

# OPERATIONAL REVIEW

## Construction Digitalisation

The Construction Digitalisation (CD) Department is dedicated to promoting and facilitating the wider adoption of construction digitalisation and related technologies across architecture, engineering, construction and operations, as well as formulating strategies for market transformation and encouraging cross-discipline collaboration within the industry.

To meet the objectives outlined in the CIC's "Construction Digitalisation Roadmap for Hong Kong", the CIC implemented the following initiatives in 2024.

### CIC Global Construction Digitalisation Forum and Exhibition 2024



CIC Global Construction Digitalisation Forum and Exhibition 2024

The Development Bureau and the CIC co-hosted the Global Construction Digitalisation Forum and Exhibition (GCDFE) 2024, which took place from 29 to 30 October 2024 at the Hong Kong Convention and Exhibition Centre. The event attracted over 10,000 physical and online visits. The award presentation ceremony of the CIC Construction Digitalisation Award 2024 was also hosted during the GCDFE's Gala Dinner.

The event featured a diverse programme, including forums and exhibitions that showcased the latest cutting-edge technologies and innovative solutions transforming the future of construction, with the aims of driving digital transformation and fostering innovation within the construction industry.



Forum



Exhibition



CIC Construction Digitalisation Award 2024

## CIC Construction Digitalisation Award 2024

The CIC Construction Digitalisation Award 2024 recognised outstanding local projects and organisations for their contribution in the promotion and adoption of digitalisation tools and workflows, and in driving innovation aimed at improving productivity, quality, sustainability and safety with measurable KPIs. A total of 29 winning teams were selected through a stringent evaluation process.

The knowledge and experiences of the digitalisation leaders will be shared with the industry through post-award seminars and workshops.

## CIC BIM Competition 2024

The 6th CIC BIM Competition has promoted the practical applications 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 "Develop a CIC Innovation Academy for higher education students".

The winning team joined the CIC Digitalisation Study Tour to Singapore in September to explore the current and future trends in construction digitalisation through meetings with various organisations, site visits, and participation in the International Built Environment Week (IBEW) 2024.



CIC BIM Competition 2024

### CIC Digital Twin Hub

The CIC Digital Twin Hub serves as a collaborative platform featuring an array of technological showcases to facilitate knowledge exchange, nurture talent and inspire innovation in the field of digital twin and construction technology. The CIC Digital Twin Hub comprises four key areas: the Showcase Area, Smart Site Construction Management Corner, Multi-purpose Area and Digital Twin Lab. It offers a variety of functions, such as digital twin experience sharing sessions, guided group tours and advisory workshops.



Sharing session on Digital Twin

### Two New CIC Master Classes

The CIC launched the Master Class on Digital Twin on 26 January 2024 and the Master Class on AI for Construction (including LLM) on 26 November 2024, seeing 25 graduates and 30 intakes respectively.

The Master Class on Digital Twin is designed to empower professionals with a comprehensive understanding of the practical applications of Digital Twin technology in construction industry and equip them to effectively leverage this technology in their roles, driving digital transformation within the industry.

The Master Class on AI for Construction (including LLM) focuses on both the theoretical and practical aspects of Artificial Intelligence (AI) in the construction industry. The programme aims to support construction decision makers seeking to harness digitalisation to improve business processes through advanced computation and AI solutions.



Kick-off ceremony of CIC Master Class on AI for Construction (including LLM)



## Reference Materials and CIC Beginner's Guide

To continuously develop and enhance standards in Building Information Modelling (BIM) to cater to local industry needs, the CIC published several key documents on 20 December 2024. These include: Reference Materials of BIM Harmonisation for Digital Hong Kong, Reference Materials on BIM for Asset Management and Facility Management and CIC Beginner's Guide on Construction Digitalisation – Cybersecurity.

The Reference Materials of BIM Harmonisation for Digital Hong Kong aims to identify additional information requirements of BIM models, serving both the public and private sectors. The document supports the government's initiatives in developing a Common Spatial Data Infrastructure (CSDI) and Smart City, aligning with the use 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.

The Reference Materials on BIM for Asset Management and Facility Management serves as a document for practitioners in the construction industry looking to explore the use of BIM for Asset Management and Facility Management (FM). It provides insights, best practices, and recommendations for leveraging BIM to optimise asset performance, enhance FM, and streamline operations throughout the entire lifecycle of a project.

The CIC Beginner's Guide on Construction Digitalisation – Cybersecurity serves as a valuable resource for construction practitioners. It offers valuable insights and practical recommendations for implementing security measures to safeguard sensitive data and ensure uninterrupted operations in digital construction processes.



Reference Materials and CIC Beginner's Guide

## Teaching and Learning Kit for BIM Viewer Training

To meet the surging demand for BIM Viewers, the CIC developed a "Teaching and Learning Kit" for BIM Viewer training, which is available in both self-learning and instructor-led formats.

In 2024, a total of 9,201 individuals completed the online BIM viewer quiz and 12,759 BIM Viewer Certificates were issued. Since the launch of the "Teaching and Learning Kit" on 20 October 2021, an accumulated total of 36,581 individuals have completed the online training package and received their corresponding certificates. (Note: Any individual could complete up to four different quizzes for respective BIM viewer software.)



### BIM Certification and Accreditation Schemes

In 2017, the HKSAR Government mandated the use of BIM technology for the design and construction of all major government capital works projects with an estimated budget exceeding HK\$30 million, set to commence in 2018 or later. This initiative also aimed to promote BIM technology in private construction projects, leading to a significant increase in demand for BIM personnel and training.

To support the healthy development of BIM in Hong Kong, the CIC has introduced the BIM Certification and Accreditation Schemes (BIMCAS) in 2019 to assess the competency of BIM personnel and ensure the quality of local BIM training courses.

In 2024, there were 88 CIC-Certified BIM Managers (CCBMs), 151 CIC-Certified BIM Coordinators (CCBCs) certified and 158 CIC-Certified BIM Coordinators (Associate) (CCBC(A)s) registered. Since the launch of the schemes, there were 711 CCBMs, 902 CCBCs certified and 359 CCBC(A)s registered by the CIC.

As of 2024, there were 16 CIC-Accredited BIM Manager Courses and four CIC-Accredited BIM Manager Top-up Courses. Moreover, there were 25 CIC-Accredited BIM Coordinator Courses and six CIC-Accredited BIM Coordinator Top-up Courses. There were a total number of 4,091 CCBM course graduates and 3,563 CCBC course graduates.

### Way Forward

In 2025, the CIC will launch the “Centre for Future Construction” (CFC), focusing primarily on high-impact training initiatives and supporting the industry in adopting advanced technologies.

The CIC will continue to consolidate training needs from the industry and collaborate with the School of Professional Development in Construction and CD training service providers to offer essential training courses.

In addition, the CIC is set to conduct a comprehensive BIM and CD Survey in 2025. This survey aims to gather critical information on current practices and provide actionable recommendations to enhance the adoption and implementation of BIM and CD. It will focus on assessing the supply and demand for BIM personnel, as well as evaluating their quality.

The expected outcomes of the survey include an in-depth exploration of the implementation of BIM and digital solutions, along with an analysis of the motivations, challenges, and benefits associated with their use.

Additionally, the survey will estimate the supply and demand for BIM personnel in 2025, with forecasts extending from 2026 to 2030.

Finally, it will identify performance gaps, enabling us to recommend targeted training needs to support the industry’s growth.

The CIC will also work 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, and one key focus will be in openBIM by developing the CIC Beginner’s Guide on Construction Digitalisation – Adoption of openBIM, and the openBIM® Quality Platform – Verification, Assessment & Tracking, to harness the power of digitalisation in Hong Kong.

## Construction Business Development

To foster a thriving construction market by promoting best practices, the Construction Business Development and Productivity Committee (the Committee) has organised the 2nd CIC Outstanding Contractor Award (OCA) to recognise contractors across various categories for their outstanding performance that can positively influence the industry. Concurrently, the Committee has organised seminars to assist industry practitioners stay updated on New Engineering Contract (NEC). Furthermore, the consultancy study to review and enhance the terms of construction contracts has been finalised, and follow-up on the recommendations has commenced. To drive sustainable development of the industry, collaborative meetings have been arranged to address industry finance issues.

### CIC Outstanding Contractor Award

A triennial flagship event of the CIC, the 2nd OCA introduced a new category for Repair, Maintenance, Alternation and Addition (RMAA) Contractors to acknowledge their growing importance and exceptional performance in the industry. Additionally, to demonstrate a commitment to integrity in the construction industry, an integrity management award was introduced for the major contractor category. The presentation ceremony was held on 6 November 2024, during which a total of 23 awards were presented to 12 contractors.



Group Photo of the Guest of Honour, Organising Committee Members and Panel Judges at the OCA Presentation Ceremony on 6 November 2024

### Seminars on NEC Engineering and Construction Contract (ECC) and Term Services Contract (TSC)

The Committee, collaborating with the Development Bureau (DEVB) and the NEC, organised seminars on 9 and 18 July 2024, focusing on the latest development in the NEC for public works contracts in Hong Kong. These included briefings on the NEC ECC Hong Kong Edition and NEC ECC/TSC for building projects. Furthermore, in response to the increasing use of NEC4 TSC in Building and Electrical & Mechanical (E&M) Works, the NEC TSC Hong Kong Edition was drafted by NEC and DEVB and launched this year. A co-organised briefing seminar was held on 29 November 2024.



Briefing Seminar on NEC TSC Hong Kong Edition on 29 November 2024

### Consultancy Study on Review and Enhancement of Construction Contract Terms

The consultancy study has been completed, reviewing various contract forms commonly adopted in Hong Kong across both public and private sectors. Based on the pain points related to risk-sharing identified in stakeholder interviews, short-, medium- and long-term recommendations were proposed. Additionally, representatives from industry institutions and associations have been invited to provide feedback on the findings and recommendations of the study.

Simultaneously, steps have been taken to implement these recommendations in advance by preparing best practices for change management, final account settlement and sub-contractor management, ensuring fair compensation, timely payments, optimised cash flow, and increased transparency throughout sub-contracting tiers.

### Collaborative Meetings and Workshops to Address Industry Financial Issues

Considering the current market situation of the industry, the Committee facilitated meetings and workshops between banking professionals and industry stakeholders to address the financial challenges faced by the industry, identify solutions offered by banks, and explore potential opportunities to improve cash flow within the sector.

### Way Forward

In line with one of the focus areas in the CIC's three-year strategic plan, the Committee will continue to explore measures and promote best practices to enhance the business environment, and support DEVB in completing preparatory tasks for the implementation of the Construction Industry Security of Payment Ordinance and provide relevant training for industry practitioners.



## Mainland Liaison Services

The CIC has actively liaised with partners in the Mainland China, fostering strong connections and striving to enhance mutual benefits and drive innovation among the construction industry of both regions. In 2024, the CIC concentrated on three key areas: “Technology Exchange”, “Business Matching”, and “Strengthening Ties with the Mainland China”, organising a total of 65 activities related to Mainland affairs throughout the year.

### Technical Visits Drives Industry Transformation

Last year, the CIC organised 11 technical visits in the Mainland China in areas such as safety, construction digitalisation and intelligence, construction robotics, and green building. These visits showcased innovative research findings to 280 participating representatives, enhancing their understanding of the latest technological developments in the construction industry of Mainland China. This experience inspired them to consider introducing relevant solutions in Hong Kong, accelerating the technological transformation of our construction industry.



Technical visits

### Promote Business Connections and Talent Collaboration

Under the guidance of the Development Bureau (DEVB), the CIC organised three “Hong Kong Construction Industry Job Fairs for Universities in the Mainland”, attracting 112 Hong Kong construction enterprises that offered over 1,260 positions and drew more than 5,000 students seeking jobs or advice. Additionally, the CIC successfully held two National Studies Course for 60 industry leaders, senior executives and young professionals, providing them in-depth insights into the country’s latest development strategies, inspiring participants to seize opportunities for development and actively advocate the integration of Hong Kong’s construction industry into the national development framework.



Hong Kong Construction Industry Job Fairs for Universities in the Mainland



National Studies Course

### Strengthening Ties with the Mainland

A total of 49 Mainland visits and exchanges were organised throughout 2024. The CIC participated in the China International Exposition of Housing Industry & Products and Equipment of Building Industrialization (CIEHI), where we introduced CIC and showcased innovative technology solutions and products from the local construction industry to our peers in the Mainland. The CIC also hand-picked information from selected CIEHI exhibitors and curated the “2024 CIEHI Exhibitors (Selected) Booklet”, aimed at fostering exchange and cooperation within the industry, thereby advocating innovation and development in the construction industry.



Participated in the CIEHI

Led by the Education and Science Department of the Liaison Office of the Central People's Government in the HKSAR, the Department of Housing and Urban-Rural Development of Guangdong Province and DEVB, the CIC has also facilitated the establishment of the Guangdong-Hong Kong-Macao Smart Construction Industry Development Alliance as one of the initiators. This initiative is aspired to enhance cooperation and drive high-quality development in smart construction across the three regions.



The establishment of the Guangdong-Hong Kong-Macao Smart Construction Industry Development Alliance

### Way Forward

Looking ahead, the CIC will continue to expand its links with the Mainland to promote cooperation within the ecosystem of the construction industry and facilitate the exchange of new technologies. Our goal is to drive the transformation of the industry, ensuring the sustainable development and prosperity of Hong Kong construction industry in the Greater Bay Area.



## Repair, Maintenance, Alteration & Addition

The Committee on RMAA (Com-RMAA) aims to foster and support the development of an efficient and healthy Repair, Maintenance, Alteration & Addition (RMAA) 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.

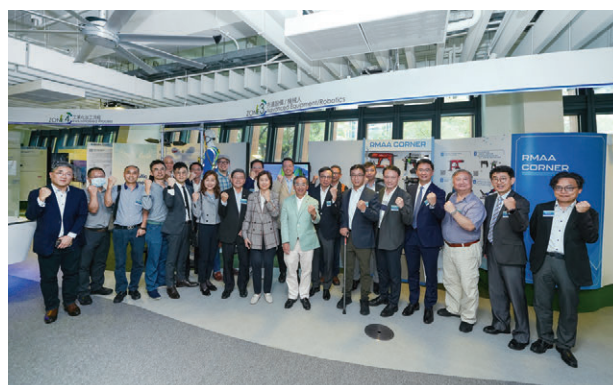
### Promotion on Certificate in Repair, Maintenance, Alteration and Addition Courses and Intermediate Tradesman Collaborative Training Scheme

In order to enhance the skill level and safety awareness of workers engaged in RMAA works, the Hong Kong Institute of Construction (HKIC) has organised the two Certificate in RMAA courses. In addition, the HKIC also provides the Intermediate Tradesman Collaborative Training Scheme (ITCTS). Throughout the year, the courses have been constantly reviewed to closely follow the events and needs of the industry and public. The courses and ITCTS combined have trained up 408 graduates and 175 students in training.

To increase the recognition of RMAA courses, promotional efforts have been conducted with Hong Kong Housing Authority, Hong Kong Housing Society, Buildings Department, Urban Renewal Authority, Architectural Services Department (ArchSD), Electrical & Mechanical Services Department (EMSD) and Hospital Authority (HA). In support of the RMAA courses, ArchSD has awarded four open tenders on RMAA term contracts requiring the employment of RMAA graduates. Hong Kong Housing Authority, EMSD and HA have also added similar requirement to their term contracts and are expected to award in 2025. These term contracts will serve as a pilot project, allowing government bodies to evaluate and give feedback on the quality and skills of the workers to help improve on the worker quality and overall industry adoption.

### Launching of the Repair, Maintenance, Addition & Alteration Corner

The Repair, Maintenance, Addition & Alteration Corner (RMAA Corner), an exhibition space detailing RMAA industry, was successfully launched on 16 July 2024. The RMAA Corner, located in Construction Innovation and Technology Application Centre (CITAC) in Kowloon Bay, provides insights on relevant market trends, regulatory policies, best practices for engineering management, safety guidelines as well as showcases the latest technological products for the RMAA industry. It also raises the awareness of the public, construction industry professionals and property management companies for enhancing safety standards and promoting positive changes within the industry.



RMAA Corner Launching Ceremony and Guided Tour



### CIC Outstanding Contractor Award – RMAA

The prestigious Outstanding Contractor Award (OCA) presentation ceremony took place on the 6 November 2024. This year, to recognise the significant contribution of the RMAA sector to the construction industry, a new contractor category was introduced for this year's OCA specifically for RMAA contractors. These contractors from the RMAA sector had the opportunity to compete for five awards: ESG, Revitalisation, Professionalism, and Corporate Innovation, as well as the Outstanding Contractor Award.



2024 CIC Outstanding Contractor Award – RMAA Contractor Outstanding Contractor Award Winner

### Way Forward

The Com-RMAA will continue to develop and enhance the initiatives to improve the long-term development of the industry. Through strategic planning and collaboration, the Com-RMAA seeks to propel the sector towards a safe, professional, sustainable and innovative industry.

Continuing its dedication to excellence, the Com-RMAA will continue to host CPD courses and events to improve the overall safety and knowledge of the industry. Apart from the industry, the Com-RMAA will further improve the RMAA Corner to better educate the public on the industry and promote good practices. By promoting transparency and sharing best practices, the RMAA Corner will continue to cultivate a culture of safety awareness and responsibility among stakeholders.

The Com-RMAA will also work with property management companies to promote the checking of Mandatory Basic Safety Training Courses Certificate before workers access property premises. The verification of certificate aims to ensure RMAA works are conducted with well trained workers, upholding industry best practices and safeguarding the well-being of all involved parties.

The Com-RMAA will also continue to expand the recognition of RMAA courses amongst industry stakeholders, including government bodies, statutory bodies, contractors and property management companies. The Com-RMAA will closely monitor and communicate with stakeholders to better understand and align industry needs with training offerings.

## Construction Productivity

In view of the critical challenge posed by an ageing workforce and the anticipated high construction volume in the coming decade, the Construction Productivity Department supports the Committee on Construction Business Development and Productivity (Com-CBD&PRO) in promoting innovation, and facilitates the adoption of modern technologies and construction methods to enhance the industry's productivity and quality.

### Sharing Session on Construction Innovative Technology

On 26 March 2024, the Construction Industry Council (CIC) hosted the CIC Sharing Session on Construction Innovative Technology. This event aimed to promote the adoption of cutting-edge technologies in the construction industry through insightful case studies.

The session featured two groundbreaking technologies: acoustic metamaterials and drone inspection and survey technology. Acoustic metamaterials, known for their ability to control sound waves, were highlighted for their applications in noise reduction. Meanwhile, drone inspection and survey technology demonstrated its efficiency in conducting aerial surveys, minimising the need for manual inspections and enhancing safety on construction sites.

Introduced by leading technology solution providers, these innovations showcased their potential to revolutionise construction practices. During the event, users from the construction industry shared their daily operational challenges and discussed how these innovative technologies could address their pain points. The CIC Sharing Session successfully underscored the importance of embracing innovative solutions to drive progress in the construction sector.



Sharing Session on Construction Innovative Technology

### CIC R&D Conference 2024

The CIC held the CIC R&D Conference 2024 on 12 December 2024, showcasing the latest research results and practical cases in the construction industry from various teams. This event highlighted three groundbreaking research outcomes.

First, the development of high-strength S690 and S960 steel offers excellent strength and toughness, enabling buildings to be taller and lighter with enhanced seismic resistance. This high-strength steel reduces the overall weight and load on foundations, minimises material usage, and lowers carbon emissions, making it a key component of sustainable building design.



CIC R&D Conference 2024

Second, the development of an Artificial Intelligence Rock Type Classification and Fracture State Characterisation APP for Engineering Applications leverages artificial intelligence in geotechnical engineering. It automates core data processing to improve efficiency and accuracy. Deep learning models analyse core images to identify minerals and geological features, enhancing core cataloging capabilities and productivity.

Lastly, the smart city super application platform, SuperApp, utilises advanced technology to simplify and optimise data processing. It integrates smart Building Information Modelling (BIM) to manage assets comprehensively, supports cities in achieving carbon neutrality goals, and reduces carbon emissions.



CIC R&D Conference 2024

### Ongoing Research Projects by CIC R&D Funding

To enhance construction productivity, four new research projects were initiated in 2024, leveraging emerging technologies such as artificial intelligence, robotics and sensors -

- AI-based Interior Fit-out Work Progress Monitoring System (conducted by Chun Wo Construction & Engineering Company Limited)
- JARVIS Pay: Applying a Large-Language-Model (LLM) Powered Digital Twin Platform to Accelerate Project Payment Certification and Payments (conducted by isBIM Limited)
- Automatic site inspection using robotic dog and Landlink Network & Teleoperation of Tower Crane using Landlink Network (conducted by The Hong Kong Polytechnic University)
- Monitoring System for Scaffold Conditions Using Distributed Sensors and Mesh Networks (conducted by B Plus Technology Limited)

### Way Forward

The Construction Productivity Department will continue to explore and advance initiatives to showcase best practices in smart offsite construction and site management, explore emerging technologies and advanced materials, and facilitate wider adoption of high productivity construction solutions and construction robots to enhance industry productivity. Practical research projects will continue to be supported to incubate innovative solutions in construction.

Building on the success of the inaugural Construction Innovation Expo (CIExpo) in 2019 and 2022, the third CIExpo will be organised in conjunction with the CIC Construction Innovation Award (InnoAward) Presentation Ceremony in December 2025, promoting innovation adoption within construction industry. The launching ceremony for InnoAward and CIExpo 2025 was successfully held on 30 October 2024.



Launching ceremony of InnoAward 2025



## Construction Safety

The Committee on Construction Safety (Com-CSY) has been dedicated to fostering a safer working environment within the industry for years. They have actively promoted and developed various measures to nurture a positive safety culture, offering safety guidelines and training to all stakeholders. With a strategic focus on achieving the vision of “Zero Accident”, the Com-CSY and its three sub-committees—the Sub-committee on Safety Promotion, Sub-committee on Safety Training, and Sub-committee on Safety Technical Issues, continue to discuss and implement initiatives across different areas.



Construction Safety Week 2024 – Kick-off Ceremony and Conference

## Construction Safety Week

The CIC and the Development Bureau co-organised the Construction Safety Week (CSW) 2024 under the theme of “Safety for All, 4S Stands Tall”, which aimed to enhance construction safety culture through promoting collective responsibility of stakeholders and adopting Smart Site Safety System (4S). The CSW commenced on 26 August 2024 and ran until 30 August 2024, its activities included Safety Conference, 4S Exhibition, 30th Considerate Contractors Site Award Scheme, Site Visits, Life First Campaign, and more, which had received support from various sectors of the community including professional groups, organisations, trade associations and labour unions.



### Life First Campaign



"Walk the Talk, Synergy in Safety" was the theme of Life First Campaign 2024, and it continued to receive great support from the industry with 303 works projects to participate. The Frontline Team Safety Performance Award was newly added this year, to recognise the outstanding safety performance of the frontline management, foreman, safety supervisors, subcontractor representatives and frontline workers.

To continuously promote safety culture in construction industry and extend the caring culture to their families and friends, the CIC invited the winners of Life First 2024 to bring along their families to the Safety Sharing event and enjoy quality family time. It also encouraged the industry to work safely to protect themselves and their families from harm.

12 Life First – Walk the Talk webinars were organised this year on different topics, with a total of over 38,000 participants, to encourage industry stakeholders to implement good practices.



"Life First 2024" promotional campaign



## CEO Safety Forum

The CEO Safety Forum was concluded on 11 June 2024, and it received great support of management representatives from the Government, clients, contractors, associations and more than 3,600 online participants. The Forum gathered insights from industry leaders and experts on the topics of safety roles and responsibilities and the adoption of Smart Site Safety System, with our distinguished guests to share good practices on enhancing construction safety in the discussion session, aiming to improve site safety within the industry.



CEO Safety Form 2024

## Design for Safety Pilot Run

The CIC has always been encouraging the construction industry to adopt Design for Safety (DfS) in construction projects, aiming to reduce the risks at design stage and ensure the safety of workers during construction and maintenance. The CIC launched the 1st Phase of DfS Pilot Run this year and provided consultancy services to the selected projects to facilitate the proper adoption of DfS management system in their projects.



Design for Safety Pilot Run – Kick-off Workshop





Presentation Ceremony of Plaques for Smart Site Safety System Labelling Scheme

### 4S Labelling Scheme

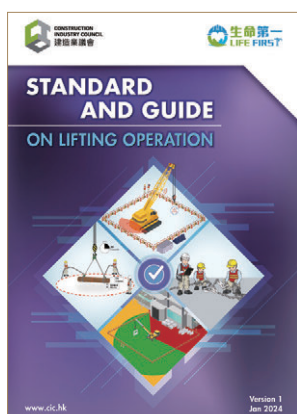
The CIC and the Development Bureau have collaborated to establish the Smart Site Safety System Labelling Scheme (4SLS) to drive the full adoption of 4S in both public and private works in order to further uplift the safety performance of the construction industry. The 4SLS commenced on 20 May 2024, with 673 projects applied and over 530 projects had been awarded the 4S Label as of April 2025.

### Survey on Safety Awareness

To gain an understanding of the current safety awareness and culture within the construction industry, the CIC initiated a large-scale survey which aimed to collect views and evaluate stakeholders' perceptions on accident causes, safety publication, training, 4S adoption and other related factors, identify the challenges encountered and explore ways to enhance site safety. The data collection was completed in early November 2024. A total of 2,157 responses were received, including 1,643 responses from frontline supervisors and workers.

## Safety Publication and Video

"Standard and Guide on Lifting Operation" and "Standard and Guide on Scaffolding Safety" were published by the CIC in January and August 2024 respectively, to provide a quick reference of industry good practices, roles and responsibilities of key personnel, major risks associated with the relevant operation and innovative technologies, for industry stakeholders to enhance construction safety.



Standard and Guide on Lifting Operation



Standard and Guide on Scaffolding Safety

To enhance the truss-out bamboo scaffolding safety, the CIC produced a series of five promotional videos, namely "What You Need to Know About Bamboo Scaffolding Safety", starring celebrities to share the latest Code of Practice, relevant information, and training in a relaxed manner.



"What You Need to Know About Bamboo Scaffolding Safety" (Safety video)

## CIC Master Class in Safety Leadership Culture

With the aim to foster the development and nurturing of safety leadership culture among project directors in the industry, four CIC Master Class in Safety Leadership Culture were held in 2024, which enabled participants to learn from the experience and insights of esteemed industry leaders and acquire practical tools for the implementation of effective safety initiatives.



CIC Master Class in Safety Leadership Culture





### Experiential Learning on Site Safety Training Scheme 2024-2025

The Experiential Learning on Site Safety Training Scheme 2024-2025 co-organised by the CIC and the Hong Kong Construction Association came to the 10th year and continued to provide experimental training to undergraduates who are planning to join the construction industry to get well-prepared. The programme features an experiential training on Design for Safety and Modular Integrated Construction in Ma Wan, and a visit at the Safety Experience Training Centre of Hong Kong Institute of Construction. 400 undergraduates are expected to benefit from the Training Scheme.

### Way Forward

The CIC will keep elevating the safety culture within the industry and promote the adoption of Smart Site Safety System through a comprehensive and strategic approach, empower all stakeholders, from management to frontline workers, to actively participate in safety initiatives.



"Experiential Learning on Site Safety Training Scheme 2024-25"



## Environment and Sustainability

Sustainability has emerged as a critical global imperative, significantly influencing the transformation of the construction industry in recent years. Recognising its growing importance, the CIC is steadfast in its mission to drive the adoption of sustainable practices and advanced technologies that elevate the industry's overall sustainability performance. Through research and the development of specialised tools and reference materials, the CIC provides invaluable support to industry stakeholders. Furthermore, the CIC plays a pivotal leadership role in spearheading the industry to pursue the decarbonisation journey and to implement initiatives aligned with the Hong Kong Government's pledge to achieve carbon neutrality by 2050.

### Decarbonisation Strategy

In line with its steadfast dedication to sustainability, the CIC published the leaflet "Decarbonisation Directions for Hong Kong Construction Industry" in May 2024, offering insights into the following three directions:

- 1 Construction Site Electrification and Clean Energy Adoption
- 2 Construction and Demolition Waste Management
- 3 High Productivity Construction and Construction Digitalisation

Leveraging this groundwork, the CIC has commenced three follow-up initiatives in 2024 to translate these directions into actionable outcomes:

- Feasibility Study of Construction Site Electrification and Clean Energy Adoption
- Exploration Study for Reducing Timber and Timber Formwork Waste
- Development of a Material Exchange Platform

#### Feasibility Study of Construction Site Electrification and Clean Energy Adoption

In pursuit of sustainable innovation, the study focuses on assessing the feasibility and readiness of electrification and clean energy solutions for Hong Kong's construction sites. By evaluating current practices, technologies, policy support and financial viability, the study will deliver practical recommendations to facilitate the transition towards sustainable energy use within the industry. The study is expected to be completed in 2025, offering guidance for a cleaner and more energy-efficient construction industry.

#### Exploration Study for Reducing Timber and Timber Formwork Waste

Timber waste constitutes one of the most significant waste streams in construction activities, primarily driven by the prevalent use of timber formwork. To tackle this, the CIC has undertaken a study to explore innovative construction methods and tools that can help reduce timber and timber formwork waste. This not only targets reduction in landfill waste but also contributes to minimising overall carbon emissions, underscoring the CIC's commitment to resource efficiency and environmental stewardship.

### Development of a Material Exchange Platform

With a view to promoting a circular economy within the construction industry, the CIC is developing a material exchange platform – a digital tool designed to connect sources of construction waste with potential users, including other construction sites, recyclers, and product innovators. To expand the lifespan of surplus and waste materials, the platform facilitates the reuse and recycling of valuable resources in the construction, significantly reducing the waste sent to landfills.

Once fully operational, it is anticipated to become an indispensable resource for advancing resource efficiency in the construction industry.

### Smart Waste Management Tool

The Smart Waste Management Tool is a web-based tool that streamlines the tracking and management of construction and demolition waste data. This centralised tool enables all waste data management activities on construction sites, such as input, analysis, approval, verification, and storage, thereby enhancing efficiency in waste management by moving away from tedious manual processes. The tool marks a significant step towards data-driven waste reduction practices.

The tool, available to the industry from April 2024, has garnered positive feedback from users. Throughout the year, extensive webinars and in-person engagement sessions have been conducted to promote its adoption.

To further enhance its usability, the CIC commenced second-phase enhancements to improve user-friendliness. These updates are scheduled for completion in 2025, further empowering the industry to achieve waste reduction goals.

### CIC Carbon Assessment Tool

Launched in 2019, the CIC Carbon Assessment Tool (CAT) provides a standardised framework and dataset for evaluating the upfront carbon performance of local construction projects. With the CAT, industry practitioners can estimate project upfront carbon footprints, identify areas for improvement, and implement strategies to reduce emissions effectively.

### CIC Green Product Certification

To address the growing demand for sustainable and low-carbon products, the CIC initiated research in 2023 to expand the scope of product categories and update the assessment criteria of existing ones under the CIC Green Product Certification (GPC). Extensive stakeholder engagement has been carried out across the construction value chain and among suppliers from different product categories, ensuring the GPC remains aligned with the evolving needs of the construction industry and the global trend.

The upgraded version of the certification scheme, featuring expanded categories and internationally aligned criteria, is set to be launched in 2025.

## CIC Sustainable Finance Certification Scheme

The Sustainable Finance Certification Scheme (SFCS) empowers the construction industry to leverage green finance opportunities to accelerate its transition to sustainable practices. In 2024, the CIC conducted engagement sessions with professionals from the financial and construction sectors, raising awareness and deepening understanding of the scheme. Awareness and practical training sessions were also organised to enhance the scheme assessors' knowledge of sustainable finance and assessment skills.

Recognising the dynamic nature of sustainable finance, the CIC initiated the Study for Enhancement and Repositioning of the SFCS in October 2024. This study aims to align the scheme with the CIC's mission and vision and meeting the needs of the construction industry. The study is expected to conclude in 2025.

## CIC Sustainability Strategies

Beyond driving industry-wide sustainability, the CIC is committed to enhancing its corporate sustainability performance. Currently, we are reviewing the overall strategy and performance.

### Way Forward

Since its inception in 2018, the CIC Sustainable Construction Award (SCA) has been held every two to three years to recognise exemplary sustainable practices among organisations and practitioners, while also aiming to inspire the younger generation.

In response to the evolving sustainability landscape, the CIC will review and enhance the SCA's criteria to ensure the award aligns with the latest developments in the industry's sustainability objectives.



# Modular Integrated Construction (MiC)

As a pivotal component of High Productivity Construction (HPC), Modular Integrated Construction (MiC) has witnessed exponential growth in Hong Kong. Spearheaded by the Development Bureau with strategic support from the CIC, MiC has been successfully established as an industry benchmark through multi-dimensional initiatives: policy formulation, regulatory framework implementation, the Construction Innovation and Technology Fund (CITF) funding schemes, and cross-sector stakeholder engagement.

## MiC Resources Centre: Bridging Professional Expertise and Public Engagement

The MiC Resources Centre served over 11,000 visitors in 2024, hosting international technical delegations and becoming a global expertise knowledge hub for modular construction advancements. Our continuously updated database facilitates technical exchanges among Hong Kong, Mainland China, and global partners, while live demonstration units enable the general public to experience MiC's quality advantages firsthand, effectively dispelling misconceptions through tactile learning.

## Knowledge Transfer through Seminars and Webinars

The seminar on Hong Kong's first private residential MiC project at 28 Tonkin Street (completed in August 2024) attracted more than 2,000 participants to attend in person and online. The developer, architect, contractor and module supplier of the project presented comprehensive case studies covering project planning, design innovation, modular manufacturing, on-site assembly, and quality assurance protocols, establishing new industry standards.



MiC Seminar

The seamless execution of this project has instilled robust confidence in MiC methodology across the sector. We are committed to accelerating industry advancement and positioning Hong Kong as the gold standard for construction excellence. Our paramount mission is to demonstrate that MiC inherently delivers certified quality assurance throughout the building lifecycle.

As a transformative construction paradigm, MiC's demonstrated success in this flagship project creates compelling incentives for private developers to adopt this approach. This strategic shift will propel Hong Kong's construction industry towards enhanced quality and sustainability targets.

## Experiential Learning through Site Visits

To advance industry-wide competency in MiC and maintain technological acuity, the CIC strategically conducted a visitation programme comprising three domestic technical tours and a Greater Bay Area (GBA) manufacturer visit in 2024. These curated engagements brought together key stakeholders including:

- Members of the CIC Committee on Construction Business Development and Productivity
- Project owners from public and private sectors
- Main contractors and specialist subcontractors

### Technical Tour Portfolio:

**February:** Mock-up of Tseung Kwan O Area 72 Fire Services Complex

**June:** Student Residence at Wong Chuk Hang for the University of Hong Kong (HKU)

**December:** Cyberport Expansion Project



Factory visit of the module fabrication for project of Fire Station-cum-ambulance Depot with Departmental Quarters and Facilities in Area 72, Tseung Kwan O in Foshan.



## GBA MiC manufacturer visit

The CIC conducted an intensive two-day immersion programme in Foshan from 9-10 April 2024, focusing on mission-critical MiC supply chain operations. To understand the capacity, capability, production process, transportation and logistics, quality assurance and quality control procedures, and related areas of the GBA factories.



Factory visit of the module fabrication for the High West Site Development at 142 Pok Fu Lam Road by HKU in Foshan.

## Consolidate Industry Implementation Experience to Revamp the Reference Materials

The CIC systematically consolidates industry implementation experience to refine MiC and Multi-trade Integrated Mechanical, Electrical and Plumbing (MiMEP) reference materials, launching an updated Reference Material on Logistics and Transport for MiC Projects in November 2024.

### Comprehensive Training Matrix Enhances Talent Nurturing and Capacity Building for Industry Transformation

The 2024 MiC Talent Enhancement Programme marked a milestone with the launch of the pioneering Master Class on MiC Logistics and Transportation Management. The kick-off ceremony of the programme was held on 21 October 2024 with over 1,300 industry professionals engaged in the event. The course was successfully completed on 18 November 2024 with 47 graduates.

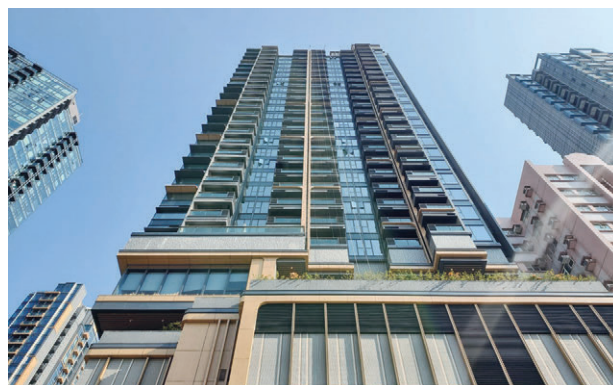
The following MiC related training courses were conducted by the Hong Kong Institute of Construction, and School of Professional Development in Construction in 2024:

- 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);
- 5 CIC Master Class on MiC Project Implementation (Project Managers) and
- 6 CIC Master Class on MiC Logistics and Transportation Management

### Way Forward

2024 marked a pivotal year with more than 50 MiC projects commissioned across Hong Kong, while 100+ major developments entered active construction or planning phases. This high year-on-year growth trajectory demonstrates MiC's rapid market penetration and higher degree of recognition.

MiC and MiMEP offer a more efficient, more sustainable, more productive, and safer approach to urban development of Hong Kong. We remain committed to leveraging HPC technologies to establish Hong Kong as Asia's sustainable construction hub.



1st Private MiC Residential Project in Hong Kong: 28 Tonkin Street Redevelopment Project Completed in August 2024



## CIC-Zero Carbon Park

The CIC-Zero Carbon Park (CIC-ZCP) is the home to the first zero carbon building in Hong Kong. Its vision, execution and implementation of low carbon design innovations are forward-thinking and mark a milestone achievement for Hong Kong's construction industry. To this day, its building performance has been continually optimised since its opening in 2012. As a centre for exhibition, education and information, CIC-ZCP aims to promote low-carbon living and advanced green building technologies beyond the industry, into the community. CIC-ZCP aspires to boost the neighbourhood's ecological value, and contribute as a living and breathing piece of infrastructure. With more engagement with the community and industry stakeholders, CIC-ZCP hopes to create a paradigm shift towards sustainable living by becoming a local landmark building, and functioning as a "city lung", breathing new life and clean air into Hong Kong.

### Diversified Marketing and STEAM Education Initiatives

CIC-ZCP aims to engage with the industry and community to promote green construction and green living. Various marketing campaigns and education initiatives including New Energy Bus Carnival, ZCP Easter STEAM Carnival, GO Green Go Life: ZCP Low Carbon Green Market, and STEAM Day Camp were launched and received overwhelming responses throughout the year. Also, the first science comic "A+ STEM Force" integrating CIC-Zero Carbon Park as the main story scene, was released to raise public awareness and interest in environmental issues, so as to encourage a low-carbon lifestyle.



Launching of the first science comic "A+ STEM Force" integrating CIC-Zero Carbon Park

### CIC-ZCP Outreach Programme

CIC-ZCP organised an abandoned pylon outreach programme to promote zero carbon concept to the community. In collaboration with different sectors, the revitalisation of abandoned pylons in rural areas would extend the concept of sustainable development from CIC-ZCP to the community, and the creativity of the new generation will further introduce new elements to the revitalised pylons.



In collaboration with different sectors to revitalise the abandoned pylons in Aberdeen Country Park

### Circular Economy

CIC-ZCP aims to promote the sustainable and circular economy concept in the community in achieving carbon neutrality and organised events including CIC-ZCP x JupYeah Autumn Something sustainable fashion event, Mid-Autumn Upcycled Art Installation partnered with local social enterprise, and CIC-ZCP x PUMA Swap Shop: A Circular Fashion Swap.



Mid-Autumn Upcycled Art Installation partnered with local social enterprise



Being the signature event of Construction Month 2024, "ZCP Drive to Zero Exhibition" collaborated with various industry stakeholders as part of CIC-ZCP's continuous effort to promote low-carbon living

### Experiential Landmark

CIC-ZCP continually uplifts its facilities to propel sustainable development and enhance the visitors' experience. The upgraded facilities of CIC-ZCP with the goal of reducing carbon emissions, enhancing energy efficiency, and adhering to the most recent energy efficiency standards.

### Construction Month 2024

CIC-ZCP presented the annual signature campaign Construction Month in November. With the theme of "Constructing a Greener Future", the campaign focused on the importance of safety, practising green construction, and sustainable development. Comprising of more than 30 captivating events, the exciting events ranging from ZCP Drive to Zero Exhibition, Green Music Flash Mob, Low Carbon Movie Night, STEAM@ZCP, ZCP Green Heroes Acknowledgement Ceremony to the Construction Experiential Day, offering opportunities for the next generation to learn more about innovative technologies and sustainability in the construction industry.

### Way Forward

As a low carbon role model, CIC-ZCP will continue to demonstrate state-of-the-art eco-building design and technologies for promoting sustainability, and explore the enhancement of renewable energy to act. CIC-ZCP will also introduce new marketing initiatives to advocate zero carbon with more engagement with the public and industry practitioners. With a view to creating and maximising synergy, CIC-ZCP will work closely with industry practitioners and provide venue support to events initiated by the industry with the aim of promoting construction sustainability.

## Construction Innovation and Technology Application Centre (CITAC)

### Global Construction Robotic Day



Global Construction Robotic Conference

The Global Construction Robotics Day was held on 7 and 8 May 2024 to promote the adoption of construction robots. This two-day event included a conference, a technology pitching session, and an exhibition, drawing numerous in-person attendees and significant online engagement. It showcased diverse robotic solutions for various construction tasks, enhancing worker safety and improving production quality.

The conference featured 15 experts - seven from overseas, two from Mainland China, and six local specialists - who shared their insights. A technology pitching seminar highlighted 20 companies presenting their latest solutions. The exhibition included 24 companies and attracted over 360 registered stakeholders, with more than 8,000 visits, demonstrating strong interest in advancements in construction robotics. Exhibitors engaged participants with live demonstrations of their market-ready solutions across applications such as spray painting, floor grinding, wall plastering, measurement, demolition, rebar tying, and façade cleaning.



Global Construction Robotic Day held on 7-8 May 2024



### Robotic Training course

To facilitate the reskilling and upskilling of practitioners for the successful adoption and integration of construction robots into the construction process, the CIC organised a pilot course on robotic operator training. Four training sessions, including courses on drones for inspection and wall surface finishing robots, were successfully conducted in September and October 2024. Positive feedback, and valuable insights were gathered from attendees for future improvements. The four training courses equipped a total of 62 frontline industry stakeholders with robotic operation skills, providing them with precious hands-on experience.



Demonstration on Wall Surface Finish Robot



Hands-on Experience on flying drones

### Smart and Sustainable Study Tour – Finland and Netherlands

The CIC organised the Smart and Sustainable Study Tour to Finland and the Netherlands in 2024. An 18-member delegation participated in the trip to explore the latest advancements in sustainable practices, digitalisation, industrial construction, smart facilities management, and reclamation technologies.



Visit to Oodi Library in Helsinki

In Finland, the tour visited Flow Modules in Helsinki, known for its advanced prefabrication techniques, and EcoUp, which focuses on reducing CO emissions through innovative recycling methods. Delegates gained insights into automation in housing construction from Admares, along with smart technologies at the VTT Technical Research Centre. In the Netherlands, they examined The Green Village at TU Delft and the Zuidas-Zuidasdok project, emphasising sustainable innovations and urban development. The Study Tour fostered exposure to advanced building technologies, collaboration with international counterparts, provided valuable insights into European architectural innovations, and facilitated knowledge sharing on ongoing infrastructure projects in Hong Kong.



Visit to Flow Modules's Prefabricated Construction



Tour to Shenzhen Robotic Companies

## Promote Implementation of Construction Innovation and Technology

To promote the adoption of innovative technologies, CITAC proactively engaged with industry stakeholders to identify their challenges and needs. In response, CITAC organised a range of outreach activities, including pitching sessions, site visits and company tours, to cultivate suitable technology partnerships. In 2024, a tour of robotic companies in Shenzhen, the HKIA Innovation Lab, and a robotic tour in Guangzhou were conducted to facilitate exchanges between industry practitioners and technology ventures.

## Way Forward

To further advance the promotion of Construction Robotics and achieve the objectives of wider adoption, Construction Robot Competition and Exhibition is scheduled to take place in 2025. This significant event will feature competition, forum, pitching session and showcasing construction robot for industry practitioners and students.



# Hong Kong Institute of Construction

Hong Kong Institute of Construction (HKIC) has always been dedicated to nurturing outstanding talent for the construction industry. With the rapid development of industry transformation and innovative technology, HKIC continuously takes the initiative in innovation and optimises its curriculum to actively respond to the urgent demand for professional talent in the industry.

## Training

For the Academic Year 2023/24, HKIC set a training target of 15,700 (including intermediate and senior tradesman), ultimately achieving the goal with an enrollment of 14,701 and a graduation number of 18,611. In view of the continued demand for manpower in the construction industry, HKIC will provide no fewer than 12,000 training places for training new entrants and upgrading intermediate and senior tradesman in each subsequent academic year.

## Technology Applications

### Launch of Professional Certificate in Robotic Welding Application

HKIC's first robotics programme, named the "Professional Certificate in Robotic Welding Application" was launched in October 2024, to address the growing demand for robotics expertise in the construction industry, and prepare students to grasp new opportunities for high-tech positions. Nine students were graduated from the inaugural class. Through practical training, students obtained hands-on experience in advanced robotic welding technologies and enhanced their competence and confidence in operating automation tools.



Students of "Professional Certificate in Robotic Welding Application" Programme are practising at workshop

### Incorporation of Multi-trade integrated Mechanical, Electrical & Plumbing (MiMEP) into Plumbing Programmes

HKIC incorporated MiMEP elements into the existing plumbing curriculum. Through the development of Building Information Modelling (BIM) tools, students can improve visualisation and master project planning skills. Dedicated training workshops were established in Sheung Shui Campus to simulate real-world work scenarios. Instructional videos were also produced to support flexible and efficient learning.



Incorporation of MiMEP Elements into Plumbing Programmes

Apart from learning at classroom, under guidance of lecturers, students experienced and learnt the on-site applications of BIM and AR technologies at the construction site of Centre for Future Construction (CFC) on the 3rd Floor of the Kowloon Bay Campus. Students could earn real-world construction experience to learn about actual site conditions and apply innovative technologies in the construction site.

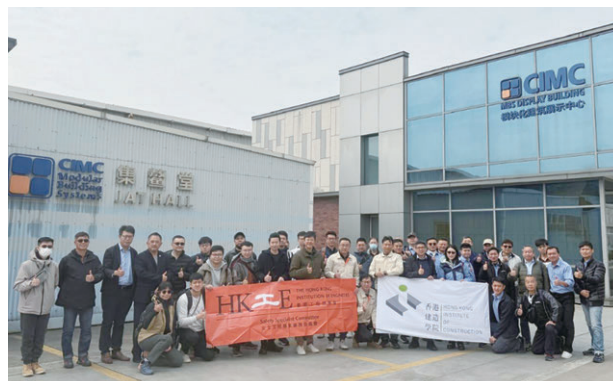


## Articulation to Universities

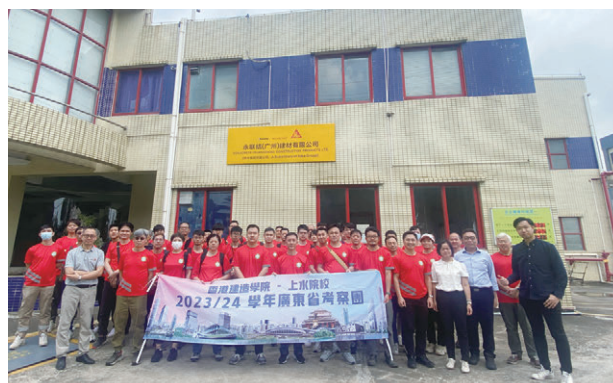
One of the goals of enhancing the Advanced Diploma programmes is to enable graduates to articulate to university education. In November 2024, eight graduates from the first cohort of revamped Advanced Diploma programmes were successfully progressed to different universities.

## Peers Exchange

HKIC encourages exchanges and keeps its staff and students abreast of industry development in the region. Management, teaching staff and students of HKIC undertook different exchange activities in 2024, including visiting five colleges in Guangzhou to learn about local campus facilities and teaching methods, and discuss potential collaboration. Students also visited material production factories, robotic applications and prefabrication production facilities in Greater Bay Area, in order to enhance their understanding of advanced construction technologies.



Instructors from Kwai Chung Campus, along with the Hong Kong Institution of Engineers, visited MiC and MiMEP factories in Xinhui and Jiangmen



Peer exchange in Greater Bay Area

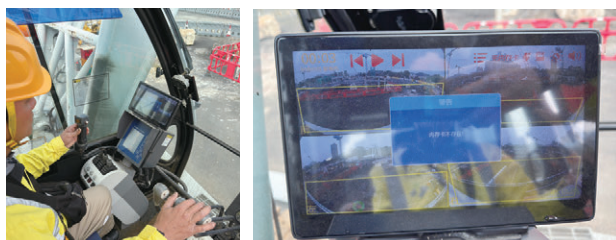
### Promotion of Construction Safety

#### Introduction of Smart Site Safety System (4S)

To facilitate the development of 4S, HKIC completed the installation of 4S in March 2024 and it is now in use at the Tai Po Training Ground and Kwai Chung Safety Experience Training Centre. This includes the installation of basic equipment such as smart locks and smart safety monitoring alarm systems, which are used for teaching demonstration and to ensure the safety of students during their training.

Besides, the outdoor training ground successfully completed several tasks related to innovation and the system, including:

- AI cameras to identify and monitor danger zones, such as areas near mobile machinery
- Crane rope monitoring system for tower cranes to ensure safety and efficiency of crane operations
- Tower crane foundation monitoring system to continuously monitor the structural integrity
- 360° monitoring to provide comprehensive and real-time oversight of mobile machinery
- Exoskeleton, a wearable robotic technology, enhances human strength and endurance



360° monitoring for mobile machinery

HKIC will continue to optimise and purchase various 4S facilities to achieve higher safety standards. Additionally, the course has been incorporated 4S elements and is continuously being optimised.

The Safety Experience Training Centre at Kwai Chung Campus has installed an immersive virtual reality system for safety course experience and the feasibility of using other latest virtual technologies in safety course training is under review.



Safety Experience Training Centre – Virtual Reality Immersive CAVE System

#### Enhancement of Safety Training Course Content

Apart from promotion of 4S development, HKIC launched the Safety Training Revalidation Course for Construction Workers of Specified Trade – Concretor in August 2024 to meet the need of the industry.

Recent fatal accident case studies were continuously incorporated and updated in the course content of all safety training programmes which allows students to investigate the causes and prevention measures in order to enhance their safety awareness.

## Develop Good Safety Practice and Enhance Safety Awareness

The Safety Model Student campaign was organised at Kwai Chung Campus in 2024. In addition to raising students' safety awareness and recognising students as safety role models, it can also promote a safety culture in campus.



Safety Model Student Campaign

## Enhancement Training

Besides trade skills training, various seminars and workshops were organised for students to enhance their industry knowledge. The topics covered occupational safety, new technologies and products, such as innovative mortar technology, cordless dust abatement tools and 3D laser scanner.



Talk on innovative product

## Construction Industry Sports & Volunteering Programme (CISVP)

HKIC actively participated in the CISVP activities. There were 649 Instructors and students participated in the Construction Industry Lo Pan Rice Campaign 2024. Staff and students from Kwai Chung Campus visited the Li's Mansion in Kuk Po Tin Sum Village to paint and repair the ceiling and wooden beams, and to pave a cement road, contributing to the preservation of historical buildings and promoting sustainable rural revitalisation.



Preservation of historical buildings

## Way Forward

In 2025, after the completion of the Centre for Future Construction (CFC), students from various programmes will learn and experience innovative technology at the CFC.

In 2025, training grounds plan to purchase EV mobile machinery for upgrading operator training and will continue to set up and enhance the 4S incorporated into practical training.

To facilitate training for the WorldSkills Competition in 2026, Sheung Shui Campus and Lam Tei Training Ground will set up WorldSkills Competition training base to simulate the competition environment where contestants will be able to get into the competition mode easily during training.

Sheung Shui Campus plans to launch S960 Welding Robotic programme and painting robotic programme to integrate robotics into construction industry and practical applications.



### School of Professional Development in Construction

School of Professional Development in Construction (SPDC) is the professional education arm of the HKIC and it is established to provide professional and continuing education pathways for industry practitioners in construction. SPDC aims to drive Construction 2.0 and actively offer innovative and continuous professional development training programmes for young professionals and frontline managers (including supervisors). SPDC's training programmes cover four areas: Building Information Modelling (BIM), Modular Integrated Construction (MiC), Construction Management, and Construction Technology and Quality.

#### Professional Training

SPDC developed a number of signature programmes in 2024, namely Future Construction Excellence Programme, CIC Master Class on MiC Logistics and Transportation Management and CIC Master Class on Digital Twin. In order to facilitate the development of the industry, SPDC also launched several BIM and Management programmes, including Certificate of BIM Use in Drawing Generation (Superstructure, Foundation & Demolition Plans) – Revit, Building Information Modelling (BIM) in Plumbing and Drainage – Revit, Building Information Modelling (BIM) Basic Course in Rebar Bending & Fabrication - Tekla Structures, Certificate in Leak Detection on Water Mains (Refresher Course) and Shotfirer Refresher Training Course.



Professional Training (BIM Programmes)



Professional Training (Management Programmes)

#### Marketing Promotion

SPDC keeps exploring more promotional channels, such as increasing the use of social media platforms for promoting programmes, and disseminating the latest programme information via industrial network and professional associations, to reach our target audience – young professionals and frontline management and supervisory personnel.

	Master Classes	BIM Programmes	Construction Management Programmes
No. of Enrollments	492	5,521	2,082
No. of Programmes Offered	8	42	48
No. of Classes Offered	15	115	86
No. of New Programmes	3	3	2

### Important Events

SPDC actively participated in various major events last year, including the Hong Kong Trade Development Council Education & Career Expo 2024 and the CIC Global Construction Digitalisation Forum and Exhibition 2024, supporting the CIC and HKIC in exemplifying the essences of Construction 2.0, namely Innovation, Professionalisation and Revitalisation. Besides, our management staff participated in the Future Construction Excellence Programme and Singapore Study Visit, continuously strengthening their professional competence to make SPDC the premier institution for continuing education for construction professionals in Hong Kong.

### Collaboration with Industry Stakeholders

SPDC closely collaborates with different stakeholders to maximise the synergy created and brings contributions to the construction industry. SPDC provided training programmes in collaboration with Government departments such as the Civil Engineering and Development Department, the Electrical and Mechanical Services Department, and the Water Supplies Department, and associations such as Hong Kong Bar-Bending Contractors Association, The Hong Kong Federation of Electrical and Mechanical Contractors Limited, and Hong Kong Plumbing & Sanitary Ware Trade Association. SPDC offered the Future Construction Excellence programme, CIC Master Class programmes, and BIM programmes in partnership with Industry Development of the CIC, to meet the great demand of the industry. In addition, SPDC collaborated with HKIC to organise the STEAM x BIM Competition 2024 to sow the seeds for the industry.

### Way Forward

SPDC aims to make CIC Master Class series a must-have programme for the emerging construction professionals, in collaboration with local tertiary institutions upon a holistic review on the Master Class programmes. With the commissioning of the Centre for Future Construction (Centre) in 2025, SPDC will engage more HKIC programmes in utilising the Centre resources to enable HKIC students to better understand the future construction technologies, inducing a stride forward towards "Construction 2.0".

### Curriculum Development & Quality Assurance

The Curriculum Development & Quality Assurance (CDQA) Department plays a vital role in ensuring programmes of HKIC to meet high standards of quality and relevance. In addition to helping HKIC set up and shape its quality assurance (QA) mechanism, steer curriculum revamp of its programmes to meet Qualifications Framework (QF) requirements, requirements and manage necessary documentation to prepare for QF accreditation exercises, CDQA Department also provides training to HKIC staff on QA and QF matters.

### Programme Area Accreditation

HKIC has sought QF accreditation for its various programmes from Hong Kong Council for Accreditation of Academic & Vocational Qualifications (HKCAAVQ) every year since its establishment in 2018 through 2023. By 2024, there was a total of 37 HKIC qualifications on the Hong Kong Qualifications Register (HKQR), ranging from QF Level 2 to Level 4.

As HKIC has passed all previous Learning Programme Accreditation (LPA) exercises without any pre-conditions or requirements, it fulfilled HKCAAVQ's eligibility criteria to apply for Programme Area Accreditation (PAA). In 2024, HKIC reached another milestone and formally submitted an application to HKCAAVQ for PAA at QF Level 3. It is anticipated that site visit by the accreditation panel will be held in March 2025 and the panel result will be released in June 2025.

Upon the successful accreditation, HKIC may develop and operate programmes within the approved scope of programme areas at QF Level 3 or below without undertaking LPA or re-LPA by HKCAAVQ.

To better prepare for the PAA, HKIC has introduced an “Internal Programme Area Assessment” (IPAA) mechanism to conduct a self-evaluation. Reference was made to the accreditation standards of PAA conducted by HKCAAVQ. The IPAA panel was composed of professionals outside of HKIC to provide objective and independent opinions. The panel meeting was held in November 2024 and concluded that HKIC was able to demonstrate the staff expertise, resources and QA mechanisms are commensurate with the scope of the PAA to be applied. A total of six recommendations were proposed to help HKIC strive for excellence and continuously improve its quality and service.

### Programme Development and Revamp

HKIC is committed to developing new programmes and revamping current ones to cater for industry development and manpower needs. With the rapid transformation and digitalisation of the industry, HKIC has developed new technology-related programmes in 2024, such as Professional Certificate in Robotic Welding Application, BIM Basic Course in Rebar Bending & Fabrication – Tekla Structure, and Master Class on AI for Construction (including LLM). Construction safety remains the top priority for the industry. In addition to the various safety-related programmes currently being offered, HKIC developed a new Safety Training Revalidation Course for Construction Workers of Specified Trade – Concretor in 2024. HKIC has also revamped seven of its current programmes to meet the requirements of QF.

### Trainings on Quality Assurance and Qualification Framework

HKIC arranges various QA and QF related training for its staff from time to time. In 2024, a total of 29 relevant training activities has been arranged for more than 1,000 participants. Relevant training topics included: “outcomes-based” curriculum design, assessment design and grading, QA mechanism of HKIC, HKQF (conducted by representatives from Qualifications Framework Secretariat (QFS)), and PAA (conducted by representatives from HKCAAVQ), etc.

## Way Forward

While HKIC would continue to develop new programmes to address industry needs, upon the successful application of PAA, it plans to revamp annually 10 to 15 existing programmes to meet the requirements of QF. Separately, HKIC would conduct a pilot project with QFS to explore feasible solutions for establishing Vocational Qualifications Pathways (VQP) under the Qualifications Framework (QF) for the construction industry.

## 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 per year under CICATP since Academic Year 2022/23. The number of trades covered in the scheme was 26, covering all trades under the Enhanced Construction Manpower Training Scheme (ECMTS) for nurturing skilled workers.

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 2024, HKIC proactively recruited students, assisted them with job placement while providing them with moral and civic education.

### Student Recruitment

Enhancing the efforts on training local workers and recruiting youngsters to join the construction industry, HKIC has been adopting multi-pronged publicities 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 exhibitions, including the Education and Careers Expo 2024 at Hong Kong Convention and Exhibition Centre in January 2024. The theme was innovative technologies in the construction industry, focusing on robotics and safety, to promote new programmes and training directions offered by HKIC. HKIC also joined the Information Expo on Multiple Pathways 2024 organised by the Education Bureau and the Building a Multicultural Workplace Job Fair organised by the Labour Department to promote the Full-time Year-long and Full-time Short programmes of HKIC in various ways.

In addition, HKIC held Information Days in March and June at the Sheung Shui Campus and Kowloon Bay Campus, inviting DJs Ms. YUEN Siu-yee and Ms. LEUNG Ka-kei to serve as hosts. Mr. George AU@P1X3L and artist Mr. Deep NG, along with alumni and students from HKIC, shared their journey of pursuing their dreams to encourage young people to join the family of the construction industry. The events attracted extensive media coverage and enhanced public awareness of HKIC.



Information Day attracted extensive media coverage



HKIC participated in Education and Careers Expo 2024

To enhance the young, energetic, professional and innovative image, HKIC produced a new promotional video featuring Mr. George AU@P1X3L, along with alumni and lecturer from the HKIC. The video was broadcasted on various channels, including TV, online and outdoor large TV screens. The online outreach received positive feedback, reaching over 1,980,000 views and over 6,200 likes. HKIC also launched its first 3D naked-eye promotional video in June, featuring HKIC students. The video was broadcasted on outdoor large TV screens in Tsim Sha Tsui, Causeway Bay, and Mong Kok with daily traffic of approximately 500,000. HKIC completed the enhancement of its website in March and launched its Facebook and Instagram platforms in June for enhancing brand image and attracting the attention of more potential students and young career changers. Analysis of the enrollment age for Full-time Year-long programmes for the Academic Year 2024/25 showed an upward trend towards younger students compared to last year, indicating that the promotion was effective.

## OPERATIONAL REVIEW

In addition, HKIC invited Mr. KHAN Jahangir, a Pakistani football player of Hong Kong team and Mr. Vivek MAHBUBANI (Ah V), an Indian stand-up comedian to promote HKIC's Full-time Short English programmes for ethnic minorities and promote diverse culture at HKIC.

### School Promotion

Promotion to secondary schools remains one of the key focuses of our student recruitment events. HKIC promoted the Full-time Year-long programmes and the Construction Pathway Project (CPP) to secondary school students and teachers through more than 120 on-site talks, activities and visits to the HKIC campuses with over 6,000 participants including Principals, teachers, students and parents, served. Funded by the Development Bureau and coordinated by HKIC, "STEAM UP" Project was launched to provide a set of STEAM teaching and learning materials dedicated to the construction industry for Primary four to six and Secondary School students and teachers. The project aims to introduce the professionalism and development of the construction industry to the public, thus attracting more newcomers to join the industry.



Promote Full-time programmes to secondary students through various activities



HKIC coordinated "STEAM UP" Project

In line with the Hong Kong Education Bureau's promotion of STEAM education for 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 two signature events included Construction x STEAM Summer Camp 2024 and STEAM x BIM Construction Model Design Competition 2024.



Group photo of Construction x STEAM Summer Camp 2024

During summer holiday, the "Construction x STEAM Summer Camp 2024" where a competition to assembly fantastic humidifier was organised. The number of participants hit a record high with particularly enthusiastic response. With the guidance of HKIC instructors, students utilised craftsmanship skills in joinery, electrical installations, and painting learned to design and create their unique humidifiers. The students' works received high praise from judges. A number of the participating teams expressed their hope to participate in the STEAM Summer Camp again and will recommend it to other students. Alternatively, the STEAM x BIM Construction Model Design Competition 2024 successfully took place in December 2024. The entries combined the theme of Luxury Glamping, with the concept of Modular Integrated Construction (MiC), Building Information Modelling (BIM) software, and 3D printing model making, and received high praise from the judges and guests. The winning entries will be exhibited at the Education Bureau Kowloon Tong Education Services Centre and the Education and Career Expo 2025 and will also be displayed on different occasions.



## Whole-person Development

In addition to mastering professional craft skills and industry knowledge, HKIC also encouraged students to participate in various physical training activities and sports competitions, with the purposes of enhancing student's personal fitness, promoting physical and mental well-being, and cultivating a spirit of teamwork. Numerous competitions were organised for students to participate, including the Construction Industry Basketball League 2024 and the Construction Industry Football League 2024 under the Construction Industry Sports & Volunteering Programme, the Hong Kong Rowing Indoor Championships 2024, the Jockey Club Water Sports 4 All Programme Inter-School Indoor Rowing Invitational Competition 2024 and the Sha Tin Dragon Boat Race 2024, etc., Students achieved outstanding results. The major awards include:

- Champion, first runner-up, and second runner-up in College Boys' 500m Rowing, and Champion in College Boys' 4x500m Rowing Relay of the Jockey Club Water Sports 4 All Programme Inter-School Indoor Rowing Invitational Competition 2024
- First runner-up in the Elite Challenge Cup 4x500m Relay of the 20th Youth College Anniversary Indoor Rowing Competition
- First runner-up in the Construction Industry Council Hip Seng Caring Committee Cup, first runner-up in the Sha Tin Reunification Cup, and fourth place in the Ling Yui Cup of the Sha Tin Dragon Boat Race 2024
- First runner-up in the Sanfield 50th Anniversary Cup of the Sanfield 50th Anniversary Friendship Basketball Invitational
- First runner-up in the Gold Cup of the Construction Industry Basketball League 2024

To cultivate students' caring spirit, HKIC has invited local social service organisations and non-profit making organisations to jointly arrange project-based volunteer training and volunteer service opportunities for students, including visiting elderly singletons, and assisting in computer recycling with the aim that the underprivileged in the community can be benefited.

Furthermore, to enrich students' learning experiences, HKIC has invited several CIC Fellows, including Ir POON Lock-kee, Rocky, Chairperson of the Organising Committee of the CIC Outstanding Contractor Award 2024; Ms. WONG Yuek-lan, Eliza, member of the CIC's Audit Committee; Ir CHAN Chi-chiu, former Chairperson of the CIC's Committee on Registered Specialist Trade Contractors Scheme; and Mr. YU Kam-hung, member of Committee on Registered Specialist Trade Contractors Scheme, to share their life and career development experiences with students, inspiring them to prepare for future success in their personal and career development.



HKIC Dragon Boat Team



HKIC Indoor Rowing Team



Project-based volunteer training





CIC Fellows Sharing Session



Whole Person Development Talk on Japan Prefabricated Construction and Transit Oriented Development

### 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 invites industry leaders from around the world to share their cutting-edge knowledge and experiences. In 2024, HKIC invited experts from Guangdong No.1 Construction Engineering Co., Ltd. to deliver a talk on Inheritance, Integration, Construction and Development of Lingnan Architecture in Guangzhou Area. Also, a visiting professor from Tokyo University of Science and an expert from NIKKEN SEKKEI were invited to share on the topic of Japan Prefabricated Construction and Transit Oriented Development. A visiting professor from South China University of Technology was invited to deliver a talk on Vocational and Professional Education and Training for the Construction Industry and Digital Construction Technology and share experience on WorldSkills Competition (Digital Construction). These talks strengthened students' professional knowledge, inspired them to pursue excellence, and applied craftsmanship in their studies and future career.



Whole Person Development Talk on Vocational and Professional Education and Training for the Construction Industry and Digital Construction Technology

### WorldSkills Competition

HKIC sent seven competitors to participate in Concrete Construction Work, Joinery, Painting and Decorating, Plumbing and Heating, Wall and Floor Tiling, and Welding of the WorldSkills Lyon 2024. The competitors in joinery and welding earned the Medallion for Excellence, achieving the best performance in HKIC's history.



Whole Person Development Talk on Inheritance, Integration, Construction and Development of Lingnan Architecture in Guangzhou Area



CHOW Lok-yin (Left) and FONG Chun-yin (Right) won the Medallion for Excellence in Welding and Joinery respectively

Furthermore, HKIC fostered collaboration with training bases in mainland China. In 2024, HKIC signed Memoranda of Understanding with the Guangzhou Light Industry Technician College, Chongqing Senior Technical School of Architecture, and Guangdong City Technician College. This deepened collaboration with training bases in various skills competitions in China, enabling the competitors to participate in intensive training and exchanges to enhance their competitiveness. HKIC arranged the competitors to participate in exchange competitions across various regions, allowing them to gain practical experience and build confidence. To prepare the competitors to represent Hong Kong in the WorldSkills Competition, HKIC not only arranges extensive training camps in mainland China and participation in diverse exchange competitions, but also provides a range of soft skills training, including sports psychology workshops, to help the competitors to develop strong psychological mental resilience, enhance their overall skills level and competitiveness. Additionally, the Gold Medallist in Joinery of WorldSkills Lyon 2024 and his trainer were invited to host a sharing session “Crafting Dreams, Winning the Future” at Sheung Shui Campus, sharing their training and competition experiences with students and staff.



HKIC sent seven competitors to participate in the WorldSkills Competition, (from Left) CHAN Chun-hei for Concrete Construction Work, CHAN Chun-ting for Plumbing and Heating, TSANG Hei-lam for Concrete Construction Work, DAI Ka-chun Stephen (Back) for Wall and Floor Tiling, FONG Chun-yin for Joinery, Chow Lok-yin for Welding and WU Yunfan for Painting and Decorating

### Promote National Identity

To strengthen students' sense of belongings towards our country and raise awareness of national security, HKIC continued to provide national education in collaboration with the Hong Kong Army Cadets Association for Full-time students in 2024, including seminars on Symbolic Significance of the National Flag, Emblem, and Anthem and National Security Education Day: Holistic Approach to National Security.

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 titled Discovering World Heritage: Fujian Tulou Cultural Tour for students of Full-time Year-long programmes. Through visits in Xiamen and Zhangzhou, Fujian, students gained firsthand insights into the country's development from historical, cultural, and heritage preservation perspectives, broadening their horizons and strengthening their identity and pride in traditional Chinese culture.



Flag-Raising Ceremony Commemorates 27th Anniversary of the Establishment of the HKSAR



Discovering World Heritage: Fujian Tulou Cultural Tour



### Career Support Services

HKIC continuously offers graduates a wide range of employment services and training opportunities. It is also committed to expanding Approved Technical Talents Training Programmes (CICATP) and helping students develop their strengths to enter the construction industry. The success of HKIC relies on the support and trust of the industry over the years. Deepening industry collaboration can help students build networks and understand industry developments. The Employers Appreciation and 4th Outstanding Alumni Award Presentation Ceremony and Pledging Ceremony of WorldSkills Competition 2024 was successfully held on 20 August 2024, to appreciate the employers who staunchly supported HKIC throughout the year and to congratulate alumni on their outstanding achievements. To strengthen the link with the Guangdong-Hong Kong-Macao Greater Bay Area (GBA), an industry promotion and recruitment event at the Guangdong Talent Hub was held with the staunch support of the CIC on 10 and 11 November 2024, over 60 organisations, universities and employers participated in this event.

HKIC offers a wide range of career counselling services to graduates. Various activities, including Student Site Practice Scheme, Build Your Life Mentorship Programme, placement related workshops, placement or career talks, employers/association/alumni sharing sessions, site visits, job fairs, mock interviews, were organised for preparing students to join the construction industry. In 2024, HKIC held 87 employer sharing sessions, receiving approximately 2,400 participants. With full support of our industry partners, the employment rate of our Advanced Diploma graduates continues to keep at 100%, which proves the success of our programmes.



HKIC Graduation Ceremony 2024



Employers Appreciation and 4th Outstanding Alumni Award Presentation Ceremony and Pledging Ceremony of WorldSkills Competition 2024



An industry promotion and recruitment event at the Guangdong Talent Hub



## 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 5,603 whereas the graduation number was 11,171 for the Collaboration Training Schemes in Academic Year 2023/2024.

## Broadening the Types and Trades of Training Schemes

In response to industry needs, HKIC added two new trades in 2024, Mechanical Fitter and Construction Plant Mechanic to Intermediate Tradesman Collaborative Training Scheme (ITCTS), offering a total of 53 training trades. Furthermore, Advanced Construction Manpower Training Scheme – Pilot Scheme (Skills Enhancement Courses) has been added the trade of “General Welder” for training, offering a total of 24 training trades.

HKIC co-organised with Hong Kong Construction Sub-Contractors Association, Registered Specialist Trade Contractors Federation, 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 2024, HKIC arranged 36 ITCTS recruitment days and career talks in Hong Kong, attracting about 1,200 job seekers to participate in the activities and attend on-the-spot interviews.

Meanwhile, HKIC implemented Intermediate Tradesman Collaborative Training Scheme (Skills Enhancement Courses) Special Class of Multi-Skilled Training Course in 2024, for broadening the skill levels of in-service workers and encouraging registered semi-skilled technicians to improve themselves, thereby widening their employment opportunities.

Additionally, HKIC, with the Development Bureau’s support, initiated an first-hire-then-train on-the-job training scheme for training Construction Safety Officer. The graduates from the first class of Construction Industry and Safety Practices Certificate has successfully transitioned to the Construction Safety Officer Course and are all being employed.

## OPERATIONAL REVIEW

### Enhancement of the Management and Training Quality in Collaborative Training

In 2024, HKIC implemented several comprehensive measures to enhance and optimise the Collaborative Training Schemes continuously. These measures include the establishment of mechanism for ITCTS collaborative bodies (employers) application, the digital process for site inspections, and the optimisation of subsidy mechanisms.

In accordance with various mechanisms, HKIC handled applications and enhanced several quality assurance measures on monitoring training bodies and employers, 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. Additionally, 294 site trainers completed the Certificate in Instructing Techniques for Site Trainers programme in 2024 to strengthen their teaching and instructing skills for Collaborative Training Schemes, and to enhance teaching quality.

### Promotion of Construction Safety Culture

HKIC also implemented various safety promotion measures in Collaborative Training Schemes. These measures include arranging trainees of the collaborative training schemes to participate in online Silent Tribute, conducting safety harness training, and distributing safety commitment whiteboards and case sharing display boards to relevant training bodies, allowing trainers to conduct accident analysis and discuss improvement measures with trainees, so as to enhance construction site safety. On the other hand, HKIC invited training bodies to visit MiC Simulation Unit (Mockup Sample) of the Hong Kong Construction Industry Trade Testing Centre to explore the possibility of including MiC elements in Skills Enhancement Courses. Employer representatives, site trainers, and trainers of training bodies were invited to participate in an online sharing session on Construction Site Safety Management, Safety Culture, and Good Practices, attracting 100 participants.

### Recruitment and Training for Non-Chinese Speakers

HKIC cooperated with 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 and Multicultural Festival organised by Labour Department to promote ITCTS for Non-Chinese Speakers, and to promote the employment opportunities in construction industry for non-Chinese speakers.



A visit to MiC Simulation Unit (Mockup Sample) of the Hong Kong Construction Industry Trade Testing Centre



Joint inspection of new training venue

## Construction Industry Council Youth Affairs Committee



Construction Youth Exchange Programme in GBA 2024 – Visit Daya Bay Nuclear Station

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 youth in their developmental stages, and to formulate a framework for the development of youth in the construction industry in Hong Kong, with clearer visions and work plan. In 2024, CICYAC organised or participated in various youth development activities for the construction industry, provided young people with opportunities to achieve a work-life balance and develop team spirit.

Additionally, CICYAC led young practitioners to participate in volunteering services, encouraging youth to engage in community service and contribute positively to society. To provide youths of the Mainland and Hong Kong opportunities of understanding the development of construction industry in the Greater Bay Area (GBA) and Hong Kong, CICYAC organised the 2024 Construction Industry Youth Exchange Programme in GBA in summer with 110 young people visited six GBA cities and more than 19 construction and technology industry factories, universities, as well as different cultural attractions, and met with industry leaders to exchange ideas.



Distribution of "Construction Industry Lo Pan Rice"



Construction Youth Exchange Programme in GBA 2024 – Learning at Guangdong University of Technology



### 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.

As of 31 December 2024, over 250 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 and 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 fairs, Job Tasting Programmes, feature advertorials on online and print media, search engine marketing and exposures on digital media platforms of the CIC 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 are having the final assessment and assessing tree risk at Kowloon Park



Arborist trainees are learning the common tree species in urban areas during the field trip at Shing Mun Valley Park



Tree climber trainee is having the aerial rescue part of 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) remains dedicated to offering independent, equitable and creditable trade testing services. In 2024, the HKCITTC conducted over 22,000 trade tests and other services, including civil and building construction trade tests, construction-related electrical and mechanical trade tests, truss-out scaffolder safety training, trade tests for Grade A electrical work, certification tests for machineries and crane operation, etc. In parallel with maintaining high-quality and efficient trade testing services, the HKCITTC is also committed to collaborating with the construction industry to establish and enhance the construction skills standards.

## Keeping Up with Industry Developments, Enhancing Construction Skills and Safety Standards

### Continuously Improving and Promoting Safety of Truss-out Scaffolding

The HKCITTC launched the Truss-out Scaffolder Safety Training in 2023 to provide safety training for truss-out scaffolders and assess their skills in erecting and dismantling truss-out scaffolds safely. In 2024, the Labour Department published a revised "Code of Practice for Bamboo Scaffolding Safety", requiring trained workers performing truss-out scaffold works to hold a valid Truss-out Scaffolder Safety Training certificate. In order to support the industry practitioners to fulfill these requirements before the revised regulations take effect on 19 October 2024, the HKCITTC allocated resources to ensure all candidates who applied for the Truss-out Scaffolder Safety Training before 30 September 2024 could complete the training by due date.

Additionally, the HKCITTC actively participated in promoting truss-out scaffolding safety throughout the year, including participating in a TV promotional video production with the Construction Safety Department of the CIC and taking part in online seminars with the Property Management Services Authority and the Construction Safety Department of the CIC.



Promotional Video: Updated Code of Practice for Truss-out Scaffolding

### Promoting Professional Development in the Truss-out Scaffolding Industry

To promote professional development, construction quality, and safety in the truss-out scaffolding industry, the CIC collaborated with the Development Bureau, Labour Department, and Occupational Safety and Health Council (OSHC) to enhance safety for truss-out scaffolding in various aspects, including the professionalism and recognition of truss-out scaffolding contractors, safety awareness of construction workers, safety management systems, and construction quality. The CIC launched the Registered Specialist Trade Contractors Scheme for the scaffolding industry and the OSHC's OSH Star Enterprise – Truss-out Scaffolding Safety Accreditation Scheme (Safety Accreditation Scheme).



In light of the feedback from the industry pertaining to the difficulty in finding suitable sites for the Safety Accreditation Scheme on-site safety assessments, the HKCITTC is rebuilding one of its workshops to provide simulated scenarios as an alternative site option for the OSHC's Safety Accreditation Scheme on-site safety assessments.

To provide further protection for truss-out scaffolding workers, joint discussions between the CIC, Development Bureau, Labour Department, OSHC, and the Employees' Compensation Insurance Residual Scheme Bureau Limited (ECIRSB), aiming to offer support the provision of suitable employees' compensation insurance for truss-out scaffolding workers by truss-out scaffolding contractors, took place in 2024 and applaudable progress has been made.

Starting from 2025, the ECIRSB will offer various discounts on employees' compensation insurance to truss-out scaffolding contractors, who have appointed the holders of the truss-out scaffolding safety training certificate as their employees and/or themselves registered as the registered specialist trade contractor and/or become Star Enterprises under the Safety Accreditation Scheme, to further enhance the protection of truss-out scaffolding workers.



Representatives from the Development Bureau, Labour Department, Occupational Safety and Health Council, and the Employees' Compensation Insurance Residual Scheme Bureau Limited visited the HKCITTC

### Actively Promoting Modular Integrated Construction (MiC)

This year, the HKCITTC completed the setup of a MiC Connection Skillsets Mock-up (Trial) (MiC Mock-up), showcasing various connection skillsets used in MiC construction sites, including external walls, inner ceilings and floors, plumbing, electrical conduits, as well as structural connections.

The HKCITTC published a booklet titled Introduction to MiC Connection Skillsets Procedures aiming to promote the application of existing construction skillsets in MiC sites connections to the construction industry.



Booklet: Introduction to Modular Integrated Construction (MiC) Connection Skillsets Procedures

### Establishing the Greater Bay Area Standards (GBA Standards) for Skilled Workers

The Development Bureau of Hong Kong Special Administrative Region Government, the Human Resources and Social Security Department of Guangdong Province, the Department of Housing and Urban-Rural Development of Guangdong Province, and the Labour Affairs Bureau of Macao Special Administrative Region Government collaborated with training and assessing institutions, industry experts of Guangdong, Hong Kong and Macao to formulate GBA standards of the skill levels of skilled workers and technicians in the construction sector, and will take forward the "One Examination, Multiple Certification" arrangement, for enhancing the training quality of the construction industry in the GBA and nurturing talents.

As the skill assessment institute for the Hong Kong construction industry, the HKCITTC actively participated in meetings and discussions related to formulation of the GBA standards, taking forward the relevant work, and the GBA standards for the first two pilot trades (i.e. painter and bricklayer) were announced and the "One Examination, Multiple Certification" arrangement was taken forward in March 2025.



## Continuously Advancing Digitalisation to Enhance Testing Efficiency

### Fully Implementing the eScheduling System

The eScheduling system has been developed and fully implemented in all trades. Comprehensive adoption of the eScheduling system enables more effective resource allocation, enhancing resource utilisation and reducing waiting time for trade tests. Meanwhile, the system features real-time performance dashboards and predictive indicators that facilitate advanced anticipation and intervention by management in preventing prolonged service time.

### Pioneering the Use of Building Information Modelling (BIM) to Demonstrate Standard Operating Procedures

The HKCITTC has developed BIM models for over 30 popular trades to help candidates better understand test projects, drawings, and acceptance requirements, thereby enhancing candidates' output quality. Additionally, by making use of BIM, the HKCITTC has created 3D animation videos that demonstrate the standard procedures of test projects, making it easier for candidates and the industry to understand the construction processes and acceptance criteria for test projects.

## Enhancing Safety Culture and Occupational Safety and Health Levels by Adopting Smart Site Safety System (4S) of the HKCITTC

To showcase safe operation and the application of smart technology in the construction industry, the HKCITTC introduced 4S equipment such as the Overhead Protection Sensor System and Fall Arrester for elevating work platforms. Additionally, new equipment such as construction exoskeletons and battery powered wheelbarrow were purchased to enhance occupational safety and health. Such efforts aim to demonstrate to the industry how technology can be used to strengthen safety culture and occupational safety and health levels.

## Promoting World-Class Construction Craftsmanship

### The 3rd Hong Kong Construction Skills Competition

The CIC's WorldSkills Competition competitors achieved excellent results in the 2024 WorldSkills Competition, bringing honour to Hong Kong. Riding on this success, the HKCITTC held the 3rd Hong Kong Construction Skills Competition (Youth Group & Beginner Group) (Competition) in December 2024. The Competition newly introduced the Beginner Group aiming to attract more potential teenagers as new talents to the construction industry. New innovative elements were also incorporated to the Competition, blending traditional craftsmanship with innovative construction technologies, and injecting vitality into the development of the construction industry.

## Way Forward

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

- 1) Further integrate traditional craftsmanship with innovative construction technologies, and promote good and safe practices;
- 2) Continuously enhance the digitalisation of trade testing operations to improve trade testing efficiency; and
- 3) Actively promote trade test qualification and uplift the skill level of skilled workers.

## Construction Workers Registration Board

### Construction Workers Carnival

To enhance a united and caring culture among the construction industry, the CIC organised its first Construction Workers Carnival on 1 December 2024 at the CIC-Zero Carbon Park (CIC-ZCP), attracting over 6,000 construction workers and their families. The event received strong support from 15 industry organisations and participation from 125 organisations. The carnival featured game booths, technology showcases and various activities to promote construction safety and health messages, as well as providing workers with opportunities to experience the application of innovative technologies. Activities also included picnics, photo booths, and live entertainments including singing, kung-fu and dance performances, creating a memorable experience for the families of the workers.

The Carnival featured a workers' commendation by the management of the construction companies. The Pioneering Worker Appreciation recognised 347 frontline supervisors and workers in total while the Caring Company Appreciation recognised 34 companies. The award ceremony provided an opportunity for company executives to honour workers who have made contributions to construction safety and the application of technology. This enhances workers' pride and their professional status as professional construction craftsmen, allows their families to witness their remarkable achievements and enables companies to fulfil their social responsibilities and demonstrate the results of good corporate governance.



Construction Workers Carnival

### Construction Workers Professional Development Scheme (CWDS)

To encourage workers to improve their skills and self-development, and to drive the continuous development of the construction industry, the CWDS incentivises registered general workers and registered semi-skilled workers to upskill and drive sustainable developments by attaining trade tests, leading to promotion to semi-skilled or skilled workers. A total of 734 awards were presented within the year, amounting to HK\$2,920,000, to recognise workers' outstanding achievements in professional development.



Workers honoured in the Construction Workers Professional Development Scheme Award Ceremony



Construction Workers Professional Development Scheme Award Ceremony

## Comprehensive Support for Construction Industry Workers

The CIC is committed to promoting continuous improvement of working environment on sites, enhancing site safety and productivity. Throughout the year, two webinars were held to invite the industry to share best practices on workers site facilities.

The CIC provides a diverse recruitment platform for contractors, employers and workers, making job searching and recruitment processes more efficient and convenient. During the year, 23 recruitment days were held in the CIC Service Centre (Kowloon Bay), offering a wide range of job opportunities and welcoming on-site job interviews. The introduction of the CIC APP also enables personalised job recommendations and instant job applications, enabling workers to apply for suitable jobs anytime, anywhere.



Construction Industry Recruitment Day

The health of workers is equally crucial for construction safety. The CIC continues to implement the Medical Examination Scheme for Registered Construction Workers (MES) designed for registered skilled and semi-skilled workers. Additionally, the CIC launched Outreach Medical Examination Scheme on Construction Sites within the year, deploying medical staff to 11 sites to provide on-site medical examinations for all registered workers, aiming to encourage more construction workers to raise awareness, detect potential health issues early and take appropriate interventions promptly. Contractors are supportive on the Outreach Medical Examination Scheme, not only facilitate the medical examinations but also provide snacks for workers who completed fasting examinations to replenish their energy.



Outreach Medical Examination Scheme on Construction Sites

The next generation is an essential asset of the society. The scholarship for Family Members of Registered Construction Workers awarded a total of 39 awards amounting to HK\$348,000 within the year, recognising the outstanding achievements of the family members of registered construction workers in the Hong Kong Diploma of Secondary Education Examination.



Scholarship for Family Members of Registered Construction Workers Award Ceremony



### Enhance Worker Registration Services and Strengthen Connections with Workers

The CIC introduced a new and optimised electronic worker registration feature within the CIC APP, offering all-encompassing support for new registrations, renewal, update information, and report of lost or damage of worker registration cards. Through electronic payment tools, workers can conveniently and efficiently manage worker registration at any time and place.

Within the year, facilities at the CIC Service Centre (Kowloon Bay) were enhanced, including the addition of screens dedicated to broadcasting construction safety-related information for visiting workers to obtain the latest industry updates and continuously increase the awareness of construction safety. Information and seating arrangements in the promotion area were also improved to facilitate the introduction of CIC's events and benefits provided to workers, such as medical examination scheme and various subsidised courses.



CIC APP

### Inspection and 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 work on construction sites and submission of daily attendance records (DAR) of registered construction workers.

Throughout the year, the Inspection and Enforcement Team accomplished their annual inspection targets, conducting 1,683 site inspections on construction sites and 2,036 compliance checks on DAR submitted by principal contractors in accordance with the requirements in the CWRO.

In terms of prosecution works, a total of 174 summonses were issued for prosecution of the suspected offenders. Including cases from previous year, a total of 158 summonses, all relating to failure in submitting DAR in accordance with the CWRO requirements, resulted in convictions in 2024.

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

### Way Forward

The CIC will support construction workers in facing the challenges of the construction industry, increase publicity to encourage frontline workers to enhance their skills, as well as to recognise the efforts of frontline workers and supervisors who have contributed to the industry and society so as to boost morale within the industry and attract more talent to join the construction industry.

# The Registered Specialist Trade Contractors Scheme

The CIC established the Registered Specialist Trade Contractors Scheme (RSTCS) under the authority of the Construction Industry Council Ordinance. This initiative is specifically designed to regulate the performance of subcontractors in the industry and promote their professional development. Since the RSTCS was established, it has been widely recognised and supported by the industry. Contract terms mandating the engagement of registered companies by main contractors have been enforced in public works projects, gradually extending to other major quasi-public and private sector construction projects. As of December 2024, there were a total of 7,143 registered companies, including 2,638 Registered Specialist Trade Contractors of 20 designated trades and 4,505 Registered Subcontractors under general civil, building, and electrical and mechanical trades.

## Industry Support and Professional Enhancement

Through the six core registration elements advocated by the RSTCS: safety, management, finance, job experiences, execution, and integrity management, the level of corporate governance of registered companies is ensured from multiple aspects. Through collaboration and effective communication with various industry associations, the RSTCS has secured approval for the addition of seven designated trades this year, namely Painting, Metal Work, Structural Steelwork, Horticultural Works, Arboricultural Works, Skyrise Greenery Works and Truss-out Scaffolding, increasing the designated trades from 14 to 21. Additionally, the CIC continues to collaborate with the Independent Commission Against Corruption (ICAC) and relevant departments to promote a series of webinars on integrity management and safe practice through RSTCS's extensive platform, strengthening the integrity management and safety culture of the key management and technical personnel of registered companies, and encouraging their professional development for continuously enhancing both quality and efficiency of corporate governance.



RSTCS has been extended and 21 designated trades are now applicable

## Utilising Technology and Moves with the Times

Registered companies under the RSTCS are committed to applying innovative technologies specific to their specialist trades in conjunction with the management and operation of professional technicians, to enhance construction quality, efficiency and safety.

This year's RSTCS Leadership Summit, themed Set Sail with New Technologies, featured leaders from registered specialist trade contractors and trade associations sharing their practical experiences in applying automated equipment and robotics. Representatives from the Hong Kong Bar-Bending Contractors Association, the Hong Kong Center for Construction Robotics, and the Registered Specialist Trade Contractors Federation shared insights on collaborative interactions to optimise the automated rebar bending machine in connection with local trade characteristics, as well as the challenges faced and the outcomes of applied research. Representatives from the Hong Kong Painting Contractors Association and Guangdong Bright Dream Robotics Co., Ltd. shared their practical experiences in implementing painting robotics and presented data analysis demonstrating the positive initial outcomes of robot applications. Representative from the Hong Kong Metal Engineering Contracting Association introduced the use of welding robots in construction, exploring the future directions for deepening the application of artificial intelligence and catering for new high strength structural steel construction.



The 2024 RSTCS Leadership Summit, themed Set Sail with New Technologies, featured leaders from registered specialist trade contractors and trade associations sharing their practical experiences with the use of various automated equipment and robots

### Development of Youth Leaders and Carrying Forward

The RSTCS has consistently provided opportunities for the professional development and interactive exchange to cultivate the next generation of leaders, ensuring the transfer of management and technical expertise in specialist trades. Throughout the year, three Executive Training Courses were organised for members of the RSTCS's Young Leaders Network. Three distinguished speakers were invited to share insights on topics including how Environment, Social and Governance (ESG) concepts enhance corporate sustainability and competitive advantages, the original intent of the RSTCS and practical contract law management including an introduction and preparation for the Construction Industry Security of Payment Ordinance, facilitated exchanges and knowledge sharing among the young leaders.



Three Executive Training Courses were held for members of the RSTCS's Youth Leaders Network

### Construction Industry Alert on Managing Wage Records

In light of the increasing trend of wage arrears incidents in construction projects in 2024, most of which involve wages calculation disputes, the CIC promptly convened a thematic forum with representatives from major industry associations, unions and other stakeholders to actively exchange ideas and facilitate consensus. Through collaborative efforts, solutions were sought to address issues related to wage payment arrangements. The CIC also formulated the Construction Industry Alert on Managing Wage Records, reiterating the importance of adhering to good practices in managing wage payment records and ensuring the proper storage of relevant information to prevent wage disputes, based on the principle of integrity.



## Enhance Regulatory Action Mechanism

Construction safety is of paramount importance. On 1 January 2024, the RSTCS introduced an immediate suspension of registration mechanism for enhancing efficacy. The Committee on Registered Specialist Trade Contractors Scheme ("the Committee") can immediately suspend the registration of companies involved in serious accidents on construction sites. These registered companies must conduct an independent safety audit to review their safety management system and submit improvement based on the results of the safety audit and complete the implementation of the improvement measures. The Committee will consider lifting the "immediate suspension" upon the completion of an independent safety audit to the satisfaction of the committee by the registered company concerned. In 2024, a total of 16 registered companies were suspended in all designated trades, trades, and specialities. The CIC will continue to stringently follow up with registered companies involved in serious incidents in accordance with the regulatory mechanism under the RSTCS.

The Committee will also take regulatory actions against registered companies convicted by the court or those that violate the Rules and Procedures of the RSTCS. When evidence is established, the Committee will convene hearings with representatives of involved registered companies to determine the appropriate penalties. An independent appeal mechanism is also established to handle appeal cases. Throughout the year, a total of 69 registered companies were subjected to regulatory actions such as suspension or written warnings. These actions mainly involved violation of the relevant legislations concerning safety, late payment of wages and MPF contributions, as well as cases of serious incidents on construction sites.

All regulatory actions taken will be communicated to all registered companies, supporting organisations, and other stakeholders through electronic direct mailing (eDM) and published on the RSTCS website.

## Way Forward

The RSTCS will continue to support the ongoing safety and professionalism of specialist trades and collaborate with all stakeholders to expand its adoption for fostering the continuous development of the local subcontracting sector.

# The Technically Competent Persons Registration Scheme (TCPRS)

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. The number of TCPs reached 5,308 by the end of 2024, a notable growth of 23% compared to 2023.

## Enhancing the Continuous Competence Development Model

TCPs play a crucial role in supervising site safety. To enhance the Continuous Competence Development (CCD) Model and continuously improve the standards of TCPs, Integrity has been incorporated into the CCD Model in 2024. Alongside Statutory Requirements, Environmental and Health, Advanced Construction Practices, and Safety, these five core pillars encourage registered TCPs to engage in continual professional development.

In addition, six webinars were organised in 2024 to introduce the TCPRS and the registration process. One of the webinars was tailor-made with the theme of Technically Competent Persons Registration Scheme – Responsibilities and Duties of Site Supervision Streams under the Buildings Ordinance which was held with speaker from the Buildings Department and provided detailed insights regarding the duties of the site supervision streams. Throughout the year, the webinars attracted over 1,500 industry stakeholders to participate.

## Optimising the Path to Register as TCPs

To encourage frontline site personnel to apply for registration as TCPs, applicants who possess the respective minimum qualifications and experience for TCP of grades T2, T3 or T4, but do not fulfil the local experience requirement, may apply for registration as TCPs. Successful applicants will be listed as a lower grade in the respective types of TCP categories.

## Way Forward

With the aim of enabling TCPs to effectively leverage their capabilities in construction works and to achieve safe construction sites together, the CIC will actively promote the TCPRS to the industry and facilitate the continuous competence development of TCPs through TCPRS.

## The Construction Innovation and Technology Fund (CITF)

The Construction Innovation and Technology Fund (CITF) continues to play a pivotal role in transforming Hong Kong's construction industry by enhancing productivity, quality, safety, and environmental performance through automation, digitalisation, and industrialisation. Since its inception in October 2018, CITF has been a catalyst for technological advancement within the industry.

### Key Achievements of 2024

In 2024, CITF maintained its momentum in supporting the local construction industry. The annual amount of approved fund grant and disbursements for 2024 was HK\$377M and HK\$187M respectively, setting a record that was 20% higher than in 2023. Compared to 2023, the total cumulative fund grant increased by 35%, reaching HK\$1,496M. Additionally, there was a 24% increase in the number of approved applications, with 4,450 out of 6,600 received being approved.

The six categories of funding support – Building Information Modelling (BIM), Advanced Construction Technologies (ACT), Modular Integrated Construction (MiC), Prefabricated Steel Rebar, Industrialised Process – Robotic Welding, and Manpower Development continued to see significant uptake. The total number of beneficiaries increased to 1,297 in 2024, with significant contributions from 786 small and medium enterprises (SMEs), reflecting broader adoption of new technologies. Additionally, 18,078 cumulative training places were approved, benefiting construction personnel at various levels including professionals, technicians, and students, and fostering a culture of innovation.

CITF conducted the comprehensive review of Pre-approved Lists in 2024 with inappropriate items delisted to ensure the suitability of the pre-approved items. There were 139 new admissions to the Pre-approved Lists in 2024, which was 74% higher than in 2023, marking the highest number in four years.

### Enhancement Measures Implemented in 2024

In May 2024, CITF expanded funding support for the industry to implement Smart Site Safety System (4S) in private work sites, including additional network fees, additional manpower costs, maintenance, and technical support required for 4S implementation. To facilitate industry's selection of suitable 4S products, CITF published a 4S packages and 85 4S products in the CITF Pre-approved Technologies List, representing a 41% increase compared to 2023.

In response to pressing concern on incidents related to mobile plant, CITF's support on 4S was extended to construction plant rental companies to expedite the procurement and installation of detection and alert systems for mobile plant operation danger zone and tower crane lifting from September to October 2024. These extended enhancements contributed to 52% of a total of 447 4S applications since the expanded funding supporting for 4S began in April 2023. Furthermore, "Good Practice for Installation of Smart Site Safety System (4S) on Tower Cranes and Mobile Plants" was published on the CITF website in Q4 2024 to further facilitate the adoption of 4S and enhance construction safety in relation to mobile plants and tower cranes.

To further expedite the approval process of CITF fund application, additional authority was granted to the CITF Secretariat in October 2024 to approve BIM and ACT funding applications for pre-approved items or associated BIM hardware.

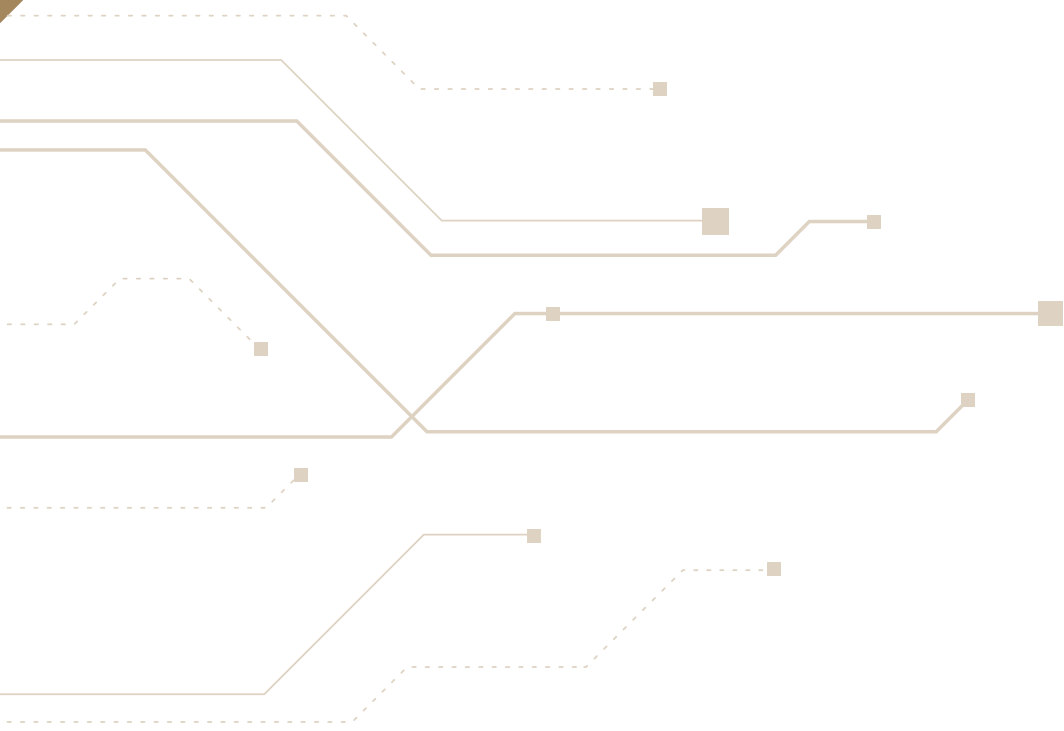


Active Engagement of the Industry

The CITF Secretariat’s Outreach Team has continued to strengthen its engagement with industry stakeholders, especially SMEs. In 2024, the team delivered or participated in over 190 outreach activities to increase industry awareness in innovation and promote the benefits of technology. This included 142 seminars and webinars, representing a 48% increase compared to 2023, as well as 52 cross-departmental and external party events to maximise exposure across various sectors.

Way Forward

As CITF enters its seventh year of operation, we remain committed to promoting wider adoption of innovative technology and construction methods. Our focus will be on areas that provide significant benefits in addressing industry needs, including but not limited to robotics, 4S, MiC and Multi-trade Integrated Mechanical, Electrical and Plumbing (MiMEP). We are dedicated to gathering feedback from industry stakeholders to drive continuous improvement and ensure our initiatives meet the evolving needs of the construction industry.



## Corporate Secretariat

The Corporate Secretariat (C-SECT) plays a crucial role in delivering high-quality secretarial services and administrative support to the Council and the Executive Committee, which are two top authorities of the CIC. It is instrumental in ensuring the CIC meets all statutory and appointment obligations, while also maintaining corporate integrity and governance standards. C-SECT aids the Council in making significant policy decisions and setting strategic directions. To enhance the quality of meeting documentation and correspondence, C-SECT has implemented Grade Management for secretariat staff of the CIC. Additionally, it is responsible for developing governance systems and procedures, formulating corporate policies and guidelines, preparing documentation frameworks and templates, and providing ongoing training on relevant topics for CIC staff.

### Strengthening Corporate Governance Standards and Enhancing Secretarial Services

In 2024, C-SECT organised four interactive and refresher training workshops focused on corporate governance and writing skills. Utilising Grade Management, C-SECT conducted thorough evaluations and offered constructive feedback to improve the quality of secretarial services provided by various CIC business units on a regular basis. Additionally, C-SECT revised the Corporate Secretariat Operation Manual to incorporate the latest operational practices for the benefit of secretarial staff.

### Publishing Informative Materials

C-SECT published and distributed the bilingual CIC 2024 Major Work Plans in March 2024. 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. In March 2024, C-SECT released and distributed the bilingual CIC 2024 Major Work Plans. To facilitate access, the electronic version was made available on the CIC website. Furthermore, during the orientation for new Council Members, C-SECT provided an Information for Council Members Booklet to assist them in their roles. In light of the changes in the corporate governance structure that took effect on 1 May 2024, C-SECT reviewed and updated the Corporate Governance Manual in May and uploaded onto the CIC website for public access.

### Updates on the CIC Fellows

C-SECT continued to provide staunch support to the CIC Fellows and committed to operating initiatives of the CIC Fellows including the CIC Members cum Fellows Visit (MFV) Programme and the CIC Fellows Sharing.

Three MFV visits to various CIC premises or facilities were held in 2024 covering the HKIC Sheung Shui Campus (SSC), the CIC-Zero Carbon Park together with the Construction Innovation and Technology Application Centre, and the HKIC Kowloon Bay Campus (KBC). The valuable improvement suggestions made by the visiting groups helped to enhance the operation of various departments or business units and also contributed to strengthening the governance and service quality of the CIC.

Four CIC Fellows Sharing sessions were conducted on HKIC campuses in 2024. 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 KBC with Ms. Eliza WONG as the guest speaker, followed by sharing sessions conducted at SSC with Ir CHAN Chi-chiu and Ir Rocky POON respectively, and at KBC with Sr YU Kam-hung. The CIC Fellows would continue to contribute to the holistic development of HKIC students through such sessions.

In addition, in the Annual Event of the CIC Fellows, the CIC Fellows enjoyed the sharing from tech ventures in the Hong Kong Science & Technology Parks (HKSTP) and a guided tour to another tech venture located in HKSTP.

### Recognition from 2024 HKMA Quality Award

C-SECT coordinated the CIC's participation in the 2024 HKMA Quality Award. The CIC was awarded the Excellence Award for demonstrating organisational excellence in total quality management, contributing to the sustainable success of the construction industry in Hong Kong. With the achievement of this prestigious award, the CIC remains committed to upholding the highest standards of quality and continuously improving CIC services.

### Improving Stakeholder Relationship

The Stakeholder Relationship Management System was revamped to further optimise the management of appointment records of various entities under the CIC, providing a more holistic view of appointment records and facilitating more efficient reporting. The improved system has significantly enhanced CIC's ability to manage stakeholder relationships effectively.

### Way Forward

In 2025, C-SECT will persist in its supportive roles for the Council, the Executive Committee, and the CIC Fellows, emphasising the enhancement of secretarial service quality and the maintenance of high corporate governance standards within the CIC. To enable the Council to concentrate on strategic development directions, C-SECT will assist in reviewing Corporate Governance. Additionally, C-SECT is currently organising an orientation for new Council Members and plans to publish the bilingual CIC 2025 Work Plans in early 2025.



2024 HKMA Quality Award



## Corporate Communications

The Corporate Communications Department is committed to promoting the Construction Industry Council (CIC) and the industry as a whole, and strengthening the role of the CIC as an advocate in the industry. The department's main responsibilities include managing the CIC's publicity programmes and activities, public and media relations, the Construction Industry Sports & Volunteering Programme (CISVP), etc. We also maintain effective communication with various stakeholders in the industry, and anticipate and respond to potential crises in a timely manner.



"CIC See What I See" Luncheons

### Large-scale Promotional Campaign and Events

In the third year of the "Design for Future, Build for Life" Campaign, the CIC continued to work with the Development Bureau to lead different industry stakeholders to enhance public understanding of the construction industry through different platforms, and attract young people to join the industry. In 2024, more diversified promotional activities were launched under the Campaign, including "Constructing Tomorrow: Towards a Sustainable Future" Roving Exhibition, DSE Roadshow Campaign, "STEAM UP" Project, etc. The department has also been conveying the professional image of the construction industry to the community through different social media platforms.

### Facilitating Industry Collaboration and Communication

In 2024, the Corporate Communications Department continued to organise the Annual Cocktail Reception and the "CIC-See What I See" Luncheons to provide a platform for the Government and the construction industry to exchange views and promote the development of the industry. At the "CIC-See What I See" Luncheons, we are honoured to have Ir Prof. Frank CHAN and Ir Allen YEUNG, Hong Kong Deputy to the National People's Congress, Prof. LING Kar-kan, the Director of Jockey Club Design Institute for Social Innovation, and Mr. Andrew WEIR, Global Chair, Asset Management and Real Estate, KPMG International, as the guest speakers, attracting a total of nearly 11,000 physical or online visits. The Corporate Communications Department also regularly updates the "Safety Walk with Thomas" column on the CIC website to share innovative safety technologies and global construction technologies with the industry.

### Commitment to Social Responsibility

Through the CISVP, the Corporate Communications Department has been actively promoting the CIC's social responsibility to help build a caring culture and promote physical and mental well-being of people from different sectors of the industry. In 2024, CISVP organised activities such as Construction Industry Volunteer Award Scheme, the Construction Industry Lo Pan Rice Campaign, Happy Run, Basketball League, Table Tennis Competition, etc., and has launched a new initiative, the Inheritance of Traditional Craftsmanship Eco-Planter Campaign, which aims to help the community to build more eco-planters and enhance the sense of well-being of the community. In 2024, CISVP recorded 14,812 participants and benefited 61,227 persons. We were also awarded the "Outstanding Non-commercial Organisation Award" in the "Hong Kong Volunteer Award 2024" co-organised by the Home and Youth Affairs Bureau and the Agency for Volunteer Service.



The Inheritance of Traditional Craftsmanship Eco-Planter Campaign



Received the "Outstanding Non-commercial Organisation Award" in the "Hong Kong Volunteer Award 2024"

### Key Publicity Programmes

The Corporate Communications Department has been providing professional advice to other departments of the CIC on their publicity programmes and event planning, with a view to enhancing the corporate image of CIC on different platforms. Through the bi-monthly magazine "Construction Post", the department shares the CIC's and industry information with frontline workers. In addition, the department provided advice on online and offline publicity channels, approaches and strategies for key programmes such as the CIC Global Construction Digitalisation Forum and Exhibition, the CIC Outstanding Contractor Award and the Construction Workers Festival, and supported the CIC to send competitors to participate in the WorldSkills Competition in 2024.

### Way Forward

The Corporate Communications Department will continue to uphold the professional image of CIC and the industry in an innovative and professional manner. In the coming year, the department will organise the Construction Industry Outstanding Young Person Award to encourage the new generation to contribute to the industry. To further enhance the awareness of construction site safety, we will also continue to promote innovative construction technologies through organising activities and publicity programmes. We will foster collaboration between the construction industry in Hong Kong and China to lead the industry in sustaining excellence and take industry development to a new peak.

## Human Resources & Administration

The Human Resources Department is dedicated to supporting the development and operational needs of CIC's business units through talent planning, acquisition, development and engagement. Robust policies and procedures are in place to ensure good governance, fairness, and transparency.

The Administration Department ensures that our work environment operates smoothly, efficiently and sustainably by coordinating efforts amongst business units. We optimise resources and promote sustainability through standardisation, automation and adoption of new technologies.

### Fostering a Strong Corporate Governance Culture

The Human Resources Department is committed to upholding CIC's high standards of corporate governance, ensuring our operations and management practices promote accountability, fairness and transparency. It is crucial to equip our staff with the necessary knowledge and continuous updates on relevant ordinances, policies and procedures.

Professionals and representatives from various law enforcement or regulatory bodies are invited to conduct trainings on anti-bribery, protection of personal data, equal opportunities, construction and workplace safety and cybersecurity. New joiners are required to complete these trainings as part of their onboarding process. Additionally, regular refresher training and townhall meetings are organised for all staff to instil a compliance mindset and keep them informed of the latest developments.

### Enriching the Learning Environment

To meet the fast-changing development of the construction industry, we are dedicated to expanding and enriching our learning environment to ensure our staff are well-equipped to address the industry's specific needs and challenges. In 2024, we organised a number of seminars and training workshops covering a wide range of topics for different levels of staff, including industry knowledge, AI technology, digital literacy, safety, personal data protection, cybersecurity and other management skills.

We also continued our CIC Talents Development Excellence Talks series, inviting distinguished speakers to share their valuable insights and experience with our staff. The speakers for the 2024 Excellence Talks included Mr. Jasper TSANG, Founding Chairman of the Democratic Alliance for the Betterment of Hong Kong, Mr. Bernard Charnwut CHAN, Chairman of M+ Museum, Mr. Marco FU, professional snooker player, and Dr. Yat YAU, acclaimed scholar and expert in "Sunzi Bingfa".



Mr. Marco FU speaks at the 2024 CIC Talents Development Excellence Talk



We maintained the 24/7 e-learning platform for staff to learn at their own time and pace. The platform was widely utilised by staff and contributed significantly to our learning culture. This dedicated effort was also well recognised with the CIC being awarded the highest Gold Award for Learning Champion in the Public Sector category at the 2024 LinkedIn Talent Awards.

### Nurturing the Next Generation for a Sustainable Future

As a commitment to the industry and to the society to ensure talent sustainability, we are dedicated to grooming young blood to become future leaders. Our Graduate Trainee Programme (GT Programme) is a testament to this commitment, offering high-calibre young graduates on-the-job learning, job rotations and all-rounded training under the guidance and support of senior management mentors. The GT of the 2023 intake is now ready to meet new challenges of their careers at the CIC upon completion of the 18-month Programme, while the 2024 intake has made good progress in their first job rotations, strengthening their industry knowledge and other management skills through regular retreats and training sessions.

In 2024, the CIC expanded its young talent acquisition efforts to the Greater Bay Area, facilitating talent flow and manpower development in the region. We held recruitment events in Xiamen and Guangdong to attract young Mainland graduates to our Hong Kong offices.

To further attract future graduates to the CIC and the construction industry, the CIC offers a Summer Internship Programme for undergraduates from various disciplines. The eight-week on-the-job training programme helps young students deepen their understanding of the construction industry and gain valuable experience from mentors, broadening their exposure and preparing them for future careers.

### Enhancing Connection with the Community and Industry

The CIC recognises the importance of community engagement and social responsibility, which align with our core values of “Caring, Integrated, Commitment”. Thus, the CIC launched the Energising Programme in mid-2024. This initiative encourages all full-time staff to participate in CIC events during their leisure time with focus on three key areas: Caring for Community, Safety Awareness Initiatives, and Enhancing Industry Knowledge.

As of 31 December 2024, all CIC staff had enrolled in various activities under the Energising Programme, with more than 14,000 participating hours registered in the three focus areas. To show our appreciation for our staff’s commitment to the Programme, we presented a Most Active Participation Awards to staff who participated the most hours in each category in 2024.

### Cultivating an Appreciative and Supportive Work Environment

We believe that our staff is the foundation of our success and are committed to fostering an appreciative and supportive work environment to attract and retain talents. Throughout 2024, a variety of staff engagement activities were organised to enhance staff relations and promote wellness. These activities included new staff orientation, engagement workshops, team-building sessions, Annual Dinner, Lunar New Year Gatherings, Family Fun Carnival, Christmas Movie Day, Friday Happy Hour workshops and Lunch Time is Fun online talks.



Family Fun Carnival

To express our appreciation for staff's long dedicated service, 30 staff members who have completed 10, 20 or 30 years of consecutive service are honoured with Long Service Awards presented at the 2024 Annual Dinner. Our commitment to caring for staff extends to their families as well. Apart from inviting them to join some of our staff engagement activities, we also restructured the CIC Education Support and Scholarship for Staff Children to continue providing financial support and scholarship for education of staff's children.



Corporate Culture Workshop cum New Staff Orientation

## Strengthening Safety and Information Security

Safety is always on the top of our priorities. To proactively mitigate risks, the Administration Department conducted a comprehensive assessment of the work environment to identify and eliminate potential hazards. We also display safety slogans prominently in various CIC premises to remind staff and integrate safety practices into our daily operations. Additionally, we required our service providers to strengthen their safety management by revisiting safety protocols and enhancing safety training for their staff.

To uphold the highest standards for protection of personal data and information security and ensure sensitive data is managed promptly and securely, we implemented a series of measures including establishing the handling procedures for disposing confidential documents and introducing secure printing functions for multifunction devices.

## Way Forward

As we move ahead, the Human Resources Department will continue with our commitment in attracting and retaining talent to support the growth and development of the CIC. In alignment with the Year of Professionalism in 2025, we have already embarked on various initiatives with focus on enhancing corporate governance, safety, adopting new technologies and ensuring talent sustainability. We will further enrich our talent development plans for all levels of staff, equipping them to meet the industry's specific needs and challenges. We shall also put more efforts to enhance staff engagement, aiming to build a more cohesive and motivated workforce and ensure that staff feel valued and appreciated for their contributions.

To support CIC's Sustainability Strategy, the Administration Department will continue utilising data analysis to reduce resource usage and enhance efficiency. We are also actively transitioning to new energy vehicles to reduce carbon emissions and promote sustainable development.

# Corporate Safety

The Corporate Safety Department (CST) is tasked with ensuring the safety and health of all CIC staff, students, and individuals impacted by the organisation’s operations and activities. CST oversees the implementation of a safety and health management system designed to create a safe and healthy workplace and environment for all stakeholders, thereby preventing injuries and illnesses.

## Reinforce Incident and Accident Reporting

The Corporate Safety Department reviewed and updated incident and accident reporting in 2024 to reinforce safety reporting and protect data privacy.

## Raise Safety Awareness at Townhalls

The Corporate Safety Department shared safety messages with all CIC staff in two CIC town halls in 2024 to reinforce safety awareness and safety culture of CIC staff and enhance office safety.

## Way Forward

To achieve continual improvement in safety and to meet the expectation of our stakeholders and the industry, CST will continue to devote to cultivating a safety-first culture at all levels and to stimulate the enhancement of CIC internal safety performance.



## Estates Office

The Estates Office (EO) is committed to the strategic management of facilities across CIC properties. EO oversees land leases for outdoor training grounds and manages building maintenance, low-voltage systems, office improvements, and landscaping. By implementing a centralised monitoring platform, EO have enhanced resource and facility utilisation, driving efficiency and innovation in our management practices.

### Achievements in 2024

#### Adoption of Smart Site Safety System (4S) IoT at Training Ground

The implementation of the 4S displacement monitoring system for the supporting bases of tower cranes, along with the 4S monitoring and health analysis system for the wiring rope of tower crane, was successfully completed at the Tai Po Training Ground (TPTG) in the fourth quarter of 2024. Both systems are now operational. This advancement enhances safety and operational efficiency on-site, minimising risks associated with tower crane operations.

#### Adoption of 4S AI cameras

Starting in the second quarter of 2024, AI cameras equipped with fire and smoke detection, as well as personal protective equipment (PPE) monitoring, have been installed at various CIC project sites to enhance site safety supervision. Additionally, in the third quarter of 2024, AI cameras with people counting functionality were expanded to cover Hong Kong Institute of Construction (HKIC) – Sheung Shui Campus and Kwai Chung Campus, complementing existing systems at CIC-Zero Carbon Park, HKIC – Kowloon Bay Campus, and TPTG to improve operational management. These enhancements significantly bolster site safety and operational efficiency, ensuring a safer working environment for all personnel.

#### Adoption of Drone-based Visual and Thermal Façade Inspection with AI Analytics

EO has adopted drone technology for visual and thermal inspections of building Façades, integrating AI analytics to enhance the assessment process. This innovative method allows for comprehensive inspections from multiple angles, reducing the risks associated with manual inspections at heights. The AI analytics provide real-time data analysis, correlating defect locations with Building Information Modelling (BIM) to identify potential issues such as heat loss and structural anomalies with precision. This enables proactive maintenance decisions. Overall, this adoption not only boosts inspection efficiency but also supports the long-term sustainability of our facilities.

### Way Forward

#### Continuous Advancement of Smart Facilities Management Control Centre (SFMCC)

EO will enhance the SFMCC by expanding covered premises and integrating innovative solutions to improve efficiency, sustainability and safety. Our focus on advanced safety technologies and AI applications will optimise operations and user experience, ensuring a secure work environment. EO will adopt AI-driven predictive analytics for safety protocols, implement systems for hazard alerts, and deploy smart monitoring devices to mitigate accident risks. Additionally, innovative AI technologies such as smart energy meters, will further enhance operational efficiency and security within the CIC.

# Information Technology

Throughout 2024, the Information Technology Department (ITD) has been dedicated to supporting CIC's digital transformation journey and enabling business initiatives with IT solutions. Key initiatives and contributions are summarised in the sections below:

## Upkeeping Cybersecurity and Information Security

- Enhanced the outside-in cybersecurity posture in many aspects, as evidenced by the 3rd-party security rating, which was raised significantly to "A"
- Being awarded a prestigious Platinum award in the "Cyber Security Staff Awareness Recognition Scheme 2024" by Hong Kong Internet Registration Corporation Limited (HKIRC) and Information Systems Audit and Control Association (China Hong Kong Chapter) (ISACA)
- Rewarded staff who serve as our human firewall and proactively report malicious emails through a gamification scheme. On some occasions, approximately 40% of staff reported phishing emails
- Cultivated a security-conscious workforce by delivering 12 mock phishing exercises, regular training, and monthly cybersecurity bulletins

## Big data to Support Data-driven Organisation

ITD harnessed the power of big data to provide valuable insights and drive decision-making processes. With 1.4M records of construction workforce and stakeholder data, ITD implemented an advanced analytics and visualisation platform to visualise the data in graphical format. This has enabled business users to draw actionable insights from the presented data to improve their planning and business performance. Over 20 dashboards delivered cover areas such as Workers demographics, Skills Training Output, Trade Testing Results, Quarters' Accommodation and Application, CIC APP Usage and Adoption, Financial Performance, and Income Forecast.

## Leveraging IT to Support CIC Strategic Goals

- The CIC APP, consolidated from the legacy easyJob and Safety App, was launched in August and turned into an everyday app for construction workers. After the launch of the construction workers registration feature in late October, the app recorded over 1,300 registration-related applications. This converted to 500 days of productivity savings for the industry

- The Hong Kong Construction Industry Trade Testing Centre further adopted digital means in their scheduling, written-test, workshop assessment, and post-testing survey which enhanced productivity and operational effectiveness
- The Online Programme Application System for Hong Kong Institute of Construction was adopted for applications to over 300 HKIC programmes. The system also supports a wide range of electronic payments such as Alipay, WeChat Pay, Google Pay, Apple Pay, and PayMe. With many manual processes digitalised, the productivity and operational efficiency have improved significantly
- The Property Management System for the Construction Sector Imported Labour Quarters was deployed to support accommodation and works order management of the quarters
- The Stakeholder Relationship Management System (SRMS) for the Corporate Secretariat was deployed to manage memberships and appointments of the Council, Boards and Committees. This has benefited the Council in ease of information retrieval and better stakeholder engagement
- Deployed the CIC Smart Waste Management Platform for the Environment & Sustainability Department, which assists Construction Site representatives in streamlining their operations by preparing necessary submissions to the Environmental Protection Department for landfills
- Completed the development of the Frontline Personnel Safety Performance Recording System to support the recording of desired and undesired behaviours of workers with an aim to identify bad practices and habits for correction

## Workplace System Enhancements

- Completed the development of the Works Registration System and Event Registration System. The two systems established an IT-supported review process for all works to be carried out and events to be organised for review by relevant subject matter experts to reduce compliance, safety, and cybersecurity risks
- The Staff Energising Programme Reward System facilitates employees to participate in and gain participation points for rewards from volunteering, learning, and sports events during their leisure time
- Various meeting and event venues are upgraded with new Audio-Visual equipment to cater for CIC geographically diverse operations.

## Technology adoptions and modernisation

- Introduced since May 2024, the ITD Brown Bag event invites colleagues and IT practitioners to share their project experience and how various IT solutions can enhance cybersecurity and productivity. The event series attracted over 500 attendees and gained popularity among CIC colleagues
- The hosting infrastructure has fully adopted active-active architect which provides a high availability and resilience environment for CIC applications. The network and system availability have exceeded 99.9% overall uptime
- Upgraded over 500 application and database servers to the latest supported operating system versions to maintain cybersecurity and optimise fault tolerance
- Implemented application code scanning technology and code deployment pipelines to identify and remove vulnerabilities and programming loopholes. The overall application security was increased



### Way Forward

The ITD has also transformed from a supporting unit into a business partner that provides digital solutions to various business lines. In 2025, the ITD will focus on the following key areas:

#### Stakeholders and Employee Experience

- Continuously enhancing the CIC APP by adding Trade Testing Application and targeted messaging. The CIC APP is expected to contribute 15,000 days of productivity (around HK\$21.7M) to the industry by allowing workers to do worker registration and trade testing applications online
- Adopt Generative AI to assist employees with procedure observance
- Initiate Enterprise Resource Planning (ERP) revamp project by business process reengineering
- Streamline HKIC's operation by integrating the eScheduling System, Curriculum Management System and Training Management System to achieve operational efficiency
- Introduce more self-service features in the Employee Service Portal to provide convenient and guided service requests to employees

#### Enhancing Cybersecurity and Organisation Resilience

- To provide further assurance to the CIC and stakeholders that CIC's cybersecurity is at a healthy state and to attain ISO27001 certification
- Uplift the governance in IT Demand Management, IT Project Management, and 3rd Party Management
- Implement a new email security gateway to safeguard the CIC from phishing emails and ransomware attacks
- Replace VPN with Secure Access Service Edge (SASE) to support secure remote work and connections between CIC sites and offices
- Adopt Software-Defined WAN (SD-WAN) to lower operational costs and maintain network resilience
- Set up Network Operation Centre (NOC) to monitor and control application and work network availability, usages, and performance

## Procurement

The Procurement Department is committed to supporting the operations of the CIC by understanding the needs of stakeholders and businesses, managing the transactions of goods and services, and ensuring compliance with procurement procedures. The Department aims to contribute to 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 2024, including:

- Design, Production, Educational and Promotion Services for the STEAM Education Portal
- Consultancy Services on Pilot Run of Design for Safety Implementation (2nd Phase)
- Feasibility Study on Construction Site Electrification and Clean Energy Adoption
- Digital and Social Media Agency Services for the “Design for Future, Build for Life” Campaign
- Consultancy Study and Development on CIC Smart Waste Management Tool (Phase Two)
- Expression of Interest for Provision of Enterprise Resource Planning Solution
- User Experience Study and Revamp of CIC Website
- AI-Based Digital Mailroom Service
- Cybersecurity Service Management

The Department also assisted in tender management for other large-scale events and facility uplifting projects such as:

- Event Management and Production Services for Global Construction Digitalisation Forum and Exhibition 2024
- Design and Renovation Works at 1/F of Hong Kong Institute of Construction – Kwai Chung Campus
- Provision and Installation of Gas Filters for Training Workstations at Hong Kong Institute of Construction – Sheung Shui Campus Welding Workshop

### Enhancement Initiatives

Throughout the year of 2024, the Department completed initiatives in different areas of enhancement, including:

- The Corruption Prevention Department of ICAC was invited to review and provide consultation on the Procurement Manual and process with satisfactory results and valuable comments. ICAC also subsequently arranged Corruption Prevention Trainings to all staff members with a high attendance rate
- User training, including but not limited to on-board training for new joiners and Procurement Champion meetings, were conducted to reinforce the controls and requirements in procurement
- Procurement Champion mechanism and Procurement Hotline were launched to streamline communication and facilitate procurement processes
- Enhancements in procurement reporting

### Project and Supplier Management

The Procurement Department assists the Project Committee with administrative tasks while ensuring that all projects adhere to the Project Management Handbook (Non-Capital Projects). Additionally, the Department maintains and expands the supplier database and regularly reviews suppliers' performance.

### Way Forward

With the engagement of an external consultant to streamline processes within the procurement cycle, the Procurement Department strives for higher efficiency in processes and operations. Additionally, we are further enhancing procurement digitalisation, and plan to leverage Large Language Model (LLM) AI solutions to better understand and meet procurement requirements for all CIC colleagues. These initiatives will ensure more efficient procurement processes, aligning with our commitment to continuous improvement.





## Finance

The Finance Department has continued to serve as a strategic business partner to the CIC and its stakeholders throughout 2024, delivering a full spectrum of finance services, including but not limited to financial and management reporting, levy assessment and collection, strategic planning and decision support, budgeting and forecasting, treasury and investment management, financial analysis, company secretarial work, bank account operations, and various finance-related projects.

In 2024, the Finance Department accomplished significant milestones in its pursuit of digitalisation, process optimisation, and enhancement of corporate governance.

### Furtherance of Digitalisation for Levy Operations

The Levy E-Service platform facilitates levy form submission by the Contractors in a more effective and efficient manner. It provides a direct means for the CIC to maintain a transparent communication with the Contractors. With the use of computer technology, stronger controls and compliance are made possible with the levy system. The use of AI has also helped to identify non-reported cases which should be subject to levy.

### Efficient Treasury Management

The Finance Department created and launched a set of management dashboards to provide management and relevant stakeholders with detailed insights on investment and treasury performance. These dashboards bring together important financial data and performance indicators and facilitate management in making informed decisions. By combining key information, these dashboards improve the ability of the departments to monitor and optimise financial results effectively.

### Enhanced Performance Monitoring

Business plans, budgets, and key performance indicators (KPIs) are integrated as departmental resource planning and management tools based on a cloud storage platform. Regular monitoring of budget utilisation and KPIs performance ensures achievement of the CIC's strategic goals and effective resource utilisation.

### Improved Reporting and Control for Construction Sector Imported Labour Quarters (CSILQ)

The capital expenditures and operating costs of CSILQ were closely reviewed to maximise its cost-effectiveness. The financial reporting processes were further enhanced to provide timely financial updates, facilitating more efficient resources planning and budgeting for CSILQ.

### Way Forward

The Finance Department will continue to explore the digitalisation journey to further enhance various finance functions. New dashboards will be developed to provide comprehensive and actionable insights for decision-making. This initiative will involve developing constructive recommendations and action plans to streamline processes and ensure effective resource utilisation. Further enhancements on levy system will be made to improve users experience in levy form submission and communication with the CIC. The Finance Department will continue to deliver financial expertise and professional advice, supporting the CIC in enhancing benefits for all stakeholders and achieving its strategic objectives.

### Legal and Compliance

In 2024, Legal and Compliance Department (L&C) has made significant strides in strengthening our ethical, legal, and data protection frameworks. We have successfully developed and institutionalised a robust Whistleblowing Policy and a comprehensive data privacy governance framework.

The launch of the Whistleblowing Policy by L&C demonstrates the management's commitment to empower employees and stakeholders to report unethical or unlawful behavior with confidence and to cultivate a culture of high integrity and ethical accountability. We established clear protocols and practice notes and conducted employees' training to ensure its effectiveness. The role of continual monitoring was timely handed over to the independent Internal Audit Department by end of December 2024 to enhance corporate governance.

By managing internal and external complaints to ensure remedial and improvement actions are taken, L&C performed Service Enhancement functions in 2024 before handing over to the Internal Audit Department by year end.

L&C has also established a comprehensive governance framework for data protection across the organisation. This includes standardising the way we communicate to our stakeholders on our data practices, ensuring consistency and clarity. A Data Protection Officer was appointed to oversee this governance structure for data protection, with support from Data Protection Champions across

different business units. Data practices have been reviewed to align with the newly established Personal Data (Privacy) Policy and its Standards and Procedures and ensure that privacy consideration is integrated into the business process early on.

To further embed a culture of data protection, we have implemented role-based training programmes tailored to the specific responsibilities of employees. These sessions are complemented by regular Data Protection Champions meetings, which serve as a platform for knowledge sharing, issue escalation, and continuous improvement. These champions play a critical role in fostering awareness of data protection and become advocates for privacy and compliance.

#### Way Forward

Looking ahead, as a foundation, we recognise that these past achievements are not merely procedural, they represent a cultural shift towards greater integrity, accountability, and trust. As L&C continue to evolve, L&C remain committed to advocating and upholding the highest standards of legal services and compliance standards in the CIC.