectives and targets progressively. The progress status for some of our action items in 2011/12 Annual Plan is summarized below:

- The scope of our technical advisory services for capital subvention projects was reviewed and the existing advisory services would be continued.
- A symposium "Partnering to serve with care" was held on 11 April 2011 to enhance partnership and collaboration with stakeholders. A website for the symposium containing event highlights, video footages, presentation material and photo album was launched in May 2011.
- A website of "Serving Hong Kong for 25 Years" to commemorate the 25<sup>th</sup> anniversary milestone of ArchSD was launched in September 2011.
- Two rounds of communication meetings with departmental staff were held in September/October 2011 and March 2012 to update the implementation progress of Annual Plan for 2011/12 and to introduce the Annual Plan for 2012/13.
- The committee structure as well as the terms of reference and membership of committees were reviewed to ensure management effectiveness.
- Two separate rounds of staff consultation for the appraisal systems of technical grade and supervisory grade were completed in July and August 2011. Seventeen sessions of user training on the performance appraisal system were held in September 2011.
- Revised mentorship scheme covering not only the newly recruited professional, but also including technical and site supervisory staff was launched in February 2011.
- The Training and Development plan was implemented according to the set time frame and the progress was closely monitored.
- A knowledge management (KM) consultant was appointed to review/enhance the KM strategy and framework. A KM strategy based on a 3-level KM architecture and 3-year roadmap was formulated.
- Setting up of Branch/Management Hubs, ArchSD Knowledge Bank as well as the knowledge communities was completed.
- Training sessions to enhance colleagues' understanding of KM and utilization of the KM portal were completed in February 2012.





DBP Consultation Meeting



## Knowledge Management

To encourage and instill department-wide sharing culture and collaboration, a knowledge management (KM) portal was developed and launched on 7 May 2012. This initiative involves managing the knowledge life cycle from generation, harvesting, formation of practice wisdom and sharing to publishing, monitoring and renewal. The whole process is manifested in the operational regime under a 3-tier system, i.e. the ArchSD Knowledge Bank (K-Bank) (精華庫), branches/divisions KM hubs (錦囊庫) and knowledge community workspace (經驗庫). Through the development of such information sharing culture, we can achieve operational and organizational excellence.



## Extranet

To promote partnership and collaboration with key stakeholders, an Architectural Services Department (ArchSD) Extranet has been developed and launched. The Extranet is a private secured web portal with restricted access to enhance communication and information exchange with external users such as consultants and contractors, and to streamline contract management of works projects undertaken by the department. In addition, to facilitate users to navigate and access different application modules in the ArchSD Extranet, web-based Project Document Management System (PDMS) will also be developed to facilitate efficient communication among ArchSD's project teams, the contractors, sub-contractors and designers, etc.



Briefing to Contractors



Briefing to Consultants



## Main Focus Areas

It is believed that through collective wisdom, experience and talent, we will be able to continuously improve our performance with respect to relevant sustainability aspects. We have distinguished our major focus areas in relation to our services and operations 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 of stakeholders' views, verifier's comments on our previous report and [GRI G3.1 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"> <li>Impact on climate change</li> <li>Waste generation and recycling</li> <li>Resources management</li> </ul>	<ul style="list-style-type: none"> <li>Low Carbon Building Design; Greening and Landscaping</li> <li>In-house Green Management</li> <li>In-house Green Management; Data Summary</li> </ul>
Social	<ul style="list-style-type: none"> <li>Occupational health and safety</li> <li>Staff relationships and development</li> <li>Public facility quality</li> <li>Community involvement</li> </ul>	<ul style="list-style-type: none"> <li>Health and Safety</li> <li>Staff Development; Staff Engagement</li> <li>Project Quality Management</li> <li>Community Support and Engagement; Servicing the Community</li> </ul>
Economic	<ul style="list-style-type: none"> <li>Corporate governance</li> <li>Economic impact</li> <li>Customer and supplier relationship</li> </ul>	<ul style="list-style-type: none"> <li>Management Approach</li> <li>About us</li> <li>Project Quality Management</li> </ul>



## Engagement Approach

We have already identified various stakeholders who have direct and/or indirect interests on ArchSD developments through our daily operations and communication processes. Our major stakeholder groups include staff, clients, contractors/consultants, professional bodies and general public. We acknowledge their contributions and engagement through many different means, e.g. from website, reports, surveys, public events to face-to-face meetings. We treasure their comments on our sustainability performance to assist us in formulating direction for continuous improvement.

We have conducted the Client Satisfaction Surveys, Post Occupancy Evaluations, public functions and meetings to engage our clients to gauge our performance and understand their expectations. We strive to provide quality services to our clients by means of developing a steady and sustainable supply chain. We also deliver presentations at public seminars and trade events to provide the latest information on our procurement activities to existing and potential suppliers.

For our professional partners, such as consultants and contractors, we appreciate their contributions and collect their feedbacks through competitions such as the Green Contractor Award 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 to share green practices and/or achievement with participants. Research-oriented conferences, training and overseas study missions are also provided to academia groups.

Internally, we have maintained various staff engagement channels such as the Departmental Consultative Committee, Joint Staff Consultation Group, Staff Motivation Scheme, Web Forum, Staff Relation Units and other staff associations. Our employees are encouraged to exchange their insight and offer suggestions to ArchSD's sustainable development.

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

## Stakeholder Interview

We have conducted five interviews with individuals representing the four major stakeholder groups of staff, contractors, clients and professional organizations during the past year in order to obtain direct feedback from our stakeholders.



**Mr. Wong Chung-wing**

Chief Technical Officer (Building Services) of ArchSD

**Comment from Staff**

ArchSD values staff's opinions and participations in all departmental initiatives. For instance, the department has conducted extensive staff consultations before finalizing and after launching the new 5-year Departmental Business Plan so as to solicit understanding and support of the new plan from all our staff. To enhance staff morale and participation, the department has organized a range of staff motivation programmes such as the "Building

Services Role-playing Competition" which I had involved. The Competition aimed to boost the departmental team spirit to stimulate us to bring out their hidden talents to share practical experiences on effective planning, management and implementation of public building projects creatively. Regarding the environmental aspect, ArchSD commits to exploring the feasibility to use the latest green technologies to lead the industry towards sustainable development. A recently completed secondary school near Choi Wan Road and Jordan Valley is one of the vivid examples to demonstrate the adoption of sustainable elements and design in ArchSD's projects. The challenge ahead is for ArchSD to further promote the environmental features or initiatives in these projects to the public through various channels to raise their environmental awareness.

**Response from ArchSD:**

We encourage staff participation in departmental programme and development of new initiatives. Internally, we have maintained a knowledge management portal to facilitate department-wide sharing and collaboration. Externally, we have conducted various community support and engagement programmes to raise public awareness on our works and activities. It is one of our missions to promote sustainability to the industry and the general public.



**Mrs. Susanna Cheung**

Chairperson of the Architectural Services Department, Architects' Association  
Chief Architect of Advisory and Statutory Compliance of ArchSD

**Comment from Staff**

Being the works agent for the procurement and maintenance of government facilities and developments, ArchSD adopts, advocates and practises sustainability concepts from the design, construction to maintenance of our projects. Sustainability is further promoted through

incorporation of environment-friendly principles in building specifications and, incentive schemes such as the Green Contractor Award, encouraging our working partners to practise sustainable construction.

The Department's commitment to sustainable design and our strive for continuous improvement are also demonstrated through a wide range of channels to collect stakeholders' views and responses, including conduction of client satisfaction surveys at different stages of project delivery to enable us to identify room for improving our services. A number of mechanisms are in place to review and enhance operation transparency and communication amongst colleagues - the Departmental Consultative Committee facilitating direct communication between management and staff; training / experience sharing seminars; and inception of the ArchSD Knowledge Hub to provide additional opportunities for interaction and engagement.

Complementary to the Department's work, our ArchSD Architects' Association and other staff associations offer another very effective means to instill colleagues' awareness, concern and participation in sustainable design through organization of various visits, recreational and voluntary activities.

**Response from ArchSD:**

We believe an open and effective staff management approach can improve staff morale and team spirit. We will continue to hear views from staff and relevant stakeholders to further improve our sustainability performance.



**Ir Wong Chi Kwong**

Building Services Division Chairman (Session 2011-12) of the Hong Kong Institution of Engineers

**Comment from Association**

Over the years, The Hong Kong Institution of Engineers - Building Services Division has worked closely with ArchSD to promote sustainable living environment in the society and advancement of the Building Services Industry. ArchSD has been contributing its professional knowledge in different ways including participation in our Committee meeting, sharing in seminars, etc. to provide

information on latest green technology and promulgate government's view on sustainability in order to assist industry's practitioners in achieving sustainable development. For instance, a professional from ArchSD has been invited to present the design strategies and applications of energy efficiency in healthcare premises recently to our members. As the architect for all the government buildings, ArchSD is one of the pioneers to adopt innovative design and carry out various sustainability studies in building and construction works. One of the successful showcases is the installation of photovoltaic panel at Electrical and Mechanical Services Department's Headquarters, which is one of the largest peak grid-connected photovoltaic panels at roof in Hong Kong. ArchSD has made every effort to promote sustainable development to both the society and the industry through different means. We trust ArchSD will continue to explore every opportunity to adopt and implement innovative but pragmatic design in government buildings.

**Response from ArchSD:**

As a government department, it is one of our responsibilities to promulgate government's view on sustainability and assist building industry in achieving sustainability. We will continue our effort to promote green building design and latest green technology to the industry.



**Mr. Kwok But**

Principal of Sing Yin Secondary School

**Comment from Client**

We worked with ArchSD recently in the construction of our new school campus. ArchSD provided excellent supporting and advisory services on our campus design, construction and commissioning. For instance, during the design stage, ArchSD not only provided professional advices and valuable information to cater for our needs and expectations, but also adopted many green features in our new campus to enhance the overall environmental

performance. One of the examples is the installation of a building energy management system, which would analyze our energy consumption pattern regularly to facilitate evaluation of the performance on various green facilities. We could also achieve energy saving by adopting this system through better energy management. In addition to the 1-year maintenance period, ArchSD has offered a 2-year extra maintenance services to our new campus to provide us with better technical supports in facility maintenance.

**Response from ArchSD:**

We thank for our staff's contribution to provide professional and quality services to our clients. We will continue to put green initiatives into practice and contribute to build a sustainable living environment in Hong Kong.





**Ir Jason Wong**

Project Manager of Gammon Construction Limited

**Comment from Contractor**

As an industry leader, ArchSD encourages its contractors to scale new heights of excellence and go beyond legislative compliance. It provides contractors with the latest information and best practices on environmental protection, safety and labour management aspects to enhance performance standards, such as meeting the Gold Certification of the Hong Kong BEAM Plus standard, and acquiring the Indoor Air Quality certification. ArchSD

implements various incentive schemes to encourage contractors to comply with different requirements. For example, ArchSD has followed Development Bureau's directives to implement the "Pay for site safety" and "Pay for Environmental Protection" schemes to provide us with financial support for meeting the target. To promote sustainable practice, ArchSD has organized an annual Green Contractor Award to encourage contractors to strive for better environmental performance. Our efforts have been widely recognized by ArchSD which motivates us to pursue excellence in our construction work continuously. In future, ArchSD may consider introducing other incentives or award schemes to encourage contractors to adopt innovative designs and initiatives to further enhance site safety and environmental performance.

**Response from ArchSD:**

We will provide necessary support and work closely with our contractors to pursue sustainability excellence. The recent launching of our Extranet is able to enhance communication and information exchange with our consultants and contractors. We will continue to encourage contractors to adopt innovative designs and initiatives to further enhance site performance.



## Low Carbon Building Design

Low carbon building design is an important aspect to achieve sustainable development in our community. Throughout the years, ArchSD has been striving to bring in low carbon design elements into architectural projects. We believe that the emergence of applying low carbon design initiatives can provide a significant effect on the need for creating more sustainable and energy efficient buildings and facilities, which will benefit our society at the end.

Energy conservation is one of our prime concerns when we consider adopting low carbon design in our projects. Since 2011 some ArchSD projects have been selected as energy efficiency demonstration projects for testing out the extent of saving when all the energy saving equipment/systems were put together.

In these demonstration projects, energy efficient designs and technologies such as use of energy efficient building materials, installation of building energy management system, adoption of automatic building ventilation system, adoption of renewable energy, installation of efficient lighting control, optimization of equipment control etc. have been widely adopted. It is anticipated that these projects will set good examples in promoting the use of energy efficient designs and technologies for the construction industry.

### Case Study

#### Secondary School near Choi Wan Road and Jordan Valley, Kwun Tong

**Project Description:**

This project, a holistic approach has been adopted to enhance the environmental performance including various aspects.



Overview of the Secondary School

**Design and Features:**

In addition to adopting common environmental and energy efficient features that are included in other government projects (e.g. heat energy reclaim for ventilation system; T5 energy efficient fluorescent tubes with electronic ballast; occupancy sensors and

## Architectural Services Department - Sustainability Report 2012 - Resources Utilization and Conservation - Low Carbon Building Design

daylight sensors and light emitting diode (LED) type exit signs etc.), this project has incorporated additional environmental and energy efficient features, with the purpose of exploring and identifying suitable technologies for wider adoption in future.

Examples of these additional environmental and energy efficient features are highlighted below:

- Building Energy Management System: Provision of flexible control for building engineering systems to suit usage patterns. The system will enable scheduled control on lighting and central dimming, automatic reduction or termination of air-conditioning when the room is unoccupied, and provide energy consumption records for energy audit and review;
- Renewable Energy Installations: Promotion of alternative and clean source of electricity using solar and wind power, including photovoltaic (PV) panels (thin film PV and sun tracking PV), solar water heaters, small scale wind turbine and daylight sun tubes;



PV Panels with Sun Tracking System

- Energy Efficient Ventilation and Air-conditioning System -
  - i. Adoption of Water-cooled Variable Refrigerant Volume (VRV) air-conditioning system, which is more energy efficient than air-cooled air-conditioning system;
  - ii. Installation of occupancy sensor control for air-conditioning supply;
  - iii. Installation of demand control of supply and fresh air with carbon dioxide sensors; and
  - iv. Installation of variable speed fans and motors

It is expected that the annual Greenhouse Gas (GHG) saving for the school would be about 30 tonnes carbon dioxide equivalent (CO<sub>2</sub>-e), about 40% less emission comparing with that of a typical school in Hong Kong.

The project has obtained a certificate in Hong Kong Building Environmental Assessment Method (BEAM 4/04) with platinum rating in 2012.

## **Cruise Terminal Building for the Kai Tak Development Area**

### **Project Description:**

The scope of the project comprises the development of new cruise terminal facilities on a site of 7.6 hectares at the southern end of the former runway at the Kai Tak Airport.

The cruise terminal has four main atria placed at regular intervals extending to the full height of a 3-storey building. The atria design allows natural light into the premises in order to provide a natural and vibrant environment.

A green landscape design at the roof deck has been adopted to provide a breathtaking waterfront views for the public to enjoy even if they are not taking a cruise vacation. The design also serves as an urban oasis for both tourists and the public to enjoy the tranquil surroundings and undertake leisure activities.

Sustainable design features such as photovoltaic systems, rain water recycling system for irrigation, service-on-demand controls for escalators and passenger conveyors, carbon dioxide sensors and building energy management system are widely used within the terminal building. The building will be connected to District Cooling System which provides chilled water to the air-conditioning system to achieve energy efficient air-conditioning.



Artist's Impression on the Cruise Terminal

## Trade and Industry Tower in Kai Tak Development Area

### Project Description:

This building is a 22-storey government building, offering a total net operational floor area of about 33,000 m<sup>2</sup> to house various government departments, in particular Trade and Industry Department. In addition, a community hall with a seating capacity of 450 persons and other supporting facilities will be provided for organizing community activities in the Kowloon City district.



1. Artist's Impression on the Trade and Industry Tower
2. The Building Integrated Photo-voltaic Panels

### Design and Features:

The construction of the building aims for certification under the BEAM 4/04 with platinum rating and the Leadership in Energy and Environmental Design (LEED) certification programme, which will incorporate many energy-efficient designs and technologies. Various applications of renewable energy technologies, photovoltaic systems, solar hot water systems, solar chimney and daylight sun-tubes will be adopted. The building will also be connected to the District Cooling System to achieve energy efficient air-conditioning and to provide more space for green roof.

Other energy conservation and environmental features will also be applied in the building, which include:

- desiccant wheels dehumidification for fresh air;
- automatic static pressure reset control for air supply;
- free air cooling system for large server rooms;
- heat recovery system for condensate;
- brushless motor for fan coil units;
- light-emitting diode type down lights and landscape lights;

## Architectural Services Department - Sustainability Report 2012 - Resources Utilization and Conservation - Low Carbon Building Design

- task lighting;
- lift power regeneration system; and
- sun tracking light pipes.

Apart from planting lush landscaping on the ground floor, landscaped elevated walkway and the main roof, the building tower will feature vertical greening on the building façades. It is anticipated that the overall greening of this project will account for more than 30% of the site area.

In terms of recycling and other environmental features, the project will also collect and recycle rainwater for landscape irrigation, adopt an automatic refuse collection system and reuse inert construction waste to minimize disposal of waste to the public fill reception facilities.

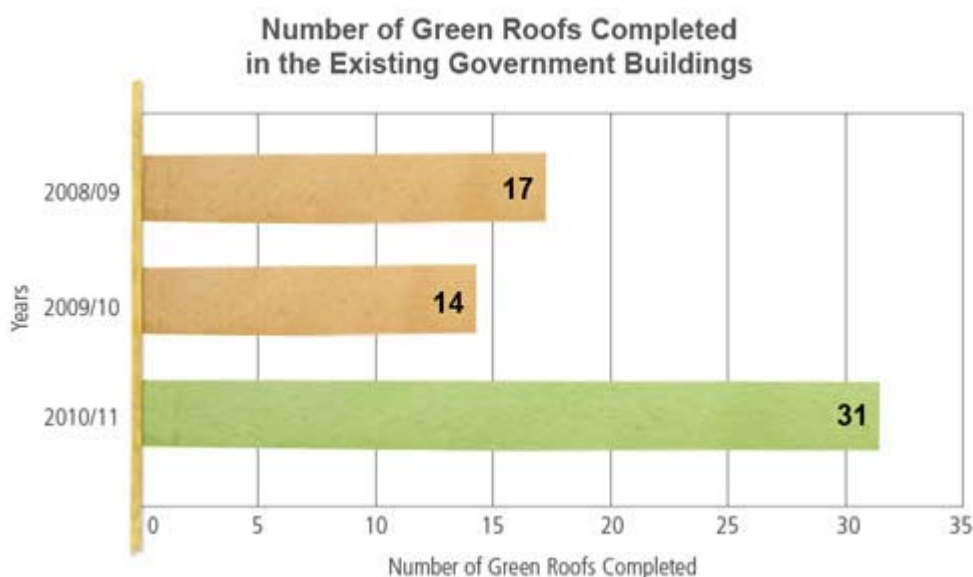
The project is scheduled for completion in 2014.



## Greening and Landscaping

It is our general practice to promote roof greening and vertical greening as well as enhance greening and landscaping in our projects. As an on-going initiative, we have been making considerable efforts to include roof greening and vertical greening where practicable in both new and existing government buildings.

For existing government buildings, we have been encouraging the management departments to consider installation of green roofs whenever there are major maintenance/renovation works involving the roofs of the buildings concerned. During the past three financial years, we have closely examined the feasibility of installation of green roofs as part of the works for existing government buildings and the numbers of green roof projects completed in recent years are as follows:



We completed 6 projects with substantial landscaped area in 2011. It includes:

- District Open Space in Area 37, Tseung Kwan O
- Local Open Space in Area 25, Fanling/Sheung Shui
- Local Open Space at Hung Tak Road, Hung Shui Kiu, Yuen Long
- Tamar Park
- Initial open space at the new Central harbourfront between Tim Wa Avenue
- Aldrich Bay Park



The Park at District Open Space in Area 37, Tseung Kwan O



Skateboarding Ground at Local Open Space in Area 25, Fanling/Sheung Shui





Local Open Space at Hung Tak Road, Hung Shui Kiu, Yuen Long



Development of Tamar

## Case Study

### Vertical Greening at EMSD Headquarters

#### Project Description:

The vertical greening at the Electrical and Mechanical Services Department (EMSD) Headquarters is an experimental project. It explores the effect of green architectural features to a built environment, aiming at reinforcing the spatial quality and energy efficiency for the interior and exterior of the building.

The project involves refurbishing 5 external walls with a total area of about 200 m<sup>2</sup> vertical green walls at the EMSD Headquarters.



Vertical Green Walls at the EMSD Headquarters

Technically, this project focuses on the evaluation of the difference in indoor temperature at areas with and without the installation of vertical green walls, to prove its moderating effect as a result.

Aesthetically, the design concept is to alter part of the external walls by extending vegetation from planters on the ground to the facade of the building. Situated at the open entrance court of a highly-populated office building and clad in hard rectangular tiles, the vertical green walls provide an immediate effect to soften the space and create a more welcoming atmosphere to the occupants.

The living green walls are composed of pre-vegetated panels that are affixed to a structural wall with a structural frame. Modular panels are composed of High Density Polyethylene (HDPE) containers, irrigation hoses, growing medium vegetation. This system comprises standard panels in which plants are inserted and irrigated by a drip-line system. Two sets of solar powered irrigation system are also embedded with wireless digital controllers which can change settings of the irrigation system such as the operating time and duration of irrigation.

## Aldrich Bay Park

### Project Description:

The Aldrich Bay Park, with an area of about 22,000 m<sup>2</sup> at the centre of Sai Wan Ho, serves not only the 59,000 local residents but also the 581,500 population in the Eastern District. The park is located next to the existing Waterfront Promenade towards the Shaueiwan Typhoon Shelter where many boats in different sizes and forms are moored.

The Aldrich Bay Park provides leisure facilities to cater for the needs for the local community. It serves as a green barrier to screen off the Island Eastern Corridor and enhances the living environment of the residents in the surrounding area too.



1. The Landscaping Design reflects the Historical Development in the Area
2. Overview of the Park

The landscaping design theme of the Aldrich Bay Park is intended to reflect the historical development in the area, i.e. village development from hill side to the waterfront with Mount Parker at distant south. The spatial arrangement of a typical village is incorporated into the design of the park to arouse the remembrance of a traditional fishing village.



## Heritage Conservation

We are fully aware of the growing realization and expectation from the public on social, economic and environmental benefits of heritage conservation. It is always our belief that effective conservation of heritage resources should be able to rehabilitate the physical structures of historic buildings, and to assure the identity and a sense of belongings to our community.

With the announcement of the Chief Executive Policy Address 2007/08, a number of initiatives for enhanced conservation of historic/heritage sites and buildings have been imposed. These initiatives include the requirement for assessing impacts on historic/heritage sites and buildings arising from the implementation of capital works projects so that due consideration will be given for their conservation.

As one of the works departments of the Government, our team has been working closely with the Antiquities & Monuments Office (AMO) of the Leisure & Cultural Services Department to ensure that every effort has been made to preserve the heritage sites or sites with possible heritage value while minimizing possible adverse impact. In addition, Heritage Impact Assessment (HIA) will be conducted when necessary so that balance between the requirements for development initiated by the Government and heritage conservation can be achieved.

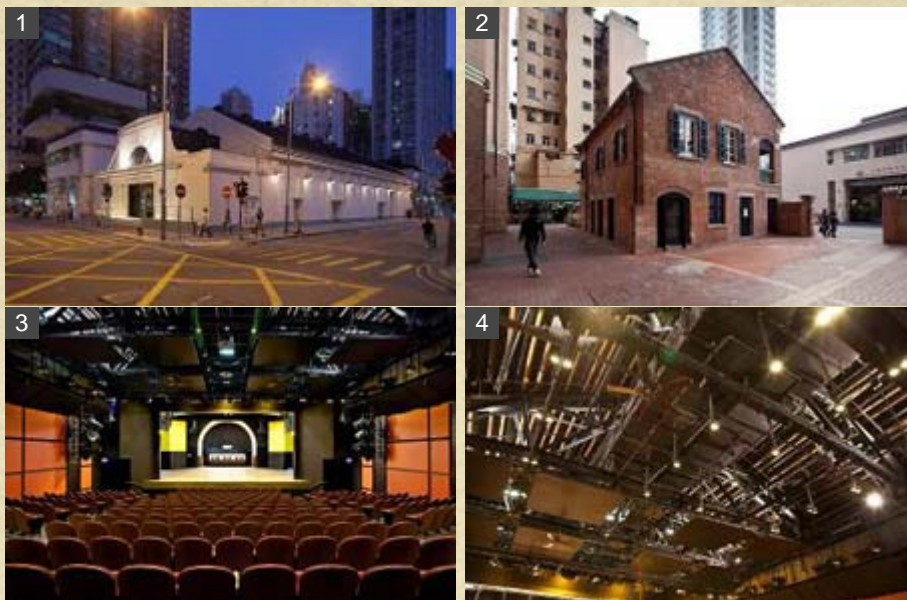
### Case Study

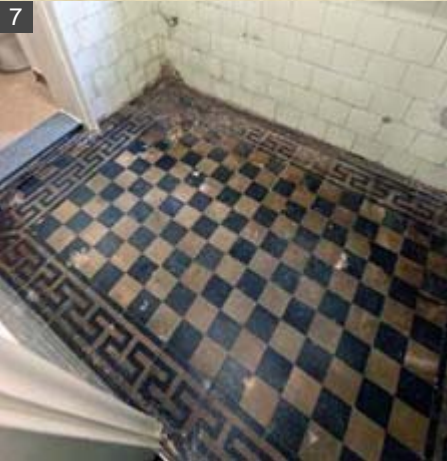
#### Conversion of Yau Ma Tei Theatre and Red Brick Building into a Xiqu Activity Centre

##### Project Description:

The Project includes the conversion of the old Yau Ma Tei Theatre (YMTT) into a small-scaled Xiqu, i.e. Chinese opera, performance venue and the Red Brick Building (RBB) into the supporting facilities.

Completed in 1930, the YMTT is classified as Grade II historic building and the only surviving pre-war cinema building in the urban areas of Hong Kong. The RBB is the oldest water pumping station structure in the territory built in 1895 and was accorded as Grade I historic building.





1. Yau Ma Tei Theatre before Construction
2. Red Brick Building before Construction
3. Interior View of the Theatre
4. Reservation of the Chinese Fir Purlins
5. Entrance Feature Column
6. Red Brick Verandah
7. Restoration of the Tiles in Toilet

#### Design and Features:

The conservation concept for the YMTT is to make adaptive reuse of this valuable historical building that represents local culture and to develop itself as the local cultural and heritage tourism hot spot for Xiqu performance.

Without glamorous outlook and drizzling decorative feature, the new Theatre puts focus on conservation of valuable heritage characters and reinforcement of its local context and district identity. The building fabric together with some historical building elements and interior fittings such as steel truss system, Chinese fir purlins and classic arch, its frank walls and entrance feature columns etc. are retained and restored.

For the RBB, the original layout is retained. The red brick façade, the verandah, the existing tiles discovered in toilet are restored.

## Transformation of the Former Police Married Quarters Site on Hollywood Road into a Creative Industries Landmark

### Project Description:

This project is one of the eight projects under the "Conserving Central" initiative announced in the Chief Executive's 2009/10 Policy Address.

The Former Police Married Quarters (PMQ) is located at the site of the former Central School built in 1889, which at the time was the first government school to provide Western style of primary and secondary schooling to the public. PMQ provided the first quarter for the married Chinese police officers of junior grades.



1. The Former Central School
2. The Former Police Married Quarters
3. Artist's Impression after Conversion to a Creative Industries Landmark
4. Artist's Impression on Underground Central School Interpretation Area
5. Artist's Impression on Main Courtyard
6. Artist's Impression on Landscape Open Space

**Design and Features:**

Following extensive consultation with key stakeholders, the Government decided to conserve and revitalize the PMQ for promoting the development of creative industries. After revitalization, the site will be catered for the uses of art galleries, design studios, art education and training centres and accommodation for overseas artists visiting Hong Kong etc.

The revitalization of the PMQ involves upgrading two quarters blocks to meet the functional requirements and modern-day building requirements. Meanwhile, the historical relics of the original Central School are preserved. Besides, it also involves constructing a new multi-purpose room-cum-exhibition area and new galleries and provides about 1,200 square metres of landscaped open space.

The whole project has been commenced since January 2012 and is scheduled for completion in December 2013. During the revitalization of the PMQ, the following features have been carefully preserved:

- the existing retaining walls together with the unique trees along Hollywood Road and Shing Wong Street, and at the lower platform of the site;
- the granite steps (stairs) leading to the 4th Plateau together with the remaining rubble wall; and
- the original granite plinths and pillars of the fenced walls along Staunton Street and Aberdeen Street.

The following environmental features will be injected into the revitalization of the site:

- a green roof at Block A and vertical greening;
- photovoltaic LED external lightings;
- an VRV air-conditioning system;
- T5 fluorescent tubes with motion sensors;
- LED exit signs and feature lights;
- heat recovery fresh air pre-conditioners; and
- automatic on/off lighting and ventilation fan inside lifts.



## In-house Green Management

Besides adopting environmental practice in our building design, we have implemented a number of green measures in our offices to raise staff awareness and improve environmental performance. During the year, we had received various accolades to recognize our efforts for the provision of a green working environment. Our in-house green initiatives are summarized below.

### Managing Our Carbon Footprint

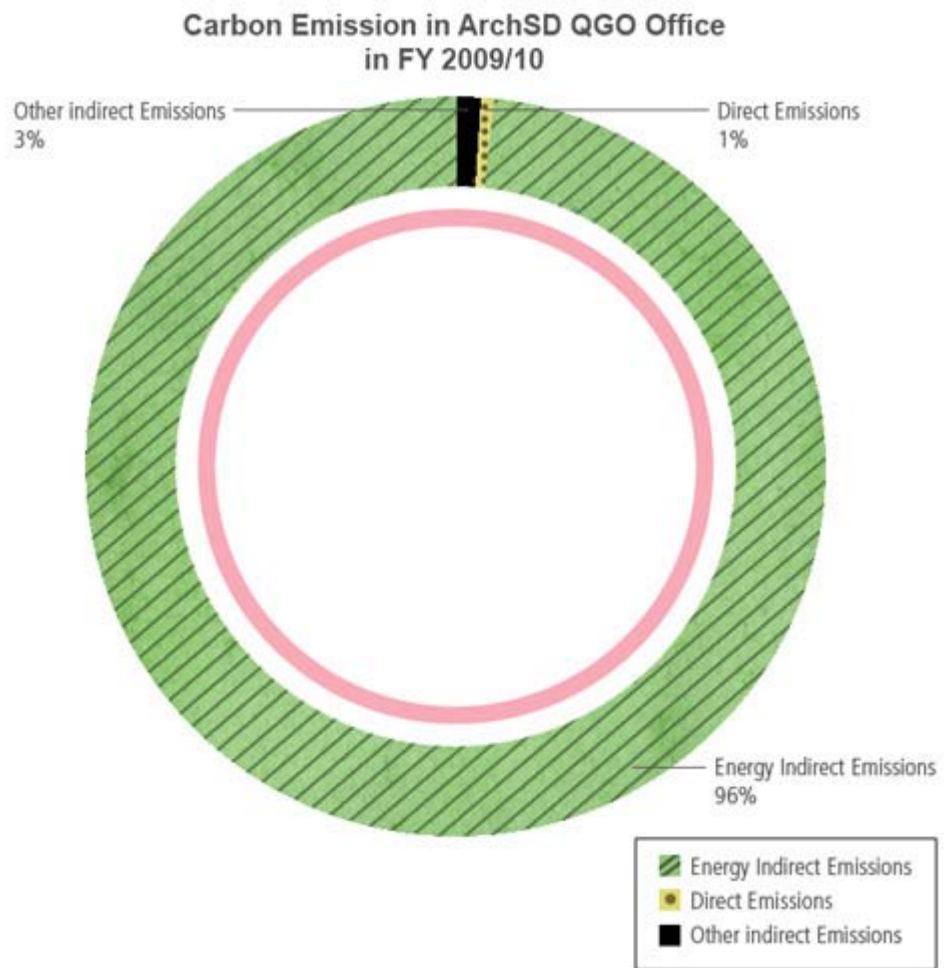
In response to the government's call for carbon reduction, we have conducted carbon audit for our offices in the Queensway Government Offices (QGO) and APB Centre since 2010. The audit, conducted on an annual basis, enables us to better understand our carbon footprint in order to formulate appropriate actions to further reduce our carbon emissions. Our carbon footprint in QGO and APB Centre is provided below.

#### Carbon Emissions in ArchSD QGO Office

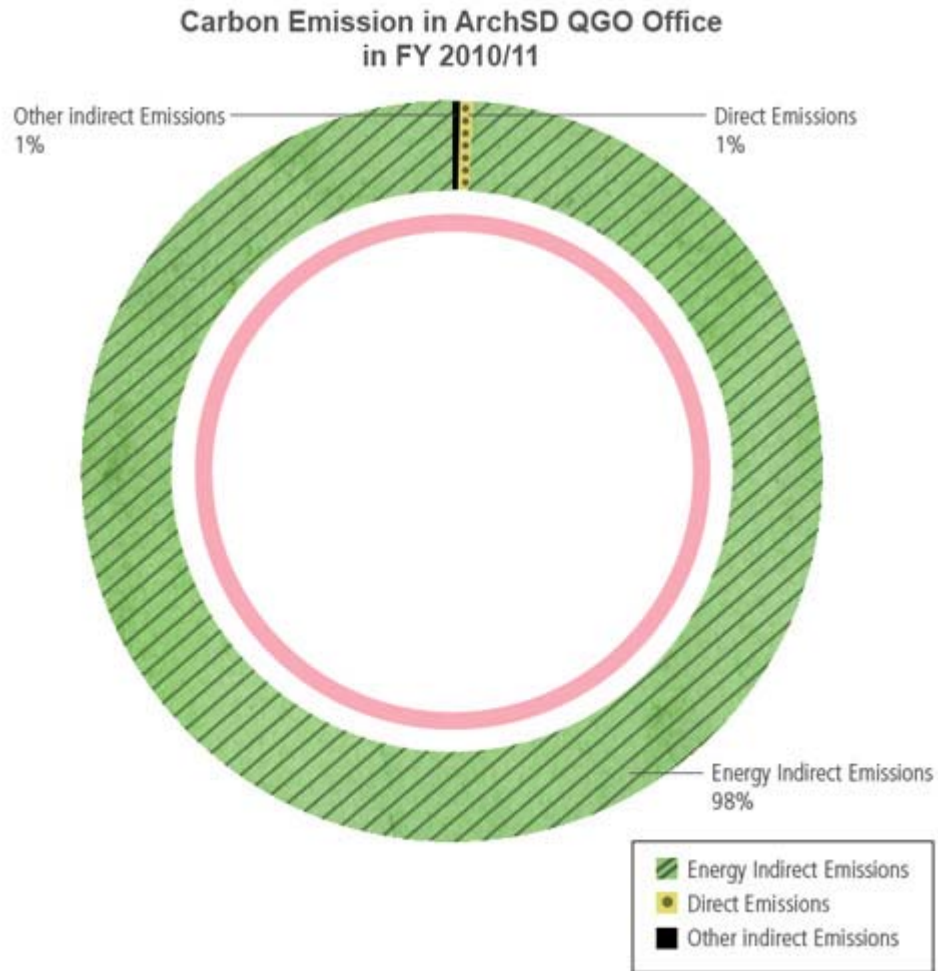
	FY 2009/10	FY 2010/11
Direct Emissions (Tonnes of CO <sub>2</sub> -e)	31.05	32.38
Energy Indirect Emissions (Tonnes of CO <sub>2</sub> -e)	2482.01	2417.88
Other Indirect Emissions (Tonnes of CO <sub>2</sub> -e)	73.67	20.61
Total (Tonnes of CO <sub>2</sub> -e)	2586.73	2470.87



### Carbon Emission in ArchSD QGO Office in FY 2009/10



### Carbon Emission in ArchSD QGO Office in FY 2010/11



Comparison of CO<sub>2</sub> Emissions in ArchSD QGO Office between FY 2009/10 and FY 2010/11

There was about 4.5% decrease in carbon emissions in FY 2010/11 at our QGO office when compared with the carbon footprint in FY 2009/10. It is mainly due to the reduction in electricity consumption after implementing various energy saving measures in our office.

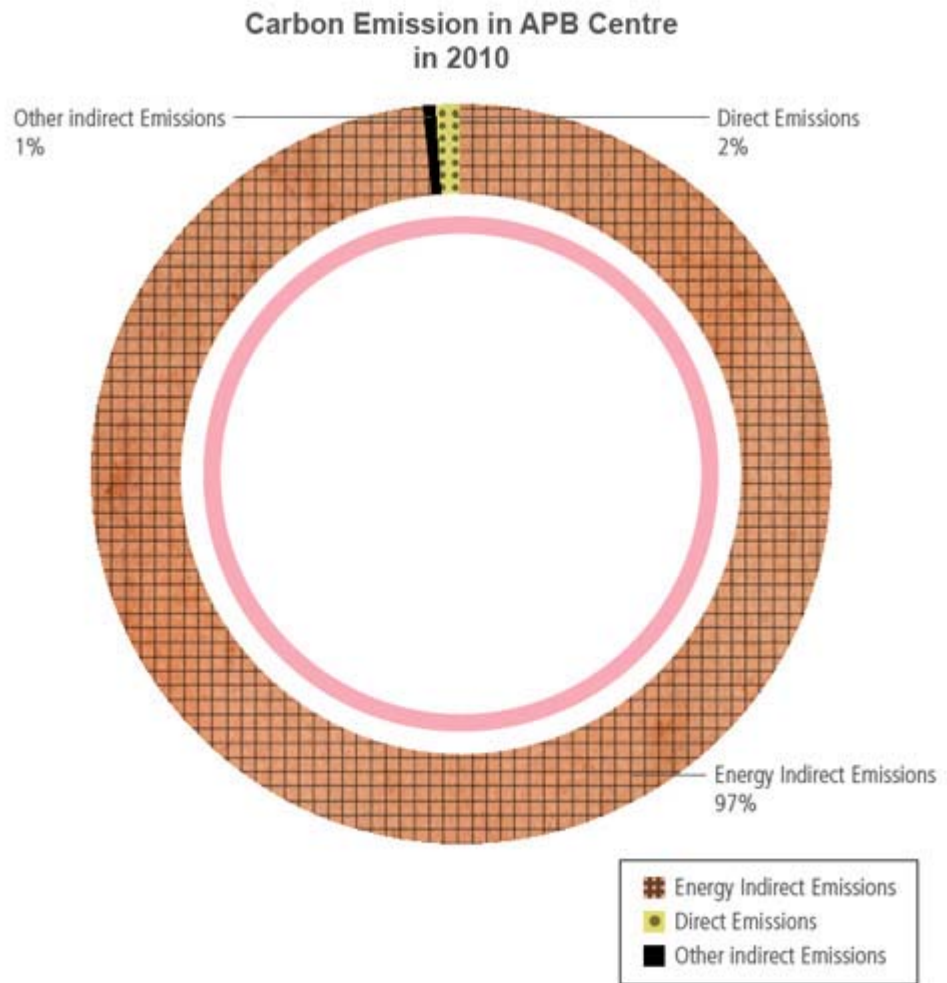
### Carbon Emissions in ArchSD APB Centre

	Year 2010	Year 2011 <sup>1</sup>
Direct Emissions (Tonnes of CO <sub>2</sub> -e)	28.51	611.79
Energy Indirect Emissions (Tonnes of CO <sub>2</sub> -e)	1844.70	1825.39
Other Indirect Emissions (Tonnes of CO <sub>2</sub> -e)	26.17	20.38
Total (Tonnes of CO <sub>2</sub> -e)	1899.38	2457.56

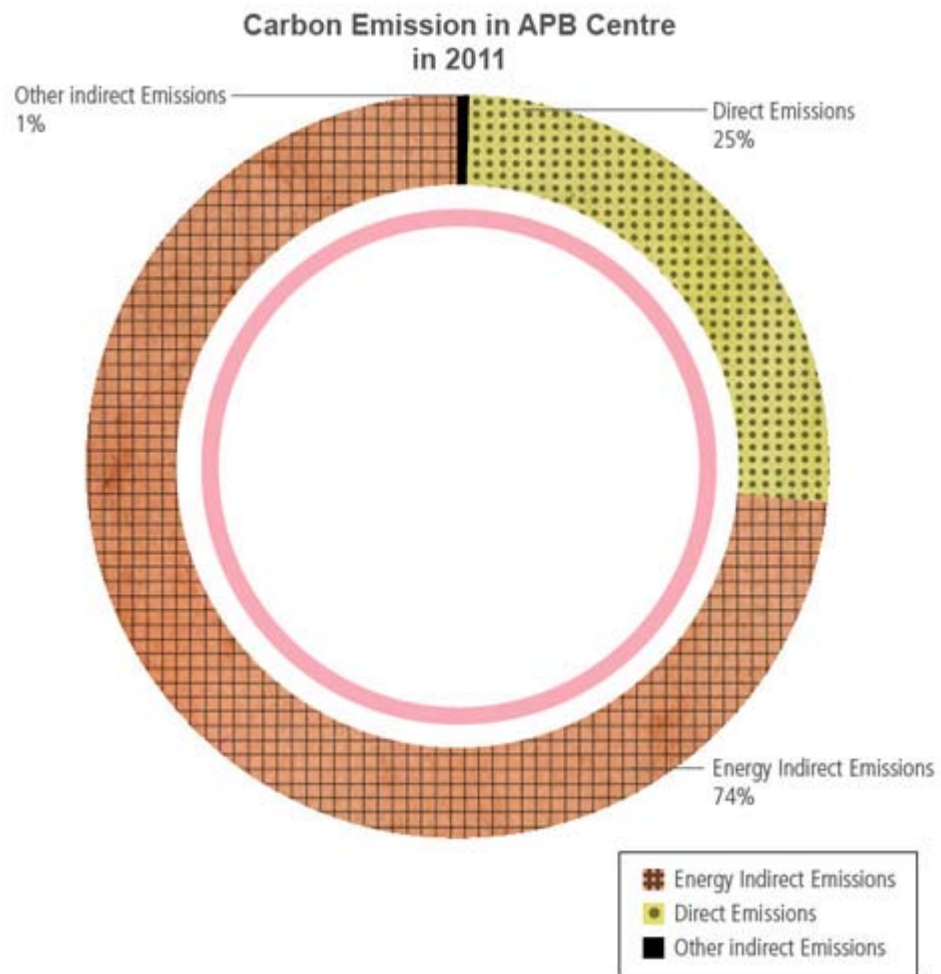
Note:

1. The scopes of the Direct Emissions in Carbon Audit for 2011 were expanded to cover the contract cars on the recommendation from the report of Carbon Audit 2010.

### Carbon Emission in APB Centre in 2010



### Carbon Emission in APB Centre in 2011



#### Comparison of CO<sub>2</sub> Emissions in APB Centre between 2010 and 2011

As the Carbon Audit 2011 included the emission of contract cars, there was an extensive increase in the Direct Emissions. On the other hand, the two results are considered as consistency when the data of Direct Emission is excluded. There is a slight decrease of 1% in 2011.

## **Energy Conservation**

Over the years, we have implemented a number of energy saving measures in our office. These include retrofitting of lighting system and installation of timers to switch off office equipment after office hours. To increase the awareness amongst staff, and investigate and identify opportunities for continual improvement in relation to energy conservation, we have appointed Energy Wardens in each division or section. They are responsible for regularly inspecting office areas to check the effectiveness of energy saving measures and to check that all lighting, air-conditioning system and office equipment are switched off before leaving the premises after office hours.



Timers Switches for Office Equipment



De-lamping of Lighting System to Reduce the Use of Fluorescent Tubes      Switch off of T5 tubes



Energy Warden Communication Meeting      Notice to Remind Staff Switching off Unused Office Equipment

## Waste Management

We have adopted the principles of Avoid, Reduce, Reuse and Recycle in our office to reduce waste generation. In addition to implementing guidelines on reducing the use of photocopying paper, we have managed the use of envelop and encouraged recycle/reuse of Information Technology equipment and other office consumables including printer toner/cartridge and CD-roms.

To further reduce our paper consumption, we have set up a "central paper pool" in our offices. Limited amount of paper has been allocated to each section and additional paper could be requested from the central pool if necessary. Our collective efforts in paper saving enabled us to save 4.6% of A3/A4 paper consumption by weight when compared with 2010.



Paper Recycling Collection Points in Office      Recycling used CR-ROMs

## Performing Good Indoor Air Quality

Indoor air quality is important to maintain healthy and comfortable working environment. We have implemented various measures to improve the indoor air quality in our offices, such as

- Increase the frequency of cleaning the air filters in air-conditioning system and window blinds to reduce respirable suspended particulates
- Increase the fresh air intake to reduce carbon dioxide concentration

In 2011, we were awarded with "Class of Good" IAQwi\$e Label of Hong Kong Awards for Environmental Excellence (HKAEE) to recognize our effort in improving indoor air quality for our Queensway Government Offices and APB Centre.



Certificates of "Class of Good" IAQwi\$e Label of HKAEE (Left: APB Centre Right: Queensway Government Offices)

## **Green Procurement**

In 2011, the Government continues to monitor the market situation for green procurement and has expanded the list of green specification for items commonly used by bureaux and departments. Specifically, all bureaux and departments are encouraged, as far as possible and where economically rational, to purchase green products and avoid single-use disposable items.

Green products are generally refer to products:

- i. with improved recyclability, high-recycled content, reduced packaging and greater durability;
- ii. with greater energy efficiency;
- iii. which utilize clean technology and/or clean fuels;
- iv. which result in reduced water consumption;
- v. which emit fewer irritating or toxic substances during installation or use; or
- vi. which result in smaller production of toxic substances, or less toxic substances, upon disposal.

In line with the Government's commitment to promote green procurement, we execute the green procurement policy when purchasing products with green specification in the Government procurement list. Currently, there are over a hundred types of green products on the list, including office consumables, computer equipment and electrical appliances.



LCD Monitor



LED Spotlights

All-in-one Multi-functional Device (Fax, Copy and Print)



With the assistance of our clients and business partners who are the key players for us in carrying out our projects and services, we communicate with them via appropriate platform to provide our latest updates and correspond with them interactively.

## Project Quality Management

Over the years, we have developed a strong culture and management system centred on project quality throughout our services in monitoring, upkeep and development of the Government-owned or -funded facilities.

We believe buildings with a high level of quality play essential roles for the prosperity of the whole city. As an open and effective way to demonstrate our commitments in building quality management and to share our latest achievement with the general public, we have participated actively in relevant local prestigious recognition schemes, such as the Quality Building Award and the Hong Kong Building Environmental Assessment Method (BEAM) Label.

### Quality Building Award

The Quality Building Award is presented bi-annually to buildings that have outstanding quality and demonstrating excellent teamwork with a high level of professionalism.

To address this year's Quality Building Award theme of Building Excellence for the Future, we integrate the concept of sustainability into quality by focusing on a variety of aspects, such as:

- Considering architectural details with more attention in the surrounding environment;
- Introducing innovative structures to encourage public interaction and community atmosphere aligned with the neighbourhood;
- Fulfilling the requirements on accessibility to provide quality living and activity establishment for occupants;
- Preserving the cultural and historic values of city heritage buildings with careful enhancement work without making significant intervention to original design;
- Exploring creative landscape design containing natural elements to render a relaxing open space for the community; and
- Constructing facilities with technological innovation and new materials to inspire visitors with a unique, functional yet visionary image.

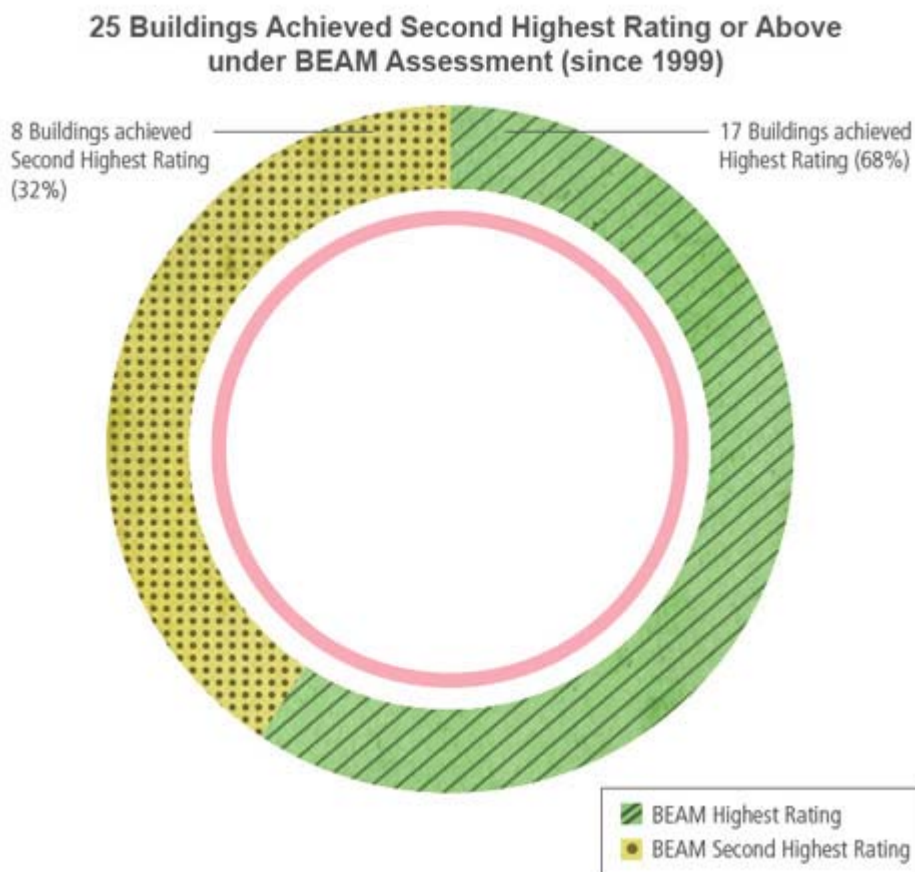
We are proud of the quality performance of our buildings, and have nominated eight entries to participate in the competition for Quality Building Award 2012.

- Hong Kong Building Environmental Assessment Method (BEAM) Label

We have 13 projects submitted or assessed (4 projects achieved second highest rating or above) for BEAM Assessment in 2011.

We recognize the value of BEAM, and have applied it to a number of new buildings as an effective tool to communicate our commitment in environmental sustainability to end users. By providing a standard to evaluate and certify building performance, BEAM demonstrates various qualities of an establishment, be it brand new, refurbished or currently in use.





## Supply Chain Recognition

Sustainable development of supply chain is regarded essential to ensure our consistent delivery of quality services. We have made great effort to establish strong working relationship with our raw material suppliers, project contractors, consultants and other business partners. In particular, through organizing the annual awards dedicated to supply chain, namely the Green Contractor Award, we compliment our suppliers / contractors with outstanding environmental and social performance.

Contractors that have excellent performance in construction sites and demonstrate their environmental and social conscious commitments through implementing effective green measures would be granted the Green Contractor Award by ArchSD every year.

The green practices of the following construction sites constitute the highlights of the Green Contractor Award 2011. (In alphabetic order)

- Aberdeen Fire Station cum Ambulance Depot at Nam Fung Road, Aberdeen
- Annex Building at the Ko Shan Theatre
- Kwun Tong Swimming Pool Complex and Kwun Tong Recreation Ground
- North Lantau Hospital
- Victoria Park Swimming Pool Complex at Causeway Bay

**Architectural Services Department - Sustainability Report 2012 - Clients and Business Partners  
- Project Quality Management**



Aberdeen Fire Station cum Ambulance Depot at Nam Fung Road, Aberdeen



Annex Building at the Ko Shan Theatre



Kwun Tong Swimming Pool Complex and Kwun Tong Recreation Ground



North Lantau Hospital



Victoria Park Swimming Pool Complex at Causeway Bay

## Construction Sites Participating in the Green Contractor Award 2011

These "Green Contractors" observe and follow a high level of standards in managing a number of different environmental aspects both at and around the sites<sup>1</sup>, including:

### Air Quality Control

- Dust control
- Material selection to abate pollution
- Air quality monitoring



Cover on Excavated Surface<sup>3</sup>

Water Spraying to Suppress Dust<sup>4</sup>



Wheel Washing at Site Exit<sup>3</sup>

Provide Shoe Washing Facilities<sup>5</sup>

Architectural Services Department - Sustainability Report 2012 - Clients and Business Partners  
- Project Quality Management



Reduce Site Mixing with Use of Ready Mix or Spray Plaster<sup>4</sup>



Use of Ultra Low Sulphur Diesel (ULSD) for Construction Plants<sup>6</sup>



Dark Smoke Test<sup>2</sup>



Dust Monitoring Device at Nearby Area<sup>5</sup>

## Noise Control

- Acoustic enclosure and barriers
- Insulation materials for equipment
- Quality powered mechanical equipment
- Regular noise monitoring



Acoustic Enclosure on Piling Plants<sup>6</sup>



Noise Insulation Jacket on Breaker<sup>3</sup>



Sound Barriers around Construction Site<sup>2</sup>



Use of Mobile Noise Barriers<sup>5</sup>



Use of Chemical Expansion Agent for Breaking Rocks<sup>3</sup>



Acoustic Materials Applied inside Hydraulic Hammer<sup>6</sup>



Quieter Quality Powered Mechanical Equipment (QPME) Generators<sup>4</sup>



Sound Monitoring for Neighbourhood<sup>2</sup>

## Water Saving

- Establish wastewater treatment system
- Perform water quality analysis
- Recycle water for site activities



Water Sampling for Lab Analysis<sup>5</sup>



Treated Water Recycled for Wheel Wash<sup>2</sup>



U Channel to Collect Rain Water<sup>4</sup>



Collect Wastewater for Shoe Washing<sup>3</sup>



Rain Water for Plant Watering<sup>4</sup>



Use Floor Sweeping Compound to Minimize Water Usage<sup>5</sup>

## Waste Management

- Sort waste for recycling
- Reuse of construction materials
- Tracking system for waste disposal



Waste Sorting Bins on Site<sup>4</sup>



Separate Handling of Hazardous Waste<sup>3</sup>



Recycle Paper<sup>2</sup>



Reuse of Imported Fill from Other Project<sup>5</sup>

**Architectural Services Department - Sustainability Report 2012 - Clients and Business Partners  
- Project Quality Management**



Use of Surplus Concrete for Building Block<sup>5</sup>



Implementation of Trip Ticket System<sup>6</sup>



CCTV for Recordation<sup>6</sup>



Mechanical Cover Provided for Waste Delivery Truck<sup>6</sup>

**Energy Conservation**

- White reflective paint to lower room temperature of site office



White-coloured Site Office to Reduce Power Consumption due to Air Conditioning<sup>3</sup>



Motion Sensor to Switch off Light when the Room Is Not In Use<sup>3</sup>



Solar LED Lamps for Access Lighting<sup>4</sup>



Solar Pest Control Device<sup>4</sup>





Solar Panel on the Roof<sup>4</sup>



Motion Sensor for Office Lighting<sup>4</sup>



Electric Meter to Monitor Electricity Consumption on Site<sup>6</sup>



Transparent Sunroof to Make Use of Natural Light to Save Energy for Lighting<sup>4</sup>

## Resource Preservation

- Application of reusable materials for construction
- Use of sustainable products
- Paperless site inspection



Use of Fiberglass Formwork instead of Timber Formwork<sup>5</sup>



Apply Metal Scaffold instead of Bamboo Scaffold<sup>6</sup>

Architectural Services Department - Sustainability Report 2012 - Clients and Business Partners  
- Project Quality Management



Reuse of Metal Fencing from Previous Projects<sup>4</sup>



Reuse of Organic Materials for Soil Conditioner<sup>2</sup>



Mobile Safety Checklist Application<sup>6</sup>



Procure Forest Stewardship Council (FSC) Certified Plywood<sup>3</sup>

## Greening and Tree Protection

- Protection zone for trees
- Greening for site office



Fence off Tree Protection Zone<sup>5</sup>



Plants Surround the Site Office<sup>4</sup>



Banner Posted on Site to Raise Awareness<sup>2</sup>



Plastic Sheets to Protect Trees from Scaffolding and Construction Works<sup>6</sup>

## Green Communication

- Training programme
- Incentive to staff
- Communication to staff and neighbours



Regular Meetings with Sub-contractors<sup>5</sup>



Chemical Spillage Drill<sup>3</sup>



Workers Awarded for Outstanding Environmental Performance<sup>5</sup>



Use of LCD Display for Environmental Awareness Notice<sup>5</sup>



Hoarding Beautification with Green Messages<sup>6</sup>



Signage Placed to Inform Public about Construction Activities<sup>6</sup>

### Notes:

1. The photos are extracted from the PowerPoint presentation of the Green Contractor Award 2011.
2. Aberdeen Fire Station cum Ambulance Depot at Nam Fung Road, Aberdeen
3. Annex Building at the Ko Shan Theatre
4. Kwun Tong Swimming Pool Complex and Kwun Tong Recreation Ground
5. North Lantau Hospital
6. Victoria Park Swimming Pool Complex at Causeway Bay

## Client Feedback

To evaluate the quality of our projects delivered, we have invited the clients to participate in our Client Satisfaction Survey (CSS) and Post Occupancy Evaluation (POE). By collecting feedbacks through the application of the two tools, we can better gauge the actual performance of the implemented projects, as well as identify potential areas for further improvement.

### Client Satisfaction Survey

We have established two aggressive quality targets related to client satisfaction, which are:

- Quality Target I - Overall Quality Performance: 100% of the completed projects should achieve Satisfied Level or above on the overall performance in CSS; and
- Quality Target II - Enhanced Communication Performance: a) 100% of the observations raised during the CSS should be followed up and properly addressed within 2 months after the survey completion; and b) timely confirmation should be sent to the clients within 1 month after the final completion of all follow-ups.

Results of the survey feedback on 30 capital works projects conducted in 2011 were published through the department's intranet for internal reference. The following tables summarize our achievement on the Quality Target I and II respectively.

Table 1. Client Satisfaction Survey Results on Quality Target I - Overall Quality Performance

Quality Target I - Overall Quality Performance	Q1	Q2	Q3	Q4	Overall
No of projects surveyed	8	7	8	7	30 (Total)
Overall Satisfaction Rating <sup>note 1</sup>	4.88	5.28	5.10	5.00	5.07 (Average)
Overall Satisfaction Index <sup>note 2</sup>	81.33	88.00	85.00	83.33	84.44 (Average)
% of "Satisfied" or above	100	100	100	100	100 (Average)
% of "Totally Satisfied" & "Very Satisfied"	47.20	90.50	72.90	68.70	69.83 (Average)

Note 1 - The overall Satisfaction Rating represents the average marks of the overall satisfaction marks given by the clients:  
(Overall Satisfaction Rating = Sum of all the overall satisfaction marks ÷ the number of surveyed projects)

Note 2 - It is the conversion of the satisfaction rating from maximum mark of 6 points to the satisfaction index of 100 points  
(Satisfaction index = 100 x Satisfaction rating ÷ 6)

**Architectural Services Department - Sustainability Report 2012 - Clients and Business Partners  
- Project Quality Management**

Table 2. Client Satisfaction Survey Results on Quality Target II - Enhanced Communication Performance

<b>Quality Target 2 - Enhanced Communication Performance</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Total</b>
(a) 100% of the observations raised during the CSS should be followed up and properly addressed within 2 months after the survey completion	8/8	7/8	8/8	7/7	30/30 <b>(100%)</b>
(b) timely confirmation should be sent to the clients within 1 month after the final completion of all follow-ups	4/4	1/1	2/2	2/2	9/9 <b>(100%)</b>

In 2011, we have gladly noticed that all the clients were "satisfied" or above with our delivered new projects, as well as agreed that we had enhanced the communication performance. There were also a few areas identified through the survey process for future improvement. For examples,

- *Conflict Handling*: to timely explain to users of the project limitations and design constricts during the initial design stage so that there would not have major different interpretations of the design criteria between clients and the project team.
- *Workmanship and Reliability of Installation*: to ensure that all terms and conditions were completed before handing over to users. In case of failure or mal-functioning of a system, project teams should instruct the contractor to respond immediately and closely monitor the progress of making-good of defects.

**Post Occupancy Evaluation**

As part of our commitment to support the HKSAR Government initiatives of "Clean Air Charter" and "Action Blue Sky", we have adopted a Post Occupancy Evaluation approach on selected newly-completed buildings to address clients' concerns in a broader scope. The exercise reviews the actual building performance and concentrates on the key evaluation issues of operational performance monitoring, handover issues, energy review and evaluation of new technologies.

Since the introduction of POE in 2005, a total of 16 projects have been selected so far. In all cases, substantial savings in electricity consumption were observed from the POE exercise with the objectives focusing on effective utilization of building services installation.

In view of experience attained, ArchSD engaged the Hong Kong Productivity Council to carry out a 2-year extensive study on the feasibility of expanding the scope of POE exercise. Based on the audited results of the study and the past POE exercises, our Senior Management was determined in 2010 to further develop the POE into a more comprehensive one-stop after-occupation service for more projects with different types and sizes.



## Social Participation

Through collaboration with our clients and business partners, we devoted great effort to sharing with the industry and the general public on our professional knowledge and experience in design and building technologies.

During the past year, we have taken the opportunity to participate in a variety of activities. For example,

### Hong Kong Flower Show

In order to promote sustainable development to the public, we have designed "The Symphony Garden" to emphasize our mission and echo the theme of the Hong Kong Flower Show 2011 "Symphony of Spring Flowers".



ArchSD's Exhibits in Hong Kong Flower Show

## Experience Sharing Events

We are willing to share our solid experience in construction design and building with the local industries as well as peers from overseas. For example, we organized the "Partnering to Serve with Care" Symposium in 2011 for widespread experience sharing with the local industry. We also received delegates from Nigeria and Belgium to share our views and insights on latest building design initiatives.



25<sup>th</sup> Year Symposium - Partnering to Serve with Care



Briefings and Site Tours for International Visitors (Left: Nigeria, Right: Belgium)

We serve and care for the community by enriching the living environment through quality professional services. Our services are delivered in an environmentally responsible manner by implementing conservation of energy, preventing pollution and reducing the consumption of natural resources. We are keen to promote environmental sustainability to our partners at work, the construction industry and general public. In 2011, we participated in a number of events to share our professional knowledge to relevant parties.

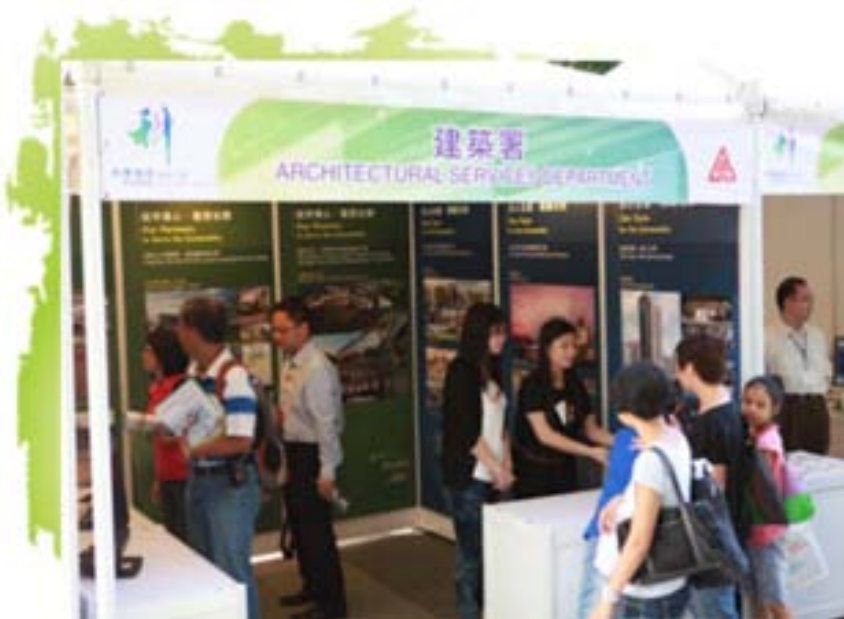
As a past winner of the HKAEE Sectoral Award, we delivered a talk on the Experience Sharing Seminar of the Award to share our green management approaches and practices with the public.





HKAEE Sectoral Award Experience Sharing Seminar

Our department had set up a booth to showcase our projects and services to the general public in the InnoCarnival 2011 held by the Innovation and Technology Commission (ITC) at the Hong Kong Science and Tehnology Parks from 5-13 November 2011.



The Booth to Showcase Our Projects and Services

We delivered a public talk in the Hong Kong Science Museum on Green Buildings, which aims to introduce green housekeeping practices, such as optimization of energy use, use of energy saving equipment, reduction of paper consumption, etc. to the public. Through this introduction, we hope to arouse behavioral changes among general public that would lead to a greener living and stronger environmental consciousness.



Public Talk in the Hong Kong Science Museum on Green Buildings



## Community Support and Engagement

Always keeping the communities and people that we serve in mind, we strive to provide diversified community support throughout and even beyond our services for local building design, construction and maintenance. We completed a number of community projects in 2011 including:

- Joint-user Complex and Wholesale Fish Market in Area 44 Tuen Mun
- Tseung Kwan O Complex in Area 44, Tseung Kwan O
- Community Hall and Integrated Family Service Centre at Tung Tau Estate Phase 9, Wong Tai Sin
- Improvement works for Mong Kok Stadium
- Sports Centre in Area 28A Fanling/ Sheung Shui
- Toilet Improvement Works in Suburban Areas



Joint-user Complex and Wholesale Fish Market in Area 44 Tuen Mun



Tseung Kwan O Complex

Architectural Services Department - Sustainability Report 2012 - Clients and Business Partners  
- Community Support and Engagement



Community Hall and Integrated Family Service Centre at Tung Tau Estate



Improvement works for Mong Kok Stadium



Sports Centre in Area 28A Fanling/ Sheung Shui

Before

After



Toilet Improvement Works in Suburban Areas

Among a number of building projects we were proud to deliver for the local communities in 2011, the following projects achieved a high level of harmony between the building, the people, as well as the surrounding communities.

- Ping Shan Tin Shui Wai Cultural and Leisure Building
- Siu Sai Wan Complex
- Kwun Tong Promenade (Stage 1)

## Ping Shan Tin Shui Wai Cultural and Leisure Building

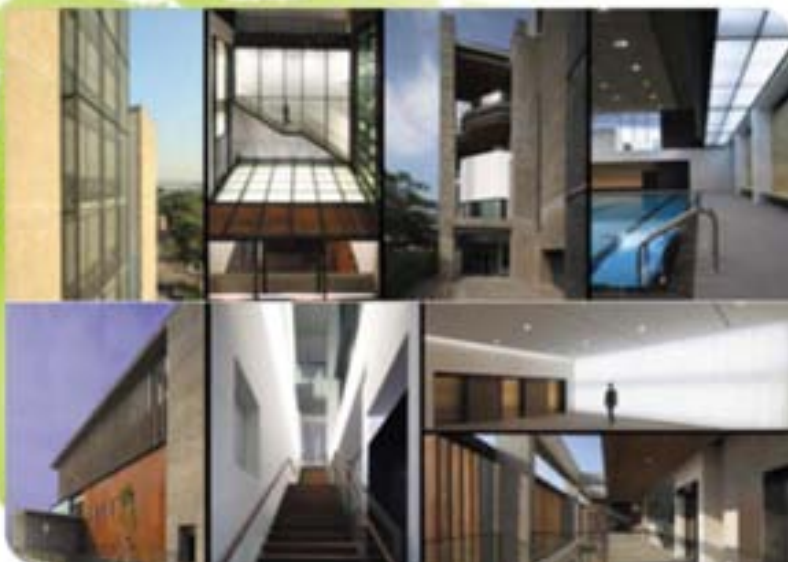


Overview of the Ping Shan Tin Shui Wai Cultural and Leisure Building

Recognized by the Hong Kong Institute of Architect Annual Award 2011 Medal of the Year of Hong Kong, Ping Shan Tin Shui Wai Cultural and Leisure Building was established as a multi-functional complex that serves as culture and leisure centre for the local community. Being the first government structure named for "culture and leisure building", some facilities in the building started to open to the general public since 2011.

Consisting of an indoor swimming pool, a sports centre, and the second largest public library in Hong Kong, the architectural design of the building embraces the unique cultural characteristics of the nearby Ping Shan area, and matches with the neighbouring built environment consisting of railway station, schools and traditional Chinese villages. In addition, making use of natural lighting for the 10-storey building aims to introduce a comfortable yet refreshing reading environment for the library users. Equipped with warm water supply, the indoor training pool provides an excellent training and leisure swimming facility to the public.

Different aspects of the surroundings have been well-addressed with much care and attention to architectural details. The overall architecture of the building, including the main elements contained inside as well as the spatial quality and the façade, was greatly inspired by the traditional design of Chinese cabinet. The application of different materials that integrates concrete, timber and steel would bring out a dynamic experience for visitors.



Interior of the Ping Shan Tin Shui Wai Cultural and Leisure Building

Architectural Services Department - Sustainability Report 2012 - Clients and Business Partners  
- Community Support and Engagement



Outdoor Room on Second Floor



Lift Lobby



Public Library Facility<sup>1</sup>

## Siu Sai Wan Complex



External View of Siu Sai Wan Complex

Located at 15 Siu Sai Wan Road, Chai Wan, the Siu Sai Wan Complex was officially opened in 2011. The complex comprises four major function zones, including a public library, a multi-purpose sports centre with 1,000 seats, two indoor swimming pools as well as a community hall. With careful planning and clear orientation, visitors to various functional zones in the complex are able to reach their destination conveniently.

Winner of the Merit Award of Hong Kong in the Hong Kong Institute of Architect Annual Awards 2010, the building is known for its distinguished design concept of "Vertical Street" that is accentuated with the use of bridges and escalators at the central portion, which emerge like an extension from the exterior to the heart of the complex. Accordingly, the building design aims to create a bustling community atmosphere that is most welcomed in local venues of its kind and encourages interaction among people. Reflecting the charisma of the surrounding community, the building serves as an iconic landmark and an elegant clubhouse for the public. In addition, this dynamic building features a sun-shading and rain-screening entrance canopy, a roof skylight as well as vivid colours, which complement harmoniously with the function of the building and deliver a welcoming environment for all visitors.



Vertical Street



Architectural Services Department - Sustainability Report 2012 - Clients and Business Partners  
- Community Support and Engagement



Front Entrance



The Public Library



The Swimming Pool

### Sun Yat Sen Memorial Park of Swimming Pool Complex

The Sun Yat Sen Memorial Park and Swimming Pool Complex provides a mixture of active and passive leisure and swimming facilities to meet the needs of people of different age groups in the Central and Western District. The theme park will also be a major tourist attraction and serve as an education platform for people to learn more about the close relationship between Dr Sun Yat Sen and Hong Kong.

The project comprises a swimming pool complex, a landscape garden, a statue of Dr. Sun Yat Sen with large lawn area, a waterfront promenade, a jogging trail and a 7-a-side artificial turf soccer pitch and ancillary supporting facilities. It occupies a site of approximately 5 hectares on the frontage of Victoria Harbour.

The layout unifies the entire site through the use of thematic planting and coordinated hard landscape to provide a harmonious setting of complimentary character to the public. The three major elements: memorial garden, swimming pool complex and active recreation facilities are carefully sited, detailed and inter-linked to achieve a fluent and unified character.



Overview of the Park

**Architectural Services Department - Sustainability Report 2012 - Clients and Business Partners**  
**- Community Support and Engagement**

The Park encompasses a metaphorical representation of the key factors shaping Dr Sun Yat Sen's early life and the development of his revolutionary ideal, and specifically the major role that Hong Kong played in this process. It creates an attractive, contemplative green space, within which visitors can interpret significant clues to the history of Dr Sun Yat Sen whilst enjoying the meditative ambience of the garden.

A considerable amount of features are sited carefully within the park to relate a more detailed story whilst respecting the principle Park structure and its message of Dr Sun's revolutionary ideas. The features include Viewing Deck, Pai Lau, Chime Tower, Main Statue and Palm Bosque, etc.



The Entrance of the Park

The swimming pool complex is positioned to act as a backdrop for the Park. It is separated vertically into different levels to provide different views over the pools, park and sea which also help to break down the building bulk. The open pool design enhances the transparency of the building and reduces energy consumption in space heating and cooling. A roof garden is designed on top of the changing room area and vertical greening is implemented through perimeter planters to provide a greener environment to the visitors.



The Swimming Pool

## Kwun Tong Promenade (Stage 1)



Kwun Tong Promenade (Stage 1)

As part of the former Kwun Tong Public Cargo Working Area, the Kwun Tong Promenade (Stage 1) is the first open leisure space project under the Kai Tak Development. It provides a great outdoor venue for the general public to enjoy the local scenery and environment, featuring a 200-metre waterfront boardwalk.

The promenade spans over 7,340 sq. meters equipped with a number of facilities, providing plenty of exercise space for residents and tourists, a playground for children, a grand view facing Victoria Harbour for lovers and couples to indulge themselves in a romantic walk along the coastline. There is also a performance stage along with a 200-seat spectator stand for hosting events.

The highlight of the promenade is the light tower landmark, inspired by the stacks of recycled paper at the former dock. Automatic colour light shows will be displayed every night through the light tower and the nearby multi-purpose piazza. Accompanying music, mist projected from the floor creates a dazzling special effect for visitors.



Playground

Architectural Services Department - Sustainability Report 2012 - Clients and Business Partners  
- Community Support and Engagement



Light Tower Landmark



Music, Light and Mist Show at Piazza



People Enjoy the Promenade



Performance Stage with Spectator Stand<sup>2</sup>

Notes:

1. The photos are extracted from the website of Hong Kong Public Libraries by Leisure and Cultural Services Department.
2. The photo is extracted from the website of Kwun Tong District Council.



## Servicing the Community

In 2011, our Volunteer Service Team served the community for over 1,600 hours through participating in more than 50 events. We reach out through assisting rehabilitation centres and elderly homes in:

- Organizing outdoor activities, birthday celebrations and games for the inhabitants;
- Arranging musical performance and making beautiful handicrafts and gifts for the elderly;
- Helping 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. The total hours and person numbers of our volunteering work over the last three years are summarized in the following table.

### Community Work Contribution

Item Description	2011	2010	2009
Total number of voluntary work hours carried out by our staff (unit: hours)	1,666	1,557	2,065
Number of active Voluntary Service Team members <sup>Note 1</sup>	24	21	25
Number of staff received commendation for voluntary service <sup>Note 2</sup>	18	18	21
Number of Volunteers	53	48	71
Number of Voluntary Projects Completed	52	67	44

Note 1 - Active Voluntary Service Team member is defined as team member contributes more than 20 hours on voluntary service.

Note 2 - Staff who can receive commendation for voluntary service is defined as team member contributes more than 30 hours on voluntary service.



Volunteer Service Team



Tai Chi Class



Beautiful Handicrafts and Gifts for the Elderly

To further support the underprivileged, we launched a fund-raising campaign last year. We have donated over HK\$28,000 through the Corporate and Employee Contribution Programme organized by The Community Chest to support the provision of a wide range of social services to the needy.





A Certificate Presented by The Community Chest

## Engagement with Youth

### Job Shadow Day

Our department has been collaborating with Junior Achievement Hong Kong to hold a Job Shadow Day at our Queensway Government Offices annually since 2008. The objective of the Job Shadow Day is to give secondary school students the opportunity to understand the world of work and develop their career aspirations. About 10 officers at basic professional rank or equivalent will be recruited as workplace mentors to provide job shadowing activities for about 20 senior secondary school students on that day.



Job Shadow Day

**Architectural Services Department - Sustainability Report 2012 - Clients and Business Partners  
- Servicing the Community**

**Student Visit**

As part of the Hong Kong Institution of Architects 55th Anniversary, a visit to our department was organized for secondary schools students last year. The visit aims to enhance students' understanding on our structure and role in the delivery of public works projects. Our involvement in community projects was exemplified by a project architect through the introduction of the Stanley Municipal Services Building project.



Student Visit to ArchSD



## Staff Development

Every organization needs committed and dedicated staff to help in achieving strategic and operating objectives. Staff development is definitely a crucial element which can help an organization in cultivating the workforce to accept new challenges and for further improvement.

As such, we focus a lot on the planning and implementation of various staff development programmes. During the year, we organized a number of training programmes, targeting to the aspects of Leadership & Management Skills, Professional & Vocational Training and Career Development.

A total of 205 training courses have been organized this year. These training courses account for a total of 28,127 training hours and average training hour of 16 per employee.

Training Type	No. of Trainees	No. of Training Hours
Leadership & Management Skills	26	816
Professional & Vocational Training	3,559	21,308
Career Development	1,199	6,003

### Mentorship Schemes for New Recruits

Our department has implemented mentorship schemes for newly-recruited officers at professional, technical and site supervisory levels since 2010. Each new officer will be assigned a mentor, normally of one rank higher, for an initial period of six months to help the new comer settling down and adapting to the new environment. The scheme aims at providing the new recruits with psychological support and personal care from members of the grade to help them integrate into the service.



Mentorship Schemes for New Recruits



## Staff Engagement

Our people are very crucial to achieving our vision, which aims to serve the community by enriching the living environment through quality professional services. We commit to providing an inclusive working environment, where all staff members are respected and motivated to perform their best.

Staff engagement allows us to listen to and understand our people's views, so that we can address their needs and concerns.

### Staff Motivation Scheme

The Staff Motivation Scheme has always been an important channel to promote the general awareness of our performance pledges among staff members. Since 1993, we have been organizing a considerable number of initiatives and activities under the Scheme, which aim to enhance our productivity and improve our service quality and performance. More importantly, the Staff Motivation Scheme provides a dynamic platform for reinforcing the sense of belonging among our staff members.

During the year, we organized the following activities under the Staff Motivation Scheme:

- Design Competition of Screen Saver for All Architectural Services Department Computers
- Design Competition on "Departmental Souvenir"
- Design Competition for the Intranet Homepage of Architectural Branch
- Building Services Role-playing Competition - Effective Planning, Management and Implementation of Public Building Projects
- PowerPoint Design Competition on "Works Procedures & Tests"
- Design Competition on Excel Templates for Facilitate Measurement
- Design Competition on Icons for QSB Knowledge Hub Homepage
- Competition on the Best Performance on Project Programming During Q1-Q3
- Design Competition for Architectural Services Department's 3-D Logo



Design Competition on Icons for QSB Knowledge Hub Homepage



Winners of the Design Competition on "Departmental Souvenir"

## Staff Recreational Activity

Over the past few years, our dragon boat racing team have actively participated in various competitions in the territory. This year, our team joined the events held in Shatin and Chai Wan with our fascinating team spirit clearly demonstrated through the exciting competitions.



The Dragon Boat Racing Team in Action

Our staff members also teamed up themselves and represented our department to participate in a number of charity events and competitions, including Wu Zhi Xing Charity Walk, Ngong Ping Charity Walk and Oxfam Trailwalker etc.



Wu Zhi Xing Charity Walk Team



Ngong Ping Charity Walk Team



Oxfam Trailwalker Teams



## Health and Safety

Health and safety is another priority of our team in which injuries and illnesses are inevitable. As such we commit to providing a safe, healthy and positive working environment for the site workers. In addition, we also strive to ensure that our partners and contractors maintain high health and safety standards.

### Governance and Supervision of Site Health and Safety

In recent years, we have adopted a 3-level site safety and environmental supervisory system for outsourced (and Design and Build) projects, and a 2-level system for in-house projects.

To further enforcing health and safety practices in projects, we have also established a series of Guidance Notes and a Multimedia Package on Construction Site Safety. We aim to provide safety information to our staff members, partners and contractors to perform specific works in accordance with associated health and safety standards.

### Promotion of Health and Safety

We believe health and safety promotion is the combined efforts of employers, employees and the society to improve the health and well-being of people at work. We believe that proper attention to workers' health and safety and maintaining safe workplaces will contribute to our sustainable development.

During the year, we have organized a great variety of health and safety promotion activities and the highlights are as follows:

- Participation of 23 projects in the DEVB's Considerate Contractors Site Award Scheme 2011
- Participation of 42 projects in the ArchSD's Site Safety Model Worker Award Scheme
- Implementation of independent site audits on mosquito control, site cleanliness and tidiness on monthly basis in wet season at selected sites
- Implementation of 3 full scale independent audits by DSEAU on 3 major safety topics: (i) fire safety; (ii) lift shaft works safety; and (iii) electrical safety
- Conduct of 14 external safety training courses for a total of 205 professional/technical/site staff
- Renewal of Green Card (Mandatory Basic Safety Training Course) for a total of 229 staff via completing CICTA's multi-media self-learning package
- Organize 4 In-house Safety & Environmental Promotional Workshops for site staff and contractors on the following topics:-
  - i. Lifting operation and manual handling
  - ii. Site safety and environmental briefing for new recruits
  - iii. Site safety supervision, site cleanliness and tidiness
  - iv. Site safety experience sharing on maintenance safety



Presentation of Site Safety Model Worker Award



Safety & Environmental Promotional Workshop



Checking Lifting Gear



Maintaining Site Cleanliness





Rest Station for Workers during Hot Seasons



Hard-paved Construction Site

## Other Initiatives Relating to Site Safety

A number of initiatives have been implemented during the year in order to further enhance the health and safety performance in our projects. These initiatives include:

- Incorporation of Particular Specification for Precast Concrete Paving for Temporary Main Haul Road and Storage Areas in ArchSD contracts for improving site housekeeping and safety
- Preparation of a safety checklist to facilitate the inspection and monitoring of safety performance for lift shaft works
- Preparation of a checklist to facilitate the monitoring of fire safety on site
- Preparation and updating of site safety and environmental promotion materials for following topics:-
  - Lesson learnt on an electrical accident
  - Sample list of site safety competent personnel
  - Guidance notes on prevention of fire accident
  - Sample Tool-box Talk on Mosquito Control on Construction Sites (Version 2011)

## **In-house Occupational Health and Safety**

To safeguard health and safety of our staff, we established an Occupational Health and Safety Representatives Working Group (OHSRWG) to oversee relevant issues in relation to our office environment. The OHSRWG consists of members from different grades of staff to address various occupational health and safety issues in the workplace, and more importantly to provide recommendations for further improvement. In addition, the OHSRWG conducts meetings to review if further improvement and enhancement of our health and safety management system would be required.

In 2011, we participated in the "Public Access Defibrillation (PAD) Programme" which included installation of Automated External Defibrillators (AED) at our offices in the Queensway Government Building and APB Centre. Under this programme, staff members received training for proper usage of the AED so that they could provide prompt first aid treatment to colleagues or visitors in need.



In 2011, 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 2011 and the targets for 2012 are tabulated below.

### On Environmental issues

Long Term Objectives	Targets for 2011	Achievements	Target Compliances	Targets for 2012
Reduce water consumption	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	89% (210 out of 237) nos. of non-mixer taps were of water efficiency type	Complied	All water taps in new projects shall be Grade 2 or above under the Voluntary Water Efficiency Labelling Scheme (WELS) of WSD unless there are genuine operational or technical needs for not doing so (such as water taps for cleansing clinical and laboratory use)
Reduce energy consumption	To achieve OTTV standard of less than 23 m <sup>2</sup> for 100% of all new projects with air conditioning installations, and not more than 18 W/m <sup>2</sup> for 70% of projects (with reference to BEAM classification)	100% (4 out of 4 projects) of all new projects with air conditioning achieved with OTTV less than 23 w/m <sup>2</sup> , and 75% (3 out of 4 projects) of projects with BEAM reference achieved OTTV less than 18 W/m <sup>2</sup>	Complied	2011 targets to be maintained in 2012
	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% (3 out of 3 projects) of all new joint user building projects, Building Energy Management System was adopted	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 ≥ 15m)	100% (11 out of 11 projects) of design stage projects had incorporated with roof greening	Complied	All new projects shall provide the percentage of site coverage of greenery as specified below unless there are genuine operational or technical needs for not doing so: a) For project with site area ≥ 1,000m <sup>2</sup> but less than 20,000m <sup>2</sup> - minimum 20% site coverage of greenery (with minimum 10% coverage at pedestrian zone); b) For project with site area ≥ 20,000m <sup>2</sup> - minimum 30% site

**Architectural Services Department - Sustainability Report 2012 - Objectives and Targets**

	To incorporate vertical greening in 60% of design stage projects	67% (10 out of 15 projects) of design stage projects had incorporated with vertical greening	Complied	coverage of greenery (with minimum 15% coverage at pedestrian zone); c) Features that may improve the micro-climate such as water features, grass paver, vertical greening and landscape-treated slopes/ retaining structures are also accepted for computing not more than 30% of the total required greenery areas
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**On Project Quality issues**

Long Term Objectives	Targets for 2011	Achievements	Target Compliances	Targets for 2012
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)	100% (19 out of 19 projects) of all PWP projects were completed on schedule.	Complied	It becomes a benchmark requirement in our projects
	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 \$11,776.5 millions. The Outturn Forecast was \$12,068.8 millions, which represented an over-spending of \$292.3 millions (2.48%) when compared to the Original Estimates	Complied	2011 targets to be maintained in 2012
	100% of the surveyed projects to achieve Satisfied Level or above on the overall performance in Client Satisfaction Survey	100% (30 out of 30 projects) of the surveyed projects have achieved Satisfied Level or above on the overall performance	Complied	2011 targets to be maintained in 2012
	To prepare not less than 2 nos. of Proforma Specification / Testing and Commissioning Procedures for BS installations	Proforma Specifications that had been issued were: 1) Proforma Specification of Standalone Pole Mounted Solar-powered Light Emitting Diode Luminaire for Path Lighting or Park Lighting 2) Proforma Specification for Food Compositing System	Complied	To prepare not less than 2 nos. of Equipment Schedule / Proforma Specification for BS installations
	To commence not less than 90% of new PWP scheduled in 2011 in accordance with the commencement dates committed in the 2010 Resource Allocation Exercise (RAE)	70% (7 out of 10 projects) of all 2010 RAE projects that committed to commence in 2011 commenced works on schedule	Not complied	2011 targets to be maintained in 2012

## On Social issues

Long Term Objectives	Targets for 2011	Achievements	Target Compliances	Targets for 2012
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	3.93 occupational injuries per 1,000 staff per year	Not complied	2011 targets to be maintained in 2012
Minimizing the accident rate in ArchSD contracts	Accident rate in ArchSD contracts should be less than 0.6 reportable accident per 100,000 man-hours worked	0.50 reportable accidents per 100,000 man-hours worked	Complied	2011 targets to be maintained in 2012
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 286 attendants	Complied	2011 targets to be maintained in 2012
Promoting the awareness on safety and health amongst construction workers	At least 35% of ArchSD contracts would participate in the ArchSD Site Safety Model Worker Award Scheme	56% (41 out of 73 contracts) of ArchSD contracts participated in Safety Model Worker Award Scheme (up to November 2011)	Complied	At least 40% 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)	60% (17 out of 28 contracts ) of eligible ArchSD new works contracts and 55% (6 out of 11 contracts) of eligible maintenance term contracts participated in CCSAS 2011	Complied	At least 45% of ArchSD eligible new works contracts and 35% of eligible maintenance term contracts would participate in CCSAS
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	14 external training courses were arranged with 205 attendants from professionals & technical staffs and site staffs	Complied	At least 12 external safety training courses on latest safety technology, current safety legislation, accident investigation, etc. should be arranged for project and office staff per year

# Data Summary

## Performance Data

### Environmental Performance

#### Resources Usage - Energy

	Units	2011	2010	2009	2008	2007
Electricity consumed (QGO and APB Centre) [1]	kWh/m <sup>2</sup>	234	236	238	244	245
CO <sub>2</sub> emission equivalent to electricity consumption (QGO and APB Centre) [2]	Tonnes CO <sub>2</sub> e	3967	4,001	4,027	4,071	4,089
Building with OTTV less than 23W/m <sup>2</sup>	% & no. of total no. of projects	100% & 4 of 4	100% & 5 of 5	100% & 16 of 16	100% & 24 of 24	100% & 15 of 15
Building with OTTV less than 18W/m <sup>2</sup>	% & no. of total no. of projects	75% & 3 of 4	80% & 4 of 5	68.75% & 11 of 16	75% & 18 of 24	66.7% & 10 of 15
Energy saved due to energy efficient installations [3]	GWh	17.26 [4]	16.66 [4]	1.35	1.7	4.9
Equivalent monetary savings	HK\$ million	17.26	16.66	1.35	1.7	4.9
Avoided CO <sub>2</sub> emissions [5]	in ,000 Tonnes CO <sub>2</sub> e	12.08	11.66	0.95	1.19	3.43

[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 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.

[4] In 2010, 2 large-scale completed projects including a Government Departmental Headquarters and a Hospital Extension Block contributed to the major increase. In 2011, the Tamer Development Project was completed and contributed to most of the energy saving.

[5] 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	2011	2010	2009	2008	2007
Fuel consumption by ArchSD's pool cars	Litre	13,263	17,723	17,236.2	14,697.4	18,690
GHG emission equivalent to fuel consumption by ArchSD pool cars [6]	Tonnes CO <sub>2</sub> e	35.9	48.0	46.7	39.8	44.1

[6] 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 2012 - Data Summary

### **Resource Usage - Office Materials**

	Units	2011	2010	2009	2008	2007
A4 paper consumption	Reams	19,240	20,021	20,536	19,653	20,263
A3 paper consumption	Reams	953	1,068	1,203	1,054	1,063
Envelop consumption	Number	54,541	58,470	56,538	59,478	55,323
Purchase of A4/A3 paper with recycled content [7]	Reams / % of total paper purchased	10,328 / 100%	30,581 / 100%	22,715 / 99.02%	21,460 / 99.49%	18,515 / 91.8%
Types of eco-friendly office consumables	Types	14	13	13	13	13

[7] The item name is revised for a better representation of the data.

### **Resource Usage - Timber & Water Use**

	Units	2011	2010	2009	2008	2007
Timber saving	Volume of Timber Saved in m <sup>3</sup> (Ratio Normalized by Contract Value)	54.56 (0.04)	1,963.60(0.18)	2,344.53(0.34)	367.05 (0.05)	1,424.29 (0.22)
Water saving	No. of Water-saving Sanitary Appliances (Ratio Normalized by Contract Value)	1,318	4,847 (0.43)	4,555 (0.66) [8]	4,242 (0.56)	6,254 (0.94)
Flushing water use in APB Centre	Cubic Metre	47,269	26,405 [9]	28,461 [10]	33,789	N/A
Potable water use in APB Centre	Cubic Metre	6,329	5,325 [11]	4,331	N/A	N/A

[8] 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.

[9] 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.

[10] 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.

[11] 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	2011	2010	2009	2008	2007
Construction & demolition materials						
C&D waste disposed of to landfills	Tonnes	66,541	69,716	56,529	26,833	24,952
C&D materials disposed of to public fill areas	Tonnes	681,987	894,710	930,831	839,097	564,284
Recyclable waste collected at APB Centre						
Waste paper	kg	23,450	26,630 [12]	18,164 [13]	2,331	2,286
Aluminium cans	No.	11,000	13,440 [12]	4,354 [13]	277	231
Plastic bottles	No.	4,748	6,805 [12]	1,467 [13]	286	250

[12] 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.

[13] 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	2011	2010	2009	2008	2007
Convictions per 100,000 man-hours	ArchSD sites (HK sites)	0.159 (0.499)	0.164 (0.437)	0.138 (0.909)	0.501 (1.397)	0.424 (0.546)
Monetary value of significant fines	HK\$	51,000	39,000	35,500	35,500	17,100

**Environmental Expenditure**

	Units	2011	2010	2009	2008	2007
Resources devoted to environmental works	HK\$ million	1,117.78	951.76	864.7	789.3	639.7
Percentage of annual expenditure	%	9.1%	7.9%	10.0%	10.3%	8.0%

**Social Performance**

**Staff**

	Units	2011	2010	2009	2008	2007
Staff establishment (As at March 31 each year)	No.	1,781	1,780	1,776	1,766	1,766
<b>Training</b>						
No. of training courses (including internal and external seminars/ workshops/ training courses/ visits)	No.	205	160	148	152	207
Numbers of trainees	No.	4,784	3,836	4,460	3,492	2,597
<b>Injury</b>						
Staff injury cases [14]	No.	7	4	5	0	2
Staff sick leave granted for staff injury cases	Days	109	78	85	0	163

[14] 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**

<b>By Post</b>		
Directorate	%	2
Professional	%	23
General Staff	%	21
Site Staff	%	32
Technical	%	22
<b>By Employment Type</b>		
Full-time	%	100
<b>By Employment Contract as at 31.3.2012</b>		
Permanent (male)	%	72%
Permanent (female)	%	28%
<b>By Age as at 31.3.2012</b>		
Age under 30	%	4.11
Age 30-49	%	52.25
Age 50 or above	%	43.64
<b>By Ethnicity</b>		
Local	%	100
Non-local	%	0
<b>By Gender as at 31.3.2012</b>		
Male	%	71.79
Female	%	28.21



## Architectural Services Department - Sustainability Report 2012 - Data Summary

### Training Hours Breakdown [15]

Type of Staff	No. of Staff (The total no. of staff in ArchSD is 1780)	Training Hours Received (The total no. of training hours in 2011 is 28127 hours)(hours)	Training Hours Per Staff(hours)
Directorate Staff	36 (2%)	773.5 (2.8%)	22
Professional Grade Staff	409 (23%)	12519.5 (44.5%)	31
Technical, Site Supervisory and General Grade Staff	1335 (75%)	14834 (52.7%)	11

[15] As there is no distinct requirement regarding receiving training in terms of gender, therefore we do not report the data broken down by gender.

### Staff Turnover

	Male	Female
Age under 30	0.2%(3)	0.1%(2)
Age 30-50	1.2% (22)	0.3% (5)
Age 51-55	0.3% (6)	0.1% (1)
Age 56-60	1.8% (32)	0.5% (8)

### New Employee Hires

	Male	Female
Age under 30	0.9% (15)	0.3% (6)
Age 30-50	3.4% (60)	0.7% (13)
Age 51-55	0	0
Age 56-60	0	0

### Retention after Parental Leave [16]

No. of employees took parental leave	14
No. of employees who returned to work after parental leave ended	14
Retention rate after parental leave[17]	80%

[16] Paternity leave will be provided to male employees starting from April 2012.

[17] The retention rate is based on the number of employees who took parental leave in 2010 and the number of those employees who were still employed as at the end of 2011.

### Contractor's Accident Rate

	Units	2011	2010	2009	2008	2007
No. of fatalities	ArchSD	2 (Male: 2 , Female: 0)	0	2	1	0
Fatal accident rate per 100,000 man-hours[18]	ArchSD (HK Construction Industry)	0.0052 (0.010)	0 (0.005)	0.0072 (0.011) [19]	0.0053 (0.011)	0 (0.011) [22]
No. of non-fatal accidents	ArchSD	191	117	100 [20]	91	93
Non-fatal accident rate per 100,000 man-hours[18]	ArchSD (HK Construction Industry)	0.50 (1.38)	0.33 (1.45)	0.36 (1.52) [21]	0.48 (1.71)	0.44 (1.69)

[18] The accident rate of the HK Construction Industry is based on the published statistics of the Labour Department and using a conversion of 1.67 accidents per 100,000 man-hours equivalent to 60 accidents per 1,000 workers per year.

[19] 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.

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

[21] 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.

[22] 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.

## Architectural Services Department - Sustainability Report 2012 - Data Summary

### Community Work

	Units	2011	2010	2009	2008	2007
Total number of voluntary work hours carried out by our staff	Hours	1,666	1,557	2,065	2,129	2,526
Number of active Voluntary Service Team members [23]	No.	24 out of 1,781	21 out of 1,780	25 out of 1,781	26 out of 1,766	35 out of 1,766
Number of staff received commendation for voluntary service [24]	No.	18	18	21	13	20
Number of Volunteers	No.	53	48	71	48	45
Number of Voluntary Projects Completed	No.	52	67	44	53	50

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

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

### Economic Performance

	Units	2011-2012	2010-2011[25]	2009-2010	2008-2009	2007-2008
Personal salaries and allowances	HK\$ million	915.19	852.41	882.29	886.88	835.62
Personnel related expenses	HK\$ million	8.36	4.14	2.88	1.71	0.68
Departmental expenses	HK\$ million	130.86	140.02	125.31	100.79	94.01
Other charges	HK\$ million	562.29	554.51	505.24	480.76	469.02

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



## Report Verification

### Scope and Objective

Hong Kong Quality Assurance Agency (HKQAA) was commissioned by Architectural Services Department of the Government of the Hong Kong Special Administrative Region (hereinafter called "ArchSD") to undertake an independent verification of the Sustainability Report 2012 (hereinafter called "the Report"). The Report stated the overall sustainability performance and efforts made by ArchSD for the period from 1<sup>st</sup> January 2011 to 31<sup>st</sup> December 2011. The verification team did not partake in the compilation of the data and information of the Report.

The aim of this verification was to provide assurance on the completeness and accuracy of the information stated in the Report. The Report's coverage of indicators defined in the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines Version 3.1 (G3.1) was also assessed to confirm if the A+ application level had been achieved.

### Methodology

The process used in this verification was based on current best practices. The Report was reviewed based on the following criteria:

- Adherence to the principles as set out in the AA1000(2008), and
- The Global Reporting Initiative (GRI) G3.1 Guidelines.

The verification procedure included reviewing relevant documentation, interviewing responsible personnel with accountability for preparing the Report and verifying the selected representative sample of data and information consolidated in the Report. Raw data and supporting evidence of the selected samples were thoroughly examined.

### Conclusion

In our opinion, the Report meets the content and quality requirements of the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines Version 3.1 (G3.1). 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.

Opportunities for improvement on the reporting structure and content are separately submitted to ArchSD for their consideration on the compilation of future sustainable development reports. It does not affect our opinion on the Report.

Signed on behalf of Hong Kong Quality Assurance Agency
























Jorine Tam  
Assistant Director, Strategic Business  
September 2012













# GRI Content Index

This report is prepared with reference to the GRI G3.1 Guidelines. The reporting profiles and core performance indicators required to achieve GRI G3.1 Application Level A requirements are presented below with either linkage to the reported section(s) or explanation for omission.












	Fully Reported		Not Reported
	Partially Reported	Text in Grey	Link to Reported Section

	GRI Element	Status	Cross-reference/Direct answer/Comment
<b>1.</b>	<b>Strategy and Analysis</b>		
1.1.	Statement from the most senior decision-maker of the organization		<a href="#">Message from the Director</a>
1.2.	Description of key impacts, risks, and opportunities		<a href="#">Strategy and Management</a>
<b>2.</b>	<b>Profile</b>		
	<b>Organizational Profile</b>		
2.1.	Name of the organization		<a href="#">About Us</a>
2.2.	Primary brands, products and services		<a href="#">About Us</a>
2.3.	Operational structure of the organization		<a href="#">About Us</a>
2.4.	Location of organization's Headquarters		<a href="#">About Us</a>
2.5.	Number of countries where the organization operates		Hong Kong only.
2.6.	Nature of ownership and legal form		Part of the Hong Kong SAR Government.
2.7.	Markets served		<a href="#">Strategy and Management</a>
2.8.	Scale of the reporting organization		<a href="#">About Us</a> <a href="#">Data Summary - Social Performance</a>
2.9.	Significant changes during the reporting period regarding size, structure, or ownership		<a href="#">About This Report</a>
2.10.	Awards received in the reporting period		<a href="#">Recognitions and Awards</a>
<b>3.</b>	<b>Reporting Parameters</b>		
	<b>Report Profile</b>		
3.1.	Reporting period		<a href="#">About This Report</a>
3.2.	Date of most recent previous report (if any)		<a href="#">About This Report</a>
3.3.	Reporting Cycle		<a href="#">About This Report</a>
3.4.	Contact point for questions regarding the report or its contents		<a href="#">Feedback</a>
	<b>Reporting Scope and Boundary</b>		
3.5.	Process for defining report		<a href="#">About This Report</a> <a href="#">Main Focus Areas</a>
3.6.	Boundaries of the report		<a href="#">About This Report</a>
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, subsidiaries and leased facilities.
3.9.	Data measurement techniques and the bases of calculations		<a href="#">About This Report</a> <a href="#">Data Summary</a>




















## Architectural Services Department - Sustainability Report 2012 - GRI Content Index

3.10.	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement		<a href="#">Data Summary</a>
3.11.	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report		No significant changes.
<b>GRI Content Index</b>			
3.12.	Table identifying the location of the Standard Disclosures in the report		<a href="#">GRI Content Index</a>
<b>Assurance</b>			
3.13.	Policy and current practice with regard to seeking external assurance for the report		<a href="#">About This Report</a> <a href="#">Report Verification</a>
<b>4. Governance Structure and Management Systems</b>			
<b>Governance</b>			
4.1.	Governance structure of the organization		<a href="#">Strategy and Management</a>
4.2.	Indicate whether the Chair of the highest governance body is also an executive officer		<a href="#">Role and Organization Structure</a> <a href="#">Strategy and Management</a> Secretary for Development, is the highest governance body for ArchSD.
4.3.	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members	Not Applicable	HKSAR Government does not adopt unitary board structure.
4.4.	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body		<a href="#">Engagement Approach</a> <a href="#">Staff Engagement</a> 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		No specific processes for the highest government body. All government departments follow internal guidelines.
4.7.	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity		The appointment and promotion of senior civil servants are to be advised by the independent Public Service Commission in accordance with 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.		<a href="#">Strategy and Management</a>
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.		<a href="#">Strategy and Management</a>




















## Architectural Services Department - Sustainability Report 2012 - GRI Content Index

4.10.	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance		Audit Commission and the Legislative Council act as the evaluation framework for general performance of Government, including Development Bureau.
<b>Commitments to External Initiatives</b>			
4.11.	Explanation of whether and how the precautionary approach or principle is addressed by the organization		<a href="#">Strategy and Management</a>
4.12.	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses		<a href="#">About This Report</a> <a href="#">Strategy and Management</a> <a href="#">Social Participation</a> <a href="#">Servicing the Community</a>
4.13.	Memberships in associations and/or national/international advocacy organizations		<a href="#">Strategy and Management</a>
<b>Stakeholder Engagement</b>			
4.14.	List of stakeholder groups engaged by the organization		<a href="#">Engagement Approach</a> Generally, we group our stakeholders into four groups: staff, professional bodies, contractors/consultants and clients/users (general public).
4.15.	Basis for identification and selection of stakeholders with whom to engage		<a href="#">Engagement Approach</a>
4.16.	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.		<a href="#">Strategy and Management</a> <a href="#">Departmental Business Plan</a> <a href="#">Knowledge Management</a> <a href="#">Extranet</a> <a href="#">Engagement Approach</a> <a href="#">Project Quality Management</a> <a href="#">Social Participation</a> <a href="#">Community Support and Engagement</a> <a href="#">Servicing the Community</a> <a href="#">Staff Development</a> <a href="#">Staff Engagement</a> 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.
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.		<a href="#">Strategy and Management</a> <a href="#">Engagement Approach</a>
<b>DISCLOSURE ON MANAGEMENT APPROACH</b>			
<b>DMA EC</b>	<b>I. Economic Aspect</b>		
	Economic performance		<a href="#">Message from the Director</a> <a href="#">Management Approach</a>
	Market presence		The salary of our staffs is based on a pay scale, Master Pay Scale, which is above the minimum wage set by the Law of HKSAR.
	Indirect economic impacts		<a href="#">About Us</a> <a href="#">Recognitions and Awards</a> ArchSD's projects in 2011 created 5,428 jobs and improved government facilities for better services to the public.

**Architectural Services Department - Sustainability Report 2012 - GRI Content Index**













<b>DMA EN</b>	<b>II. Environmental Aspect</b>		
	Materials		<a href="#">Objectives and Targets</a> <a href="#">Low Carbon Building Design</a> <a href="#">Data Summary</a>
	Energy		<a href="#">Objectives and Targets</a> <a href="#">Low Carbon Building Design</a> <a href="#">Data Summary</a>
	Water		<a href="#">Objectives and Targets</a> <a href="#">Low Carbon Building Design</a> <a href="#">Data Summary</a>
	Biodiversity		ArchSD is committed to Environmental Protection. We conduct Preliminary Environmental Review for all our capital project during the feasibility study stage. Projects in progress or commenced in 2011 were situated in developed areas and had no significant impact on the biodiversity.
	Emissions, effluents, and waste		<a href="#">Objectives and Targets</a> <a href="#">Low Carbon Building Design</a> <a href="#">Data Summary</a>
	Products and services		<a href="#">About us</a> <a href="#">Strategy and Management</a> <a href="#">Recognitions and Awards</a> <a href="#">Low Carbon Building Design</a> <a href="#">Greening and Landscaping</a> <a href="#">In-house Green Management</a>
	Compliance		<a href="#">Strategy and Management</a> <a href="#">Data Summary</a>
	Transport		<a href="#">Strategy and Management</a> <a href="#">Data Summary</a>
	Overall		<a href="#">Strategy and Management</a> <a href="#">Data Summary</a>
<b>DMA LA</b>	<b>III. Labor Practices Aspect</b>		
	Employment		<a href="#">Human Resources</a> <a href="#">Data Summary</a>
	Labour/Management relations		<a href="#">Staff Engagement</a> <a href="#">Data Summary</a>
	Occupational health and safety		<a href="#">Health and Safety</a> <a href="#">Objectives and Targets</a> <a href="#">Data Summary</a>
	Training and education		<a href="#">Staff Development</a> <a href="#">Data Summary</a>
	Diversity and equal opportunity		The Hong Kong SAR Government is not discriminatory about gender differences, age, disabilities, etc.
	Equal Remuneration for women and men		There is no difference between male and female employees in the remuneration package. The ratio of basic salary of women to men of the same rank is 1:1.
<b>DMA HR</b>	<b>IV. Human Right Aspect</b>		
	Investment and procurement practices		<a href="#">Strategy and Management</a> Our operation do not involve with investments.
	Non-discrimination		<a href="#">Strategy and Management</a> Any complaint on discrimination will be handled by an independent commission, Equal Opportunities Commission. No incident of discrimination and action has been reported in 2011.
	Freedom of association and collective bargaining		No operations have been identified in which the right to exercise freedom of association and collective bargaining may be at risk.
	Child labour		<a href="#">Strategy and Management</a>

**Architectural Services Department - Sustainability Report 2012 - GRI Content Index**












	Forced and compulsory labour		<a href="#">Strategy and Management</a>
	Security practices		There is no such practice in ArchSD.
	Indigenous right		Any violation involving rights of indigenous would be report to the Deputy Director. No complain of this nature was reported in 2011.
	Assessment		Any operation involving violation of human rights would be report to the Deputy Director. No complain of this nature was reported in 2011.
	Remediation		Any remediation would follow the procedures and guidelines given by Civil Services Bureau.
<b>DMA SO</b>	<b>V. Society Aspect</b>		
	Local Communities		<a href="#">Strategy and Management</a> <a href="#">Community Support and Engagement</a>
	Corruption		<a href="#">Strategy and Management</a>
	Public policy		<a href="#">Strategy and Management</a>
	Anti-competitive behavior		Any operation involving violation of anti-competitive behavior would be report to the Deputy Director. No complain of this nature was reported in 2011.
	Compliance		No significant non-compliance with Law and Regulation.
<b>DMA PR</b>	<b>VI. Product Responsibility Aspect</b>		
	Customer health and safety		<a href="#">Recognitions and Awards</a> <a href="#">Main Focus Area</a> <a href="#">Project Quality Management</a> There are two Statutory Compliance Checking Division in ArchSD to examine the health and safety standard requirement of ArchSD's projects
	Product and service labeling		<a href="#">Low Carbon Building Design</a> ArchSD's capital projects are subjected to assessment with Building Environmental Assessment Method (BEAM).
	Marketing communication		As a service provider for the Government, we do not have any market communication plan.
	Customer privacy		There is no report of loss of customer data recorded in 2011.
	Compliance		No significant non-compliance with Law and Regulation.
<b>ECONOMIC PERFORMANCE INDICATORS</b>			
<b>I. Economic Performance</b>			
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		<a href="#">About us</a> <a href="#">Data Summary - Economic Performance</a> No direct economic value generated in ArchSD's normal operation.
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change		<a href="#">Data Summary - Environmental Performance</a>
EC3	Coverage of the organization's defined benefit plan obligations		<a href="#">Data Summary - Economic Performance</a>
EC4	Significant financial assistance received from government		<a href="#">About Us</a> No subsidies, but direct public fund from government











**Architectural Services Department - Sustainability Report 2012 - GRI Content Index**

<b>II. Market Presence</b>			
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation		In 2011, all our purchases were from local suppliers (defined as companies registered in Hong Kong).
EC7	Procedure for local hiring, and proportion of senior management hired from the local community at locations of significant operation		In accordance with Article 99 of the Basic law, new recruits appointed to the Civil Service on or after 1 July 1997 must be permanent residents. All our senior management are local staff.
<b>III. Indirect Economic Impacts</b>			
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.
<b>ENVIRONMENTAL PERFORMANCE INDICATORS</b>			
<b>I. Materials</b>			
EN1	Materials used by weight or volume		<a href="#">Data Summary - Environmental Performance</a>
EN2	Percentage of materials used that are recycled input materials		<a href="#">Data Summary - Environmental Performance</a>
<b>II. Energy</b>			
EN3	Direct energy consumption by primary energy source		<a href="#">Data Summary - Environmental Performance</a> 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 448.29GJ.
EN4	Indirect energy consumption by primary source		<a href="#">Data Summary - Environmental Performance</a> 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 21,060 GJ.
<b>III. Water</b>			
EN8	Total water withdrawal by source		Fresh water consumption of APB Centre in 2011 was 7,653 m <sup>3</sup> and fresh water consumption of Queensway Government Offices in FY2010/11 was 7,323m <sup>3</sup> (The figure is based on the water used by the 10.5 floors of the offices occupied by ArchSD).
<b>IV. Biodiversity</b>			
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 2011 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		Same as EN11 above.
<b>V. Emissions, Effluents, and Waste</b>			
EN16	Total direct and indirect greenhouse gas emissions by weight		<a href="#">Data Summary - Environmental Performance</a>
EN17	Other relevant indirect greenhouse gas emissions by weight		<a href="#">In-house Green Management</a>















**Architectural Services Department - Sustainability Report 2012 - GRI Content Index**

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 ozone depleting substances consumption value.
EN20	NOx, SOx and other significant air emissions by type and weight	Not Applicable	No measurement mechanism in place as we do not generate significant NOx, SOx emissions.
EN21	Total water discharge by quality and destination		Under the HKSAR Law, all discharged water is collected by the public sewage system to treatment plants before discharging into the sea. The quantity of water discharged in our office (no other water source discharges through our drains) is equal to the amount of fresh water consumed.
EN22	Total weight of waste by type and disposal method		<a href="#">Data Summary - Environmental Performance</a>
EN23	Total number and volume of significant spills		There have been no reported spill in 2011.
<b>VII. Products and Services</b>			
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation		<a href="#">Strategy and Management</a> <a href="#">Low Carbon Building Design</a> <a href="#">Greening and Landscaping</a> <a href="#">In-house Green Management</a>
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	Not Applicable	No products sold.
<b>VIII. Compliance</b>			
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations		<a href="#">Data Summary - Environmental Performance</a>
<b>SOCIAL PERFORMANCE INDICATORS</b>			
<b>SOCIAL PERFORMANCE INDICATORS: LABOUR PRACTICES AND DECENT WORK</b>			
<b>I. Employment</b>			
LA1	Total workforce by employment type, employment contract, and region, broken down by gender.		<a href="#">Data Summary - Social Performance</a> All our establishment posts are filled by permanent staff or probational staff.
LA2	Total number and rate of new employee hires and employee turnover by age group, gender and region		<a href="#">Data Summary - Social Performance</a>
LA15	Return to work and tetention rates after parental leave, by gender		<a href="#">Data Summary - Social Performance</a>
<b>II. Labour/ Management relations</b>			
LA4	Percentage of employees covered by collective bargaining agreements		<a href="#">Staff Engagement</a>
LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements		Staff members are well informed and consulted regarding significant changes beforehand, and notices are issued as soon as possible, although minimum notice period is not prescribed in government internal circulars. An example would be the launch of Departmental Business Plan, staff consultation was initiated 8 months prior to the implementation.




## Architectural Services Department - Sustainability Report 2012 - GRI Content Index

III. Occupational Health and Safety			
LA7	Rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities by region and by gender		<a href="#">Data Summary - Social Performance</a>
LA8	Education, training, counselling, prevention and risk-control programmes in place to assist workforce members, their families or community members regarding serious diseases		<a href="#">Health and Safety</a>
IV. Training and Education			
LA10	Average hours of training per year per employee by gender, and by employee category		<a href="#">Staff Development</a> <a href="#">Data Summary - Social Performance</a> Average Training Hour for each staff is 16 hours.
V. Diversity and Equal opportunity			
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity		<a href="#">Data Summary - Social Performance</a>
VI: Equal Remuneration for women and men			
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation		There is no difference between male and female employees in the remuneration package. The ratio of basic salary of women to men 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 and contracts that include clauses incorporating human rights concerns or that have undergone human rights screening	Not Applicable	Our operations do not involve with investments.
HR2	Percentage of significant suppliers contractors, and other business partners that have undergone human rights screening, and actions taken		We do not report this issue because ArchSD only use suppliers and contractors registered with the Government Logistic Department and Development Bureau respectively. The registers are used by all the works agent of the HKSAR Government (i.e. Water Services Department, Highways Department, Drainage Services Department, etc). ArchSD do not have the result of any screening conducted by the Government Logistic Department and Development Bureau.
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained		<a href="#">Strategy and Management</a> We do not provide such training.
II. Non-discrimination			
HR4	Total number of incidents of discrimination and corrective actions taken		No incidents of discrimination and actions taken in 2011.

## Architectural Services Department - Sustainability Report 2012 - GRI Content Index

III. Freedom of Association and Collective Bargaining		
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	 No operations have been identified in which the right to exercise freedom of association and collective bargaining may be at risk.
IV. Child Labour		
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective abolition of child labour	 <a href="#">Strategy and Management</a>
V. Forced and Compulsory Labour		
HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour	 <a href="#">Strategy and Management</a>
VI. Assessment		
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments	 <a href="#">About us</a> <a href="#">Strategy and Management</a>
VII: Remediation		
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms	 <a href="#">Strategy and Management</a> No grievance related to human rights received in 2011.
SOCIAL PERFORMANCE INDICATORS: SOCIETY		
I. Local Communities		
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	 <a href="#">Project Quality Management</a> <a href="#">Social Participation</a> <a href="#">Community Support and Engagement</a> <a href="#">Servicing the Community</a>
SO9	Operations with significant potential or actual negative impacts on local communities	 <a href="#">Main Focus Areas</a>
SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities	 <a href="#">Project Quality Management</a> <a href="#">Community Support and Engagement</a> <a href="#">Servicing the Community</a> <a href="#">Staff Development</a> <a href="#">Staff Engagement</a> <a href="#">Health and Safety</a>
II. Corruption		
SO2	Percentage and total number of business units analyzed for risks related to corruption	 <a href="#">Strategy and Management</a>
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	 The percentage of our staff whom attended anti-corruption/integrity management trainings in 2011 is 17.8%.
SO4	Actions taken in response to incidents of corruption	 <a href="#">Strategy and Management</a>
III. Public Policy		
SO5	Public policy positions and participation in public policy development and lobbying	 <a href="#">Strategy and Management</a> <a href="#">Low Carbon Building Design</a> <a href="#">Social Participation</a>
IV. Compliance		
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	 No significant non-compliance with laws and regulations.
SOCIAL PERFORMANCE INDICATORS: PRODUCT RESPONSIBILITY		
I. Customer Health and Safety		
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	 <a href="#">Project Quality Management</a> <a href="#">Health and Safety</a>

## Architectural Services Department - Sustainability Report 2012 - GRI Content Index

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		<a href="#">Low Carbon Building Design</a>
III. Marketing Communication			
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship		As a service provider for the Government, we do not have any market communication plan.
IV. 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.

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

# Glossary

<b>Building Energy Codes (BEC)</b>	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.
<b>Building Environmental Assessment Method (BEAM)</b>	Quote from BEAM Society, "A means by which to benchmark and improve performance in the planning, design, construction, commissioning, operation and management of buildings."
<b>Carbon Audit</b>	A systematic and scientific approach to account for the greenhouse gas emissions arising from the operations of the buildings.
<b>Carbon Footprint</b>	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.
<b>Considerate Contractors Site Award</b>	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.
<b>Designated Projects</b>	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".)
<b>Environmental Impact Assessment (EIA)</b>	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.
<b>Environmental Impact Assessment Ordinance (EIAO)</b>	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.
<b>Global Reporting Initiative (GRI)</b>	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.
<b>Green Building Awards (GBA)</b>	Jointly organized by the Hong Kong Green Building Council and the Professional Green Building Council, GBA is a biennial industry award which aims to provide recognition to building-related projects with excellent performance and contributions in sustainability and the built environment. It also encourages the industry to transform the mainstream market towards wider adoption of sustainable planning, design, construction, management, operation, maintenance, renovation and decommissioning of buildings.
<b>Greenhouse Gases</b>	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).

## Architectural Services Department - Sustainability Report 2012 - Glossary

<b>Grey Water</b>	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.
<b>Hong Kong Energy Efficiency Registration Scheme for Buildings</b>	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.
<b>Important Tree</b>	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.
<b>Leadership in Energy and Environmental Design (LEED)</b>	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.
<b>Microclimate Study</b>	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.
<b>Overall Thermal Transfer Value (OTTV)</b>	A measure of the energy transferred through the envelope of a building and has a direct correlation with energy consumption.
<b>Preliminary Environmental Review (PER)</b>	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.  All Government Projects are required to carry out PER at the early stage of the projects (Feasibility Study Stage).
<b>Practice Note for Authorized Persons and Registered Structural Engineers (PNAP)</b>	'Practice Note for Authorized Persons and Registered Structural Engineers' ('PNAP) have been issued since 1974. The Building Authority issues practice notes to authorized persons, registered structural engineers and registered geotechnical engineers from time to time to promulgate how the Authority applies and enforces the provisions of the Buildings Ordinance (BO) and its subsidiary regulations as well as other administrative and advisory matters in the administration of the BO.
<b>Post Occupancy Evaluation (POE)</b>	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.
<b>Quality Building Awards (QBA)</b>	QBA is jointly launched by nine professional organizations in Hong Kong at biennial intervals to present public recognition to buildings of outstanding 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.
<b>Register of Old and Valuable Trees</b>	The Leisure and Cultural Services Department, <u>Agriculture, Fisheries and Conservation Department</u> and <u>Housing Department</u> have identified some 500 Old and Valuable Trees on unleased Government land within built-up areas or tourist attractive spots in village areas to provide priority protection.

## Architectural Services Department - Sustainability Report 2012 - Glossary

<b>Stakeholder</b>	It refers to individuals, groups or organizations which experience directly or indirectly the actions and policies implemented by an organization.
<b>Sustainable Development</b>	Sustainable development is the development approach which meets the desires of the present and preserves the environment and natural resource for the future generations.
<b>Testing and Commissioning (T&amp;C)</b>	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.
<b>Resource Allocation Exercise (RAE)</b>	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.
<b>Universal Accessibility</b>	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.
<b>U-value</b>	The rate of heat flow through a material. It is measured as the amount of heat flow through 1m <sup>2</sup> of the material for every degree difference in temperature each second.
<b>Valuable Tree</b>	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.
<b>Vertical Greening</b>	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.





Sustainability Report 2012

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"/>	<input type="text"/>
Content is balanced and reliable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Content is clear and easy to understand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Structure and layout are rational and easy to use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>

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"/>	<input type="text"/>

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"/>	<input type="text"/>

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

5. Other comments:

**Architectural Services Department - Sustainability Report 2012 - Feedback**

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:	<input type="text"/>
Your Organisation:	<input type="text"/>
Your Telephone:	<input type="text" value="e.g. 2596 0361"/>
Your Email address:	<input type="text" value="e.g. imu@archsd.gov.hk"/>

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](mailto:imu@archsd.gov.hk).

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