

OPERATIONAL REVIEW



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Pipe Header

Construction Digitalisation

The Construction Digitalisation Department continues to promote and facilitate wider adoption of construction digitalisation and related technologies in architecture, engineering, construction and operation, as well as formulating strategies for market transformation and promoting cross-discipline collaboration in the industry.

To achieve the target set in the CIC's "Construction Digitalisation Roadmap for Hong Kong", the CIC carried out the following initiatives in 2023.

CIC Digital Twin Hub

To further accelerate construction digitalisation and popularise the use of digital twin in the industry, the CIC established the "CIC Digital Twin Hub". The "CIC Digital Twin Hub", transformed from the "CIC BIM Space", provides a collaborative platform and an array of technological showcases to facilitate knowledge exchange, nurture talents and inspire innovation in the field of digital twin and construction technology. The newly established CIC Digital Twin Hub consists of four key areas, including Showcase Area, Smart Site Construction Management Corner, Multi-purpose Area and Digital Twin Lab. It provides a variety of functions, such as digital twin experience sharing sessions, group guided tours and advisory workshops.



CIC Digital Twin Hub Opening Ceremony

Hong Kong Construction Common Data Environment Award 2023

The CIC and the Development Bureau continue to co-organise the Hong Kong Construction Common Data Environment Award in 2023 to recognise outstanding local projects and organisations that had best utilised CDE to improve project management, collaboration, productivity and sustainability. To further encourage Hong Kong projects to adopt CDE, the "Overseas Achievement Award" was newly added under the Organisation Category to recognise organisations with remarkable CDE adoption on non-local projects and actions to adopt overseas experience in Hong Kong projects.



Hong Kong Construction Common Data Environment Award 2023



Construction Digitalisation Coaching Session



Construction Digitalisation Charter

Since the launch of the Construction Digitalisation Charter at the end of 2022, around 200 organisations have signed the Charter to join hands with the CIC to achieve our digitalisation targets for the industry.

In 2023, the CIC organised a Construction Digitalisation Charter Pledgees Sharing event to invite pledgees to share their digitalisation journey and a Coaching Session with interactive workshops and sharing to assist Construction Digitalisation Charter pledgees to develop strategic roadmaps tailored to their respective organisations.



Construction Digitalisation Charter Pledgees Sharing

CIC Construction Digitalisation Award 2024

The CIC launched the second CIC Construction Digitalisation Award in 2023 to recognise outstanding local projects and local organisations for their contribution in the promotion and adoption of digitalisation tools and workflows and in bringing about innovation in these areas to improve productivity, quality, sustainability and safety, with measurable key performance indicators. This time, “Special Sub-categories” including “Building Information Modelling (BIM) & Digital Twin”, “Common Data Environment (CDE)”, “OpenBIM” and “Smart Site Safety System (4S)”, are newly added under the Project Category.



CIC Construction Digitalisation Award 2024

Master Classes on Construction Digitalisation

Building on the success of the opening of the CIC Digital Twin Hub, the CIC developed the signature course “Master Class on Digital Twin” for industry practitioners in 2023 which enrollment started in Q4 2023. The Master Class will be launched in 2024 and it aims to empower participants with a thorough understanding of the practical applications of Digital Twin for construction and equip professionals to leverage Digital Twin technology in their roles to drive digital transformation for the construction industry.

In addition, the CIC launched another signature course “Master Class on AI for Construction” in February 2023. The course aims to enable industry professionals to adopt AI and relevant advanced solutions, such as natural language processing, machine learning, computer vision, and robotics, in construction projects in Hong Kong.

The CIC also continues to re-run the ever popular Master Classes on Construction Digitalisation. In April 2023, the second cohort of the “Master Class on Common Data Environment (Project Managers)” was successfully completed and the programme had over 70 graduates since its launch in 2022.



CIC Master Class on Artificial Intelligence (AI) for Construction Kick-off Ceremony

Memorandum of Understandings Signing

The CIC signed the Memorandum of Understandings (MoUs) with the Faculty of Architecture, the University of Hong Kong, MIT Hong Kong Innovation Node and SenseTime Group Limited to jointly promote the adoption of innovative construction technologies and drive digital transformation for the Hong Kong construction industry.



Memorandum of Understandings (MoUs) with Faculty of Architecture, the University of Hong Kong, MIT Hong Kong Innovation Node and SenseTime Group Limited

Multi-to-Multi Construction Digitalisation Meet Up

The CIC and Cyberport co-hosted a business matching event, "Multi-to-Multi Construction Digitalisation Meet Up". The event featured participation from over 35 startups, which were invited to showcase their latest technological solutions aimed at enhancing productivity within the construction industry. The event extended invitations to over 30 CIC Construction Digitalisation Charter pledgees and more than 70 industry representatives. These startups came together to explore the adoption of construction technology across four key areas: ESG, efficiency, safety, and quality, resulting in more than 100 successful business matchings.



Multi-to-Multi Construction Digitalisation Meet Up



Construction SafetyHACK 2023 - Future of Construction Safety

Construction SafetyHACK 2023 - Future of Construction Safety

The CIC supported a Hackathon event titled “Construction SafetyHACK 2023: Future of Construction Safety”, which was co-organised by the MIT Hong Kong Innovation Node and Hong Kong Productivity Council. The event gathered university students and professionals from various backgrounds to explore innovative ideas and leverage new technologies to create a “Zero Accident” construction site.



CIC BIM Competition 2023

For the fifth year, the CIC BIM Competition continued to promote the practical uses of BIM through a collaborative and competitive learning approach among higher education students in construction-related disciplines. The theme of this year’s Competition is “Sustainable Design of the Construction Innovation Campus”.



CIC BIM Competition 2023

Reference Materials of BIM Harmonisation for Digital Hong Kong

The CIC completed the final version of “Reference Materials of BIM Harmonisation for Digital Hong Kong” aiming to identify appropriate additional information requirements of BIM models for reference by the industry (both public and private sectors). The reference materials will be published in 2024 after incorporating comments of key stakeholders. This is in support of the Government’s initiative of developing Common Spatial Data Infrastructure (CSDI) and Smart City and to satisfy the use of cases identified in the Report on 3D Spatial and BIM Data Use Case Requirements of the Hong Kong Construction Industry published by the CIC in 2021.



White Paper on BIM Personnel Development in Hong Kong

The CIC conducted a review of the BIM personnel development of the Hong Kong construction industry in 2020 to estimate the demand for BIM managers and BIM Coordinators by 2025. In August 2022, the CIC had commenced a survey on the current supply and demand of BIM personnel to formulate a forecast on the future manpower requirement and availability. A total of 124 project-based surveys and 37 organisation-based surveys were collected. Additionally, the CIC had interviewed 19 organisations, including different categories of stakeholders. The White Paper reviewed the supply and demand of BIM personnel in 2022, as well as providing a forecast for the supply and demand of BIM personnel from 2023 to 2027. Key recommendations were made in the White Paper to facilitate the supply of BIM personnel.

Teaching and Learning Kit for BIM Viewer Training

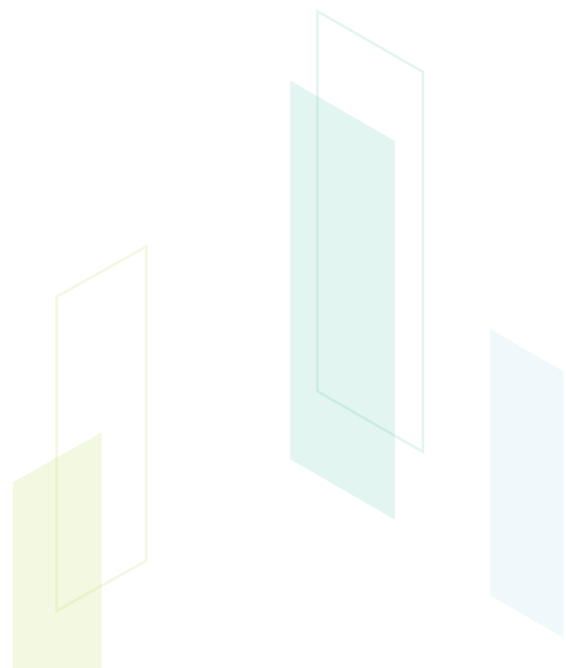
To cope with the surging demand for BIM Viewers, the CIC developed a “Teaching and Learning Kit” for BIM Viewer training, available in both self-learning and instructor-led training. A new BIM Viewer platform was introduced in 2023, achieving a total of four different BIM Viewer platforms together with an openBIM (IFC compatible) platform. From its launch in 2021 to the end of 2023, over 27,770 individuals have completed the online training and received the BIM Viewer certificates.

Way Forward

The CIC Construction Digitalisation Award 2024 has been launched with an Award Presentation Ceremony at the end of 2024. A CIC Global Construction Digitalisation Forum and Exhibition 2024 is scheduled to be held during the year.

On the training side, the CIC will continue to consolidate training needs from the industry and collaborate with the School of Professional Development in Construction and Construction Digitalisation training service providers to offer necessary training courses. In addition, the CIC is going to launch the CIC Master Class on Digital Twin in Q1 2024 and will revamp and offer the CIC Master Class on AI for Construction with the latest Large Language Model (LLM) technologies in Q3 2024.

We will continue collaborating with industry stakeholders and relevant government departments to identify and develop quick-win BIM-related digital solutions, such as plugins, through consultancy services or R&D projects, to harness the power of digitalisation in Hong Kong.



Construction Business Development

With an aim to foster a healthy and competitive construction market in Hong Kong, Construction Business Development (CBD) has conducted a consultancy study to review the terms of construction contracts, ensuring their reasonableness and balance. Furthermore, the CIC has organised various activities such as workshops, webinars and study tours to assist industry practitioners in staying updated on New Engineering Contract (NEC) and Security of Payment Legislation (SOPL). Additionally, the CIC has established the Representative Office of CIC (HK) in Guangdong with a view of assisting the construction companies in Hong Kong in developing business connections. The CIC has also organised national affairs classes for young talents in Hong Kong to gain more understanding of the national affairs and develop a sense of belonging to the country.

Consultancy Study on Review and Enhancement of Construction Contract Terms

To drive fair risk sharing and promote a collaborative culture, the CIC has commissioned a consultant to conduct a comprehensive study. The objective of this study is to review the terms of construction contracts, ensuring their reasonableness and balance in relation to the rights and obligations of all contracting parties involved. The goal of the study is to provide strategies and good practices of recommendations by referencing international contracts and local government contracts that can be implemented in the short, medium and long term.

Study Tour to London 2023

The NEC Engineering and Construction Contract (ECC) Hong Kong Edition was launched on 13 July 2023. The CIC organised a study tour to attend the NEC Annual Conference 2023 in London, the United Kingdom. The main purpose of the tour was to let delegates keep abreast of the latest developments in NEC and exchange views with international users and experts regarding their experiences with NEC. In addition, the study tour provided delegates with knowledge on the latest innovative construction technologies, their implementation and practices. It also sought to explore the possibility of adopting these technologies in the construction industry in Hong Kong.



NEC Annual Conference held in London on 13 July 2023

Security of Payment Legislation

The proposed Construction Industry Security of Payment Bill ("Legislation") has been discussed in the Panel on Development meeting held on 28 November 2023. The Legislation proposal of the Bill is in the finalising stage and is seeking submission to the Legislative Council in the first half of the following year 2024 for consideration and enactment. Two briefing sessions were given by the Development Bureau (DEVB) on 10 July and 6 December 2023 to provide industry practitioners with updates on the enactment of the Legislation.



Briefing Session held on the Legislation on 6 December 2023

NEC Workshops

The CIC organised workshops and webinars to promote the implementation of NEC and foster a collaborative culture within the construction industry. Besides, a workshop with the DEVB has been arranged to review the NEC implementation challenges and explore potential solutions for the way forward.



Webinar on NEC held on 14 November 2023

Mainland Liaison Services (MLS)

The Representative Office of CIC (HK) in Guangdong was successfully established and put into operation in Guangzhou in 2023. The Representative Office will assist the Hong Kong construction industry in establishing business connections, exploring business opportunities, and hence building a comprehensive construction supply chain in the Greater Bay Area (GBA) in the future.

The CIC has organised two signature courses on national affairs in Beijing, aiming to deepen the understanding of Hong Kong's industry towards the Mainland development and cultivate a sense of belonging to the country among the participants.

The Forum of China ConTech Development and the Future of Hong Kong Construction Industry was hosted by the CIC on 9 August 2023, aimed to build a platform for high-level industry exchanges, foster collaborations and create business opportunities. At the Forum, 23 leading figures from the construction industry in Mainland China and Hong Kong discussed the latest construction technologies in the Mainland and the development opportunities of the local construction industry.

In 2023, the CIC organised courtesy visits to more than 70 organisations, including institutes, associations, and enterprises, etc. The CIC gradually expanded the network of liaison affairs with the Mainland, strengthened talents matching, improved supply chain, as well as innovation and technology exchanges.



Representative Office of CIC (HK) in Guangdong was successfully established and started its operation in Guangzhou on 24 July 2023



Signature Course on National Affairs in Beijing started in June 2023



The Forum of China ConTech Development and the Future of Hong Kong Construction Industry was held on 9 August 2023

Way Forward

Recognising the distinct duties and business nature of CBD and MLS, and considering the increasing significance of MLS's roles and responsibilities, the decision to split Com-CBD & Mainland Liaison (ML) into two separate committees was made by the Council in October 2023. This division ensures a more focused development in their respective areas. Additionally, at the Council Meeting in December 2023, a proposal was put forth to merge the Committee on Construction Business Development with the Committee on Productivity. This merger aims to create synergies and adopt a comprehensive and coordinated approach to improving productivity, facilitating business development and driving positive changes in the construction industry. The newly established and merger of committees is expected to begin their service in 2024.

Repair, Maintenance, Alteration & Addition (RMAA)

The Committee on RMAA (Com-RMAA) aims to foster and support the development of efficient and healthy Repair, Maintenance, Alteration & Addition industry through comprehensively reviewing and determining the development directions of RMAA works, and enhancing the techniques, management and safety knowledge of the RMAA sector by optimising the existing relevant courses. To effectively develop the broad initiatives of this industry, the Com-RMAA has created four sub-committees on Worker Training, Promotion & Education, Standardisation and Supervision Matters.

Promotion on Certificate in RMAA Courses and Intermediate Tradesman Collaborative Training Scheme

To enhance the skill level and safety awareness of workers engaged in RMAA works, the Hong Kong Institute of Construction (HKIC) has organised two certificate courses in RMAA. In addition, the HKIC also provides the Intermediate Tradesman Collaborative Training Scheme (ITCTS) through collaboration with contractors. Throughout the year, the courses have been constantly reviewed by HKIC to closely follow the events and needs of the industry and public. The courses and ITCTS combined have trained up 138 graduates and 203 students under training.

To enhance the management and quality of contractors, two new designated trades for RMAA – “Building Maintenance” and “Interior Fitting-Out” were launched under the Registered Specialist Trade Contractors Scheme (RSTCS) on 1 October 2023.

To increase the recognition of RMAA courses, the Com-RMAA continued to promote the courses to different government departments and organisations for recruiting the course graduates to undertake their works. It is encouraging to see many organisations have showed their support to start recruiting the graduates.

Thematic Talks and Launching Ceremony on Construction Industry Integrity Charter 2.0 and Carnival

Thematic Talks and Launching Ceremony on Construction Industry Integrity Charter 2.0 and Carnival were held from 31 March to 2 April 2023. The RMAA Thematic Talks and Launching Ceremony on Construction Industry Integrity Charter 2.0 attracted 140 guests and 845 online participants. At the Launching Ceremony, 16 participating and supporting professional associations and organisations pledged to further promote and encourage the construction industry to implement the Integrity Management System, maintain and enhance the professionalism and integrity of the construction industry, and actively encourage organisations and company members to participate in the Construction Industry Integrity Charter 2.0.



Thematic Talks and Launching Ceremony on Construction Industry Integrity Charter 2.0 and Carnival



Thematic Talk on RMAA New Mileage

Consultancy Study

In 2022, The RMAA market accounted for approximately more than one-third of the total construction expenditure in Hong Kong. With the increasing number of aging buildings, the market is projected to witness a steady growth in expenditure. Com-RMAA has engaged a consultancy study on RMAA in May 2023 with aims to provide insights, issues and initiatives for the development of the RMAA industry with a focus on enhancing safety.

Thematic Talk on RMAA New Mileage

The thematic talk on RMAA New Mileage in collaboration with the Labour Department and the Property Management Services Authority was successfully held on 7 November 2023. The event included introduction of “Building Maintenance” and “Interior Fitting-Out” trade under RSTCS as well as the regulatory regime of the property management industry and guide on construction and work safety of truss-out bamboo scaffolds. The talk successfully attracted 132 guests and 2,062 online participants.

Way Forward

In order to set out a definitive framework of the RMAA market and targeted initiatives to contribute to the development of a healthy RMAA market, Com-RMAA will continue to monitor and work on the consultancy study. Stakeholder engagement sessions will be conducted in Q2 2024 to discuss the long-term development of the industry. The consultancy study is expected to be completed in Q3 2024.

The Com-RMAA will continue to host CPDs and events and focus on the development of the construction industry. The RMAA sector will also be able to participate in the Outstanding Contractor Awards 2024 RMAA category to solidify their reputation in the RMAA industry.

To address the ongoing safety issues within the RMAA industry, Com-RMAA will focus on the development of RMAA safety reference materials to help stakeholders and the public understand the safety requirements and best practices when conducting RMAA works. An RMAA exhibition corner is also planned to be set up in Q3 2024 to help educate stakeholders and the public to properly understand and manage RMAA works.

Construction Productivity

In view of the critical challenge of the aging workforce and the anticipated high construction volume in the coming decade, the Construction Productivity Department supports the Committee on Productivity (Com-PRO) in promoting innovation and facilitating the adoption of modern technologies and construction methods to enhance the industry's productivity and quality.

Improving Time, Cost, and Quality Performance of the Hong Kong Construction Industry

The consultancy report "Improving Time, Cost and Quality Performance of the Hong Kong Construction Industry" was released on 17 November 2022. The report recommended 13 strategies in four focus areas: High Productivity Construction, Streamline Approval Process, Drive Adoption of Innovative Technologies, and Enhance Project Management & Procurement with the aim to uplift the industry's competitive strengths to cope with the golden decade ahead. In 2023, we formulated individual short-term action plans for each focus area and initiated them accordingly. These action plans are expected to take approximately 1-2 years to complete, with the goal of finishing by Q4 2024.

Ongoing Research Projects

To enhance construction productivity, a number of research projects were initiated using emerging technologies, such as artificial intelligence, robotics, etc.

- Development of an Artificial Intelligence Rock Type Classification and Fracture State Characterisation APP for Engineering Applications (conducted by the University of Hong Kong)
- Autonomous Mobile Robot for Material Delivery and Site Inspection (conducted by Shui On Construction Company Limited)
- Development of Advanced Seismic Design Guidelines for Modular Integrated Construction (MiC) Buildings in Hong Kong and in the Greater Bay Area (conducted by The Hong Kong Polytechnic University)
- iBEAM Unison - Data Unification Platform to Enhance the Integrity of Environmental and Sustainability Data in Design and Construction Processes (conducted by BEAM Society Limited)
- Study of Artificial Intelligence for Road Surface Depression Detection Using 3D LiDAR Data (conducted by The Hong Kong Polytechnic University and the Highways Department as industry partners)

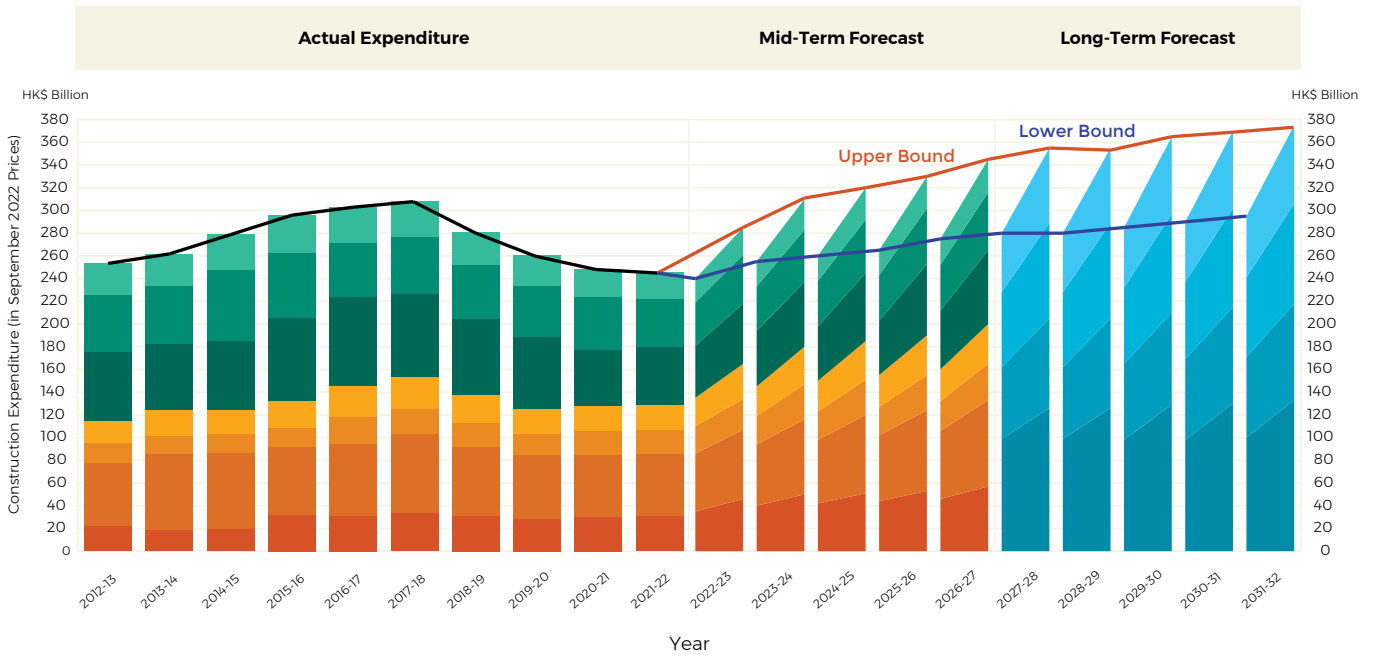
Study Tour to Japan 2023

The Committee on Productivity (Com-PRO) jointly organised a 4-day study tour to Tokyo, Japan, in May 2023 with the Committee on Environment (Com-ENV). The purpose of the visit was to widen the CIC delegates' exposure to the international industry trends and the latest developments in construction innovative technologies. The delegates included the Com-PRO and Com-ENV Members, representatives from the Development Bureau and the Buildings Department, HKSAR Government, as well as the CIC secretariat and some stakeholder organisations. They visited the 5th Construction & Survey Productivity Improvement Expo, New Environment Exposition, Fujita Technology Center, Obayashi Technology Research Institute, etc., during the tour. The activities have deeply inspired the CIC delegates with the importance of driving sustainability and promoting digitalisation and modernisation in the construction industry.



Study Tour to Japan 2023

Construction Expenditure Forecast For Public And Private Sectors* (2022/23 to 2031/32)



*Based on the information up to March 2023

Colour Codes		E&M Works*	RMAA Works*	Civil Works	Building Works
Actual Expenditure & Mid-Term	Public Sector	Yellow	Orange	Light Blue	Dark Blue
	Private Sector	Green	Dark Green	-	Dark Green
Long-Term	Public Sector + Private Sector	Light Blue	Blue	Light Blue	Dark Blue

*E&M Works - Electrical and Mechanical Works
 *RMAA Works - Repair, Maintenance, Alteration and Addition Works

Construction Expenditure Forecast

To facilitate policy makers and industry stakeholders in assessing market trends and formulating strategic plans, the CIC continues to forecast construction expenditures for the period of the next ten years. The latest forecast indicated that, due to the massive demand for housing and infrastructure development, the construction volume was expected to reach between HK\$295 billion and HK\$375 billion (at the September 2022 price level) from 2022/23 to 2031/32.

Way Forward

The Com-PRO will continue to explore and take forward initiatives to showcase best practices on smart offsite construction and site management, explore emerging technologies and advanced materials, and facilitate wider adoption of high-productivity construction solutions and construction robots for enhancing industry's productivity. Practical research projects will continue to be supported to incubate innovative solutions in construction.

Construction Safety

The Committee on Construction Safety (Com-CSY) has been committed to driving the industry in building a safer working environment over the years, and to taking forward initiatives in promoting and developing various measures to cultivate a positive safety culture, and providing safe work guidelines and training to all stakeholders. With the aim and strategic direction of preventing fatal and serious construction accidents, the Com-CSY and its three sub-committees, namely Sub-committee on Safety Promotion, Sub-committee on Safety Training and Sub-committee on Safety Technical Issues continue to discuss and implement work in different areas.

Safety Promotion

In 2023, the theme of the 12th consecutive Construction Safety Week (CSW) co-organised by the CIC and the Development Bureau (DEVB) was “United For A New Site Safety Chapter”, to unite the efforts of all stakeholders to jointly promote and work towards achieving the target of “Zero Accident” in the construction industry. The CSW activities included “Safety Conference”, “Safety X Smart Site Exhibition”, “29th Considerate Contractors Site Award Scheme”, “Life First” Campaign, “Construction Safety Exhibition”, as well as “Construction Safety Week Carnival”, etc.



Construction Safety Week 2023 – Kick-off Ceremony and Conference

Construction Safety Exhibition and Construction Safety Week Carnival



CEO Safety Forum

The 4th year of the “Life First” promotional campaign continued to receive great support from the industry, with 313 works projects participated, and the first “Design for Safety” Competition was organised with a total of 35 projects joined to demonstrate how to apply construction design to enhance construction safety and safety culture. The “Life First” Quiz Competition, first held in 2022, had since received positive feedback from the industry and continued to be held in CSW this year to remind participants of construction safety related information in a fun way. The “Construction Safety Week Carnival” was organised again after five years, with the theme “Proud to be Safe”. There were “Construction Safety Competition”, game booths and safety drama performance, etc., for reminding industry stakeholders of the messages related to construction safety and its importance of to the public.

In addition, a CEO Safety Forum and 12 webinars on “Life First - Walk the Talk” of different topics were organised this year with a total of over 24,000 participants, to encourage industry stakeholders to implement effective practices for minimising accidents.



CEO Safety Forum



“Life First” promotional campaign

Safety Training

The “Experiential Learning on Site Safety Training Scheme 2023-24” co-organised by the CIC and the Hong Kong Construction Association came to its 9th year, continues to provide experiential training to prepare undergraduates who are planning to join the construction industry. 400 undergraduates are expected to benefit from the Training Scheme.

With the aim to encourage the establishment and maintenance of safety culture among project directors in the industry, three “CIC Master Class in Safety Leadership Culture” were held in July, September and December 2023, which allowed the participants to learn from industry leaders and gain practical knowledge to implement effective safety initiatives.

The Safety Experience Training Centre (SETC) located at HKIC Kwai Chung Campus was established in 2019 to enhance safety awareness and promote safe working environment. In 2023, SETC was equipped with a comprehensive smart site safety system (4S) to provide practical and efficient training on the application of Smart Site Safety System (4S) on site.



CIC Master Class in Safety Leadership Culture

Safety Publications

The CIC had collaborated with the Hong Kong Temporary Works Forum to prepare a Reference Material on “Temporary Works Management Plan” in March 2023, showcasing recommended good practice procedures for the design and control of temporary works in Hong Kong construction projects, and for reducing fatal and serious construction accidents of related work. Besides, to strengthen the safety culture in construction sites, a Reference Material on “Construction Safety Assembly” was issued in December 2023 to encourage the industry to conduct Construction Safety Assembly in enhancing the safety awareness of workers through regular practice.



“Experiential Learning on Site Safety Training Scheme 2023-24”



Construction Safety Culture Visit to Osaka

Overseas Exchange

The CIC organised the “Construction Safety Culture Visit Osaka” in October 2023, with over 20 industry stakeholders participants. This overseas trip to Osaka, Japan visited the construction sites of major Japanese construction companies, and having in-depth exchange meetings with local construction practitioners and the Osaka Association of Architects & Building Engineers, to learn from the Japanese construction safety culture for applying to Hong Kong construction projects.

Way Forward

With the aim of further enhancing the overall safety performance of the industry, the CIC will adopt a more proactive approach by encouraging the industry to adopt and strengthen initiatives such as Safety Culture, Design for Safety and Smart Site Safety System.

Environment and Sustainability

Sustainability has emerged as a paramount global trend that profoundly impacts the construction industry and the world as a whole, and is poised to shape the trajectory of both for decades to come. To champion adopting the most effective sustainable practices and innovative technologies that bolster the industry's sustainability performance, the CIC undertakes extensive research and devises tools, standards and guidelines tailored to the industry. Moreover, the CIC is deeply committed to leading the industry in formulating decarbonisation strategies and implementing measures that align with the Government's pledge to achieve carbon neutrality by 2050.

CIC Global Construction Sustainability Forum and Exhibition 2023 (GCSFE 2023)

Echoing the global carbon neutrality initiative, the CIC and the Development Bureau co-organised the inaugural Global Construction Sustainability Forum and Exhibition 2023 (GCSFE 2023) in Hong Kong from 20 to 23 November 2023. This event aimed to bring together industry stakeholders and promote sustainable development in the construction industry while driving improvements in Environmental, Social, and Governance (ESG) performance. With a series of signature events, including a forum, exhibition, charter signing ceremonies, award ceremonies and technical tours, the GCSFE 2023 attracted over 10,000 participants and featured over 40 prestigious speakers from all over the world, as well as 40 exhibitors showcasing the latest sustainable solutions. The newly-launched CIC Sustainable Construction Charter has received an overwhelming response from 160 organisations along the value chain. This well-acclaimed event has succeeded in serving as a platform for knowledge sharing and collaboration among professionals, staging the latest sustainable innovations to a global audience and encouraging the adoption of sustainable practices within the industry.



Ms. Winnie HO, Secretary for Housing, visited the GCSFE 2023 to understand the robotics showcase



Dr. LAM Ching-choi, Chairman of Council for Carbon Neutrality & Sustainable Development and Mr. Edward TSE, the then Director of Architectural Services visited booths at the GCSFE 2023

Carbon Neutrality Strategy

The CIC completed the Carbon Neutrality Strategy Study for the Hong Kong Construction Industry in 2023. Three decarbonisation directions, including Construction Site Electrification and Clean Energy Adoption, Construction and Demolition Waste Management, and High Productivity Construction and Construction Digitalisation are identified. These three decarbonisation directions were weaved through the exhibition in the GCSFE 2023.

Smart Waste Management Tool (SWMT)

To respond to one of the decarbonisation strategies, the CIC has developed a web application - Smart Waste Management Tool (SWMT) that manages C&D waste data, aiming to digitalise the inputs, analysis, verification and storage of waste data. In addition to immediate benefits such as manpower and paper savings, this tool will improve the accuracy, efficiency and transparency of waste data management. By collecting and analysing data on waste disposal, recycling rate, waste type and sharing, the tool can also provide a benchmark for practitioners, thus promoting proper waste management and waste reduction at the source. After completing the pilot trials and refinement, the SWMT was introduced in November 2023.



Showcase of E&S tools and initiatives in GCSFE 2023

CIC Carbon Assessment Tool (CAT)

The CIC Carbon Assessment Tool (CAT) is a web-based carbon assessment tool that was launched in 2019. Its primary objective is to offer a standardised evaluation method for the industry to assess the carbon performance of their local construction projects. By utilising the CAT, industry practitioners can effectively measure and evaluate the carbon footprint of their projects, enabling them to identify areas for improvement and implement measures to reduce carbon emissions.

In 2023, the CAT platform underwent an upgrade to enhance user-friendliness, making it more accessible and intuitive for industry practitioners. Additionally, the CAT database has almost doubled its size to nearly 2,000 pieces of carbon emission factors. This expansion enables users to access a more comprehensive and up-to-date set of data, allowing for more accurate and detailed assessments of carbon performance in construction projects.

CIC Green Product Certification (GPC)

To further support industry needs and encourage the adoption of sustainable products, the CIC initiated additional research in 2023, focusing on reviewing and exploring new product categories and assessment criteria for CIC Green Product Certification (GPC). By expanding the scope of product categories and updating assessment criteria, the CIC aims to ensure that the industry's demand for greener and more low-carbon products is effectively met. This research is targeted to be completed in 2024.

As of December 2023, the number of certified products under the 28 product categories of the GPC programme reached more than 1,000. This represents a significant 32% increase in the cumulative number of certified products compared to the figures recorded in 2022. This growth indicates the industry's increasing adoption of green and low-carbon products.

CIC Sustainable Finance Certification Scheme (SFCS)

The SFCS is a scheme tailored for the construction industry to seize the opportunities presented by green finance and transition towards sustainable construction practices. Over the course of 2023, more than 30 engagements and training individuals were conducted, targeting individuals from both the financial and construction sectors. These sessions effectively raised awareness and enhanced understanding of the SFCS among different stakeholders. In 2023, the CIC further strengthened its commitment to sustainable finance by signing a Memorandum of Understanding (MoU) with a local bank. This collaboration represents a significant step towards promoting sustainable construction and fostering green finance within the industry.

Way Forward

To enhance the CIC's ESG performance, the CIC conducted a comprehensive study to review and enhance our ESG performance and strategy. This study would involve evaluating key sustainability metrics, identifying areas for improvement, and developing a clear roadmap and action plan.

Additionally, to drive the industry towards carbon neutrality, the CIC would take proactive steps in exploring and assessing the feasibility of implementing Construction Site Electrification and Clean Energy Adoption in 2024. This initiative aims to reduce carbon emissions by transitioning construction sites to cleaner and more sustainable energy sources. By examining the viability and benefits of this approach, the CIC would play a pivotal role in promoting and implementing environmentally friendly practices across the construction sector.

Regarding waste reduction in the construction, the CIC will continue to foster the adoption of Smart Waste Management Tool and commence the second phase enhancement of the application to incorporate functions that are favourable to waste reduction.

Modular Integrated Construction (MiC)

Modular Integrated Construction (MiC) is one of the High Productivity Construction (HPC) methods which has been speedily developed in Hong Kong over the years. The Government, spearheaded by the Development Bureau and supported by the CIC, has played an instrumental role in promoting and facilitating the wide adoption of MiC technology within the construction industry with key initiatives such as funding support, policy implementation, endorsement of regulatory frameworks, and active industry engagement.

Deepening Regional and International Technical Exchanges

MiC Resources Centre welcomed nearly 10,000 visitors in 2023. Many of them are industry experts from Mainland China and around the world who came to Hong Kong to participate in technical tours organised by different organisations. “iHub” is one of the highlights of their tours. By joining the “iHub” guided tours, participants learned about the latest development of MiC in Hong Kong. As a knowledge platform for promoting MiC, the Centre not only updates the database at all times, but is also committed to fostering technical exchanges between Hong Kong and Mainland China and Overseas, and creating collaboration opportunities to optimise the MiC supply chain in Hong Kong.



Business leaders from 26 countries and regions participating in the 24th Hong Kong Forum visited MiC Resources Centre to learn about the latest development of MiC in Hong Kong



Experts shared professional insights on high productivity and sustainable construction during the forum in CIC Global Construction Sustainability Forum and Exhibition 2023 (GCSFE 2023)

Facilitating Exchanges through International Forum and Webinar

High Productivity and Sustainable Construction Forum was successfully held during the CIC Global Construction Sustainability Forum and Exhibition 2023 (GCSFE 2023) on 20 November 2023, attracting over 600 attendees. Professionals from local and the Mainland China shared the latest development and insightful knowledge in high productivity and sustainable construction in their jurisdiction.

Co-organising with the Jockey Club Design Institute for Social Innovation of The Hong Kong Polytechnic University (DISI, PolyU), the Webinar on MiC: Deconstruction and Relocation of First Modular Social Housing Project (Nam Cheong 220) was held on 19 December 2023, attracting nearly 1,400 attendees.

This Webinar presented the findings and experiences derived from the consultancy service provided by DISI, PolyU for a study on the module reusability of the first MiC transitional housing buildings during 2023.



Representative from China Overseas Innovation & Technology (Zhuhai) Company Limited presented their digital technology to the CIC and industry representatives

Facilitating Industry Engagement through MiC Project and Factory Visits

To foster knowledge exchange within the industry and ensure continuous updates on MiC development, the CIC organised six local project and factory visits and one Greater Bay Area (GBA) visit in 2023 for industry practitioners including representatives from the Joint Working Group on MiC, project clients and contractors, etc. Visits included:

- January: CNQC factory in Tuen Mun;
- June: The City University of Hong Kong Student Hostel at Whitehead and Mockup for Public Housing Development at Tung Chung Area 99;
- August: Dedicated Rehousing Estate at Hung Shui Kiu Phase IA;
- October: Elderly's Home at Jat Min Chuen Chung Yuet Lau; and
- November: Public Housing Developments at Anderson Road Quarry Sites R2-6 and R2-7

Besides, a 3-day-2-night visit to factories in the Greater Bay Area (GBA) and projects was organised with the Mainland Liaison Services team on 25-27 April 2023. Six HPC factories and one MiC project in GBA were visited. Over 150 industry practitioners participated in the above visits.



Joint Working Group on MiC and Committee on Productivity representatives visited Elderly's Home at Jat Min Chuen Chung Yuet Lau which was completed in December 2023



Publication to Update Regulatory Framework on MiC

The CIC regularly publishes and updates reference materials on MiC for the industry practitioners. The CIC newly issued “Reference Material on MiC Installation and Disassembly” in August 2023; and also updated “Reference Material on Statutory Requirements for Modular Integrated Construction Projects” in October 2023. With these publication updates, over 300,000 click rates on MiC website were recorded as of 31 December 2023.

MiC Training Programmes for Industry Practitioners

As of December 2023, the following MiC related training courses were conducted by the HKIC and SPDC and over 400 students were trained in 2023.

1. Certificate in Lifting Safety Supervisor;
2. Certificate in Modular Integrated Construction (MiC) for Foreman;
3. Certificate in Modular Integrated Construction Unit Installation;
4. Foundation Certificate in MiC (Lifting, Installation and Disassembly); and
5. CIC Master Class on MiC Project Implementation (Project Managers)

Way Forward

We are delighted to witness the completion of over 40 MiC projects in 2023, with over 80 projects that are currently under construction or in the planning stage. This significant progress highlights the promising path that MiC offers for the construction industry in Hong Kong. MiC presents a more efficient, sustainable, productive and safe approach to urban development, providing numerous benefits to the industry and the city as a whole. We hope that all stakeholders in the industry can effectively utilise construction technologies, including MiC to drive Hong Kong towards a more sustainable city.

CIC-Zero Carbon Park

The CIC-Zero Carbon Park (CIC-ZCP) has pioneered the green construction arena in Hong Kong. As the first zero carbon building in the city, it embodies forward-thinking, low-carbon design innovations. Since its opening in 2012, the building's performance has continuously improved. Serving as an exhibition and education center, CIC-ZCP aims to extend its influence beyond the industry, promoting low-carbon living and advanced green building technologies within the community. By engaging with local residents and industry stakeholders, CIC-ZCP strives to transform sustainable living into a reality, acting as a local landmark and a vital "city lung," infusing fresh air into Hong Kong.

Diversified Marketing Initiatives

CIC-ZCP aims to engage with the industry and community to promote green construction and green living, various marketing campaigns including MegaBox x CIC-ZCP Chill Green Fest, ZCP Easter STEAM Carnival, "Sustainable Fashion" Mid-Autumn Green Campaign and New Energy Vehicles Exhibition were launched and received overwhelming response throughout the year.

CIC-ZCP STEAM Lab

Opened its door in June 2023, the CIC-ZCP STEAM Lab serves as an educational platform for exploring innovative construction technologies and industry knowledge, as well as cultivating future cross-disciplinary talents with essential skills in construction innovation to pursue carbon neutrality.



CIC-ZCP has set up Hong Kong's first construction theme STEAM Lab



Each zone provides participants with an immersive and engaging environment to learn more about the construction industry in an interactive and fun way

MiC Play Unit 2

The CIC-ZCP upgraded the MiC Play Unit using hexagonal-shaped, pre-fabricated and readymade MiC components with laminated bamboo to create a sustainable community play unit, the flexibility and versatility of MiC architecture are displayed to the public, whilst establishing a family-friendly communal space.



The Play Unit also delivers the concept of carbon sink and embodied carbon in construction materials



To demonstrate the industry's efforts in terms of technology application, CIC-ZCP joined hands with the Hong Kong Institute of Landscape Architects and supporting partners for the MiC Play Unit 2

Construction Month 2023

CIC-ZCP presented the annual signature campaign Construction Month 2023 in November. With the theme of "Build Green, Live Green", the campaign comprised different captivating events, to unite and encourage the industry as well as the public to explore the "Carbon Neutrality" journey. The exciting events included Robotics x STEAM Construction Day Camp, Percussion Instruments Marathon and ZCP Green Heroes Acknowledgement Ceremony cum Obstacle Race; ZCP Green Market, Explore Kowloon East Green Tour, and Upcycling Green Workshop to promote low-carbon lifestyle; Percussion Marathon and Green Music Flash Mob to connect the communities with music, and engage the public to embrace the low-carbon living experience!

Experiential Landmark

CIC-ZCP continually uplifts its facilities to propel sustainable development and enhance the visitors' experience. The upgraded facilities of CIC-ZCP include the replacement of the biodiesel generator and photovoltaic (PV) inverters, with the goal of lowering carbon emissions, raising energy efficiency, and adhering to the most recent energy efficiency standards.

Way Forward

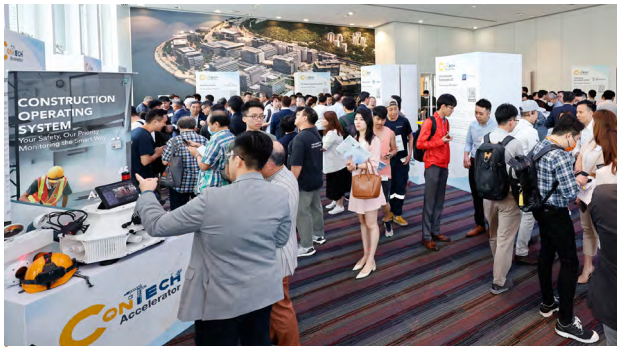
As a beacon of low-carbon practices, CIC-ZCP remains committed to showcasing cutting-edge eco-building designs and technologies that promote sustainability. It will further explore ways to enhance renewable energy adoption. Additionally, CIC-ZCP plans to launch new marketing initiatives to champion zero-carbon efforts, engaging both the public and industry professionals. By fostering collaboration and synergy, CIC-ZCP will closely collaborate with industry stakeholders and offer venue support for industry-led events, all aimed at advancing sustainable construction practices.



Construction Innovation and Technology Application Centre (CITAC)

ConTech Accelerator

ConTech Accelerator, co-organised by HKSTP and CIC, aims to accelerate technology trials and adoption across the construction industry. The shortlisted tech ventures will have the opportunity to refine the pre-ready or ready-to-market construction technology (ConTech) solutions and conduct trials or affirm large-scale adoption in different sites and premises with our 20 partnering corporate contractors. During the programme, we have consolidated 165 industry pain points and received over 200 technical proposals from 117 local and global tech ventures. In the past year, we arranged 126 matching sessions between our contractors and tech ventures, resulting in 116 technical proposals being accepted for further exploration. More than 10 proposals were adopted by contractors to conduct proof-of-concept or trial.



Exhibition of ConTech Proposals



ConTech Demonstration Day held on 1 August 2023

Workshops on Construction Robots

The CIC hosted a kickoff seminar for the Workshops on Construction Robots and introduced 21 advanced construction robots from 13 exhibitors to over 160 industry professionals. This event marked an important step towards the integration of robotics into construction, showcasing the practical applications of advanced technology in real-world settings. The workshop, spanning from 5 to 18 October 2023, offered in-depth explorations and demonstrations of these

technologies. A total of 68 organisations and 425 participants were engaged in four full-day and seven selected workshops, along with 13 demonstration tours. The objective was to offer a hands-on experience and to understand the capabilities and benefits of each robotic solution.



Kickoff Seminar for Workshops on Construction Robots held on 5 October 2023

Way Forward

To further advance the adoption of Construction Robotics and achieve the objectives of enhancing project efficiency, worksite safety and overall productivity, Global Construction Robotic Day took place on 7 to 8 May 2024. This significant event will comprise a 1-day robotic conference and a 2-day robotic exhibition, featuring esteemed speakers and exhibitors from both local and international domains, including the Mainland.

CITAC will strive to establish the Construction Innovation Platform to tackle specific industry pain points raised by construction industry stakeholders via innovative technology adoptions.

Hong Kong Institute of Construction

With the epidemic situation stabilising in 2023, Hong Kong Institute of Construction's (HKIC) operation fully resumed and overcame more challenges. Nevertheless, with the joint efforts of its staff, HKIC achieved fruitful results in various aspects.

HKIC formulated the Development Blueprint for Manpower Training of Construction Industry in 2022, covering four areas of training as the pillars of HKIC: Trade Skills Development; Professional Development; Technology / Modern Methods of Construction / Modern Construction Management and Sustainability; and Construction Safety.

Training

The industry's demand for manpower continues to grow as the industry resumes its normal operation. The training target of 10,000 tradesmen (including Senior and Intermediate Tradesman) was set by HKIC in Academic Year 2022/23 and was eventually achieved with 21,565 students enrolled and 13,094 graduated. Owing to the sustained increase of manpower needs of the construction industry, in Academic Year 2023/24, HKIC has set the training target for skilled and semi-skilled workers at 15,700, and at least about 12,000 in each of the coming academic years. As of 31 December 2023, the student enrollment and graduation of HKIC's relevant programmes and Collaborative Training Schemes reached 6,761 and 8,298 respectively.

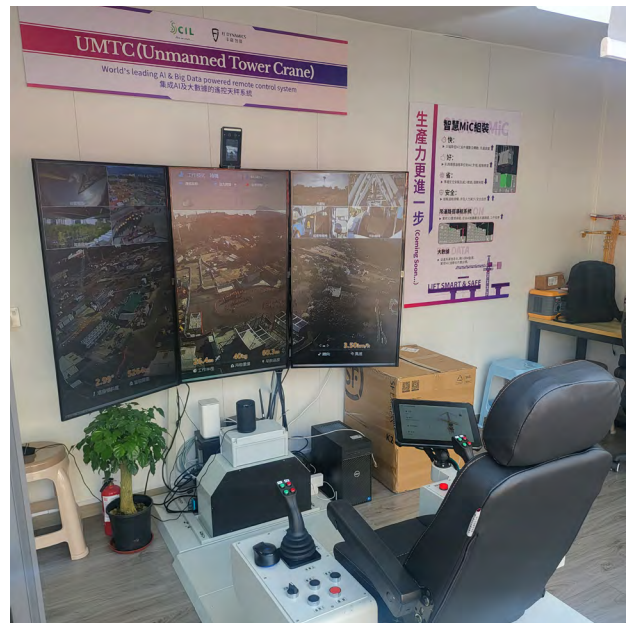
In response to the manpower shortage of various trades, 13 regular Full-time short programmes of HKIC were integrated to "Enhance Construction Manpower Training Scheme" (ECMTS) to provide higher training allowances in order to attract more new blood to join the industry. Besides, HKIC launched a series of intensive certificate programmes, providing new ways for current workers in the construction industry to attain Intermediate Tradesman qualifications.

Technology Applications

Elements of new construction technologies and skills were added in HKIC's programmes to make the training contents up-to-date. Training on Modular Integrated Construction (MiC) and Building Information Modelling (BIM) were added to Full-time programmes, while regular seminars about new technology applications were organised for teaching staff and students. Uplifting of facilities was also conducted to enhance the application of new technologies. The tower crane remote-control driving system was installed at Tai Po Training Ground while the welding robot was acquired at Sheung Shui Campus.



Students visited Digital Twin Hub and MiC Resources Centre



Tower crane remote-control driving system at Tai Po Training Ground started operation in August 2023



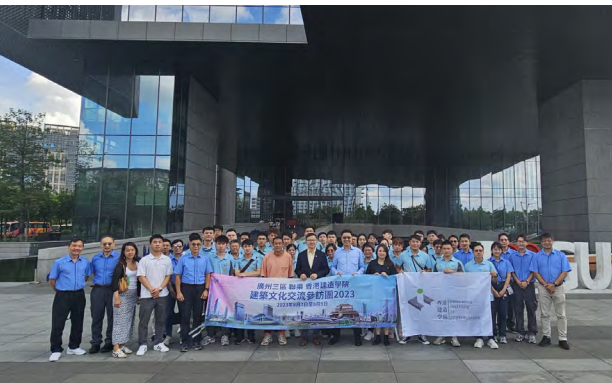
Welding Robot was acquired at Sheung Shui Campus

Uplifting Training Ground

Tuen Mun Training Ground will be returned to the Government in 2024. A newly established Siu Lam Training Ground will replace the current Tuen Mun Training Ground for Loadshifting Machinery Operators training with the assistance of the Development Bureau (DEVB). The new training ground will provide students with more on-site and realistic hands-on experience, and adapt to site operation quickly after the training.

Peers Exchange

HKIC encourages the exchanges and keeps its staff and students abreast of industry development in the region. Management, teaching staff and students of HKIC participated in the "Architectural and Cultural Exchange Tour 2023" to learn about architecture and planning in the Greater Bay Area from 7 to 9 August 2023. Teaching staff visited a construction site at Shunde, Guangdong in November 2023, to have better understanding and observation on the practical application of painting robots.



Architectural and Cultural Exchange Tour 2023

Promotion of Construction Safety

Launch of New Programmes

To support the policy of the Development Bureau to promote wider adoption of Smart Site Safety System (4S), HKIC launched two related programmes in April 2023, namely "Certificate in 4S Planning and Implementation" and "Certificate in Safety Supervision with 4S", which started in September and November 2023 respectively.

With the "first-hire-then-train" initiative promoted by the DEVB, HKIC launched the "Certificate in Construction and Safety Practice" in November 2023, to attract young people to join the construction industry and to become safety officers through HKIC and on-the-job training.

Introduction of 4S

To facilitate the development of 4S, a number of 4S gadgets and facilities, including smart helmets, smart watches, artificial intelligence monitoring system, and real-time weather monitoring system were installed at training grounds and Safety Experience Training Centre at the Kwai Chung Campus since June 2023 for training staff and students. Starting from October 2023, all safety training courses included 4S elements. Besides, HKIC cooperated with different robotic and Internet of Things (IoT) device technology companies to look for feasibility of introducing 4S into other programmes.



Smart Helmets

Develop Good Safety Practice and Enhance Safety Awareness

To develop good safety practice and enhance safety awareness, HKIC students are required to practice the safety belts and double harness safety lanyard, and conduct Dynamic Risk Assessment before training everyday.



Safety Belt Training

Enhancement of Safety Training Course Content

Apart from promotion of 4S development, HKIC introduced the safety training of MiC Lifting in Safety Training Course for Construction Workers of Specified Trade - Construction Materials Rigger (A12) and Safety Training Course for Construction Workers of Specified Trade - Rigger and Signaller (A12S) in November 2023.

Since September 2023, recent fatal accident case studies were continuously incorporated and updated in the course content of all safety training programmes which allowed students to discuss causes and avoidance methods in order to enhance their safety awareness.

School of Professional Development in Construction

To promote 'Construction 2.0', support the industry development and cater to industry demands on training, the School of Professional Development in Construction (SPDC) is committed to providing advanced professional and continuous training for practitioners. In 2023, we offered several signature programmes, namely CIC Master Class in Safety Leadership Culture, CIC Master Class on MiC Project Implementation (Project Managers), CIC Master Class on Common Data Environment (Project Managers), CIC Master Class on AI for Construction, CIC Master Class on Design for Safety (Management Personnel), CIC Master Class on Design for Safety (General Construction Personnel) and CIC Master Class on Temporary Works (Engineers and Supervisors).



1st Cohort of CIC Master Class in Safety Leadership Culture

In addition, on promoting popularisation of BIM, SPDC kept offering BIM viewer training programmes with an aim to equip construction practitioners with the ability and knowledge of BIM viewing and commenting skills. By the end of 2023, over 3,000 students have enrolled in the programmes, including students from HKIC.

SPDC proactively reached out to industry stakeholders to promote training programmes to their members and employees, and expanded SPDC's collaboration network. For example, the Hong Kong Federation of Electrical and Mechanical Contractors Limited, Civil Engineering and Development Department, Hong Kong Housing Authority, and various project clients, consultants and contractors.

In response to market demands and address the latest industry trends and technologies, SPDC is going to launch several new training programmes in 2024, including Certificate in BIM - Plumbing and Drainage (Revit), Certificate for BIM Use in Drawing Generation (Superstructure, Foundation & Demolition Plans) - Revit, Shotfirer Refresher Training Course and Master Class on Digital Twin.

Programme Revamp, Development and Accreditation

Since its establishment in 2018, HKIC has been actively participating in the Hong Kong Qualifications Framework (HKQF). To further enhance awareness to and recognition of its programmes, HKIC has been submitting its programmes to the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ) every year for Qualifications Framework (QF) accreditation and subsequent upload onto the Qualifications Register (QR).

In 2023, HKIC revamped eight of its full-time (short) training programmes and completed the accreditation at QF Level 2 for these programmes. As in past instances, the accreditation results were encouraging with no conditions/ requirements. Together with the previously QF-recognised programmes, currently there is a total of 37 HKIC qualifications listed on the QR.

In recognition of HKIC's active participation and support to HKQF, as well as its impressive track record in past accreditation exercises, the Education Bureau commended HKIC as 2022 "QF in Action" (QFIA) Achiever at the "QF Partnerships Commendation Ceremony cum QF 15th Anniversary Celebration" held on 10 May 2023, complimenting its application of QF.

As a major training institution in vocational and professional education for the construction industry, HKIC launches new programmes from time to time to meet the development and manpower needs of the industry. In order to ensure that its programmes are up-to-date, HKIC also reviews and enhances its curriculum designs and teaching contents in a timely manner. In 2023, HKIC developed a total of 16 new programmes and made substantial changes to 23 of its current programmes.

Progression Pathway for HKIC Students

HKIC provides a structured articulation pathway for its students. Currently, students can progress from "Certificate in Construction" (QF Level 2) or relevant full-time (short) programmes, through "Diploma in Construction" (QF Level 3) with module exemption, to "Professional Diploma in Construction for Specialist Trades" (QF Level 4), gradually transitioning from "quality skilled workers" to "knowledge-based workers", and laying the foundation for becoming "trade supervisors". During this period, students also switch from full-time programmes to part-time studies on the next level programmes, simultaneously joining the 2-year Construction Industry Council Approved Technical Talents Training Programmes (CICATP) for advancement to become Senior Tradesmen.

HKIC also liaises with various local and overseas tertiary institutions to offer articulation to degree programmes

for graduates of "Advanced Diploma" and "Professional Diploma in Construction for Specialist Trades" (all at QF Level 4). HKIC is pleased to announce that graduates of the four "Advanced Diploma" programmes have been granted credit exemption for relevant part-time degree programmes at the Hong Kong Metropolitan University (HKMU) and University College of Estate Management (UCEM), thus shortening the study period.

Starting in 2024, graduates of the four "Advanced Diploma" programmes can enter the third year of the relevant part-time related degree programmes at the HKMU directly, with exemptions ranging from 42 to 57 credits, shortening the study period by two years. For UCEM, graduates are eligible for exemption of up to 200 credits when enrolling in the relevant degree programmes (360 credits). Graduates of Advanced Diploma in Quantity Surveying could articulate to degree programme that lead to membership with the Hong Kong Institute of Surveyors (HKIS) and the Royal Institution of Chartered Surveyors (RICS).

Guest Lecturer Scheme

HKIC always maintains close connection with the industry. In order to broaden students' knowledge and understanding of the latest technological applications, site conditions, industry operations and trends, etc., HKIC launched a Guest Lecturer Scheme to systematically invite experienced industry practitioners and experts to share experience with HKIC students or to conduct topical speeches. In 2023, HKIC appointed a total of 32 Guest Lecturers and the appointment was made in the "Employers Appreciation and Appointment of Guest Lecturer Ceremony and Construction Industry Outstanding Apprentice Award Presentation Ceremony 2023" held on 20 September 2023. HKIC would continue to arrange appropriate activities for students to allow them to grasp the latest industry situations and development.



Appointment of Guest Lecturer Ceremony

Trainings on Quality Assurance and Qualifications Framework

To facilitate staff's professional development and encourage lifelong learning, HKIC continuously provides various training on quality assurance (QA) and QF to its staff. Training topics included: HKQF, internal programme validation / vetting and programme accreditation, design of teaching and learning materials and assessments, assessment marking, online learning platform, file sharing platform, and industry and site attachment schemes etc. In addition, with a view to further strengthen staff's language use to better support the Institute's QA and QF development, HKIC also arranged language enhancement workshops for staff. In 2023, HKIC conducted a total of 41 training sessions with 716 attendees.

HKIC plans to submit the application for "Programme Area Accreditation" at QF Level 3 to HKCAAVQ in 2024. A series of preparation work has commenced. HKIC has also formulated a work plan with timeline to ensure that relevant work is carried out in a timely and orderly manner.

The Construction Industry Council Approved Technical Talents Training Programmes

HKIC started to launch the Construction Industry Council Approved Technical Talents Training Programmes (CICATP) in 2019. CICATP articulated with the Part-time programmes of 'Professional Diploma in Construction for Specialist Trades' and 'Diploma in Construction' in Academic Year 2022/23.

CICATP fosters HKIC's graduates to become knowledge-based skilled technical personnels through a comprehensive solution integrating on-the-job training, trade skills enhancement and assessment, and soft skills, safety training as well as technology and innovation education. To train more new blood and upskill the graduates' technical standard, HKIC obtained the great support and funding from the Government and provided 620 training places under CICATP in Academic Year 2023/24. The number of trades covered in the scheme was 23, straddling most of the trades in ECMTS.

It is expected that through the CICATP, more talents can be trained up with both skills and qualifications to meet the manpower demands of the construction industry.

Student Recruitment, Student Development and Career Support Services

In 2023, HKIC proactively recruited students, assisted them with job placement while providing them with moral and civic education.

Student Recruitment

Enhancing the efforts in training local workers and recruiting youngsters to join the construction industry, HKIC has been adopting multi-pronged publicity and promotion strategies, not only to expand the source of recruitment, but also to build up the brand image of HKIC.

Apart from holding recruitment activities at campuses regularly, HKIC also actively participated in different education and career expos, including the "Education and Careers Expo 2023" organised by Hong Kong Trade Development Council from 2 to 5 February 2023, in which two seminar sessions were held on the "Construction Theme Day". For promoting HKIC's programmes and Hong Kong construction industry, HKIC also joined the "29th Hong Kong International Education and Careers Expo" organised by The Chinese Manufacturers' Association of Hong Kong, the "Information Expo on Multiple Pathways 2023" organised by the Education Bureau and the "Education Expo" organised by Ming Pao.

In addition, HKIC collaborated with Hong Kong Metropolitan University (HKMU) to organise Info Day activities on 10 and 17 June respectively. Through seminars, taster workshop, campus tour, participants were able to learn more about the Construction Pathway created for Full-time Year-long Programmes offered by HKIC and to understand more about the programme information of the top-up degrees provided by HKMU.



Recruitment activities were held at campuses regularly



HKIC participated in Education and Careers Expo 2023

In 2023, HKIC aimed to establish a “young, energetic, and professional” image for its students in its promotion campaign by using online platforms and Key Opinion Leaders (KOL) which are popularly exposed to teenagers to recruit students to join the programmes. The “Pomato - HKIC One-Day Experience” (「小薯茄—香港建造學院一日體驗」) launched in June received over 403,000 views, while the “Water Wild Month - There’s more than one way to do it.” (「水野月—路從來唔止一條」) launched in August received over 386,000 views. A very positive response was received. Besides, a new promotional video was produced to enhance the brand image of HKIC and for the recruitment promotion. Featuring a member of the popular boy band among youngsters, the video focused on the digitalisation of the construction industry and the vibrant image of youth, with a view to reaching out to more young people. Further than CIC and HKIC’s social media channels, the video was broadcasted on various TV channels, outdoor large TV screens, social media, estate lobby TVs, radio mobile apps, etc. The total number of views of the video on online platforms exceeded 1,000,000.



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New promotional video to enhance HKIC brand image and drive recruitment

School Promotion

Promotion to secondary schools remains one of the key focuses of student recruitment. HKIC promoted the Full-time year-long programmes and the Construction Pathway Project (CPP) to secondary school students and teachers through a number of on-site talks and visits to the HKIC campuses. To further strengthen the connection between the HKIC and secondary schools, HKIC organised a Principal Discussion Forum on 12 October 2023 to update secondary school principals on the latest opportunities for students in the construction industry and to encourage secondary school students to enroll in the HKIC through their secondary schools.



“Construction x STEAM Summer Camp 2023”



"Principal Discussion Forum" with secondary school principals

In line with the Hong Kong Education Bureau's strong effort in promoting STEAM education to primary and secondary schools, HKIC has been promoting the construction industry and strengthening its brand through a series of activities of the "STEAM Alliance" to secondary schools. This initiative aims to encourage more young people to enroll in HKIC programmes and join the construction industry in the future. The inauguration ceremony of "STEAM Alliance" was held on 30 May 2023, at the CIC - Zero Carbon Park (CIC-ZCP). Besides, the "Construction x STEAM Summer Camp" was held on 18, 19 and 21 August, where 66 secondary school students learned about construction crafts such as painting, woodworking, and electrical installation. They also participated in the creative design competition of assembling LED lighting in the camp. In addition, the prize presentation ceremony for the "BIM x STEAM Construction Model Creative Design Competition 2023" was held on 16 December. Through a specialised workshop, students learned about innovative construction technology and BIM software, and designed works under the theme of environmental protection. The response in this year was more positive than the previous year. A total number of 38 teams applied for the competition was recorded compared to 30 teams in 2022.



"BIM x STEAM Construction Model Creative Design Competition 2023"



Promote Full-time programmes to secondary students by school seminar

Whole-person Development

In addition to mastering professional craft skills and industry knowledge, HKIC also encourages students to participate in various physical training activities and sports competitions, with the purposes of enhancing student's personal fitness, promote physical and mental well-being, and cultivate a spirit of teamwork. Numerous competitions were organised for students to participate in, under the Construction Industry Sports and Volunteering Programme (CISVP), including the "Construction Industry Basketball League 2023" and the "Construction Industry Football League 2023", the "Hong Kong Rowing Indoor Championships 2023", the "Jockey Club Water Sports 4 All Programme Inter-School Indoor Rowing Invitational Competition 2023" and the "Sha Tin Festival - Sha Tin Dragon Boat Race", etc., and achieved outstanding results. The major awards include:

- Champion in the Buildings Department 30th Anniversary Silver Cup of the "4th Kwun Tong Seaside Sunshine Dragon Boat Race"
- Champion in College Boys' 500m Rowing, Boys' 200m Indoor Kayak Ergometer Race, and College Boys' 4x500m Rowing Relay, as well as second runner-up in College Boys' 4x500m Rowing Relay of the "Jockey Club Water Sports 4 All Programme Inter-School Indoor Rowing Invitational Competition 2023"
- First and second runner-up in the Corporate Men Team Relay of the "Hong Kong Ergathlon 2023"
- First runner-up in the Silver Cup Division of the "Hong Kong Institute of Construction Managers National Cup Basketball Competition 2023"
- Second runner-up in the Silver Disc Division of the "Construction Industry Basketball League 2023"

To cultivate students' caring spirit, HKIC invited local social service and non-profit making organisations to jointly arrange project-based volunteer training and services for students. The services included visiting elderly people living alone, and assisting in computer recycling with the aim that the underprivileged in the community can be benefited. Besides, HKIC actively participated in CISVP activities. There were 577 instructors and students that have participated in the Construction Industry Lo Pan Rice Campaign in 2023. In the Construction Industry Volunteer Award Presentation Ceremony 2023, Sheung Shui Campus was awarded in "Most Supportive Organisation" and Merit of "Annual



Sheung Shui Campus was awarded in "Most Supportive Organization" and Merit of "Annual CISVP Corporate Award for Activeness"

CISVP Corporate Award for Activeness". Furthermore, to enrich students' learning experiences, HKIC invited several outstanding CIC Fellows, including Ir HON Chi-keung, former Permanent Secretary for Development (Works) of the Development Bureau; Dr. CHAN Ka-kui, former Chairman of CIC; Dr. Christopher TO, former Executive Director of CIC; Mr. Ivan FU Chin-shing, Chairperson of the Committee on Environment and Zero Carbon Building (ZCB) Management Board; and Mr Paul CHONG Kin-lit, former Chairperson of the ZCB Management Board of the CIC, to share their life and career experience with students, inspiring them to prepare for future success in personal and career development.



HKIC Dragon Boat Team



HKIC Indoor Rowing Team

Promote a Sense of Craftsmanship

For nurturing students' sense of craftsmanship – “To dedicate • To excel” for their study and work, HKIC not only incorporates elements of craftsmanship into the teaching materials and assessment for Whole Person Development modules, but also organises a sharing session on Craftsmanship for students. Mr. Simen CHEN, Chief Maintenance Technician of China Nuclear Power Operations Co., Ltd. and “Craftsman of the Nation 2022”, was invited as the guest speaker to share his innovative inventions and successful story, and inspire students to apply craftsmanship in their studies and career.



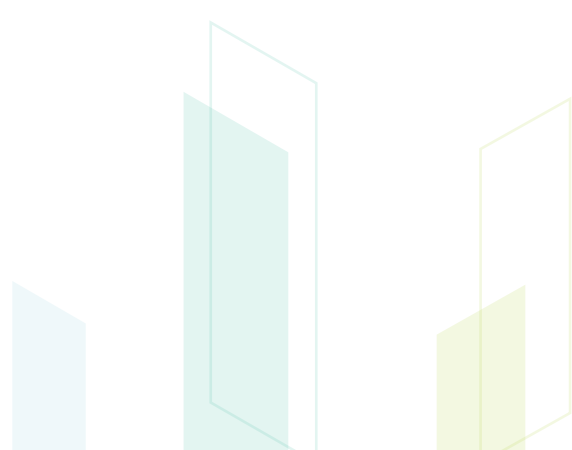
Project-based volunteer training



Sharing Session on “Innovation and Craftsmanship”



CIC Fellows Sharing Session



WorldSkills Competition

The WorldSkills Competition is held biennially. HKIC sent its representatives to participate in the competitions and obtained outstanding results.

In 2023, 11 winners from seven trades in the 2nd Hong Kong Construction Skills Competition were selected as competitors of WorldSkills Competition 2024 to join the year-long specialised skills training. The training, provided by HKIC's experts and trainers, was intended to increase the competitiveness of the competitors by equipping them with the most advanced skills and techniques in their trade.

Apart from the skill training, all rounded trainings like sport psychology workshops, weekly physical trainings, and enhancement courses in "set-out", English, and Mathematics were provided to the competitors to fortify their foundation at the beginning stage.

The WorldSkills team strived to seek training opportunities with Mainland China. In September 2023, the WorldSkills team visited the 2nd Vocational Skills Competition of the People's Republic of China in Tianjin, allowing them to exchange and build network with counterparts in China. Two Gold medallists in Bricklaying were invited to share their experience in preparing and competing in the WorldSkills Competition with the WorldSkills team at HKIC's Sheung Shui Campus. The WorldSkills team is confirmed to start training in China in early 2024.

Promote National Identity

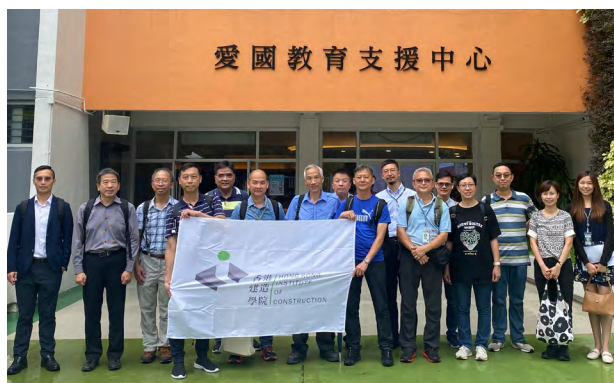
To strengthen students' national identity and sense of belongings towards our country, HKIC continued to provide national education in collaboration with the Hong Kong Army Cadets Association for full-time students in 2023, including seminars on "The National Flag, Regional emblem and National Anthem of the People's Republic of China" and "National Security Education Day".

Besides, students of Full-time Year-long programmes were encouraged to join the HKIC Flag-raising Team with the provision of structural training on the flag-raising and foot-drill. They served as flag-raisers and flag-bearers in flag-raising ceremonies organised by the CIC and HKIC, and thereby enabling students to develop a sense of national pride and to demonstrate their patriotism.

Meanwhile, HKIC organised a study tour to the Patriotic Education Centre of the Hong Kong Federation of Education Workers for teaching staff with the aim of enhancing their understanding about national education. Through seminar and exhibition visits, teaching staff learned about strategies for promoting national education on campus and how to cultivate students' sense of national identity.



Flag-raising ceremony of the Construction Industry Sports Day and Charity Fun Day 2023



Study tour to the Patriotic Education Centre of the Hong Kong Federation of Education Workers

Career Support Services

HKIC continually offers graduates a wide range of employment services and training opportunities. It was also committed to expanding apprenticeship training and facilitating students to develop their strengths to join the construction industry. The success of HKIC depends on the support and trust of the industry for years. Deepening industry collaboration could help students to establish networks and grasp the industry development. The 'Employers Appreciation and Appointment of Guest Lecturer Ceremony and Construction Industry Outstanding Apprentice Award Presentation Ceremony 2023' was held successfully on 20 September 2023 to appreciate the employers and guest lecturers who staunchly supported the training of HKIC through the year and to congratulate apprentices for their outstanding achievements.



HKIC Graduation Ceremony 2023



Employers Appreciation and Appointment of Guest Lecturer Ceremony and Construction Industry Outstanding Apprentice Award Presentation Ceremony 2023

The 'On-the-job Skill Consolidation Subsidy Scheme' (OTJS) was also launched to subsidise employers who employed graduates of the ECMTS with a monthly allowance of HK\$2,500, for providing monthly salary not less than HK\$15,000 for nine months. OTJS encourages employers to provide the HKIC graduates with on-the-job training and continuous employment.

HKIC offers a wide range of career counselling services to all graduates. Various activities, including Student Site Practice Scheme, Build Your Life Mentorship Programme, placement related workshops, placement/career talks, employers/ association/ alumni sharing sessions, site visits, job fairs, mock interviews, were organised for preparing students to join the construction industry.



Build Your Life Mentorship Programme 2023

Collaborative Training

In addition to providing Full-time and Part-time programmes, to meet the manpower demand of intermediate tradesmen and senior tradesman as well as safety officers, HKIC offers a variety of Collaborative Training Schemes to provide comprehensive and structured craft trainings for construction practitioners. Collaborative Training Schemes work in partnership with trade associations, contractors, sub-contractors, employers, trade unions and training bodies, the enrollment number was 12,596 whereas the graduation number was 6,412 for the Collaboration Training Schemes in academic year 2022/2023.

Collaborative Training Schemes

With the continuous improvement of safety awareness in the construction industry and the surging demand for registered safety officers, HKIC introduced “Construction Industry and Safety Practices Certificate” to cultivate more talents with construction safety knowledge to meet the industry’s manpower needs. This 5-month training course follows a “first-hire-then-train” model, allowing graduates to progress to the “Construction Safety Officer Course” for further study.



The first class of HKIC “Construction Industry and Safety Practices Certificate”

HKIC is committed to implementing Collaborative Training Schemes for training intermediate tradesmen and senior tradesman and has expanded its range of training trades. The Intermediate Tradesman Collaborative Training Scheme includes the trades of “Fire Service Electrical Fitter” and “Cured-in-place-pipe worker”, bringing the total number of training trades to 51. Intermediate Tradesman Collaborative Training Scheme (Skills Enhancement Courses) added five new trades, namely “Joiner”, “Building Security System Mechanic”, “Bar Bender and Fixer”, “False Ceiling Installer” and “Glazier”. Currently, 10 training bodies have been approved to offer 24 courses for registered general workers who possess relevant working experience to upgrade to registered training intermediate tradesmen. Furthermore, Advanced Construction Manpower Training Scheme - Pilot Scheme (Skills Enhancement Courses) added the trade of “Paving Block Layer,” offering a total of 23 training trades to enhance the training of intermediate tradesmen to become senior tradesmen, to meet the training needs of the industry and to work in line with HKIC’s four pillars under the Development Blueprint for Manpower Training of Construction Industry.

Optimisation and Enhancement of the Collaborative Training

In 2023, HKIC implemented a number of comprehensive measures to enhance the Collaborative Training Schemes. These measures include the establishment of a quota allocation mechanism, quota reallocation mechanism, an approval and supervision mechanism for training body application and training venue for skills enhancement courses; optimisation of skills enhancement courses trainee application form, approval process and bonus arrangement, introduction of “multi-skilled” course in the first quarter of 2024 for intermediate tradesmen to attain self-enhancement and increase their employment opportunities. As for Intermediate Tradesman Collaborative Training Scheme, mechanism for reviewing new collaborative bodies (employers), evaluation mechanism and optimisation on the ratio of site mentors to students were established.

The number of participating training bodies has been increased to 10. In accordance with various mechanisms, HKIC handled applications and enhanced several quality assurance measures on monitoring training bodies, including consistent joint inspection of training venues with other departments from CIC, and class observations by HKIC’s instructors to ensure that the training bodies meet HKIC’s requirement. For on-site training, HKIC also conducted regular site visits, arranged Site Trainers and Trade Testing Exchange Sessions, Expectation Management Talks for enhancing overall training efficiency. During the year, 219 site trainers participated in 18 “Site Trainers and Trade Test Exchange Session” and 220 site trainers completed “Certificate in Instructing Techniques for Site Trainers” programme in 2023 to strengthen their teaching and instructing skills for Collaborative Training Schemes, and to improve students’ passing rates.



CIC Chairman visits Collaboration Scheme Training Bodies

Anti-Corruption and Integrity Management

HKIC arranged the “Corruption Prevention and Integrity Management in the Construction Industry – Collaborative Training Schemes” talk, conducted by Independent Commission Against Corruption for training bodies and employers. A total of 65 representatives of training bodies and employers attended the talk, where information related to anti-corruption and integrity management in the construction industry and collaborative training schemes was shared, with the aims of enhancing training bodies and employers’ awareness of anti-corruption prevention and management practices.

Joint Recruitment of Intermediate Tradesman Collaborative Training Scheme

HKIC has set up a new classification mechanism to appoint training partners (employers) to participate in the recruitment and student’s referral. HKIC co-organised with training partners (employers) (including Registered Specialist Trade Contractors Federation, Hong Kong Construction Sub Contractors Association and Hong Kong Construction Association), Labour Department and social welfare organisations to hold the promotion activities for recruiting students who are interested in joining the construction industry to participate in the training. In 2023, HKIC arranged 47 scheme recruitment days, promotion booths and career talks in various districts in Hong Kong, attracting more than 1,200 job seekers to participate in the activities and attend on-the-spot interviews.

Non-Chinese Speakers’ Recruitment and Training

HKIC cooperated with the training bodies to provide skills enhancement courses for non-Chinese speaking registered general workers to upskill to Intermediate Tradesman. HKIC jointly organised Non-Chinese Speakers Recruitment Day with Registered Specialist Trade Contractors to assist employers in recruiting non-Chinese speakers. HKIC also participated in “Job Expo – Building a Multicultural Workplace” organised by Labour Department to promote Intermediate Tradesman Collaborative Training Scheme for Non-Chinese Speakers. A briefing session of Collaborative Training Schemes to the representatives of Nepalese Construction Workers Union Hong Kong and The Hong Kong Construction Association was held to promote the employment opportunities in construction industry for non-Chinese speakers.

In the coming years, in consultation with stakeholders, HKIC will explore and introduce more work trades under the Collaborative Training Schemes to alleviate manpower shortage in the construction industry.



Intermediate Tradesman Collaborative Training Scheme Recruitment Days co-organised by HKIC and Labour Department at the Labour Department’s Construction Industry Recruitment Centre

Construction Industry Council Youth Affairs Committee

Construction Industry Council Youth Affairs Committee (CICYAC) was established in late 2022 to formulate the future direction of the youth development policy of the construction industry in Hong Kong, to recommend the short-term, medium-term and long-term plans to meet the needs of the youth in their developmental stages, and to formulate a comprehensive blueprint for the development of the youth in the construction industry in Hong Kong, with clearer visions and missions through policies. In 2023, different types of youth development activities and programmes were organised including Young Construction Forum 2023 which allowed young people to express their perspectives on the industry development, understand and share the latest state and trend of the industry. To encourage and support young people to grasp the immense opportunities brought about by the development of the Greater Bay Area, CICYAC organised a 11-day “The Greater Bay Area Construction Industry Youth Exchange Programme” starting from 8 July 2023 with 70 participants to learn about the latest opportunities of the construction industry in Hong Kong and the mainland China and to seek regional cooperation.



2023 The Greater Bay Area Construction Industry Youth Exchange Program



2023 Hong Kong Young Construction Forum

Urban Forestry Support Fund – Trainee Programme

The Urban Forestry Support Fund – Trainee Programme (UFSF-TP) has been in operation since August 2020. Employers in the arboriculture industry are encouraged to engage graduates of arboriculture, tree management, tree climbing and tree work programmes to join the UFSF-TP through the ‘first hire-then-train’ mode. Enhancement measures were rolled out in mid July 2023 to attract more new blood to join the arboriculture industry.

Five key highlights of the enhancement includes:

1. Extend UFSF-TP to cover Tree Risk Assessor, Tree Work Supervisor and Chainsaw Operator apart from Arborist and Tree Climber;
2. Encourage trainees to acquire additional professional qualifications by the release of additional HK\$4,000 bonus;
3. Increase the minimum wage level and monthly training allowance;
4. Optimise the tutor and trainee ratio and introduce the role of “Assistant Tutor” in assistant to conduct related training; and
5. Provide trainees with an occupational safety and health in arboriculture training course recognised under the Registration Scheme for Tree Management Personnel.

As of 31 December 2023, almost 190 trainees, including Arborist, Tree Risk Assessor, Tree Work Supervisor, Tree Climber and Tree Climber cum Chainsaw Operator Trainees, had thus far participated in the programme as recommended by their employers ranging from government departments, landscape, arboriculture, construction companies, consultants, racecourse to golf club.

To assist these trainees in acquiring professional skills, HKIC arranged soft skills and knowledge enhancement, as well as occupational safety and health courses in the form of group activities, lectures and field trips. Their overall competency development was assessed through several rounds of assessments which included mid-year & final written and practical fieldwork of tree risk assessments or tree climbing assessments. To promote the UFSF-TP, HKIC arranged a series of promotion activities, which included recruitment talks at tertiary education institutions and job fair, feature advertorials on online and print media, search engine marketing and exposures on digital media platforms of the Council and industry associations.

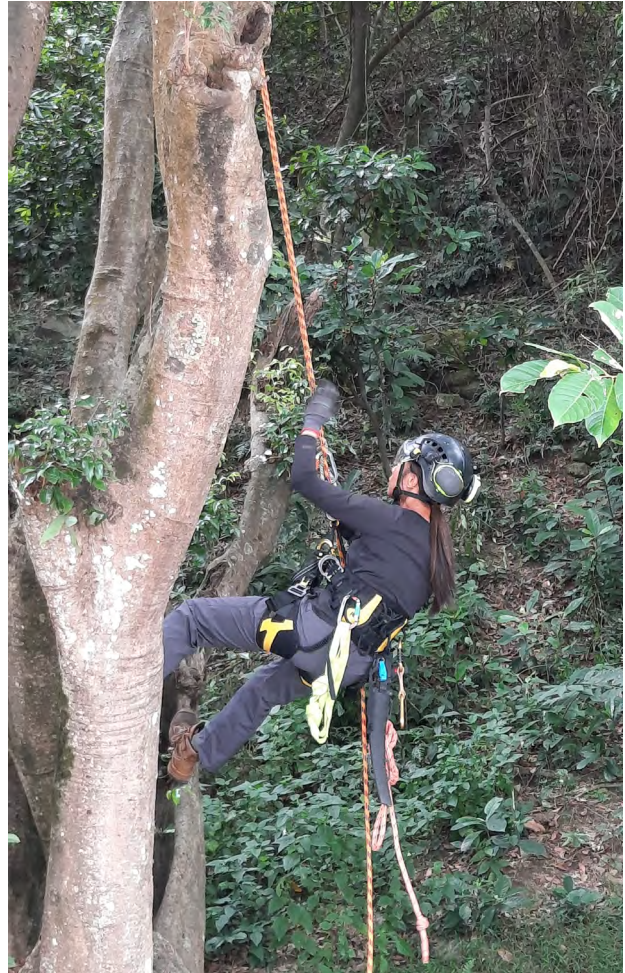
In the coming years, HKIC will work hand in hand with the Development Bureau to train more arboriculture and tree work experts to facilitate the development of the industry.



Arborist trainees practice tree risk assessment during the field trip at Kowloon Park



Arborist trainees are having the interim assessment and assessing tree risk



Tree climber trainee is having the final assessment



Tree climber trainees are learning to use the tree climbing equipment in the skills enrichment programme



Trade Testing

The Hong Kong Construction Industry Trade Testing Centre (HKCITTC) continues to strive for providing independent, equitable and creditable trade testing services. With the easing of the pandemic and the social activities resuming to normalcy, the demand for trade testing service had increased sharply. In 2023, the total number of trade test conducted increased by more than 70% compared to the previous year.

To cope with the upsurge in demand of trade test, HKCITTC has undertaken a series of works to further improve efficiency of trade tests. In addition to maintaining high-quality and efficient trade testing services, HKCITTC has also introduced various safety practices and measures, and adopted innovated construction technologies to continue promoting safety culture and leading the industry in adopting new technologies.

Continuously Improve Efficiency of Trade Test to Cope with the Upsurge Demand

Uplift Trade Test Resources Utilisation and Shorten the Waiting Time of Trade Test

Along with the social returning to normalcy, the demand of trade test sharply increased by 70% compared to the last year, with a total of over 26,000 trade tests conducted in 2023. To meet the needs of the industry, HKCITTC carried out a series of work to further improve efficiency of trade test, including the implementation of e-Assessment and e-Scheduling systems. Furthermore, HKCITTC flexibly reallocate the human resources and workshop space to further enhance the utilisation of the test resources. HKCITTC successfully implemented a series of measures that resulted in the reduction in waiting time of more than 90% of trades from two months to 1.5 months during the high demand of trade test.

Develop New Trade Testing Resources – San Tin Training Ground

The San Tin Training Ground, formerly a community isolation facility built with assistance from Mainland, commenced operations in November 2023. HKCITTC revamped the isolation units into trade testing classrooms and workshops and provided trade tests for Painter and Decorator etc. After the San Tin Training Ground was put into use, the waiting time for the trade tests is reduced by around one month.

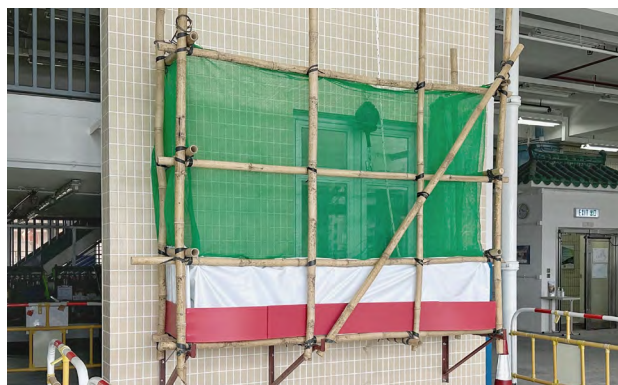


The San Tin Training Ground provides Intermediate Trade Tests for Painter and Decorator

Newly Launched Truss-out Scaffolder Safety Training to Promote Safe Scaffolding Construction

In order to ensure the safety of the scaffolding workers and the third parties, HKCITTC newly launched Advanced and Intermediate Level Truss-out Scaffolder Safety Training to provide safety training and skills assessment for truss-out scaffolders.

In 2023, HKCITTC produced two videos of truss-out scaffolding to promote safe truss-out scaffolding construction practices in the building rehabilitation and home renovation works. One video introduced the truss-out scaffolding construction procedures for property management practitioners and public; the other one provided the assessment tips for Truss-out Scaffolder Safety Training and two related seminars, helping truss-out scaffolders understand the content of Truss-out Scaffolder Safety Training, assessment contents and certification requirements.



HKCITTC provides Truss-out Scaffolder Safety Training



- 高級懸空式棚架安全訓練-實務評核包括：**
- ◆ 根據施工圖在不同的模擬情境下拆卸並安裝一座約7.5呎長x 6呎高的懸空式棚架
 - ◆ 根據指引安裝3個狗臂架及吊環螺栓
 - ◆ 總評核時限：4.5小時

Practical Assessment Tips Video for Truss-out Scaffolding Safety Training

Actively Promote Safety Culture and Good Practices

Implementation of the “Candidates’ Safety Commitment Charter”

HKCITTC implemented the “Candidates’ Safety Commitment Charter” this year. Candidates are required to attend a safety briefing and sign the charter before proceeding to the practical test to raise their awareness of safety.



“Candidates’ Safety Commitment Charter” for Trade Testing Candidates

Implementation of Safe Operations and Good Practices

In addition to continuing to require candidates to complete a “Dynamic Risk Assessment” before work commencement, protect the workplace and the upstream works prior to work, touch up on work before handover and housekeep after work, HKCITTC additionally requests candidates to practice wearing full-body safety harness and switching lanyards, as well as cross-check each other’s personal protective equipment.

Moreover, all trade testing workshops strictly implement “dangerous zone” management by using red plastic fences to enclose the “dangerous zone” in order to prevent unauthorised entry of work areas and avoid accidents. HKCITTC aims to act as a role model to promote safe operations and good practices to the industry.

Introducing Smart Site Safety System (4S)

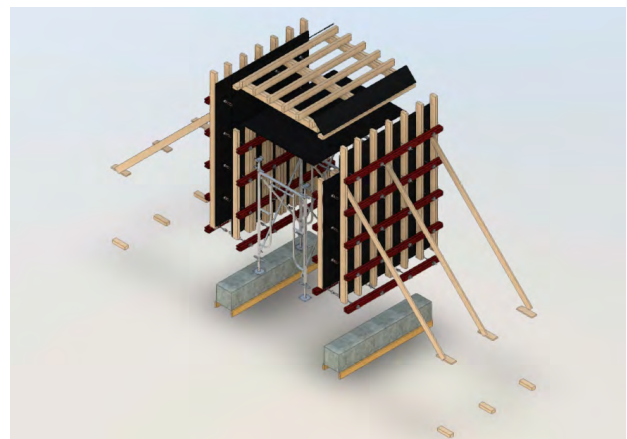
HKCITTC newly introduced 4S in 2023, to provide timely safety alerts and monitoring to trade test candidates and further ensure the candidates’ safety during works. Additionally, the implementation approach of 4S on construction sites and how to utilise 4S to enhance safety management are demonstrated to the industry.

The 4S devices include:

- Real-time Weather and Heat Stress Alert;
- Indoor Air Quality Monitoring System;
- Smart Helmet & Smart Watch;
- Personal Protective Equipment Monitoring System;
- Smart Dangerous Zone Monitoring Camera; and
- Centralised Management System, etc.

Adoption and Application of Construction Technologies

HKCITTC uses BIM to manage the center’s resources and operations by monitoring over 20 items such as water, electricity, equipment, test resources, security and safety management tools and etc. Furthermore, HKCITTC produced BIM model for around 30 popular trades to help candidates understand the design, drawings and requirements of the test projects, aiming to facilitate candidates to uplift the quality of candidates’ workpiece.



Test Project’s Building Information Modelling (BIM)

Recognition to Construction Masters and Promote Trade Test

Organised The 2nd Hong Kong Construction Skills Competition

HKCITTC organised the 2nd Hong Kong Construction Skills Competition in order to acknowledge skilled industry practitioners and recognise exceptional workmanship of experienced masters and industry rising stars. The Competition consisted of Open Group and Youth Group competitions, attracting around 300 competitors and around 90 sponsors and supporting organisations. The Competition and HKCITTC Open Day attracted active participation from the industry.



Winners of The 2nd Hong Kong Construction Skills Competition

Proactively Liaise with the Industry and Promote Trade Test

HKCITTC held over a hundred trade testing exchange meetings and stakeholder exchange sessions in 2023 to actively promote trade test qualification and the high skill level of certified workers. Support and recognition were received from various stakeholders; some incorporated the minimum skilled worker requirement in their construction work contracts, some specified the skilled worker qualification requirements in their employment contracts.



Ir Albert CHENG, Executive Director of the CIC accompanied the Labour Department representatives to visit HKCITTC



Hong Kong-Macau Trade Testing Technology Exchange Meeting

Way Forward

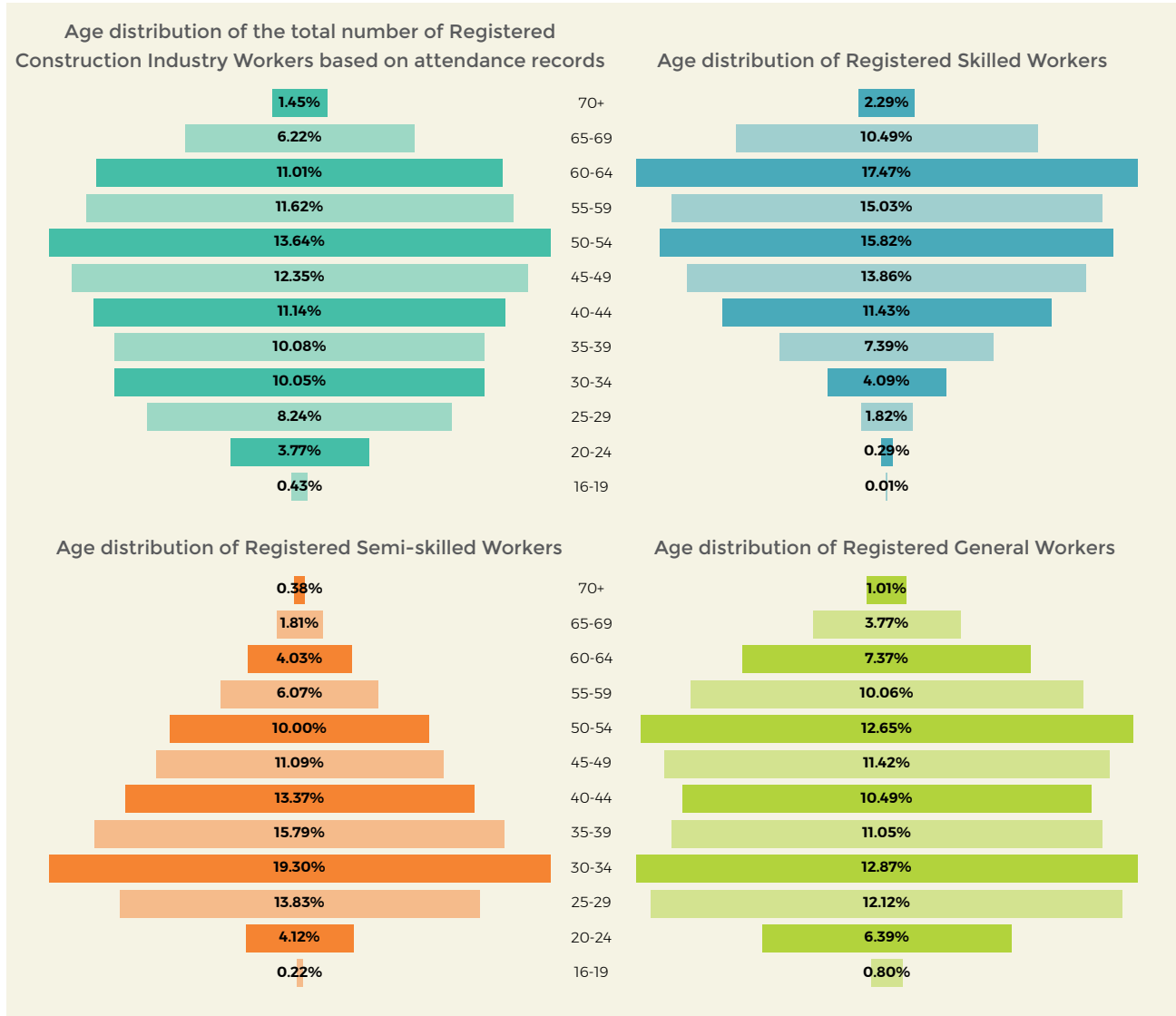
HKCITTC will continue to develop in the following three major directions:

1. further adopt safety culture and good practices, and the application of construction technologies;
2. continue to implement digitalisation for trade testing operations; and
3. proactively promote trade test qualification and the high skill level of certified workers.

Workers Registration

The construction industry had entered another golden era to build care and solidarity for all walks of life. The vast opportunities came with challenges especially on the acute demand of skilled workers. The Construction Workers Registration Board (CWRB) had worked with the construction industry to tackle the challenges.

Upskill



Age distribution chart of Registered Construction Industry Workers working on construction sites (from 1 Jan 2023 to 31 Dec 2023)

Among skilled workers working on construction sites, over 47,000 are aged over 55. It was foreseen that this group of core workforce of the construction industry would gradually retire in the coming decade. Replenishing the skilled workforce should be in force without delay.

The Construction Workers' Professional Development Scheme incentivised in-service general workers and semi-skilled workers to upskill to semi-skilled workers and skilled workers by undertaking trade tests.



Publicity of Construction Workers Professional Development Scheme



Construction Industry Recruitment Day

Recruitment

Releasing the local workforce to fill the vacancies could alleviate the shortage of workforce. During the year, 13 recruitment days were held in the CIC Service Centre (Kowloon Bay), welcoming walk in for job interviews. Opportunities offered by main contractors on different types of construction projects, including the signature ones, were simultaneously promoted to registered workers and the public via the easyJob app.



Publicity of Construction Industry Recruitment Day

Safety

The aging workforce and extreme weather had posed challenges to construction safety. Preventive measures were essential to uncover issues timely. The Medical Examination Scheme for Registered Construction Workers (the MES) prioritised skilled and semi-skilled workers aged 50 and above to undergo health check-up covering blood pressure and pulse, BMI measurement, diabetes, lipid, liver function test, kidney function test as well as uric acid. The MES also covered workers working on construction sites.



Promotion poster of "Medical Examination Scheme for Registered Construction Workers"

Care

In an effort to drive industry-wide improvement in the site facilities for construction workers, the CIC published the “Reference Materials on Construction Site Facilities for Workers” providing standardized recommendations for the necessary facilities. With the aim of improving the well-being of construction workers, the CIC encouraged industry stakeholders to adopt these recommended facilities on construction sites.



“Reference Materials on Construction Site Facilities for Workers”

Development

The Construction Workers Festival presented a series of family inclusion activities throughout the year, including: Construction Industry Exhibition Hub Guided Tours, Safety Training Seminars for the Construction Industry, Health talk on Stretching and Pain Relief, Positive Psychology – “The Happiness Equation” Talk and Free Health Assessment for Workers of Ethnic Minorities.



Free Health Assessment for Workers of Ethnic Minorities



Positive Psychology – “The Happiness Equation” Talk



Health talk on Stretching and Pain Relief



Construction Industry Exhibition Hub Guided Tours

Welfare

The Scholarship for Family Member of the Registered Workers 2023 not only recognised the outstanding achievements of the family members of construction workers in the 2023 Hong Kong Diploma of Secondary Education Examination, but also commended the family members of the awardees who are registered workers.



Publicity of Scholarship for Family Member of the Registered Workers



Students with the top three awards in the Open Category and Construction Related Curricula Category of the 13th Scholarship for Family Member of the Registered Workers

Enforcement

The CIC is committed to promoting the construction industry in compliance with the statutory requirements of the Construction Workers Registration Ordinance (Cap. 583) (CWRO), including employment of registered construction workers for carrying out construction works on construction sites and submission of workers daily attendance records (DAR).

Under the authority granted by the CWRO, the Inspection and Enforcement Team conducted thorough site inspections and reviewed DAR to ensure compliance with the CWRO's provisions. In the year of 2023, the Inspection and Enforcement Team accomplished their annual inspection targets, conducting 1,661 inspections on construction sites and 2,050 compliance checks on DAR submitted by principal contractors were conducted in accordance with requirements in the CWRO.

In terms of prosecution works, a total of 215 summonses were issued for prosecution of the suspected offenders. Including cases from previous year, a total of 281 summonses, all relating to failure in submitting DAR within the prescribed statutory period, resulted in convictions in 2023.

To continually strengthen awareness and compliance among main contractors with the CWRO, the Council utilized email and instant messaging platforms to remind them of the key provisions of the CWRO and promote seminars related to the CWRO, encouraging industry stakeholders to stay updated on a regular basis.



The Inspection and Enforcement Team conducted inspection at construction site

Registration Figures

The Workers Registration Office (WRO) processed 53,932 new registrations and 73,289 renewal applications in 2023, maintaining high service volume. By end of 2023, the total number of valid registration was as follows:

Registration Category	Number of Registered Workers (as at 31/12/2023)	Number of Registered Workers (as at 31/12/2022)
Registered skilled worker	201,781	205,356
Registered semi-skilled worker	46,577	36,409
Registered general worker	390,106	367,562
Total	638,464	609,327

Way Forward

To ensure the continued development of the industry and maintain a leading position in the technological field of the construction sector, while providing more growth and development opportunities for technical personnel and enhancing customer satisfaction and experience, the CIC will actively strengthen the following measures:

- Explore, in consultation with the trades, proposals on development courses for construction workers registration renewals for workers in selected trades if considered necessary and suitable
- Attract workers whose registration have expired to rejoin the construction industry
- Further improve customer experience by centralising digitalised service appointment, workers registration and worker communication with in-built technology such as OCR and auto-notification via CIC App

Registered Specialist Trade Contractors Scheme

Continuous Growth and Development

The Registered Specialist Trade Contractors Scheme (RSTCS) has been expanded into 14 designated trades from only seven designated trades at its launch in 2019. During the year, three new designated trades were added to the RSTCS, namely Levelling and Setting Out, as well as the two RMAA related trades, Building Maintenance and Interior Fitting-out. As of December 2023, there were a total of 7,290 registered companies, including 1,956 Registered Specialist Trade Contractors (RSTCs) of 14 designated trades and 5,334 Registered Subcontractors (RSs) under general civil, building and electrical and mechanical trades. The RSTCS focuses on the development of the registered companies during the year to cope with the everchanging business environment while grasping the ample opportunities.



Two designated trades in relation to Repair, Maintenance, Addition and Alternation (RMAA) were included in RSTCS since 1 October 2023

Strengthen Registration Requirements

The RSTCS encourages and supports professional development of the RSTCs and regularly reviews the registration requirements to address the needs and aspirations of the construction industry over the RSTCs. Upon completion of the transition of the initial eight designated trades, registration requirements were reviewed and optimised. Highlights included strengthening the qualifications and number of dedicated safety and management personnel, mandating Building Information Modelling (BIM) Viewer qualification, and requiring training for front-line practitioners for Group 2 registered companies.

The sixth core registration element "Integrity Management" was fully implemented in January 2023 on all RSTCs and RSs. All registered companies must submit an integrity policy and arrange their senior management members to complete integrity training.

Promulgate Good Trade Practices

In order to showcase professionalism of the RSTCs and provide a reference on standard operating procedures and work output, the RSTCS launched the brand new "Designated Trade Good Practice Manuals" series. The series was supported by Hong Kong Institute of Construction and trade associations. We hope to advocate good trade practices, construction safety and close collaboration among developers, consultants, contractors, subcontractors and front-line practitioners.



During the year, the RSTCS continued the Specialist Trade Technical Webinar series for “Building Drainage Installations” and “Levelling and Setting Out” designated trades to showcase the achievements, good practice and innovation technology adoption of the specialist trades with participation of about 1,500 industry practitioners.



The Hong Kong Plumbing & Sanitary Ware Trade Association sent speakers to support RSTCS' technical webinar

Attention on Variation Management

As reflected by industry stakeholders, project teams may face acute challenges on cash flow if the contract execution, especially variations, not being managed properly. The RSTCS published “Alerts on Variation Management”, advocating best practices to handle variation and define the roles and responsibilities of different stakeholders in the process of contract management.



Uphold Clean Business Environment

The CIC together with Development Bureau and the Independent Commission Against Corruption joined hands with industry stakeholders to support combatting illegal referral fees in the “Anti-Corruption Summit and Commitment to Action Agenda”. In addition to the active participation of young leaders of the registered companies, the event has attracted more than 2,000 industry stakeholders to attend on-site or participate online. The content of the event has also been edited into an educational video to facilitate industry leaders to instill a clean work culture into their teams.



CIC Chairman, Executive Director, representatives from the ICAC and Development Bureau and industry leaders have participated in anti-corruption event

During the year, a series of three integrity management webinars were held to introduce the risks of referral fees, the Prevention of Bribery Ordinance and integrity risk management to frontline practitioners of registered companies. More than 3,500 people attended the webinars.

Grow and Develop Young Leaders

The RSTCS “Young Leaders Network” has over 240 members who exchanged industry news and business opportunities in the designated social chat group. The RSTCS communicated the scheme training and development programs to them via the same channel. During the year, six Building Information Modeling (BIM) viewer courses were held and trained a total of 103 young leaders to BIM viewers.



A series of BIM review courses has been organised for members of Young Leaders Network

Strengthen Regulatory Action Mechanism

The Committee on RSTCS instigates regulatory action against registered companies arising from court convictions or breach of the Rules and Procedures for the RSTCS. When there is prima facie case, a hearing will be conducted by the Committee and any regulatory actions imposed will be notified to supporting organisations by direct electronic mail and published on the RSTCS website. An independent appeal mechanism is also established to handle appeal cases.

In 2023, a total of 34 registered companies were regulated, mainly in relation to convicted violations of safety and arrears of wages or MPF contributions, as well as serious incidents happened on construction sites. Regulatory actions taken included suspension of registration or revocation of registration.

Way Forward

We shall continue to expand the scope of application of the RSTCS, strive to promote the professionalisation of registered companies and strengthen the capabilities and skills of core personnel of registered companies to grasp the vast opportunities arising from the golden era of construction industry. On the other hand, safety would be the paramount interests and the RSTCS will step up regulatory mechanism in this regard.

Technically Competent Persons Registration Scheme

The Technically Competent Persons Registration Scheme (TCPRS), which facilitates supervision plan submission under the Buildings Ordinance (Cap 123), gauges the supply of Technically Competent Persons (TCPs) and enhances their quality, skills and knowledge through continuous training, reached 4320 by the end of 2023, a notable growth of 28% compared to 2022.

Continuous Competence Development

Being one of the crucial parties on front-line safety supervision, TCPs should keep abreast of the latest safety requirements. During the year, the TCPRS has organised two tailor-made webinars which attracted more than 1,600 industry stakeholders to participate. The webinar series included:

- Occupational Safety and Construction Safety Regulatory Requirements Webinar with speakers from the Buildings Department and Labour Department, providing an update on the site supervision safety and legislative requirements as well as illustrated good practice through various case sharing.
- Adoption of Smart Site Safety System(4S) and Construction Innovation and Technology Fund (CITF) Support encouraged TCPs to leverage on the government funding to adopt technology which could assist them to discharge their supervision duties more effectively.



Representatives of the Buildings Department and the Labour Department responded to the questions raised by the audience

Experience Recognition for registration

The requirement on local site experience for TCPs to register under the TCPRS was widened during the year to cover qualified supervision experience gained from factories outside Hong Kong provided that such qualified supervisions are requirements and conditions imposed under the Buildings Ordinance upon plan approval. This facilitated practitioners who managed operations in Mainland China for the Hong Kong projects to have their experience recognised under TCPRS.

TCPRS Awareness

The TCPRS significantly alleviated the workload of the submitter of site supervision plan with qualifications of the TCPs being vetted by the CIC Secretariat, which would be the responsibilities of the submitter. In addition to the quick link added on to the BD website, the virtue of the TCPRS was shared in an article themed Driving Professionalism and Excellence for Technically Competent Persons through Registration, which was published on the Hong Kong Engineer by the Hong Kong Institute of Engineers in July 2023.

Way Forward

With the increasing construction expenditure for the years to come, safety remains a top priority and of paramount importance. Registered TCPs would be encouraged to participate site visits to exchange 4S adoption experience sharing and attended webinars to keep abreast of the latest construction method. Joined hands with the Buildings Department, TCPs duties as specified in the Code of Practice for Site Supervision would be reiterated and promulgated.

Construction Innovation and Technology Fund (CITF)

Reaching New Height for Technological Transformation

The Construction Innovation and Technology Fund (CITF) continued to support the local construction industry to transform and improve its productivity, quality, safety and environmental performance through automation, digitalisation and industrialisation. In 2023, the total cumulative fund grant exceeded the initial government injection of HK\$1,000M and reached HK\$1,109M as of 31 December 2023 involving a total of 3,580 approved applications out of the 5,268 applications received. The annual grant amount in 2023 was HK\$313M, which is a record high since the launch of CITF in October 2018.

Under the six categories of funding support, namely Building Information Modelling (BIM), Advanced Construction Technologies (ACT), Modular Integrated Construction (MiC), Prefabricated Steel Rebar, Industrialised Process - Robotic Welding and Manpower Development, the total accumulative number of beneficiaries increased to 1,139 in 2023. The total accumulative number of small and medium enterprises (SMEs)⁽¹⁾ supported increased by 18% to 683 in 2023, indicating the wider adoption of new technologies among SMEs. More than 15,304 training places of different construction-related technologies including BIM have been approved under the CITF, which benefited construction personnel at various levels including professionals, technicians and students and encouraged the adoption of innovative construction technology.

The CITF has continued its enhancement to better facilitate technology adoption since the last major enhancement in 2022, subsequent to a series of initiatives and the completion of the CITF Overall Review which aimed at assessing the achievements of the CITF and identifying the way forward after four years of operation. The latest CITF enhancement measures in 2023 featured uplifting of the per-applicant fund ceiling under the BIM and ACT categories by HK\$1.5M solely designated for adoption of smart site safety system (4S) in private work sites, uplifting of per-applicant fund ceiling to HK\$6M under BIM category and provision of additional funding for innovative and high-rise MiC projects alongside with simplification of the application and final disbursement procedures including the publication of approved product prices of pre-approved ACT products.

The CITF Pre-approved Lists underwent a comprehensive review in 2023 with inappropriate items delisted to ensure the suitability of the pre-approved items. In 2023, 75 new ACT items, BIM software and BIM training courses were admitted to the Pre-approved Lists. By the end of 2023, there were 615 Pre-approved items.

Active Engagement of the Industry

To enhance and reinforce connection with the industry, in mid-2023, the CITF Secretariat established the "Outreach Team" to actively engage with the stakeholders. The team is dedicated to promote the latest information on the CITF and new technologies through a hybrid mode of on-line (e.g. webinars, eDMs, social media, newsletters, etc.) and in-person promotional activities (e.g. seminars, exhibitions, etc.). In 2023, the CITF Secretariat delivered and participated in a total of 138 promulgation activities including 74 CITF briefings and case sharing sessions, 41 cross-departmental or external party events and 23 tailor-made briefings to specific groups of industry stakeholders. To boost the adoption of technologies among SMEs and subcontractors, a series of technology sharing and briefing sessions were delivered to key subcontractors and trade associations of small main contractors including the Hong Kong Construction Sub-Contractors Association and Hong Kong Registered Contractors Association, etc., to promote the latest CITF enhancement measures and pre-approved technologies applicable to their specific work trades.

Way Forward

Entering the sixth year of operation of the CITF, the outreach team will operate in full swing to enhance the promotion in particular the adoption of 4S and collect feedback from the industry stakeholders for continuous development of the construction industry.



CITF briefing for small contractor associations including Hong Kong Construction Sub-Contractors Association and Hong Kong Registered Contractors Association

(1) Small to Medium Enterprises refer to organisations which employ fewer than 50 persons.

Corporate Secretariat

The Corporate Secretariat (C-SECT) provides quality secretarial services and administrative support to the two top authorities, the Council and the Executive Committee. It ensures the CIC's compliance with statutory and appointment requirements, upholds the corporate integrity and governance standards, and assists the Council on important policy decisions and strategic directions. C-SECT continuously improves the quality of meeting documents and correspondence by implementing Grade Management for secretariat staff. It also develops governance systems and procedures, formulates corporate policies and guidelines, prepares documentation framework and templates, as well as providing regular training on relevant topics for staff.

Enhancing Corporate Governance Standards and Quality of Secretarial Services

In 2023, C-SECT conducted four interactive and refresher training workshops on corporate governance and writing skills. Through Grade Management, C-SECT critically reviewed and provided constructive advice / suggestions to uplift the quality of secretarial services delivered by various CIC business units on a regular basis.

Release Informative Publications

C-SECT published and distributed the bilingual CIC 2023 Major Work Plans in February 2023. To ensure easy access, the electronic version was also uploaded to the CIC website. Additionally, during the orientation for new Council Members, C-SECT provided them with an "Information for Council Members" booklet.

Latest Updates of the CIC Fellows

In 2021, the CIC Fellows were established, and in 2022, the "CIC Members cum Fellows Visit (MFV) Programme" was launched as an initiative. In 2023, a new initiative called the "CIC Fellows Sharing" was introduced.

Five "CIC Fellows Sharing" sessions were conducted at HKIC campuses in 2023. The sharing sessions aimed to provide HKIC students with the opportunity to learn from the experiences and insights of the CIC Fellows who have made significant contributions to the construction industry. The first sharing session was conducted at Kowloon Bay Campus (KBC) with Dr. CHAN Ka-Kui as the guest speaker on 27 March 2023, followed by sharing sessions conducted at Sheung Shui Campus (SSC) with Mr. Ivan FU, at KBC with Mr. Paul CHONG, at KBC with Ir HON Chi-keung and at SSC with Dr. Christopher TO respectively. The CIC Fellows would continue to contribute to the holistic development of HKIC students through such sessions.

Eight MFV visits to various CIC premises / facilities were held in 2023. The first visit was held on 3 April 2023 at the HKIC Kwai Chung Campus, followed by visits to the Hong Kong Construction Industry Trade Testing Centre and the HKIC SSC, etc. The valuable improvement suggestions made by the visiting groups helped to enhance the

operation of various departments/ business units and also contributed to strengthening the governance and service quality of the CIC.

In addition, the CIC Fellows Annual Event cum Luncheon was held on 29 November 2023. The CIC Fellows enjoyed a guided tour to the CIC Digital Twin Hub before the luncheon, and some took an optional tour to the CIC-ZCP afterwards.

Addressing Acute Manpower Shortage

To address the severe shortage of manpower in the construction industry, C-SECT assisted in reorganising the "Task Force on Short-Term Labour Supply". This involved updating its Composition and Terms of Reference to effectively support the implementation of the "Labour Importation Schemes for the Construction Sector". The Task Force served as a platform to engage industry stakeholders and offered valuable advice on matters pertaining to the formulation of the Scheme. We provided secretarial services to the Task Force meetings in 2023.

Way Forward

In 2024, the C-SECT will continue its supportive functions to the Council, the Executive Committee and the CIC Fellows, with a focus on improving the quality and standard of secretarial services and upholding high standards in corporate governance of the CIC. The C-SECT is in the process of organising an orientation for new Council Members as well as publishing the bilingual "CIC 2024 Major Work Plans" in early 2024.



CIC Fellows Annual Event cum Luncheon

Corporate Communications

The Corporate Communications Department is responsible for promoting the CIC's image and enhancing public awareness of its mission and achievements through a diversity of channels. The Department maintains effective, professional communications with industry stakeholders to uphold the CIC's pivotal role in the industry. The Department manages print and online communications, events, relations with its stakeholders, the public, and the media, oversees the Construction Industry Sports and Volunteering Programme (CISVP), and handles issues and emergency communications.

The industry-wide PR campaign

To promote the professional image of the construction industry and attract new blood, the CIC and the Development Bureau have continued their efforts in the "Design for Future Build for Life" industry-wide promotion campaign. The campaign successfully promoted a professional image to draw young talents to join the industry. The campaign reaches the community widely through diversional platforms, including TV Announcements in the Public Interest (API), websites, social media tools, etc. The campaign also includes Master Talks, site visits and career talks, and the introduction of a STEAM Lab which features STEAM education and promotion to raise the public awareness towards the industry.



The STEAM Lab displays advanced construction technology through education and interaction

Connecting the Industry

The Department has continued to organise the "CIC-See What I See" event series to connect government officials, industry leaders and business partners for networking and exchanges. In 2023, CIC had the honour to have invited prestigious keynote speakers to share their Insights with the community. They included the Honourable Regina IP, Executive Council Convenor and Legislative Council Member, Ms. Bernadette LINN, Secretary for Development; Ms. Winnie HO, Secretary for Housing; Ir Ricky LEUNG, Executive Director, Engineering & Technology, Airport Authority Hong Kong; Ar. Donald CHOI, Executive Director & CEO, Chinachem Group; and Mr. Robert CHAN, Executive Director of Sun Hung Kai Properties Limited.



CIC-See What I see events

The Department worked closely with other departments and stakeholders to organise an array of events, including the inaugural Workshops on Construction Robots which showcased 20 ready-to-market construction robots and how they can effectively address the challenges encountered during site work across different stages of construction. The Department also promoted the launch of the first Digital Twin Hub which provides a collaborative platform and an array of technological showcases to facilitate knowledge exchange, nurture talent and inspire innovation in the digital twin and construction technology field. In terms of sustainable development, the Department took a leading role in the promotion of the CIC Global Construction Sustainability Forum and Exhibition 2023 (GCSFE 2023). Apart from social media platforms, outdoor billboard advertisements were also placed at high traffic areas as well as outside the cross harbour tunnels.



“Design for Future, Build for Life” industry-wide promotion campaign

Revitalising the Construction Industry

The Department continued to organise the third edition of Construction Industry Outstanding Young Person Award, the biennial award to recognise young construction practitioners with remarkable achievements in their careers and outstanding contributions to the construction industry and society at large. Six young professionals in the industry were awarded in 2023.

Caring and CSR

Commitment to corporate social responsibility (CSR) has always been one of the major initiatives of the CIC. The Construction Industry Sports & Volunteering Programme (CISVP) rolled out a number of events, including the Volunteer Award Presentation Ceremony, Happy Run, Sports Day and Charity Fun Day, Table Tennis Competition and Lo Pan Rice Campaign, etc. With the support of the industry, CISVP recorded over 13,831 participants (man-time), 231,397 volunteering service hours and 62,990 beneficiaries (man-time).



Construction Industry Lo Pan Rice Campaign

Way Forward

The Corporate Communications Department will continue to safeguard the image of the CIC and the industry and to cope with challenges with an innovative mindset and “can-do” attitude. Riding on the CIC’s success over the past years, the Department will strive to promote innovative construction technology continually and encourage the industry’s sustainable development by hosting different events and campaigns. The Department will continue our efforts in activities that aim at grooming and nurturing talents and maintaining professionalism of the industry, contributing to sustainable development, fostering collaborations with the Mainland, especially the Greater Bay Area, and contributing to the betterment of the industry.

Human Resources & Administration

The Human Resources Department provides comprehensive human resources support to various operational teams in areas of manpower planning, as well as in talent acquisition, development and engagement. Our human resources policies and operations align and support CIC's sustainable development goals. There was a total of 844 full-time staff as of 31 December 2023.

The Administration Department ensures that our work environment run smoothly and efficiently by providing coordination amongst operational teams. We optimise resource utilisation through standardisation, automation and adoption of new technologies.

Prioritise Talent Acquisition and Retention

In 2023, acquiring, retaining, and developing talents are the top priorities of the Human Resources Department. We faced keen talent competition in the Hong Kong labour market. To meet this challenge, we work more closely with Line Heads to review their manpower situation and needs on a regular basis, work along with various executive search firms to source for senior management and professional talents, as well as streamline the recruitment process to secure the best fit talent. We monitor the market remuneration packages closely to ensure that our offer is competitive to attract the most suitable talents and we reward good performing staff with promotion opportunities. We also reviewed and re-designed our on-board induction and orientation programmes to ensure that they are comprehensive enough to equip new staff with the tools, resources and support they need to grow and succeed with the CIC.

Develop Future Leaders

Succession planning is a crucial component of the CIC's sustainable development. We recognise the importance of identifying and grooming suitable successors to ensure business continuity and maintain high standards of performance. To achieve this goal, we review and identify staff members with the potential to take on critical roles in the future. We tailor-made Individual Development Programs for these staff members, which include assigning senior management as their internal mentors and inviting successful business and industry stakeholders as their external mentors. Regular meetings were arranged for them to meet with their mentors to share leadership experience and enrich their market insights. We also nominated a number of successors to attend suitable development programmes both locally and overseas, such as the IMD Executive Education Programme on Orchestrating Winning Performance at Lausanne, the High Potential Leadership Consortium Programme for Executives, the National Education Programme offered by the Hong Kong Institute for Public Administration, etc.



CIC Talents Development Excellence Talk

Encourage a Learning Culture

We invest significant amount of effort and resources to develop our staff through various Talents Development Programmes. We believe that staff working in an organisation which emphasises staff development will see themselves with plenty of opportunities for career advancement and are more likely to stay on. Our Talent Development Programme aims to ensure that our staff are equipped with and kept abreast of the latest development in technology, including the adoption of Artificial Intelligence (AI). Our staff are also updated with the latest development in safety, personal data protection, cyber security and other related ordinances. Apart from regular seminars and training workshops and the provision of a free 24/7 online learning platform for staff, we also organised a series of the CIC Talents Development Excellence Talks in 2023. We are honoured to have invited Mr. LEE Ming-kwai Dick, the Executive Director of the Hong Kong Institute for Public Administration, Ms. Cally CHAN, General Manager of Microsoft Hong Kong and Macau, Dr. Charleston SIN, Executive Director, MIT Hong Kong Innovation Node, and Dr. CHAN Ka-kui, former Chairman of the CIC as our distinguished speakers of the Excellence Talks to share their insights and experience with our staff.



Dr. CHAN Ka-kui, former Chairman of the CIC

Nurture Fresh Graduates as Future Leaders

Our Graduate Trainee Programme (“GT Programme”) is designed to attract and develop young graduates with the potential to become future leaders of the CIC. We are committed to providing a comprehensive development programme for them to grow and succeed within the CIC. The GTs are deployed to work on job rotation in various departments under the guidance of mentors to obtain all-round experience. Regular retreats and training sessions are arranged to groom them in various aspects including industry knowledge, presentation, communication, leadership and management. The GT Programme is both rewarding and challenging, and the GTs are groomed to take up a managerial role within CIC upon completion of the programme.

Foster a Positive and Engaging Work Environment

We recognise the importance of fostering a positive and engaging work environment to attract and retain talents. A variety of staff engagement activities were held throughout the year to promote team building and collaboration, boost morale, and show our appreciation to staff’s hard work and dedication. Amongst some of these activities are Staff Engagement and Team Building Workshops, Chinese New Year gatherings in February, an Annual Dinner in July and a Staff Fun Day at HK Disneyland Theme Park in December. All these activities were warmly welcomed by staff with overwhelming participation. We also held a number of “Friday Happy Hours” and “Lunch Time is Fun Time” throughout the year with themes to suit staff’s interests and to take care of their well-being.



Staff Activities - Friday Happy Hours: Alcohol Ink Art Workshop



Staff Activities - Friday Happy Hours: Aroma Yoga

Adopt New Technologies in Administration

CIC has taken various initiatives to promote an environmentally responsible office culture. We have installed plastic bottle recycling machines and set up recycling bins at our premises to encourage waste separation and recycling practices. We have partnered with Green@Community to collect recyclable materials and ensure that they are processed and recycled in an environmentally responsible manner. We have also implemented a screensaver on computers to promote eco-friendly practices in the office. A smart office management system has been deployed which optimises office space utilisation by providing real-time occupancy rates and seating arrangements, enabling improved resource allocation and enhanced productivity.

Way Forward

Looking ahead to 2024, the Human Resources Department will continue to expand and enrich the learning environment of staff to support the growth and development of the CIC and the theme of Year of Safety. We shall foster the adoption of digitalisation and innovative technology in our staff’s learning to enable them to make good use of this new technology to enhance their daily work.

The Administration Department will deploy digitalisation and innovative technology in multifunctional device services and digital mailroom operations. We shall also initiate measures to minimise unnecessary waste generation and foster a culture of sustainability.

Corporate Safety

The Corporate Safety Department (CST) is responsible for the safety and health of all CIC staff, students and those who can be affected by the CIC's operations and activities. CST leads tasks related to maintaining a safety and health management system intended to allow the organisation to provide safe and healthy workplace and environment for all stakeholders to prevent injury and illness.

Emergency Preparedness Enhancement

In 2023, CST reviewed and re-established the enhancement on emergency preparedness in various aspects, including incident classification, centralised reporting, first aid and AED arrangement. This enhancement plan has upgraded emergency preparedness arrangement comprehensively in the CIC training and trade test premises.

Safety Improvement Team

The internal safety campaign provided an opportunity to form a safety improvement team across various departments of the CIC. Making use of synergies of staff members from different departments, the improvement team has identified improvement areas in daily working environment and implemented improvement measures to uplift CIC safety performance.

Digitalisation on Heat Stress Assessment

The Labour Department has revised the Guidance Notes on Prevention of Heat Stroke at Work and updated the assessment methodology of heat stress assessment in May 2023. In order to adopt the Guidance Notes effectively, digitalisation of heat stress assessment provided a standardised and automated solution to complete the assessment.

Way Forward

The Corporate Safety Department will continue to devote to cultivating a safety-first culture in all levels and to stimulate the enhancement of CIC internal safety performance, in order to deliver continual improvement on safety aspect and to meet the expectation of our stakeholders and the industry.

Estates Office

Estates Office (EO) supports the CIC's operations through facilities management, capital projects, and land lease management. We optimised space utilisation, managed building structures, landscaping, furniture & equipment, and ELV systems. Additionally, we ensured license renewals and pursued short-term use of vacant government sites for CIC campuses and outdoor training grounds.

Establishment of Smart Facilities Management Control Centre (SFMCC)

The SFMCC, launched in Q3 2023, integrates various systems, platforms, and technologies used in our daily operations, including the Building Management System (BMS), Estates Office Management System (EOMS), CCTV system, and IoT devices across CIC networks. It provides real-time monitoring of facility conditions, aiming to enhance productivity, cost efficiency and sustainability. With dynamic analytics and control capabilities, SFMCC optimises facility operations, enables predictive maintenance practices and facilitates benchmarking for ESG practices, hence achieving operational excellence.

Lift Replacement Works of Three HKIC Campuses

We have adopted a Dynamic Risk Assessment approach in the lift replacement works at HKIC Kowloon Bay, Kwai Chung, and Sheung Shui Campuses, consistently identifying and mitigating on-site hazards and risks.

Our commitment to safe work practices is unwavering, and we actively promote a culture of site safety and awareness among both site management and workers.

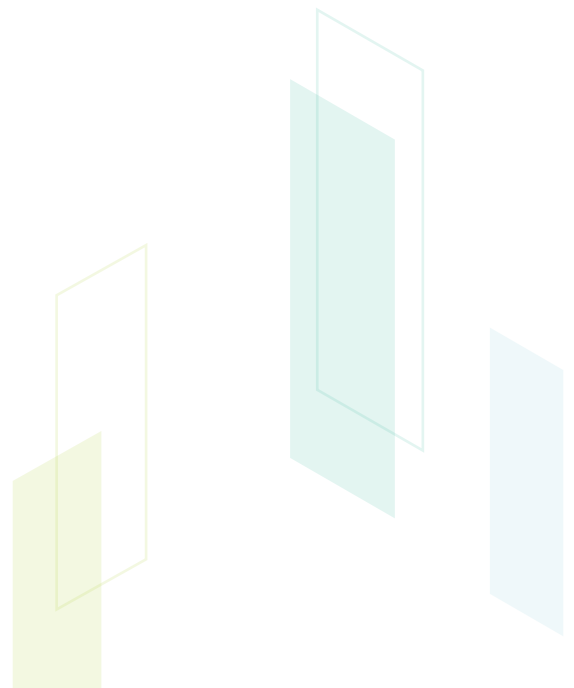
The implementation of elements from the Site Safety Cycle occurs on a regular basis, ensuring a comprehensive approach to maintaining a safe working environment.

Way Forward

We will continue to collaborate with relevant CIC departments to enhance facilities and create a smart and sustainable work environment that meets the needs of the CIC's future growth.

Elevation of SFMCC

We will further develop the SFMCC through increasing the number of covered premises and incorporating more innovative solutions into the operation. By leveraging continuous advancements, we will be able to proactively address issues, monitor and manage facilities in real-time and ensuring optimal performance and efficiency across multiple locations.



Information Technology

The primary functions of the Information Technology Department (ITD) include IT Strategy implementation, cybersecurity, enterprise architecture, IT demand management, enterprise applications implementation, application development, data management, network and infrastructure services, service desk, and workspace technologies. It is responsible for the development, coordination, maintenance, and operations of all information services and technologies for the CIC. The ITD strives to provide excellent employee and customer-centric solutions through one-stop service and user experience principles.

Digitalisation of Hong Kong Institute of Construction

ITD assisted Hong Kong Institute of Construction in the following:

- Online Programme Application System for full-time courses and part-time courses launched
- eSurvey system for safety training and Collaboration Scheme feature released
- Trade Test eScheduling System launched
- Safety Training Enquiry System launched

Big Data Visualisation and Decision Making

Significant progress was made in establishing a data platform to foster a data-driven culture. These initiatives have yielded tangible benefits, enabling data visualisation and providing valuable insights from below dashboards:

- Operational Dashboards for CITF, Levy, HKIC, Trade Testing, and Worker Registration
- Registered Workers Demographics & Engagement Level
- Trade Testing Trade-360
- CSILQ - Quarters Accommodation, Application Summary, and Quarters Income

Implementation of New Technologies

These digitalisation successes reflect our commitment to using digital platforms to enhance access, promote CIC resource reuse, and improve user experiences.

- The API Connectivity and Management platform has been operational, expediting development and bolstering security
- The Centralised Web Content Management Platform has been rolled out to support content management and publishing workflows for CIC's websites and mobile applications

- A Low-code Application Platform (LCAP), OutSystems, has been successfully launched as a standard for swift application development. Notable CIC applications like the Sustainable Construction Award website, Online Program Application System, Safety Training Enquiry System, and Construction Digitalisation Award website have been deployed on this Platform

IT Infrastructure Advancement

IT infrastructure underpins diverse IT services and systems. Notable achievements include:

- Hyper-converged Infrastructure (HCI) is adopted successfully to elevate the quality through improved resiliency, availability, and performance, ensuring uninterrupted access for users
- Network bandwidth upgraded for training facilities and CIC offices/campuses (18 sites in total)

Enhance IT Governance

IT governance achievements highlight our IT and business alignment, service level commitment, and risk management in task execution.

- IT Service Management System has been launched, simplifying initiation and tracking of incidents, service requests, and changes
- Call centre service level has markedly improved, enhancing IT hotline and desktside support. It efficiently resolves inquiries and incidents, improving response and tracking
- Strategic Portfolio Management Platform for CIC departments is live, effectively managing KPIs. A new management dashboard tracks and visually represents metrics
- IT Policies and SOPs in Information Classification, Security Incident Handling, IT Security Policy, and System Acquisition have been crafted to govern IT services and heighten compliance

Way Forward

Our focus remains on maximising our business capabilities and achieving desired outcomes through the implementation of multi-year strategy. Building upon the digital transformation journey of the CIC, we continue to implement various IT initiatives that will propel us towards a digital organisation. This will help the CIC enhance employee experience, improve learning experience and teaching quality, optimise resource utilisation, promote industry development, provide one-stop service for workers, and further strengthen our cybersecurity posture.

Enhancing Cybersecurity in the CIC

Cybersecurity remains a top priority at CIC. The IT Department is dedicated to ensuring a secure environment. Key initiatives for the year include:

- A comprehensive cross-department Cybersecurity Incident Response Drill was conducted to enhance incident responsiveness
- Cybersecurity awareness training was completed successfully for all staff, covering a wide range of topics and recent trends
- Achieved a low phishing offensive click rate (0% at times), exceeding industry standards due to regular educational activities like mock tests, newsletters, and videos, which promote a vigilant cybersecurity culture
- Known security vulnerabilities are mitigated by promptly securing our servers. This highlights a strong commitment to maintaining a resilient cybersecurity ecosystem
- Protection of privacy and sensitive information assets has been strengthened by providing comprehensive training on data protection and labelling tools to staff. This achievement underscores our commitment to safeguarding confidential data in a secure ecosystem
- Enhanced firewall protection to control access from outside Hong Kong, increasing IT asset security and reducing the attack surface

Customer and Employee Centricity

The core of digital transformation is to enhance the user experience of our employees and stakeholders.

- Employee Service Centre Portal has been launched to enhance our customer-centric approach. With convenient access, employees have greater visibility over their IT requests. This improves efficiency and collaboration, leading to increased satisfaction
- The CIC App, a mobile application for workers, has finished prototyping. It transforms worker registration and renewal, providing access to safety and worker information, underscoring our commitment to enhance worker safety and efficiency
- e-Signature Platform implementation completed including user LinkedIn training facilitating seamless adoption
- ERP project user survey and workshop for requirement feedback, Expression of Interest preparation, and Return on Investment analysis completed, setting the stage for project commencement
- “CIC OnePass” platform was launched, providing stakeholders unified access to CIC systems like e-Tendering system, Smart Waste Management System, Web Content Management System, and HKIC Online Application Platform



Legal and Compliance

The Legal and Compliance Department (L&C) was newly formed in June 2023 and had the full team in September 2023. The L&C supports the CIC in legal and regulatory compliance matters. The department ensures that the CIC's operations comply with relevant laws, rules and regulations issued by relevant authorities.

With the support of external legal advisors, the L&C provides legal advice on litigation and other legality issues where relevant. The department also plays an important role in regulatory compliance and personal data privacy initiatives. This includes developing policies and procedures to manage and mitigate risks related to personal data privacy, as well as monitoring and detection of its non-compliance. In addition, L&C provides legal advice on complaints from the public. All complaints are channelled to relevant departments in a timely manner for investigation and identification of improvement areas to ensure that the CIC's services meet public expectation.

Key Achievement

Acknowledged that data privacy is more than regulatory compliance, L&C has adopted a proactive approach in embracing the evolving challenges of data protection. The department has endeavoured to develop privacy protection as part of the CIC's corporate governance responsibilities and apply it as a top-down business imperative throughout the organisation.

In 2023, with strong support from senior management, L&C has started a project to revamp CIC's Personal Data Privacy Compliance Framework. A comprehensive gap analysis was performed and areas for improvement were identified. In particular, the L&C developed Privacy Policy Statement for the CIC which can be found on the CIC's website.

Way Forward

In the coming years, the L&C will continue working with external legal advisors to provide quality legal advice to inhouse stakeholders. The department will also work with other departments to implement measures to enhance the CIC's Personal Data Privacy Compliance Framework such as implementation of new Personal Data Privacy Policy and Privacy Impact Assessment etc..

Procurement

The Procurement Department continues to support the CIC's operations by understanding its business requirements, managing transactions of goods and services and ensuring compliance with procurement procedures, hence improving the efficiency of transaction flow and reporting.

Management of Major Tenders

The Procurement Department managed a number of major tenders in regard to consultancy and general goods or services in 2023, including:

- User Experience Study and Website Revamp for Hong Kong Institute of Construction (HKIC) and School of Professional Development in Construction (SPDC)
- Worker App Development and Infrastructure with Digital Card, Job and Safety Integrations
- Development of Frontline Personnel Safety Performance Recording Scheme
- Outreach Service to promote innovative technologies, manpower training and the Construction Innovation and Technology Fund (CITF)
- Public Relations Services for Publicity Campaign for the Construction Industry
- Website Development for CIC Digital Platform (iHub)
- Consultancy Services on Repair, Maintenance, Alteration and Addition (RMAA) Market Study in Hong Kong
- Consultancy Study on Review and Enhancement of Construction Contract Terms
- IT Development and Support Services
- Supply and Implementation of Centralised Monitoring Dashboard Platform
- Quantity Surveying Consultancy Services
- IT Service Desk and User Support Services
- Supply and Delivery of HKIC Student Uniform and Construction Industry Worker Uniform

The Department also assisted in tender management for other large-scale events and Tam Mei Construction Sector Imported Labour Quarters set-up projects, such as:

- Event Management and Production Services for Global Construction Sustainability Conference & Exhibition 2023 (GCSFE 2023)
- Event Management and Production Services for Construction Industry Happy Run and Carnival 2024
- Design, Supply and Installation of ELV Systems in Tam Mei Construction Sector Imported Labour Quarters
- Wi-Fi Infrastructure for Tam Mei Construction Sector Imported Labour Quarters
- Overall Service Management for Tam Mei Construction Sector Imported Labour Quarters

Project and Supplier Management

The Procurement Department supports the administration works of the Project Committee, ensuring all projects are managed in compliance with the Project Management Handbook (Non-Capital Projects). We have also focused on maintaining and expanding our supplier database, regularly reviewing suppliers performance to ensure high standards are maintained.

Way Forward

Looking ahead, the Procurement Department is committed to achieving a high level of governance, transparency and efficiency throughout the procurement process. With the launch of updated Procurement Manual, the adoption of revised Terms and Conditions and Contract Templates and the implementation of E-tendering system, we aim to safeguard the interests of the CIC and further advance our digital transformation journey.

Finance

The Finance Department continues to serve as a strategic business partner to the CIC and its stakeholders in delivering comprehensive finance services throughout 2023. These services encompassed financial and management reporting, levy assessment and collection, strategic planning and decision support, budgeting and forecasting, treasury and investment management, financial analysis, company secretarial works, bank account operations, and various finance-related projects.

In 2023, the Finance Department has achieved significant milestones in its pursuit of digitalisation, process optimisation, and strengthened corporate governance.

Compulsory Use of Levy E-Service

Following the official launch of the interactive electronic platform, Levy E-Service 2.0, for the submission of Levy Forms, efficiency in levy form submission and communication with industry practitioners has tremendously improved. In 2023, many contractors have transitioned to submitting levy forms electronically, marking a significant shift towards digitalisation. This widespread adoption of the E-Service platform demonstrates its effectiveness in levy processing and streamlining communication between the CIC and industry practitioners.

Dashboards and Enhanced Reporting

To provide management with an updated view of levy operations, the Finance Department developed and launched a set of levy dashboards. These dashboards offer real-time information to both management and the levy operation team, enabling them to effectively monitor levy-related activities. In view of enhancing performance tracking and monitoring, the Finance Department has developed an electronic Key Performance Indicator (KPI) platform. This platform enables the tracking of KPI progress in a centralised and automated manner, allowing management and relevant stakeholders to effectively monitor progress, identify areas for improvement, and make data-driven decisions.

Improvement in Treasury Management

Continuing the digitalisation efforts, the Finance Department has expanded the use of electronic payments to the majority of vendor payments. By leveraging electronic payment methods for vendor transactions, the Finance Department has streamlined the payment process, reducing manual work and improving operational efficiency. This expansion of electronic payments has enabled faster and more secure processing, enhancing the overall payment experience for vendors and promoting efficient financial management within the CIC.

Way Forward

The Finance Department remains steadfast in its commitment to advancing digitalisation efforts and driving operational efficiency. We will continue to explore the implementation of AI or other electronic systems to automate the identification of potentially non-reported levy cases, further strengthening compliance measures. Additionally, we will develop and deploy a series of management dashboards to provide management with in-depth insights into investment and treasury performance. These dashboards will consolidate critical financial data and performance indicators, empowering management to make well-informed decisions. The Finance Department will continue to provide valuable financial expertise, supporting the CIC in maximising the benefits for all stakeholders.

