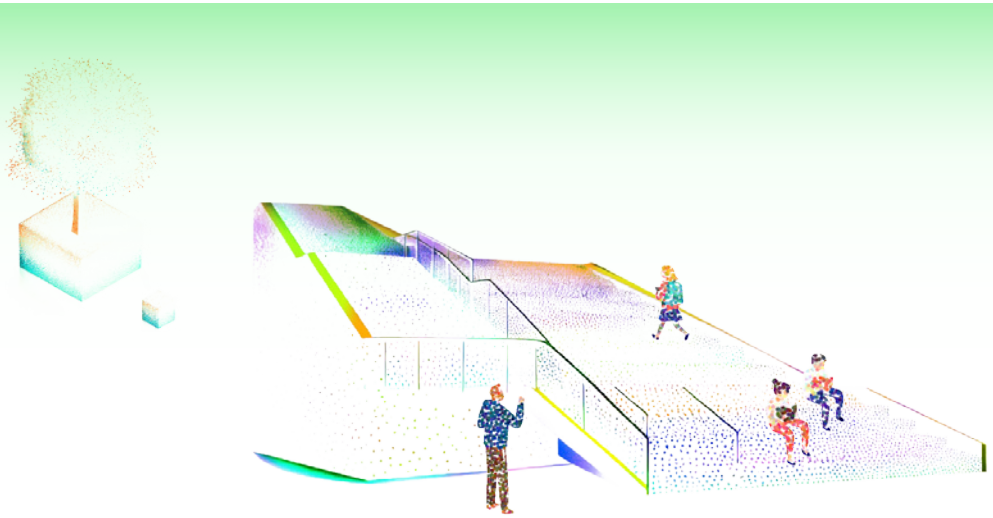
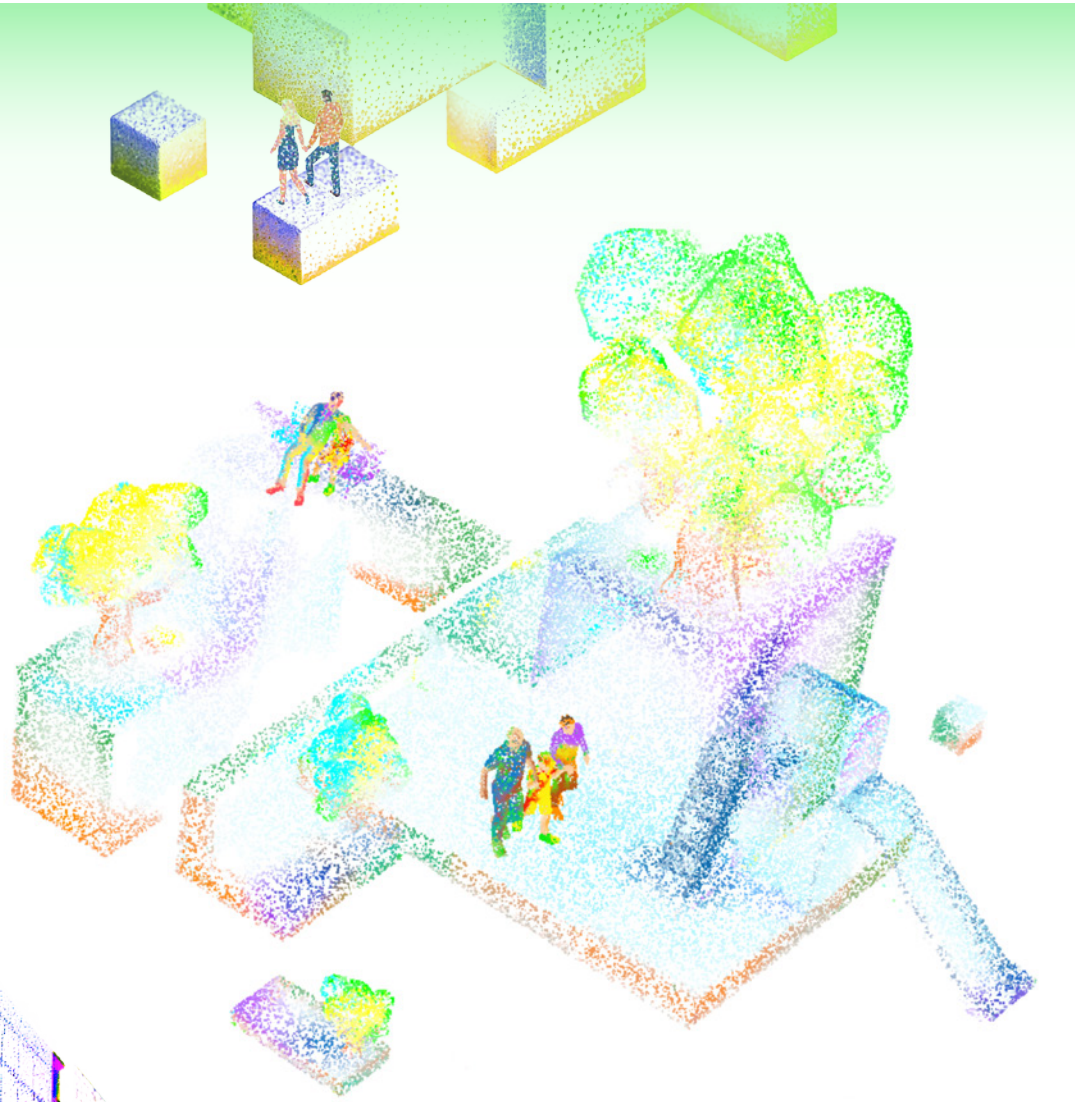
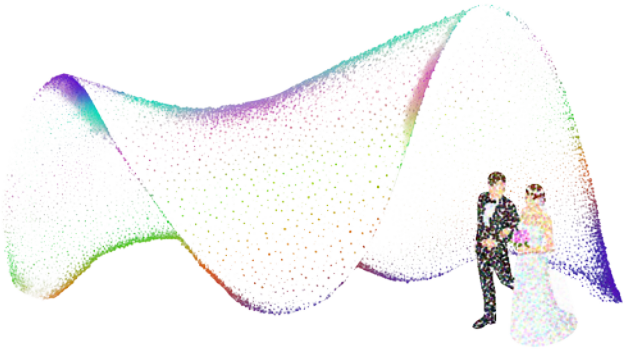
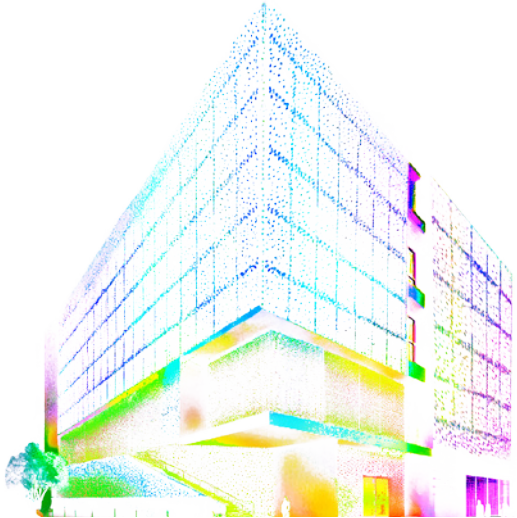
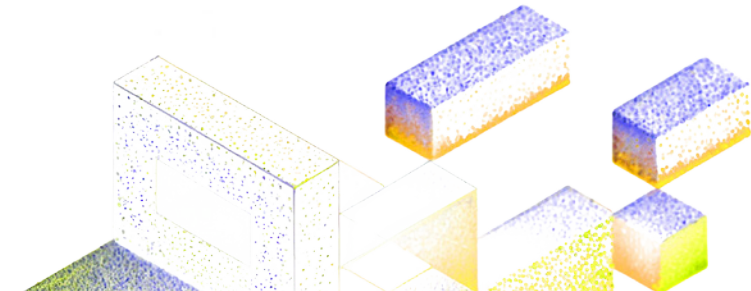




BUILD SMART
GO GREEN







CONTENTS

MESSAGE FROM THE DIRECTOR

> **We aspire to build smart, go green and create vibrant communities for generations to come.**

Climate events are increasing in severity globally breaking new records in 2023 in the number, speed and scale, making decarbonisation, climate-resilient buildings along with digitalisation transformation the new normal.

At the ArchSD, we aspire to build smart, go green and create vibrant communities for generations to come. From designing facilities that inspire creativity, preserve heritage and enrich lives, to addressing the needs and challenges that we face today from climate change to urbanisation, we are committed to leveraging innovative technologies and people-centric designs, as well as our knowledge, reach and partnerships to build a more sustainable future.

DRIVING LOW-CARBON TRANSFORMATION

To accelerate low-carbon transformation in Hong Kong's built environment, we have formulated the "3A Strategy" under our Carbon Neutrality Strategic Framework with a view to advancing low-carbon building designs and deep decarbonisation in the whole building's life cycle. With the transformative development of smart buildings coupled with technological advancement, thereby making low-carbon applications increasingly more reliable, scalable and affordable, it's an opportune time for us to build a robust repository in close collaboration with our contractors and partners to foster holistic and effective management of carbon performance in our projects.

We are integrating carbon appraisal in our projects to address current challenges in progressing low-carbon building designs and construction, as well as assessing, tracking and monitoring the projects' carbon footprint. This signifies an important milestone in facilitating the setting of overarching decarbonisation strategies for Hong Kong's buildings sector, thereby enhancing climate resilience with more efficient, smart and green buildings.

Carbon Neutrality Strategic Framework

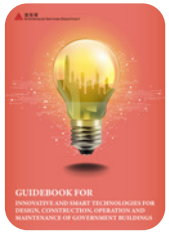
EMBRACING INNOVATIVE AND SMART CONSTRUCTION

Widespread adoption of green and high productivity construction technologies is our key to enhancing site safety, client services, environmental performance and operational efficiency. In projects of different nature and scale including government quarters, elderly care homes, public markets, hospitals, schools, and Light Public Housing, we have applied high productivity technologies such as BIM, DfMA, MiC and MiMEP, utilised AI and robotics, as well as progressively adopted Smart Site Safety System (4S). Our long-term plan is to apply these smart and modular construction technologies to those common building types for standardisation, scaling up technology innovations and applications to exponentially benefit project safety, quality, maintainability and cost-effectiveness.

Beyond Boundaries: Exploring Smart Facilities Management Symposium 2024

One notable innovative project is our large-scale pilot application of 3D metal printing technology, first of its kind in Hong Kong, to build the "Weaving Love" installation at the new Tseung Kwan O (TKO) Immigration Headquarters, which has reduced construction material wastage by over 80% compared to conventional construction methods. During the year, we also developed a *Guidebook for Innovative and Smart Technologies for Design, Construction, Operation and Maintenance of Government Buildings*. This Guidebook, as a practical reference tool, was shared with the industry to enhance innovative collaborations.

3D metal printing production of "Weaving Love"



Guidebook for Innovative and Smart Technologies for Design, Construction, Operation and Maintenance of Government Buildings

CREATING INCLUSIVE, VIBRANT AND LIVEABLE COMMUNITIES

People are at the centre of our efforts towards a sustainable urban living environment. Balancing socio-economic developments and unique aspirations of each neighbourhood, we adopt people-centric designs to transform public open space (POS) for enhancing social well-being and cultural vibrancy. From providing a quality social and leisure hub with the Kai Tak Station Square to a pleasant user experience with the new landmark of the TKO Immigration Headquarters, we are committed to creating inclusive and liveable communities for generations to come.

Hoi Fai Road Park Opening Ceremony

To promote design thinking and innovation, we have pioneered a year-long territory-wide, cross-sectoral collaborative project "POSsible! POS Design Lab" to co-create high-quality people-centered POS development through integrating diverse stakeholder needs and expectations. With the ideas generated through experience sharing in the finale symposium and a series of workshops attended by over 300 participants, we have developed and published a set of tailor-made design thinking toolkit and design guide as common resources to facilitate future sustainable and quality POS development in highly urbanised Hong Kong.

Sham Shui Po Park

FOSTERING EMPOWERMENT AND COLLABORATION

Sustaining innovation, talent development and robust stakeholder collaboration are pivotal to underpinning our long-term growth. We value diversity in fostering staff empowerment with enhanced knowledge, skills and wellness, and strive to inspire their passion enabling their contributions to society for a sense of purpose. With the concerted efforts from staff members, we received over 100 awards in 2023 commending our excellent project and service delivery in green building, creative and inclusive urban design, construction and research innovation, and heritage conservation. The highlights of these key awards are the Grand Award of Spatial Design in the *DFA Design for Asia Awards 2023* for Phase II Development of Oil Street Art Space, and the 5 projects recognised with Grand Awards in the *Excellent Building Award 2023*.

30th Considerate Contractors Site Award Scheme Award Presentation Ceremony

2023 marked a rewarding year. I would like to thank our colleagues for their dedication and resilience harnessing trends and challenges into opportunities and motivation for effecting positive changes in sustainable construction and inclusive communities, as well as our clients, contractors and industry partners for their continuous support. Looking ahead, we will continue to collaborate with our stakeholders and the wider community to "Build Smart • Go Green", building a city of dreams and realising our vision of a liveable, innovative and green Hong Kong.

Mr. Michael LI, JP
Director of Architectural Services

ABOUT THIS REPORT

Objectives

Our Sustainability Report 2024 ('the Report') is the 21st annual sustainability report published by the Architectural Services Department ('ArchSD' or 'the Department') of the Government of the Hong Kong Special Administrative Region of the People's Republic of China.

Under the theme 'Build Smart • Go Green', this Report presents our sustainability strategy, initiatives and economic, social and environmental performance in 2023. It also highlights our commitment to serving the community through continuous improvements.

Scope

The Report highlights ArchSD's key sustainability initiatives and achievements during the period from 1 January 2023 to 31 December 2023. It covers the sustainability performance and initiatives of our 4 project management branches, 5 functional branches and 1 central management division.

The data represents absolute figures as at 31 December 2023 (unless otherwise stated) to the best of our knowledge. Financial data is for the financial year ended 31 March 2024. All monetary values are in Hong Kong Dollars.

Principles

This Report has been prepared in accordance with the GRI Standards 2021. It also refers to the Sustainability Accounting Standard for the Engineering and Construction Industry, as defined by the SASB Standards. In addition, this report takes into consideration the recommendations of the Task Force on Climate-related Financial Disclosures ("TCFD") for preparing a climate action plan towards our goal of achieving carbon neutrality by the year 2050.

The GRI Content Index correlates GRI disclosures with associated sections in this report. External assurance was carried out by an independent third party to ensure the accuracy, consistency, reliability, materiality and credibility of the report and its adherence to the GRI Universal Standards 2021.

Share your Thoughts

We welcome stakeholders' feedback and suggestions on this Report. You can share your thoughts by filling in the feedback form or sending an email to imu@archsd.gov.hk.

Notes to Readers

Available in English, Traditional and Simplified Chinese, this Report is published online and has been prepared in accordance with Level AA Conformance to W3C Web Content Accessibility Guidelines 2.1 and HTML5.

ABOUT THIS REPORT

The report can be viewed on mobile devices with the following key features:

On-screen font sizes

Picture enlargement

Search function

Dark mode display option

Data summary

Glossary

HIGHLIGHTS OF THE YEAR

2023 Performance Highlights

Energy Use and Efficiency

Less *18%* compared to the average of the past five years (Electricity consumption by the Queensway Government Offices (QGO) and APB Centre)

Save *13.9* GWh every year
(Projects completed in 2023)
Equivalent to
reduce ~9.7 kilotonnes CO_2-e, or
plant >422 000 trees

Tackling Climate Change

Formulated the ***3A Strategy*** under the *Carbon Neutrality Strategic Framework* to accelerate the progress in decarbonising Hong Kong's built environment by applying green and **high-productivity construction technologies**, harnessing renewable energy installations and adopting recycled and low-carbon materials in close collaboration with our stakeholders

HIGHLIGHTS OF THE YEAR

2023 Performance Highlights

Staff Training and Development

704 training courses

26% **more** than the average of the past five years

17 674 trainees

34% **more** than the average of the past five years

Sustainability Governance

Obtained new certification for **ISO 37001:2016** Anti-bribery Management System and **enhanced staff training for raising awareness**

Awards and Recognition

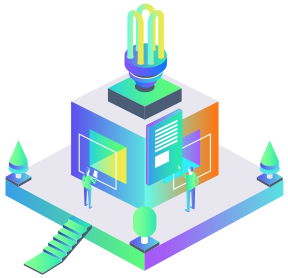
104 awards recognising our contributions in green buildings, creative urban design, construction and research innovation, heritage conservation, project management, etc

HIGHLIGHTS OF THE YEAR

Achievements and Way Forward

At the ArchSD, we seek continuous improvements in our sustainability performance. To this end, we have formulated our annual plan and identified 4 strategic focus areas, aiming to advance smart innovations and low-carbon transformation, enhance project quality, productivity and safety, empower talents while bringing positive impacts on the well-being and prosperity of local communities and individuals.

Innovation



Achievements in 2023

- Explored and applied advanced construction methods and smart technologies in new works projects and facilities upkeep. These include wide adoption of BIM from planning to construction stages and various applications of robotics, drone, AI, IoT and AR tools in smart advisory, site supervision, site safety and facilities
- Innovative Construction Focus Group explored and shared trends and latest applications of innovative construction technologies and conducted site visits to exchange ideas with the industry stakeholders

Targets for 2024

- Adopt innovation and new techniques to enhance internal processes, smart workflow, business facilitation and to uplift overall productivity, quality and safety in facilities development and upkeep
- Promote application of robotics, AI, applied R&D, new materials and digitalisation of public works to cultivate new concepts and technologies through wider adoption in our projects

People-centric Design

Achievements in 2023

- Formulated the "3A Strategy" under the *Carbon Neutrality Strategic Framework*, conducted "Let's have a Chat" engagement exercise with industry partners and shared the strategy in the Eco Expo Asia 2023
- Developed and published a design thinking toolkit and a design guide arising from POSsible!, a cross-sectoral collaborative design innovation process to reinvent public open spaces for improving urban planning and liveability

Targets for 2024

- Promote the integration of AI in inclusive, sustainable and green building design, and strive towards carbon neutrality in design and construction of livable Hong Kong to enhance the well-being of the city and its citizens
- Engage stakeholders through wider participation and various communication channels and platforms to sharing of experiences, understand people's needs and to building up wider consensus and recognition of our works

HIGHLIGHTS OF THE YEAR

Achievements and Way Forward

Sense of Purpose

Achievements in 2023

- ArchSD Volunteer Service Team participated in various community services helping those in need including the elderly, students, people with special needs and limited mobilities
- Leveraged government's digital and social media platforms to promote ArchSD's quality professional services through interviews with young and aspiring staff of different disciplines

Targets for 2024

- Empower new generation and groom talents to foster a sense of purpose, recognition and team spirit in serving the community, and to promote professional image and safety culture of the industry
- Encourage continual improvement and cultivate resilience and can-do attitude to accept challenge amid normalcy as well as critical times

Slim and Trim

Achievements in 2023

- Implemented various corporate intelligence projects to streamline processing time and save paper works
- Continued the development of Digital Works Supervision System (DWSS) including the implementation of Smart Site Safety and e-Material Submission to promote a work-smart culture and harness benefits of digitalisation

Targets for 2024

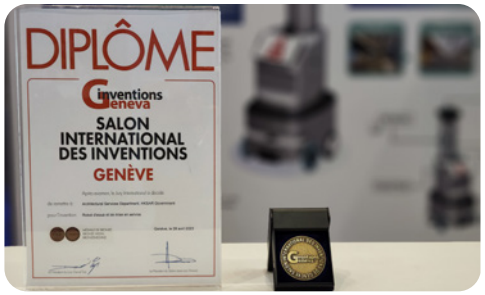
- Trim and streamline cumbersome procedures and obsolete practices to spur changes for higher efficiency and effectiveness
- Promote work smart culture and harness benefits of robotics, AI, digitalisation, e-workflow and new information technology

HIGHLIGHTS OF THE YEAR

Awards and Recognition

We strive for excellence in facilities development and upkeep, service and community contributions. Awards are a strong testament to our dedication to serving the community and delivering innovative solutions for the benefit of our living environment and thriving communities.

This year, our staff and projects were once again commended for their outstanding performance and professional contributions to the industry. In 2023, we won 104 awards in green buildings, creative urban design, construction and research innovation, heritage conservation, project management etc. Below is a selection of some key awards from local and global institutions.



Testing and Commissioning Robot

48th International Exhibition of Inventions Geneva

Architecture/ Civil/ Construction/ Materials/ Woodworks Category | Bronze Medal

Inland Revenue Centre in Kai Tak Development Area

The Excellent Building Award 2023

"New Building" Category | Grand Award

Treasury Building (Joint-user Government Office Building in Cheung Sha Wan)

The Excellent Building Award 2023

"New Building" Category | Grand Award

Pak Shing Kok Disciplined Services Quarters

The Excellent Building Award 2023

"New Building" Category | Grand Award

Improvement Works at Woosung Street Temporary Cooked Food Hawker Bazaar

The Excellent Building Award 2023

"Existing Building" Category | Grand Award

HIGHLIGHTS OF THE YEAR

Awards and Recognition

Phase II Development of Oil Street Art Space

DFA Design for Asia Awards 2023

Spatial Design – Event, Exhibition & Stage | Grand Award

Community Green Station (Wan Chai)

DFA Design for Asia Awards 2023

Spatial Design – Institutional Spaces | Gold Award

Kowloon East Regional Headquarters and Operational Base-cum-Ngau Tau Kok Divisional Police Station

The Excellent Building Award 2023

"New Building" Category | Grand Award

Community Green Station (Wan Chai)

International Design Awards (IDA) 2023

Architecture – Sustainable/ Green Architecture Design Other Sustainable/ Green Designs | Gold

ArchSD's Sustainability Report 2023

ASTRID Awards 2024

Annual Reports – Online: Home Page | Gold Winner

Annual Reports – Online: Non-Profit Organisation | Bronze Winner

Websites: Microsite | Bronze Winner

HIGHLIGHTS OF THE YEAR

Awards and Recognition

Other Key Awards

Projects	Award
New Territories (Shatin) Forensic Medicine Centre	**DFA Design for Asia Awards 2023** Spatial Design – Institutional Spaces | Bronze Award
West Kowloon Government Offices	**ASHRAE HK Chapter Technology Award 2023 & ASHRAE Technology Award 2023** Institutional Buildings (joint submission with EMSD) | ASHRAE Hong Kong Chapter Technology Award 2023
Kowloon East Regional Headquarters and Operational Base cum Ngau Tau Kok Divisional Police Station	**ASHRAE HK Chapter Technology Award 2023 & ASHRAE Technology Award 2023** ASHRAE Technology Award 2023 at Society Level | Honorable Mention
Maryknoll Secondary School at Anderson Road	**International Design Awards (IDA) 2023** Architecture – Educational Architecture Design, Schools – Other | Silver
Tung Chung Sunlight Market	**International Design Awards (IDA) 2023** Architecture – Urban Space, Public Infrastructure | Silver
Provision of Columbarium at Wo Hop Shek Cemetery – Phase 1	**International Design Awards (IDA) 2023** Architecture – Public Space, Municipal Building | Silver
Moreton Terrace Activity Centre	**International Design Awards (IDA) 2023** Architecture – Public Space, Community Centre | Bronze
Lam Wah Street Playground	**International Design Awards (IDA) 2023** Landscape Architecture Designs, Civic Landscape, Gardens, Parks and Open Space | Bronze
Advance Promenade near Wan Chai Ferry Pier	**International Design Awards (IDA) 2023** Public Space Design, Landmarks, Parks, Vistas & Plazas | Bronze
Inland Revenue Centre in Kai Tak Development	**International Design Awards (IDA) 2023** Workplace Architecture Designs, Workshops & Offices | Bronze
Advance Promenade from Central & Western District Promenade (Central Section) to the Hong Kong Convention and Exhibition Centre	**International Design Awards (IDA) 2023** Architecture – Public Space Architecture Designs, Parks | Bronze

HIGHLIGHTS OF THE YEAR

Awards and Recognition

Other Key Awards

Projects	Award
Cheung Sha Wan Catholic Primary School	**HKIA Annual Award 2022/23** ▪ HKIA Medal of the Year inside Hong Kong ▪ HKIA Award of Hong Kong | Institutional Building
Transport Department Vehicle Examination Complex	**HKIA Annual Award 2022/23** ▪ HKIA Medal of the Year inside Hong Kong ▪ HKIA Merit Award of Hong Kong | Industrial/ Infrastructural Building
Columbarium at Wo Hop Shek Cemetery Phase 1	**HKIA Annual Award 2022/23** ▪ HKIA Medal of the Year inside Hong Kong ▪ HKIA Merit Award of Hong Kong | Public Space/ Civic/ Communal Building
Advance Promenade near Wan Chai Ferry Pier	**HKIA Annual Award 2022/23** ▪ HKIA Medal of the Year inside Hong Kong ▪ HKIA Merit Award of Hong Kong | Urban Design & Master Planning
Kindergarten Education Centre (Siu Sai Wan)	**HKIA Annual Award 2022/23** ▪ HKIA Medal of the Year inside Hong Kong ▪ HKIA Merit Award of Hong Kong | Future Project
Activity Centre for Promotion of Chinese History & Culture	**HKIA Annual Award 2022/23** ▪ HKIA Medal of the Year inside Hong Kong ▪ HKIA Merit Award of Hong Kong | Future Project
Tung Chung Sunlight Market	**HKIA Annual Award 2022/23** President's Special Prize
Home of Forever Love	**HKIA Annual Award 2022/23** President's Special Prize
Kowloon East Regional Headquarters and Operation Base cum Ngau Tau Kok Division Police Station	**CIBSE Hong Kong Awards 2023** Project of the Year Award – Public Use Building | Winner
Heritage Building Information Modelling for Cultural Heritage Conservation at Tai Fu Tai Mansion	**Building Surveyor Awards 2023** Heritage Conservation Award

HIGHLIGHTS OF THE YEAR

Awards and Recognition

Other Key Awards

Projects	Award
Drainage Services Department Office Building at Cheung Sha Wan Sewage Pumping Station	**Martin Barnes Awards 2023 (formerly named as NEC Awards)** NEC Building/ FM Contract of the Year | Winner
Construction of Fire Station-cum-Ambulance Depot with Departmental Quarters and Facilities in Area 72, Tseung Kwan O	**Martin Barnes Awards 2023 (formerly named as NEC Awards)** NEC Sustainability and Climate Resilience Contract of the Year | Winner
Community Isolation and Treatment Facilities	**RICS Hong Kong Awards 2023** Construction Project Management Team of the Year | Winner
Inland Revenue Centre in Kai Tak Development Area	**HKIPM PM Achievement Awards 2023** Category A: Construction/ Engineering | Winner
Modernisation of Aberdeen Market cum Cooked Food Centre	**HKIPM PM Achievement Awards 2023** Category A: Construction/ Engineering | Winner
Enhancements of Public Health Laboratory Centre	**HKIPM PM Achievement Awards 2023** Category A: Construction/ Engineering | Winner
New Territories (Shatin) Forensic Medicine Centre	**HKIPM PM Achievement Awards 2023** Category A: Construction/ Engineering | Winner
A 30-classroom Primary School at Shui Chuen O, Shatin	**HKIPM PM Achievement Awards 2023** Category A: Construction/ Engineering | Winner
A purpose-built Multi-welfare Services Complex in Area 29, Kwu Tung North New Development Area	**HKIPM PM Achievement Awards 2023** Category A: Construction/ Engineering | Winner
Additional of Disinfection Facilities in Lam Tin Ambulance Deport	**HKIPM PM Achievement Awards 2023** Category A: Construction/ Engineering | Winner
Fitting-out of Office Accommodation at 19/F, Marina 8, Wong Chuk Hang for the Transport and Logistics Bureau	**HKIPM PM Achievement Awards 2023** Category A: Construction/ Engineering | Winner
Disciplined Services Quarters for Fire Services Department at Pak Shing Kok, Tseung Kwan O	**ACEHK Annual Awards 2023** Group 1 (Public Works) Category | Overall Best

ARCHSD AT A GLANCE

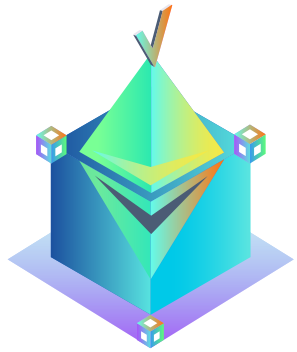
Our Organisation and Roles

VISION

- To serve the community
- Take care of the community
- Provide quality professional services
- Improve the quality of the living environment

MISSION

- Ensure the quality, cost effectiveness and sustainable development of community facilities
- Ensure the quality and cost effectiveness in the upkeeping of community facilities
- Provide quality professional advisory services on community facilities and related matters
- Promote best practices in the building industry



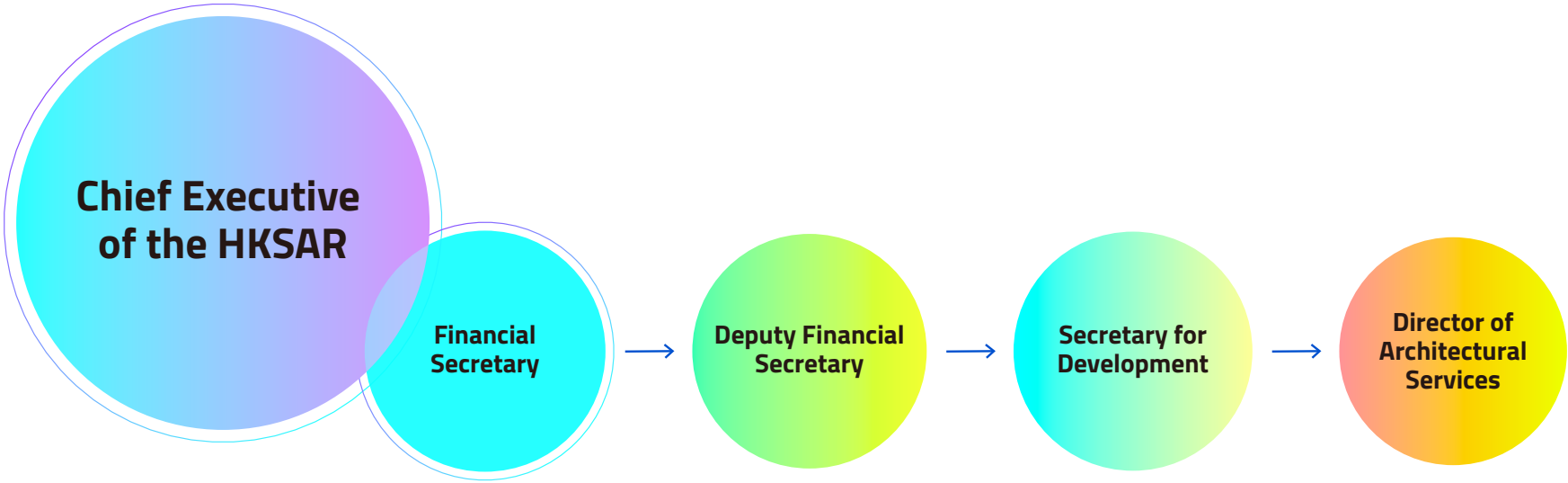
VALUES

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

ARCHSD AT A GLANCE

Our Organisation and Roles

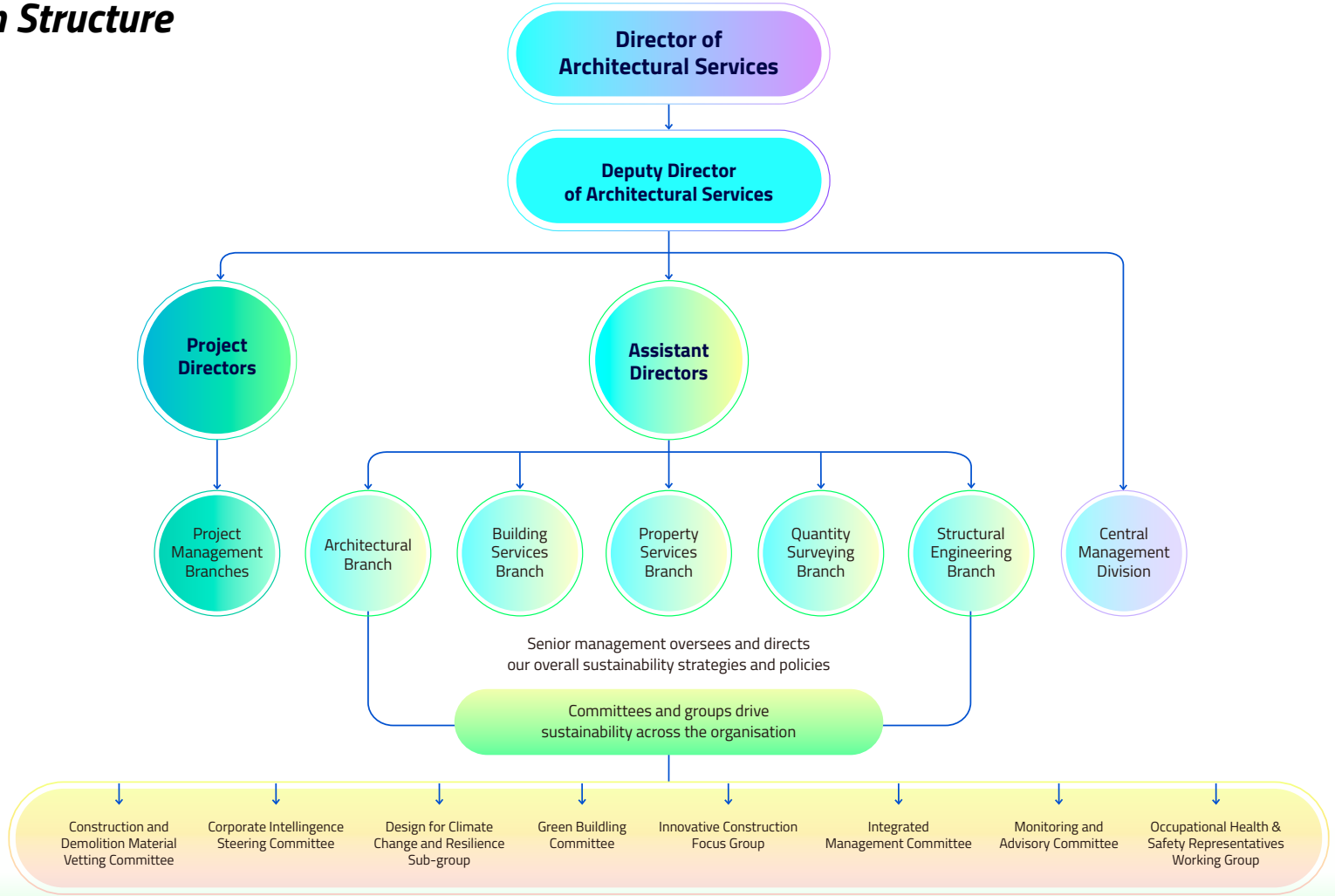
ArchSD's Role in the Government of HKSAR



ARCHSD AT A GLANCE

Our Organisation and Roles

Organisation Structure



ARCHSD AT A GLANCE

Our Organisation and Roles

Management Team

1. **Mr. Michael LI, JP**
   Director of Architectural Services
2. **Mr. Alan SIN**
   Deputy Director of Architectural Services
3. **Mr. M. C. CHUNG**
   Assistant Director (Architectural)
4. **Mr. M. Y. CHAN**
   Assistant Director (Building Services)
5. **Mr. Raymond CHAN**
   Assistant Director (Property Services)
6. **Ms. Katherine LEUNG**
   Assistant Director (Quantity Surveying)
7. **Mr. C. Y. KAN**
   Assistant Director (Structural Engineering)
8. **Ms. Winnie CHONG**
   Departmental Secretary
9. **Ms. Athena FUNG**
   Project Director/1
10. **Mr. Edward WONG**
    Project Director/2
11. **Mr. Andrew FUNG**
    Project Director/3
12. **Mr. Ben YEUNG**
    Project Director/4

ARCHSD AT A GLANCE

Our Organisation and Roles

Core Functions

ArchSD performs three core functions for Government-owned and Government-funded facilities:

Monitoring and Advisory Services

Providing effective professional and technical advice to the Government and quasi-government organisations and to oversee subvented and entrusted projects.

Facilities Upkeep

Providing efficient and cost-effective professional and project management services for the maintenance and refurbishment of buildings and facilities.

Facilities Development

Providing efficient, cost-effective and timely architectural and associated professional and project management services for the design and construction of buildings and related facilities.

ARCHSD AT A GLANCE

Key Facts of the Department

Our Profile

Establishment Date

11 April 1986

Staff Establishment

2 026 **employees**

(As at 31 March 2024)

Our Services and Contributions

(For the calendar year 2023)

Number of Subvented/Entrusted Projects Reviewed	Number of Facilities Development Projects Completed	Number of New Jobs Created	New Works and Term Contracts Commenced
671	***30***	***10 986***	***20***

Government Spending on Building Projects	Value of New Works Development	Building Floor Area of Properties Maintained
HK$ ***21,092.30*** million	HK$ ***349.85*** billion	***33 910 000*** m²

Our Offices

Total Office Area

42 494.14 m²

Headquarters

Queensway Government Offices,
66 Queensway, Hong Kong

Other Offices

APB Centre, Hunghom, Kowloon

Cityplaza 3, 14 Taikoo Wan Road, Quarry Bay, Hong Kong

Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong

Rumsey Street Multi-story Carpark, 2 Rumsey Street, Sheung Wan, Hong Kong

Wanchai Tower, 12 Harbour Road, Wan Chai, Hong Kong

Other premises (employed by ArchSD in delivering public services)

ARCHSD AT A GLANCE

Departmental Funding and Expenditure

Funding

Our departmental operation is funded by

the Capital Works Reserve Fund, which is approved, monitored and reviewed by the Legislative Council

the Lotteries Fund, which is approved by the Director of Social Welfare

the Anti-epidemic Fund, which was launched by the Government in 2020

ARCHSD AT A GLANCE

Departmental Funding and Expenditure

Expenditure

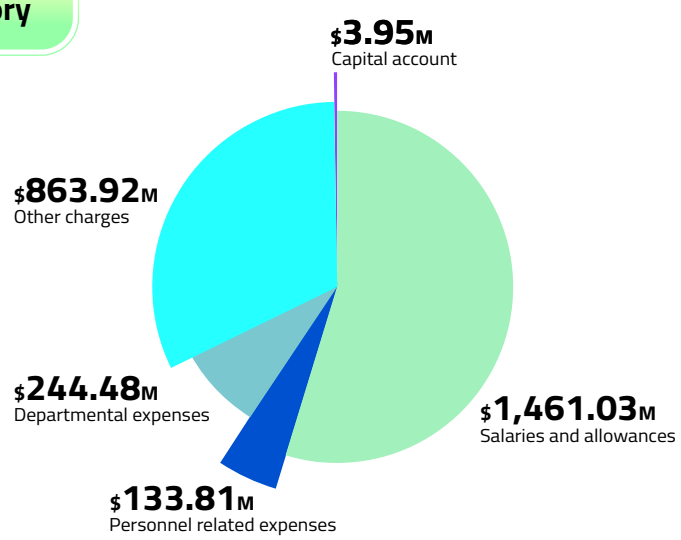
In the financial year 2023-24, departmental expenditure increased by 4.85%[1] as compared with the previous financial year. A breakdown of our Department and programme areas[2] for 2023-24 is listed below.

Financial information and key performance details can be found in the ArchSD Controlling Officer's Report of the 2024-25 Estimates of the Government of the HKSAR, which is available at www.budget.gov.hk.

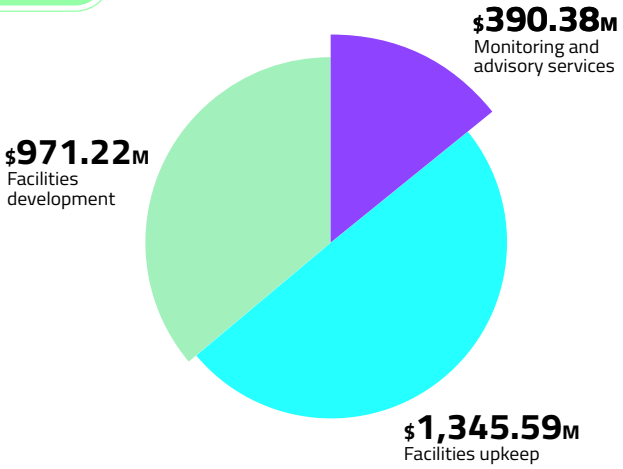
Actual Departmental Expenditure: $2,707.19M

(4.85% increase as compared with last financial year)

By Catagory



By Programme



[1] The actual Departmental Expenditure for 2023-24 was HK$2,707.19 million. This represented a 4.85% increase as compared with the actual Departmental Expenditure for 2022-23 of HK$2,581.90 million.

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

BUILD ROBUST SUSTAINABILITY GOVERNANCE

Our Strategy and Approach

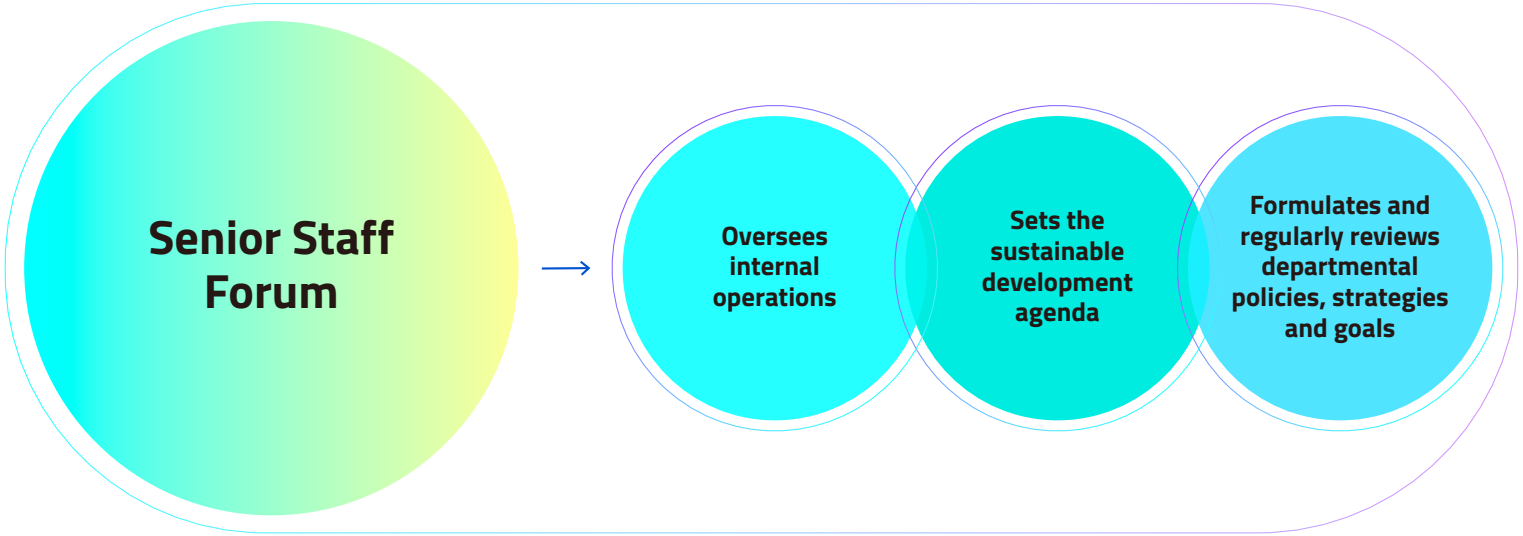
Sustainability drives the way we work with our stakeholders in the communities we serve. From driving development to preserving heritage, we are committed to addressing environmental challenges, providing safe and healthy workplaces and enriching the well-being and resilience of our communities through fostering people-centric design, capacity building, innovative and smart construction technologies.

ArchSD has a sound governance system with long-term sustainability objectives and a mechanism for monitoring progress.

Senior Staff Forum

A Senior Staff Forum (SSF) is in place to oversee the internal operations and implementation of sustainability strategies and policies, supported by internal committees and working group across the organisation to drive and implement sustainability initiatives.

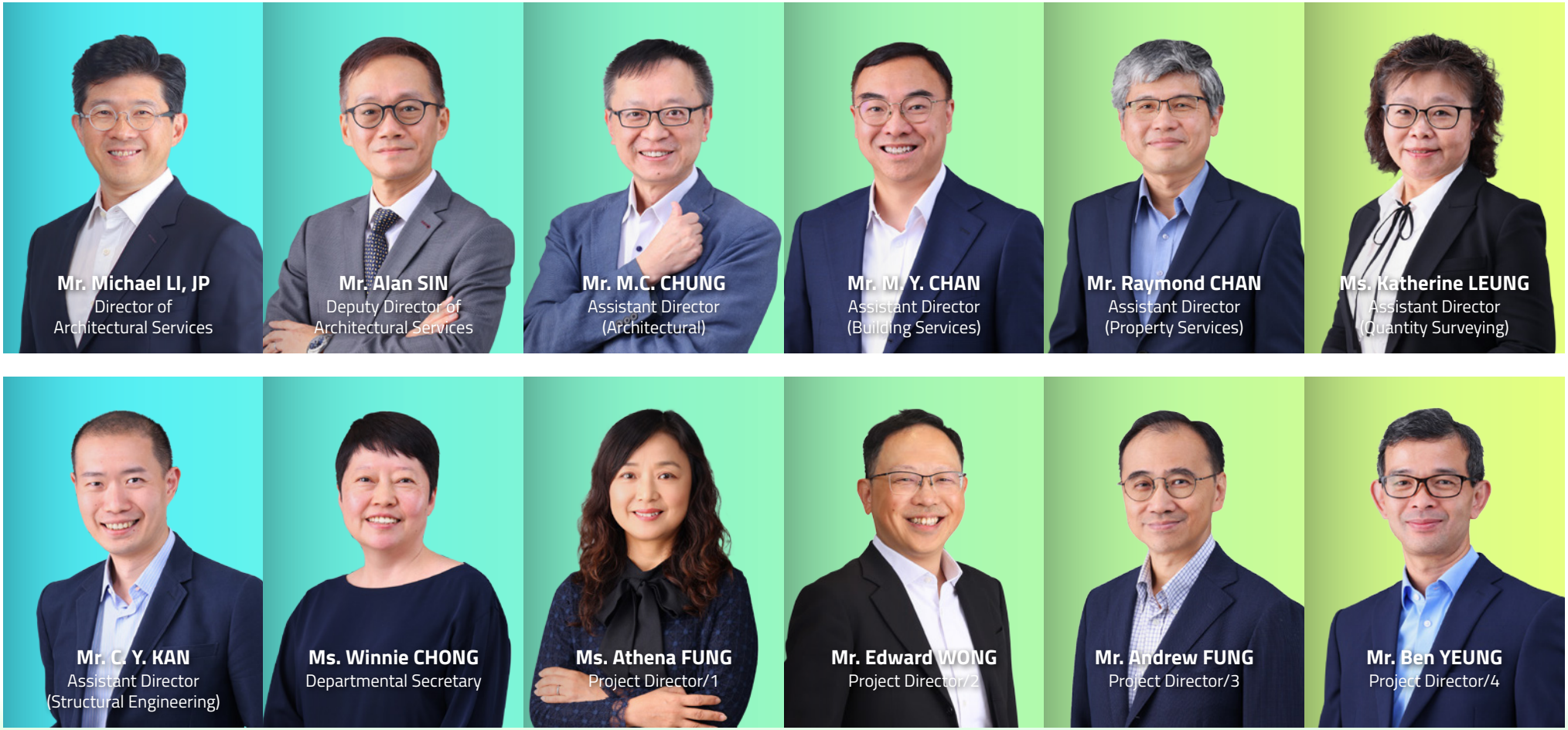
Chaired by the Director, the SSF



BUILD ROBUST SUSTAINABILITY GOVERNANCE

Our Strategy and Approach

The SSF also reviews the projects' potential negative impacts in both short- and long-term on the surrounding community, including environmental and social impacts. These concerns are clearly outlined in the Department's tender documents for mitigation or remediation by the contractor.



BUILD ROBUST SUSTAINABILITY GOVERNANCE

Embedding Sustainability

We integrate sustainable development considerations into every stage of project delivery and facet of our operations. We have established a set of policies, guidelines and system controls, striving to maintain the highest standards across all our services and operations:

Policies and Guidelines

Quality, Environmental, Anti-bribery, Occupational Health and Safety Policy

Our commitment to long-term sustainability is reflected in the *Quality, Environmental, Anti-bribery, Occupational Health and Safety Policy* and its guidelines outlined below:

- Fulfil the agreed requirements of our clients to the highest professional standards.
- Deliver our services in an environmentally responsible manner by implementing conservation of energy, preventing pollution and reducing the consumption of natural resources to protect the environment.
- Manage to eliminate our hazards and reduce our occupational health and safety risks to ensure and provide a safe and occupational healthy environment for the prevention of work-related injury and ill health from our staff, our contractors and other people who may be affected by our work.
- Involve and, where appropriate, consult our staff, our contractors and other people who may be affected by our work, and their representatives in the improvement of our occupational health and safety performance.
- Fulfil all compliance obligations including applicable legislation and other requirements, and wherever practicable, to achieve standards beyond those that are legally required.
- Provide adequate resources and training to all staff and provide appropriate training to persons working for or on behalf of ArchSD and to continually improve our quality, environmental, anti-bribery, occupational health and safety management system to enhance performance and effectiveness.
- Promote ArchSD's principles of quality, environmental sustainability, anti-bribery, occupational health and safety to our partners in work, the construction industry and the general public.
- Prohibit bribery, encourage raising concerns and commit to continual improvement of anti-bribery management system.

BUILD ROBUST SUSTAINABILITY GOVERNANCE

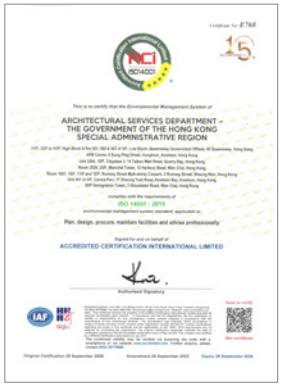
Embedding Sustainability

Integrated Management System

To align our services and operations with international standards, ArchSD has developed an Integrated Management System (IMS) comprising quality, environmental, anti-bribery, occupational health and safety and energy management aspects with the following international standards:

Integrated Management System Accredited Certification

ISO 9001:2015 Accredited Certification



ISO 14001:2015 Accredited Certification

ISO 37001:2016 Accredited Certification

ISO 45001:2018 Accredited Certification

ISO 50001:2018 Accredited Certification

We also refer to the ISO 26000:2010 for guidance on operating in a socially responsible way. To foster continuous improvements, ArchSD will monitor and review the performance of our IMS at least once a year.

BUILD ROBUST SUSTAINABILITY GOVERNANCE

Embedding Sustainability

Supporting the UNSDGs

We support the United Nations Sustainable Development Goals (UNSDGs) which aim to achieve a better and more sustainable future for all. We have aligned our operations and sustainability efforts with nine of the UNSDGs to respond and contribute to international sustainable development strategies:

UNSDG 3: Good Health and Well-Being

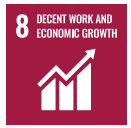
We integrate social considerations and people-centric design into our projects to enhance the quality of urban living. We are also committed to fostering the wellness of our employees and value chain in line with international occupational health and safety standards and best practices, as well as through regular risk assessments and safety inspections.

UNSDG 5: Gender Equality

We value diversity in the workforce and provide equal opportunities for employment, talent and leadership development.

UNSDG 7: Affordable and Clean Energy

We integrate renewable energy technologies into all projects, design and construct energy-efficient buildings, and leverage advanced technologies in our offices to enhance energy and resource efficiency.



UNSDG 8: Decent Work and Economic Growth

We offer training opportunities to enhance service quality, project efficiency and empower personal and professional development of our people. We also create jobs and develop quality, inclusive and sustainable buildings and facilities to support economic, social and environmental developments in Hong Kong.

UNSDG 9: Industry, Innovation and Infrastructure

We build climate-resilient infrastructure to support sustainable development in Hong Kong. We also foster industry innovation through robust application of innovative and high-productivity construction technologies and materials, guidelines and best practices development, insights sharing, field research, as well as cross-sectoral stakeholder collaboration.

BUILD ROBUST SUSTAINABILITY GOVERNANCE

Embedding Sustainability

Supporting the UNSDGs

UNSDG 11: Sustainable Cities and Communities

We provide high-quality public buildings and facilities that prioritise safety, inclusiveness and environmental sustainability; promote social interaction among diverse populations; and participate in voluntary services to enhance community wellness. We also embrace innovative technologies and construction methods to reduce our projects' social and environmental impacts, drive development and enrich cultural heritage.

UNSDG 12: Responsible Consumption and Production

We reduce waste at source, promote recycling, as well as enhance project planning and collaboration through innovative construction technologies and methods. We also adopt green procurement and conduct regular audits to review our carbon footprint and operational practices to optimise resource efficiency.

UNSDG 13: Climate Action

We have established a departmental climate change sub-group and formulated the Carbon Neutrality Strategic Framework to facilitate the low-carbon transformation in Hong Kong's built environment.

UNSDG 17: Partnerships for the Goals

We mobilise resources, advocate sustainable building design and construction, and strengthen engagement with the industry as well as the wider community for enhancing policy coherence and building a more sustainable, resilient and low-carbon future together.

BUILD ROBUST SUSTAINABILITY GOVERNANCE

Managing Risk

We take an active approach to risk management. The potential impacts of climate change, natural disasters and other potential hazards and harms to our operations are managed by

- identifying, assessing, mitigating and monitoring potential risks within our operational control;
- reporting details of the risk assessment to the Department for consideration in decision-making processes;
- following the guidelines published by the Development Bureau, including the *Technical Circular (Works) No. 6/2005: Implementation of Systematic Risk Management in Public Works Projects*; and
- conducting integrated risk assessment workshops throughout the entire project lifecycle to identify project risks and formulate precautionary control measures.

Climate-related Risks and Opportunities

ArchSD has adopted the framework and recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) for disclosing its climate-related risks and opportunities. Occupational health and safety aspect is also taken into consideration when managing our risks.

We summarise our approach to corporate governance, strategy, risk management and metrics and targets below according to the TCFD reporting framework.

Governance

We take both top-down and bottom-up approaches to ensure effective two-way communication with respect to our governance around climate-related risks and opportunities.

As part of our top-down approach, our SSF meets regularly to oversee risk management of the Department, including climate-related risks. We have also established a Green Building Committee, which advises and implements policy initiatives, departmental policies and strategies related to green buildings and sustainable construction.

Our staff have an important role to play in our bottom-up management approach. A Design for Climate Change and Resilience sub-group was established to develop best practices and design guidelines against incidents such as extreme weather, outbreaks of disease and vandalism. Staff can also share their opinions through multiple communication channels, such as meeting, internal Chatapp and email.

BUILD ROBUST SUSTAINABILITY GOVERNANCE

Managing Risk

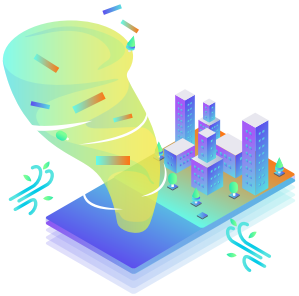
Strategy

To address the actual and potential impacts of climate-related risks on the organisation's businesses, strategy, and financial planning, we have formulated a strategy covering the risks and opportunities associated with climate change.

Climate-related Risks

Physical Risks

These include acute risks, such as increased intensity and frequency of extreme weather events (typhoons, flooding and extreme heat) and chronic risks, such as rising temperatures and sea levels.



Transition Risks

There are also risks associated with the transition to a lower-carbon economy:

Policy and Legal Risk
Keep up with the latest environmental policies

Technology Risk
Transition to low emissions technology

Market Risk
Increased market demand for green building guidelines

Reputation Risk
Increased risk of greenwashing

Climate-related Opportunities

In the foreseeable future, we see a growing market demand for green buildings due to the heightened awareness of sustainability in the industry. The rising demand will lead to increasing acceptance and willingness to adopt innovative green technologies in building projects, which will create opportunities to put these technologies into practice. The experience gained would then be shared within the construction industry, thereby accelerating sustainable development.

BUILD ROBUST SUSTAINABILITY GOVERNANCE

Managing Risk

Risk Management

	Potential Impact(s)		Our Strategies
Physical Risks	Increased physical impacts on existing buildings and infrastructure		▪ Conduct routine maintenance to tackle the impacts of physical climate risks on organisation's assets ▪ Promote "Design of Resilience" in building design and raise staff awareness to optimise the interaction between a building and its local microclimate ▪ Provide technical guidelines on all building works during extreme weather conditions ▪ Conduct regular offsite offline backup to secure local storage of all data for ArchSD's operations
	Staff safety under extreme weather conditions		▪ Provide guidelines in our ArchSD Management Plan for Emergency Incidents ▪ Launch work arrangements in times of tropical cyclones and rainstorms
Transition Risks	Policy and Legal Risk	Keep up with the latest environmental policies and circulars	▪ Engage external committees to keep track of market or policy updates ▪ Incorporate updates of the circulars on Green Government Building into departmental environmental objectives and targets and General Specifications ▪ Utilise multiple communication channels to update all concerning parties
	Technology Risk	Transition to low emissions technology	▪ Set up an Innovative Construction Focus Group ▪ Conduct regular meetings with other government departments and professional institutions to keep abreast of the latest developments ▪ Expand resources dedicated to staff training on adopting innovative technologies
	Market Risk	Increased market demand for green building guidelines to keep up with international standards	▪ Update the General Specification for Building and the General Specification for Building Services Installation in Government Buildings ▪ Provide professional advice and recommendations related to sustainability in external committees
	Reputation Risk	Increased risk of greenwashing	▪ Enhance credible third-party certification and sustainability benchmarking

BUILD ROBUST SUSTAINABILITY GOVERNANCE

Managing Risk

Metrics & Targets

We have set targets to measure our management of climate-related risks and opportunities.

At the organisation level, we have achieved ISO 14001 Environmental Management System certification coupled with annual reviews of our environmental performance, as well as monthly reviews of our green housekeeping progress as metrics.

We have also set electricity consumption targets and measured our progress according to the Green Energy Targets (published by the HKSAR Government) and the Green Manager's Environmental Targets (published by the ArchSD). (See our data summary for details.)

At the project level, we have included incentive marks to enhance green performance in the tender proposals. Guidelines and checklists were also provided for project proponents to evaluate the environmental impacts of the projects.

Following the consultancy study, we established the "3A Strategy" under the Carbon Neutrality Strategic Framework in 2023 aiming to accelerate progress in decarbonising the built environment by harnessing smart, innovative and green solutions; as well as to advocate for collective actions to drive sustainable construction for a low-carbon future.

Contingency Plans

To protect our operations under a wide range of scenarios, we have a Site Safety and Environmental Review Committee to oversee a comprehensive strategy document, the ArchSD *Management Plan for Emergency Incidents*. This plan not only gives us the ability to recover rapidly from a variety of emergency incidents, such as adverse weather events, natural disasters, fire and accidents, but also to anticipate and deal effectively with crises that may arise.

BUILD ROBUST SUSTAINABILITY GOVERNANCE

Maintaining Integrity and Professionalism

ArchSD attaches great importance to upholding the highest standard of staff conduct and integrity in its operations and practices.

All ArchSD staff are required to comply with the regulations of the Prevention of Bribery Ordinance. Any suspicion of bribery or corruption is immediately reported to the SSF and the Independent Commission Against Corruption for further investigation. We are also obliged to comply with the applicable legislation and other requirements, including but not limited to anti-corruption and anti-competitive activities. In 2023, we also obtained new certification for ISO 37001:2016 Anti-bribery Management System.

No case of non-compliance was recorded during the reporting period.

To strengthen awareness of the importance of integrity, we held 19 workshops on Corruption Prevention & Capacity Building for ArchSD staff and contractors' staff, 2 refresher workshops for ArchSD staff while also conducting 2 sessions on Integrity Management for new recruits during the year.

Employee Rights

We strictly comply with the Employment Ordinance. We respect the employment rights of our staff as well as enhance their capabilities and technical proficiency by:

- providing employee benefits
- offering on-going technical training opportunities

Safety

We consider the safety of our staff and industry partners to be of paramount importance. On our construction sites, we strive to ensure that all personnel adhere fully to or outperform the statutory safety requirements and the guidelines published by the Development Bureau. In the early stage of large-scale projects, Labour Relations Officers are appointed to resolve any safety-related disputes that may arise between contractors and workers.

In addition, we organise and participate in events, as well as develop guidelines to promote good safety management standards and practices. These include:

- ArchSD Standard on Universal Accessibility Provisions and Elderly-friendly Design Guidelines
- ArchSD's Site Safety Model Workers Award Scheme
- Considerate Contractors Site Award Scheme co-organised by the Development Bureau and Construction Industry Council

Handling Complaints

Should a dispute arise within our own ranks, a grievance handling mechanism is in place to enable staff to raise any complaint in strict confidence to his or her Departmental Staff Complaints Officer. Similar procedures are in place for handling sexual harassment complaints according to the procedures established by the Civil Service Bureau.

Client Satisfaction

To optimise our performance and service quality, we conduct annual client satisfaction surveys. With a view to driving continuous improvements, we have set up a team dedicated to handling client feedback and opinions.

During the reporting period, 100% of the completed projects achieved a "Satisfied" rating or above on our overall performance.

BUILD ROBUST SUSTAINABILITY GOVERNANCE

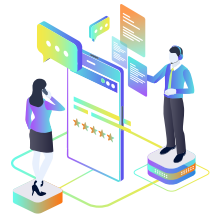
Stakeholder Engagement and Materiality

Listening to our Stakeholders

ArchSD engages stakeholders through a variety of two-way communication channels in order to gain an in-depth understanding of their opinions, concerns, priorities and values. This ongoing communication process involves stakeholders both within the ArchSD and the wider community.

Clients

- After-action Reviews
- Post Occupancy Evaluations
- Surveys
- Workshops



Staff

- Department Consultative Committee
- Staff Associations
- Staff Motivation Scheme
- Staff Relation Units
- Web Forum

Suppliers

- Events
- Public Seminars

Legislators and District Councillors

- Focus Group Meetings

Academic Groups/ Professional Bodies

- Conferences
- Meetings
- Publications
- Training Sessions

Contractors/Consultants

- Events
- Extranet
- Green Contractor Award
- Site Visits

General Public

- ArchSD Sustainability Reports
- Events and Activities
- Exhibitions
- Mass and Digital Media
- Public Seminars

BUILD ROBUST SUSTAINABILITY GOVERNANCE

Stakeholder Engagement and Materiality

Industry Engagement

ArchSD strives to strengthen engagement with external stakeholders by participating in various government committees as well as industry and professional associations to provide recommendations, share experiences and promote best practices. These include but not limited to:

- **Advisory Committee on Built Heritage Conservation** to provide advice on built heritage conservation;
- **Building Sub-Committee of Land and Development Advisory Committee** to consider and where necessary, recommend changes to building policies, procedures, legislation; and to report on such reviews and recommendations to the Land and Development Advisory Committee;
- **Common Spatial Data Steering Committee** to provide advice and to assist the Steering Committee on Innovation and Technology on spatial data policy, strategies and publicity promotion;
- **Hong Kong Green Building Council Sustainable Development Committee** to provide guidance and advice on advanced and impactful sustainable building environment concepts and practices; and
- **Public Fill Committee** to formulate and implement strategies for public fill and recycled materials.

BUILD ROBUST SUSTAINABILITY GOVERNANCE

Stakeholder Engagement and Materiality

Materiality Assessment

To identify the material ESG topics that have the greatest impacts on the ArchSD and our stakeholders, we undertake an annual comprehensive materiality assessment process according to the reporting principles of the GRI Standards.

This year's materiality assessment was conducted by an independent consultant, who used a quantitative approach to identify the material topics, following the steps outlined in GRI 3: Material Topics 2021.

The year's materiality assessment took into account the results of a questionnaire survey conducted in June 2024 among six stakeholder groups who have significant impacts on ArchSD's operations or could be significantly affected by our operations. These stakeholder groups included the following:

- ArchSD Staff
- Academic Groups / Professional Bodies
- Client Departments, i.e. other Government Departments
- Consultants
- Contractors
- General Public

Material issues along with additional industry-specific issues and global megatrends were selected and identified to produce 20 material topics for this year's Report. A total of 668 responses were received. The materiality results are shown in the table on the right.

Categories	Material topics	Importance
Environment	Energy mix and efficiency	High
	Biodiversity and ecological impacts	Mid
	Management of greenhouse gas (GHG) emissions and related environmental risks	Mid
	Resource efficiency and circularity	Mid
	Water efficiency and recycling	Low
Social	Health and safety for all	High
	User health and safety in using the facilities	High
	Employment practices, welfare and rights	Mid
	Diverse and comprehensive staff training and development	Low
	Community engagement	Low
Governance	Ethical practices	High
	Climate risks and response	Mid
	Data security	Mid
	Management of ESG risks and opportunities related to the ArchSD's operations	Mid
	Management of ESG risks and opportunities related to the supply chain	Low
Value creation	Bring positive impacts on the social well-being, livelihood and prosperity of local communities and individuals	High
	Deliver environmentally and socially responsible projects	High
	Use advanced technologies to enhance project quality and productivity	Mid
	Economic performance	Mid
	Indirect economic impacts	Low

BUILD ROBUST SUSTAINABILITY GOVERNANCE

Stakeholder Engagement and Materiality

After scrutinising the feedback from all stakeholder groups, we identified 6 material topics (most significant impacts) that are disclosed in detail in the Report.

Bring positive impacts on the social well-being, livelihood and prosperity of local communities and individuals

Deliver environmentally and socially responsible projects

Energy mix and efficiency

Ethical practices

Health and safety for all

User health and safety in using the facilities

Moreover, with a view to delivering a comprehensive report on ArchSD's sustainability performance, the following material topics with less significant impacts will also be disclosed:

- Use advanced technologies to enhance project quality and productivity
- Climate risks and response
- Community engagement
- Economic performance
- Employment practices, welfare and rights
- Management of GHG emissions and related environmental risks
- Indirect economic impacts
- Resource efficiency and circularity
- Diverse and comprehensive staff training and development
- Water efficiency and recycling

STAKEHOLDER INTERVIEW

Following the survey, two qualitative face-to-face interviews with both internal and external stakeholders were also arranged to gain insights on our key material issues. We also maintained close communication with and collected feedback from stakeholders during the course of our daily operations.

Interview with External Stakeholder

Participants in POSsible! Public Open Space Design Lab Project

Mr. Henry WONG
Assistant Director (Leisure Services)1
Leisure and Cultural Services Department

Ms. Sarah Mui
Co-Founder & Design Director
onebite

Mr. Eric HO
Co-founder & Director
ARCHITECTURE COMMONS

Mr. Jacky CHAN
Manager (Play Environment)
Playright Children's Play Association

ABOUT POSsible!

With a view to enhancing urban living that meets the future needs of communities and the general public, the ArchSD pioneered a territory-wide, cross-sectoral design empowerment project "POSsible! Public Open Space Design Lab" in 2021 to reinvent creative and sustainable public open spaces (POSs) for improving quality of life, social well-being and cultural vibrancy in highly urbanised Hong Kong.

Interview with External Stakeholder

CO-CREATING PUBLIC OPEN SPACES THROUGH DESIGN THINKING

The cross-sectoral collaborative project comprised field studies, literature reviews, stakeholder and community engagement workshop series, and the finale symposium attended by local and international architects and experts on experience and best practice sharing.

With funding support from the Cultural and Creative Industries Development Agency (ex-Create Hong Kong), the ArchSD sought to achieve the following outcomes:

- Promote design thinking and social innovation in upgrading and creating future POSs,
- Foster open dialogue on issues for future POS development;
- Bring various stakeholders together for exchanging ideas and co-creating innovations and solutions, and
- Formulate the POSsible! Design Guide and POSsible! Design Thinking Toolkit through a ground-breaking participatory approach as the future framework for guiding sustainable POS development in Hong Kong.

POSsible! Symposium – POS Design

GATHERING VALUABLE INSIGHTS FOR FUTURE POS DEVELOPMENT

1. Planning and Design: Incorporating the needs and perspectives of POS users, design and management professionals, businesses, NGOs and members of the public, as well as making reference to the United Nations Habitat Quality Public Open Space Dimensions, the project compiled the tailor-made POSsible! Design Guide and POSsible! Design Thinking Toolkit, which provide exemplary guidelines, methodologies, evaluation criteria and tools for various industries to create and revitalise future POSs, making POSs inclusive-, eco- , social-, play-, rest- and leisure-possible for all people, ages and abilities.

2. Stakeholder and Inclusive Engagement: One of the most appreciative aspects of the project were the multidisciplinary insights and the extensive and large-scale stakeholder and community engagement activities involved in exploring and innovating POS design in various types (e.g. sitting-out areas, parks, playgrounds, waterfront promenade) and tackling simulated real world scenarios. The design guide and toolkit resulting from this participatory process, first of its kind in Hong Kong, have provided a common language to better understand the desirable level of inclusivity, quality, social cohesion and community vibrancy, thereby addressing the unique needs of diverse users and communities.

3. Resilient and Sustainable Practices: Adapting and mitigating the impacts of climate change, the project and its cross-sectoral partnership approach also offered an important platform to promote climate-resilient infrastructure and urban greenery for future POS development, contributing to reduce carbon footprint while improving the quality of the living environment and a liveable community for the public.

POSsible! Design Guide and POSsible! Design Thinking Toolkit

Community engagement activity in exploring and innovating POS design

Interview with External Stakeholder

Sham Shui Po Park

UNLOCKING POTENTIAL OF TRANSFORMING PUBLIC SPACES

The newly refurbished inclusive playground at the Sham Shui Po Park, as part of the Transformation of Public Play Space plan by the Leisure and Cultural Services Department, has adopted the future design thinking framework in renovating the existing POS with extensive community participation and engagement works to refine operation and management arrangements.

The successful implementation solicited encouraging response, presenting exciting opportunities to apply design thinking and the two tools widely in future POS development projects, and transform future POSs into distinctive landmarks in Hong Kong, thereby meeting the aspirations of local residents as well as international visitors, and fostering a conducive environment to facilitate the development of arts, sports, culture and creative sectors.

OUR RESPONSE

ArchSD appreciated the insights given by different stakeholders from other departments, POS users, design and management professionals, businesses and NGOs to explore how to improve the design of local POSs. They provided many valuable views on the development of design toolkit and guide. We hope that every stakeholder can become a POS designer with the help of the user-friendly and efficient design guide and toolkit to create a quality living environment and a liveable community for the public.

Interview with Internal Stakeholder

ArchSD Innovative Construction Focus Group

ABOUT THE ICFG

Established in 2018, the Innovative Construction Focus Group (ICFG) aims to acquire new knowledge on innovative construction through active exploration, and identify appropriate projects in carrying out pilot projects in architectural works, building services and maintenance, structural engineering and quantity surveying. As part of ArchSD's staff development initiatives, the ICFG comprises staff members from different disciplines and grades, serving as the innovation driver to promote exchange with the industry while driving best practices and sharing knowledge within the organisation. Online sharing sessions are held bi-monthly for convenience and flexibility in participation as well as archiving to facilitate ease of retrieving, learning and systematic knowledge management record.

Interview with Internal Stakeholder

ENABLING ALL-ROUND STAFF DEVELOPMENT

As the bridge, executer and promoter of innovative construction, the ICFG explore innovative construction opportunities for enhancing our projects and daily operations as well as sharing our experiences across the organisation.

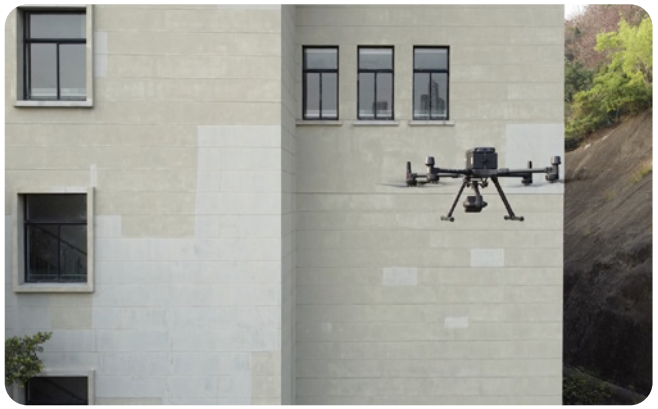
From widening perspectives and industry knowledge to strengthening staff development in interpersonal and problem-solving skills, we are inspired and motivated by the positive and supportive environment of the ICFG to constantly seek innovative ideas, new knowledge and solutions through research, R&D collaboration and adopting in selected pilot projects to address the evolving needs and challenges in the built environment. The unfailing contributions by all group members also foster a sense of purpose in the workplace.

EMPOWERING ICFG TO SUSTAIN INNOVATION

We value open discussion and active participation of the ICFG supported by the top management, and are encouraged to learn, discuss, share and piloting. This enhances cross-team collaboration and synergy for organisation excellence. The multi-disciplinary platform not only provides us opportunities to learn, but more a holistic perspective for technology integration and innovation application in various project stages from planning, design, construction to operation and maintenance.

Looking ahead, we will continue to nurture the new and younger staff, and invite staff from diverse disciplines and grades to create and amplify the impact in sustaining the culture of innovation. Enhancing research in close collaboration with professional and academic institutions, as well as advancing our knowledge management platform are key to the continuous development of the ICFG.

Recreational surface inspection robot



External facade inspection by drone

Wall climbing robot

Interview with Internal Stakeholder

MAKING CONTRIBUTIONS ON SUSTAINABLE DEVELOPMENT

- **Health and safety:** We provide more facilities and guidelines to take care of worker well-being in extreme weather, promote smart construction site and apply various smart devices to enhance site safety and safety management culture.
- **Climate actions:** We are committed to contribute as a part in building climate-resilient infrastructure and decarbonising public buildings through wider application of low-carbon design and materials, and sharing our successful cases to the industry to create the impact.
- **Public education and community engagement:** As the government works agent responsible for development and upkeep of public architecture, we are aware of the need to promote knowledge to the public on how building contributes to our environment and social well-being. Strengthening industry and community engagement can also help advocate best practices while gauging feedback on the diverse needs and aspirations of the community.

OUR RESPONSE

ArchSD values our ICFG's efforts and dedication to drive innovation development in our department. We treasure the positive impact brought from ICFG to our department and the industry. We also appreciated the dedicated contributions by all group members in fostering a sense of purpose in the workplace. ArchSD will continue to support ICFG to explore more innovative construction opportunities and allow them flexibility to apply new knowledge and solutions in our projects and daily operations to enhance work efficiency, site safety and sustainability performance of built environment. We will do more promotion to encourage our staff from different disciplines and grades to participate the ICFG's online meeting and visits to keep innovation culture growing in our department and remain agile in the industry's latest trend and development.

BUILD A LOW-CARBON ENVIRONMENT

Driving Low-Carbon Transformation with Advanced Technologies

As the key department responsible for the development and maintenance of public facilities in Hong Kong, the ArchSD is committed to leveraging innovative and smart construction technologies, as well as our reach and partnerships to break new grounds in environmental stewardship, and to influence the systemic progress necessary for advancing low-carbon building design, construction and practices.

To enhance the sustainability and environmental performance of our construction projects, we are adopting a performance-based approach that goes beyond statutory requirements. Green and high productivity construction technologies, such as Building Information Modelling (BIM), Modular Integrated Construction (MiC) and Multi-trade integrated Mechanical, Electrical and Plumbing (MiMEP), are extensively used in our projects in close collaboration with industry partners and contractors.

Carbon Neutrality Strategic Framework

To align with *Hong Kong's Climate Action Plan 2050*, we are taking a proactive approach to adopting the "3A Strategy", namely Amplify, Accelerate and Act Together under our *Carbon Neutrality Strategy Framework* to speed up the progress in decarbonising Hong Kong's built environment.

3A Strategy

AMPLIFY

To adopt performance-based approach to go beyond and above statutory requirements and apply green and high productivity construction technologies to maximise decarbonisation

ACCELERATE

To explore, develop and adopt smart and advanced technologies to accelerate low-carbon transformation in our projects

ACT TOGETHER

To work hand-in-hand with stakeholders to combat future climate challenges and build the carbon neutral future together

To address the increasing demand in achieving a low-carbon built environment, we will integrate carbon appraisal in our projects and build up capacity with a view to progressing low-carbon building designs. Through the collection, analysis and tracking of carbon performance in projects, a holistic overview of carbon performance can facilitate deep decarbonisation as well as the setting of overarching decarbonisation strategies in Hong Kong's built environment.

Visit our website to learn more about our Carbon Neutrality Strategic Framework and 3A Strategy.

BUILD A LOW-CARBON ENVIRONMENT

Driving Low-Carbon Transformation with Advanced Technologies

Sustainable Building Design Strategies

To enhance climate change mitigation and resilience, we have adopted passive and active design approaches as our key strategies for designing sustainable and future-fit buildings as follows.

Passive Design Approaches

Mitigating heat island effect or elevated temperature

Air ventilation around buildings

Daylighting

Natural ventilation

Passive cooling

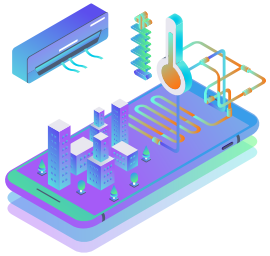
Reducing heat gain through building envelope

We also strive to optimise a building's interaction with its local microclimate through careful planning, site orientation and material selection.

BUILD A LOW-CARBON ENVIRONMENT

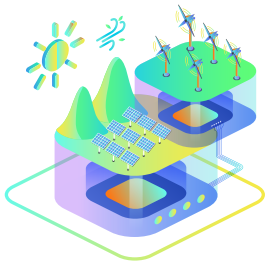
Driving Low-Carbon Transformation with Advanced Technologies

Active Design Approaches



Heating, ventilation and air conditioning (HVAC) systems and water-efficient devices

Lighting systems

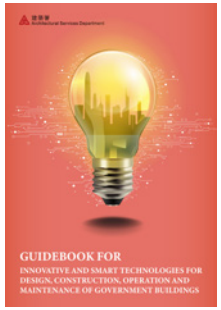


Renewable energy technologies

Guidebook for Innovative and Smart Technologies

The ArchSD has been pushing the boundaries of technology in promoting a smart and sustainable building ecosystem. With emerging technologies advancing at a rapid ppace, we conducted a research study and developed the Guidebook to identify and scale up smart and low-carbon building initiatives as a practical reference tool for implementation in government buildings across multiple stages, and in various building types.

Guidebook for Innovative and Smart Technologies for Design, Construction, Operation and Maintenance of Government Buildings.

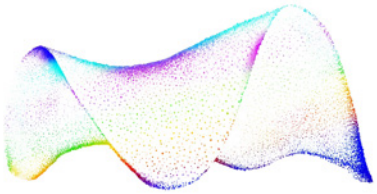


CASE STUDY

The following case studies are exemplary showcases of the ArchSD's low-carbon and green buildings as well as its application of innovative and smart technologies in design and construction:

Tseung Kwan O Immigration Headquarters

A NEW LANDMARK BLENDING INNOVATION, TECHNOLOGY AND SUSTAINABILITY



The reprovisioning of the Immigration Headquarters from Wan Chai to Tseung Kwan O signifies a key milestone in architectural design with state-of-the-art technologies.

The new headquarters has adopted various innovative and smart technologies to enhance its sustainability performance. Amongst others, the iconic installation at the wedding garden "Weaving Love" is Hong Kong's pioneering large-scale pilot that embraces 3D metal printing technology which can reduce material wastage by over 80% compared to conventional construction methods. Leveraging the robotics technology, we have also developed the Testing and Commissioning (T&C) Robot applying deep learning in Artificial intelligence (AI) to perform inspections and installations for the smart construction site. The T&C Robot was awarded the Bronze Medal at the 48th International Exhibition of Inventions of Geneva 2023.

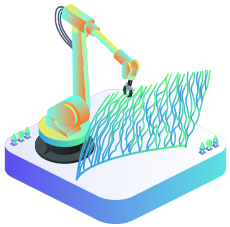
Comprising the Administrative Tower and Enforcement Tower, the new buildings feature modern design with abundant greenery spaces and a large glass façade that enhances air ventilation and natural lighting. Sustainable building materials, resource-efficient initiatives as well as renewable energy technologies are also implemented to reduce energy consumption and resource usage.

CASE STUDY

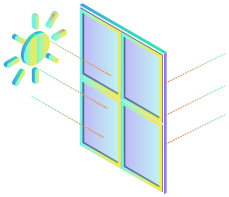
Tseung Kwan O Immigration Headquarters

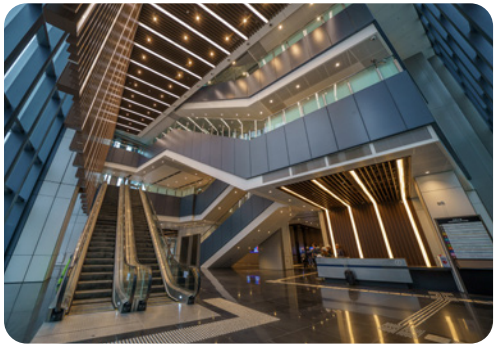
Key Features

Inspired by the bridal veil with its silhouette outlined in metallic wire, the intricate lattice is comprised of heart-shaped patterns that represent the beauty of love. The "Weaving Love" installation at the Wedding Garden is Hong Kong's first large-scale pilot utilising 3D metal printing technology.



T&C Robot applies deep learning in AI to carry out scheduled site inspection and reports generation.





The main entrance provides a 3-storey height atrium space with highly transparent glass façade to maximise natural daylight while providing sun shading with vertical fins.

Innovative, high-performance lightweight cellular concrete is adopted to reduce transportation cost and loading for foundation and provide better thermal and insulation performance.

CASE STUDY

Tseung Kwan O Immigration Headquarters

Facts & Figures

Key Features

01

Commended for its architectural innovation, the project won the ***Merit Award of the Green Building Award 2023*** under the New Building Category.

02

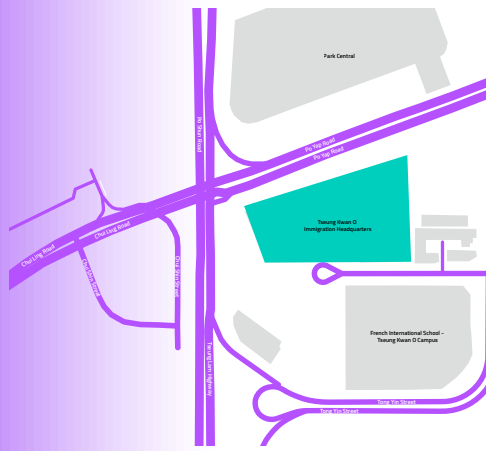
The project has extensively applied ***innovative construction technologies*** and methods. These include BIM, MiC, DfMA and MiMEP with a view to enhancing ***quality control*** and ***site safety***, saving construction cost and time, and reducing usage of resources.

Smart construction robots are also used in ***MEP installation*** and to conduct curtain wall water test for ***enhancing site safety and project efficiency***.

03

Resource-efficiency initiatives and ***renewable energy*** technologies are implemented to reduce energy and ***water consumption***, e.g. water-cooled chillers, variable speed drive for chillers, demand control of supply air, ***photovoltaic system***, rainwater and condensate water recycling system, ***evapo-transpiration system*** for automatic irrigation system, etc.

Location



Address:
61 Po Yap Road, Tseung Kwan O, New Territories

CASE STUDY

Reprovisioning of the Hongkong Post's Headquarters

A SEAMLESS CONNECTION WITH THE VIBRANT COMMUNITY

As one of the iconic cultural landmarks, the Hongkong Post Headquarters in Central has been reprovisioned in Kowloon Bay to make way for a more vibrant and accessible new Central Harbourfront.

Leveraging BIM modelling as well as the application of other smart technologies, the new Headquarters is mainly made of steel structures which offer slim designs with relatively small columns, facilitate modular and prefabricated construction, as well as minimise wastage, achieving an 18% reduction in H-piles compared to an ordinary reinforced concrete structure and saving approximately 1 300 tonnes of carbon emissions.

As a model of an open and inviting civic building dedicated to enhancing the well-being of its users, the new architecture aims to create a place with a seamless connection with the community. To bridge the exterior and interior environments, natural light, greenery and outdoor view of gardens are infused into indoor spaces. The building comprises two main sections: a public section including a post office and the Postal Gallery which showcases the development of Hong Kong's postal services, and an office section incorporating people-centric design spaces for working, operations and training.

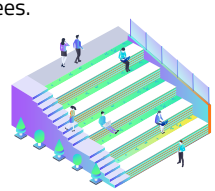
CASE STUDY

Reprovisioning of the Hongkong Post's Headquarters

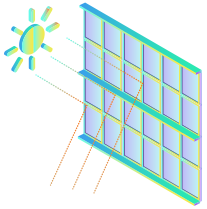
Key Features

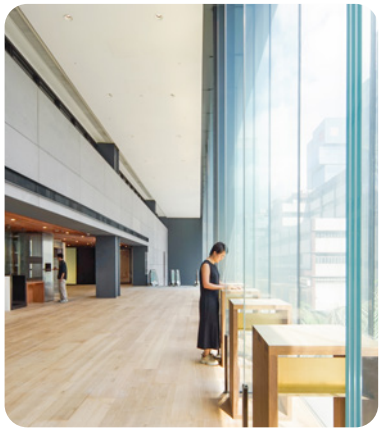
Fronted by a landscaped plaza that welcomes visitors, the tranquil green sanctuary serves as a foyer and a green pedestrian pathway, enabling a seamless connection with the community.

As a gathering hub, the central courtyard on 6/F offers a serene oasis where staff can unwind and interact, fostering a sense of community among employees.

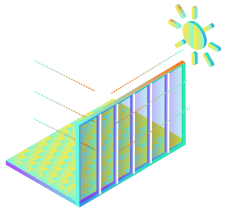


The East and West façades feature rectilinear sun-shading devices in the form of overhangs with varying depths, reducing direct solar heat gain and creating a visually appealing interplay of light and shadow.

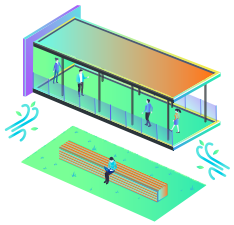




Tall glass walls on the 1/F infuse the interior space with sunlight. The combination of timber flooring and ceiling elements with the natural light crafts a warm and inviting ambience.



Landscaped terraces integrated at various levels to reduce the heat island effects, allowing staff to enjoy city views and appreciate the natural beauty from their working spaces.



CASE STUDY

Reprovisioning of the Hongkong Post's Headquarters

Facts & Figures

Key Features

01

The new postal complex is designed with a touch of ***refreshing oasis*** with over 25% of the site covered in ***greenery***.

02

Energy-efficient features and ***renewable energy technologies*** are integrated into its design and construction, including solar hot water panel and ***photovoltaic (PV) panels*** which contribute to ***approximately 10% energy saving*** in the annual energy consumption.

03

55 monocrystalline silicon PV panels are installed on roof contributing an estimation of ***27MWh annual energy*** generation.

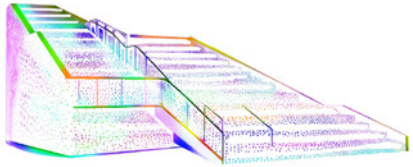
Location

Address:
8 Wang Kee Street, Kowloon Bay, Kowloon

CASE STUDY

The Pentecostal Holiness Church Wing Kwong Junior School

FIRST MIC-BUILT PRIMARY SCHOOL IN HONG KONG



The Pentecostal Holiness Church Wing Kwong Junior School at Tai Po Area 9 is the first primary school building in Hong Kong adopting Modular Integrated Construction (MiC) for all 36 numbers of typical classrooms, typical lavatories for students, typical electrical rooms and pantry. Apart from enhancing site safety, the adoption of MiC improved construction efficiency and sustainability performance. The valuable experience of MiC design and implementation gained in this project has set a good example for the forthcoming MiC school projects in Hong Kong.

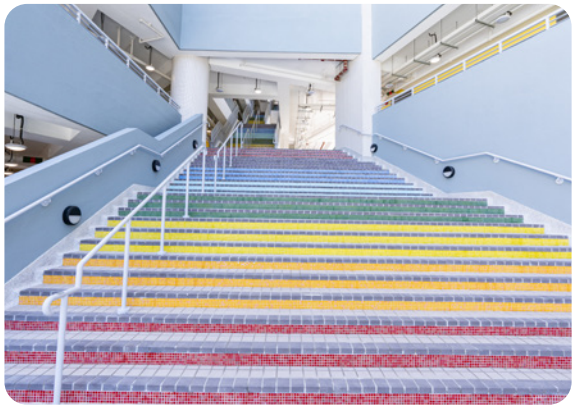
The design objective for this school is to provide an inspirational, airy and joyful environment with diverse and boundless spaces for students to explore, interact and pursue their aspirations. Linking the learning and teaching spaces, a central atrium and a “Rainbow Staircase” serve as multi-functional areas for learning, repose and social interaction while enhancing visual and physical connection between 3 main building blocks, i.e. Classroom Block, Special Room Block and Hall Block.

The refurbished school has also integrated sustainable features into its design and construction with over 20% of the site covered in extensive greenery.

CASE STUDY

The Pentecostal Holiness Church Wing Kwong Junior School

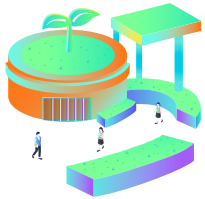
Key Features



The "Rainbow Staircase" that connects building blocks resembles "Progress Learning"- students grow in strength, wisdom and faith year after year.

Sustainable and energy-efficient features as well as renewable energy technologies contribute to energy and water reduction. These include rainwater recycling system, solar pipes along common corridor of the central atrium, photovoltaic panels, LED lighting and life regenerative system.

The 36-classroom primary school at Tai Po were constructed with 181 MiC modules of typical classrooms, typical toilets, typical electrical rooms and pantry. Pictured is a standardised classroom.



The Student Activity Centre is an oval-shaped stand-alone structure on the Roof Garden above the Assembly Hall at 5/F encouraging students' exploration and connection to the outdoor environment.

CASE STUDY

The Pentecostal Holiness Church Wing Kwong Junior School

Facts & Figures

Key Features

01 The project won the ***Construction Industry Council's Outstanding MiC Project Award*** in 2022.

02 With the ***total construction floor area*** of ***13,233m²***, the primary school consists of 36 classrooms including 4 small group teaching rooms, 9 special rooms, a library, a guidance activity room, 2 interview rooms, a staff room, a staff common room, a conference room, an assembly hall, a multi-purpose area, a ***student activity centre*** and ***other ancillary facilities***.

03 Each classroom is sub-divided into 4 ***volumetric units prefabricated*** with reinforced concrete elements and completed with the required finishes, ***fixtures*** and ***building services*** in an off-site factory under ***stringent quality control***. There are also 6 volumetric units for the toilets and electrical room, and 1 volumetric unit for pantry.

Other smart construction technologies including BIM from site planning to development, as well as ***DfMA*** for pre-fabricated and ***modular type equipment*** are employed. These include toilet pipe duct risers, air conditioning terminals, pre-insulated air duct, distribution board, electrical riser, pump sets and hose reel cabinet.

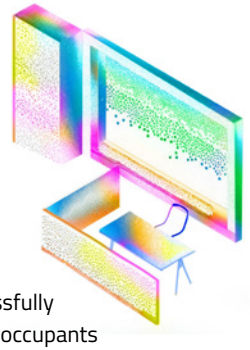
Location

Address:
10 Choi Tip Street, Tai Po

CASE STUDY

Fitting-out of Office Accommodation at 19/F, 8 Heung Yip Road, Wong Chuk Hang

A NOVEL APPROACH TO SMART AND GREEN OFFICE



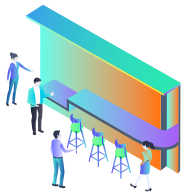
The newly designed workspace for Transport and Logistics Bureau has successfully combined environmental conservation with the well-being and comfort of its occupants and achieved the Platinum rating under BEAM Plus Interiors V2.0 with an overall score of 99 recognising its outstanding performance. With the goal of promoting a sustainable lifestyle, the project was led by a collaborative team involving multiple stakeholders (i.e. occupants, building management office and project team) throughout planning, design, construction and operation stages to create a workspace that is modern, smart and sustainable.

The office has an open view in two opposite sides with over 80% of its occupants can enjoy natural lighting. A glazed feature wall in atomise glass system is developed between two office areas to enhance the space with a touch of biophilic design, fostering a connection with the natural world. The refurbished office also features a quality indoor environment and sustainable facilities include sharing and education boards, seating area, recycling facilities and reused electrical appliance and furniture.

CASE STUDY

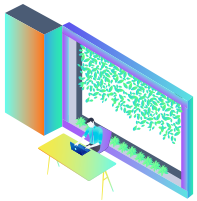
Fitting-out of Office Accommodation at 19/F, 8 Heung Yip Road, Wong Chuk Hang

Key Features

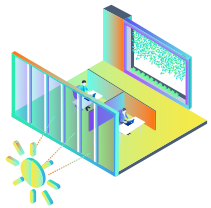


Common and connecting spaces are equipped with resting and dining area and recycling bins to promote a sustainable lifestyle.

The glazed feature wall enhances biophilic design and promotes a smart office design.



The refurbished workspace adopts an inclusive design and features a comfort zone with education and sharing board facilities.



Open ceiling with energy-efficient Intelligent Fan Coil Units (IFCUs) for the air conditioning system are adopted saving more than 67% of energy.

CASE STUDY

Fitting-out of Office Accommodation at 19/F, 8 Heung Yip Road, Wong Chuk Hang

Facts & Figures

Key Features

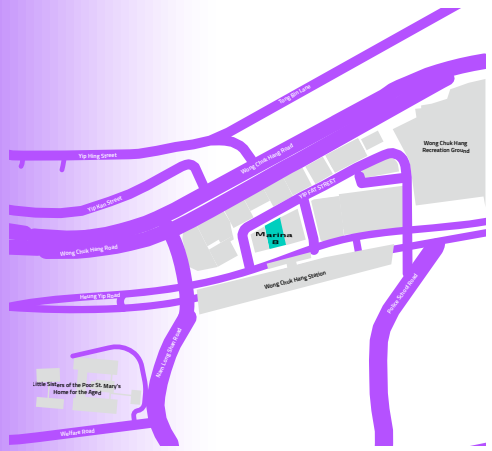
01 The Fitting-out of ***Office Accommodation for Transport and Logistics Bureau is the pilot project of the BEAM Plus Interiors V2.0 and achieved Final Platinum Rating***.

02 The project was commended as the winner of the Hong Kong Institute of ***Project Management Achievement Awards 2023*** in the ***Sustainable Projects category*** as well as ***the Green Building Award 2023*** (Merit Award).

03 The refurbished office incorporates acoustic design and ***advanced energy-efficient IFCUs*** which manage 18 temperature control zones. These features contribute to an environment that ***promotes health and well-being***, thereby earning an excellent rating under the ***IAQ Certification Scheme***.

04 This project preserved and reused ***existing structure and materials*** where possible e.g. existing wall and flooring, and adopted local, recycled materials and ***certified green products*** for the renovation. ***Over 79%*** of the demolition and construction waste were ***recycled and reused***.

Location



Address:
8 Heung Yip Road, Marina 8, Wong Chuk Hang, Hong Kong

BUILD A LOW-CARBON ENVIRONMENT

Driving Low-Carbon Transformation with Advanced Technologies

Advancing Green Buildings

Pursuing green certification can enhance environmental and sustainability performance. The ArchSD underlines its strategic approach to sustainability by adopting the BEAM Plus New Buildings for new projects. As at the end of 2023, we have obtained BEAM plus (New Buildings) certification for 55 new buildings, BEAM Plus Interiors certification for 5 offices and BEAM Plus Existing Building (Selective Scheme) for 3 buildings.

BEAM Plus-Certified Buildings up to 2023

Type of Certificates	Rating		Sub-total
BEAM Plus (New Buildings) Certification* (Versions 1.1, 1.2, 2.0)	**Platinum**	**Gold**	
	17	38	55
BEAM Plus (Interiors) Certification (Version 1.0)	**Platinum**		
	4		4
BEAM Plus (Interiors) Certification (Version 2.0 – Non-residential)	1		1
BEAM Plus Existing Building (Version 2.0 Selective Scheme) Certification	**Excellent**	**Satisfactory**	
	2	1	3

*Reference to specific versions of BEAM Certificate:
Version 1.1 – BEAM Plus New Buildings, 2010;
Version 1.2 – BEAM Plus New Buildings, 2012; and
Version 2.0 – BEAM Plus New Buildings, 2019.

BUILD A LOW-CARBON ENVIRONMENT

Driving Low-Carbon Transformation with Advanced Technologies

Managing our Footprint

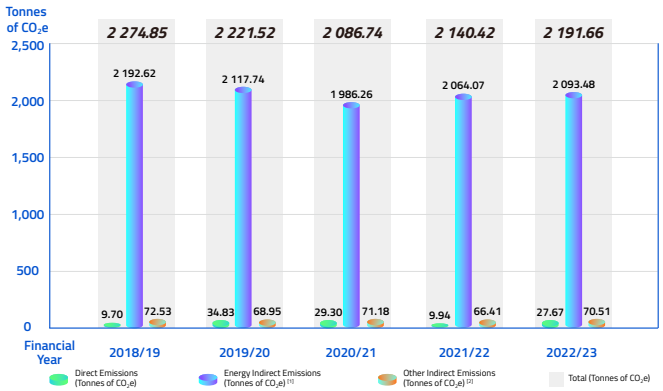
We abide by the Quality, Environmental, Anti-bribery, Occupational Health and Safety Policy to deliver our services in an environmentally responsible manner by reducing carbon emissions, increasing energy and resource efficiency and enhancing our waste management. In addition, we have introduced various waste-reduction, energy- and water-saving measures to reduce our carbon footprint. Below are the highlights of the measures adopted at the QGO and APB Centre:

Carbon Emission Management

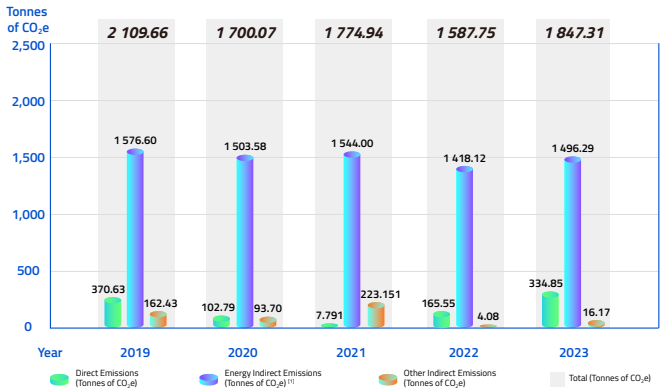
Manage greenhouse gases emissions by assessing our carbon emissions and implementing targeted measures to effectively reduce greenhouse gas emissions, for example:

- Conduct regular carbon audits to measure our carbon footprint in accordance with the Greenhouse Gas Protocol and with reference to the local guidelines from the Environmental Protection Department and the Electrical and Mechanical Services Department.
- Monitor electricity consumption and related environmental risks in our daily office operations as well as our energy mix and energy efficiency.
- Adopt electric vehicles (EV) in new maintenance term contracts.
- Adopt EV at the QGO, install EV chargers at the QGO and APB Centre, as well as for the ArchSD's projects.
- Recommend our clients to use innovative and smart technologies in reducing their environmental impacts.

Carbon emissions produced by the QGO



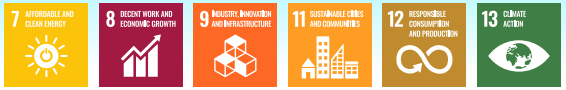
Carbon emissions produced by the APB Centre



[1] A territory-wide default emissions factor was used to calculate these emissions.

[2] The figures were calculated by measuring the actual usage of fuel in mobile sources and paper consumption (A3 and A4) and wastepaper collected for recycling at the QGO.

BUILD A LOW-CARBON ENVIRONMENT



Driving Low-Carbon Transformation with Advanced Technologies

Energy Saving

- Set annual target for reducing electricity consumption using 2018 as the base year to further drive energy-saving efforts.
- Reduce energy consumption and enhance energy efficiency across our operating premises, for example:
  - Refer to the ISO 14001 standard for improving environmental performance of our office operations and ISO 50001 for managing energy consumption at the APB Centre.
  - Use occupancy/motion sensors to automatically switch on and off the lighting in areas with low traffic flow.
  - Maintain room temperatures to 25.5°C to avoid excessive cooling.
  - Set all office equipment to energy-saving mode during office hour and switch off the equipment after office hour.
  - Pre-set switch-off time for external lighting installations at the APB Centre to 8 p.m.
- Monitor energy-use pattern to identify abnormalities in energy consumption and explore energy-efficiency enhancement opportunities, such as lighting retrofitting works at our offices.
- Install photovoltaic panels at the APB Centre to generate renewable energy for electricity consumption.

Green Procurement

- Incorporate environmental and well-being considerations when purchasing goods and services that could contribute to a circular economy, for example:
  - Refer to the Green Specifications from the Environment Protection Department to purchase goods and services to promote resource efficiency and circularity.

Resource Efficiency

- "Slim and Trim" cumbersome procedures and obsolete practices to promote smarter and greener practices and increase efficiency and effectiveness in our operations, for example:
  - Encourage a work-smart culture and adopt digitalisation, e-workflows and new information technology.
  - Implement various CO-i projects to shorten processing time and save paper.

Waste Management

- Encourage clients to use resources more efficiently during construction.
- Recommend the use of pre-cast concrete, onsite sorting of construction and demolition waste, and recycling or upcycling of used construction materials.

Waste Reduction

- Issue green house-keeping guidelines to promote waste reduction, recycling and handling, for example:
  - Adopt electronic functions / systems to reduce paper consumption and reuse materials (e.g. printing on both sides of paper and envelopes) instead of using virgin materials.
  - Set up collection points for metal and plastic waste to facilitate recycling throughout our offices.
  - Formulate waste-reduction measures against our annual targets to monitor the progress.

Water Efficiency and Recycling

- Manage water consumption across our operating premises to ensure efficient water utilisation, for example:
  - Use auto-sensing taps and dual flush cisterns to avoid excessive use.
  - Conduct regular inspections and maintenance of our water supply system to avoid leakage.
- Monitor water consumption patterns regularly to identify abnormalities and explore opportunities for enhancing water-use efficiency.

BUILD A LOW-CARBON ENVIRONMENT

Driving Low-Carbon Transformation with Advanced Technologies

Green Recognitions

The concerted efforts and commitments to the environment from our management and staff have earned ArchSD the Hong Kong Green Organisation Certificate (HKGOC). The consecutive recognition from the Environmental Campaign Committee and Environment and Ecology Bureau serves as a testimony and future motivation to our conscientious contributions to the environmental protection in workplace.

'Excellent Level'
Energywi$e certificate

Carbon Reduction certificate
(APB Centre)

'Excellent Level'
Wastewi$e certificate

'Good Level'
IAQwi$e certificates (APB Centre)

'Good Level'
IAQwi$e certificates (QGO)

Hong Kong
Green Organisation

BUILD AN INCLUSIVE WORKPLACE AND SOCIETY

Empowering our People

At the ArchSD, we recognise the importance of cultivating a highly skilled workforce so as to serve our clients and the community effectively. With the rapid shifts in climate, technological advancements and user expectations, we are committed to empowering our staff with enhanced knowledge, skills, safety and wellness through fostering knowledge, collaboration and a culture of innovation. This will enable our staff to continuously enhance our services and contribute their expertise in building facilities that will benefit the community for generations to come.

Our People

We strive to provide a supportive environment that inspires our staff from diverse backgrounds to reach their full potential for both professional and personal growth.

We recruit and develop talents based on merit and equal opportunity following the principles of open and fair competition. We also follow the Government's practice of non-discrimination in terms of disability, sex, marital status, pregnancy, age, family status, sexual orientation and race.

Staff Development and Knowledge Management

At the ArchSD, we believe a skilled and diverse workforce is the key to delivering exceptional service to our clients and the broader community, in particular in today's ever-evolving landscape of the architecture and construction industry.

In 2023 we continued to keep our staff abreast of the latest advancements in cutting-edge construction technologies, such as DfMA, MiC, MiMEP and BIM to ensure our employees remain agile and adaptable in line with industry trends.

Training programmes are tailored to the unique needs of each staff member through a diverse array of platforms and formats. These include academic lectures, structured classroom training, workshops and seminars, symposiums, overseas visits, on-the-job training, coaching and mentoring sessions, e-learning modules, and competitions.

We also foster learning, innovation and collaboration through the one-stop Knowledge Management (KM) Portal which aims to provide a cross-disciplinary knowledge sharing and discussion platform for organisation and operation excellence. During the year, we enhanced the ArchSD Chatapp to interlink with the KM Portal offering our staff an easy and convenient access for acquiring knowledge and sharing insights. We also organised design workshops and activities to further encourage knowledge sharing and co-creation.

The Design Thinking Workshop held in October 2023 on knowledge management brought together staff of different ranks and disciplines to collaboratively brainstorm creative ideas for developing new features and enhancing user experience of the e-Profile.

BUILD AN INCLUSIVE WORKPLACE AND SOCIETY

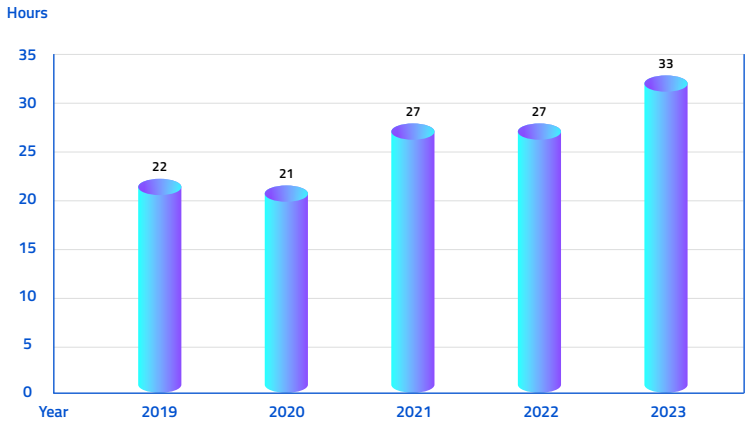
Empowering our People

4 dedicated video channels, namely “Knowledge Maker”, "QQ Tutorial", "TECHNOPOLY" and “TECHTUBE”, were featured in the e-learning portal of TechnoLand to foster sharing of valuable insights by senior colleagues as well as application of advanced technologies by young staff. The in-house training campaigns cultivate a collaborative learning culture empowering staff to take charge of their progressive learning journey.

To enable the sharing of knowledge and experiences among site supervisory staff across different sites, thematic videos were developed in the KM Portal covering various aspects of construction site works, e.g. installation, testing and commissioning, site safety, health, environmental protection, etc, which can be applied in New Building Works, Building Services and Facility Upkeep.

During the reporting year, the ArchSD provided 704 training courses with each staff member receiving an average of 33 hours of training.

Training Hours per Staff



Summary of Training Activities

Type	Number of Trainees	Number of Training Hours
Leadership & Management Skills	107	1 649
Professional & Vocational Training	14 093	45 734
Career Development	3 474	15 477
Total	**17 674**	**62 860**

BUILD AN INCLUSIVE WORKPLACE AND SOCIETY

Empowering our People

Staff Well-Being

We are committed to building a vibrant and inclusive workplace that fosters staff wellness, embraces work-life balance, encourages teamwork and builds a positive mindset and a sense of pride in the work our staff have contributed.

During the year, our staff associations also organised a broad spectrum of sports and recreational activities which contribute to a healthy and joyful workplace and our community-oriented service culture, reinforcing our commitment to the welfare and unity of our ArchSD family.

ArchSD Annual Dinner

ArchSD Dragon Boat Launching Ceremony

Architectural Services Department Inter-Branch Football Tournament

Oxfam Trailwalker

BUILD AN INCLUSIVE WORKPLACE AND SOCIETY

Fostering a Green and Safety Culture

From formulating policy and improving risk management to measuring performance and enhancing awareness and training, we adopt a holistic approach with a view to fostering a green and safe culture in our operations as well as the entire value chain.

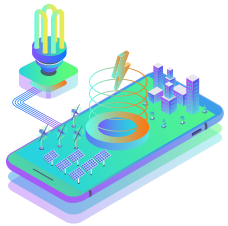
Our department-wide ISO 45001 Occupational Health and Safety Management System aligns with the international best practices and industry standards for protecting employees in our offices and project sites. An Occupational Health and Safety Representatives Working Group is in place to discuss matters of concern, monitor and measure our performance. Potential hazards in our offices and project sites are identified through regular safety inspections. When hazards are detected, we will determine their possible impact and develop suitable mitigation plans.

To raise safety awareness among our staff, we provide training in a range of topics, such as safe lifting operations for mobile plants, construction and environmental engineering safety, and site safety in maintenance works. To strengthen staff knowledge with our safety procedures, we conduct emergency drills across all staff levels and identify areas that need improvement.

Our contractors are also pivotal in nurturing a strong health and safety culture. In ArchSD's projects, our contractors have initiated and applied various innovative practices in site operations to monitor and improve onsite sustainability performance, which progressively outperform the industry in developing green and smart practices. These include:

Energy Efficiency

- Install energy-saving lighting systems
- Use intelligent sensors
- Use renewable energy
- Build temporary transformers



Emission Mitigation

- Suppress construction dust
- Install noise enclosure and acoustic screen
- Operate hydraulic crusher for demolition work

INNOVATIVE PRACTICES

People

- Provide rechargeable cordless tools for workers
- Conduct volunteer renovation work for neighbouring stakeholders
- Establish a 24-hour enquiry and support hotline for stakeholders

Waste Management and Reduction

- Use pre-cast concrete
- Sort construction and demolition waste onsite
- Encourage recycling
- Upcycle used materials

BUILD AN INCLUSIVE WORKPLACE AND SOCIETY

Fostering a Green and Safety Culture

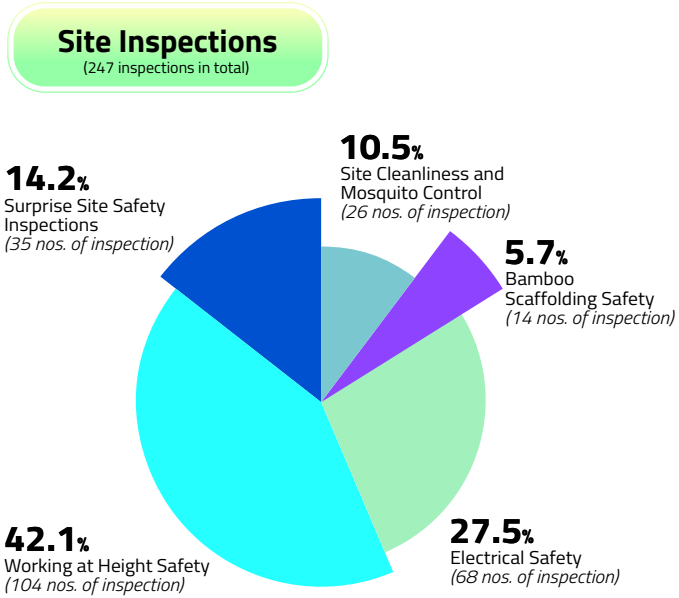
Safety Culture at Construction Sites

Adhering to the core values of professionalism, integrity and sustainability, the ArchSD maintains a robust engagement with our key stakeholders, including clients and business partners, to ensure sustainability practices are pursued throughout our value chain. We require that all ArchSD's contractors and suppliers strictly abide by the Hong Kong Laws, such as the anti-corruption laws, upon submission of their tenders.

As part of ArchSD's commitments to maintaining site safety, we require our contractors to follow our stringent safety requirements and industry best practices. We provide guidance to our contractors with various guidelines and reference information, which include but not limited to codes of conduct and practices, Work Safety Alerts issued by the Labour Department, site safety checklists, safety audit results, safety reminders, briefing notes, etc.

To further safeguard occupational health and safety of contractors, our Departmental Safety & Environmental Advisory Unit will conduct surprise inspections and raise site safety issues for their attention and corrective actions in a timely manner.

In 2023, we conducted a total of 247 site inspections to gauge performance on the following issues:



In addition, we arrange regular project meetings to keep track of and review contractors' environmental and safety performance, as well as to proactively discuss with contractors for formulating rectifying measures and remediation plans to improve substandard performance once identified.

Raising and Recognising Sustainability Performance

In close collaboration with industry stakeholders, ArchSD is committed to delivering outstanding sustainability performance and service in our facilities development and maintenance. During the reporting year, we conducted a total of 56 workshops and talks and 98 publicity events to share knowledge and promote best practices in creating a quality and sustainable built environment.

We also recognise contractors, subcontractors and site personnel in demonstrating exemplary achievements in environmental performance, site safety and a considerate attitude in carrying out public works. We offer formal commendation mainly through two award schemes, namely the Green Contractor Award and the Considerate Contractors Site Award Scheme.

BUILD AN INCLUSIVE WORKPLACE AND SOCIETY

Fostering a Green and Safety Culture

Green Contractor Award

Since 2001, ArchSD has organised the Green Contractor Award annually with the aim of encouraging green initiatives (e.g. energy saving, water conservation, waste reduction, emissions mitigation, and environmental management, etc.) during construction, as well as to compliment contractors' continual efforts in achieving sustainability. All our projects under construction in 2023, including maintenance projects, with contract sums exceeding $50 millions participated in the competition.

Award	Awardee	Contract
Gold Award	Paul Y. - Able Joint Venture	Contract No. SS F501 Design and Construction of Redevelopment of Queen Mary Hospital Phase I - Main Works at Pok Fu Lam Road, Hong Kong
Silver Award	China State Construction Engineering (Hong Kong) Limited	Contract No. SS K514 Design and Construction of Chinese Medicine Hospital and Government Chinese Medicines Testing Institute in Tseung Kwan O
		Contract No. SS J513 Redevelopment of Kowloon Tsai Swimming Pool Complex
		Contract No. SS L514 Construction of Heritage Conservation and Resource Centre
Bronze Award	Gammon Construction Limited	Contract No. SS L501 Design and Construction of Kwun Tong Composite Development
Green Contractor Award (Term Contract)	Cheung Hing Construction Company Limited	Contract No. TC H938 Term Contract for the Maintenance of Slopes for which the Architectural Services Department (Property Services Branch) is Responsible [Designated Contract Area: New Territories and Outlying Islands (North)]
Special Award (Worker-Centric Construction Site)	China State Construction Engineering (Hong Kong) Limited	Contract No. SS K514 Design and Construction of Chinese Medicine Hospital and Government Chinese Medicines Testing Institute in Tseung Kwan O
		Contract No. SS J513 Redevelopment of Kowloon Tsai Swimming Pool Complex
		Contract No. SS L514 Construction of Heritage Conservation and Resource Centre

BUILD AN INCLUSIVE WORKPLACE AND SOCIETY

Fostering a Green and Safety Culture

Awardees of Green Contractor Award

BUILD AN INCLUSIVE WORKPLACE AND SOCIETY

Fostering a Green and Safety Culture

Considerate Contractors Site Award Scheme

The Considerate Contractors Site Award Scheme, jointly organised by the Development Bureau and the Construction Industry Council, is designed to motivate contractors, subcontractors and all site personnel to operate responsibly and considerably at all times and take environment, public health and safety into consideration. 2023 marks the 30th anniversary of the Scheme, the contractors of ArchSD received a total of 16 awards in the Considerate Contractors Site Awards (CCSA), Outstanding Environmental Management and Performance Awards (OEMPA) and Innovation Awards for Safety and Environmental Excellence (IASEE) categories, including:

Award			Contractor	Contracts
CCSA	OEMPA	IASEE		
Public Works - New Works				
Bronze	Bronze	Merit	China State Construction Engineering (Hong Kong) Limited	Contract no. SS L514 Construction of Heritage Conservation and Resource Centre
Merit	Merit	Merit	Hip Hing Engineering Company Limited	Contract no. SS L508 Design and Construction of Expansion of the Legislative Council Complex
Merit	Merit	Merit	Dragages Hong Kong Limited	Contract no. SS K506 Construction of Fire Station – cum – ambulance Depot with Departmental Quarters and Facilities in Area 72, Tseung Kwan O
Merit	Merit	Merit	Gammon Construction Limited	Contract no. SS L501 Design and Construction of Kwun Tong Composite Development
Public Works - RMAA Works				
Merit	Merit	Merit	CWED Joint Venture	Contract no. TC K928 Term Contract for the Maintenance of Slopes for which the Architectural Services Department (Property Services Branch) is Responsible [Designated Contract Area: Hong Kong Island and Outlying Islands (South)]
Merit	N/A	N/A	Chun Wo Joint Venture	Contract no. TC J921 Term Contract for the Alterations, Additions, Maintenance and Repair of Buildings and Lands and Other Properties for which the Architectural Services Department (Property Services Branch) is Responsible [Designated Contract Area: Wan Chai (South) and Wan Chai (North)]

BUILD AN INCLUSIVE WORKPLACE AND SOCIETY

Creating Inclusive, Vibrant and Liveable Communities

Being an integral member of the community, we take an empathetic and a long-term approach to advancing sustainable development in the design and construction of public architecture, with a view to enhancing the inclusivity and well-being of our community. We also advocate a culture of creating positive impact through staff volunteering.

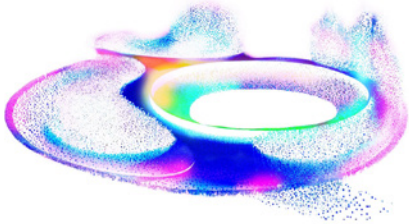
To enhance the quality of urban living, we are committed to integrating social considerations and people-centric designs and applying low-carbon and smart construction technologies to our projects from planning and design to construction and maintenance. We work closely with our industry partners, user departments and the wider community to provide green, high-quality and accessible public spaces that inspire creativity, and promote interaction among diverse members of the community, thereby allowing the public to enjoy leisure moments and get a respite from the fast-paced city life.

The following case studies are exemplary showcases of the ArchSD's efforts in enhancing diversity, creativity and social well-being of the city:

CASE STUDY

Kai Tak Station Square

A GATEWAY, A HUB AND AN URBAN EMERALD OF KAI TAK



Station Square is located at the heart of Kai Tak. It acts as a connector to adjacent urban development and existing historical context. Being the biggest urban square in Hong Kong, the project is designed to provide a sequence of urban spaces that embody different public activities, such as festive events, children plays, lawn bowling, sports, etc, manifesting itself as “a place for people”.

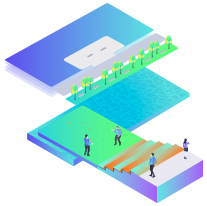
Station Square also acts as a green breathing space in the vibrant neighbourhood. Through creating natural wind corridors in a low density area, it encourages flow of natural breezes across the square. In addition, the concept of “Canopy of Tree” of the project not only gives an identity to it, but also provides large natural shaded spaces for public to enjoy as well. This abundant landscaped area, including rain garden and boawale planter, also allows better management of storm water. Furthermore, the extensive greenery coverage and large water bodies in Station Square also improve the mirco-climate by mitigating heat island effect at district level. As an urban oasis amidst the dense urban fabric, Station Square creates an unique habitat for various creatures.

CASE STUDY

Kai Tak Station Square

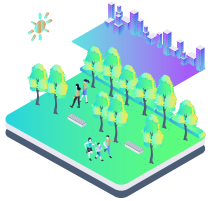
Key Features

Station Square is the biggest urban square in Hong Kong for holding a variety of activities, such as festival events. It accommodates a wide range of facilities including, lawn bowling green, children play areas, cycling grounds etc.

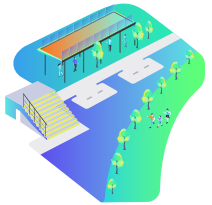


Main water features in Station Square are designed adjacent to the existing Kai Tak River to form an urban oasis and all are connected to main event spaces by a covered walkway.

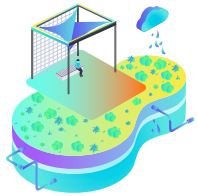
"Canopy of Trees" creates strong identity by unique square-shaped trees, providing sufficient natural shading.



Extensive greenery and water bodies help mitigating heat island effect. Rows of trees and plants are carefully placed as visual relief and green-linkage for the residential areas and Kai Tak Sports Park.



The concept of "sponge city" is introduced through providing abundant landscaped areas, integrated with the design of rain garden and bioswale, for better management of storm-water. Innovation technology, including soil cells and underground tree guying system, and innovation ideas, pet-inclusive and cycling-inclusive concept, are implemented to achieve a new chapter of urban space.



CASE STUDY

Kai Tak Station Square

Facts & Figures

Key Feature

01

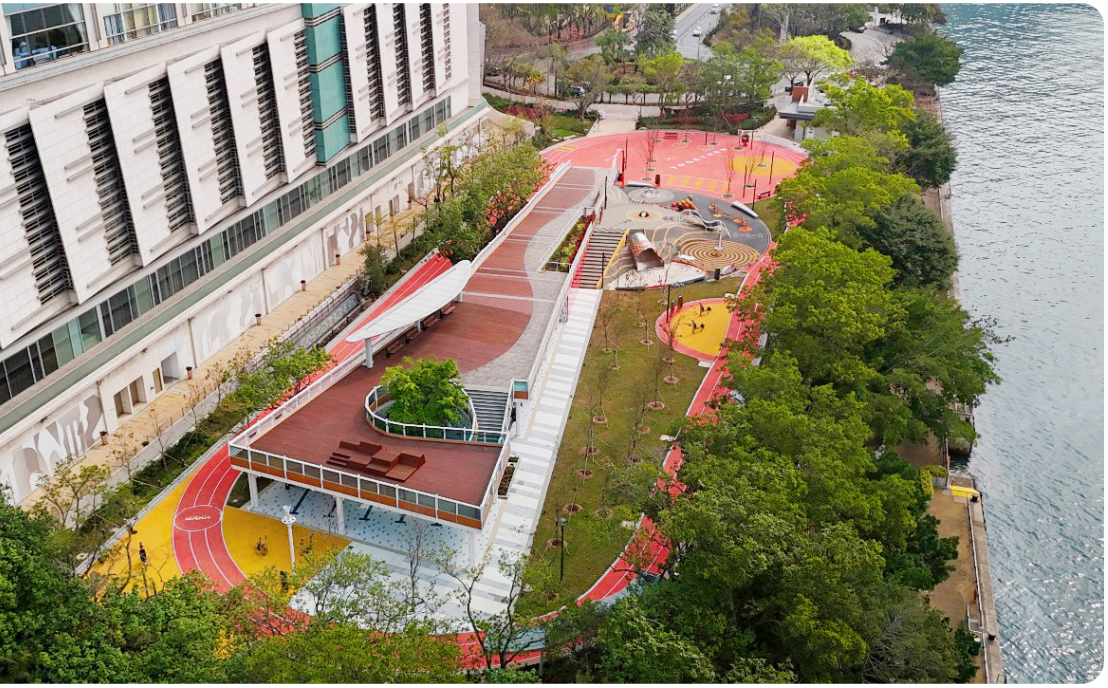
Energy-efficient features and ***renewable energy technologies*** including photovoltaic (PV) panels and ***solar powered light*** fittings contribute to ***4.5% of energy reduction***.

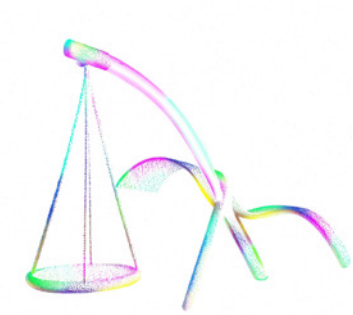
Location

Address:
20 Muk On Street, Kai Tak

CASE STUDY

Hoi Fai Road Park





AN INCLUSIVE GREEN OASIS

From a bare ex-bus terminus to a green oasis, the Hoi Fai Road Park has been transformed, offering a refreshed linkage that seamlessly connects with nearby open spaces and promenades, providing attractive and quality open space for public enjoyment.

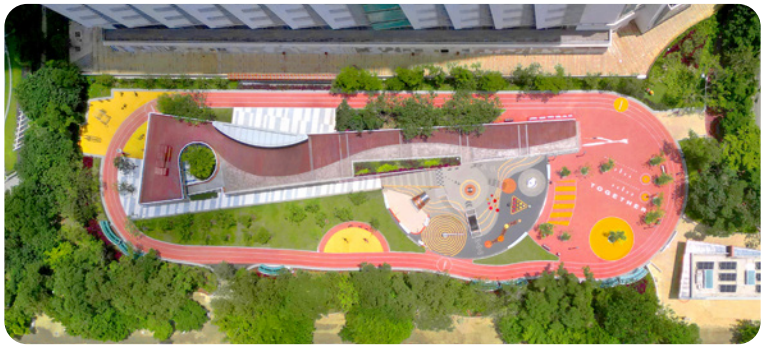
As a new public open space landmark located near the Olympic MTR Station, the Hoi Fai Road Park's design concept incorporates various "Olympic" elements and a vivid colour scheme, providing the public with a unique visiting experience. These "Olympic" features include anamorphic graphics at the park entrance to simulate lighting of the Olympic flame; covered space beneath the viewing platform to resemble immersing in a swimming pool; 3D text art installation to showcase the Olympic motto "Faster", and a themed wall inspired by the Olympic motto "Higher" with supergraphics to encourage children to jump higher, etc.

A variety of recreational facilities are also provided at the Hoi Fai Road Park to accommodate diverse needs of users, serving as an inclusive and vibrant public open space.

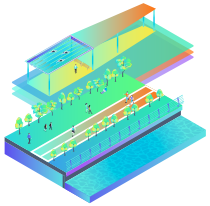
CASE STUDY

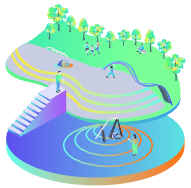
Hoi Fai Road Park

Key Features



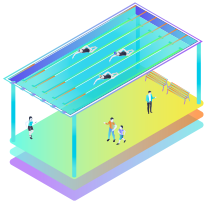
Seamlessly connects with adjacent Hoi Fai Road Promenade and open space, the Hoi Fai Road Park fosters a sense of continuity and accessibility within the urban fabric.

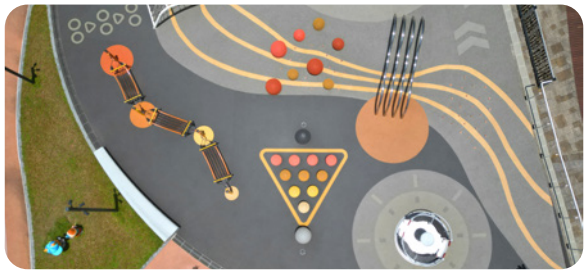




The park promotes inclusiveness and accessibility by adopting people-centric design, contributing to a welcoming and inclusive environment.

Incorporating "Olympic" design elements, the park creates a distinctive and unique identity providing cultural and architectural coherence as a sustainable Green Oasis.





"Playscape" design theme with "Olympic" element that incorporated the landform, setting with variety of inclusive children play equipment, caters to the diverse abilities and interests of every child and offer an inclusive play experience.

A diverse range of recreational facilities include an inclusive children's play area, fitness corners, Tai Chi area, jogging track, and landscaped garden with sitting-out facilities.

CASE STUDY

Hoi Fai Road Park

Facts & Figures

Key Features

01

Fitness corners offer a wide range of fitness equipment, including ***recumbent bikes*** with ***mobile chargers***, promoting community's ***active engagement in exercise***.

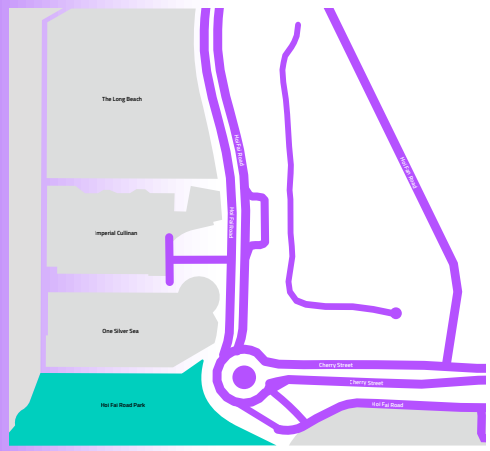
02

The park ***leverages renewable energy technologies*** such as ***photovoltaic panels*** on the roof of toilet block, pole light with ***wind turbine*** and PV cell and solar-powered bollard lights to improve its environmental performance, ***contributing to a green city***.

03

Associated facilities, such as toilet, ***universal toilet***, ***accessible toilet*** and a ***baby-care room***, are provided to meet the needs of the community.

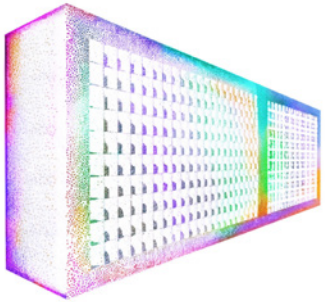
Location



Address:
Hoi Fai Road, Tai Kok Tsui, Kowloon

CASE STUDY

Cape Collinson-San Ha Columbarium



ENHANCING ACCESSIBILITY AND AESTHETICS FOR PAYING RESPECTS

The new Columbarium is aesthetically designed with enhanced facilities and improved accessibility, addressing the growing demand for niches and delighting the local community and visitors.

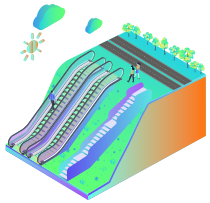
Adjacent to the local housing estates with a rural setting, the project seeks to establish harmony with the surrounding environment and minimise visual impact. The columbarium provides a pleasant and serene environment for paying tribute to cherished memories. All niches have external views provided with natural daylight and ventilation. Ancillary facilities such as hand-washing troughs, communal joss paper burners, communal incense holders, landscaping area, barrier-free provision and universal accessible toilet were provided.

One notable feature is the covered pedestrian link with two-way escalators and stairway connecting Cape Collinson Road uphill and San Ha Street downhill. This design enhances connectivity and alleviates pedestrian and traffic flow during the Ching Ming and Chung Yeung Festivals. This project achieved the Gold Rating in BEAM Plus (New Buildings) Final Assessment with a number green features including vertical greenery and rainwater harvesting system.

CASE STUDY

Cape Collinson-San Ha Columbarium

Key Features



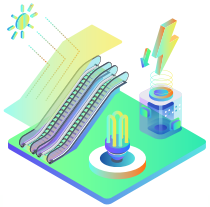
A covered pedestrian link with escalators and stairway connecting Cape Collinson Road and San Ha Street to improve the connectivity and accessibility for the visitors.

There are 25 340 niches to meet the growing demand with smoke-free and non-smoke free niches. Ample open spaces such as the courtyard at the 1/F of the Columbarium, and seating areas on different floors of the Columbarium and adjacent to escalator landings for public enjoyment are provided.

Local widening at short sections of Cape Collinson Road.

Rainwater is collected from the roof of the building and diverted to the rainwater filtration plantroom to reuse grey water for irrigation purpose. Together with water-efficient fixture and fittings, annual fresh water consumption can be significantly reduced by more than 70%.

Energy-efficient features are adopted in building service systems such as air conditioning, lighting, escalators and lifts to reduce annual energy consumption by more than 20%.



CASE STUDY

Cape Collinson-San Ha Columbarium

Facts & Figures

Key Features

01

With a site area of some ***3 400 square metres***, the Columbarium at Cape Collinson Road in Chai Wan was one of the ***shortlisted sites identified*** in the Chief Executive's Policy Address 2011-12 Policy Agenda to increase the supply of ***columbarium facilities*** to meet the overall public demand.

02

Recent pedestrian flow of the project has served more than ***43 000 citizens*** on the ***Ching Ming Festival*** period in 2024.

03

Compliments were received from the general public on the provision of escalators improving the ***connectivity and mobility***. With the new escalators, visitors could now reach the columbarium at ***Cape Collinson Road from San Ha Street***, or ***vice versa***, in about ***7 minutes*** during the Ching Ming and Chung Yung Festivals period.

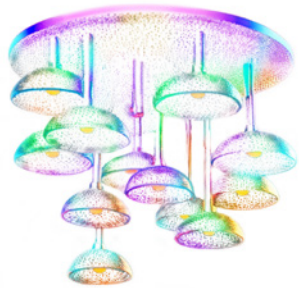
Location

Address:
59 Cape Collinson Road, Chai Wan

CASE STUDY

Aberdeen Market

REVITALISING PUBLIC MARKET WITH VIBRANCY AND BUSINESS VIABILITY



After serving the local community for more than 40 years, Aberdeen Market has undergone an overhaul to elevate the spatial experience and comfort of tenants and patrons, thereby enhancing the operating environment and shopping experience.

The renovated Aberdeen Market adopts a completely modern design and layout, such as open plan approach, delineation of stalls according to the types of business, enlarging of stalls, widening of passageways, and increase in public spaces and seating areas.

The modernised market is air-conditioned and equipped with 142 stalls including 9 cooked food stalls and many enhanced facilities and services. These facilities and services include baby-care rooms, accessible lifts, place making area for holding promotion events and gatherings, hand-washing stations, and bottle re-filling stations etc. Marked by the new curtain wall façade and a feature lighting reminiscent of red wet market lamp, Aberdeen Market has been transformed into a nodal point of going in the district.

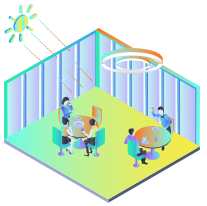
CASE STUDY

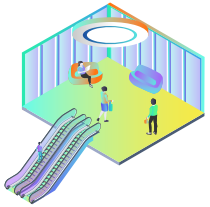
Aberdeen Market

Key Features

The launch of the overhauled Aberdeen Market marks a milestone in public market under FEHD with a modern touch to enliven the surrounding.

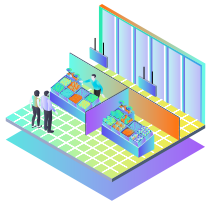
Façade of the market is uplifted by the sustainable design of the low-e double glazing curtain wall system, allowing natural daylight while reducing heat gain into the interior space.





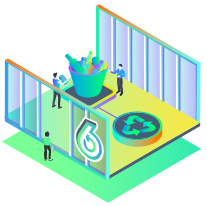
With the wide variety of new and enhanced facilities and services, the modernised market addresses diverse needs of the tenants, patrons and the local community.

The use of DfMA panels and MiMEP units for market stalls delivered works of high quality and in a timely manner with reduced construction waste.



A completely revamped layout with open plan design offers a pleasant shopping experience to patrons.

Aberdeen Market is the first public market under FEHD to integrate GREEN@ABERDEEN recycling facilities to facilitate residents for waste recycling.



CASE STUDY

Aberdeen Market

Facts & Figures

Key Features

01

Established as the pioneering project under the ***Government's Market Modernisation Programme***, the Aberdeen Market was overhauled with a ***brand new design*** and reopened in April 2023.

02

A number of new facilities are also provided at the market including a ***foam compactor room***, a EPD recycling store and ***a separate storage room*** for ***temporary storage of carcasses***.

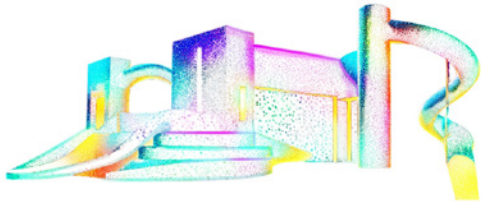
Location

Address:
203 Aberdeen Main Road, Aberdeen

CASE STUDY

Transformation of Public Play Space in Sham Shui Po Park

AN INCLUSIVE SOCIAL HUB INSPIRING CREATIVITY AND BONDING



The new inclusive playground in Sham Shui Po Park has been given an amazing makeover as a social hub, allowing people of all ages and abilities to play together and interact.

To address diverse needs of the Sham Shui Po community, this transformation project has taken into account the public's views on the playground design gathered through questionnaires, surveys and workshops. As part of community engagement, creative thoughts from local children have been collected through their drawings which were then transformed into design elements of the playground such as the sensory wall, water play equipment, signages and floor patterns.

The 6 400-square-metre inclusive playground adopted a captivating "theme of nature" with three thematic play areas in the new spread, namely a water play area "Oasis Spring", a sand play area "Sandy Bunker", and a sensory play area "Jungle Meadow". The playground showcases a diverse range of play equipment encouraging greater interaction among people with a range of physical abilities and interests, thereby enhancing connections across generations. These facilities include various types of swings and slides of different heights, rope climbing nets, a carousel for wheel-chair users, trampolines, a sensory wall and a fitness corner.

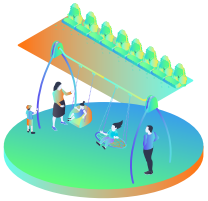
CASE STUDY

Transformation of Public Play Space in Sham Shui Po Park

Key Features

Ideas from local children were sought on the playground design for example, the Oasis Spring Play Area.

Artwork created by children in the local community was integrated into the play equipment of the sensory wall.



Innovative playground design offers a diverse range of play equipment for all ages, abilities and backgrounds to encourage inclusive play.

Children and families living in the vicinity can enjoy the more challenging and fun play equipment, for example, the climbing tower located at “Sandy Bunker” is connected to the spiral tube slide which is the tallest and longest slide tube in Hong Kong Public Playground.

The project has maintained a balance between tree preservation and urban development by transforming the existing vegetated area into a natural play area with various plant species.

CASE STUDY

Transformation of Public Play Space in Sham Shui Po Park

Facts & Figures

Key Feature

01

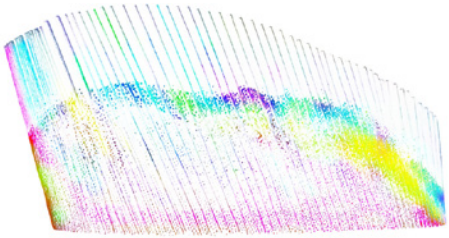
This transformation project in Sham Shui Po Park is one of the largest projects under the 5-year Transformation of ***Public Play Space Plan***, which aims to transform over ***170 public play spaces into innovative, inclusive and fun playgrounds***.

Location

Address:
733 Lai Chi Kok road, Kowloon, Hong Kong

CASE STUDY

Hong Kong Flower Show 2023



PAVILION OF BLESSING AND LOVE

The “Pavilion of Blessing and Love” at the Hong Kong Flov
with its theme flower “hydrangea” through the seamless i
landscape arrangement.

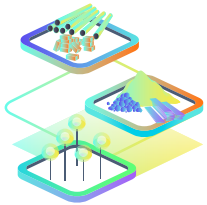
The dynamic curved feature walls of the pavilion were made of bamboo, a local, traditional and renewable construction material. Decorated with a vibrant diversity of hydrangea, the pavilion was filled with intriguing scents of daily life conveying various positive meanings in floriography. For example, blue represents romance and happiness; purple represents warmth and reunion; white represents hope and purity; pink represents hope and love; and red represents festive reunion.

The landscape and architectural features were designed to create a feeling of happiness and a welcoming experience. Visitors could appreciate the exquisite arrangement of plants, lighting, and sculptures as they walked through the display. The iconic design of the pavilion was recognised with the Gold Award for Outstanding Exhibit (Landscape Display) at the show.

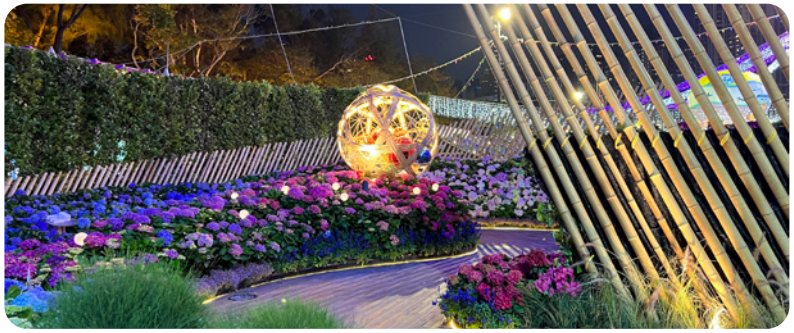
CASE STUDY

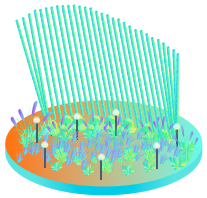
Hong Kong Flower Show 2023

Key Features



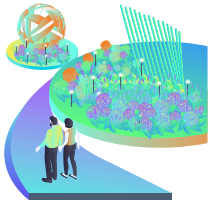
The pavilion has demonstrated sustainable construction in practice by reusing the fabricated and ordered materials stored in a warehouse due to the event cancellation in 2022.





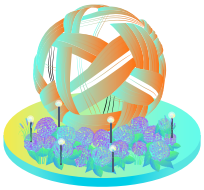
Bamboo was extensively adopted in the pavilion, manifesting the ArchSD's vision of creating a sustainable built environment for Hong Kong.

The vibrant colours of "Hydrangea Flora Sea" were showcased for visitors to enjoy and capture their unique and unforgettable moments and experiences.



3D print models were also displayed to introduce the ArchSD's remarkable projects.

A creative feature bamboo ball was developed as a focal point, lighting feature and interactive object for overlaying animated emojis with Augmented Reality (AR), enriching the exhibits as well as offering playful and immersive experience for the public.



CASE STUDY

Hong Kong Flower Show 2023

Facts & Figures

Key Feature

01

Gold Award for Outstanding Exhibit (Landscape Display)

Location

Address:
Victoria Park - Hard-surfaced Football Courts

BUILD AN INCLUSIVE WORKPLACE AND SOCIETY

Engaging the Public

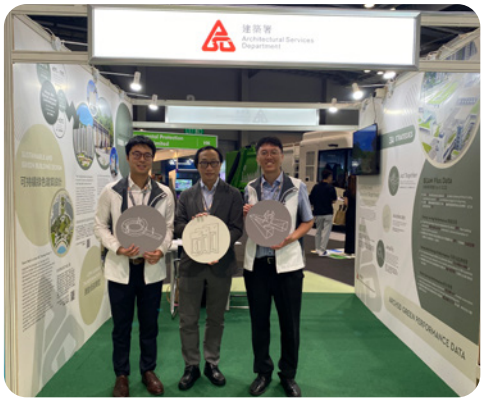
Engaging the public through a variety of enjoyable, educational and inspiring activities is a key goal of the ArchSD. During the year, we organised exhibitions and participated in activities raising public awareness and knowledge of the development and current trends of public architecture in Hong Kong.

The Urban Governance: How Professional Departments Form the Backbone of our City Exhibition was organised by the Wan Chai District Office and government departments.

During the event, we shared with students from 10 local secondary schools on the public buildings constructed by the ArchSD and our adoption of innovative technologies as well as inclusive and environmentally friendly building designs.

Leveraging various engagement activities, for example, “MiC” mini-game and "Building Marathon" online game as well as virtual reality equipment regarding heritage preservation, students were introduced innovative construction technologies and hand-on experience of the public buildings from Central to Wan Chai.

ArchSD Annual Award 2023 Exhibition at Queensway Government Offices



Eco Expo Asia 2023

The 48th International Exhibition of Inventions of Geneva

BUILD AN INCLUSIVE WORKPLACE AND SOCIETY

Serving our Community

At the ArchSD, we spare no effort in supporting community wellness through staff volunteering activities. To foster staff's active participation in community services as well as enhancing their skill development, we have established the ArchSD Volunteer Service Team which takes part in a wide range of activities serving the diverse needs of community, ranging from redecorating homes and bringing joy to the elderly and people with special needs, to supporting youth mentorship programmes and contributing to community charities.

Shoreline Clean-up Day

Redecoration of Homes of the Elderly Project

Celebrating Mid-Autumn Festival with the Elderly

Winter Visit for Extending Care to the Elderly

BUILD AN INCLUSIVE WORKPLACE AND SOCIETY

Serving our Community

In 2023, our colleagues took part in 45 volunteer activities comprising a total of 1 462 hours of community service.

	2021[1]	2022	2023
Total number of hours of staff volunteer service	594	809	1 462
Number of volunteers	43	72	150
Number of voluntary projects completed	4	22	45
Number of active Volunteer Service Team Member[2]	15	15	19
Number of staff received commendation for voluntary service[3]	0	1	12

[1] Volunteering activities were highly restricted or suspended during the COVID-19 epidemic period from 2020 to 2023.
[2] Active Volunteer Service Team member is defined as team member contributing more than 20 hours of volunteer service.
[3] Staff who receives commendation for volunteer service is defined as team member contributing more than 30 hours of volunteer service.

DATA SUMMARY

ENVIRONMENTAL PERFORMANCE

Resources Usage – Energy

	Unit	2019	2020	2021	2022	2023
Energy used at the QGO and APB Centre						
Electricity consumed [1]	kWh	4 815 754	4 256 371	3 699 415	3 863 227	3 632 543
Electricity intensity [1]	kWh/m^2	190	125	109	113	106
CO_2 emission equivalent to electricity consumption [2]	Tonne CO_2-e	3 201	2 292	1 921	2 008	1 818
Total Electricity consumed per employee	kWh/employee	2 456	2 095	1 812	1 778	1 709
Total CO_2 emission equivalent to electricity consumption per employee	Tonne CO_2-e/ employee	1.558	1.041	0.885	0.924	0.855
Renewable energy generated by photovoltaic (PV) panels at the APB Centre	kWh	7 246	8 915	9 960	6 377	8 784
Energy saved by projects [3]						
Total energy-saving due to green and low-carbon design	GWh	24.3	11.0	3.5	15.6	14.4
CO_2 emission equivalent	Kilotonne CO_2-e	17.0	7.7	2.4	10.9	10.0
No. of certified green buildings or under application [4]						
Certified green buildings against third-party standards	Number	7	13	12	7	7
Active projects seeking green building certifications against third-party standards	Number	56	56	69	53	58

[1] Offices at the APB Centre and QGO represent a majority of total ArchSD office space. The percentage of electricity consumption of the whole premises for ArchSD office at APB Centre & QGO is assumed to be 100% and 20% respectively.
[2] CO_2 emissions intensity of CLP Power and HK Electric from 2019 to 2023 were used for ArchSD office at the APB Centre & QGO respectively.
[3] Energy-saving is calculated by considering green and low carbon design features, e.g. building envelope, building services systems and renewable energy technologies, adopted in projects.
[4] 'Third-party standards' refers to BEAM Plus certified by Hong Kong Green Building Council.

DATA SUMMARY

ENVIRONMENTAL PERFORMANCE

Resource Usage – Fuel

	Unit	2019	2020	2021	2022	2023
Fuel consumption by ArchSD pool cars	Litre	14 556	13 197	13 543	11 463	12 110
GHG emissions equivalent to fuel consumption by ArchSD pool cars [5]	Tonne CO_2-e	39.4	35.7	36.6	31.0	32.8
NO_x emissions equivalent to fuel consumption by ArchSD pool cars [6]	kg	9.975	8.200	8.017	7.509	8.794
SO_x emissions equivalent to fuel consumption by ArchSD pool cars [6]	kg	0.214	0.194	0.199	0.169	0.178
PM emissions equivalent to fuel consumption by ArchSD pool cars [6]	kg	0.734	0.604	0.590	0.553	0.648
Total Fuel consumption by ArchSD pool cars per employee	Litre/employee	7.423	6.495	6.632	5.275	5.696
Total GHG emissions equivalent to fuel consumption by ArchSD pool cars per employee	Tonne CO_2e/ employee	0.020	0.018	0.018	0.014	0.015

[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, 2010 Edition.

[6] Air pollutant emission factors for mobile combustion are based on The Hong Kong Environmental Protection Department's ("EPD") EMFAC-HK Vehicle Emission Calculation model and the United States Environmental Protection Agency's Vehicle Emission Modelling Software - MOBILE6.1

Resource Usage – Water

	Unit	2019	2020	2021	2022	2023
Water consumption by ArchSD [7]	m^3	13 109	13 837	14 247	13 611	13 699

[7] Offices at APB Centre and QGO represent a majority of total ArchSD office space. In the calculation process, ArchSD offices at APB Centre and QGO are assumed to consume 100% and 20% of the water of the whole premises, respectively.

DATA SUMMARY

ENVIRONMENTAL PERFORMANCE

Resource Usage – Office Materials

	Unit	2019	2020	2021	2022	2023
A4 paper consumption	Ream	16 534	17 249	16 486	15 199	16 166
A3 paper consumption	Ream	1 247	1 252	1 385	1 223	1 186
Envelope consumption	No.	34 203	27 415	36 784	37 340	31 946

Waste Management in Programme Areas of Facilities Development and Upkeeping

	Unit	2019	2020	2021	2022	2023
Construction & demolition (C&D) materials						
C&D waste to landfills	Tonne	43 970	47 768	42 047	44 980	66 182
C&D materials to public landfill areas	Tonne	745 343	839 544	799 066	1 199 771	686 341
Recyclable waste collected at the APB Centre						
Waste paper	kg	8 243	8 119	7 800	7 537	6 984
Aluminium	No.	4 560	3 871	5 569	6 354	9 942
Plastic bottles	No.	7 071	4 237	6 209	8 536	10 715

Environmental Convictions of Contractors

	Unit	2019	2020	2021	2022	2023
Convictions [8] per 100 000 man-hours	ArchSD sites (HK sites)	0.374 (0.197)	0.118 (0.087)	0.037 (0.065)	0.000 (0.137)	0.031 (0.269)
Monetary value of fines	HK$	112,000	22,000	2,000	0	20,000

[8] 'Environmental convictions' refers to instances of non-compliance associated with the environment, including, but not limited to, violations of permits, standards, and/or regulations associated with waste, air quality and/or emissions, water discharges and hazardous spills.

DATA SUMMARY

SOCIAL PERFORMANCE

Staff Establishment (Civil Service Staff)

	Unit	2019	2020	2021	2022	2023
Staff establishment (as at 31 December of the year) [9]	No.	1 961	2 032	2 042	2 033	2 025

[9] Staff data are extracted from the records kept in the personnel section.

Staff Statistics (as at 31 December of the year unless specified otherwise)

	Employees 2023/2024
By grade based on Civil Service Staff (%)	
Directorate grade staff	38 (2.0%)
Professional grade staff	542 (28.1%)
Site supervisory staff	582 (30.2%)
Technical grade staff	421 (21.9%)
Administrative and Support staff	343 (17.8%)
By age as at 31 March 2024 (%)	
Under 30	189 (9.8%)
30-49	1 261 (65.2%)
50 or above	483 (25.0%)

DATA SUMMARY

SOCIAL PERFORMANCE

Staff Statistics (as at 31 December of the year unless specified otherwise)

		Employees 2023/2024	
Staff turnover rate by age (no.)			
		MALE	**FEMALE**
Under 30		1.0% (19)	0.4% (8)
30-50		1.9% (36)	0.7% (14)
51-55		0.1% (1)	0.1% (1)
56 or above		2.5% (49)	1.6% (30)
New employee hire rate (no.)			
		MALE	**FEMALE**
Under 30		1.1% (21)	0.5% (9)
30-50		2.5% (48)	0.7% (13)
51-55		0.1% (1)	0.1% (1)
56 or above		0% (0)	0% (0)
By employment type include Non-Civil Service Contract Staff (%)			
		MALE	**FEMALE**
Civil Service Staff	Full-time	1 262 (59.4%)	664 (31.2%)
Non-Civil Service Contract Staff	Full-time	146 (6.9%)	36 (1.7%)
	Part-time	10 (0.5%)	8 (0.3%)

DATA SUMMARY

SOCIAL PERFORMANCE

Staff Training

	Unit	2019	2020	2021	2022	2023
Number of training courses (including internal and external seminars/workshops/training courses/visits)	No.	422	422	653	595	704
Number of trainees	No.	9 447	8 551	16 391	13 908	17 674

Training Hours

Type of Staff	Total Training Hour Received (Hour)		Training Hour per Staff (Hour)	
Directorate grade staff	1 882		49.5	
	MALE	FEMALE	MALE	FEMALE
	1 642	240	54.7	30.0
Professional grade staff	21 745		40.1	
	MALE	FEMALE	MALE	FEMALE
	12 474	9 271	41.3	38.6
Technical grade, site supervisory and general grade staff	39 232		29.1	
	MALE	FEMALE	MALE	FEMALE
	31 318	7 914	33.6	19.1
Total	62 860		32.6	
	MALE	FEMALE	MALE	FEMALE
	45 434	17 425	36.0	26.3

DATA SUMMARY

SOCIAL PERFORMANCE

Anti-corruption Training

Type of Staff	Number of Staff Participating in Anti-Corruption Training		Percentage of Staff Participating in Anti-Corruption Training [10]	
Directorate grade staff	47		123.7%	
	MALE	**FEMALE**	**MALE**	**FEMALE**
	38	9	126.7%	112.5%
Professional grade staff	182		33.6%	
	MALE	**FEMALE**	**MALE**	**FEMALE**
	118	64	39.1%	26.7%
Technical grade, site supervisory and general grade staff	575		42.7%	
	MALE	**FEMALE**	**MALE**	**FEMALE**
	474	101	50.9%	24.3%

[10] According to DEVB's Guidelines for Integrity Training Workshop dated 16 July 2018, a 5-year training cycle has been adopted for the ArchSD staff to receive integrity training at regular intervals.

Occupational Health and Safety Management System

	Number of All Employees and Workers [11]	Percentage of All Employees and Workers [11]
Covered by the system	2 025	100%
Covered by the system and internally audited	2 025	100%
Covered by the system and audited or certified by an external party	2 025	100%

[11] 'Workers' refers to persons who are not employees but whose work and/or workplace is controlled by the ArchSD. Contractors' staff directly employed and controlled by the contractors are excluded from this disclosure.

DATA SUMMARY

SOCIAL PERFORMANCE

Staff Injuries

	Unit	2019		2020		2021		2022		2023	
Staff injury cases [12]	No.	2		2		4		2		1	
		M	F	M	F	M	F	M	F	M	F
		2	0	1	1	3	1	1	1	1	0
Staff sick leave granted for staff injury cases	Day	20		19		38.5		12		6	

[12] 'Staff injury cases' refers to reported cases of occupational injuries under the Employee's Compensation Ordinance, resulting in death or incapacity for work over 3 days.

Contractor Establishment

	Unit	2019	2020	2021	2022	2023
Indirect employee (as at 31 December of the year) [13]	No.	>=11 000	>=10 000	>=11 000	>=14 000	>=14 000

[13] Total man-hours in 2018 to 2023 was extracted from Public Works Programme Construction Site Safety and Environmental Statistics System (PCSES) of the Development Bureau. In the calculation process, each worker is assumed to work for 9 hours per working day in every year.

DATA SUMMARY

SOCIAL PERFORMANCE

Contractor's Accident Rate

	Unit	2019	2020	2021	2022	2023
No. of fatalities [14] (ArchSD)	No.	0	1 (Male: 1)	0	1 (Male: 1)	4 (Male: 4)
Fatal accident rate [14] (ArchSD)	per 100 000 man-hours	0	0.003	0	0.002	0.01
Fatal accident rate [15] (HK Construction Industry)	per 100 000 man-hours	0.004	0.005	0.006	0.005	0.005
No. of non-fatal accidents [14] (ArchSD)	No.	82 (Male: 69, Female: 10, Unidentified: 3)	61 (Male: 45, Female: 14, Unidentified: 2)	98 (Male: 83, Female: 13, Unidentified: 2)	96 (Male: 82, Female: 13, Unidentified: 1)	76 (Male: 61, Female: 15)
Non-fatal accident rate [14] (ArchSD)	per 100 000 man-hours	0.27	0.21	0.31	0.24	0.20
Non-fatal accident rate [15] (HK Construction Industry)	per 100 000 man-hours	0.80	0.72	0.81	0.81	0.76

[14] Data from 2023 and previous years were extracted from the Public Works Programme Construction Site Safety and Environmental Statistics System (PCSES) of the Development Bureau as at 8 August 2024. From 2019 to 2022, the number of non-fatal accidents and the non-fatal accident rate was adjusted.

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

GRI CONTENT INDEX

"For the Content Index – Advanced Service, GRI Services reviewed that the GRI content index has been presented in a way consistent with the requirements for reporting in accordance with the GRI Standards, and that the information in the index is clearly presented and accessible to the stakeholders"

GRI CONTENT INDEX ADVANCED SERVICE 2024

Statement of Use	Architectural Services Department has reported in accordance with the GRI Standards for the period 1 January 2023 to 31 December 2023.
GRI Used	GRI 1: Foundation 2021

GRI Standard	Disclosure		HKEx	SASB	Location	Remarks	External Assurance	Page Number
GRI 2: General Disclosures 2021	**The organisation and its reporting practices**							
	2-1	Organisation details			**ArchSD at a Glance** - Our Organisation and Roles		√	**16**
	2-2	Entities included in the organisation's sustainability reporting			**About this Report** **ArchSD at a Glance** - Key Facts of the Department		√	**5** **21**
	2-3	Reporting period, frequency and contact point			**About this Report** **Feedback**		√	**5** **113**
	2-4	Restatements of information			The fatal accident rate has been restated, please refer to **the Data Summary**.	The fatal accident rate has been restated, please refer to **the Data Summary**.	√	**102**
	2-5	External assurance			**Report Verification**		√	**112**
	Activities and workers							
	2-6	Activities, value chain and other business relationships	KPI B5.1 KPI B5.2 KPI B5.3 KPI B5.4		**ArchSD at a Glance**		√	**16**
	2-7	Employees	KPI B1.1		**Key Facts of the Department** **Data Summary** - Social Performance		√	**21** **99**
	2-8	Workers who are not employees			**Data Summary** - Social Performance		√	**99**

GRI CONTENT INDEX

GRI Standard	Disclosure		HKEx	SASB	Location	Remarks	External Assurance	Page Number
	Governance							
	2-9	Governance structure and composition			**ArchSD at a Glance** - Organisational Chart, Management Team **Build Robust Sustainability Governance** – Senior Staff Forum		√	**18-19** **24-25**
	2-10	Nomination and selection of the highest governance body			**Build Robust Sustainability Governance** - Senior Staff Forum	ArchSD is the governmental department of Hong Kong Special Administrative Region and the highest governance body of the department is the senior management.	√	**24-25**
	2-11	Chair of the highest governance body					√	**24-25**
	2-12	Role of the highest governance body in overseeing the management of impacts			**Build Robust Sustainability Governance** – Senior Staff Forum, Managing Risk	The content is about senior management but not board of directors as ArchSD is the governmental department of Hong Kong Special Administrative Region.	√	**24-25** **30**
	2-13	Delegation of responsibility for managing impacts					√	**24**
	2-14	Role of the highest governance body in sustainability reporting				The content is about senior management but not board of directors as ArchSD is the governmental department of Hong Kong Special Administrative Region. ArchSD follows the rules and regulations shown in Civil Service Bureau, Hong Kong Special Administrative Region as ArchSD is the governmental department of Hong Kong Special Administrative Region.	√	**24**
	2-15	Conflicts of interest					√	**24**
	2-16	Communication of critical concerns					√	**24**
	2-17	Collective knowledge of the highest governance body					√	**24**
	2-18	Evaluation of the performance of the highest governance body					√	**24**
	2-19	Remuneration policies					√	**23**
	2-20	Process to determine remuneration					√	**23**
	2-21	Annual total compensation ratio					√	**23**

GRI CONTENT INDEX

GRI Standard	Disclosure		HKEx	SASB	Location	Remarks	External Assurance	Page Number
	Strategy, policies and practices							
	2-22	Statement on sustainable development strategy			**Message from the Director** Achievements and Way Forward Our Strategy and Approach		√	**3** **9-10** **24**
	2-23	Policy commitments			**Build Robust Sustainability Governance**- Policies and Guidelines		√	**26**
	2-24	Embedding policy commitments					√	**26**
	2-25	Processes to remediate negative impacts					√	**26**
	2-26	Mechanisms for seeking advice and raising concerns	KPI B7.2		**Build Robust Sustainability Governance** - Maintaining Integrity and Professionalism		√	**34**
	2-27	Compliance with laws and regulations	GD A1 GD B6		**Build Robust Sustainability Governance** - Maintaining Integrity and Professionalism - Policies and Guidelines - Managing Risk		√	**34** **26** **30**
	2-28	Membership associations			**Stakeholder Engagement and Materiality** - Industry Engagement		√	**36**
	Stakeholder engagement							
	2-29	Approach to stakeholder engagement	KPI B6.2		**Build Robust Sustainability Governance** - Materiality Assessment		√	**37**
	2-30	Collective bargaining agreements			**Content Index**	**Not applicable** There is no collective bargaining legislation that 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.	√	**105**

GRI CONTENT INDEX

GRI Standard	Disclosure		HKEx	SASB	Location	Remarks	External Assurance	Page Number
GRI 3: Material Topics 2021	3-1	Process to determine material topics			**Build Robust Sustainability Governance** - Materiality Assessment		√	**37**
	3-2	List of material topics			**Build Robust Sustainability Governance** - Materiality Assessment		√	**37**
Deliver environmentally and socially responsible projects (Material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components			**Building A Low Carbon Environment** - Sustainable Building Design Strategies		√	**46**
Bring positive impacts on the social well-being, livelihood and prosperity of local communities and individuals (Material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components			**Building A Low Carbon Environment** - Driving Low-Carbon Transformation with Advanced Technologies		√	**45**
Use advanced technologies to enhance project quality and productivity (Additional non-material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components			**Building A Low Carbon Environment** - Driving Low-Carbon Transformation with Advanced Technologies		√	**45**
Climate risks and response and Economic performance (Additional non-material topics)								
GRI 3: Material Topics 2021	3-3	The management approach and its components			**Build Robust Sustainability Governance** - Climate-related Risks and Opportunities		√	**30-33**
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	KPI B8.2		**ArchSD at a Glance** - Departmental Funding and Expenditure		√	**22**
	201-2	Financial implications and other risks and opportunities due to climate change	KPI A4.1		**Build Robust Sustainability Governance** - Climate-related Risks and Opportunities		√	**30-33**
	201-4	Financial assistance received from the government			**Build Robust Sustainability Governance** - Departmental Funding and Expenditure		√	**22**

GRI CONTENT INDEX

GRI Standard	Disclosure		HKEx	SASB	Location	Remarks	External Assurance	Page Number
Indirect Economic Impacts (Additional non-material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components			**Build an Inclusive Workplace and Society** - Our People		√	**64**
GRI 203: Indirect Economic Performance 2016	203-1	Infrastructure investments and services supported					√	**64**
Ethical practices (Material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components			**Build Robust Sustainability Governance** - Maintaining Integrity and Professionalism **Build an Inclusive Workplace and Society** - Our People		√	**34** **64**
GRI 205: Anti-Corruption 2016	205-2	Communication and training about anti-corruption policies and procedures	KPI B7.3		**Build Robust Sustainability Governance** - Maintaining Integrity and Professionalism **Data Summary** - Anti-corruption Training		√	**34** **100**
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	GD B1		**Build an Inclusive Workplace and Society** - Our People **Content Index**	No incident of discrimination was reported in 2023.	√	**64** **107**
Energy mix and efficiency (Material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components	GD A2 GD A3 KPI A2.3	IF-EN-410a.2	**Building a Low Carbon Environment** – Driving Low-Carbon Transformation with Advanced Technologies		√	**62**
GRI 302: Energy 2016	302-1	Energy consumption with the organisation	KPI A2.1		**Building a Low Carbon Environment** - Managing our Footprint		√	**61-63**
	302-3	Energy Intensity	KPI A2.1		**Data Summary** - Environmental Performance		√	**94-96**
	302-4	Reduction of energy consumption	KPI A2.3					**94-96**
	302-5	Reductions in energy requirements of products and services	KPI A2.3					**94-96**

GRI CONTENT INDEX

GRI Standard	Disclosure		HKEx	SASB	Location	Remarks	External Assurance	Page Number
Water efficiency and recycling (Additional non-material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components	GD A2 GD A3	IF-EN-410a.2	**Building a Low Carbon Environment** - Water Efficiency and Recycling		√	**62**
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	KPI A2.2 KPI A2.4 KPI B5.3		**Data Summary** - Environmental Performance		√	**94-96**
	303-2	Management of water discharge-related impacts		IF-EN-160a.2	**Content Index**	Effluents of ArchSD are discharged into municipal sewage treatment systems, and comply with local regulatory standards of effluents discharge.	√	**108**
	303-4	Water discharge				Not applicable. It is not material to ArchSD due to its operational nature.	√	**108**
	303-5	Water consumption	KPI A2.2		**Data Summary** - Environmental Performance		√	**94-96**
Management of GHG emissions and related environmental risks (Additional non-material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components	GD A1 GD A3 KPI 1.5 KPI A3.1 KPI A4.1	IF-EN-160a.2	**Building a Low Carbon Environment** - Managing our Footprint		√	**61**
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	KPI A1.1 KPI A1.2		**Building a Low Carbon Environment** - Managing our Footprint Data Summary - Environmental Performance		√	**61** **94**
	305-2	Energy indirect (Scope 2) GHG emissions	KPI A1.1 KPI A1.2					**61** **94**
	305-7	Nitrogen oxides (NO_x), sulfur oxides (SO_x), and other significant air emissions	KPI A1.1					**61** **94**

GRI CONTENT INDEX

GRI Standard	Disclosure		HKEx	SASB	Location	Remarks	External Assurance	Page Number
Resource efficiency and circularity (Additional non-material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components			**Building a Low Carbon Environment** - Resource Efficiency		√	**62**
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	KPI A3.1	IF-EN-160a.2	**Building a Low Carbon Environment** - Waste Management		√	**62**
	306-2	Management of significant waste-related impact			**Data Summary** - Environmental Performance			**96**
Employment practices, welfare and rights (Additional non-material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components	GD B1		**Build an Inclusive Workplace and Society** - Empowering our People		√	**64**
	401-1	New employee hires and employee turnover	KPI B1.2		**Data Summary** - Social Performance			**98**
GR1 401: Employment 2016	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees			**Content Index**	ArchSD follows the rules and regulations shown in Civil Service Bureau, Hong Kong Special Administrative Region as ArchSD is the governmental department of Hong Kong Special Administrative Region.	√	**109**
	401-3	Parental Leave				100% return to work after parental leave.	√	**109**

GRI CONTENT INDEX

GRI Standard	Disclosure		HKEx	SASB	Location	Remarks	External Assurance	Page Number
Health and safety for all (Material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components	GD B2 KPI B2.3	IF-EN-250a.2	**Fostering a Green and Safety Culture**		√	**67**
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	GD B2 KPI B2.3	IF-EN-250a.2				
	403-2	Hazard identification, risk assessment, and incident investigation	GD B2 KPI B2.3		**Fostering a Green and Safety Culture** - Safety Culture at Construction Sites		√	**68**
	403-3	Occupational health services	GD B2 KPI B2.3					**68**
	403-4	Worker participation, consultation, and communication on occupational health and safety	GD B2					**68**
	403-5	Worker training on occupational health and safety	GD B2 KPI B2.3		**Fostering a Green and Safety Culture**		√	**67**
	403-6	Promotion of worker health	GD B2		**Fostering a Green and Safety Culture** - Safety Culture at Construction Sites		√	**68**
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	GD B2 KPI B2.3					
	403-8	Workers covered by an occupational health and safety management system	GD B2 KPI B2.3		**Fostering a Green and Safety Culture** - Safety Culture at Construction Sites **Data Summary** - Social Performance		√	**68** **100**
	403-9	Work-related injuries	KPI B2.1 KPI B2.2	IF-EN-320a.1	**Data Summary** - Social Performance		√	**101**
	403-10	Work-related ill health	KPI B2.1					

GRI CONTENT INDEX

GRI Standard	Disclosure		HKEx	SASB	Location	Remarks	External Assurance	Page Number
Diverse and comprehensive staff training and development (Additional non-material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components	GD B3		**Build an Inclusive Workplace and Society** - Staff Development and Knowledge Management **Data Summary** - Social Performance		√	**64** **99**
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	KPI B3.1 KPI B3.2					
	404-2	Programs for upgrading employee skills and transition assistance programs						
	404-3	Percentage of employees receiving regular performance and career development reviews			**Content Index**	All staff receive regular performance appraisal.	√	**111**
Community Engagement (Additional non-material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components	GD B8		**Fostering a Green and Safety Culture** - Raising and Recognising Sustainability Performance **Creating Inclusive, Vibrant and Liveable Communities**		√	**68** **72**
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs						
User health and safety in using the facilities (Material topic)								
GRI 3: Material Topics 2021	3-3	The management approach and its components	GD B6		**Fostering a Green and Safety Culture** - Raising and Recognising Sustainability Performance **Creating Inclusive, Vibrant and Liveable Communities**		√	**68** **72**
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories						
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	GD B6		**Content Index**	No incident of non-compliance concerning health and safety impacts of products and services was reported in 2023.	√	**111**

REPORT VERIFICATION

Verification Statement

Scope and Objective

Hong Kong Quality Assurance Agency ("HKQAA") was commissioned by the Architectural Services Department (hereinafter referred to as "ArchSD") of the Government of the Hong Kong Special Administrative Region to undertake an independent verification for the Sustainability Report 2024 (hereinafter referred to as "the Report"). The Report stated the sustainability performance of ArchSD in economic, environmental and social aspects in the period of 1st January 2023 to 31st December 2023.

The aim of this verification is to provide a reasonable assurance on the reliability of the report contents. The Report has been prepared in accordance with the GRI Standards 2021 ("GRI Standards").

Level of Assurance and Methodology

The process applied in this verification was based on the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board. Our evidence gathering process was designed to obtain a reasonable level of assurance as set out in the standard for the purpose of devising the verification conclusion. The extent of this verification process undertaken covered the criteria set in the GRI Standards 2021.

The verification process included verifying the systems and processes implemented for collecting, collating and reporting the sustainability performance data, reviewing relevant documentation, interviewing responsible personnel with accountability for preparing the reporting contents and verifying selected representative sample of data and information. Raw data and supporting evidence of the selected samples were thoroughly examined during the verification process according to the sampling plan.

HKQAA
HONG KONG QUALITY ASSURANCE AGENCY
香 港 品 質 保 證 局

Independence

ArchSD is responsible for the collection and presentation of the information presented. HKQAA is not involved in calculating, compiling, or in the development of the Report. Our verification activities are independent from ArchSD.

Conclusion

Based on the verification results and in accordance with the verification procedures undertaken, HKQAA has obtained reasonable assurance and is in the opinion that:

- The Report has been prepared in accordance with the GRI Standards;
- The Report illustrates the sustainability performance of ArchSD, covering all material aspects, in a material, responsive, fair and balance manner; and
- The data and information disclosed in the Report are reliable and complete.

In conclusion, 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.

Signed on behalf of Hong Kong Quality Assurance Agency

Connie Sham
Head of Audit
29 October 2024

FEEDBACK

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.

Why did you read our Sustainability Report 2024?

(You may choose more than one)

- ◯ For general interest
- ◯ For sustainability performance benchmarking
- ◯ For research and educational purposes
- ◯ For investment purposes
- ◯ Other(s), please specify_____

Please rate the quality of our Sustainability Report 2024 based on the following criteria:

	Excellent				Poor
	5	4	3	2	1
Content clarity	◯	◯	◯	◯	◯
Visual design	◯	◯	◯	◯	◯
Ease of finding information	◯	◯	◯	◯	◯

Which of the following best describes you?

- ◯ Academic / Professional Body
- ◯ ArchSD's Staff
- ◯ Construction Industry/ Consultant / Contractor / Supplier
- ◯ General Public
- ◯ Non-governmental Organisation
- ◯ Other Government Departments

Where did you learn about the ArchSD Sustainability Report?

- ◯ Mass media (e.g. TV, newspaper, magazine, radio)
- ◯ Social media (e.g. Archi Tour@Facebook, architourhk@Instagram, ARCHSDGOVHK@YouTube)
- ◯ Internet (e.g. ArchSD Website and search engine)
- ◯ Exhibition
- ◯ Meeting / Seminar / Workshop
- ◯ Other(s), please specify_____

Additional Comments

You can also send an email to imu@archsd.gov.hk. The information will be used in strict confidence and for statistical purposes only.

GLOSSARY

Building Environmental Assessment Method (BEAM) Plus

According to the BEAM Society, BEAM is '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. Issued in 2012, the "BEAM Plus Version 1.2 for New Buildings and Existing Buildings" were enhanced from the earlier versions to include Passive Design as an alternative method for assessment. The BEAM Plus Version 2.0 for Existing Buildings was officially launched in 2016, which contains major revisions to the assessment guidelines and offers greater flexibility in the scope of assessment, with a view to encouraging more participation by owners of existing buildings in Hong Kong. The "BEAM Plus Version 2.0 for New Buildings" was officially launched in 2019, which introduces new assessment credits that promotes healthy living and wellness of building users. A new assessment aspect, Integrated Design and Construction Management, has been added to encourage the adoption of an integrated design approach to green buildings throughout the development process from design to construction.

Building Information Modelling (BIM)

Building Information Modelling is the process of generating and managing building data during the design and construction stages, as well as during the building or asset life cycle. The process uses multi-dimensional building modelling software and a unified data environment to enhance cross-disciplinary collaboration and increase productivity.

Code on Access to Information

The Code on Access to Information (the Code) provides a formal framework for access to information held by government departments in Hong Kong. It defines the scope of information that will be provided, sets out how the information will be made available either routinely or in response to a request, and lays down procedures governing its prompt release, as well as procedures for review or complaint (if a member of the public considers that the provisions of the Code have not been properly applied).

Corporate Intelligence (CO-i)

ArchSD aims at enhancing its operational efficiency by applying smart and innovative technologies in the work process through the CO-i development. The core of the CO-i development is a big data bank with a linkage to various application systems to facilitate 'Architectural Intelligence'. This data bank includes an integrated project management platform, an advanced asset information system integrated with Building Information Modelling (BIM), and a mobile platform for construction site supervision and workflow digitalisation.

Design for Manufacture and Assembly (DfMA)

This proactive design approach allows for ease of manufacture and efficiency of assembly, enables offsite manufacture of high-quality construction components and efficient onsite assembly of components. It is a well- established approach in the construction industry for accomplishing significant improvements in productivity, safety, quality and sustainability. Applying DfMA also enables the identification, quantification and elimination of waste or inefficiencies in product manufacture and assembly to achieve lean construction.

ArchSD Extranet

The ArchSD Extranet is a private, secure web portal, equipped with a restricted access to enhance communications and information exchange with external users (such as consultants and contractors), and streamline contract management of works projects undertaken by the Department.

Global Reporting Initiative (GRI)

GRI is a multi-stakeholder-governed institution, which provides a framework for sustainability reporting commonly used all over the world. The framework sets out the principles and disclosure requirements that entities can use to measure and report their economic, social and environmental performance. GRI published its revised Sustainability Reporting Standards (GRI Standards) in 2021.

GLOSSARY

Greenhouse Gases

Greenhouse gases are those which absorb and hold heat in the atmosphere, either occurring naturally (e.g. carbon dioxide, methane, ozone and water vapour) or resulting exclusively from human activities (e.g. hydrofluorocarbons).

Greenhouse Gas Protocol

The Greenhouse Gas Protocol establishes comprehensive standardised global frameworks to measure and manage greenhouse gas (GHG) emissions from private and public sector operations, value chains and mitigation actions. It is the world's most widely used greenhouse gas accounting standard.

Hong Kong's Climate Action Plan 2050

In line with the spirit of the Paris Agreement, Hong Kong's "Climate Action Plan 2050" published by the Environment Bureau was updated in 2021, setting out the vision of "Zero-carbon Emissions • Liveable City • Sustainable Development" as well as the strategies and targets for combating climate change and achieving carbon neutrality before 2050. The new plan outlines four major decarbonisation strategies and measures, namely net-zero electricity generation, energy saving and green buildings, green transport, and waste reduction.

Hong Kong Green Organisation Certificate (HKGOC)

The Hong Kong Green Organisation Certification (HKGOC) benchmarks green organisations with substantial achievements in green management and encourages participating organisations to adopt environmental practices, while recognising their efforts in and commitments to the environment. It comprises five Certificates: a Wastewi$e Certificate, Energywi$e Certificate, IAQwi$e Certificate, and Carbon Reduction Certificate.

ISO 14001 Environmental Management System

ISO 14001 is an international standard published by the International Organization for Standardization (ISO) in 1996, which specifies requirements for the development and implementation of an environmental management system. It is intended for use by organisations seeking to improve their environmental performance in a systematic manner from resource usage and waste management to monitoring environmental performance and involving stakeholders in environmental commitments, and thereby contributing to the environmental pillar of sustainability.

ISO 45001 Occupational Health and Safety Management System

ISO 45001 is an international standard published by the International Organization for Standardization (ISO) in 2018, which specifies requirements for the development and implementation of an occupational health and safety management system (OH&S). It enables organisations to systematically prevent work-related injuries and ill health through hazard assessment and risk control implementation with a view to improving their OH&S performance and thereby providing safe and healthy workplaces.

ISO 50001 Energy Management System

ISO 50001 is an international standard published by the International Organization for Standardization (ISO) in 2011, which specifies requirements for the development and implementation of an energy management system. Adopting the 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.

ISO 9001 Quality Management System

ISO 9001 is an international standard published by the International Organization for Standardization (ISO) in 1987, which specifies requirements for the development and implementation of a quality management system. Adopting the ISO 9001 Quality Management System supports organisations to provide products and services that consistently meet customer and applicable statutory and regulatory requirements and enhance customer satisfaction through various improvement processes.

GLOSSARY

ISO 37001 Anti-bribery Management System

ISO 37001 is an international standard published by the International Organization for Standardization (ISO) in 2016, which specifies requirements for the establishment of an anti-bribery management system. Adopting ISO 37001 Anti-bribery Management System supports organisations in establishing, implementing, maintaining and improving an anti-bribery compliance programme in order to prevent, detect and address bribery risks.

Integrated Management System (IMS)

ArchSD's Integrated Management System consists of five management systems, namely Quality Management System, Environmental Management System, Anti-bribery Management System, Occupational Health and Safety Management System and Energy Management System.

Microclimate

A microclimate generally refers to the specific climatic conditions within a small area (such as a street, park or riverside). Due to the influence of the surrounding terrain, orientation and density of buildings, as well as weather conditions and other factors, the climatic characteristics of an area may differ from those prevailing over the surrounding large region.

Modular Integrated Construction (MiC)

Modular Integrated Construction (MiC) refers to a construction method in which free-standing integrated modules (completed with finishes, fixtures, fittings, etc.) are manufactured offsite and then transported to the construction site for assembly.

Multi-trade Integrated Mechanical, Electrical and Plumbing (MiMEP)

Multi-trade integrated Mechanical, Electrical and Plumbing (MiMEP) refers to the integration of multi-trade building service components into a single assembly of a prefabricated module, manufactured in a factory and then transported to the construction site for connection.

Sustainability Accounting Standards Board (SASB)

The Sustainability Accounting Standards Board (SASB) is an independent non-profit organisation that sets standards to guide the disclosure of financially material sustainability information by companies to their investors.

United Nations Sustainable Development Goals (UNSDGs)

Adopted by all United Nations Member States in 2015, the Sustainable Development Goals (SDGs) are the blueprint to achieve a better and more sustainable future for all. The 17 Goals aim to address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, peace and justice.

WEB Content Accessibility Guidelines (WCAG)

The Web Content Accessibility Guidelines (WCAG) cover a wide range of recommendations for making web content more accessible to a wider range of people with disabilities. Disabilities may include blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity and/or combinations of these.