

Our Green Map

Our Green Map

Sustainability Report 2014

Participated
in Over
100
Social Activities

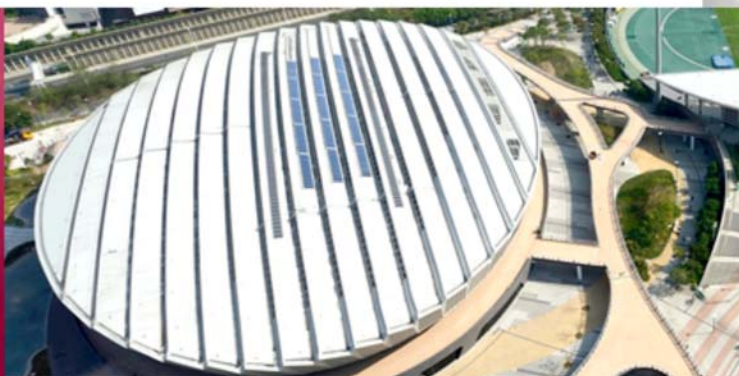
10
Public Award
Received for
Our Projects

4 Projects
Received the
Highest Rating in
BEAM Assessment

ArchSD Sustainability Report 2014 - Table of Contents

Message from the Director	1
About This Report	2
About Us	
- Role and Organization Structure	3
- Funding and Mode of Operation	4
- Departmental Expenditure	4
- Key Facts	5
Recognitions and Awards	6
Management Approach	
- Strategy and Management	12
- Main Focus Areas	19
- Engagement Approach	20
Resources Utilisation and Conservation	
- Low Carbon Building Design	27
- Greening and Landscaping	31
- Heritage Conservation	34
- In-house Green Management	36
Clients and Business Partners	
- Project Quality Management	42
- Social Participation and Engagement	49
- Community Support	54
Human Resources	
- Staff Development	57
- Staff Engagement	59
Objectives and Targets	65
Data Summary	
- Environmental Performance	70
- Social Performance	71
Report Verification	75
GRI Content Index	76
Glossary	81
Feedback	85

Message from the Director



Dear Stakeholders,

Welcome to our eleventh Sustainability Report which illustrates our sustainability initiatives and performance in 2013. This is the second report that we follow Global Reporting Initiative's G4 Guidelines to show our journey of continuous improvement with ongoing concerted efforts in planning, execution and review of our sustainability initiatives. This report titles "Our Green Map".

As an executive arm of the HKSAR Government for the development and upkeep of public facilities, we have reviewed and scrutinized potential green applications in the government building projects. We foster sustainability through incorporating green elements and putting active and passive building designs into practice as examples for the industry. For instance, the Energizing Kowloon East Office Project not only optimised the use of a piece of derelict land under the Kwun Tong Bypass, it has also become Hong Kong's first BEAM Plus Platinum Rated temporary office building which has adopted a number of integrated green building planning and technologies, experimented some innovative lean construction methods and made extensive use of low embodied energy materials.

In order to cope with future challenges, we are committed to make continuous improvement on organizational effectiveness, energy conservation through green housekeeping management, human resources management, utilization of information and knowledge management techniques. We have implemented the Knowledge Management Portal and Extranet to retain, capitalise and share our professional knowledge among our staff, partners and stakeholders. In addition, we launched the ArchSD Academy last year to facilitate transferring knowledge of the experienced staff to the younger generations.

We endeavour to contribute our best for the betterment of the community. Please share your comments, 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

Architectural Services Department (ArchSD) of the Government of the Hong Kong Special Administrative Region has produced 16 annual environmental and sustainability reports in total. The Sustainability Report 2014, Our Green Map, is our eleventh annual sustainability report, which elaborates our performance on economic, environmental and social aspects in 2013.

We wish this report could provide an opportunity not only to demonstrate our achievement last year, but also to ensure you of our commitment to serving better in the future with continuous efforts and improvement in sustainability.

Reporting Scope

The Sustainability Report 2014 ("the Report") highlights our major sustainability initiatives and achievements from 1 January to 31 December 2013. There was no significant change in our operational size, structure, ownership and supply chain during the year.

Data in the Report are presented as absolute figures as of 31 December 2013 (unless otherwise stated) to the best of our knowledge. The Report covers the performance data of our six functional branches and two Central Management Divisions. Financial data are reported for the financial year ended 31 March 2014. All monetary values are in Hong Kong Dollars.

Reporting Principles

The Report was prepared in accordance with the Core Option of the Sustainability Reporting Guidelines G4, published by the Global Reporting Initiative (GRI), as well as the Environmental Protection Department's [A Guide to Environmental Reporting for Controlling Officers](#).

The GRI Content Index correlates GRI indicators with associated sections in the Report. An independent third-party assurance was conducted to verify the materiality, credibility and reliability of this Report and ensure its attainments to the Core Option of GRI G4 Guidelines. We also went through and achieved the GRI G4 "Materiality Matters" Check to ensure the most critical disclosures are reported and can be easily found by readers.

Note to Reader

The Report is published online in web-based interactive html version, PDF version and text-only versions, available in three languages (English, Traditional Chinese and Simplified Chinese). The interface has been prepared in accordance with the Level AA of the [W3C Web Content Accessibility Guidelines 2.0](#). In addition, the report can be viewed by tablet computers.



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 readers;

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;

"Data Summary" section furnished readers with a quick review of our performance on various key indicators; and

"Glossary" section provides definitions of the technical terms using in or relevant to this Report.

About us

Roles and Organisational Structure

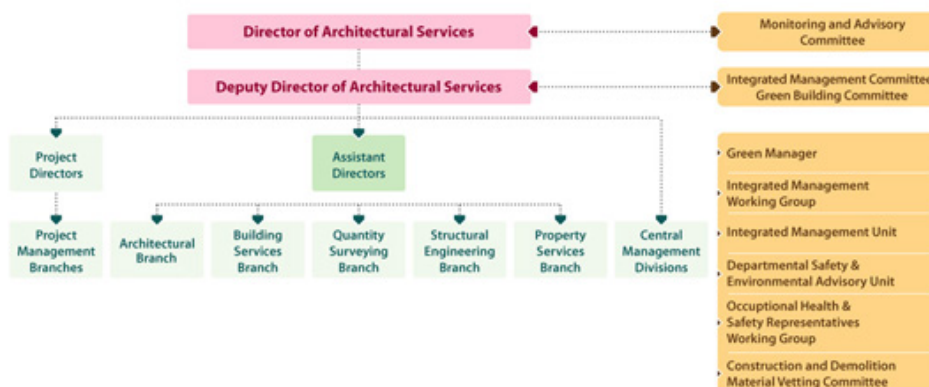
Architectural Services Department (ArchSD) performs three core functions in relation to Government-owned and Government-funded facilities in the following programme areas:

- **Monitoring and advisory services** - to provide effective professional and technical advice to the Government and quasi-government organisations and to oversee subvented, joint-venture and entrusted projects;
- **Facilities 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.

ArchSD Role in the Government of the HKSAR



Organisational Structure



Funding and Mode of Operation

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

We have created a total of 11,227 jobs by awarding works contracts and consultancies in relation to both new capital and minor works projects in 2013. We commenced 14 new capital works projects and a substantial amount of minor works projects during the year.

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 is not easy to quantify the economic value generated, it would improve or enhance the quality of the services and the facilities for the benefit of the public.

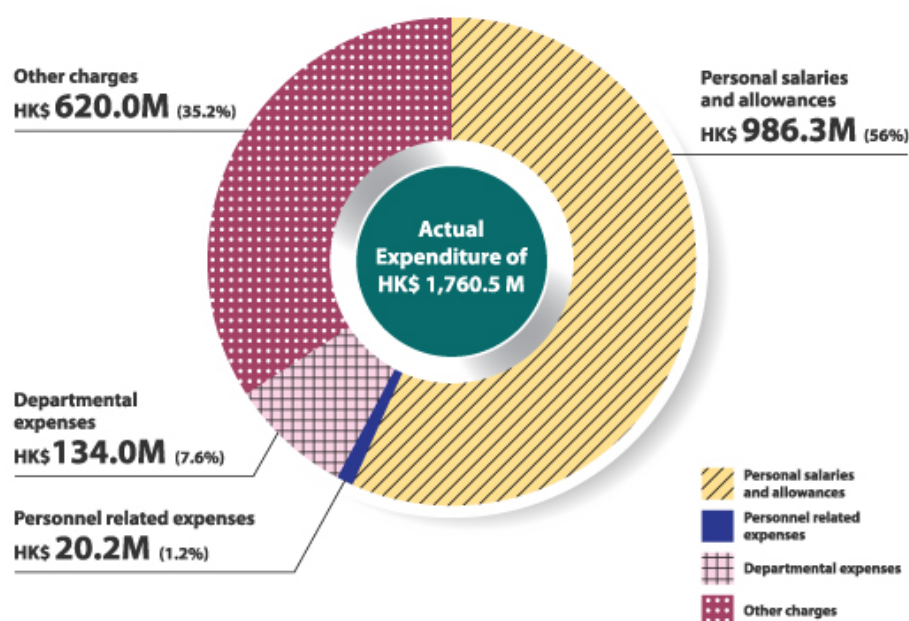
Departmental Expenditure

In the financial year 2013-14, we recorded an overall increase of around 5.2% [1] in departmental expenditure as comparing with the previous financial year in 2012-13. Expenditure breakdown of our department and by different programmes [2] for the financial year 2013-14 are provided below. Details of our financial information and key performance can be found in the ArchSD Controlling Officer's Report of the 2014-15 Estimates of the Government of the HKSAR, which is available online at www.budget.gov.hk.

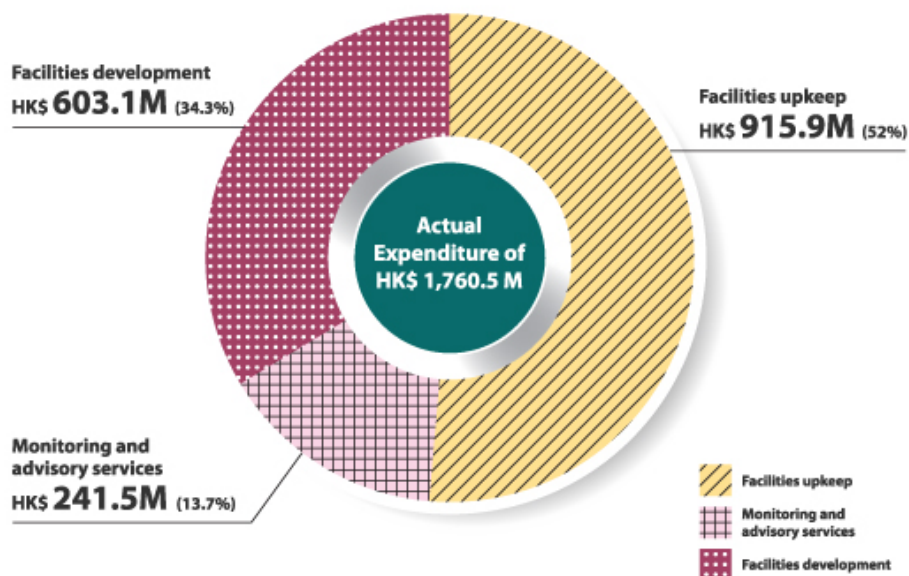
[1] The Departmental Expenditure 2013-14 is HK\$1,760.5 million, there was around 5.2% increase as comparing with the Departmental Expenditure 2012-13 of HK\$1,673.4 million.

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

Departmental Expenditure in Financial Year 2013-14



Expenditure Breakdown by Programmes



Key Facts

Founded on: 11 April 1986

Staff Establishment: 1,795 (as at 31 March 2014)

Headquarters: Queensway Government Offices, 66 Queensway, Hong Kong

Other Office Location: APB Centre, Hunghom, Kowloon; 17/F and 19/F, 410 Kwun Tong Road, Kwun Tong, Kowloon^[3]

Total Office Area: Approximately 25,477.2m² (as at 31 December 2013)

Scale of Services: (from 1 January 2013 to 31 December 2013)

- Number of Subvented / Entrusted Projects Reviewed: 834
- Number of Facilities Development Projects Completed: 40
- Building Floor Area of Properties Maintained: 31,113,000m²
- Government Spending on Facilities Development Projects: HK\$6,828million
- Government Spending on Facilities Upkeep Works: HK\$3,152million
- Value of New Works under Development: HK\$106billion

[3] Offices at 17/F & 19/F, Kwun Tong View, 410 Kwun Tong Road will be handed over to the next tenant as arranged by the Government Property Agency on 3 June 2014.

Recognitions and Awards



ArchSD strives for excellence in every detail in our architectural services, and always seeks opportunities to further enhance our service quality. Through participating in different schemes and awards, we can better understand the latest requirements and trends related to the development and upkeep of buildings and facilities, and serve a leading role in adopting best practices in the building industry.

Hong Kong Institute of Architects (HKIA) Annual Awards

With an aim of “Build a Better Hong Kong, Promote Architectural Excellence”, the HKIA Annual Awards recognise outstanding architectures by local architects. This year, we are honoured to have our “Reprovisioning of Wo Hop Shek Crematorium” project receiving the Merit Award.



Wo Hop Shek Crematorium

Hong Kong Institution of Engineers (HKIE) - Joint Structural Division Structural Excellence Award

The Joint Structural Division of HKIE has organised the Structural Excellence Award since 1998/99, with an aim to promote excellence in structural engineering demonstrated through the design and construction of buildings and structures.

In 2014, two of our projects received awards in the Structural Excellence Award. They are:

- **"Cruise Terminal Building for the Kai Tak Cruise Terminal Development"**
- Grand Award - Non-residential
- **"Conversion of the Former Royal Hong Kong Yacht Club Premises to a Community and Public Art Centre"**
- Finalist - Heritage



Cruise Terminal Building for the Kai Tak Cruise Terminal Development

Hong Kong Public Space Awards

It is jointly organised by the Hong Kong Public Space Initiative, RFP Magazine and Designing Hong Kong. The Award aims to raise awareness of public spaces, recognise various stakeholders of public spaces, including planners, designers, management companies and the likes, for their contribution, thus inspiring people with ideas for future public space development.

We are pleased to announce that five of our project works have been awarded the winners or honorable mention in different categories by public voting and a jury of qualified designers, developers and experts, taking into account the public opinion.

- **"Stanley Waterfront Improvement Works - Stanley Promenade and Piazza of Stanley Plaza"**

The Stanley Promenade together with Piazza of Stanley Plaza were granted the overall winner of the year and the winner under the Waterfront Area category. Though the ownerships of the two places are different, the two closely connected spaces have brought remarkable experience to pedestrians. Expert judges of the Award recognised the project as a "successful integration of different elements required for a vibrant public space e.g. waterfront, street, piazza, open sky and sea".

Other recognitions received include:

- **"Improvement Works to Sai Kung Promenade"**
- Waterfront Area - Honorable Mention
- **"Cornwall Street Park"**
- Urban Park - Winner
- **"Jordan Valley Park"** - Large-scale Green Park - Honorable Mention
- **"Tai Ming Lane Square"** - Urban Plaza - Winner

Civil Service Outstanding Service Award Scheme

The award scheme has been organised on a biennial basis by the Civil Service Bureau, aiming to recognise excellent service provided by government departments and teams. This year, we were awarded two Inter-departmental Awards, recognising our collaborative effort with other departments.

- Collaborated with the Food and Environmental Hygiene Department, **"Reprovisioning of Wo Hop Shek Crematorium and Provision of Columbarium and Garden of Remembrance at Kiu Tau Road, Wo Hop Shek"** was awarded the Gold Prize



Wo Hop Shek Columbarium Building

- **"Accessibility in Publicly Accessible Premises"** was awarded the Silver Prize

Hong Kong Flower Show

The flower show organised by the Leisure and Cultural Services Department attracted over 550,000 visitors this year. The theme of the flower show was "Kaleidoscope of Spring", with "Dendrobium" as the theme flower. Our landscape design participating in the show won the Grand Award for Design Excellence (Landscape Display).



ArchSD flower display in the Hong Kong Flower Show 2013

The Caring Organisation Logo Award Scheme

To promote good corporate citizenship amongst business and public sectors in Hong Kong, the Hong Kong Council of Social Service (HKCSS) launched the Caring Company and Caring Organisation Logo Award Scheme. To recognise our continuous support to the program, we were awarded the 5 Plus Consecutive Years Caring Organisation Logo this year.



5 Plus Consecutive Years Caring Organisation Logo

A' Design Award

The theme of our Sustainability Report 2012 was "Low Carbon Buildings for a Greener Future". It showcased our green commitment to the community, and was expressed through an artistic design of the report content. After vigorous assessment on the content, visual and graphic design, interactivity and accessibility, our web-based Sustainability Report 2012 won the Bronze Award (Website Design Category).



ArchSD Sustainability Report 2012 won the Bronze Award (Website Design Category) in the A' Design Award

Hong Kong Awards for Environmental Excellence (HKAEE)

The HKAEE has been launched since 2008 by the Environmental Campaign Committee (ECC) alongside the Environmental Protection Department and together with 9 non-governmental organisations. Offering different schemes, the HKAEE aims to encourage businesses and organisations to adopt green management and green innovations, as well as to present them with an opportunity to benchmark their commitment towards environmental excellence.

We have actively participated in various schemes under the HKAEE and received the following recognitions during the year.

Sectoral Awards

In pursuit of our commitment to deliver services in an environmentally friendly manner, green elements have always been integrated into our architectural projects. In addition to communicating with our staff, we actively engage our business partners, the construction industry and the public to adopt green best practices.

ArchSD Sustainability Report 2014 - Recognitions and Awards

In the 2013 HKAEE Sectoral Awards, we won the Bronze Award in the "Public Organisations and Utilities" sector. Some of our green achievements are listed below.

- "Siu San Wan Complex" was awarded the Grand Award under New Buildings (Completed Building) Category in Green Building Awards 2012
- Passive design for natural lighting and ventilation, modular design for reusable internal layouts have been introduced to ArchSD's site offices
- The former police married quarters on Hollywood Road was revitalised for heritage conservation



ArchSD won the Bronze Award in the "Public Organisations and Utilities" sector of 2013 HKAEE Sectoral Awards

Environmental Labels and Carbon Reduction Certificate

During the year, we obtained the "Class of Excellence" in the "Wastewi\$e Label" and "Energywi\$e Label" to recognise our effort in waste reduction and energy conservation. In addition, two ArchSD office premises have been awarded the "Class of Good" under the "IAQwi\$e Label" demonstrating our achievement on improving indoor air quality. Through the implementation of various energy saving measures, we successfully reduced electricity consumption by over 63,000 kWh under Energywi\$e Label. We have received a special award from the HKAEE to recognise our outstanding achievements in attaining significant energy reduction under the Energywi\$e Label.

To help combat climate change, we have implemented a number of carbon reduction measures in our office. We were awarded the Carbon Reduction Certificate to appreciate our achievement in reducing 11% carbon footprint in 2012 compared to our baseline year in 2011.



Presentation of Carbon Reduction Certificate and certificates of Energywise Label, Wastewise Label and IAQwise Label of HKAEE

Manpower Developer Award Scheme

Talent retention and development are crucial to every knowledge-based company including ArchSD. In 2009, the Employees Retaining Board launched the Manpower Developer Award Scheme. It aims to recognise organisations which demonstrate outstanding achievements in manpower training and developers. This year, we were awarded the Manpower Developer Logo in recognition of our commitment to manpower development.



Manpower Developer Logo

Talent-Wise Employment Charter and Inclusive Organisations Recognition Scheme

To foster social integration and build a caring and supportive society for all, ArchSD has signed the "Talent-Wise Employment Charter". In recognition of ArchSD's continuous efforts in promoting inclusive human resource policy, we have been awarded "Partnering Inclusive Organisation Award" of the Inclusive Organisations Recognition Scheme. The Scheme was launched by the Labour and Welfare Bureau, in collaboration with the Rehabilitation Advisory Committee, the Hong Kong Council of Social Service and the Hong Kong Joint Council for People with Disabilities to further promote the employment of persons with disabilities.



Inclusive Organisation Logo

Management Approach



Strategy and Management

We strive to promote sustainability through our operations, which consist of three core functions in relation to Government-owned and Government-funded facilities, where we serve as the Government Advisor, Maintenance Agent, Works Agent, or Project Manager.



Being a department under the Hong Kong SAR Government, we adhere to the policies stipulated by the Civil Service Bureau as part of our internal governance measure. We follow the safety-associated guidelines developed by the Development Bureau (DEVB) to ensure our safety-associated provisions such as site safety training, pay for safety, safety model workers award scheme, are addressed in our construction contracts. Fully compliant with the Employment Ordinance, we are committed to protecting the rights of employees and providing a range of benefits to support their development. The use of child labour or forced labour is strictly prohibited in our operations. A Labour Relations Officer would also be appointed for large-scaled construction projects to help solve the disputes between contractors and workers at early stage.

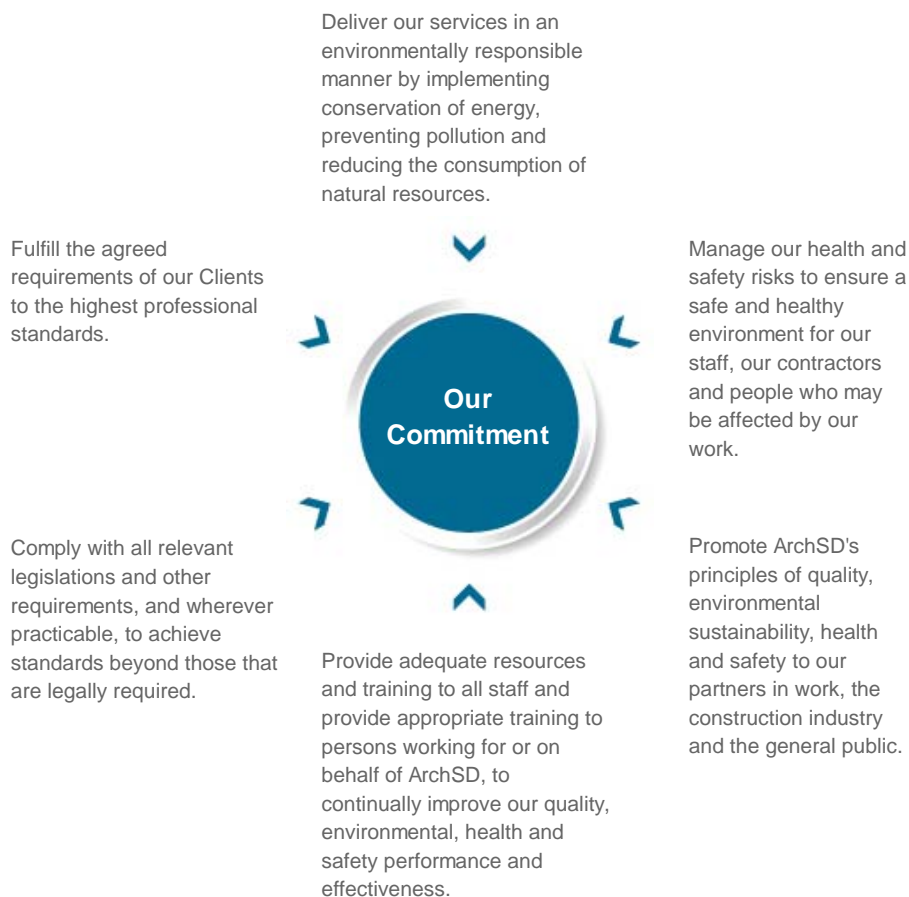
Over the years, we have successfully implemented an Integrated Management System (IMS) in accordance with international standards including ISO 9001 on service quality management, ISO 14001 on environmental management and OHSAS 18001 on occupational, health and safety management. Our IMS enables us to continually improve operational performance towards sustainability, while achieving service excellence in line with our Vision, Mission and Values, as well as Quality, Environmental, Health and Safety Policy.

Our Vision, Mission and Values



Quality, Environmental, Health and Safety Policy

When offering our clients a comprehensive range of multi-disciplinary services for government buildings and facilities, we commit to:



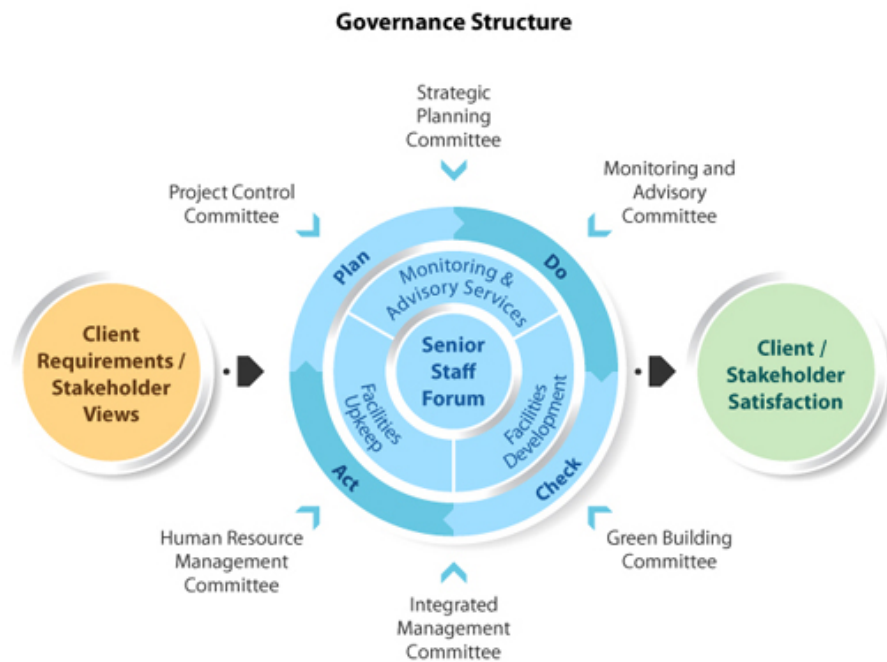
Governance

In addition to defining the above guiding principles, the Senior Staff Forum, which is administrated by our Director, is responsible to oversee the management and operation strategies of the Department. In order to fulfill our commitment to enhance performance continuously in economic, environmental and social areas, the Forum is entrusted with the development of our sustainability strategies, policies and goals as well as reviewing our sustainability performance as part of the IMS at least once a year.



Members of the Senior Staff Forum, from left to right:
Mr. Benny CHAN, AD(A); Ms. Sheron LI, JP, AD(QS); Mrs. Alice YU, PD/3; Mr. Michael CHEUNG, JP, AD(BS); Mr. Stephen TANG, JP, DDArchS; Mr. K.K. LEUNG, JP, DArchS; Mr. K.T. LEUNG, AD(SE); Mr. S.W. FONG, AD(PS); Mrs. Sylvia LAM, PD/1; Miss H.M. CHAN, PD/2; Miss Deborah AU, DS

Internally, a number of steering committees also play important roles to ensure the Department's governance.



Externally, some members of our senior management provide statutory, professional and technical advice to a number of professional bodies and committees to support local initiatives such as developing public policies on building design and architectural issues, and serve the industry and the community at large. These professional bodies and committees 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 optimisation of site utilisation;
- Minor Building Works Committee to examine and approve minor building works applications;
- 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;
- Committee on Environment, Innovation and Technology under the Construction Industry Council to promote environmental protection and sustainable development in the construction industry; and
- Green Labelling Committee, the Industry Standards Committee and the Policy and Research Committee under the Hong Kong Green Building Council Limited to drive green building development.

Our senior management also sits in the Steering Committee on the Promotion of Green Building, which is led by the Secretary for the Environment. The inter-departmental Steering Committee was established in January 2011 aims to strengthen the co-ordination among departments to formulate implementation strategies and action plans, while maintaining close dialogue and co-operation with the relevant sectors and stakeholders to further promote green buildings and make recommendations on relevant measures. The Steering Committee will consider and promote the required strength-of-action that could bring about substantial energy saving gains in buildings.

Risk Management

We carefully monitor risks associated with our operations. By conducting risk assessments on the Department as well as on individual projects, we evaluate potential impacts and take necessary actions to prevent or mitigate risks as far as practicable.

On the Departmental level, we adopt the "Plan-Do-Check-Act" methodology under our IMS to identify and manage potential risks on quality, environment, health and safety in relation to our services and operations.

On individual projects, we apply the guidelines stipulated in the Development Bureau 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" to control risks throughout the project lifecycle starting from the inception of a project till the completion of its construction. Project teams will also engage different stakeholders through integrated management workshops during the course of project delivery to assist us in analysing risk and formulating controls.

Following the principles stated in the Prevention of Bribery Ordinance, all staff are required to maintain a high level of ethical standards and professional integrity. Potential bribery or corruption cases will be reported to the Senior Staff Forum and the Independent Commission Against Corruption (ICAC) for further investigation. During the reporting period, there was no such case reported.

Business Planning

To set a clear direction to guide short to medium-term development of the Department, the Business Plan Core Group was established in 2009 to develop a 5-year Departmental Business Plan (DBP) for the fiscal years 2010/11 to 2014/15.

Based on the results from evaluating external operating environment and analysing internal operating environment, DBP (2010/11-2014/15) specifies business priorities, devised operating strategies to leverage our strengths, and prioritises key improvement areas.

According to the DBP (2010/11-2014/15), we set transformation priorities on operation structure, operation management, human resources management, and partnership and collaboration. Our department will operate as below in 2014/15 after we have implemented our new operating strategy.

Operation in 2014/15



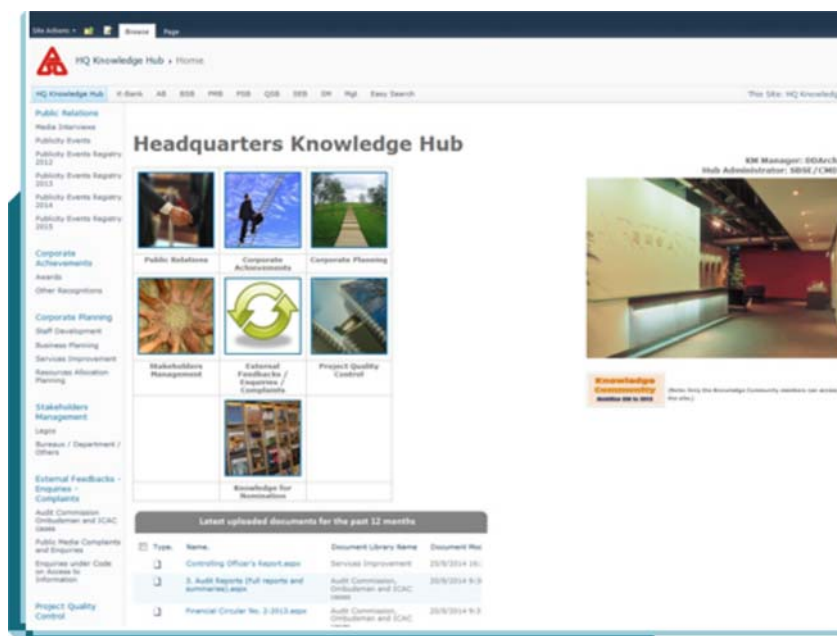
In order to implement the above 5-year DBP in a systematic and progressive approach, we set detailed annual objectives and monitor actual progress each year. The Departmental objectives as specified in our 2014/15 Annual Plan are outlined below.



Knowledge Management

To help built up and manage our professional knowledge in a systematic manner, we have launched a Knowledge Management (KM) portal in May 2012.

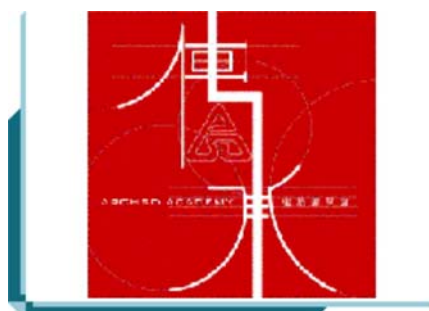
The KM portal was developed to enhance cross-branches knowledge sharing among colleagues, and is divided into three levels - *knowledge communities*, *functional / branch Knowledge hubs*, and *ArchSD knowledge bank*. Besides facilitating internal knowledge sharing with regard to our core competence, the portal aims to form a knowledge repository for our proprietary information. The KM portal provides a platform to capture knowledge at different phases of its life cycle, including generation, harvesting, formation of practice wisdom and sharing, monitoring and renewal.



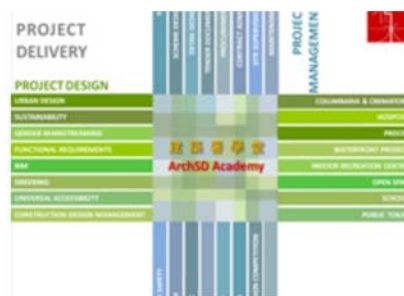
ArchSD Headquarters Knowledge Hub

ArchSD Academy

In April 2013, we launched the ArchSD Academy with the objectives to help our colleagues face the challenges ahead. The ArchSD Academy, by offering the Project Management and Project Design streams of programmes in matrix, served as a platform to facilitate systematic and active knowledge sharing so as to equip staff with necessary skill sets for project delivery. The project management training were offered to the professionals of all disciplines in ArchSD so as to achieve project goals as a team whilst project design training was catered to officers of all disciplines and levels with the introduction of different specialised topics including (i) design review, (ii) innovative ideas and new technology, (iii) learning from past project experience and (iv) exploration of the role of project design in different Government initiatives to address the rising public expectations and to generate work synergy and effectiveness. From April to December 2013, the ArchSD Academy organised about 18 training sessions on Project Design and 14 sessions on Project Management. Total number of trainees and training hours were 2,700 and 4,700 respectively. Course materials for each training session, in terms of presentation slides, class videos, and course notes etc. are uploaded online for easy access by colleagues through the ArchSD Academy Learning Portal. From time to time, renowned industry experts, professionals and academia would also be invited to conduct sharing sessions at our Academy.



The winning submission of the design competition for the ArchSD Academy Emblem was adopted as the official emblem



Themes of the courses in the Academy were devised from two streams of knowledge: Project Management and Project Design



DArchS unleashed a new training era of the Department by launching the ArchSD Academy in April 2013



A total of 32 training sessions were held in 2013 by the ArchSD Academy

Management Approach

Main Focus Areas

By reviewing our operations and communication processes, we have identified a number of stakeholder groups that would have direct and/or indirect implication on the Department's development. These include staff, clients, contractors/consultants, facility users, professional bodies and general public.

To better address the interests and concerns of our stakeholders, we have conducted a series of stakeholder engagement activities to help define the Material Aspects and their Boundaries that need to be addressed in the Report. Representatives from selected stakeholder groups, such as professional and technical staff, contractors, clients, facility users and professional bodies, have been invited to participate in interviews and share with us their particular interests and concerns on our sustainability initiatives and performance.

Taking into consideration of the Department's major activities, impacts and the key interests expressed by our stakeholders, the following main focus areas have been prioritised as the Material Aspects for the Report content.





Management Approach

Engagement Approach

To better communicate with different stakeholders, we have applied a variety of methods to engage them on a regular basis, for example the Department's website, reports and other publications, surveys, public events, as well as face-to-face meetings. The comments and suggestions from stakeholders are very important as they can provide valuable reference to help us continuously improve our sustainability performance.

Staff

Several internal communication channels are made available for our staff to encourage knowledge exchange and invite suggestions on sustainable development. These include the Departmental Consultative Committee, Staff Motivation Scheme, Web Forum, Staff Relation Units and staff associations.

Clients

Besides arranging public events and meetings, we conduct Client Satisfaction Surveys and Post Occupancy Evaluations with our clients and facility users to understand their expectation and gauge our sustainability performance. Taking the Post Occupancy Evaluation (POE) for an example, it was originally introduced in 2005 to support the Government's initiatives of "Clean Air Charter" and "Action Blue Sky". It has become our important channel to collect comments and inputs from the clients and users, allowing us to evaluate the actual performance of selected newly-completed buildings on aspects such as operational efficiency, handover issues, energy performance and new technology applications. Through this channel, we are able to identify opportunities to achieve great energy savings and promote the utilisation of building services in a more efficient way.

Suppliers

To build up and maintain a sustainable supply chain to support the Department's development, we organise public seminars and events to provide existing and potential suppliers with the updates of our latest procurement requirements and activities.

Contractors/Consultants

We organise the Green Contractor Award and Considerate Contractor Awards to acknowledge the professional expertise and contribution of our contractors and consultants. We also take the opportunities of various site tours and functions initiated by professional bodies to exchange knowledge and share experience with professionals in the industry.

General Public

Staying connected with legislators and local district councillors, we arrange focus group meetings to communicate latest development associated with our public works projects as well as our green practices/achievement. In addition, research conferences, training sessions and study missions are provided to educational and academia.

We also handle enquiries and value comments from local and overseas parties, including media and NGOs. They can obtain latest information and contact us directly through the Department's website.

E-communication Channels

As a new digital platform to cultivate partnership and collaboration between ArchSD and key stakeholders, we have developed the Extranet to enhance communication with external users such as consultants and contractors. It will also assist in contract management for the works projects undertaken by the Department.

Stakeholder Interview

Six interviews were carried out in 2013/14 with individuals representing the major stakeholder groups of staff, contractors, clients, users and professional organisations in order to understand their concerns and obtain feedback.

Comment from Association



Dr. Samuel Chui
Secretariat of Awards
Committee on the Hong
Kong Awards for
Environmental Excellence

The Hong Kong Awards for Environmental Excellence (HKAEE) has been recognised by the community as one of the most prestigious and reputable award schemes in Hong Kong. Organised by the Environmental Campaign Committee, HKAEE has received thousands of applications since 2008.

As a government department that cares about the environment, the Architectural Services Department (ArchSD) has already received a number of recognitions from the HKAEE including the Carbon Reduction Certificate, Wastewi\$e, Energywi\$e and IAQwi\$e Labels as well as the Bronze Award of the Sectoral Awards (Public Organisations and Utilities Sector) for two years. We are delighted that ArchSD has put substantial efforts moving towards environmental excellence. Internally, ArchSD has put in place a sound system on environmental management and constantly provides suitable environmental training for its staff. Externally, ArchSD has actively engaged its clients and business partners to enhance their environmental awareness. It has also incorporated many green measures such as green roofs, vertical greening, energy-saving features and carbon reduction practices into building design. We are impressed by ArchSD's all-round and outstanding environmental performance as well as its efforts to engage partners in adopting green practices to create awareness and impact on the society.

We encourage ArchSD to uphold its momentum and good work to attain a higher level of achievement. As a pioneer of green building, we look forward to seeing ArchSD to introduce more innovative green measures especially on waste reduction in building design and project management.



Our Response

We are pleased to know that our efforts in environmental protection are highly appreciated by the community. We will continue to strive for environmental excellence and introduce innovative green measures in our projects as far as practicable.

Comment from Staff



Mr. Yuen Ting-hon, MH
Chief Technical Officer
(Building) of Architectural
Services Department

Over the years, our Department had established various internal communication channels among site staff and the directorate officers such as Maintenance Works Site Supervisory Staff Meeting and Departmental Consultative Committee Meeting. These meetings allow us to share views interactively. Our opinions are always taken with positive light, such as the wish for more overseas training opportunities to let us get in touch with the latest information and technologies had been fulfilled. Four site staff are arranged to attend overseas training at the end of this year. Besides, our recommendation to incorporate maintenance plan for replacing aging water pipes and drainage stacks for old buildings was also adopted in new maintenance term contracts. We believe the arrangement can help to provide a better facilities upkeeping service for our clients.

Our Department commits to promote green building initiative to set examples for the building industry. The renovation project of the APB Centre attempting the "BEAM Plus" accreditation becomes real-life example for our staff to experience the benefits of a green building design and will serve as working example for other government departments and stakeholders to follow.

I hope the Department would provide more opportunities to enrich our experience with more in-house projects as our experience is the invaluable asset for the Department. I believe this is essential to groom experienced and knowledgeable staff for succession.



Our Response

We treasure suggestions and comments from staff to continuously improve our performance. It is our mission to promote best practices and lead by examples to the building industry and our counterparts in moving towards sustainable development. To ensure sustainable operation of the department, we will continue to nurture young employees in different aspects according to their interests and core competence.

Comment from Staff



**Mr. WAN Chuck Kwan,
Thomas**
Senior Architect of ArchSD

As an architect, my work focuses on design of buildings and facilities. Our Department provides a comfortable working environment to enable us to develop our full potential. The Department also cares about our well-being through arranging a wide range of staff activities, such as sport events and lunch gathering to promote work-life balance and to strengthen the bonding among staff across different levels and disciplines. These activities also served as informal communication channels that we can raise our ideas and feedbacks to the management.

Among all, incorporating green building elements into projects is one of the top priorities in our daily operation. By implementing green building standards such as the Building Environmental Assessment Method (BEAM), the Architectural Services Department (ArchSD) not only improves the environmental performance of our building projects, but also serves as a role model for the industry to adopt these environmental practices.



Our Response

We highly value staff motivation and satisfaction, and treasure their comment and feedback on our management and operation. It is our commitment to provide a favourable working environment that supports and enables staff to realise our shared goal. Feedbacks gathered from staff at different levels and disciplines allow us to identify room for improvement and achieve continuous improvement. Staff is one of our important stakeholders, we will work with them closely for a better future.

Comment from Client



**Mr. CHAN Chi Yuen,
Stanley**

AS (Works Policies) of
Development Bureau

We highly appreciate ArchSD's quality work. Over the years, we reckon the Architectural Services Department (ArchSD) has put substantial effort to enhance its environmental performance. For instance, ArchSD has incorporated green elements as part of its tender requirements and evaluation criteria, such as energy efficiency, use of environmentally friendly materials and practical measures to eliminate potential environmental impact. This can effectively drive environmental improvement among contractors and the construction industry.

In view of the increasing awareness on green building, we encourage ArchSD to provide more information on the green building features adopted in various projects, such as utilisation of natural ventilation and adaptation to micro-climate in future reports.



Our Response

We are glad to learn that our efforts are commended by the Development Bureau. We will continue to seek clients' feedback proactively to improve our performance. We will go on introducing and adopting green initiatives as far as practicable during the project design and planning stages to build a sustainable environment in Hong Kong.

Comment from Contractor



Mr. Kevin Yu
Site Agent (Sports Centre
& Library in Area 74,
Tsueng Kwan O) of Lanon
Development Limited

Being a works contractor of the Architectural Services Department (ArchSD), we are required to meet certain environmental and safety standards apart from the statutory requirements in place. For instance, we are required to use ultra-low-sulphur diesel in the diesel engines and to conduct weekly safety inspection in the construction site. These requirements not only improve our environmental and safety performance, but also help us build a positive image to the public.

As our working partner, ArchSD always offers assistance and provides us with invaluable advice on our proposed measures to comply with these requirements. ArchSD also encourages us to join various environmental and safety award schemes to enhance and benchmark our performance such as the Green Contractor Awards. Through participating in different award schemes, we have initiated a number of green measures to minimise the environmental impacts to our neighbourhoods including schools and public estates during the construction phase. Our concerted efforts and achievements will also be recorded in our performance report, which would be considered in future tendering exercise of similar government projects. In the long run, we would like to see ArchSD to introduce more experience sharing platforms for the construction industry so that we can learn the good practices from the counterparts.



Our Response

Contractors play an important role in delivering ArchSD's projects and services. We will continue to offer full support to our contractors and disseminate latest technological updates and best industry practices via appropriate platforms to the construction industry.

Comment from User



Mr. Wong Shiu Kwan
Senior Project Director of
Hong Kong Sports Institute

In 2008, the Government allocated \$1.8 billion for the redevelopment of Hong Kong Sports Institute (HKSI) and it was planned to complete by the end of 2014. Throughout the project, the Architectural Services Department (ArchSD) has played an advisory role to provide us with various supports and latest information on environment-friendly technologies to enrich the redevelopment of HKSI.

ArchSD has maintained close dialogue with us to ensure the suitability and effectiveness of the proposed green measures. In addition to constructing new buildings to enhance our sport facilities, we have upgraded the existing building of HKSI, which was built over 30 years ago, instead of demolishing the old building. This greatly reduced the construction waste and shortened the duration of the project. A wide range of green features have been incorporated into the new design such as green roofs and solar panels for water heating. We have also preserved existing trees within HKSI's premises as far as possible and increased the greening coverage areas to create a pleasant environment to our athletes. I appreciate the input from ArchSD and expect the Department to continuously support the government-funded projects to adopt latest green features where applicable.



Our Response

It is one of the Department's core functions to provide advisory support to government-funded building projects. We will make every endeavour to provide practical, cost-effective and environment-friendly advice to consummate the building design.

Resources Utilisation and Conservation



Low Carbon Building Design

Buildings account for nearly 90% of electricity consumption in Hong Kong. Reducing the amount of energy consumed for the operation of buildings is paramount to reduce carbon emissions and combat climate change. As such, we have devoted utmost efforts to promote low carbon building design and to adopt various cutting-edge technologies and systems to enhance energy efficiency and resource conservation in our development projects.

During the year, we have consolidated our best practices and developed the Sustainable Building Design Considerations Guidelines. The Guidelines aim to provide general guidance, reference and key issues that need to be considered in implementing sustainability elements for building services installations and the construction methods and materials adopted. It is expected to be launched in Q4 of 2014. In addition, we also developed a standard Particular Specification (PS) for the design of the ArchSD temporary site office to further promote the use of green materials.

We believe the technological advancements in environmental protection can co-exist with aesthetics and functionality of architectural design. We embrace every opportunity to incorporate sustainable design and green measures in our building projects in order to support the transformation of the cityscape into more sustainable and livable.

Case Study

Construction of Fire Station-cum-Ambulance Facility at Cheung Yip Street, Kowloon Bay

The fire station provides fire and emergency ambulance services for the Kai Tak Cruise Terminal as well as future developments in Kai Tak area. With a site area of 2,250 m², the project consists of a six-storey building accommodating a four-bay appliance room with ancillary and supporting facilities, and a single-storey building to support urban search and rescue operation.



Overview of Fire Station-cum-ambulance Facility at Cheung Yip Street

The elements of greening are well integrated into the design of the fire station. About 43% of green coverage has been achieved through multiple planters and vertical greening above ground level and green roofs, which is double the minimum requirement (20%) for Government buildings. Continuous planters along the boundary edge further soften the rectilinear and angled building form and minimise visual impact of the building mass.



Up to 43% of green coverage has been achieved through green wall and green roofs

Regarding sustainable design features, the building has been able to introduce as much natural daylight into the interior space as possible through large windows and skylights composed of heat insulating glass, solar tubes and provision of balconies. Sun-shading fins have been installed on the west-facing external wall to minimise energy consumption of the air-conditioning system. Furthermore, water permeable paving blocks made of recycled materials have been used on the external ground.

Through adopting various sustainable design, the project has obtained provisional Platinum rating in "Building Environmental Assessment Method (BEAM) Plus New Buildings" by the Hong Kong Green Building Council.



Ample plantings including vertical greening and stacked planters are blended into the elevations

Case Study

Joint-user Complex at Bailey Street, To Kwan Wan Reclamation



Overview of Joint-user Complex at Bailey Street

The theme of the Complex is to create a human-orientated civic focus to rejuvenate the To Kwa Wan precinct within the Kowloon City District and at the same time to accommodate new, expanded and merged Government services. The complex includes a community hall, a maternal and child health centre, a families clinic, a dental clinic and office accommodation for the Government.

With a site area of 2,200 m², the project has incorporated many different forms of environment-friendly building services systems including, water cooled chillers, automatic demand control systems, heat energy reclaim system, T5 fluorescent tubes with electronic ballast, daylight sensors, service-on-demand control for escalator, building energy management system and solar hot water system.



The complex has adopted various energy efficient lighting equipment for illumination purpose

For recycled features, a rainwater and condensate recycling system is provided for irrigation and flushing respectively to conserve water. Solar powered microclimate station is adopted to control the irrigation system.



The complex has established green roofs and terraces, and vertical greening on external walls for environmental and amenity benefits

In terms of greenery area, the ratio is significantly higher in this building. There is about 911m² of soft landscape area, equivalent to 41.4% of the site area, much higher than the 20% statutory requirements for similar sites. The extensive greenery would ameliorate heat island effect by reducing temperature of heat-absorbing surfaces.

The Complex finally achieved the highest rating of "Platinum" in the Building Environmental Assessment Method (BEAM) New Building Development (Version 4/04), endorsed by the Hong Kong Green Building Council.

Resources Utilisation and Conservation



Greening and Landscaping

ArchSD strives to bring about continual improvements to greening and landscaping through maximisation of quality greenery coverage, including roof greening and vertical greening. As the government's technical adviser, we take every opportunity to promote best practices of roof greening and vertical greening to various government departments and quasi-government organisations on subvented projects.

In 2013, we completed 11 projects with green roofs on new buildings and 7 projects with retrofitted green roofs on existing buildings, as well as 8 projects with vertical greening on new buildings for different government bureaux/departments and related organisations, including (listed below in alphabetical order):

- Development Bureau;
- Education Bureau;
- Fire Services Department;
- Food and Environmental Hygiene Department;
- Home Affairs Department;
- Hong Kong Police Force;
- Hospital Authority;
- Leisure and Cultural Services Department; and
- Tourism Commission, etc.

The types of buildings/facilities include community centre, conserved and revitalised historic site, cruise terminal building, cultural complex, fire station, hospital, joint-user complex, park, police station, refuse collection point, school, sports centre and swimming pool complex.

Case Study

Town Park, Indoor Velodrome-cum-Sports Centre in Area 45, Tseung Kwan O

The Hong Kong Velodrome is the first-ever local indoor cycling facility that meets the standards of the International Cycling Union. In addition to providing a wide range of leisure facilities, the Velodrome offers public with a variety of recreation and sports programmes every month.

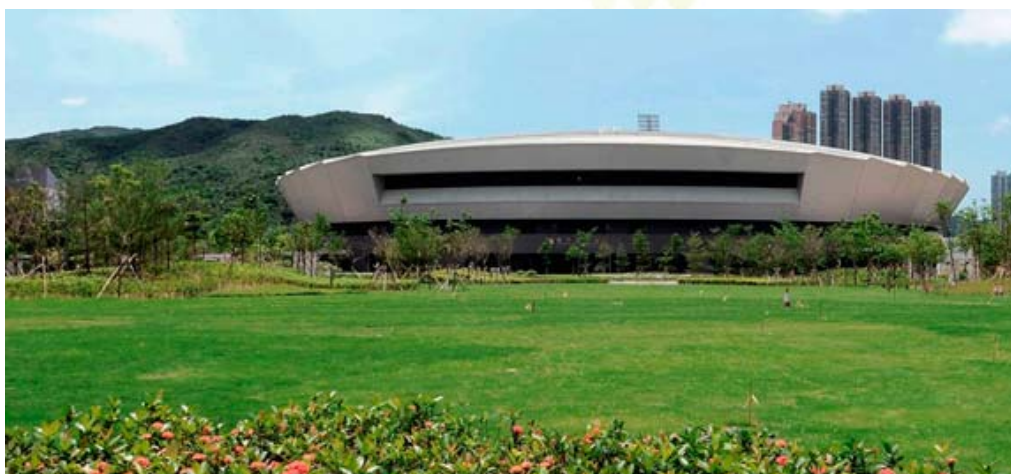
The elliptical form and ribbed roof of the velodrome building are inspired by the profile of a bicycle helmet. The curvilinear shape helps reduce the mass of the building from whichever angle you look and successfully blends into the organically shaped parkland.



Overview of Velodrome-cum-Sports Centre in Tseung Kwan O

The project also features a town park, which comprises a garden with a large central lawn, an artificial lake,

landscaped terrace, elderly corner, children's play area, amphitheatre and a skateboard park. The landscape design of the project has maximised the incorporation of greenery in the town park by extensive planting of about 1,200 trees, 190,000 shrubs, groundcover and climbers. The vastly vegetated town park offers a natural and comfortable open space to meet the demand of citizens in Tseung Kwan O and beyond. A green roof has also been established for the covered car park.



Overview of the town park

Case Study

Cruise Terminal Building and Ancillary Facilities for the Kai Tak Cruise Terminal Development



Overview of the Cruise Terminal Building

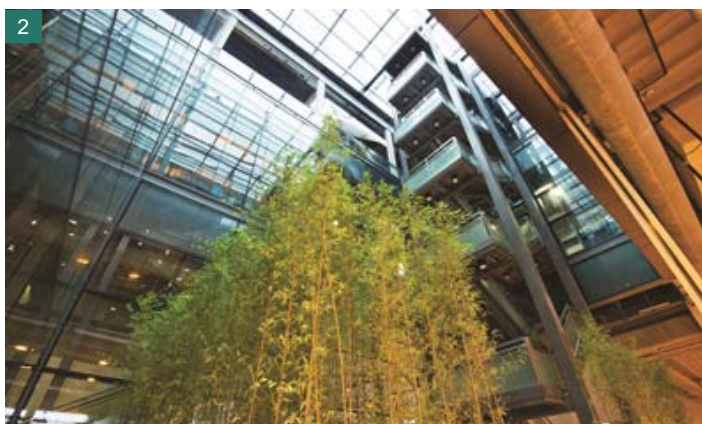
The Kai Tak Cruise Terminal (KTCT) is a major tourism infrastructure project in Hong Kong. With the terminal building and the first berth of the KTCT successfully commissioned in mid-2013, the \$8.2 billion infrastructure project is key to developing Hong Kong into a regional cruise hub in Asia and reinforcing Hong Kong's position in tourism.

On a site of 7.6 hectares, the terminal building of the KTCT provides world-class port facilities in supporting the operation. For example, it offers highly efficient customs, immigration and quarantine facilities which are able to clear 3,000 passengers per hour. The terminal building also provides ample area for passenger check-in/waiting and baggage handling, pick-up/drop-off areas for various types of vehicles, coach parking spaces and ancillary commercial areas.

Apron facilities cover electrical and mechanical services to the apron area, including passenger gangways, electricity supply systems, on-shore water supply and sewage reception facilities, external lighting, fire fighting provisions, etc.

Regarding green features, the project has a landscaped deck of about 23,000 m², which is one of the largest public roof gardens in Hong Kong. A rain water and air-conditioning condensate water recycling system has been adopted for irrigation purpose.

1. Half of the landscaped deck has been turfed and planted with groundcovers, shrubs, palms and tress to



provide a green outdoor environment along the waterfront

2. Interior greening works in the Cruise Terminal Building

The second berth of the KCTC will be completed in 2014. After further dredging works on the seabed, the two berths can each accommodate the largest cruise ship (up to 220,000 gross tonnes) in the world.

Case Study

North Lantau Hospital, Phase 1



Overview of North Lantau Hospital, Phase 1

To cope with the development and population growth of North Lantau, the North Lantau Hospital (NLTH) Phase 1 was successfully commissioned in September 2013. NLTH is a 180-bed community hospital providing a wide range of healthcare services, including accident and emergency, primary and specialist out-patient, day centres, community, acute and extended in-patient care services to the neighborhood.

The project features extensive application of skysrise greening including roof greening and vertical greening at various levels of podium as far as practicable. The overall greening provides environmental benefits as well as enhances aesthetic quality of the hospital environment.

Resources Utilisation and Conservation



Heritage Conservation

Historic buildings are symbols of Hong Kong's cultural identity and continuity, which carry various kinds of academic and aesthetic value. There has been increasing public concern on the importance of the conservation of historic buildings in recent years.

We pay special attention to the preservation of archaeological and built heritage in Hong Kong. By joining hands with the Antiquities and Monument Office (AMO), we strive to protect, conserve and revitalise as appropriate historical and heritage sites and buildings in our projects. We believe heritage conservation can only be achieved through relevant and sustainable approaches for the benefit and enjoyment of present and future generations.

Case Study

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



Overview of the Former Police Married Quarters

The Former Police Married Quarters (PMQ) is located at the site of the former Central School built in 1889, which was the first government school in Hong Kong providing western education at the upper primary and secondary levels. Dr. Sun Yat-sen studied at the school in 1884.

The school buildings were severely damaged during the World War II. They were rebuilt as the first PMQ for married Chinese junior police officers, which were subsequently left unused since 2000.



The Former Central School



The Former Police Married Quarters

In 2009, the preservation of PMQ heritage was included as part of the "Conserving Central" initiative of the Chief Executive's 2009-10 Policy Address. The conservation and transformation of the site into a creative industries landmark officially commenced in 2012. The revitalisation works were completed in December 2013, and the PMQ started to operate in 2014.

The revitalisation of the PMQ involves upgrading two quarters blocks to meet the functional requirements and modern-day building requirements. In addition, the historical relics of the original Central School are preserved. An underground interpretation area has been established for visitors to appreciate the underground remains of the former Central School at close range.



Exterior of the building facing Staunton Street



Interior of the revitalised site

Besides, the project also involves constructing a new multi-purpose room-cum-exhibition area and new galleries and providing about 1,200 m² of landscaped open space. The revitalised site provides an integrated service platform and studios, with retail space to display products and production processes for designers and create-preneurs.

The site also caters for the uses of art galleries, design studios, art education and training centres and accommodation for overseas artists visiting Hong Kong.



Preservation of existing retaining walls together with the unique wall trees



Conservation of the granite steps (stairs) leading to the 4th Plateau together with the remaining rubble wall

Resources Utilisation and Conservation



In-house Green Management

In addition to developing quality and sustainable building design and community facilities, ArchSD is committed to green our own operation through proactive environmental management and staff engagement.

We have been certified to ISO 14001 since 1998 and has merged the Environmental Management System with the ISO 9001 Quality Management System and OHSAS 18001 Occupational, Health and Safety Management Systems into an Integrated Management System since 2007. We are taking a further step to pursue ISO 50001 Energy Management System in APB Centre for its building operation and maintenance.

We are pleased that our environmental achievements are well recognised by the community. ArchSD has won the Bronze Award of the Sectoral Awards (Public Organisations and Utilities) of the 2013 Hong Kong Awards for Environmental Excellence (HKAEE), which is one of the most prestigious environmental award schemes in Hong Kong. This is the second time that ArchSD won the same award.



Bronze Award of 2013 HKAEE Sectoral Awards (Public Organisations and Utilities)

Managing Our Carbon Footprint and Energy Consumption

We have been conducting carbon audits for our offices in the Queensway Government Office (QGO) and APB Centre in order to benchmark our carbon footprint over time and to seek further improvement opportunities.

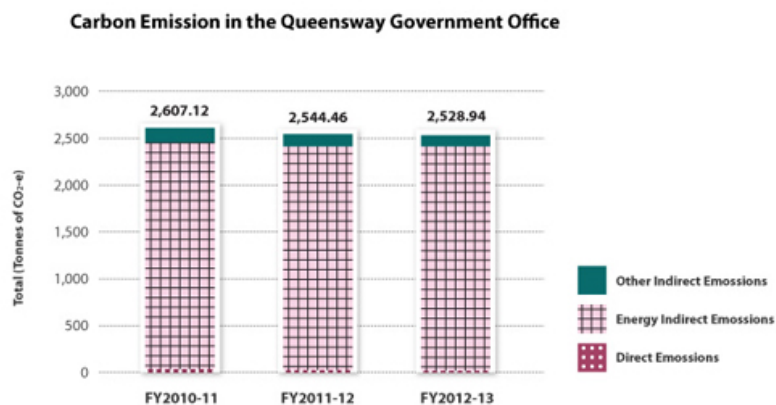
The carbon footprints of QGO and APB centre over the past three years are provided below:

Carbon Emissions in the Queensway Government Office

	FY2010-11	FY2011-12	FY2012-13
Direct Emissions (Tonnes of CO ₂ -e)	32.38	28.66	24.05
Energy Indirect Emissions (Tonnes of CO ₂ -e) ^[1]	2,417.88	2,372.86	2385.64
Other Indirect Emissions (Tonnes of CO ₂ -e) ^[2]	156.86	142.94	119.25
Total (Tonnes of CO ₂ -e) ^[2]	2607.12	2544.46	2528.94

[1] Territory-wide default emission factor was used for the calculation of emissions.

[2] The figures in FY 2010-11, FY 2011-12 & FY 2012-13 are calculated by using the actual paper consumption (A3 & A4) and waste paper collected for recycling.

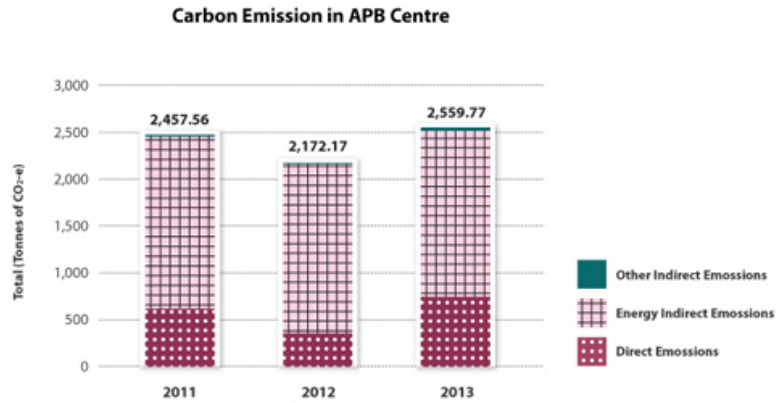


Compared to the carbon auditing result for FY 2010-11 and FY2011-12, this year we successfully achieved a 3.5% and 1.7% of carbon reduction in the QGO respectively. The reduction in carbon emissions were mainly due to the decrease in fuel consumption, fugitive emissions, water consumption and paper consumption as well as the increase in the amount of paper recycling.

Carbon Emissions in APB Centre

	2011	2012	2013
Direct Emissions (Tonnes of CO ₂ -e)	611.79	325.14	732.33
Energy Indirect Emissions (Tonnes of CO ₂ -e) ^[3]	1,825.39	1,833.11	1785.41
Other Indirect Emissions (Tonnes of CO ₂ -e)	20.38	13.93	42.04
Total (Tonnes of CO ₂ -e)	2,457.56	2,172.17	2559.77

[3] Territory-wide default emission factor was used for the calculation of emissions.



The increase in carbon emission in 2013 was mainly attributed to the increase in direct emissions. The rise in direct emissions was due to the leakage of refrigerants from the air-conditioning systems of the building, which accounted for 417.59 tonnes of carbon dioxide equivalent fugitive emissions. As APB Centre is near to the seashore, weather elements might accelerate corrosion of the coil of the variable refrigerant volume (VRV) outdoor units. We will identify preventive measures such as replacement of the VRV air-conditioning equipment and relocation of the equipment, where appropriate, to minimise leakage of refrigerants in future.

We have been practicing various low-carbon housekeeping management measures in our daily operation. Through adopting a number of energy-saving features such as de-lamping, applying timers, light zonings, intelligent power bars and energy efficient computer transformers, the electricity consumption of APB Centre and QGO ArchSD Office has been reduced by 2.6% in FY2012/13 when compared with the same period in FY 2011/12.



In 2013, our offices were awarded “Class of Excellence” in the “Energywi\$e Label” and “Carbon Reduction Certificate” of HKAEE to recognise our effort in reducing energy consumption and carbon emissions generated from our daily operation. We have implemented three measures under Energywi\$e Label including retrofit for lighting system, installation of occupancy sensors and reducing the standby power loss. By implementing the aforesaid measures, we reduced electricity consumption by over 63,000 kWh. As such, we were granted a special award to recognise our outstanding achievements in attaining significant energy reduction under the Energywi\$e Label.



Carbon Reduction Certificate of HKAEE



Presentation of Carbon Reduction Certificate of HKAEE



Presentation of certificate of Energywise Label of HKAEE



Presentation of a special award under Energywi\$e Label of HKAEE

To better manage energy performance and efficiency in relation to our daily operation, we are going to develop an ISO 50001 energy management system (EnMS) for the management and operation of APB Centre. After carrying out an extensive energy review for APB Centre, we have developed an energy baseline and appropriate energy performance indicator to benchmark our energy performance. We have also established energy objectives, targets and action plans to further improve energy performance of the significant energy uses in APB Centre. With the EnMS going to be in place, we will further reduce the annual energy consumption in APB Centre.

We continued to make best utilisation of Building Information Modeling (BIM) in our pilot projects to reduce cost, increase productivity, reduce errors and improve the quality of work products and enhance the built environment. Over the year, we have conducted more projects for the trial run of BIM. We envisage BIM is growing to be an essential tool and platform to facilitate successful collaboration and coordination during the lifetime of a building, i.e. pre-design, design, construction, operation and maintenance.

Indoor Air Quality Management and Air Pollution Control

We put heavy emphasis to maintain a good indoor air quality (IAQ) within our workplace for the benefits of our staff and visitors. IAQ measurements are conducted annually and the two ArchSD office premises have been registered as "Good Class" under the IAQwi\$e of HKAEE for 9 consecutive years. We will continue to reduce the concentration levels of respirable suspended particulates and carbon dioxide in our premises as our continuous improvement targets in 2014.

In addition to IAQ, we have implemented a number of control measures to mitigate air pollution. For instance, ozone depleting substances are not used in the air-conditioning and fire fighting systems of ArchSD's office premises. Electric vehicles were introduced to the Department in early 2013 to encourage commute with low road-side emissions. Requirement on using electric vehicles has been incorporated in some new maintenance term contracts.



Presentation of certificates of IAQwi\$e Label of HKAEE

Water Conservation and Wastewater Control

Sensor taps, dual flush cisterns and water saving devices with water efficiency labels under Water Efficiency Labelling Scheme have been installed to save precious water resources in our APB Centre. Potable water consumption in QGO was decreased by 24.9% when compared to the previous year.

A water saving guideline has also been developed and incorporated into the Department's General Circular for "Measures of Green Housekeeping".

Waste Management

To echo government's policy on waste recycling and waste sorting at source, we offer collection facilities for a wide range of items including waste paper, aluminium cans, plastics bottles, used CDs or DVDs, used rechargeable cells, used printer toner cartridges in our office premises. We also worked proactively with our IT equipment suppliers to facilitate the reuse and recycling of computers in offices.

A guideline for waste reduction has been developed and incorporated into the Department's General Circular for "Measures of Green Housekeeping". To improve our waste management efforts, we have established goals for improving our resource usage and reducing waste disposal. During the year, we achieved our goal of reducing 1% of A4 paper consumption. For both APB Centre and QGO Office, we also achieved our target of increasing the waste paper recycling by 2% as well as reducing 2% envelope usage.



Waste recycling in office

With such achievements, our offices were awarded "Class of Excellence" in the "Wastewi\$e Label" of HKAEE in 2013.



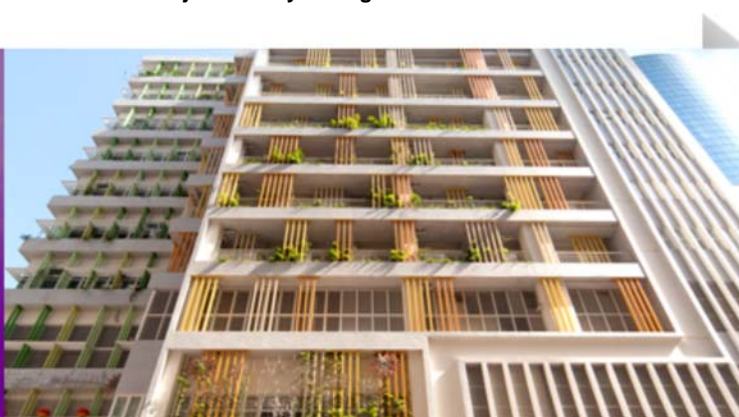
Presentation of certificate of Wastewi\$e Label of HKAEE

Environmental Training for Staff

Staff members at different levels have been invited to participate in appropriate environmental training. Up to November 2013, 183 staff members of ArchSD have obtained the BEAM Pro qualification.

A team of about 70 Green Wardens (previously known as energy warden) from various branches and divisions has been appointed since 2006 to assist in implementing and monitoring the environmental programmes of ArchSD. Green Wardens with outstanding performance would be nominated for an appreciation letter to recognise their valuable contribution.

Clients and Business Partners



Project Quality Management

We take pride in our quality services to clients on the buildings and the associated public facilities that are funded or owned by the Government, and continue to seek room for improvement. By collaborating with business partners in supply chain, we are committed to delivering quality building projects for the public with high performance standard enriched by the latest technology, while contributing to the sustainable development of the community and the environment.

Sustainable Building

As a pioneer in implementing the Building Environmental Assessment Method (BEAM) since 1996, we have been applying the BEAM or BEAM Plus assessment and certification to benchmark the environmental performance of our building projects, including energy, water and materials consumption as well as carbon footprint, against local norms. During the reporting period (FY2012/13), 4 projects received the highest rating in BEAM or BEAM Plus assessment.

BEAM Certified Buildings by the End of 2013

HK-BEAM Certification	Version 1/96R & 2/96 & 2/96R	Version 4/04 & 4/03	BEAM Plus
Excellent Rating	11	-	-
Very Good Rating	2	-	-
Platinum	-	15	1
Gold	-	8	-
Total	13	23	1

Customer Satisfaction

ArchSD carries out the Client Satisfaction Survey (CSS) on a regular basis to collect feedbacks including opinions and suggestions from clients. Such feedbacks are valuable for refining our quality on professional service. In 2013, a total of 27 surveys were conducted and the results are as follows.

2013 Client Satisfaction Survey Results for New Projects

Quality Target 1 - 100% of the completed projects to achieve Satisfied Level or above on the overall performance

- 100% achieved "Satisfied" or above
- 69% achieved "Total Satisfied" or "Very Satisfied"

Quality Target 2 - 100% compliance with: a) replying within 2 months after the survey to follow up with the observations raised during the survey; and b) informing client within 1 month after the completion of the follow-up actions

- 100% achieved with (a) on all the surveys
- 100% achieved with (b) on 5 surveys required follow up actions

Partnership with Supply Chain

To ensure our construction projects can achieve good to excellent performance on energy saving, health, safety and environmental aspects, we work closely with our staff, clients and contractors to promote and maintain the best standards and practices on energy saving, health, safety and environmental issues.

During the year, we continue to adopt 3-level site safety and environmental supervisory system for outsourced projects, and a 2-level system for in-house projects to gauge our performance.

To facilitate compliance with safety and environmental standards, we established a collection of guidance notes, lessons learnt, briefing notes, safety audit reports, etc. on a number of key topics on site safety and environmental management.

Regular inspections are also conducted by our Departmental Safety & Environmental Advisory Unit (DSEAU), focusing on a range of site safety and environmental issues. During 2013, a total of 150 inspections were carried out on site with regard to:

- i. Site cleanliness and mosquito control (48 nos. of inspection);
- ii. Working at height (29 nos. of inspection); and
- iii. Electricity safety (72 nos. of inspection).

Considerate Contractors Site Award Scheme

28 contracts have participated in Considerate Contractors Site Award Scheme 2013 jointly organised by the Development Bureau and the Hong Kong Construction Industry Council. Among these 28 contracts, 3 contracts were presented with the Considerate Contractors Site Award (CCSA) and one contract was presented with the Outstanding Environmental Management and Performance Award (OEMPA) for the year 2013.

CCSA - Gold Award

- Term Contract for Ground Investigation and Laboratory & Testing by Vibro (H.K.) Limited

CCSA - Bronze Award & OEMPA - Silver Award

- District Open Space, Sports Centre & Library in Area 74, TKO by Lanon Development Limited

CCSA - Merit Award

- Redevelopment of Kwun Tong Swimming Pool Complex and Kwun Tong Recreation Ground by Gammon Construction Limited

Green Contractor Award

ArchSD has organised an annual award scheme namely "Green Contractor Award" since 2001 to express our appreciation and offer formal recognition to contractors with sound environmental practices. All projects, including maintenance projects, with contract value over HK\$30 million which are under construction during the year are eligible to participating in the scheme. Rated based on their environmental performance, contractors achieving top scores are granted the awards. The following contractors were presented with the Green Contractor Award for the year 2013.

Gold Award

- Lanon Development Ltd, Contract No. SST329 - Construction of Library, Sports Center and District Open Space at Area 74 Tseung Kwan O



Construction of Library, Sports Center and District Open Space at Area 74 Tseung Kwan O (left: under construction, right: project completion)

Silver Award

- China State Construction Engineering (Hong Kong) Limited, Contract No. SS A503 – Fire Services Training School cum Driving Training School at Pak Shing Kok, Area 78, Tseung Kwan O

Bronze Award

- Chun Wo Construction and Engineering Company Limited, Contract No. SS A508 – Construction of Kwun Tong Promenade (Stage 2)
- Chun Wo Construction and Engineering Company Limited, Contract No. SS A506 – Construction of Open Space in Area 117, Tin Shui Wan

Term Contract Award

- Cheung Hing Construction Co., Ltd., Contract No. TCW315 - Term Contract for Design & Construction of Aqua Privies into Flushing Toilet (Phase 6 & 7)

Highlights of 2013 Green Contractor Awardees' Best Practices

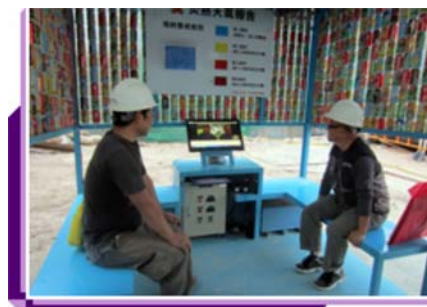
On-site Environmental Management



Frontline staff accountability



Notice board posting the green message



Voluntary Interactive Training System for environmental training and communication



Green construction talk to students

Emission Controls



Demolition using low-dust-impact saw-cutting method



Erection of Dust Screen



Tailor made acoustic panel for screening the noisy column concreting process



Collect water from air conditioner for reuse

Waste Management



Designated area for on-site waste sorting



Durable materials reused for paving



Drawers are made from recycled wooden materials



Chemical waste to be handled with care

Energy Effectiveness



Renewable energy device with automatic thermal control for worker's resting area



Fans driven by power generated from solar panel



Moveable drinking water cabinet with solar panels



Rechargeable LED lighting devices to replace traditional flood lights

Green Building Materials



Adopting Pre-cast U-channel to minimise in-situ formwork and concreting work



Make use of reusable steel moulds to replace timber formwork



Using brick work as formwork to minimise timber usage



Reusing metal materials

Site Environment



Encouraging staff to practice planting on site



Site mosquito control by specialist



Greenery and hard paving on site



Protecting trees adjacent to site

Site Safety Model Worker Award Scheme

A total of 52 contracts have participated in Site Safety Model Worker Award Scheme and 537 workers received the award.

Safety Training

During the past year, there are:

- 173 staff in total have taken or renewed their Green Card (Mandatory Basic Safety Training Course) via completing Construction Industry Council Training Academy's multi-media self-learning package;
- 22 external training courses have been conducted for a total of 528 professional/technical/site staff; and
- 4 in-house seminars comprising topics on railway protection, lesson learnt from serious accidents, hazards from falling and operation of moving plants have been conducted for a total of 211 in-house staff, contractors and consultants.

Measures to Enhance Site Safety and Environmental Practices

In addition, the following measures were also implemented during the past year to enhance the site safety and environmental performance.

Site Safety:

- a. Implementation of a permit-to-work system after energisation of permanent power supply to enhance electrical safety in construction site.
- b. Promulgation of guidance notes and/or lesson learnt including:
 - i. Guidance Notes on Safe Measures for Working in Hot Weather;
 - ii. Guidance Notes on the Use of Drip Tray;
- c. Promulgation of new or revised site safety checklists including:
 - i. Electrical safety;
 - ii. Works at height;
 - iii. Precautionary actions before the onset of wet season;
 - iv. Safe maneuvering of mobile plant;
- d. Promulgation of new or revised materials related to site safety and environmental protection including:
 - i. Sample Tool-box Talk on Mosquito Control on Construction Sites (Version 2013); and
 - ii. Training Kit for Site Safety and Environmental Supervision.

Environmental Performance:

- Organising the Green and Caring Site Commitment and Award Scheme;
- Induction Trainings and Toolbox Talks;
- Chemical Spill Training and Drill;
- Videos on environmental protection at rest area in site;
- Newsletters to residents outlining construction activities and pollution abatement measures; and
- Encouraging staff involvement in community services on environmental protection issues.

Clients and Business Partners



Social Participation and Engagement

During 2013, ArchSD provided support in the form of hosting group tours, conducting presentations, sharing at exhibitions, showing presence at events and attending media interviews, to over 100 social activities organised or co-organised by our partners from both public and private sectors.

Flower Show

Regarded as one of many locals' favourite public events, we have supported the annual Hong Kong Flower Show held by the Leisure and Culture Services Department since 1987. Inspired by our vision to enhance quality living and greening in the city, as well as echoing with the theme of the Hong Kong Flower Show 2013 ("Kaleidoscope of Spring"), ArchSD presented its latest exhibition themed of "Kaleidoscopic Cityscape" at Victoria Park in March 2013. Our display featured a conical steel surface with a mirror effect and two anamorphic wood carved silhouettes radiating from two centres decorated with a range of flowers including the theme flower "Dendrobium" to depict the waterfront cityscape of the Victoria Harbour.



ArchSD's display themed of 'Kaleidoscopic Cityscape' at Hong Kong Flower Show 2013

InnoCarnival 2013

It is organised by the Innovation and Technology Commission. The InnoCarnival 2013 features more than 700 activities to underscore 3 main themes, namely Life Science, Green Technology, as well as Robotic Engineering for members of the public to gain hands-on experience of the convenience and fun brought by innovation and technology to daily life. ArchSD has supported the event for several years. This year, we set up an exhibition booth during the event to showcase our projects and services as well as to share our experiences in green building design with the general public and the industries.



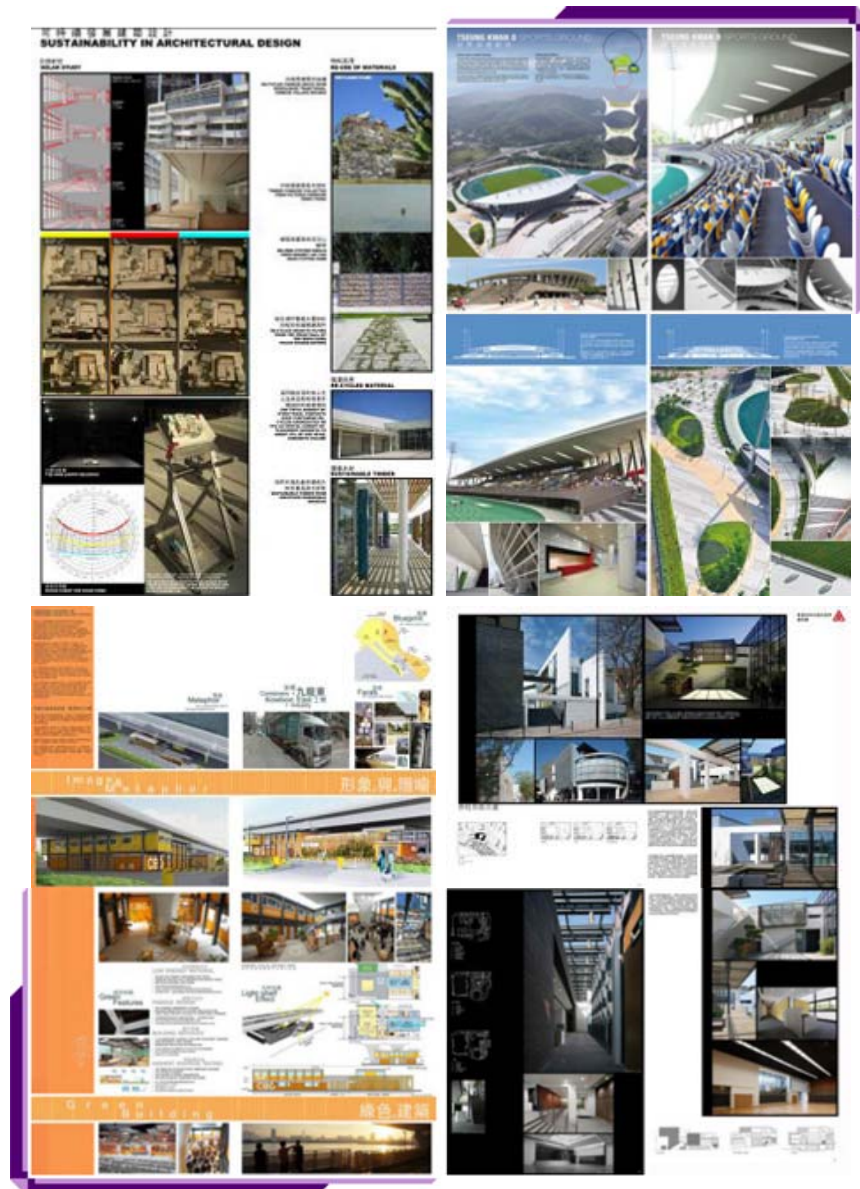
ArchSD's exhibition booth in the InnoCarnival 2013

Eco Expo Asia 2013

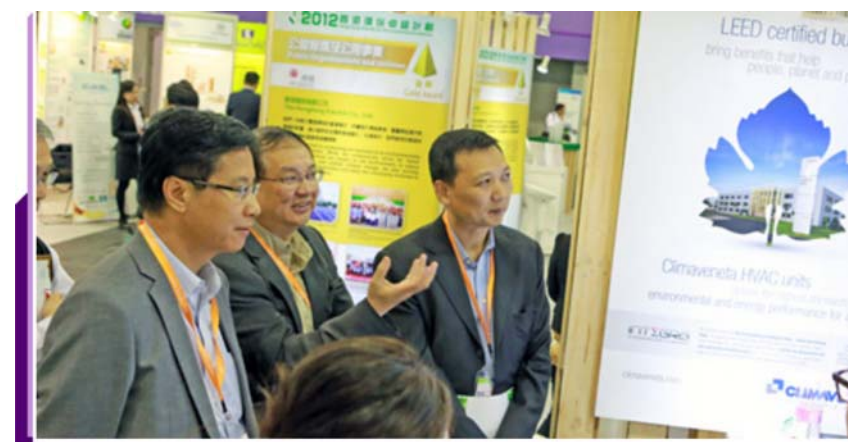
Eco Expo Asia is an annual international trade fair jointly organised by the Environment Bureau and the Hong Kong Trade Development Council to showcase the latest innovations in environmental protection industries from around the world. We had set up an exhibition booth in the Eco Expo Asia 2013 to display different aspects of our green building design and environmental achievement to both the trade and the general public.



ArchSD's management fully supported the Eco Expo Asia 2013



Panels in our booth to showcase how we incorporate sustainability elements in architectural design



Our top management visited other exhibition booths to understand the latest green building practices and requirements

HKAEE Seminar

Hong Kong Awards for Environmental Excellence (HKAEE) is one of the most prestigious environmental award schemes in Hong Kong. As the Bronze Award winner of the Sectoral Awards (Public Organisations and Utilities) of the 2013 HKAEE, we were invited to present during an experience sharing seminar to highlight our environmental practices and achievements.



Sharing at HKAEE seminar

HKQAA Symposium 2013

Being the first batch of organisations in Hong Kong published sustainability report in accordance with Global Reporting Initiative (GRI) G4 Guidelines, we were invited by the Hong Kong Quality Assurance Agency to speak in its flagship event. We shared our reporting journey as well as the benefits and challenges in adopting the latest GRI Guidelines in reporting with the participants.



Our management shared our reporting experience in HKQAA Symposium 2013

Volunteers

We encourage staff to participate in community services. ArchSD Volunteer Service Team has organised 45 activities during the year, which amounted to a total of 1,574 hours.

ArchSD Sustainability Report 2014 - Clients and Business Partners - Social Participation and Engagement

	2013	2012	2011	2010	2009
Total number of hours of staff volunteer service	1,574	1,927	1,666	1,557	2,065
Number of active Volunteer Service Team members ^{Note 1}	23	27	24	21	25
Number of staff received Commendation for voluntary service ^{Note 2}	18	19	18	18	21
Number of Volunteers	47	54	53	48	71
Number of Voluntary Projects Completed	45	47	52	67	44

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

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

One of the founders of our Volunteer Service Team has been recognised as top 30 nominees at ATV Hong Kong Loving Hearts Campaign 2013. With over 30 years of experience in building project supervision, he has actively applied his professional knowledge to serve the community. He has helped the elderly with their home maintenance works together with other members of the ArchSD Volunteer Service Team since 2004, bringing care and warmth to more than 300 residents.



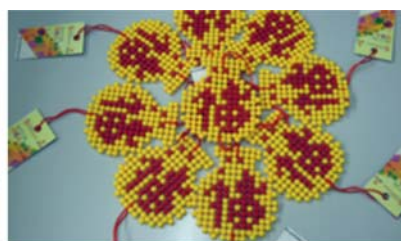
Our Volunteer Service Team



An interview with our team members on TV



Participate in activity organised by the Agency for Volunteer Service



Souvenirs for the elderly

Clients and Business Partners



Community Support

As a government department serving the public, we have devoted our skills and professionalism to society through not only participating in a variety of social engagement activities to communicate with our stakeholders but also delivering quality building and maintenance projects for the community.

Development of Fanling Joint-user Complex

Completed by ArchSD in late 2013, the building project of Fanling Joint-user Complex in Area 44 was first proposed jointly by two government departments in 2011. The project involves a total construction floor area of over 4,000 square metres to accommodate a Community Hall under the Home Affairs Department, as well as an Integrated Family Service Centre and a District Elderly Community Centre cum Integrated Home Care Services Team under the Social Welfare Department. Due to the great demand and positive results reflected through public consultation, the building project has been supported by the community for early implementation.

The design of the building has incorporated a number of energy efficient features including

- water cooled chillers with automatic demand control of water circulation system;
- fresh air supply control aided by carbon dioxide sensors;
- heat energy reclaim of exhaust air;
- light-emitting diode (LED) type exit signs;
- automatic switching of lighting and ventilation fan inside the lift; and
- T5 fluorescent tubes with electronic ballast and lighting control by occupancy sensors.

In addition, a solar hot water system, a green roof and a rain water recycling system have been installed for realising environmental benefits. Selected trees within the project boundary were preserved, while 6 more trees, 1,089 shrubs and 2,546 groundcovers added.



Fanling Joint-user Complex



Green roof

Construction of Aberdeen Fire Station-cum-Ambulance Depot

The 5-storey fire station and ambulance depot building at the Aberdeen consists of a wide range of facilities including

- a 3-bay fire services appliance room
- a 2-bay ambulance appliance room, watch rooms, offices
- a 9- storey drill tower and a drill yard
- a variety of auxiliary facilities such as officers' bedrooms, a canteen, a lecture room, an exercise room, a barrack, stores, and a disinfection room.

In addition, the unique high angle rescue training facility with the simulated cable car marks the very first installation of such a structure in Hong Kong.

Surrounded by the beautiful natural vegetation, the architectural form of the building has placed a significant focus on reserving the original trees and natural stream course in the area, while achieving a high level of operation effectiveness through energy-conscious measures. The building benefits from natural ventilation and lighting through the design of large windows and a central courtyard. Facilitated with a building management system to monitor real-time energy consumption, the energy-efficient structure is equipped with solar PV panels, a solar hot water system, a rain water recycling system, sensor controlled lighting, and other green elements. In situ greenery features green roof, planters, and trellis for climbers, which can blend into the natural landscape.



Aberdeen Fire Station-cum-Ambulance Depot



Cable car rescue training facility



Rain shelter along natural stream course



Green roof installation



Open courtyard enabling natural ventilation and lighting

Human Resources

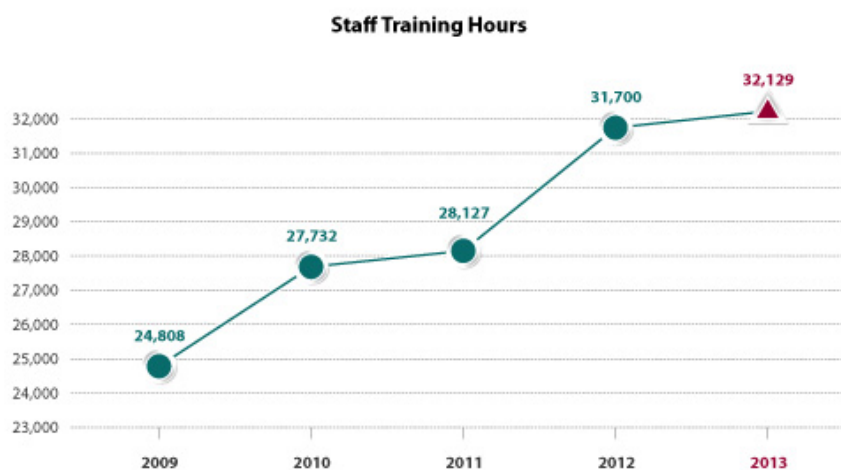


Staff Development

ArchSD believes that professionalism, devotion and participation of staff are the cornerstone for the success. Staff development is a crucial element which helps cultivate the workforce to accept new challenges and to seek room for further improvement. As such, we have put considerable amount of resources into our staff development programmes.

During the year, we organised a total of 270 training courses, covering topics related to Leadership & Management Skills, Professional & Vocational Training and Career Development. These training courses account for a total of 32,129 training hours. Each staff received average training hours of 18 hours per year.

Training Type	No. of Trainees	No. of Training Hours
Leadership & Management Skills	36	1831
Professional & Vocational Training	5,756	24,649
Career Development	882	5,649
Total	6,674	32,129



Mentorship Scheme for New Recruits

The Mentorship Scheme for New Recruits was launched in 2010. It was extended from professional grades to cover site supervisory and technical grades in 2011. The Scheme aims to provide new recruits with psychological support and personal care from more senior members to help them integrate smoothly into the team. A mentor, normally of one rank higher, is assigned for each new staff member for a period of six months to facilitate them in adapting to the new working environment. Up to 2013, 215 new recruits have been benefitted from the Scheme.



Mentorship Schemes for New Recruits

Human Resources

Staff Engagement

Staff Motivation Scheme

Staff Motivation Scheme has been conducted since 1993. It aims to achieve productivity gain as well as to improve the performance and service quality of our staff. More importantly, it fosters a sense of belonging among our staff members.

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

- Design idea for indoor greening in common area of ArchSD in Queensway Government Offices and APB Centre

The winning entry proposed to introduce low maintenance planting into office space. Light-weighted planting tubes and planter boxes were suggested to install on walls and partitions within our offices. An actual prototype was installed in the Hong Kong Flower Show in March 2014 as a showcase for the idea and the detailed design of installation is now in progress.

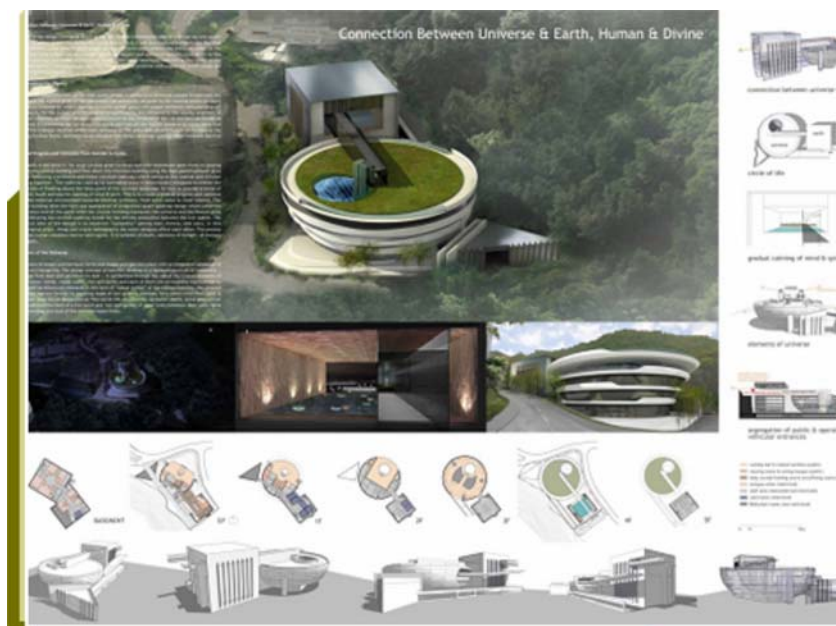
- Design Idea Generation for Construction of a New Fu Shan Public Mortuary



Winning design — 'The way we say farewell; the path we meet true life.'



First runner up — 'Peace, Longevity and Spirit'



Second runner up — 'Connection between Universe & Earth, Human & Divine'

Design competition on the Property Services Branch Intranet Front Page

To enhance the efficiency and effectiveness in using the Property Services Branch (PSB) intranet, a competition on the new design of the intranet front page was organised. It was intended to solicit innovative ideas from all staff within PSB to enhance the layout and graphic design of the front page of the intranet and to enrich users' browsing experience. The participant's idea may be used for the development or updating of PSB intranet.



Front page design and the design concept of the winner

■ Naming Competition for Quantity Surveying Branch Cost Data Bank

The Quantity Surveying Branch Cost Data Bank has been launched since October 2013 to facilitate staff to search and retrieve cost data from intranet. To enhance a sense of belonging among staff members, a naming competition for the Cost Data Bank was organised to identify an appropriate name for the system. Winners of the competition are listed below.

Award	Suggested Name
Gold Award	Search Out Simple (SOS)
Silver Award	B C Corner (Building Cost Corner)
Bronze Award	Cost Easy

■ Design Competition on "Interesting Scene on Site"

To engage our site supervisory staff, a design competition on "Interesting Scene on Site" was held to promote awareness on site activities and working environment among site staff. Staff members were invited to submit photos with description that captured interesting scenes on construction site.



Champion - 齊齊玩單槓

■ Most Impressive e-Profile

The Most Impressive e-Profile aims to recognise outstanding e-Profile of our staff or branch. There are a total of four award categories including Most Impressive e-Profile, Most Knowledgeable e-Profile, Best Sharing e-Profile and Most Enthusiastic Knowledge Hub. The winners of each award category are listed below.

Award Category	Winners
Most Impressive e-Profile	KWAN Wai-ming
Most Knowledgeable e-Profile	Li Fat-keung
Best Sharing e-Profile	CHU Ka-fu, Peter WONG Wing-hang
Most Enthusiastic Knowledge Hub	Headquarters Knowledge Hub

■ Design Competition for the Emblem of ArchSD Academy

The slogan "凝聚經驗、傳承智慧" has been adopted for the ArchSD Academy. We initiated a design competition to encourage our staff members to submit their creative ideas on the emblem of the ArchSD Academy which align with the slogan. We received over 50 entries for the competition and the first prize design has become the official emblem of the ArchSD Academy.



The winning submission of the design competition for the ArchSD Academy Emblem was adopted as the official emblem

Other staff motivation schemes organised over the year:

- ArchSD Staff Desk-Top Notice Design Competition
- ArchSD "Handy Carrying Case" Design Competition
- Design Competition for the Intranet Homepage of Building Services Branch
- Design Competition on "BIM & Me"
- Idea Proposal Competition: Creative use of mobile Apps for mobile communication devices
- Photo and Video Competition - Share with the family and friends the quality facilities developed by our Department

Staff Recreational Activities

We always encourage our staff to participate in various recreational activities to foster better team spirit and staff relations. Our staff joined the Ngong Ping Charity Walk again this year to raise funds for Hong Kong Youth Hostels Association.



ArchSD staff members teamed up themselves to join the Ngong Ping Charity Walk 2013

Over the past few years, ArchSD Dragon Boat Racing Team has actively participated in various competitions as these events can provide us with an excellent opportunity to cultivate and demonstrate our team spirit. This year, our team got the third runner-up in Shatin Dragon Boat Competition 2013.



Our Dragon Boat Racing Team spared no effort to splash their way across the water



Our staff celebrated their achievement in Shatin Dragon Boat Competition 2013

Objectives and Targets



To ensure continuous improvement in our performance, we have established objectives and targets addressing different sustainability issues including environmental, social and project quality related to our operations. The targets and corresponding achievements are reviewed every year. Details of our achievements in 2013, and the targets for 2014 are tabulated below.

On Environmental issues

Long Term Objectives	Targets for 2013	Achievements	Target Compliances	Targets for 2014
Reduce water consumption	All water taps in new projects shall be Grade 2 or above under the Voluntary Water Efficiency Labelling Scheme (WELS) of Water Supplies Department (WSD) unless there are genuine operational or technical needs for not doing so (such as water taps for cleansing clinical and laboratory use)	All water taps in the 9 new projects are Grade 2 or above under WELS of WSD except due to genuine operational or technical needs	Complied	2013 targets to be maintained in 2014
	In not less than 80% of new projects, either rainwater/ condensate water/ grey water recycling system should be installed	100% (11 out of 11) of projects complied with the target	Complied	In not less than 80% of new projects, either rainwater/ grey water recycling system should be installed. 60% of these projects to achieve a reduction of 5% or more in the annual consumption of fresh water
Reduce energy consumption	To achieve OTTV standard of less than 23 W/m ² for 100% of all new projects with air conditioning installations, and 70% of these projects to achieve an even lower OTTV of not more than 18 W/m ²	100% (7 out of 7) of projects with OTTV less than 23 W/m ² , and 86% (6 out of 7) of projects with OTTV less than 18 W/m ²	Complied	2013 targets to be maintained in 2014

ArchSD Sustainability Report 2014 - Objectives and Targets

Improve visual and air quality of our city	All new projects with Technical Feasibility Statement (TFS) approved before 18/6/2012 shall provide minimum percentage of site coverage of greenery according to the site area unless there are genuine operational or technical needs for not doing so.	100% (8 out of 8) of new projects where site area is $\geq 1,000\text{m}^2$ but less than $20,000\text{m}^2$ have achieved over 20% greenery coverage. Apart from the above, one project (76LC - Redevelopment of Tai Lam Centre for Women) has been exempted from providing the minimum % of greenery coverage	Complied	It becomes a benchmark requirement in our projects.
Promote a healthy and sustainable development	60% of the new in-house and outsourced projects with Capital Project Estimate (CPE) / Approved Project Estimate (APE) greater than \$30 million shall use pulverised-fly ash (PFA) concrete	71% (5 out of 7) of the new projects have used PFA concrete	Complied	70% of the new in-house and outsourced projects with CPE/APE greater than \$30 million shall use PFA concrete
Improve green housekeeping management	To reduce A4 paper consumption by 7.5% as compared with the base year 2005	Actual consumption of A4 paper in 2013 was 18,346 reams. With data normalised, there were 39.2% and 2.9% saving when compared with 2005 and 2012 respectively	Complied	2013 targets to be maintained in 2014

ArchSD Sustainability Report 2014 - Objectives and Targets

	To reduce electricity consumption (exclude A/C system) by 5% at QGO as compared with the base year 2007	Actual consumption in 2013 was 1,046,478 kWh. With data normalised [1], the consumption was 974,530 kWh. There was 22.4% and 6.7% saving when compared with 2007 and 2012 respectively	Complied	To reduce electricity consumption (exclude A/C system) by 6% at QGO as compared with the base year 2007
	To reduce electricity consumption (kWh/m ²) by 5% at APB Centre as compared with the base year 2007	Actual electricity consumption in 2013 was 2,550,585 kWh. With data normalised [1], the consumption was 1,827,005 kWh. There were 19.6% and 2.9% saving when compared with 2007 and 2012 respectively	Complied	To reduce electricity consumption (exclude A/C system) by 6% at APB Centre as compared with the base year 2007

[1] The electricity consumption was normalised with the consideration of number of server rooms and number of staff.

On Project Quality issues

Long Term Objectives	Targets for 2013	Achievements	Target Compliances	Targets for 2014
Improve the quality of our services and project delivery	To monitor the expenditure on Capital Works Programme (CWP) 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 \$9,869.6 million. As at 31/12/2013, the outturn forecast is \$9,969.6 million, which represents an over-spending of \$100 million (1.0%) when compared to the Original Estimate	Complied	2013 targets to be maintained in 2014
	100% of the surveyed projects to achieve Satisfied Level or above on the overall performance in Client Satisfaction Survey	100% (26 out of 26 projects) of the surveyed projects have achieved Satisfied Level or above on the overall performance	Complied	2013 targets to be maintained in 2014

ArchSD Sustainability Report 2014 - Objectives and Targets

	To update and review not less than 2 nos. of Equipment Schedule / Proforma Specification for building service installations	"Proforma Particular Specification for Air Conditioning, Refrigeration, Ventilation and Central Monitoring & Control System Installation" and "Proforma Particular Specification for Lift, Escalators and Passenger Conveyor" were reviewed accordingly.	Complied	To update, review and issue corrigendum for BS General Specifications (2012 Edition)
	To commence not less than 90% of new Public Works Programme (PWP) projects scheduled in 2013 in accordance with the commencement dates committed in the 2012 Resource Allocation Exercise (RAE)	76.5% (13 out of 17) of new projects (excluding B- projects and purchase items) commenced works in 2013	Not complied	To commence not less than 90% of new Public Works Programme (PWP) projects scheduled in 2014 in accordance with the commencement dates committed in the 2013 RAE

On Social issues

Long Term Objectives	Targets for 2013	Achievements	Target Compliances	Targets for 2014
Minimising accident rate for ArchSD staff	Accident rate for ArchSD staff should be not more than 2 occupational injuries per 1,000 staff per year	There was 1 reportable accident of ArchSD staff in 2013, equivalent to an accident rate of 1.12 reportable accidents per 1,000 staff per year.	Complied	2013 targets to be maintained in 2014
Minimising 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	0.27 reportable accidents per 100,000 man-hours worked	Complied	2013 targets to be maintained in 2014

ArchSD Sustainability Report 2014 - Objectives and Targets

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 organised	4 in-house workshops / seminars were conducted	Complied	2013 targets to be maintained in 2014
Promoting the awareness on safety and health amongst construction workers	At least 40% of ArchSD contracts would participate in the ArchSD Site Safety Model Worker Award Scheme	Up to 30/11/2013, 67% (30 out of 45) of ArchSD contracts participated in Safety Model Worker Award Scheme	Complied	2013 targets to be maintained in 2014
Promoting the awareness on safety and health amongst contractors	At least 45% of ArchSD eligible new works contracts and 35% of eligible maintenance term contracts would participate in Development Bureau Considerate Contractors Site Award Scheme (CCSAS)	88% (15 out of 17) of eligible ArchSD new works contracts and 52% (13 out of 25) of eligible maintenance term contracts participated in CCSAS 2013	Complied	At least 50% of ArchSD eligible new works contracts and 35% of eligible maintenance term contracts would participate in Development Bureau Considerate Contractors Site Award Scheme (CCSAS).
Strengthening health and safety knowledge for project staff with external training	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	22 external training courses were conducted with 528 professionals, technical staff and site staff	Complied	2013 targets to be maintained in 2014



Data Summary



Environmental Performance

Resources Usage - Energy

	Units	2013	2012	2011	2010	2009
Electricity consumed (QGO and APB Centre) [1]	kWh/m ²	218	234	234	236	238
CO ₂ emission equivalent to electricity consumption (QGO and APB Centre) [2]	Tonnes CO ₂ -e	3,808	3,967	3,967	4,001	4,027
Energy saved due to energy efficient installations [3]	GWh	6.90	9.58 [4]	17.26 [4]	16.66 [4]	1.35
Equivalent monetary savings	HK\$ million	6.90	9.58	17.26	16.66	1.35
Avoided CO ₂ emissions [3]	in ,000 Tonnes CO ₂ -e	4.83	6.71	12.08	11.66	0.95

[1] Offices in QGO and APB Centre represent a majority of total ArchSD office space. Total ArchSD office area is assumed to be 24,955.2 m² (10,844.4m² for APB and 14,110.8 m² for QGO 31/F& 33/F-41/F). The percentage of electricity consumption of the whole premises for ArchSD office at APB & QGO is assumed to be 100% and 20% respectively.

[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. ArchSD staff advises which project will be completed for the concerned year and then the energy template to be completed by the corresponding project officer. Total energy saved due to energy efficient installations can be summed up.

[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. In 2012, the New CAD Headquarters and North Lantau Hospital Phase 1 contributed to most of the energy saving.

Resource Usage - Fuel

	Units	2013	2012	2011	2010	2009
Fuel consumption by ArchSD's pool cars	Litre	13,142	13,998	13,263	17,723	17,236.2
GHG emission equivalent to fuel consumption by ArchSD pool cars [5]	Tonnes CO ₂ -e	35.6	37.9	35.9	48.0	46.7

[5] GHG emission factors for mobile combustion are based on the Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for buildings (Commercial, Residential or Institutional Purpose) in Hong Kong issued by the Environmental Protection Department, HKSAR in February 2010.

Resource Usage - Office Materials

	Units	2013	2012	2011	2010	2009
A4 paper consumption	Reams	18,346	18,330 [6]	19,240	20,021	20,536
A3 paper consumption	Reams	1,053	934	953	1,068	1,203
Envelop consumption	Reams	43,294	53,818 [6]	54,541	58,470	56,538

[6] The data of A4 paper consumption and envelop consumption in 2012 have been revised due to rounding.

[G4-22]

Waste Management

	Units	2013	2012	2011	2010	2009
Construction & demolition materials						
C&D waste disposed of to landfills	Tonnes	24,125	46,261	66,541	69,716	56,529
C&D materials disposed of to public fill areas	Tonnes	644,728	556,560	681,987	894,710	930,831
Recyclable waste collected at APB Centre [7]						
Waste paper	kg	19,335	19,375	23,450	26,630	18,164
Aluminium	No.	5,900	8,407	11,000	13,440	4,354
Plastic bottles	No.	3,385	3,690	4,748	6,805	1,467

[7] APB Centre was committed to the EPD's Source Separation Programme of Commercial and Industrial Waste for classifying daily recyclable wastes including waste paper, aluminium cans & plastic bottles.

Environmental Convictions of Contractors

	Units	2013	2012	2011	2010	2009
Convictions per 100,000 man-hours	ArchSD sites (HK sites)	0.15 (0.618)	0.336 (0.606)	0.159 (0.499)	0.164 (0.437)	0.138 (0.909)
Monetary value of significant fines	HK\$	18,500	61,000	51,000	39,000	35,500

Environmental Expenditure

	Units	2013	2012	2011	2010	2009
Resources devoted to environmental works	HK\$ million	892.16	1,101.09	1,117.78	951.76	864.7
Percentage of annual expenditure	%	12.12	11.7%	9.1%	7.9%	10.0%

Social Performance

Staff

	Units	2013	2012	2011	2010	2009
Staff establishment (As at fiscal year-end)	No.	1,795	1,792	1,781	1,780	1,776

Staff Establishment Breakdown

By Post		
Directorate	%	2
Professional	%	23
General Staff	%	21
Site Staff	%	32
Technical	%	22
By Employment Type		
Full-time	%	100
By Employment Contract		
Permanent (male)	%	67
Permanent (female)	%	27
Contract (male)	%	4
Contract (female)	%	2
By Age (As at fiscal year-end)		
Age under 30	%	4.7
Age 30-49	%	47.3
Age 50 or above	%	48
By Ethnicity		
Local	%	100
Non-local	%	0
By Gender		
Male	%	71
Female	%	29

Staff Training

	Units	2013	2012	2011	2010	2009
No. of training courses (including internal and external seminars/ workshops/ training courses/ visits)	No.	270	240	205	160	148
Numbers of trainees	No.	6,674	4,902	4,784	3,836	4,460

Training Hours Breakdown [8]

Type of Staff	Total Training Hours Received (hours)	Training Hours Per Staff (hours)
Directorate Staff	1,587	44
Professional Grade Staff	18,233	45
Technical, Site Supervisory and General Grade Staff	12,308	9

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

Anti corruption Training

Type of Staff	Number of Staff Participated Anti-corruption Training	Percentage of Staff Participated Anti-corruption Training
Directorate Staff	0	0%
Professional Grade Staff	15	4%
Technical, Site Supervisory and General Grade Staff	184	14%

Staff Turnover

	Male	Female
Age under 30	0.1%(2)	0.2%(3)
Age 30-50	1.1%(19)	0.4%(7)
Age 51-55	0.4%(7)	0.1%(1)
Age 56-60	1.8%(32)	0.7%(12)

New Employee Hires

	Male	Female
Age under 30	1.3%(23)	0.7%(13)
Age 30-50	2.2%(38)	0.9%(16)
Age 51-55	0%(0)	0%(0)
Age 56-60	0%(0)	0%(0)

Staff Injury

	Units	2013	2012	2011	2010	2009
Staff injury cases [9]	No.	1	4	7	4	5
Staff sick leave granted for staff injury cases	Days	7	119.5	109	78	85

[9] 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.

Contractor s Accident Rate

	Units	2013	2012	2011	2010	2009
No. of fatalities	ArchSD	0	4 (Male: 4, Female: 0)	2 (Male: 2, Female: 0)	0	2
Fatal accident rate per 100,000 man-hours [10]	ArchSD (HK Construction Industry)	0 (0.008)	0.013 (0.009)	0.0052 (0.010)	0 (0.005)	0.0072 (0.011)
No. of non-fatal accidents	ArchSD	66 [11]	114	191	117	100
Non-fatal accident rate per 100,000 man-hours [10]	ArchSD (HK Construction Industry)	0.26 (1.13)	0.36 (1.23)	0.50 (1.38)	0.33 (1.45)	0.36 (1.52)

[10] 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.

[11] Data extracted from PWP Construction Accident Statistics System of DEVB as at August 2014.

Report Verification



Scope and Objective

Hong Kong Quality Assurance Agency ('HKQAA') was commissioned by the Architectural Services Department (ArchSD) of the Government of the Hong Kong Special Administrative Region to provide independent assurance of the ArchSD Sustainability Report 2014 ('the Report') which was prepared in accordance with the Core option of the G4 Sustainability Reporting Guidelines issued by the Global Reporting Initiative (GRI). The Report states ArchSD's major activities and achievements on sustainable development from 1 January to 31 December 2013. Besides, the financial data are reported for the financial year ended 31 March 2014.

Assurance Methodology

The assurance process was undertaken with reference to the AA1000 Assurance Standard ('AA1000AS') aiming to assessing the Report's adherence to the principles of Inclusivity, Materiality, and Responsiveness. In addition, reliability of the selected sustainability information and data was verified against the International Standard on Assurance Engagement 3000 ('ISAE 3000') – "Assurance Engagement Other Than Audits or Reviews of Historical Financial Information" for a reasonable level of assurance.

The assurance process consisted of:

- Identification and classification of statements, figures, charts and data sets to be verified.
- Verification of the selected representative sample of data and information consolidated in the Report, reviewing relevant documentation, interviewing responsible personnel with accountability for preparing the Report and crosschecking the raw data and evidence of the selected samples that support the reporting contents in order to reduce the risk of error or omission to an acceptably low level.
- Provision of recommendations to ArchSD for improvement of future reporting.

Independence

HKQAA was not involved in collecting and calculating the reporting data, or in the development of the Report. HKQAA's activities are independent from ArchSD.

Conclusion

The information presented in the Report provided a material and complete representation of the performance of ArchSD in the context of sustainable development. The verification team confirmed that the Report was prepared based on factual statements and that the data contained within the Report are accurate. It is a fair and honest representation of initiatives, targets, progress and performance on ArchSD's sustainable development achievements.

Overall speaking, the Report provides an adequate and fair account of ArchSD's sustainability performance on material aspects and demonstrates satisfactory disclosure of the Core options of the GRI's G4 Sustainability Reporting Guidelines.

Signed on behalf of HKQAA

Jorine Tam
Assistant Director, Strategic Business
17 September 2014



GRI Content Index

This report was prepared in accordance with the Core requirements of Global Reporting Initiative (GRI) G4 Guidelines. The General Standard Disclosures and material Specific Standard Disclosures are presented below with either linkage to the reported section(s) or direct answer.

General Standard Disclosures		
General Standard Disclosures	Cross-reference/Comments	External Assurance
Strategy and Analysis		
G4-1 Statement from the most senior decision-maker of the organisation	Message from the Director	✓
Organisational Profile		
G4-3 Name of the organisation	About Us	✓
G4-4 Primary brands, products and services	About Us	✓
G4-5 Location of organisation's headquarters	About Us	✓
G4-6 Number of countries where the organisation operates	Hong Kong only	✓
G4-7 Nature of ownership and legal form	Part of the Hong Kong SAR Government	✓
G4-8 Markets served	Strategy and Management	✓
G4-9 Scale of the organisation	About Us Data Summary	✓
G4-10 Number of Employees	Data Summary	✓
G4-11 Percentage of employees covered by collective bargaining agreements	None. There is no collective bargaining legislation exists in Hong Kong but 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.	✓
G4-12 Organisation's supply chain	Project Quality Management	✓
G4-13 Significant changes during the reporting period regarding size, structure, ownership or organisation's supply chain	About This Report	✓
G4-14 Explanation of whether and how the precautionary approach or principle is addressed by the organisation	Strategy and Management	✓
G4-15 Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organisation subscribes or endorses	About This Report Strategy and Management	✓

ArchSD Sustainability Report 2014 - GRI Content Index

G4-16 Memberships in associations and/or national/international advocacy organisations	Strategy and Management	✓
Identified Material Aspects and Boundary		
G4-17 Entities included in the organisation's consolidated financial statements or equivalent documents	About Us	✓ Report Verification
G4-18 Process for defining report content and the aspect boundaries	About This Report Main Focus Areas	✓ Report Verification
G4-19 Material aspects identified in the process for defining report content	Main Focus Areas	✓ Report Verification
G4-20 Aspect boundary within the organisation for each material aspect	Main Focus Areas	✓ Report Verification
G4-21 Aspect boundary outside the organisation for each material aspect	Main Focus Areas	✓ Report Verification
G4-22 Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	Data Summary	✓ Report Verification
G4-23 Significant changes from previous reporting periods in the scope and boundary	About This Report	✓ Report Verification
Stakeholder Engagement		
G4-24 List of stakeholder groups engaged by the organisation	Main Focus Areas Engagement Approach	✓ Report Verification
G4-25 Basis for identification and selection of stakeholders with whom to engage	Main Focus Areas	✓ Report Verification
G4-26 Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	Engagement Approach We have regular engagement with members of each group: (i) annual appraisals for staff; (ii) quarterly performance reports for consultants and contractors; and (iii) Client Satisfaction Survey for clients.	✓ Report Verification
G4-27 Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting	Engagement Approach	✓ Report Verification
Report Profile		
G4-28 Reporting period	About This Report	✓
G4-29 Date of most recent previous report	About This Report	✓
G4-30 Reporting cycle	About This Report	✓
G4-31 Contact point for questions regarding the report or its contents	Feedback	✓
G4-32 GRI Content Index, the 'in accordance' option the organisation has chosen and the reference to the External Assurance Report if any	GRI Content Index	✓
G4-33 Policy and current practice with regard to seeking external assurance for the report	About This Report Report Verification	✓

Governance		
G4-34 Governance structure of the organisation	About Us Strategy and Management	✓
Ethics and Integrity		
G4-56 Organisation's values, principles, standards and norms of behaviour	Strategy and Management	✓

Specific Standard Disclosures			
Material Aspects	DMA and Indicators	Cross-reference/Comments	External Assurance
Procurement Practices	DMA	In-house Green Management Project Quality Management	✓
Procurement Practices	G4 EC9 Proportion of spending on local suppliers at significant locations of operation	In 2013, all our purchases were from local suppliers (defined as companies registered in Hong Kong).	✓
Energy	DMA	Low Carbon Building Design Objectives and Targets	✓
Energy	G4-EN3 Energy consumption within the organisation	Data Summary	✓
Energy	G4-EN6 Reduction of energy consumption	Data Summary	✓
Emissions	DMA	Low Carbon Building Design In-house Green Management Objectives and Targets	✓
Emissions	G4-EN15 Direct greenhouse gas (GHG) emission (Scope 1)	In-house Green Management	✓
Emissions	G4-EN16 Energy indirect GHG emissions (Scope 2)	In-house Green Management	✓
Emissions	G4-EN17 Other indirect GHG emissions (Scope 3)	In-house Green Management	✓
Emissions	G4-EN19 Reduction of GHG emissions	Data Summary	✓
Effluents and Waste	DMA	Low Carbon Building Design In-house Green Management Objectives and Targets	✓
Effluents and Waste	G4-EN23 Total weight of waste by type and disposal method	Data Summary	✓
Compliance	DMA	Strategy and Management	✓

ArchSD Sustainability Report 2014 - GRI Content Index

Compliance	G4-EN29 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Data Summary	✓
Supplier Environmental Assessment	DMA	Project Quality Management	✓
Supplier Environmental Assessment	G4-EN32 Percentage of new suppliers that were screened using environmental criteria	ArchSD only appoints contractors and suppliers from lists of relevant categories, which are maintained by the Government of HKSAR. The listed contractors and suppliers have to fulfill certain requirements, which are mainly related to the establishment of their companies, set out by the administrators of these lists. Contractors and suppliers are also required to achieve ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 certifications in order to be included in these lists.	✓
Employment	DMA	Staff Development Staff Engagement	✓
Employment	G4-LA1 Total number and rates of new employee hires and employee turnover by age group, gender and region	Data Summary	✓
Occupational Health and Safety	DMA	Project Quality Management Objectives and Targets	✓
Occupational Health and Safety	G4-LA6 Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Data Summary	✓
Training and Education	DMA	Staff Development	✓
Training and Education	G4-LA9 Average hours of training per year per employee by gender, and by employee category	Data Summary	✓
Training and Education	G4-LA11 Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	All staff receive regular performance appraisal.	✓
Non-discrimination	DMA	Strategy and Management	✓
Non-discrimination	G4-HR3 Total number of incidents of discrimination and corrective actions taken	No incident of discrimination was reported in 2013.	✓
Anti-corruption	DMA	Strategy and Management	✓
Anti-corruption	G4-SO4 Communication and training on anti-corruption policies and procedures	Data Summary	✓

ArchSD Sustainability Report 2014 - GRI Content Index

Anti-corruption	G4-SO5 Confirmed incidents of corruption and actions taken	Strategy and Management	✓
Grievance Mechanisms of Impacts on Society	DMA	Project Quality Management	✓
Grievance Mechanisms of Impacts on Society	G4-SO11 Number of grievance about impacts on society filed, addressed, and resolved through formal grievance mechanisms	The number of public and media complaints filed, addressed, and resolved in 2013 was 361.	✓
Product and Service Labelling	DMA	Low Carbon Building Design ArchSD's capital projects are subjected to assessment with Building Environmental Assessment Method (BEAM Plus).	✓
Product and Service Labelling	G4-PR5 Results of surveys measuring customer satisfaction	Project Quality Management Objectives and Targets	✓



Glossary



Building Energy Codes (BEC)	Building Energy Codes is a suite of guidance that covers five aspects of installation practices, including lighting, air conditioning, electrical and lift & escalator installations. It stipulates the minimum energy performance standards (MEPS) of these installations practices.
Building Environmental Assessment Method (BEAM)	Quote from BEAM Society, "A means by which to benchmark and improve performance in the planning, design, construction, commissioning, operation and management of buildings." BEAM Plus is a comprehensive environmental assessment scheme recognised by the Hong Kong Green Building Council (HKGBC). Issued in 2012, BEAM Plus Version 1.2 for New Buildings and Existing Buildings is an enhanced from the earlier version in providing Passive Design as an alternative method for assessment."
Carbon Audit	A systematic and scientific approach to account for the greenhouse gas emissions arising from the operations of the buildings.
Carbon Footprint	The carbon footprint is the measurement of all greenhouse gases an individual produces in daily lives through burning fossil fuels for electricity, heating, transportation, etc, usually in the unit of tonnes (or kg) of carbon dioxide equivalent.
Considerate Contractors Site Award	It is an award to promote a considerate attitude and good site safety, health and environmental practices for both Public Works and non-Public Works sites.
Designated Projects	Designated projects are projects or proposals that may have an adverse impact on the environment. They are covered by the Environmental Impact Assessment Ordinance in which they are categorised into two schedules: Schedule 2 and 3. (Details please refer to A Guide to the Environmental Impact Assessment Ordinance .)
Environmental Impact Assessment (EIA)	A process to assess the potential environmental impacts and environmental benefits (in quantitative and qualitative terms) of a project in the early planning stages as well as identify any alternatives or mitigation measures.
Environmental Impact Assessment Ordinance (EIAO)	An Ordinance to assess the impact on the environment of certain projects and proposals, for protecting the environment and for incidental matters through the application of the EIA process and the environmental permit system.
Extranet	The ArchSD 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.

ArchSD Sustainability Report 2014 - Glossary

Global Reporting Initiative (GRI)	A multi-stakeholder-governed institution which provides a framework for sustainability reporting, which is commonly used all over the world. This framework sets out the principles and indicators that entities can use to measure and report their economic, social and environmental performance. More than 5,000 organisations, including the owners of many of the world's leading brands, have declared their adoption of the Guidelines which have been prepared in accordance with the GRI. GRI launched its fourth generation of Sustainability Reporting Guidelines (G4) in May 2013. G4 emphasises on report materiality that encourages reporting organisations to provide only information that is critical to their business and stakeholders.
Green Building Awards (GBA)	Jointly organised 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.
Green Contractor Award	Green Contractor Award is organised by ArchSD every year to appraise contractors that have excellent performance in construction sites through demonstrating their environmental and social conscious commitments with the implementation of effective green measures.
Greenhouse Gases	Greenhouse gases refer to those which are able to absorb and hold heat in the atmosphere, either occurring naturally (e.g. carbon dioxide, methane, ozone and water vapour) or exclusively resulting from human activities (e.g. hydrofluorocarbons).
Grey Water	Grey water is the wastewater generated from domestic activities such as hand washing and cloth laundering. It is suitable for reuse as landscape irrigation or even toilet flushing.
Hong Kong Energy Efficiency Registration Scheme for Buildings	This scheme was launched by the Electrical & Mechanical Services Department for promoting the application of Building Energy Codes since October 1998. It provides an official platform for interested parties to register their buildings which comply with BECs.
Important Tree	Important Trees are 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 m (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.
ISO 50001 Energy Management System	ISO 50001 is an international standard first published by International Organization for Standardization (ISO) on 15 June 2011, which specifies requirements for the establishment of an energy management system. Adopting ISO 50001 Energy Management System enables organisations to improve their energy performance, which generally includes energy use, energy efficiency and energy consumption, in a systematic approach. Similar to other well-known ISO standards such as ISO 9001 and ISO 14001, ISO 50001 is also based on the PLAN-DO-CHECK-ACT approach to assist organisations in achieving continual improvement.

ArchSD Sustainability Report 2014 - Glossary

Knowledge Management (KM) Portal	KM portal is to manage 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), branches/divisions KM hubs and knowledge community workspace.
Leadership in Energy and Environmental Design (LEED)	The Leadership in Energy and Environmental Design (LEED) Green Building Rating System, developed by the U.S. Green Building Council (USGBC), provides a suite of standards for environmentally sustainable construction.
Microclimate Study	Microclimate study acts as an environmental performance factor of the site providing environmental characteristic of the site for the purpose of creating a sustainable environment which provides the greater comfort for the development.
Overall Thermal Transfer Value (OTTV)	A measure of the energy transferred through the envelope of a building and has a direct correlation with energy consumption.
Preliminary Environmental Review (PER)	<p>It is a study that determines the current environmental conditions of the project site through inspecting the potential environmental impacts associated with the project and recommending corresponding mitigation measures.</p> <p>All Government Projects are required to carry out PER at the early stage of the projects (Feasibility Study Stage).</p>
Practice Note for Authorized Persons and Registered Structural Engineers (PNAP)	<u>Practice Note for Authorized Persons and Registered Structural Engineers (PNAP)</u> have been issued since 1974. The Building Authority issues practice notes to authorised 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.
Program on Source Separation of Commercial and Industrial Waste	It has been launched by EPD since 2007. It aims to encourage the property management sector to undertake initiative to set up and implement suitable mechanism to separate and recover waste within commercial & industrial (C&I) premises. This will facilitate the tenants / occupants to practice waste separation and recycling in workplace with ease.
Post Occupancy Evaluation (POE)	Post Occupancy Evaluation is a management tool tailor-made to evaluate the performance, assess the effectiveness of sophisticated building services systems after client occupancy, and to address clients' concerns on the functional requirements and energy consumption of their recently completed building projects.
Quality Building Awards (QBA)	QBA is jointly launched by nine professional organisations 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.
Register of Old and Valuable Trees	The Leisure and Cultural Services Department, Agriculture, Fisheries and Conservation Department and Housing Department 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.
Stakeholder	It refers to individuals, groups or organisations which experience directly or indirectly the actions and policies implemented by an organisation.
Sustainable Development	Sustainable development is the development approach which meets the desires of the present and preserves the environment and natural resource for the future generations.

ArchSD Sustainability Report 2014 - Glossary

Testing and Commissioning (T&C)	Testing and Commissioning (T&C) is generally regarded as testing of equipment and systems separately, in order to ensure that they are safe and meet the design requirements.
Resource Allocation Exercise (RAE)	It is a practice to schedule activities and assign available resources in an economic way, so that predetermined constraints of resource availability and/or project time are not exceeded. Each HKSAR Government Department has to earmark an amount of Recurrent/Capital spending in October that to be included in the budget of the following year.
Universal Accessibility	The concept of Universal Design forms the backbone of Universal Accessibility. It is a design approach to a universally accessible standard in which all products, environments and communications will allow for the widest spectrum of our community regardless of diversity, age and ability.
U-value	The rate of heat flow through a material. It is measured as the amount of heat flow through 1m ² of the material for every degree difference in temperature each second.
Valuable Tree	Refers to the "valuable trees" in the Register of Old and Valuable Trees which are distinguished in the following categories: Trees of large size; Trees of precious or rare species; Trees of particularly old age (e.g. aged 100 or above); Trees of cultural, historical or memorable significance; and Trees of outstanding form.
Vertical Greening	Vertical greening is the application of a vegetative cover to a wall/vertical structure. It serves as the thermal insulation to building to moderate temperature and relative humidity to the site. It also helps in filtrating dust pollution, reducing noise pollution and enhancing the biological diversity of the building and its surroundings.



Feedback



Sustainability Report 2014

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" value="Enter comments"/>
Content is balanced and reliable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text" value="Enter comments"/>
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" value="Enter comments"/>
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" value="Enter comments"/>

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" value="Enter comments"/>

3. In accordance with 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" value="Enter comments"/>

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

ArchSD Sustainability Report 2014 - Feedback

5. Other comments:

6. Which of the following best describes you?

- ☐ Client of ArchSD
- ☐ Government Department
- ☐ Consultant / Contractor / Supplier / Construction Industry
- ☐ Architect / Engineer / Landscape Architect / Surveyor
- ☐ 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.

The information will be used in strictly confidential and for communication and statistical purpose only. All personal data are handled in accordance with the provision of the Personal Data (Privacy) Ordinance and our [Privacy Policy Statement](#).