



CONTENTS

- 2 Figures at a Glance in 2021
- 6 Highlights of the Year
- **13** Chairman's Message
- **18** Chairman's Review
- 20 Executive Director's Report
- 25 Membership of CIC
- **31** About the Council
- **34** The Council and its Committees
- **35** Corporate Governance Report
- 58 Membership of Committees and Boards, and Terms of Reference
- 80 Senior Management
- 82 Organisation Chart

- 83 Operational Review
- **137** Diversity and Inclusion
- **144** Sustainability Report
- 160 Highlights of Audited Financial Statements for 2021
- 164 Independent Auditor's Report
- **167** Financial Statements
- 173 Notes to the Consolidated Financial Statements
- 204 Annex

FIGURES AT A GLANCE IN 2021



Site Inspection and Enforcement



Number of sites inspected



15,342





Number of trade tests conducted

* Including civil and building construction trade tests; construction-related electrical and mechanical trade tests and others.

Hong Kong Institute of Construction



[#] Included full-time course, part-time course and collaboration scheme



students were successfully placed within one month upon graduation

Urban Forestry Support Fund – Trainee Programme



FIGURES AT A GLANCE IN 2021



FIGURES AT A GLANCE IN 2021





Construction Innovation

Commemorative plaques were presented to InnoCell and the Married Quarters for the Fire Services Department at Pak Shing Kok in Tseung Kwan O to mark the completion of two of Hong Kong's first Modular Integrated Construction (MiC) projects.



The International Conference on Modular Integrated Construction 2021 invited MiC experts from around the world for discussions on the development of MiC.







The first **CIC Construction Digitalisation Award 2021** recognised outstanding local projects and local organisations for their achievements in digitalisation and innovation to improve construction productivity, quality, sustainability and safety.





CITAC Anniversary Conference 2021 provided a platform for local and overseas expert to share knowledge and experience in big data mining and analytics as well as exploring how these tools unlock the game-changing benefits to solve industry problems.

"CIC BIM Competition" was held for the third year, aiming to promote the practical uses of Building Information Modelling (BIM) through collaborative and competitive learning approach among teams of tertiary students in construction-related disciplines.





Industry Development

The kick-off ceremony of **"Life First"** was successfully launched on 11 May.





Construction Safety Week 2021 focused on "lifting and heavy machinery operation safety" was held to enhance awareness in the industry on construction safety, and encourage the adoption of innovative technologies to create a working environment with "zero accidents".





The newly relocated **CITAC** and the brand new **Sustainable Development Exhibition** joined the **MiC Resources Centre** and **CIC BIM Space** in CIC-Zero Carbon Park to form the **iHub** as part of its

continued efforts to promote wider adoption of advanced construction technologies to innovate industry practices.







CIC Outstanding Contractor Award 2021 recognised outstanding contractors for their achievements in driving innovation, fostering professionalism, injecting revitalisation and upholding corporate governance. 11 winning companies were selected through a comprehensive and rigorous evaluation process by the judging panel.





Aiming to support the HKSAR Government's carbon neutrality target and in response to the growing demand for sustainable finance across industry, the **Sustainable Finance Certification Scheme** was launched to provide a common framework and a simplified assessment system that facilitate sustainable financing.

The biennial CIC Young Construction Conference and the **2nd "Construction Industry Outstanding Young Person Award" Presentation Ceremony** were held successfully on 26 June 2021.





During **Construction Month 2021**, over 20 activities, encompassing key industry events and a series of fascinating programmes were held to promote sustainable industry development and motivate the public in leading a low-carbon lifestyle.



"MiC: Maximise Infinite Creativity" Mini-Building Model Competition aimed to ignite creativity among secondary school students, hoping to bring fresh new ideas to our urban landscape and the construction industry. 14 outstanding building models were selected and exhibited in the CIC-Zero Carbon Park during the "Construction Month 2021".





The **"18 Districts Lo Pan Rice" Campaign** was organised from 16 to 23 July 2021 during the birthday of master Lo Pan. Teams of volunteers from 37 supporting organisations distributed nearly 5,000 meal boxes at 51 distribution points across 18 districts.

ConstructionIndustryVolunteerAwardPresentationCeremony2021washeld on18July2021andnearly100,000servicehourswasrecorded overtheyear.





Despite the pandemic, a series of sports programmes were held to encourage a healthy lifestyle amongst industry practitioners.



Fight Against COVID-19



With the support from the Development Bureau, the CIC and the Hong Kong Construction Association jointly launched the **"Construction Industry COVID-19 Testing Service Scheme"** with the support from the Development Bureau of the HKSAR Government, to help stop virus transmission and protect workers as well as their families.



Construction industry showed unity while getting vaccination together.





"Construction Workers Vaccination Lucky Draw" successfully distributed prizes worth over HK\$3 million to lucky workers who have received COVID-19 vaccine.



CHAIRMAN'S MESSAGE

CHAIRMAN'S MESSAGE



"I am honoured to be appointed as the new Chairman of the Construction Industry Council (CIC) to lead the industry as it forges ahead with its development. It is my objective to leverage my extensive experience in Hong Kong's construction industry, specifically in the area of technological innovation and the promotion of digital and innovative construction method, to lead the CIC in creating a more innovative, safer and stronger construction environment under the current challenging circumstances."

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I would like to express my sincere gratitude to our former Chairman, Mr. Chan Ka-kui, for his tireless efforts and leadership over the past six years in steering the Council to a number of outstanding achievements and laying a solid foundation for the Council's future work.

The enormous construction expenditure in the coming decade, coupled with the aging problem of the construction industry, brings dual challenges to the industry in Hong Kong. We must embrace innovation and technology, and at the same time revitalise the industry by attracting more young talents. In the coming years, my goal is to promote Hong Kong as the innovation and technology hub in the region, and even in Asia. We will strive to make Hong Kong the best smart city in Asia, and to create a better living environment for Hong Kong citizens through innovative construction technologies. Construction safety is my other focus to protect workers and elevate the public perception of the industry.

Braving the Challenges and Breaking Through Waves

In response to the pandemic's repeated hits, the CIC implemented a number of initiatives to ensure the industry is able to operate as efficiently and effectively as possible while navigating the disruptions created by the pandemic. To ensure the safety of frontline workers, the CIC has been actively encouraging workers to get their vaccination since 2021 and provides regular testing to intercept the virus' transmission chain in a timely manner. The construction industry also used innovative construction techniques, such as Modular Integrated Construction, to swiftly build the Penny's Bay Quarantine Centre and The North Lantau Hospital Hong Kong Infection Control Centre to in order to provide a safe environment for the increasing number of people required to undergo compulsory guarantine. As the fifth wave of the pandemic hit Hong Kong, the construction industry was ready to assist the government fight the pandemic by using innovative construction techniques to build community isolation facilities in a record time.

Innovation Fuels Future Development

In recent years, the construction industry has been under tremendous pressure in terms of manpower, productivity and safety. To alleviate these challenges, the CIC has been leading the industry to break new ground in using innovative technology and thinking out of the box as it works with the industry to develop a long-term and sustainable future.

Over the years, the CIC spared no effort in spearheading innovation in the industry to boost construction productivity. This year the CIC-managed Construction Industry Innovation and Technology Fund received an injection of \$1.2 billion from the Government's Budget which it will use to further drive industry innovation. We regularly review new applications of various innovative technologies to continuously improve areas such as productivity, construction quality, site safety and sustainability.

Digitalisation of the construction industry is one of the cornerstones driving Hong Kong's future development. During the year, CIC collaborated with international experts and key industry stakeholders to develop a "Construction Digitalisation Roadmap for Hong Kong". The application covers six high-value digital application areas including Smart Data Sharing, Smart Planning and Design, Smart Submission with BIM, Smart Offsite Fabrication and Delivery, Smart Site Management, and Smart Asset and Facility Management. In line with the Hong Kong Smart City Blueprint 2.0, we are actively promoting smart concepts and innovative technologies to facilitate the sustainable development of the construction industry. Over the past few years, CIC has been promoting the industrialisation of construction and the use of innovative technology and digitalisation. Amongst the various applications, the Modular Integrated Construction (MiC) method introduced by the CIC has successfully been used in over 70 projects in Hong Kong. The industry also applied the experience gained in the early stage of the fight against the pandemic to rapidly build a number of anti-pandemic facilities using the MiC construction method. The overwhelming satisfaction of the quarantine centres raised the community's awareness of MiC and laid a solid foundation for MiC to be used in future development projects.

Looking ahead, we envisage that innovative building technologies such as MiC and digital building technologies will be widely used throughout Hong Kong, as it provides an ideal solution for long-term and sustainable development of the industry.

CIC is organising the triennial flagship event "Construction Innovation Expo 2022 (CI Expo)" this year. The event will include a four-day exhibition of innovative construction solutions and international conferences on various topics. It will also bring advanced construction technologies from around the world to Hong Kong and provide a platform for the industry to exchange ideas and explore more local and overseas business opportunities in the construction industry.

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Professional Team in Unity

There are a number of major infrastructure projects coming up in Hong Kong, including the Northern Metropolis Development Strategy and the Lantau Tomorrow Vision projects, which brings exciting new opportunities for the industry. To meet the huge construction demand in Hong Kong over the next decade, the Government has allocated \$1 billion in the new Budget to boost manpower supply. The CIC hopes that this will increase the industry's productivity, raise its professional image and attract more talents to the industry.

The Hong Kong Institute of Construction will continue to provide training courses suitable for practitioners at all levels and introduce appropriate collaborative training programmes based on market conditions. For example, to address the industry's current manpower shortage problem, the Collaborative Training Scheme's "first-hire-then-train" approach is being expanded to attract new talents. Additionally, the CIC regularly reviews ways to upgrade workers' skills and to supplement its "professional" career development path. Programs include the Hong Kong Institute of Construction's series of courses for frontline workers and managers accredited at Levels 2, 3 and 4 of the Hong Kong Qualifications Framework. The Institute also signed a Memorandum of Intent with the Hong Kong Metropolitan University to explore the provision of part-time degree programmes with local universities. With a clear progression ladder, we hope to attract more talented young people to join the construction industry and become the industry's future backbone through programs to upgrade their skills and academic gualifications.

Unveil Our Way To The Future Together

Hong Kong is committed to achieving carbon neutrality by 2050. In 2017, CIC launched an annual initiative to promote sustainable development with the goal of helping the industry develop low-carbon and green buildings. The CIC Carbon Assessment Tool established in 2019 helps the industry to systematically measure the carbon footprint of building materials and construction processes, build a comprehensive carbon performance database for Hong Kong's built environment, and complement the Green Product Certification platform to assess the environmental performance of building construction materials. With the successful launch of the CIC Sustainable Finance Certification Scheme, CIC hopes to establish a common framework and a simple assessment system for the construction industry to support the development of more green construction projects in Hong Kong and the Greater Bay Area through utilizing sustainable finance tools thereby driving the pace of sustainable development in Hong Kona.

In addition, the CIC is committed to exploring new business opportunities in order to broaden the scope of industry's development. The Greater Bay Area is the future for world-class bay areas. It provides an excellent place for Hong Kong's construction industry and young people to advance their careers and excel in the future. Although the pandemic limited people's mobility to cross the border to the Greater Bay Area, the CIC is continuing to assist the industry in exploring and establishing supply chain networks in the region. Currently, it is setting up a Greater Bay Area Liaison Office to provide a bridge between the industry and its construction partners in the Greater Bay Area. The CIC has also launched the Greater Bay Area Construction Development Platform to enhance communication and cooperation between local and Greater Bay Area's construction industry practitioners and to explore business opportunities for construction companies in the Greater Bay Area. The CI Expo to be held in December this year is expected to attract over 250 exhibitors and encourage business collaboration between local, the Greater Bay Area and overseas companies.

Finally, I would like to express my heartfelt gratitude to all CIC members, committee members and staff for their dedication and commitment in carrying out their duties during this unprecedented pandemic. With the trust and support of the Development Bureau and the Hong Kong construction industry, I am confident that the CIC and everyone who is a part of the industry will ride out this storm together to create a better future for Hong Kong's construction industry.

Ir Thomas Ho

Chairman, Construction Industry Council (Since 1 February 2022) May 2022

CHAIRMAN'S REVIEW



Time flies and years passes by, I completed my six-year term as Chairman of the Construction Industry Council (CIC) at the beginning of 2022.

I would like to thank my fellow CIC members and colleagues for walking alongside me, as well as the Development Bureau and various works departments for their support in progressing the construction industry in a number of areas.

In face of the social unrest in 2019 and the coronavirus pandemic that brought the global economy to a halt for more than two years, CIC has taken proactive measures to lead Hong Kong's construction industry in overcoming recent challenges and find ways to build a better future for Hong Kong.

Over the past few years, promoting the construction industry reform has been one of the top priorities of CIC. We have spared no effort to promote the application of the Modular Integrated Construction method (MiC). As of the end of 2021, there are more than 70 MiC projects that are completed or in progress in Hong Kong. MiC was adopted to build a number of anti-pandemic isolation facilities at breakneck speed to protect lives of the community which made a significant contribution to the fight against the pandemic in Hong Kong. To promote the benefits of MiC, including enhancement in productivity, efficiency, quality, safety and

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environmental protection, CIC established Hong Kong's ascending position in the international MiC arena by organising a series of international seminars. Additionally, CIC collaborated with nine local tertiary institutions to incorporate Building Information Modelling (BIM) into their curricula and launched the Certification and Accreditation Schemes to promote the adoption of BIM in the industry. Due to travel limitations as a result of the pandemic, the Construction Innovation and Technology Application Centre (CITAC) organized 65 digital technology-related webinars to explore appropriate innovative technologies and solutions for the industry.

After several years of hard work, a number of the Hong Kong Institute of Construction's (HKIC) programmes were successfully recognized as QF2, QF3 and QF4 in the Hong Kong Qualifications Framework, establishing a well-defined progression pathway for students and graduates to advance their education. Last year, CIC completed an enhancement project to upgrade its facilities and strengthen the training on digital technology as a way to nurture a new generation of construction practitioners with innovative minds and the ability to effectively use construction technology. At the end of 2021, HKIC signed a Memorandum of Intent with the Hong Kong Metropolitan University to enable graduates with appropriate qualifications to articulate to relevant degree programmes. Furthermore, the Approved Technical Talents Training Programmes and the Registered Specialist Trade Contractors Scheme launched in 2019, as well as the establishment of the Approved Employer List last year, have enhanced their relevant assessment systems. These programs have become extremely influential to the success of bolstering the construction industry's professional image.

Since 2017, the CIC has launched a number of sustainability initiatives, including the CIC Sustainable Construction Award, the CIC Green Product Certification, the CIC Carbon Assessment Tool and the CIC Sustainable Finance Certification Scheme launched in 2021. These initiatives were established

to encourage the Hong Kong construction industry to initiate more sustainable and green construction projects. Furthering these efforts, CIC also organised the first-ever CIC Construction Digitalisation Award in 2021 to recognise outstanding local projects and organisations that have adopted innovative digital technologies to improve construction productivity. For the first time, the CIC bestowed the Outstanding Contractor Award, which is also known as the Oscar of the construction industry, to recognise local contractors and their outstanding contribution to the industry and the community.

The Construction Industry Sports and Volunteering Programme (CISVP), established in late 2016, organizes series of sports competitions and volunteer activities for the industry. We are very pleased that many practitioners became CISVP members are passionate about sports or volunteering. Many construction companies have set up their own volunteer and sports teams to collaborate and enhance construction workers' quality of life, to build a caring culture within the industry.

The tougher the road, the sweeter the taste of success. The past six years would not have been possible without the collective efforts and hard work of all CIC members, committee members at all levels and all staff. I am confident that under the leadership of Ir Thomas Ho, the new Chairman of CIC, the Hong Kong construction industry will continue to strive for excellence as we build a dynamic and vibrant city that integrates sustainable development.

Chan Ka-Kui

Chairman, Construction Industry Council (Retired since 31 January 2022)

EXECUTIVE DIRECTOR'S REPORT



Turning Challenges into Drivers

For the Hong Kong construction industry, 2021 was a roller-coaster year with a myriad of challenges. The construction industry was awash with a range of problems including construction delays due to stringent lockdown measures, interruptions in access to funding sources and serious disruptions in supply chains. The aforesaid challenges however presented an opportunity to the Construction Industry Council (CIC) in uniting the industry to act decisively and curtail the impact of these difficulties on the overall development of the industry as it strives to build a better future.

Facing the profound impact Covid-19 had on both the economy and the lives of Hong Kong people, the CIC played an enormous role to safeguard the construction industry during this downturn by working around the challenges created by the pandemic while pressing ahead on its robust infrastructure development plan supported by the HKSAR Government's desire to increase housing supply. The CIC acted vigorously to beef up the industry's productivity with technologies and foster young talent's development of important industry skills and innovativeness. The CIC also strives to achieve sustainable development through utilizing carbon measuring tools and green financing schemes.

Caring for Workers

Workers' well being and safety is always our top priority. The novel coronavirus epidemic overwhelmed Hong Kong and seriously impacted construction workers' livelihood as many workers who were infected or quarantined are family breadwinners. The CIC promptly responded by providing financial assistance and caring support to construction workers to help them get through these tough times. The CIC fully understands the workers' burden and moved to extend the Campaign 2.0 in 2022 and other protective measures with the support of the Development Bureau, to protect workers' health and ease their financial concerns.

To encourage construction workers to get vaccinated and increase the industry's vaccination rate, the CIC and the industry set up a "Construction Workers Vaccination Lucky Draw", distributing prizes worth HK\$3.3 million to lucky workers who received the COVID-19 vaccination. The Lucky Draw gave away a total of 411 prizes including the grand prize which was a pre-paid card or credit card with a spending credit valued at HK\$300,000.

With the provision of HK\$70 million to support registered construction workers who were underemployed or temporarily unemployed due to the COVID-19 pandemic, the CIC launched the "Construction Industry Council Relief Fund - Multiskills Training Scheme for Registered Workers". The program consists of 21 full-time short courses to encourage workers to acquire new skills and enhance their competitiveness to prepare for future changes in the development of the industry. Through the Multi-skills Training Scheme, the CIC aims to assist construction workers acquire new skills to enhance their competency while they are in between jobs, making it easier for them to switch to other trades in need of workers or for better job prospects.

With united efforts, the CIC will stay focused and diligent in battling challenges and seizing new opportunities within the industry as it continues to excel and flourish.

Promoting Innovative Technology and Construction Digitalisation

Hong Kong's construction industry is accelerating its digital transformation efforts in response to limitations created by the Covid-19 pandemic. Promoting smart construction to enhance productivity and rejuvenating the industry's workforce is high on the CIC's agenda. As part of the "Construction 2.0 strategy" launched in 2018, the CIC actively promotes smart and sustainable construction practices along with the adoption of innovative technologies including Modular Integrated Construction (MiC) and Building Information Modeling (BIM) to enhance the industry's productivity and attract digital-savvy young talent.

MiC is an innovative and environmentally friendly construction method that has gained a high level of importance in the technological development of Hong Kong's construction industry. In 2021, the industry successfully integrated MiC technology to build the Hong Kong Infection Control Centre of North Lantau Hospital. The speed and ease in which the hospital was constructed fully demonstrates the success in harnessing the versatility of MiC in urgent and largescale development projects. To further establish Hong Kong as an important player in the international MiC market, CIC successfully held the International Conference on MiC for the third consecutive year. The conference attracted over 1,400 experts from across the globe, providing them with the opportunity to exchange views and insights as well as share the latest developments and professional advice on the MiC in their respective regions and jurisdictions. The wealth of knowledge gained from the conference is expected to stimulate a wider MiC adoption in Hong Kong.

By the end of 2021, over 15 MiC projects were completed; specifically the high-rise Fire Services Department's Married Quarters at Pak Shing Kok marked a major step forward in utilising this technology. Additionally, there were more than 60 projects under construction or in the planning stage to adopt MiC including the refurbishment of the Western Police Married Quarters, the Kwun Tong Composite Development, and an extension to the Legislative Council complex. The success of these projects will be remarkable proof showing MiC effectiveness and suitability for a wide variety of construction applications in Hong Kong. The initiatives proposed in the "Chief Executive's 2021 Policy Address" highlighted that more construction projects will be adopting MiC in order to expand the housing supply in an effort to improve Hong Kong's living environment and standards.

The ongoing development of professional talent and solidifying advanced industry knowledge is essential in order to accelerate construction innovation. The CIC pressed ahead in mobilizing workers' professional development. The CIC renamed MiC Display Centre as MiC Resources Centre for demonstrating residential flats built with MiC. In the past year, CIC organised five local seminars and workshops which attracted over 5,500 participants in total. The MiC Resources Display Centre joined Construction Innovation and Technology Application Centre, CIC – Zero Carbon Park and Building Information Modelling Space to form the Construction Exhibition Hub to serve as a professional knowledge platform for the industry.

Fortifying the construction industry's digital transformation, the CIC has achieved considerable success from embracing BIM. In September 2021, the CIC renamed the Building Information Modelling Department as the Construction Digitalisation Department, expanding its role to orchestrate the wider adoption of BIM and other digital construction technologies in architecture, engineering, construction and operations. The CIC also developed new strategies to accelerate the market transformation and promote cross-discipline collaboration in the industry. These programs provide a solid foundation along with extensive infrastructure to empower Hong Kong's construction industry to incorporate BIM as part of its long term development plans.

In 2021, the CIC won the Gold Award (BIM Projects – BIM initiatives Category) granted by HKIBIM Award 2021 for publishing a series of publications related to new and updated BIM training and BIM standards in mobilizing the development of BIM in Hong Kong. This recognition from the industry bolsters our confidence and reinforces BIM's use by Hong Kong's construction industry's professionals.

The CIC Construction Digitalisation Award 2021 is given out to recognise outstanding local projects and local organisations for their achievements in digitalisation and innovation to improve construction productivity, quality, sustainability and safety. This year the CIC received 120 entries in its two categories, "Project" and "Organisation". 23 winning teams were selected through a rigorous evaluation process.

The use of digital technology in construction has now become commonplace in the industry. To further promote digitalisation in the Hong Kong construction industry, the CIC has been working with experts and key industry stakeholders to craft the Construction Digitalisation Roadmap. The Roadmap includes a Construction Digitalisation Dashboard and highlights six high-value areas: Smart Data Sharing, Smart Planning and Design, Smart Submission with BIM, Smart Offsite Fabrication and Delivery, Smart Site Management, and Smart Asset and Facility Management. It also lists strategies to encourage a greater adoption of digitalisation.

The Construction Innovation & Technology Fund (CITF) continues to promote wider adoption of innovative construction methods and technology in the construction industry to boost productivity, uplift built quality, improve site safety and enhance environmental performance. Up til the end of 2021, the total accumulative number of beneficiaries increased to 849 covering technologies and

initiatives in BIM, Advanced Construction Technologies, MIC, Prefabricated Steel Rebar, Industrialised Process – Robotic Welding and Manpower Development. In 2021, Advanced Construction Technologies, BIM software and BIM training courses on the Pre-approved Lists continued to expand to 566 pre-approved items by 2021.

Making Sustainability an Imperative

As one of the economic pillars of Hong Kong, the construction industry is closely related to Hong Kong's sustainable development. Driving the sustainability of the industry is the eager cooperation and support from the industry in various areas. Despite the challenges posed by the prolonged COVID-19 pandemic, the CIC remained committed to enhancing the business environment and promoting sustainable development in Hong Kong's construction industry on many fronts over the past year.

The launch of the CIC Sustainable Finance Certification Scheme marks another milestone in the construction industry and encourages Hong Kong's development as a sustainable green city. The Scheme which is developed based on three Principles - Integrity, Internationality, and Intelligence, aims to support the HKSAR Government's carbon neutrality target and the growing demand for sustainable finance across the construction industry. The Scheme provides a common framework and a simple and easy assessment system that brings together stakeholders including developers, contractors, subcontractors and suppliers. 19 pilot projects from 17 organisations successfully obtaining the certification in 2021. These organizations utilise the tools for sustainable finance and further develop more sustainable construction projects. They also support green finance in Hong Kong's construction industry and raise awareness of sustainable financing solutions available to the construction industry while supporting Hong Kong's carbon neutrality agenda.

To showcase the industry's ability in DfMA and the multi-trade integrated approach for MEP works, CIC together with the Hong Kong Federation of Electrical & Mechanical Contractors Limited successfully organized the DfMA MiMEP Tradeshow 2021. The Tradeshow served as a platform for sharing the best practices, innovative ideas and benefits to adopting DfMA for MEP works. The 25 innovative and inspirational exhibits, drew over 6,600 project clients, industry practitioners and government regulators to the Tradeshow. In addition to the Tradeshow, CIC

organized a conference and a technical forum. 15 industry experts from project clients, practitioners, specialist contractors, and professional bodies shared their knowhow and experience in adopting DfMA – MiMEP works during these events.

Although the pandemic hindered our ability to freely travel to the Greater Bay Area, local industry stakeholders' interest in collaboration with other GBA cities is still a high priority. The CIC strengthened connections with GBA construction stakeholders and launched the Greater Bay Area Construction Development Platform in 2021. The platform provides an online company directory to facilitate the development of construction supply chains in nine selected GBA cities and two special administrative regions, Macao, and Hong Kong. Over 200 companies joined the platform to participate in the expanding business opportunities between GBA cities.

In 2022, CIC plans to establish a liaison office in the Greater Bay Area to enhance its communication channel and support connecting Hong Kong and GBA construction stakeholders.

Empowering New Generation to Lead Change

The future of Hong Kong's construction industry relies on both traditional skills and craftmanship, but also training younger talents in innovative techniques that will help the industry evolve.

The completion of upgrading the campus at Hong Kong Institute of Construction (HKIC) opens a new chapter in construction training. The campus provides advanced hardware for students and a comprehensive learning environment. In line with the education system in Hong Kong, HKIC is committed to optimising its full-time courses. Currently, a total of 25 qualifications are recognised under the Qualification Framework accredited at QF Level 4, Level 3 and Level 2.

HKIC strives to provide opportunities for young people to receive professional training and build a career path to higher level management. Young students who completed Secondary 3 can acquire professional skills in HKIC and enter the construction industry after becoming semi-skilled workers. Graduates can start their career with systematic apprenticeship training and then transfer to a university degree programme. Launched in 2019, the Construction Industry Council Approved Technical Talents Training Programmes (CICATP) has provided systematic on-the-job and enrichment programme training to about 100 CICATP apprentices. These apprentices are the first batch of knowledge-based skilled workers trained by HKIC and who will be the pillar supporting the future of our construction industry.

HKIC aims to nurture an accomplished construction workforce with sound professional skills. Its commitment to the "Construction Pathway Project" provides graduates with a comprehensive pathway and progressive development in a vocational or professional career in the construction industry. All these initiatives pave the way for young talents to pursue a career in construction, contributing to the industry's sustainable development.

The CIC is developing a CIC BIM Starter Guide for new BIM users. This is an easy and user-friendly pamphlet to assist the industry, in particular small and medium enterprises, on BIM adoption.

To uphold the quality and ascertain the competency of BIM personnel in the industry, CIC has launched the BIM Certification and Accreditation Schemes (the Schemes) since 2019. 484 BIM Managers and 338 BIM Coordinators have been certified under the Schemes by end of 2021.

On the training side, the CIC will continue to consolidate training needs from the industry and collaborate with the School of Professional Development in Construction (SPDC) and BIM training service providers to offer necessary training courses to meet industry demands. In addition, the CIC will include BIM and Construction Digitalisation in the Science, Technology, Engineering and Mathematics (STEM) Education program for secondary school students through taster workshops.

The CIC organised the CIC BIM Competition for the third consecutive year in 2021, with the aim to promote the practical uses of BIM through a collaborative and competitive learning approach among participating teams of higher education students in constructionrelated disciplines. We also organised 20 different webinars to strengthen students' knowledge and skills in BIM to facilitate outstanding performance. These webinars covered BIM authoring tools, Geographic Information System (GIS) platforms, Common Data Environment (CDE) related solutions and building energy simulation software, and net zero building design.

To promote the MiC method, the CIC successfully launched the "MiC: Maximise Infinite Creativity" Mini-Building Model Competition to stimulate creativity among secondary school students and to provide participants with trainings on MiC and related technology.

Leading the Industry to Improving Safety

Safety is paramount to the CIC. The loss of even one life is unacceptable yet in 2021, the industry suffered 23 fatalities showing more can be done to improve on-site safety. To increase safety awareness, the focus of this year's Construction Safety Week was "lifting and heavy machinery operation safety". The CIC also launched its 'Life First' campaign which encourages all stakeholders – including the owner, the contractor and sub-contractors, designer and architect – to regularly walk the site to ensure there are no loose ends or potentially dangerous areas. "Design for Safety" was developed last year providing guidelines to promote good practices in planning and design for safety in the project life cycle. This aims to make on-site safety an absolute priority by involving all parties at every stage.

To further enhance the safety of the construction industry, the Committee on Construction Safety develops and presents initiatives to foster a positive safety culture by providing guidance and training on safe practices. The CIC and the Hong Kong Construction Association co-organised the seventh annual "Experiential Learning on Site Safety Training Scheme 2021–22" to educate and cultivate proper site safety awareness among future construction talents. It provided training sessions to enhance awareness and necessary knowledge on construction safety for undergraduates planning to join the construction industry.

Way Forward

Both the Hong Kong community and the construction industry continue to evolve and adapt to cope with the impact of the ongoing pandemic, while continuing to seize a variety of valuable opportunities. To achieve our goals, the CIC will continue to provide support for all stakeholders working towards construction digitalisation and seamless adoption of related technologies contributing to Hong Kong's sustainable development in transitioning to a smart city. As a strong proponent of the construction industry, the CIC is committed to fight the pandemic and overcome challenges as it leads the way forward towards a sustainable future. We will lead the CIC team to promote new initiatives in various key areas to achieve our vision for the future. Our main focus will cover promotions of innovation adoption in the construction industry and BIM education in higher education institutions. We are also determined to reduce fatal accidents and enhance overall safety standards while developing relevant reference materials and organise promotion activities for the industry. Equally important is the Greater Bay Area which is our next target to explore and establish supply chains to develop business opportunities for local enterprises.

In conclusion, I want to acknowledge the hard work and dedication of the CIC team during this year of unprecedented challenges. I am grateful for every staff member who rose to the occasion. We appreciate their dedication, skills and focus which allowed us to roll out so many successful programmes and initiatives, and I am proud of their considerate efforts.

Finally, I want to thank all my work colleagues, the many stakeholders across the construction industry, and the government officials who all rallied behind the CIC during this difficult year. We have all emerged stronger – and are well-positioned to make our industry safer, more sustainable, and more innovative for the years ahead.

Ir Albert CHENG

Executive Director, Construction Industry Council, May 2022









RETIRED CIC MEMBERS AND CURRENT CHAIRPERSONS OF MANAGEMENT BOARDS

Retired CIC Members

(Retired on 31 January 2022)



2 Mr. CHONG Kin-lit, Paul Chairperson, ZCB Management Board



Mr. CHOI Wun-hing, Donald

Management Board

Chairperson, Construction Innovation

and Technology Application Centre

ABOUT THE COUNCIL

About the Construction Industry Council

The Construction Industry Council (CIC) was formed in 2007 under the Construction Industry Council Ordinance (Cap. 587). The CIC consists of a chairman and 24 members representing various sectors of the industry including employers, professionals, academics, contractors, workers, independent persons and Government officials. The main functions of the CIC are to forge consensus on long-term strategic issues, convey the industry's needs and aspirations to the Government, provide professional training and registration services, and serve as a communication channel between the Government and the construction industry.



Please visit **www.cic.hk** for further details.

Vision and Mission



Vision

To drive for unity and excellence of the construction industry of Hong Kong.



Mission

To strengthen the sustainability of the construction industry in Hong Kong by providing a communications platform, striving for continuous improvement, increasing awareness of health and safety, as well as improving skills development.

CIC Functions (up to 31 December 2021)

Under Section 5 of the Construction Industry Council Ordinance, the CIC is vested with the following functions:

- 1. to advise and make recommendations to the Government on strategic matters, major policies and legislative proposals, that may affect or are connected with the construction industry, and on matters of concern to the construction industry;
- 2. to reflect to the Government the construction industry's needs and aspirations;
- 3. to elevate the quality and competitiveness of the construction industry by promoting the ongoing development and improvement of the industry;
- 4. to uphold professionalism and integrity within the construction industry by promoting self-regulation, formulating codes of conduct and enforcing such codes;
- 5. to improve the performance of persons connected with the construction industry through establishing or administering registration schemes or rating schemes;
- 6. to advance the skills of personnel in the construction industry through planning, promotion, supervision, provision or coordination of training courses or programmes;
- 7. to encourage research activities and the use of innovative techniques and to establish or promote the establishment of standards for the construction industry;
- 8. to promote good practices in the construction industry in relation to dispute resolution, environmental protection, multi-layer subcontracting, occupational safety and health, procurement methods, project management and supervision, sustainable construction and other areas conducive to improving construction quality;
- 9. to enhance the cohesiveness of the construction industry by promoting harmonious labour relations and the observance of statutory requirements relating to employment, and by facilitating communication among various sectors of the industry;
- 10. to serve as a resource centre for the sharing of knowledge and experience within the construction industry;
- 11. to assess improvements made by the construction industry through the compilation of performance indicators;
- 12. to make recommendations with respect to the rate of the levy imposed under this Ordinance;
- 13. to conduct or finance educational, publicity, research or other programmes relating to occupational safety and health, environmental protection or sustainable development in the construction industry; and
- 14. to perform any other functions relevant to the construction industry, including those functions conferred or imposed on it by or under this Ordinance, the Construction Workers Registration Ordinance (Cap. 583) or any other enactment.

ABOUT THE COUNCIL

Under Section 6 of the Construction Industry Council Ordinance, the supplementary functions of the CIC are:

- 1. to provide training courses for the construction industry;
- 2. to establish and maintain industrial training centres for the construction industry;
- 3. to assist, including by the provision of financial assistance, in the placement of persons who have completed training courses provided for the construction industry;
- 4. to assess the standards of skills achieved by any person in any kind of work involving or in connection with the construction industry, to conduct examinations and tests, to issue or award certificates of attendance or competence, and to establish the standards to be achieved in respect of any such work.

THE COUNCIL AND ITS COMMITTEES

Executive Committee

Committee on Construction Safety

Committee on Environment

Committee on Construction Business Development

Committee on Productivity

Committee on Building Information Modelling



CONSTRUCTION INDUSTRY COUNCIL 建浩業議會 Committee on Registered Specialist Trade Contractors Scheme

Objections Board

Audit Committee

Management Committee on Construction Innovation & Technology Fund

Construction Industry Training Board

Construction Workers Registration Board

Construction Industry Sports & Volunteering Programme Committee

Zero Carbon Building Management Board

Construction Innovation and Technology Application Centre Management Board

CORPORATE GOVERNANCE REPORT
Corporate Governance Structure

The Construction Industry Council (CIC) is firmly committed to maintaining high standards of corporate governance. We believe that good corporate governance is fundamental to ensuring proper management and smooth operation of the organisation in the interests of all stakeholders and the public.



The Council, Statutory Boards and Industry Development Committees

Structure and Composition

The Council

The Chairman of CIC and its 24 Members are appointed by the Secretary for Development, generally for two years each term. They may serve the CIC continuously for up to six years. The composition of the Council is governed by Sections 9 to 12 and Schedule 2 of the Construction Industry Council Ordinance (Cap. 587) (CICO), as follows:

- not more than three public officers;
- not more than four persons who represent employers;
- not more than four persons who represent professionals or consultants;
- not more than five persons who represent contractors, subcontractors, materials suppliers or equipment suppliers;
- not more than two persons who represent training institutes, academic or research institutions;
- not more than three persons from trade unions representing construction workers; and
- not more than three persons the Secretary for Development thinks fit to be a Member.

Statutory Boards

Apart from the Council, there are five Statutory Boards established under the CICO and the Construction Workers Registration Ordinance (Cap. 583) (CWRO), namely

- the Objections Board;
- the Construction Industry Training Board;
- the Construction Workers Registration Board;
- the Construction Workers Qualifications Board; and
- the Construction Workers Review Board.

Industry Development Committees

In overseeing the performance of the CIC, pursuant to Section 15 of the CICO, the Council has established a number of Boards and Committees to assist the CIC in executing and managing its various core businesses and functions. Upon such division of responsibilities, the Council concentrates on strategic issues, direction planning, policy making, corporate governance and the long-term development of the industry. The five Industry Development Committees are:

- Committee on Building Information Modelling;
- Committee on Construction Business Development;
- Committee on Construction Safety;
- Committee on Environment; and
- Committee on Productivity.

In addition to the Boards and Committees, a number of subcommittees, task forces and working groups are also formed to assist the relevant Boards / Committees to focus on specific issues and carry out respective tasks for better performance of the CIC's functions.

Appointment

To ensure connectivity and to strengthen communication, the Chairpersons of Boards / Committees are, as far as possible, Council Members, while the subcommittees / task forces / working groups are chaired by the respective board / committee members, unless special expertise is required from outside parties. Council Members may indicate their preference to join up to three committees in general.

The appointment mechanism of the five Industry Development Committees was revamped in 2018. To add in new blood and to rejuvenate the composition of the Industry Development Committees, it was further enhanced in 2021 by introducing a new category "Young Member" for suitable appointees under 40 years old at the time of appointment. Under the established mechanism on selecting and appointing new members to the Committees, the CIC will invite relevant construction industry-related bodies to nominate candidates in order of priority. The candidates' suitability will be assessed by their expertise, previous contributions to the industry and/ or CIC task forces, their willingness to serve, and the needs of the CIC, etc. The Council Chairman, in consultation with the individual Committee Chairpersons, will propose the list of Committee Members for the Council's approval, with due consideration given to Council Members' indicated preferences and nominations received.

Via mirroring the Council and capping Committees' members to a maximum of 18, the enhanced appointment mechanism would enable the Committees to be more representative of the industry, allowing an integration of views from representative sectors and enabling more youthful elements to contribute to Committee work while forbidding monopolisation by particular institutions as non-Council members would normally serve a maximum of four years. This mechanism also encourages members to advise from a macro, instead of a sectoral, perspective. They enable the CIC to benefit from a wide range of experience and a variety of independent perspectives. In addition to sufficient diversity, wider representation and better integration, it also exemplifies cross sector collaboration.



Modus Operandi of the Council

Apart from the regulatory requirements on meeting procedures of the Council and the Statutory Boards, the CIC Boards and Committees at large adopt the following key features on meeting procedures as a good practice of corporate governance:

- 1. The Council and the Executive Committee hold bimonthly meetings, while Boards and Committees meet at least quarterly (except for the Objections Board, Construction Workers Qualifications Board and Construction Workers Review Board, which hold meetings as and when necessary).
- 2. Attending meetings by video conferencing is arranged in line with the social distancing measures during the COVID-19 pandemic and for Members who are out of town.
- 3. The annual meeting schedule is set at the end of the previous year to allow Members to reserve time to attend.
- 4. Notice of Meeting is issued to Members at least 14 calendar days before the meeting. Members are provided with the Agenda and Papers at least seven calendar days before the meeting is convened.
- 5. The draft Agenda is prepared by the responsible Secretariat and approved by the Council Chairman / Board / Committee Chairperson.
- 6. The Executive Director and senior management attend the meetings to present the papers and provide further information and explanations on the issues where appropriate. However, they have no voting rights and shall not influence the decision-making process. The management of the CIC, under the leadership of the Executive Director, will follow up on the execution of the strategic directions set by the Members and report progress from time to time.

- 7. Members are required to sign the attendance sheet at the meeting. Meeting attendance and proceedings are documented in the Minutes recorded by the relevant Secretariat.
- 8. The draft Minutes prepared by the Secretariat should be ready around seven calendar days after the meeting for consideration by the senior management and Chairman/Chairperson. The Minutes and discussion points of each agenda item are circulated to Members no later than 21 calendar days after the meeting for comment. The Minutes are reviewed and confirmed in the subsequent meeting.
- 9. Minutes of the meetings (except those of the Executive Committee, Audit Committee (Com-AUD), Objections Board and the closed-door sessions of meetings of the Council) are uploaded to the CIC website for the public's reference.
- 10. Members are required to declare conflicts of interests, if any, before the commencement of discussion of the related agenda item(s) in question. These declarations and the actions taken, such as a Member abstaining from participating in the discussion of the concerned item(s), will be recorded in the Minutes and kept in a register of the Corporate Secretariat.
- 11. Members have access to relevant expertise to help discharge their responsibilities upon obtaining proper approval where appropriate e.g. consultants will be invited to present and explain their recommendations in separate sessions before the Council meeting to allow more time for questions and detailed discussions.
- 12. The quorum required by the Council meetings and Statutory Boards meetings is specified in the CICO and CWRO respectively.

A "Starred Discussion Paper" system was introduced in 2018 to facilitate prompt handling of approval matters and efficient processing of discussion papers at meetings. For routine and straightforward matters presented in a Starred Discussion Paper, approval by Members is assumed, unless Members choose to raise comments and / or enquiries during meeting. Since the implementation of this system, meetings have been conducted in a smoother, more timely and effective manner.

Risk Management and Internal Controls

Risk management is integrated into the CIC's strategic planning process and its daily operations. With the growing complexity of operations and the increasing expectation of the industry on the CIC's services, the governance and control measures of the CIC have been strengthened in the recent years, with the following Three Lines of Risk Management Structure in place:



First Line

Operational management is responsible for maintaining effective internal controls on a day-to-day basis. Internal policies and procedures are established and documented in the CIC's operation manuals. All divisions and departments are required to conduct regular reviews on their operational manuals and ensure staff's compliance with internal operational policies and procedures.

Operational management reports, including areas with control deficiencies, if identified, and rectifying measures and controls, are compiled on a regular basis.

First Line

Second Line

Financial controls, quality assurance, compliance and risk management functions are in place to ensure proper internal controls over daily operations (i.e. the First Line of Risk Management).

A team of experienced staff with accounting expertise and relevant qualifications is responsible for the financial reporting and accounting functions.

By an integrated top-down and bottom-up risk review process, risk items in CIC are identified and prioritised for monitoring by different levels of management according to the risk levels. An open and effective communication channel is created to ensure controls of top risks, timely reporting of emerging risk exposures and formulating relevant mitigation measures.

CIC maintains a corporate level risk register and a departmental level risk register and these are reviewed and updated annually under the risk management mechanism. Under the mechanism, views from all managerial staff are solicited to identify top tier risks and cross department risks the CIC is facing. Forums and/or interviews facilitating the discussion of strategies to manage the identified potential risks are held where appropriate. The risk management mechanism lays down a defined way to assess risks and increase the awareness of staff in relation to risk management.

The Committee on IT and Cyber Security composed of senior management was formed in 2021. Meetings are held on a quarterly basis to ensure adequate and updated controls on cyber security and IT risks are in place.

In view of the outbreak of COVID-19 epidemic, the CIC has implemented various measures to ensure its functions and services are properly delivered as well as safeguarding the health of the public and its staff.

First Line

id Line

The Internal Audit Department is responsible for reviewing the effectiveness of governance, risk management and internal controls in the first two Lines of Risk Management. The Department is comprised of staff with professional qualifications and has unhindered access to operational information for executing its duties.

Third Line

Through a risk-based audit approach, the Department assesses the effectiveness of internal controls of CIC based on the guidelines on internal control promulgated by the HKICPA. The Committee of Sponsoring Organizations of the Treadway Commission Framework ("COSO") 2013 is also adopted to assess the five major components of internal controls, namely control environment, risk assessment, control activities, information and communication, and monitoring activities.

The Department conducts internal audit exercises according to the annual internal audit plan approved by the Com-AUD. Findings are discussed and confirmed with the senior management and reported to and considered by the Com-AUD, to ensure the highest level of independence and objectivity.

External Assurance Providers

External auditors and regulators outside of the CIC provide additional assurance to the CIC's stakeholders. For instance, the Hong Kong Council for Accreditation of Academic and Vocational Qualifications provides quality assurance to the Qualification Framework recognised programmes of the Hong Kong Institute of Construction. In addition, senior management meets regularly with the ICAC Corruption Prevention Department to uphold the leading practices and measures in corruption prevention, especially on the new business or operations of the CIC.

Internal Audit

The Internal Audit functions, as specified in the "Internal Audit Charter" of the Internal Audit Operation Manual, include:

- developing a flexible annual audit plan using risk-based methodology covering reviews of all material controls, including financial, operational and compliance controls and risk management functions. The key focus is on accountability, compliance and efficiency;
- implementing the annual audit plan as approved by the Com-AUD including special tasks or projects requested by the management and the Com-AUD and performing compliance reviews with the laid down policies, procedures and requirements;
- discussing with the management and the Com-AUD the adequacy of the CIC's internal controls in the areas of corporate governance, information systems and security, and related significant findings and recommendations, together with the management's responses to resolve the issues or improve the processes;
- ensuring the endorsed recommendations from the audit report are completed by the management in a timely manner; and
- reporting to the Com-AUD and/or the senior management directly for any major issues encountered in relation to the internal audits.

CIC Fellows

The CIC Fellows, composed of retired Council Members, retired Chairpersons of major Boards / Committees and retired Executive Directors, was officially set up in 2021. It serves as a high level advisory organisation for the benefit and future development of the construction industry as well as a platform to maintain friendship and expertise. Mr. CHAN Ka-kui, whose CIC chairmanship expired after 31 January 2022, is the Convenor. It is planned that various functions, site tours and social gatherings will be organised every year to solicit advice and support to the CIC as may be necessary.



Management Controls

The CIC formulates its annual Major Work Plans and publishes the information in the form of bilingual booklets. The Major Work Plans consist of the initiatives, action plans, timeline and the expected deliverables of individual departments of the CIC. The senior management will review their work progress at regular intervals during the year, and assess the final output and performance of the responsible departments against the work plans at the end of the year. In the internal audit exercises, the performance of relevant departments will be reviewed with reference to the Major Work Plans. Moreover, to enhance transparency and openness, the booklets of Major Work Plans will be distributed to various government departments, stakeholder organisations, industry associations/unions and training institutions.

Mechanism of Complaints Handling

To maintain public accountability, the CIC has established various communication channels with internal and external stakeholders and always welcomes their feedback. Non-anonymous complaints showing dissatisfaction against the CIC or our staff members will be timely handled and thoroughly investigated. Any non-compliance and inefficiency found in the provision of services will be followed up by the relevant management and further reported to the Com-AUD.

Ethical Culture

A high level of integrity is essential to the organisation's continued success and long-term advancement. The CIC is strongly committed to upholding the principles of fairness, honesty, integrity and impartiality in conducting its business and discharging its functions.

Code of Conduct for Members

Sections 6 and 7 under Schedule 3 and Section 8 under Schedule 4 of the CICO lay down the provisions on disclosure of interests of members and keeping of a relevant register. CIC's Code of Conduct for Members (the Code) sets out the standards of conduct and behaviour, while the Policy on Disclosure of Interests of Members (the Policy) spells out the declaration and handling of conflicts of interests for observance by Members. To uphold public trust and protect public interests, upon acceptance of appointment, Members of Council / Boards / Committees are required to accept and abide by the Code and the Policy, and declare any conflicts of interests in compliance with the stipulated requirements. Newly appointed Council Members are given briefings and a bilingual Information Booklet for Council Members to familiarise them with the CIC's corporate governance structure and the work of the CIC.

Code of Conduct for Staff

For CIC staff, the Code of Conduct (the Code) is in place to set out the basic standard of conduct and other relevant policies which all staff are expected to understand and observe in the daily discharge of their duties. The Code, which is reviewed periodically to ensure compliance with the Prevention of Bribery Ordinance (Cap. 201) and the best practices promulgated by the Independent Commission Against Corruption (ICAC), covers the areas of acceptance of advantages, conflicts of interests, use of organisation's assets and resources, confidentiality of information, outside work, workplace behaviour, etc. All new employees are required to sign their acknowledgement of the Code. In addition, the CIC management staff are required to declare in writing annually their compliance with this Code.

Compliance Training for Staff

The CIC is fully committed to the principles of honesty, integrity and fair play and attaches much importance to protecting a person's right to privacy in relation to personal data. We provide an equal opportunity environment when delivering services to the general public. To keep our staff updated on the latest development of the relevant ordinances and to refresh their knowledge in these aspects on a regular basis, the following training sessions are arranged. New staff will be arranged to attend these training sessions on a compulsory basis as soon as they report for duty. Representatives from the ICAC, Equal Opportunity Commission and the Privacy Commissioner for Personal Data are invited to conduct these training sessions.

- Introduction to the Anti-Bribery Ordinance of Hong Kong
- Introduction to the Anti-Discrimination Laws of Hong Kong
- Introduction to the Personal Data (Privacy) Ordinance

Summary of Work Done in 2021

In pursuit of its Vision and Mission, the CIC's corporate governance framework is supported by the Five Pillars:



CIC's corporate governance framework is established with reference to the following:

- Corporate Governance Code and Corporate Governance Report issued by the Hong Kong Exchanges and Clearing Limited;
- Corporate Governance for Public Bodies A Basic Framework published by the Hong Kong Institute of Certified Public Accountants; and
- Good Governance and Internal Control in Public Organisations issued by the Independent Commission Against Corruption.



The Five Pillars:

Standard of Behaviour

It states the expectations on Members' and staff's behaviour. Compliance with the CIC Code of Conduct, Prevention of Bribery Ordinance and Code of Conduct for Personnel in the construction industry is expected.

1. Before the commencement of each Council Meeting, the Chairman will remind Council Members to declare any conflicts of interests during the course of meeting. This will be properly documented and appropriate actions, if deemed necessary, will be taken.

Organisation Structure and Business Processes

It illustrates the functions and operations of the CIC with clearly defined roles and responsibilities as well as reporting structure.

In 2021, the following were done to enable the CIC to continue to perform its roles and responsibilities in an effective manner, and also address imminent issues to meet future challenges:

- 1. Establishment of Committee on IT and Cyber Security
- 2. Establishment of Steering Committee on Implementation of HKIC's Vision, Mission and Motto
- 3. Appointment / Re-appointment of Chairpersons and Members to the Construction Industry Training Board and the Construction Workers Registration Board
- 4. Establishment of the CIC Fellows
- 5. Enhancements to the appointment mechanism for the Industry Development Committees

Risk Management and Controls

It aims at analysing factors which may hinder the CIC from achieving its vision and mission. There is internal audit, statutory audit as well as budgeting and financial management to direct the appropriate behaviour. A dedicated risk management mechanism is established to lay down a defined way to assess risks.

In 2021, the following were put in place to better support effective risk management and controls across different functions and operations of the CIC:

- 1. Enhancements to the composition of the Com-AUD
- 2. Formulating a risk-based internal audit plan
- Provision of audit services for the Employment Support Scheme for the Construction Sector under the Anti-epidemic Fund
- 4. Organising training sessions on "Cyber Security Awareness" for all staff
- 5. Strengthening the income control procedures for the Hong Kong Institute of Construction

Reporting and Communications

This pillar delineates the external and internal reporting requirements to ensure a timely disclosure of information for management decisions and compliance with regulatory requirements.

In 2021, the following were accomplished to enable timely and informative reporting and communications of our recent/new initiatives:

- 1. Conduct of the mid-term review of the Construction Innovation and Technology Fund
- 2. Conduct of the third-party verification for the CIC Sustainability Report 2020
- 3. Development of E-Service 2.0 for Levy System

Corporate Citizenship

Corporate citizenship is embedded to demonstrate the CIC's commitment to contribute to build a caring society. There are three main areas, namely environment, charitable activities and volunteerism.



The COVID-19 epidemic has had a significant impact on the construction industry. In 2021, the following, demonstrating our commitments to the construction industry as well as other stakeholders at large, were implemented:

 Providing administrative and operational support to the Government in the implementation of the Construction Industry COVID-19 Testing Services (CITS)



- 2. Extension of the waiver of Construction Workers Registration Fees
- 3. Implementation of the Construction Industry Caring Campaign – Fight Against Novel Coronavirus
- 4. Launch of the CIC Sustainable Finance Certification Scheme
- 5. Launch of "CIC Relief Fund Construction Business Support Scheme"
- Implementation of the "Construction Industry Council Relief Fund – Multi-skills Training Scheme for Registered Workers"
- 7. Promotion of low carbon living and sustainability







Percentages may not add up to 100% due to rounding.

(as at 31 December 2021)



Percentages may not add up to 100% due to rounding.

(as at 31 December 2021)





Percentages may not add up to 100% due to rounding.

(as at 31 December 2021)



ANNUAL REPORT 2021 53



Meeting Attendance

Council Members' Attendance in Various Meetings in 2021

		Council	Com-EXE	Com-BIM	Com-CBD	Com-CSY	Com-ENV	Com-PRO	Com-RSC	Com-AUD
1	Mr. CHAN Ka-kui	6/6	6/6							
2	Ir CHAN Chi-chiu	6/6			4/4				4/4	
3	Mr. CHAN Kim-kwong	6/6			4/4	4/4				
4	Mr. CHAN Pat-kan	0/1 ¹								
5	Prof. CHUNG Kwok-fai	5/6		3/4				3/3		
6	Mr. FU Chin-shing, Ivan	6/6	6/6	3/4	3/4		4/4	2/3		
7	Sr HO Kwok-kwan, Thomas	6/6			4/4		4/4		4/4	
8	Ir HO On-sing, Thomas	6/6						2/2 ²	3/3 ²	
9	Sr LAM Kin-wing, Eddie	6/6	3/3³					3/3		
10	Ir LAM Sai-hung	4/44	5/5 ⁴			3/34 & 5				
11	Ir LAU Chun-kit, Ricky	2/2 ⁶	1/16			1/1 ^{5 & 6}				
12	Ir LEUNG Wing-kee, Ricky	6/6			3/4				4/4	
13	Mr. LEUNG Kin-man, Stephen	6/6 ⁷				4/45				
14	Mr. LI Tat-wai	4/6				2/4		2/3		
15	Ir Prof. LO Hong-kam	4/6				2/4	3/4			
16	Mrs. LO LEE Oi-lin	6/6								
17	Ir MO Kon-fei, Kenneth	6/6	6/6			4/4		3/3	4/4	
18	Mr. MOW Tai-hing	6/6				2/3 ²		2/2 ²		
19	Ir PAN Shujie	6/6					4/4	3/3		
20	Ir Dr. PANG Yat-bond, Derrick	5/6	6/6			4/4				
21	Ir POON Lock-kee, Rocky	6/6	6/6		4/4			3/3		
22	Mr. WONG Hin-wing, Simon	6/6			4/4					4/4
23	Ir WONG Kin-wai, Ken	6/6	5/5 ⁸					3/3		
24	Ms. WONG Yeuk-lan, Eliza	6/6			4/4					4/4
25	Ms. YU Po-mei, Clarice	1/1º					1/1º			
26	Ir YU Sai-yen	6/6	3/310			4/4				
27	Mr. YU Tak-cheung	5/511					2/311			
28	Ar. FUNG Yin-suen, Ada	N/A	1/112							
29	Ir YU Shek-man, Ringo	N/A	1/1 ¹²							

¹ Member resigned on 10 March 2021.

- ² Term commenced on 23 April 2021.
- ³ Term commenced on 1 July 2021.
- ⁴ Term ended on 7 October 2021.
- ⁵ Meetings were attended by representative(s).
- ⁶ Term commenced on 8 October 2021.
- ⁷ Three meetings were attended by representative(s).
- ⁸ Term commenced on 1 February 2021.
- ⁹ Term commenced on 29 November 2021.
- ¹⁰ Term ended on 30 June 2021.
- ¹¹ Term ended on 28 November 2021.
- ¹² Term ended on 31 January 2021.

Construction Industry Training Board

Members' Meeting Attendance in 2021

Chairperson	Attendance
1 Sr LAM Kin-wing, Eddie	6/6 ¹
2 Ir YU Sai-yen	3/3 ²
Members	Attendance
3 Mr. CHAN Kim-kwong	6/6
4 Sr CHAU Bing-che, Hen	y 6/6
5 Mr. HUANG Yongquan	6/6
6 Mr. LAM Oi-ki, Peter	5/6
7 Mr. LAU Wing-sum	2/6
8 Ms. LEE Chung-yan, An	gela 6/6
9 Mrs. LO LEE Oi-lin	3/33
10 Ir LUK Wai-lam, William	5/6
11 Mr. WAN Chi-ping, Fen	ion 5/6
12 Ar. WONG Chiu-lung, D	ennis 5/6
13 Sr WONG Kin-wai, Staw	6/6
14 Mr. WONG Ping	5/6
15 Dr. YAN Ting-kwan, Da	niel 4/6

¹ Member was appointed Chairperson on 1 July 2021.

² Term ended on 30 June 2021.

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³ Term commenced on 1 July 2021.

Construction Workers Registration Board

Members' Meeting Attendance in 2021

Chairperson		Attendance		
1	Ir MO Kon-fei, Kenneth	4/4		
Members		Attendance		
2	Ir Dr. CHAN Ka-lung, Raymond	4/4		
3	Prof. CHAN Kwok-hong, Raymond	2/4		
4	Mr. CHAN Shut-ho, Franki	3/4		
5	Ir CHAN Yun-kan, Simon	2/3 ¹		
6	Mr. CHAN Ka-lai	4/4 ²		
7	Ms. CHAN Yuen-ming, Mary	4/4²		
8	Ir CHOW Hau-keung, Vincent	3/3 ^{2&3}		
9	Sr DY Wai-fung, Peter	3/4		
10	Mr. KWOK Tung-keung, Simon	3/4		
11	Ir LAU Lik-kee	1/1³		
12	Ms. LEE Chung-yan, Angela	4/44		
13	Ir LEUNG Wai-ho, Alfred	3/4		
14	Ir LIU Sing-pang, Simon	4/4		
15	Mr. LOK Kwei-sang, Tandy	3/4		
16	Ir Prof. PAN Wei	1/4		
17	Mr. TSANG Ting-fat	4/4		
18	Mr. WONG Ping	4/4		
19	Ar. Franklin YU	4/4		

¹ Term commenced on 23 April 2021.

² One meeting was attended by a representative.

³ Due to the change of posting, Ir CHOW Hau-keung, Vincent and Ir LAU Lik-kee attended meetings as representatives of the Electrical & Mechanical Services Department.

⁴ Three meetings were attended by representatives.

MEMBERSHIP OF COMMITTEES AND BOARDS, AND TERMS OF REFERENCE

Executive Committee

The Executive Committee was formed in 2018 with an aim to allow a more efficient decision-making process in the delivery of the CIC's services and initiatives. The Council Chairman is also the Chairperson of the Executive Committee. For close connectivity and institutional coordination, the Chairpersons of the main Boards and Committees, who are generally Council Members, sit on the Executive Committee. All major approvals are, in principle, vested in the Council, which meets bi-monthly in the even-number months, while the Executive Committee is also a bi-monthly forum in the odd number months to discuss policies and new initiatives and brainstorm on important issues. On pressing occasions, the Executive Committee is empowered to act on behalf of the Council to approve urgent matters for operational needs, except those specifically reserved for the Council under the CICO. The approved items shall be reported to the Council in a timely manner.

Membership

Chairperson

Mr. CHAN Ka-kui

Members

- Mr. FU Chin-shing, Ivan
- Ar. FUNG Yin-suen, Ada
- (Retired w.e.f. 1 February 2021) Sr LAM Kin-wing, Eddie
- (Membership since 1 July 2021)
- Ir LAM Sai-hung
- (Retired w.e.f. 8 October 2021)
- Ir LAU Chun-kit, Ricky (Membership since 8 October 2021)
- Ir MO Kon-fei, Kenneth
- Ir Dr. PANG Yat-bond, Derrick
- Ir POON Lock-kee, Rocky
- Ir WONG Kin-wai, Ken (Membership since 1 February 2021)
- Ir YU Sai-yen (Retired w.e.f. 1 July 2021)
- Ir YU Shek-man, Ringo (Retired w.e.f. 1 February 2021)

Terms of Reference

- 1. To advise CIC on staff matters, including recruitment, salary and other conditions of service;
- 2. To advise CIC on general administration matters, including accommodation and facilities;
- To examine and endorse annual estimates of incomes and expenditure and programme of activities prepared by the Management for the approval of the Council;
- 4. To deliberate on policy formulation and emerging issues and to formulate initiatives that are of interest to the construction industry;
- 5. To formulate strategic direction and provide guidance on the long-term development of the CIC; and
- 6. To approve urgent and time-sensitive matters on behalf of the Council except those specifically reserved for the Council under the Construction Industry Council Ordinance and to report to the Council on such approval given.

Committee on Building Information Modelling (Com-BIM)

The Com-BIM aims to formulate strategies for market transformation, and to promote and facilitate the application of BIM and its related technologies across the construction industry. It also supports the development of BIM related training programmes as well as setting standards and common practices for BIM implementation.

Membership

Chairperson

Ar. Prof. FUNG Yin-suen, Ada

Members

Ir CHAN Chi-ming, Antonio Dr. CHAN Kang-yuen, Neo Prof. CHENG Chin-pang, Jack Mr. CHOI Wun-hing, Donald Ir CHUNG Hung-wai, Clement Prof. CHUNG Kwok-fai Mr. FU Chin-shing, Ivan Ir LEUNG Chi-suen, Francis Sr POON Shun-wing, Eric Mr. WONG Chi-pan, Billy Ir WONG Ka-wo, Kelvin Cr WONG Wai-lun, Michael Ms. WONG Wai-man, Rosana Principal Assistant Secretary (Works) 3, Development Bureau Assistant Director / Corporate Services, **Buildings** Department

Terms of Reference

- To formulate strategies for market transformation, promote the use and facilitate the application of BIM, digital construction, and its related technologies in construction industry;
- 2. To promote cross-disciplinary collaboration and adoption of BIM in project delivery processes including planning and design, construction, facility and asset management;

- 3. To develop CIC as a Centre of Excellence for BIM in the form of a central hub and of the open sharing platform of BIM with specific focus on the following:
 - to develop standards, specifications and common practices for BIM;

- to develop and promote good practices in both BIM management and BIM operation;
- to build capacity, develop and operate BIM Development Ladder, BIM Training Ladder, BIM Professional Registration and Accreditation; and their relating training programmes and implementation programmes; and
- 4. To identify areas which require further investigation, promote research and development for BIM.

Task Forces / Task Groups:

- Task Force on BIM Standards
- Task Force on BIM Training
 - Task Group on BIM-enabled Modern Construction Training for Higher Education
- Task Force on BIM Submissions to the Buildings Department
- Task Force on BIM Specifications and Agreement
 - Task Group 1 on BIM Specifications
 - Task Group 2 on BIM Special Conditions of Contract & Services Agreement

Committee on Construction Business Development

The Com-CBD aims to foster an efficient and healthy construction market through best practices and innovative solutions in areas such as tendering, project management, quality supervision and risk allocation. In recent years, we strive to facilitate local industry stakeholders in exploring construction supply chains in the Greater Bay Area, and strengthen cross-boundary exchanges between local and mainland construction industries.

Members

Chairperson

Ir POON Lock-kee, Rocky

Members

Mr. AU Koon-shan, Raymond Ir CHAN Chi-chiu Mr. CHAN Kim-kwong Mr. CHAN Wai-pong Mr. CHOW Ping-wai Ms. CHUNG Fung-hing, Rita Mr. FU Chin-shing, Ivan Sr HO Kwok-kwan, Thomas Ir HUNG Cheung-shew, Danny Ir LEUNG Wing-kee, Ricky Mr. TSANG Pak-chung, Eddy Mr. WONG Hin-wing, Simon Ms. WONG Yeuk-Ian, Eliza Permanent Secretary for Development (Works) or representative Permanent Secretary for Transport and Housing (Housing) or representative

Terms of Reference

- 1. To deliberate and make recommendations for fostering a more efficient and healthy construction market through best practices in areas such as tendering, risk allocation, programming, maintaining liquidity throughout the construction supply chain, project management and quality supervision. With a view to cultivating equitable risk sharing and collaborative culture;
- To promulgate the utilisation of innovative solutions and technology for procurement, project management and quality supervision;
- 3. To enhance communications and collaboration between local and Greater Bay Area construction practitioners; and
- 4. To facilitate local industry stakeholders in exploring supply chain in the Greater Bay Area.

Task Forces:

- Task Force on Greater Bay Area
- Task Force on Construction Expenditure Forecast
- Task Force on Reasonable Consultancy Fee Evaluation System
- Task Force on Strategic Review for Uplifting Construction Capacity

Committee on Productivity (Com-PRO)

The Com-PRO aims to elevate construction productivity by improving the construction process, advocating industrialisation and encouraging research and development. Innovative construction approaches including robotics and automation, offsite construction, and adoption of novel technologies and materials are explored and promoted to the industry.

Membership

Chairperson

Ir WONG Kin-wai, Ken

Members

Ir Prof. CHUNG Kwok-fai Mr. FU Chin-shing, Ivan Ir HO On-sing, Thomas (since 23 April 2021) Mr. KWOK Tung-keung, Simon Sr LAM Kin-wing, Eddie Mr. LI Tat-wai Ir MO Kon-fei, Kenneth Mr. MOW Tai-hing (since 23 April 2021) Ir PAN Shujie Ir POON Lock-kee, Rocky Ir SO Kwok-leung, Derek Mr. YEUNG Kai-yu, Franki Permanent Secretary for Development (Works) Permanent Secretary for Transport and Housing (Housing)

Terms of Reference

1. To compile and update key performance indicators related to the construction industry;

- 2. To review current productivity level in the construction industry by introducing measurable indicators for different work trades;
- 3. To encourage the adoption of new technology and innovative ideas to elevate construction productivity;
- 4. To conduct research on benchmarking or setting standards for the productivity of construction process;
- 5. To provide statistics in relation to construction productivity;
- 6. To recommend strategies to the Council and Boards/Committees for enhancing the industry's productivity and competitiveness; and
- 7. To co-ordinate and promote research and development for elevating construction productivity.

Committee on Construction Safety (Com-CSY)

The Com-CSY strives to promote initiatives and measures to foster a positive safety culture in the construction industry. It reviews and monitors safety performance and encourages the adoption of new technology to improve safety. To enhance the mechanism of safety management, the Com-CSY also provides guidelines on preventive measures in relation to construction safety.

Membership

Chairperson

Ir Dr. PANG Yat-bond, Derrick

Members

Mr. Collin CHAN Mr. CHAN Kim-kwong Mr. IP Ka-sing, Dennis Mr. LI Tat-wai Ir Prof. LO Hong-kam Ir MO Kon-fei, Kenneth Mr. MOW Tai-hing Ir Alcohol MOK Sr WONG Chi-kin, Jesse Mr. WONG Kwok-keung Mr. Rex WONG Mr. WU Wai-hung Ir YU Sai-yen Permanent Secretary for Development (Works) Permanent Secretary for Transport and Housing (Housing)

Terms of Reference

- 1. To review and monitor safety performance of the construction industry;
- 2. To review and enhance the mechanism of safety management;
- 3. To encourage the adoption of new technology and innovative ideas in construction safety;
- 4. To conduct research on enhancing safety performance of the construction industry;
- 5. To identify and recommend measures for improving safety performance to CIC;
- 6. To promote the adoption of the improvement measures by the construction industry; and
- 7. To nurture a safety culture for the construction industry.

Task Forces / Sub-committees:

- Task Force on Design for Safety
- Task Force on Site Safety of Working in Lift Shaft
- Task Force on Safety of Lorry-mounted Cranes
- Task Force on Truss-out Bamboo Scaffolds
- Sub-committee on Safety Training
- Sub-committee on Safety Technical Issues
- Sub-committee on Safety Promotion

MEMBERSHIP OF COMMITTEES AND BOARDS, AND TERMS OF REFERENCE

Committee on Environment (Com-ENV)

The Com-ENV aims to promote good practices and innovative technologies to enhance the performance of the construction industry on sustainable development. Relevant standards and guidelines are provided for industry stakeholders via industry researches and digital platforms.

Membership

Chairperson

Mr. FU Chin-shing, Ivan

Members

Dr. CHAN Ka-lung Mr. CHIU Chung-kei, Charles Mr. CHOW Chi-ping Sr HO Kwok-kwan, Thomas Prof. LAU Siu-yu, Stephen Prof. LO Hong-kam Mr. PAN Shu-jie Ir POON Ching-su, Lisa Mr. POON Shun-wing, Eric Mr. TONG Yuen-king, Amen Mr. WONG Ping Mr. WU Siu-kei Mr. YU Tak-cheung (Retired w.e.f. 29 November 2021) Ms. YU Po-mei, Clarice (Membership since 29 November 2021) Permanent Secretary for Development (Works) Permanent Secretary for Transport and Housing (Housing)

Terms of Reference

1. To promote environmental protection and sustainable development in the construction industry;

- 2. To promote good practices in relation to sustainable design and construction;
- To encourage the adoption of new technology and innovative ideas in environment protection and sustainable development in the construction industry;
- 4. To conduct research for enhancing environmental protection and sustainable development in the construction industry; and
- 5. To advise on the environmental strategy for development of construction standards.

Working Groups:

- CIC Carbon Assessment Tool Working Group
- CIC Sustainable Construction Certification Scheme for Green Finance Working Group

Committee on Registered Specialist Trade Contractors Scheme (Com-RSC)

The Com-RSC's key role is to oversee, discuss, review and monitor the operation of the registration and regulatory actions of Registered Specialist Trade Contractors Scheme. It also sets the strategic direction and formulates policies in managing businesses relating to the implementation, adoption and promotion of the Scheme.

Membership

Chairperson

Ir CHAN Chi-chiu

Members

Mr. CHAN Lok-chai Ir CHENG Sau-tong, Chris Mr. CHEUNG Tat-fai, Kenneth Mr. CHEUNG Yuk-kei Mr. CHIM Fu-keung Ir FUNG Kwok-keung, Conrad Ir HO On-sing, Thomas Sr HO Kwok-kwan, Thomas Ir HUNG Cheung-shew, Danny Ir LEUNG Wing-kee, Ricky Mr. LOK Kwei-sang, Tandy Ir MO Kon-fei, Kenneth Mr. NG Choi-wah Ir SHEA Tat-chi, Ringo Sr WONG Kwok-leung, Paul Mr. WONG Ping

Terms of Reference

- To implement the recommendations of the University of Hong Kong's Research on "A Roadmap to Enhance the Subcontractor Management Mechanism in Hong Kong";
- 2. To steer the operations of the Registered Specialist Trade Contractors Scheme and the Subcontractor Registration Scheme (collectively, the Scheme), including but not limited to making recommendations on scope of trades, registration requirements, and any enhancements to the Scheme;
- To review and approve registration applications of Registered Specialist Trade Contractors (RSTCs) and Registered Subcontractors (RSs);
- 4. To take regulatory actions against RSTCs or RSs violating rules under the Scheme; and
- 5. To promote the adoption of the Scheme by the industry.

MEMBERSHIP OF COMMITTEES AND BOARDS, AND TERMS OF REFERENCE

Audit Committee

Formed in 2018, the Audit Committee supervises the work of the Internal Audit Department and oversees corporate governance, compliance, financial reporting, internal controls, risk management and audit matters of the CIC.

Membership

Chairperson

Mr. WONG Hin-wing, Simon

Members

Mr. CHOW Yuen-ming, PaulMs. OR Siu-ngam, PatriciaMs. WONG Yeuk-lan, ElizaPrincipal Assistant Secretary (Works) 1 of the Development Bureau

Terms of Reference

1. To assist the Council fulfill its corporate governance and overseeing responsibilities of the CIC (with member organisations), including financial reporting, internal control, risk management, internal and external audit functions as well as compliance with policies, regulations and relevant legislations;

- 2. To oversee the work of Internal Audit Department, to review findings and management's responses to the recommendations made;
- 3. To oversee the external audit process:
 - i. To make recommendations to the Council on the appointment of external auditors, audit fees and any related matters;
 - ii. To review annual audit report and any matters raised by external auditors;
- 4. To approve the engagement of any external consultants to conduct review if necessary; and
- 5. To assist the Council in dealing other relevant issues.

Objections Board

The Objections Board was established under Section 54 to 56 of the Construction Industry Council Ordinance (CICO) to deal with objections to levy or surcharge raised by the contractor.

The Board consists of three members of the Council and the Council may authorise the Objections Board to appoint a subcommittee for the better performance of the Objections Board's function. The Objections Board is chaired by an academic to avoid the possible conflict of interest with industry stakeholders.

By virtue of Section 56 of the CICO, the Objections Board has the power to confirm, cancel or reduce the levy or surcharge.

Membership (all are CIC Member)

Terms of Reference

Convenor

Prof. CHUNG Kwok-fai

Members

Sr HO Kwok-kwan, Thomas Ir TONG Ka-hung, Edwin To determine objections to levy and surcharge made under section 55 of CICO and under section 29 of the Construction Workers Registration Ordinance.

Construction Industry Training Board (CITB)

Established under Section 29 of the Construction Industry Council Ordinance, the CITB is responsible for training and trade testing matters of the construction industry. It provides training courses, establishes and maintains industrial training centres, assists in placement issues and administers the relevant assessments, skills standards establishment, etc. for the construction industry.

Membership

Chairperson

- Ir YU Sai-yen (Retired from being the chairperson w.e.f. 1 July 2021)
- Sr Eddie LAM Kin-wing (Retired from being a member and appointed as the chairperson w.e.f. 1 July 2021)

Member

Mr. CHAN Kim-kwong
Sr CHAU Bing-che, Henry
Mr. HUANG Yongquan
Mr. LAM Oi-ki, Peter
Mr. LAU Wing-sum
Mrs. LO LEE Oi-lin

(Appointed as a member w.e.f. 1 July 2021)

Ir LUK Wai-lam, William
Ar. WONG Chiu-lung, Dennis
Sr WONG Kin-wai, Staw
Mr. WONG Ping
Dr. YAN Ting-kwan, Daniel
Chief Occupational Safety Officer (System and Support) of the Labour Department
Deputy Secretary for Development (Works) 1 of the

Development Bureau

Terms of Reference

1. To provide training courses for the construction industry;

- 2. To establish and maintain industrial training centres for the construction industry;
- To assist, including by the provision of financial assistance, in the placement of persons who have completed training courses provided for the construction industry;
- 4. To assess the standards of skills achieved by any person in any kind of work involving or in connection with the construction industry, to conduct examinations and tests, to issue or award certificates of attendance or competence, and to establish the standards to be achieved in respect of any such work;
- To advise on manpower planning and development for construction personnel at professional, supervisory and craftsman levels; and
- 6. To foster an ethical culture.

Management Board / Task Force / Sub-committee / Steering Committee / Course Advisory Panels:

- Hong Kong Institute of Construction
 Management Board
- Task Force on HKIC's Staffing Policy
- Steering Committee on Implementation of HKIC's Vision, Mission and Motto
- Sub-committee on Trade Testing
- Course Advisory Panel on Construction
 Supervisor
- Course Advisory Panel on Quantity Surveying
- Course Advisory Panel on Computer-aided
 Software for Construction Projects
- Course Advisory Panel on Bricklaying, Plastering & Tiling
- Course Advisory Panel on Joinery

- Course Advisory Panel on Construction
 Formwork
- Course Advisory Panel on Painting, Decorating
 & Sign-writing
- Course Advisory Panel on Plumbing & Pipefitting
- Course Advisory Panel on Marble-laying
- Course Advisory Panel on Metal Works
- Course Advisory Panel on Construction Plant
 Maintenance & Repairs

- Course Advisory Panel on Electrical Installation
- Course Advisory Panel on Construction
 Scaffolding Works
- Course Advisory Panel on Bar-bending & Fixing
- Course Advisory Panel on Plant Operation
- Course Advisory Panel on Site Surveying and Surveying & Setting-out
- Course Advisory Panel on Civil Engineering
- Course Advisory Panel on Concreting
- Sub-committee on Construction Industry Council Approved Technical Talents Training Programmes and Collaborative Training Schemes
- Sub-committee on Ethnic Minorities in Construction
- Task Force on Construction Industry Council Manpower Forecasting

Hong Kong Institute of Construction (HKIC) Management Board

The Hong Kong Institute of Construction (HKIC) was established as a limited company pursuant to the Company Ordinance (Cap. 622). The HKIC Management Board governs the HKIC. It reports and is accountable to the CITB.

Membership

Chairperson

Prof. LEE Chack-fan

Members

Mr. CHAN Ka-kui Ir Prof. CHAN Ping-chuen, Albert Ir KWOK Yu-won, Eric Sr LAM Kin-wing, Eddie (since 1 July 2021) Mr. LAM Oi-ki, Peter Mr. LI Wing-leung Mrs. LO LEE Oi-lin Mrs. Deanna TO LAU Mr. WONG Ping Ir YU Sai-yen (until 30 June 2021) Deputy Secretary for Development (Works) 1 of the Development Bureau Principal Assistant Secretary (Further Education) of the Education Bureau

Ex Officio

Ir CHENG Ting-ning, Albert

Terms of Reference

1. To formulate strategies for the development of HKIC (the Institute), taking into account of industry input and developments in the vocational and professional education and training (VPET) sector;

- 2. To ensure efficient and effective management of the Institute to realise its vision and mission;
- 3. To prepare and submit 3-year Strategic Plan and Annual Plan to Construction Industry Training Board (CITB) for endorsement on an annual basis;
- 4. To prepare and submit Annual Report to CITB;
- 5. To oversee and ensure quality provision of the Institute's programmes and services;
- 6. To decide on the Institute's policies and guidelines on programme planning, development, delivery and review; and
- 7. To approve programme proposals, including admission requirements, programme objectives, intended learning outcomes, and syllabuses.

MEMBERSHIP OF COMMITTEES AND BOARDS, AND TERMS OF REFERENCE

Task Force / Steering Committee / Course Advisory Panels:

- Task Force on HKIC's Staffing Policy
- Steering Committee on Implementation of HKIC's Vision, Mission and Motto
- Course Advisory Panel on Construction
 Supervisor
- Course Advisory Panel on Quantity Surveying
- Course Advisory Panel on Computer-aided
 Software for Construction Projects
- Course Advisory Panel on Bricklaying, Plastering & Tiling
- Course Advisory Panel on Joinery
- Course Advisory Panel on Construction
 Formwork
- Course Advisory Panel on Painting, Decorating & Sign-writing
- Course Advisory Panel on Plumbing & Pipefitting
- Course Advisory Panel on Marble-laying

- Course Advisory Panel on Metal Works
- Course Advisory Panel on Construction Plant Maintenance & Repairs
- Course Advisory Panel on Electrical Installation
- Course Advisory Panel on Construction
 Scaffolding Works

- Course Advisory Panel on Bar-bending & Fixing
- Course Advisory Panel on Plant Operation
- Course Advisory Panel on Site Surveying and Surveying & Setting-out
- Course Advisory Panel on Civil Engineering
- Course Advisory Panel on Concreting

Construction Workers Registration Board (CWRB)

Established under Section 11A of the Construction Workers Registration Ordinance, the CWRB governs and provides quality workers registration services for the construction industry.

Membership

Chairperson

Ir MO Kon-fei, Kenneth

Members

Ir Dr. CHAN Ka-lung, Raymond Prof. CHAN Kwok-hong, Raymond Mr. CHAN Shut-ho, Franki Ir CHAN Yun-kan, Simon Sr DY Wai-fung, Peter Mr. KWOK Tung-keung, Simon Ir LEUNG Wai-ho, Alfred Ir LIU Sing-pang, Simon Mr. LOK Kwei-sang, Tandy Ir Prof. PAN Wei Mr. TSANG Ting-fat Mr. WONG Ping Ar. Franklin YU Assistant Director/Gas and General Legislation, Electrical and Mechanical Services Department Chief Occupational Safety Officer (Operations), Labour Department Chief Officer/Technical Services, Buildings Department Deputy Secretary for Development (Works) 1,

Development Bureau

Terms of Reference

1. To set the qualification requirements for registration or renewal of registration;

- 2. To act on and discharge tasks in regard to the Construction Workers Registration Ordinance, which include inspection of construction sites, conducting construction workers registration, handling review and appeal cases relating to workers registration, maintaining the daily attendance records of construction sites, and so on; and
- 3. To perform and exercise such other functions or powers as are imposed on it by the Construction Industry Council.

Boards / Sub-committees:

- Construction Workers Qualifications Board
- Construction Workers Review Board
- Sub-committee on Data Analysis
- Sub-committee on Registration Matters
- Sub-committee on Workers Development and Welfare
ZCB Management Board

The CIC-Zero Carbon Park (CIC-ZCP, originally named as Zero Carbon Building (ZCB)) was set up as a company limited by guarantee governed by the Articles of Association under the Company Ordinance (Cap. 622). It is governed by a Board of Directors appointed by the CIC and consists of top green building specialists, engineers and key stakeholders who steer the development of the CIC-ZCP.

Membership

Chairperson

Task Force / Panels:

• Advancing Zero Carbon Task Force

Mr. CHONG Kin-lit, Paul

Members

Mr. CHAN Yin-chung, Anthony Ir CHENG Ting-ning, Albert Mr. IP Chung-man, Tony Mr. KWOK Chi-wah, Andrew Mr. LAI Wing-chun, Martin Mr. LO Chi-wai, Ian Mr. MA Pok-man, Josiah Mr. MA Pok-man, Josiah Mr. MA Wing-kui, William Cr MANG Ka-wing, Terence Mr. NG San-wa, Lawrence Ir YU Shek-man, Ringo Mr. FU Chin-shing, Ivan

72 CONSTRUCTION INDUSTRY COUNCIL

Facility Improvement Panel

Event & Promotion Panel

Construction Innovation and Technology Application Centre (CITAC) Management Board

The CITAC Management Board gathers industry expertise to oversee the CITAC in exploring and identifying innovative technologies from local and international organisations.

Membership

Chairperson

Mr. CHOI Wun-hing, Donald

Board Members

Ir Sammy LAI Ir CHENG Ting-ning, Albert Mr. James LEE Ir Wes JONES Prof. LEUNG Kin-ying, Christopher Ir PAN Shujie Ir Dr. TSUI Yun-cheong, Ricky Ir WONG Chi-kwong Mr. WONG Ka-yu, Oscar Mr Patrick KABASCI Director of Buildings Permanent Secretary for Development (Works)

Terms of Reference

 To explore and identify innovative techniques and technologies, both locally and internationally, that are suitable for adoption in the Hong Kong construction industry for improvement of its productivity, sustainability and safety;

- 2. To serve as a knowledge hub by collecting, showcasing and promulgating the latest local and overseas construction technologies with a view to promoting their implementation and application;
- 3. To establish a global research network and serve as a collaboration platform with a view to encourage interdisciplinary research activities and collaboration; and
- 4. To cultivate and nurture a culture within the construction industry that is receptive and conducive to continuous innovation.

Task Force:

Task Force on Construction Digitalisation

Construction Industry Sports & Volunteering Programme Committee (Com-CISVP)

The Com-CISVP aims to better steer and promote sports and volunteering programmes in the construction industry, and to develop a long-term partnership with key industry stakeholders.

Membership

Chairperson

Ir Dr. PANG Yat-bond, Derrick

Member

Ms. CHAN Ka-po, Judy Mr. CHAN Yam-lung, Alfred Mr. CHAU Kai-nin, Alex Mr. CHAN Hai-bo, David Mr. CHEUNG Chun-hoo, Anson Mr. HO Yau-ho, William Mr. LAI Siu-ki, Pele Mr. LEUNG Siu-fai, Alex Mr. LIU Hoi-yu, Paul Mr. LUI Man-wai, David Mr. SO Chi-kin, Cyril Mr. TAM Chi-kwong, Steve Mr. TSANG Ting-fat Mr. YAN Wai-ming, Alan Mr. YAU Kit-pan Deputy Secretary for Development (Works) 1 or representative

Terms of Reference

- 1. To steer the development of Construction Industry Sports & Volunteering Programme (CISVP);
- 2. To promote CISVP to the wider population of the construction industry;
- 3. To encourage setting up company sports clubs and volunteering teams at company or association; and
- 4. To support CISVP events including but not limited to proactive promotion and participant recruitment.

Task Force:

- General Sports Task Force
- Ball Games Task Force
- Volunteering Service and Caring Organisation Task Force
- Fundraising and Promotion Task Force

Management Committee on Technically Competent Persons Registration Scheme (TCPRS)

The CIC established the Management Committee on TCPRS to steer the direction of TCPRS.

Membership

Chairperson

Ir WONG Kin-wai, Ken

Members

Ir KWAN King-fai, Alex
Mr. KWOK Chi-wah, Andrew
Mr. HO Hon-kit, Humphrey – Representative of the Buildings Department
Mr. LAI Ho-cheong, Alvin – Representative of the Buildings Department (since 30 April 2021)
Ms. CHAN Wai-lin – Representative of the

Geotechnical Engineering Office of the Civil Engineering and Development Department (since 28 December 2021)

Terms of Reference

 To steer the implementation of the Technically Competent Persons Registration Scheme (TCPRS);

- 2. To review the efficacy of the TCPRS in uplifting the quality of site supervision personnel;
- 3. To review the appeal and/or complaint case(s) under the TCPRS; and
- 4. To consider the industry feedback and any other related matters to facilitate the industry for a wider adoption of the TCPRS.

Management Committee on Construction Innovation and Technology Fund (MC-CITF)

The Management Committee on Construction Innovation and Technology Fund (MC-CITF) oversees the operation of the CITF.

Membership

Chairperson

Ir CHAN Chi-chiu

Members

Ir Prof. CHUNG Kwok-fai Ir Kwan King-fai, Alex Ir Cheng Ting-ning, Albert Representative from the Development Bureau

Terms of Reference

- 1. To formulate and recommend for the Council's approval, the operational framework of the CITF;
- To ensure the CITF is operated properly and efficiently in accordance with the approved operational framework;
- 3. To report to the Council on the operation of the CITF; and
- 4. To decide on all matters relating to the CITF operation as and when required, subject to the Council's ultimate decision.

Vetting Sub-Committees:

- Building Information Modelling (BIM) Vetting Sub-Committee
- Manpower Development Vetting Sub-Committee
- Modular Integrated Construction (MiC) Vetting Sub-Committee
- Advanced Construction Technology (ACT) Vetting Sub-Committee

MEMBERSHIP OF COMMITTEES AND BOARDS, AND TERMS OF REFERENCE

Investment Task Force

The Investment Task Force advises the CIC on investment-related matters, such as purchase, asset switching, redemption, etc. It also oversees the performance of the CIC's investments.

Membership

Chairperson

Mr. WONG Hin-wing, Simon

Member

Mr. AU Chun-hing, Edward (until 30 June 2021) Mr. LEUNG Sze-kit, Roy (since 1 July 2021) Mr. LIU Chi-lun, Alan Mr. Kassian POLIN Mr. TSE Yue-hong, Chris

Terms of Reference

1. To recommend appropriate investment of surplus funds;

- 2. To advise the CIC on investment-related matters, such as purchase, asset switching, redemption, etc;
- 3. To oversee the performance of the CIC's investments;
- 4. To advise and formulate investment strategies for the CIC; and
- 5. To decide whether external managers should be appointed to manage the CIC's investment portfolio going forward.

Joint Working Group on Modular Integrated Construction (MiC)

The Joint Working Group (JWG) on MiC was set up by Development Bureau (DEVB) and CIC in May 2017 to promote and widen MiC adoption in Hong Kong.

Membership

Chairperson

Ir MO Kon-fei, Kenneth

Vice-Chairperson

Mr. KWONG Ka-sing, John

Members

Ms. HO Wing-yin, Winnie Ms. YU Po-mei, Clarice Mr. WONG Wai-hung, Rayson Ir Prof. WONG Sze-chun Ms. WONG Yeuk-lan, Eliza Secretary (on rotational basis between DEVB and CIC)

Terms of Reference

- To identify suitable technologies and practices of MiC for Hong Kong;
- 2. To identify critical issues in implementing MiC in Hong Kong and to formulate relevant measures to tackle the issues;
- 3. To establish a roadmap leading to wide adoption of MiC in Hong Kong;
- 4. To promote the adoption of MiC in Hong Kong; and
- 5. To establish and monitor, if appropriate, task forces for addressing specific issues.

MEMBERSHIP OF COMMITTEES AND BOARDS, AND TERMS OF REFERENCE

Other

- 1. Task Force on Construction Industry Site Supervision Practice
- 2. Building Information Modelling Certification and Accreditation Board
- 3. Building Information Modelling Appeal Board
- 4. Steering Committee for the Consultancy Study on Improving Time, Cost and Quality Performance of the Hong Kong Construction Industry
- DEVB-CIC Joint Working Group for the Consultancy Study on Improving Time, Cost and Quality Performance of the Hong Kong Construction Industry
- 6. Steering Committee for the Consultancy Study on Improving Environmental Performance of the Hong Kong Construction Industry
- 7. Task Force on Repair, Maintenance, Alteration and Addition

SENIOR MANAGEMENT



SENIOR MANAGEMENT



9 Dr. CHENG Tak-ming, Eric Principal - Kowloon Bay Campus, HKIC



Mr. HO Yau-ho, William Principal - Sheung Shui Campus, HKIC



Mr. WONG Ka-man, Kevin Principal - Kwai Chung Campus, HKIC (Acting)



Mr. CHIU Ka-shun, Daniel Principal - School of Professional Development in Construction, HKIC (Acting)



Ms. CHOI Chin-cheung, Lotus General Manager - Corporate Communications & ZCP

13

17



14 Ms. CHOI Ying-wai, Rebecca Senior Manager - Curriculum Development & Quality Assurance



15

Mr. KO Chun-hon, Ivan Senior Manager - Trade Testing



16 Mr. LAI Chi-wai Senior Manager -Registration Services



Senior Manager - Industry Development, Construction Safety



Mr. LEUNG Ming tak. Tim

Mr. LEUNG Ming tak, Timothy Senior Manager - Industry Development, Construction Business Development



Mr. NG Wing-chung, Raymond Senior Manager - Information Technology (Acting)



Mr. WONG Chun-kuen, George Senior Manager - Industry Development, Construction Digitalisation



19

22 Senior Manager - Industry Development, Construction Productivity



20

23 Ms. YEAP Miranda Senior Manager - Corporate Secretariat

ORGANISATION CHART



OPERATIONAL REVIEW ----

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OPERATIONAL REVIEW

Construction Digitalisation

The Construction Industry Council (CIC) continues to promote and facilitate wider adoption of BIM and construction digitalisation and related technologies in architecture, engineering, construction and operation, as well as formulating strategies for market transformation and promoting cross-discipline collaboration in the industry. The CIC given its momentum in developing standards, training, certification and accreditation, R&D in pursuit of these objectives, made significant achievements in 2021. To reflect its expanded functions, the Building Information Modelling Department has been renamed as the Construction Digitalisation Department in September 2021.

During the year, a series of new and updated CIC BIM training and publications related to BIM standards had won the Gold Award (BIM Projects – BIM initiatives Category) conferred in HKIBIM Award 2021 recognising our efforts in promoting the use of BIM in Hong Kong.



CIC Construction Digitalisation Award

The CIC organised the inaugural CIC Construction Digitalisation Award 2021 to recognise outstanding local projects and organisations for their achievements in digitalisation and innovation to improve construction productivity, quality, sustainability and safety. The Award received 120 entries in its two categories, namely "Project" and "Organisation". There are six sub-categories under the "Organisation" category, including Client (Government, Public Clients and Developers), Consultant, Contractor Category A, Contractor Category B, Training/Research Institute and Start-up Company. 23 winning teams were selected through a rigorous evaluation process.

Construction Digitalisation Roadmap for Hong Kong

To further promote digitalisation in the construction industry, the CIC has been working with experts and key industry stakeholders to craft the Construction Digitalisation Roadmap. The Roadmap has been officially launched together with the Construction Digitalisation Dashboard and identified six high-value digital application areas, namely Smart Data Sharing, Smart Planning and Design, Smart Submission with BIM, Smart Offsite Fabrication and Delivery, Smart Site Management, and Smart Asset and Facility Management, and strategies to support construction digitalisation.

SMART Construction

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Construction Digitalisation Roadmap for Hong Kong

Teaching and Learning Kit for BIM Viewer Training

To cope with the surging demand for BIM Viewers, the CIC developed a "Teaching and Learning Kit" for BIM Viewer training. Launched since October 2021, the Kit was intended for both self-learning and instructor-led training. After completing the postcourse online BIM Viewer Quiz and those passing the quiz would be awarded a CIC BIM Viewer Certificate. From its launch to December 2021, nearly 1,800 individuals had completed the online training and received the certificates.

R&D Project – BIM-Automation of Gross Floor Area (GFA) Calculation, Fire Safety and Prescribed Checking for General Building Plans (GBP) Preparation

Established in 2013, the CIC Research and Technology Development Fund continued to provide financial support for research projects which improved the performance and competitiveness of the industry. Completed in 2021, one of the CIC funded research and development projects, the "BIM-Automation of Gross Floor Area (GFA) Calculation, Fire Safety and Prescribed Checking for General Building Plans (GBP) Preparation" could automate most of the timeconsuming calculation and checking issues commonly required for GBP submission. Starting from 2021, CITF-eligible architectural firms are entitled to use this R&D product under a free license till the end of December 2022.

Consultancy Study on "Digital Hong Kong"

The CIC kicked off a consultancy study in support of the Government's initiative of developing a smart city and Common Spatial Data Infrastructure (CSDI) in 2020. The study identified a total of 47 raw 3D spatial and BIM data use cases across the project lifecycle. They were then grouped and prioritised into 20 use cases, with elaboration given for the top 10. With the elaboration of one more use case supplemented in 2021, we have published a "Report on 3D Spatial and BIM Data Use Case Requirements of the Hong Kong Construction Industry", which summarises the study, details the selected top 11 use cases with their respective constraints, way forward and benefits, and provides recommendations for reference of the industry.



CIC BIM Standards

The CIC further developed and enhanced the CIC BIM Standards in 2021 to meet the needs of the industry. A total of 11 new / updated English publications related to BIM Standards were issued by the CIC as follows:

- CIC BIM Standards General (Version 2.1 2021);
- CIC BIM Standards for Architecture and Structural Engineering (Version 2.1 2021);
- CIC BIM Standards for Underground Utilities (Version 2 2021);
- CIC BIM Standards for Mechanical, Electrical and Plumbing (Version 2 2021);
- CIC Production of BIM Objects Guide General Requirements (Version 2 2021);
- CIC BIM Dictionary (2021);
- CIC BIM Exchange Information Requirements (EIR) Template (Version 1.1 2021);
- CIC BIM for Asset Management & Facility Management Case Sharing (2021);
- CIC BIM Guide for using BIM in generation of MEP digital drawings for Statutory Submissions (2021);
- CIC BIM Special Conditions of Contract (2021); and
- CIC BIM Services Agreement (2021).

Training classes and webinars were conducted after launching of the new publications to facilitate better understanding and adoption of them by the industry. Online training videos of the *CIC BIM Standards* – General were made available to industry.



Report on 3D Spatial and BIM Data Use Case Requirements of the Hong Kong Construction Industry

CIC BIM Competition

The CIC organised the CIC BIM Competition for the third time in 2021, aiming to promote the practical uses of BIM through collaborative and competitive learning approach among participating teams of higher education students in construction-related disciplines. Themed "An Advancing Net Zero (ANZ) Hub in CIC-Zero Carbon Park" this year, a recordbreaking number of teams had registered 53 teams of 252 tertiary students. We organised 20 different webinars to build up their knowledge and skills in BIM, including BIM authoring tools, Geographic Information System (GIS) platforms, Common Data Environment (CDE) related solutions and building energy simulation software, and net zero building design, enabling their outstanding performance at the finals. The CIC looks forward to students' outstanding performance again in the competition in 2022.

CIC BIM Space

The CIC BIM Space has been serving as an onestop service platform for providing BIM-related services and support to the industry. We have revamped the showcases and continue to encourage BIM adoption and proliferation through organising joint seminars and events in collaboration with different stakeholders to provide the industry with an information sharing platform. Hands-on software workshops, advisory workshops, awareness seminars and workshops; and showcase advanced BIM and related technologies with their applications in real projects are also organised. 47 webinars were organised throughout the year, covering various BIM-related events such as BIM Talks, BIM Solution Day, BIM Show & Tell, briefing of the Certification of BIM Personnel and Accreditation of BIM Training Courses, and consultation and training sessions for industry stakeholders on CIC BIM Standards, successfully attracting around 32,200 attendees to CIC BIM Space.

Way Forward

Joining hands with the Development Bureau, the CIC would organise a Celebration of BIM Achievement again in 2022 to recognise outstanding local projects, organisations, individuals and higher education students for their efforts in adopting and promoting BIM in the construction industry in Hong Kong.

The CIC will develop a CIC BIM Starter Guide for new BIM users, an easy and user-friendly pamphlet to assist the industry, in particular small and medium enterprises, on BIM adoption right from the beginning. We will also develop reference material on Common Data Environment (CDE) to facilitate industry practitioners to adopt and select CDEs for information management, with an aim to improving the efficiency and effectiveness of information exchange and project collaboration, hence increasing productivity and quality of deliverables throughout the lifecycles. Meanwhile, more online training materials of CIC BIM standardsrelated publications would be made available to facilitate industry practitioners in BIM adoption in a more effective and easier way. We will also study the issue of cyber-security, in tandem with a more common uptake of BIM and digital applications.

On the training side, the CIC will continue to consolidate training needs from the industry and collaborate with the School of Professional Development in Construction (SPDC) and BIM training service providers to offer necessary training courses to meet the demands. In addition, the CIC will introduce BIM and Construction Digitalisation to Science, Technology, Engineering and Mathematics (STEM) Education for secondary school students through workshops.

The CIC will organise the first-ever BIM Education Symposium in Hong Kong to promote BIM education in higher education institutions through sharing of latest trend in building technology, best industrial practices and new challenges of BIM-related training needs in Hong Kong and around the world.

In advancing the frontiers of BIM application, the CIC will continue to liaise with relevant stakeholders to facilitate the use of open 3D spatial and BIM data in Hong Kong, and to conduct further R&D to facilitate the industry in applying BIM for statutory submission and approval process.

The CIC will continue to provide support for all stakeholders working towards construction digitalisation and better adoption in BIM and related technologies, in a smooth and sustainable manner for making Hong Kong a smart city.

Construction Business Development

Construction Business Development (CBD) promotes an efficient and healthy construction market in Hong Kong. Despite the challenges posed by the prolonged COVID-19 pandemic, the CIC is committed to enhancing the business environment in Hong Kong, while publishing relevant alerts to stakeholders in response to prevailing issues in the construction market. The CIC also launched the Greater Bay Area Construction Development Platform to promote communication and collaboration between local and Greater Bay Area (GBA) construction practitioners and to assist companies in exploring business opportunities in the GBA.

Outstanding Contractor Award

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An efficient and healthy construction market relies on the concerted effort of its stakeholders, while contractors play a vital role, hence CIC organised the inaugural "CIC Outstanding Contractor Award" in the Government House on 2 December 2021 to recognise local contractors for their exceptional performances and contribution to the industry and society. Mrs. Carrie LAM, the Chief Executive of the Hong Kong Special Administrative Region, graced the event as the Guest of Honour. Main Contractors, Contractors and Specialist Contractors competed in the aspects of Corporate Innovation, Professionalisation, Revitalisation, and Environmental, Social and Governance (ESG) and a total of 14 awards were presented in the ceremony.

Consultancy Fee Evaluation System

With fierce competition on tender bids among consultants in the construction industry, even though the two-envelope system evaluating both fee and technical aspects is commonly adopted, consultants with inadequate resources may still attempt to secure jobs with abnormally low priced bids, resulting in unsatisfactory services. In view of this circumstance, a study had been carried out by the CIC to review existing fee evaluation systems and to recommend fee evaluation mechanism(s) for consultancy tenders which are suitable for the construction industry in managing unreasonably low bids. A reference material with the recommended fee evaluation mechanism(s) would be published in early 2022 to assist clients in the private sector in the assessment of consultancy fees.

Uplifting Construction Capacity

Efficient utilisation of resources could alleviate the problems of high construction cost that the construction industry of Hong Kong is facing. The CIC commissioned a consultancy study in 2021 for a strategic review of the construction capacity and identification of the resources needs with respect to the construction expenditure forecast, so as to help the industry to equip with better planning on resources utilisation and training output to meet the demand.



Award Presentation Ceremony of Outstanding Contractor Award 2021

Reasonable Construction Period

Construction period is a key performance indicator for measuring contractor's deliverables in contract compliance, project completion and overall project management fulfilment of the contract time requirements. The CIC developed a digitalised construction duration model adopting big data analytics and machine learning approach for evaluating and benchmarking Construction Time Performance (CTP) of different building superstructure projects in Hong Kong. By comparing one individual project CTP index with a similar one in the past, this Index could be an effective tool in gaining an objective and independent perspective on how their projects CTP performed. The CTP index tool is already made available to the public at the CIC website.

Facilitating Construction Supply Chain at GBA

Although the pandemic had comprised our geographic mobility in GBA, local industry stakeholders' interest in collaboration with other GBA cities remained strong. The CIC strived to establish connection with GBA construction stakeholders and launched the Greater Bay Area Construction Development Platform in 2021 to provide an online company directory facilitating the development of construction supply chains in nine selected GBA cities and two special administrative regions, i.e. Macau and Hong Kong. Over 200 companies had joined the platform to explore business opportunity with GBA cities.

Promoting Healthy Construction Market

Considering the generalisation of innovative technology adoption such as BIM and MiC, the "CIC BIM Special Conditions of Contract" and "CIC BIM Services Agreement" were published in Q3 2021 while "Reference Material - Sample Clauses for Procurement of MiC Building Projects" was published in September 2021 to facilitate the promotion of MiC and DfMA adoption. A webinar on the integrity requirements of practitioners was held in collaboration with ICAC in September 2021 to enable participants to fulfill IMS requirements in public works projects. With the issuance of the Technical Circular implementing Security of Payment provisions in public works contracts, briefing sessions were held in collaboration with DEVB in Q4 2021.

Way Forward

The CIC would continue to conduct different studies on the aspects of healthy construction market, equitable risk sharing and collaborative culture, as well as to develop relevant reference materials and to organise promotion activities for the industry. The CIC noticed that Renovation, Maintenance, Additional and Alternation (RMAA) contributed a significant amount in Hong Kong's overall construction expenditure but their work nature was scattered and comparably in small project scale. The CIC will conduct a study to set out framework in defining RMAA market and get a better understanding of the factors that would contribute to a healthy development of the RMAA market.

The CBD will keep striving to facilitate industry stakeholders to explore and establish supply chains in the GBA. In 2022, a liaison office is planned to be established in GBA to provide a convenient communication channel and to support connections between Hong Kong and GBA construction stakeholders.



Reference Materials and Material Alert issued by CIC

Construction Productivity

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

Industrialisation

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CIC continues to promote the wider adoption of offsite construction in the Hong Kong construction industry. In a webinar series organised by the CIC in 2021, local experts, as well as professionals from the Mainland, Singapore and the United Kingdom were invited to share their experience on offsite construction. Over 5,000 practitioners attended the event.

A consultancy study was carried out on driving the adoption of Design for Manufacture and Assembly (DfMA) for mechanical, electrical and plumbing (MEP) design and installation as DfMA brings large potential in improving construction productivity for the MEP works. Strategies, action plans were formulated while a practical guidebook was also published to guide industry practitioners to apply DfMA at various stages of project development involving MEP works.

Jointly organised by the CIC and the Hong Kong Federation of Electrical and Mechanical Contractors, the "DfMA MiMEP Tradeshow" (the Tradeshow) was held on 2–12 March 2021 at the CIC-Zero Carbon Park. With over 6,600 industry practitioners visiting the Tradeshow, 25 innovative and inspirational exhibits on MultiTrade integrated Mechanical, Electrical and Plumbing (MiMEP) demonstrated the industry's capability in delivering high quality of MEP works using the DfMA approach. Besides, a conference and a technical forum were organised during the Tradeshow with 15 industry experts sharing the knowhow and benefits in implementing the DfMA for MEP works.

Innovation and Research

To promote construction automation, the CIC and the Hong Kong Science and Technology Parks Corporation co-organised the Third International Symposium on Construction Robotics and Automation on 10 December 2021. Over 1,100 participants attended the Symposium physically and online. The Symposium brought together local and international experts from Singapore and Israel to exchange on the latest development on automation, artificial intelligence and robotics (AIR) solutions for the construction industry. A business matching session was also held to facilitate the adoption of Internet of Things, sensing technologies, AIR solutions, and Digital Works Supervision System.

Funded under the CIC Research and Technology Development Fund, a mobile phone application with user guide has been developed to monitor constructioninduced vibration and noise through a smartphone efficiently. A research forum webinar was also held in October 2021 to promote this mobile application and other smart IoT solutions for construction with around 700 industry practitioners participated.



Guests visit DfMA MiMEP Tradeshow 2021

The CIC is also promoting a sensing technology, namely maturity method, as a non-destructive approach to estimate the early-age and compressive strength of in-place concrete in real-time. It could bring about better quality control and assurance on concrete structures and provide important information for optimising project schedule. In view of this, the CIC funded a research and published a Practical Guideline on "Maturity Method for Estimation of Concrete Strength". It sets out the guiding principles and provides the basis for applying concrete maturity sensors in different projects.

Construction Expenditure Forecast

To facilitate policy makers and industry stakeholders in assessing market trends and formulating strategic plans, the CIC continues to forecast construction expenditure in various sectors. The latest forecast indicated that, due to the massive demand for housing and infrastructure development, the construction volume will reach between HK\$220 billion and HK\$345 billion (in September 2021 price level) per annum in the next 10 years.

CONSTRUCTION EXPENDITURE FORECAST

Way Forward

The Com-PRO will continue to explore and take forward initiatives to showcase best practices on smart offsite construction and site management, improve buildability, facilitate wider adoption of high level DfMA solutions and construction robots for enhancing construction productivity. Practical research projects will continue to be supported to incubate innovative solutions in construction. A construction robot certification scheme is under development and expected to be launched in the 2022 as a pilot scheme, to uphold standard and reliability of robots to be deployed in construction sites for conducting welding, painting and plastering tasks.

Riding on the success of the inaugural Construction Innovation Expo (CIExpo) in 2019, the second CIExpo will be organised in conjunction with the CIC Construction Innovation Award in December 2022, promoting innovation adoption in construction industry.

Actual Expenditure & Mid-Term

實際工程量及中期預測

Long-Term

長期預測



Construction Expenditure Forecast (2021/22 to 2030/31)

Construction Safety

The Committee on Construction Safety (Com-CSY) strives to develop and take forward initiatives to foster a positive safety culture and provide guidance and training on safe practices. The Com-CSY and its three sub-committees, Sub-committee on Safety Promotion, Sub-committee on Safety Training and Sub-committee on Safety Technical Issues, continue to carry out work following the consensus strategic direction of preventing fatal and serious construction accidents.

In 2021, the CIC published the "Guidelines on Safety Enhancement of and Notification Arrangement for Truss-out Bamboo Scaffolds" (Guidelines) to provide guidance on the good practice for the erection of truss-out bamboo scaffolds to enhance work safety of scaffolders in minor renovation and repair works. The notification mechanism introduced in the Guidelines marked a big step in enhancing work safety on truss-out bamboo scaffolds through inspection of law enforcement departments.

On the safety promotion front, the CIC and the Development Bureau continued to co-organise the tenth consecutive Construction Safety Week and the industry-wide "Life First" campaign. The theme of this year's Construction Safety Week was "Safety x Smart Site", with focus on "lifting and heavy machinery operation safety". Activities including "Safety Conference", "Safety x Smart Site Exhibition", "Site Safety Gathering in Construction Sites Campaign", "Sharing Session for Safety for

Confined Space Work", "Sharing Session for accidents review and related safety measures" as well as "27th Considerate Contractors Site Award Scheme" were held to promote construction safety. "Life First" campaign continued to encourage industry players to conduct a 5-day safety review at their sites. 106 clients, 220 contractors and nearly 600 work projects were engaged campaign, and more than 3,000 good practices were received via the online platform. In addition, six technical webinars themed "Truss-out Bamboo Scaffolds' Safety", "Innovative solutions for Lifting and Machinery Safety", etc. and a "CEO Safety Forum" were organised to promote safety knowledge to industry stakeholders with a total of over 9,000 participants. The CIC also developed a virtual reality (VR) safety training kit and a new VR download platform to share the latest VR training materials with the industry.



The opening ceremony of the seventh annual "Experiential Learning on Site Safety Training Scheme 2021–22"



Construction Safety Week 2021 – Opening Ceremony and Safety Conference



Construction Safety Week 2021 – "Safety x Smart Site Exhibition"

The CIC's safety promotion platform, "Construction Safety" app launched an update in 2021. On top of its original function to disseminate timely safety information to frontline workers, practitioners and stakeholders, the update added an e-wallet function that could help keep copies of CIC issued cards.

With the aim of educating and cultivating proper site safety awareness among future construction talents, the CIC and the Hong Kong Construction Association co-organised the seventh annual "Experiential Learning on Site Safety Training Scheme 2021–22", providing training sessions to enhancing consciousness and instilling knowledge on construction safety into the minds of undergraduates planning to join the construction industry. Running from November 2021 to July 2022, 13 constructionrelated faculties from 11 universities and tertiary institutions joined this year and around 400 undergraduates are expected be benefited from the Scheme. Two new training courses were also launched this year, including "Foundation Certificate in Construction Safety Course" and "Safety Training Course for Construction Workers of Specified Trade (Silver Card) – Concreter".

Way forward

With an aim to reduce fatal accidents, transform existing safety culture and enhance overall safety standards, the CIC will initiate several initiatives including enhancing safety control on high-risk activities; increasing awareness on stakeholder's responsibilities; implementing of Design for Safety; enhancing support and focus on safety standard in Repair, Maintenance, Addition and Alteration (RMAA) work; and improving safety performance in private sector.



"Experiential Learning on Site Safety Training Scheme 2021–22"



Industry-wide construction safety campaign, "Life First

Environment And Sustainability

Committee on Environment

The Committee on Environment (Com-ENV) aims to promote sustainable development in the construction industry through supporting sustainability research and development, fostering best practices in sustainable design and construction, and encouraging adoption of new technology and innovative ideas in environmental protection.

The construction industry plays a vital role in achieving net-zero target by 2050 in Hong Kong. In this context, the CIC strives to support and help the construction industry seize the decarbonisation opportunity in Hong Kong's advancing net-zero journey.

CIC Sustainable Finance Certification Scheme (SFCS)

Substantial financial resources are required to achieve carbon neutrality, green finance is critical for the net-zero transition by 2050. Hong Kong is well placed to become the green finance hub in the region and serves as a premier financing platform for green enterprises and projects. As demand for green finance instruments across the construction industry (including from public and private project owners, contractors, subcontractors and suppliers, etc.) rises, the CIC has developed and launched the Sustainable Finance Certification Scheme (SFCS) in 2021 that aims to provide a standard assessment system for the implementation of best practices in sustainable construction and serve as a tool to facilitate the wider adoption of green finance in the construction industry of the Hong Kong SAR and Greater Bay Area.

The SFCS is developed based on 3I design principles: integrity, internationalism, and intelligence to achieve recognition both locally and internationally. The successful launch of the SFCS represents CIC's critical and positive step towards advancing net-zero in Hong Kong through leveraging green finance to decarbonise the construction industry and hence promote sustainable construction in the long run. The CIC is now recognised by the Hong Kong SAR Government as an external reviewer under the Hong Kong Monetary Authority (HKMA) Green and Sustainable Finance Grant (GSF Grant Scheme).

By the end of 2021, the CIC had issued a total of 20 SFCS certificates and 11 certified candidates had already received bank offers with sustainable finance agreements. In addition, the CIC had accredited a total of 20 qualified SFCS Assessors. Through the provisions of both awareness training and SFCS assessor training, the CIC will contribute towards a broader range of initiatives to accelerate the growth of green finance ecosystem in Hong Kong.



OPERATIONAL REVIEW



Panel Discussion on Sustainable Finance Opportunities in Construction Industry and Collaboration in Greater Bay Area

CIC Carbon Assessment Tool (CAT)

The CIC Carbon Assessment Tool (CAT) launched in 2019 is a web-based carbon assessment tool that aims to provide a standardised assessment method for Hong Kong construction industry practitioners to evaluate carbon performance of construction projects.

In 2021, CAT has been integrated into BEAM Plus NB to encourage embodied carbon reduction through embracing low-carbon designs and construction. In addition, the benchmarking of carbon performance for major building project types has been incorporated into the CAT. In order to raise the awareness and capability of industry practitioners on embodied carbon reduction and CAT application, a total of 14 training sessions for CAT had been conducted for over 880 participants.

CIC Green Product Certification (GPC)

In 2021, over 600 products had been certified through GPC in 28 product categories. A maximum of 6 credits can be attained under the BEAM Plus NB 2.0 through the use of the CIC GPC certified products.

Way Forward

As the CIC strives to support the construction industry seize the decarbonisation opportunity in the journey of advancing net-zero, the Committee on Environment will prioritise the following initiatives:

- Sustainable Finance Certification Scheme: establish an incentive programme and roadmap for SFCS to provide training programmes for industry practitioners and financial institutions, and hence encourage wider adoption of the scheme in public and private construction projects;
- (2) Carbon neutrality roadmap in construction: collaborate with the key industry stakeholders (including Development Bureau, Hong Kong Green Building Council, BEAM Society Limited, and Business Environment Council, etc.) to develop a consolidated carbon neutrality roadmap, in which energy saving in buildings is one of the focus areas, for the Hong Kong construction industry;
- (3) Smart Waste Management Plug-in: develop a Smart Waste Management Plug-in that can serve as a digital platform to increase the efficiency of data collection process and accuracy of data collected for monitoring and analysis of C&D waste management; and
- (4) Riding on the success of the CIC Sustainable Construction Award (SCA), the CIC is planning to launch the third SCA in 2023 to recognise sustainability and carbon neutrality best practices among construction organisations and practitioners, in particular the younger generation of the construction industry.

Modular Integrated Construction

Modular Integrated Construction (MiC) is an innovative and environmental friendly construction method. Since 2017, the Construction Industry Council (CIC) has been committed to promoting MiC to the industry and the public, in bringing about its rapid development in Hong Kong in recent years, and industry practitioners have strongly supported the adoption of this construction method in different types of buildings.

By end of 2021, more than 15 MiC projects were completed in Hong Kong. With the successful completion of InnoCell, Married Quarters for the Fire Services Department at Pak Shing Kok, various transitional housing projects, quarantine camps and Hong Kong Infection Control Centre, etc., it is proved that MiC is suitable for wide adoption in Hong Kong. There are more than 60 projects under construction / planning stages across the region.

MiC Resources Centre Provides Onestop-shop Exchange Platform for Latest Innovation Technologies

In July 2021, MiC Display Centre was officially renamed "MiC Resources Centre". The Centre demonstrates exhibits residential flats built with MiC, while providing professional information and latest updates on MiC from around the world for industry professionals. As of December 2021, the Resources Centre has welcomed more than 1,200 guided tours. The MiC Resources Centre joined Construction Innovation and Technology Application Centre, CIC – Zero Carbon Park and Building Information Modelling Space to form the Construction Exhibition Hub to serve as a professional knowledge platform for the industry.

International Conference on MiC

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In order to promote the expertise exchange on MiC around the world, following two successful events in 2018 and 2019, the 3rd International Conference on MiC was held in September 2021, attracting more than 1,400 participants. Experts from Hong Kong, Mainland China, Japan, Singapore and the United Kingdom shared the latest developments

and provided professional advice on MiC in their respective regions and jurisdictions, stimulating a wider MiC adoption in Hong Kong.

Local Seminars and Workshops

In 2021, the CIC organised five local seminars and workshops attracting a total of over 5,500 participants, they are a webinar for the North Lantau Hospital Hong Kong Infection Control Centre and workshop on procurement and contract for the Hospital Authority in March; procurement workshop on MiC transitional housing projects for non-governmental organisations (NGOs) in April; MiC Workshop on Lifting, Logistics and Transport of Modules in June and MiC Workshop on Technical Aspects of Design in July.



The International Conference on MiC was successfully held in September 2021



Students from the Civil Engineering Faculty from HKU experience the "iHub" tour in the MiC Resources Centre

Encourage Understanding of Local MiC Projects

As an advocate of MiC in Hong Kong, the CIC strives to promote understanding on the construction process of MiC in the industry. The CIC organised at least 6 local site visits in 2021 for council members, industry practitioners, NGO representatives, developers and media, including a visit to the North Lantau Hospital Hong Kong Infection Control Centre in February; a visit to Kwu Tung North Residential Care Homes for the Elderly Mockup Units in September; a visit to the transitional housing at Yen Chow Street and Ying Wa Street in November; as well as visit and sharing workshops to the HKU at Wong Chuk Hang Student Residences Mockup Units and InnoCell at HKSTP in December. In addition, The CIC presented commemorative plaques in January and September 2021 to the project teams of InnoCell at Hong Kong Science and Technology Parks and Married Quarters for the Fire Services Department at Pak Shing Kok as a token of appreciation to their contribution on the MiC development.



A visit to the HKU Wong Chuk Hang Student Residences Mockup Units

Reference Materials on MiC

The CIC regularly publishes reference materials on MiC to the industry practitioners. In 2021, the CIC issued "Reference Materials – Use of Digital Technologies for QA/QC of MiC Modules in MiC Factories" and "Reference Materials – Sample Clauses for Procurement of MiC Building Projects". As of 31 December 2021, over 2,000 downloads were recorded for these reference materials.

MiC Training Programmes for Industry Practitioners

As of December 2021, the following MiC related training courses were conducted by the HKIC and SPDC, with over 300 enrollments:

- 1. Certificate in MiC Unit Installation
- 2. Certificate in Lifting Safety Supervisor
- 3. Certificate in MiC for Project Manager and Clerk of Works
- 4. Certificate in MiC for Foremen

Way Forward

With the initiatives stated in the "Chief Executive's 2021 Policy Address", it is expected that more projects will adopt MiC method to speed up housing supply, thereby improving living environment and standard for Hong Kong.



Guests celebrate the completion of the Married Quarters for the Fire Services Department at Pak Shing Kok in Tseung Kwan O at the plaque presentation ceremony

MiC Projects in Hong Kong

Significant Completed/Substantially Completed MiC Projects

- Hong Kong Infection Control Centre Camps (Architectural Services Department)
- InnoCell (HKSTP)
- Married Quarters for the Fire Services Department at Pak Shing Kok (Architectural Services Department)
- Modular Social Housing Scheme Junction of Sung Wong Toi Road and To Kwa Wan Road Project (The Lok Sin Tong Benevolent Society, Kowloon)
- Nam Cheong Street Modular Social Housing Project ("NamCheong 220") (The Hong Kong Council of Social Service)



Kong Ha Wai Transitional Housing Project will provide 1,998 units upon completion

- Quarantine Camps (Architectural Services Department, Civil Engineering and Development Department)
- Yen Chow Street Modular Social Housing Project James' Concourse (The Hong Kong Council of Social Service)
- Kong Ha Wai Transitional Housing Project (Phase 1) (Pok Hoi Hospital)
- Ying Wa Module Community (Society for Community Organization)
- United Court Transitional Housing Project (Hong Kong Sheng Kung Hui Welfare Council)



Residential Care Homes for the Elderly in Kwu Tung North will be completed in Q4 2022

MiC Projects in Construction Stage

- Composite Development at Ash Street, Tai Kok Tsui (Urban Renewal Authority)
- Elderly's Home at Jat Min Chuen Chung Yuet Lau (Hong Kong Housing Society)
- High West Site Development (Estates Office, HKU)
- New Acute Hospital at Kai Tak Development Area (Hospital Authority)
- Public Housing Development at Tung Chung Area 99 (Housing Authority)
- Residential Care Homes for the Elderly in Kwu Tung North (Architectural Services Department)
- Kong Ha Wai Transitional Housing Project (Phase 2) (Pok Oi Hospital)
- Residential Development for Tonkin Street and Fuk Wing Street (Urban Renewal Authority, Chinachem Group)
- Subsidised Sale Flats Project in Hung Shui Kiu (Hong Kong Housing Society)
- Student Residence at Wong Chuk Hang Site for HKU (Estates Office, HKU)
- The Development of Chinese Medicine Hospital in Tseung Kwan O (Architectural Services Department)
- * The above list is not exhaustive

CIC – Zero Carbon Park

The CIC – Zero Carbon Park (CIC-ZCP) is home to the first zero carbon building in Hong Kong. Its vision, execution and implementation of low carbon design innovations are forward-thinking, and marks a milestone achievement for Hong Kong's construction industry. To this day, building performance has been continually optimised since its opening in 2012. As a centre for exhibition, education and information, CIC-ZCP aims to promote a low-carbon mentality 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, 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 function as a "city lung", breathing new life and clean air into Hong Kong.



CIC-ZCP offers diversified marketing activities to promote well-being and low carbon living



CIC-ZCP launch the brand new exhibition themed "Sustainable Development"

"Sustainable Development" Exhibition

CIC-ZCP has transformed into an experiential platform that promulgates awareness in sustainable development. To enhance public's understanding of low carbon living for achieving carbon neutrality, CIC-ZCP launched a brand new exhibition themed "Sustainable Development" in July 2021. Together with the CITAC relocation, synergy was achieved in promoting wider adoption of innovative construction technologies and construction sustainability.

Diversified Marketing Initiatives

CIC-ZCP aims to engage with the industry and community to promote well-being and low carbon living, various marketing campaigns including CIC-ZCP Spring Celebration, ZCP Market of Coffee x Busking, Enjoy Mid-autumn @ CIC-ZCP were launched and received overwhelming response throughout the year.

"Construction Month 2021"

CIC-ZCP presented the annual signature campaign "Construction Month 2021" in November. With the theme of "Toward Carbon Neutral", the campaign comprised of over 30 industry and environmental friendly activities, such as Construction Safety Forum, Construction Playground, Construction Story Corner, Construction Workers x Low Carbon Movie Night, CIC-ZCP Biodiversity Exploration and ZCP Green Market, offering a great platform to unite and encourage the industry as well as the public to explore the "Carbon Neutral" journey".

Experiential Landmarks

¢. CIC-ZCP continually uplifts its facilities to propel the sustainable development and enhance the experience of visitors. The timber floor in Hallway had been

Way Forward

As a low carbon role model, CIC-ZCP will continue to demonstrate the 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 advancing zero carbon and carbon neutrality with more engagement with the public and industry practitioners. With a view to creating and maximising synergy, CIC-ZCP will work closely with the industry practitioners and provide venue support to events initiated by the industry with aims of promoting construction sustainability.



Construction Innovation and Technology Application Centre (CITAC)

CITAC was established in November 2017 to showcase and promulgate innovative technologies and practices which can improve productivity, safety and sustainability in construction. CITAC also explores and identifies innovative solutions, both locally and internationally, that are suitable for the Hong Kong construction industry.

In 2021, under the strategic direction of its Management Board, CITAC promoted and showcased the use of construction innovations and technology via the following initiatives:

CITAC Exhibition

To promote wider adoption of construction innovation for the betterment of the industry, and to keep up with the fast-paced technological developments, CITAC was relocated to the CIC-Zero Carbon Park in July. CITAC joins hands with the CIC-Zero Carbon Park Indoor Exhibition Centre, MiC Resources Centre and BIM Space, to establish a "Construction Exhibition Hub" (the Hub). The Hub serves as a professional knowledge platform, to explore and identify innovative techniques and technologies that are suitable for adoption in the Hong Kong construction industry, boosting its productivity, sustainability and safety standards. In light of the COVID-19 situation and the relocation work of CITAC, CITAC Exhibition Centre was temporarily closed in the first half of the year. After the relocation, around 3,000 visitors visited the centre to learn more about innovation technologies, in which, CITAC reorganised its exhibits into 6 zones, namely "Internet of Things", "Advanced Technology Solutions", "Advanced Equipment/Robotics, Industrialised Process", "Advance Materials" and "Smart Lifecycle Management".

Works department and local professional bodies, including the Development Bureau, Architectural Services Department, Electrical and Mechanical Services Department, Hong Kong Housing Authority, HKIE Geotechnical Division and Housing Society had visited CITAC to exchange ideas and explore the potentials for implementing innovative technologies in the construction industry. Besides, potential construction practitioners from educational institutions, including The Hong Kong Polytechnic University, City University of Hong Kong, Hong Kong Metropolitan University had participated in tours to the Hub to understand and explore the development of the Hong Kong construction industry.

Webinars attracted more than a thousand live viewers:

Date	Title	No. of Attendees
28 Jan 2021	CIC Webinar on Forum on Unmanned Aircraft Systems (UAS) Adoption in the Construction Industry	1,048
05 Feb 2021	Sharing on the Tuen Mun-Chek Lap Kok Link Project	1,449
23 Feb 2021	Webinar on Empowering Future Urban Planning & Design with Dynamic Data	1,169
16 Apr 2021	CIC Power Talk – Where Next for MTR Projects	1,940
21 May 2021	Webinar on Emerging Digital Communication Tools in Construction Sites	1,235
15 Oct 2021	CIC Power Talk: Ways to Build Smarter – HA's New Initiatives	1,032
29 Oct 2021	Webinar on Innovation and Technology Application on Smart Construction Sites 2 – Digital Twin	1,039

OPERATIONAL REVIEW

Webinars

Webinars continue to serve as one of the means for CITAC to engage industry stakeholders and maintain the momentum on knowledge sharing under different social distancing measures. In 2021, CITAC organised 17 webinars and successfully engaged more than 15,558 attendees.

The CITAC Anniversary Conference 2021

The CITAC Anniversary Conference on Unlocking the Power of Data to Revolutionise the Construction Industry 2021 was held as a hybrid event on 10 November 2021 with around 110 and 1,100 physical and online participants respectively. Centred on the theme of data to revolution, local and overseas experts shared their knowledge and experience in big data mining and analytics and how these tools can unlock the game-changing benefits to solve industry problems and provide critical insights for construction activities.

Webinar on Emerging Digital Communication Tools in Construction Sites

Co-organised by the Construction Industry Council, the Department for International Trade UK and Institution of Civil Engineers – Hong Kong Association, was held on 21 May 2021 and brought together nearly 1,200 online participants Experts were invited to share their modern methods of construction and digital transformation in the UK construction industry and introduce their cutting-edge digital tools to our Hong Kong industry practitioners.

CITAC x Israel Construction Technology Conference and B2B Session

Following the success of the CITAC x Israel Construction Technology Conference and B2B ("Conference") in November 2020, CITAC was proud to co-organise the Conference on 15 December 2021 with the Consulate General of Israel Hong Kong, supported by the Institution of Civil Engineers. A total of six high-tech Israel companies gave presentations and participated in this conference and B2B session, which aimed to foster connections between high-tech companies in Israel and industry stakeholders in Hong Kong.

Growth of i-Club Membership

Benefited from numbers of held webinars and system integration, the number of registered organization members and individual members was 717 and 12,537 respectively (as of 31 December 2021), with over four-fold growth in membership this year. The CITAC will continue to develop attractive i-Club member privileges to appeal to industry stakeholders in joining the i-Club community.



CITAC Management Board and guests at the launch ceremony for exhibitions



Hong Kong Institute of Construction

2021 was a year full of challenges posed by the pandemic, yet the Hong Kong Institute of Construction (HKIC) achieved positive results through the concerted efforts of its staff.

HKIC has completed the articulation pathway for the students, including recognising the Professional Diploma in Construction for Specialist Trades to be launched in 2022/23, under the Hong Kong Qualification Framework (QF) at Level 4 successfully and the completion of Accreditation/Re-accreditation for various programmes. HKIC will forge ahead with various courses' accreditation under QF. In order to provide more quality programmes and ensure a sustainable long-term development of construction training, Hong Kong Institute of Construction Management Board (HKICMB) has approved a 3-year development plan for the School of Professional Development in Construction (SPDC) and safety training.

For the Repair, Maintenance, Alteration and Addition (RMAA) trade, HKIC is reviewing the courses for building services and electrical & mechanical fields (E&M) to enhance relevant training. At the strategic level, The CIC has set up a Task Force on RMAA to execute major tasks in 2021. The HKICMB also

established the Task Force on HKIC's Staffing Policy and Steering Committee on Implementation of HKIC's Vision, Mission and Motto.

Training

With the continuous support from the CIC on construction training, hardware and software of HKIC have been further strengthened. In 2021, HKIC completed uplifting works for its three campuses and established clear positioning for programmes offered by each campus (Kowloon Bay Campus, Sheung Shui Campus and Kwai Chung Campus and SPDC). Facilities of each campus have also been enhanced, including the re-provisioning of workshops, the setting up of lecture theatres, learning resources centre, indoor gym room, Ideas Lab, etc. There is an indoor sports hall at the Sheung Shui Campus which could be used for 5-a-side football or basketball games.

Moreover, in response to the impact of the pandemic, HKIC has upgraded the classrooms with internetready A/V facilities which can support both faceto-face and online teaching and learning modes. Teaching staff can conduct online teaching under pandemic situation.



Enhancement of campus facilities for Hong Kong Institute of Construction



Qualification Framework Accreditation for Initial Evaluation at QF Level 4 and Professional Diploma in Construction for Specialist Trades programme

Complete Progression Pathway with Qualification Framework Accreditation

After the completion of the uplifting project, Kowloon Bay Campus will launch the revamped flag-ship Advanced Diploma Programme and QF level 4 Professional Diploma in Construction for Specialist Trades. The uplifting project has also facilitated the widening of coverage on full-time short programmes and promotion of construction safety in Kwai Chung Campus. Sheung Shui Campus has enhanced its fulltime & part-time workshop-based craft skills training and nurtures year-long students of the Certificate in Construction and the Diploma in Construction programmes at QF level 2 and 3 respectively. The quality of teaching of SPDC was also enhanced.

Apart from the uplifting project, HKIC has established a completed articulation pathway for students. Students can complete the programmes at QF Level 2 to 4 at HKIC and join the 2-year Construction Industry Council Approved Technical Talents Training Programme (CICATP) after graduation for advancement to skilled workers.

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Whole Person Development

In addition to mastering professional craft skills and industry knowledge, HKIC also encourages students to participate in various sports activities and competitions in order to nurture their whole-person development and team spirit, including CIC Happy Run 2021 organised by the Construction Industry Sports and Volunteering Programme, an interschool rowing competition with secondary schools and the "2021 HKIC Baduanjin Qigong Competition" adjudicated by the Health Qigong Association of Hong Kong, China, etc.

Besides, HKIC is committed to cultivating a caring and compassionate attitude among students in pursuit of their whole person development. Staff and students have formed teams by their specialties and perform volunteer work during weekends and after classes, such as helping the neighborhood on small repair works, helping elderly to relocate homes, carrying out cultural preservation and restoration projects in remote islands with EPD & CUHK.

Woodwork lecturers at Sheung Shui Campus crafted a giant six-way Luban lock (two-meter in height and two-tonne in weight) with the rare wood logs (Malagasy Rosewood and Red Sandalwood) donated by the Agriculture, Fisheries and Conservation Department with the assistance of WorldSkills Competition candidates. The statue took more than three months to complete and became the landmark of HKIC in December 2021.



HKIC staff and students assist EPD on the restoration of a seawall at Lai Chi Wo



Inter-school rowing competition at HKIC Sheung Shui Campus

All-rounded Curriculum Development

For programme development, the inclusion of foundation skills subjects into the curriculum of the Certificate in Construction and Diploma in Construction helps to equip students with fundamental skills on communication, numeracy and information technology application for their career development after graduation. The module-based delivery arrangement enables a better teaching and learning experience.

In order to meet industry requirements, HKIC has successfully launched an EMSD recognised part-time Certificate of Electrician/Electrical Fitter (Grade A) Upgrading Course and the first class was launched on 20 December 2021.

A new 2-day Certificate in Construction Safety Foundation Course was launched in September 2021 to replace the one-day Mandatory Basic Safety Training Course (Construction Work) for HKIC students. The new course features interactive discussion sessions and virtual reality exhibits to enhance students' understanding and awareness of site safety. In 2021, 51 classes were conducted with 890 graduates. HKIC is in active discussion with the Labour Department, for offering Certificate in Construction Safety Foundation Course to industry practitioners with recognition. HKIC launched the "Construction Industry Council Relief Fund – Multi-skills Training Scheme for Registered Workers" to assist the underemployed or temporarily unemployed construction workers in acquiring new skills and enhance their competitiveness to prepare for further development in the industry. The eligible registered construction workers who enroll in a suitable full-time course under the Enhanced Construction Manpower Training Scheme within the Scheme period will receive a special allowance of maximum HK\$3,000 per month in addition to the monthly basic allowance based on their attendance record. The scheme provided training to some 700 workers in 2021.

Updates to Training Grounds

In order to optimise the usage and management of all outdoor training grounds, Wong Lung Hang Training Ground and Yuen Kong Training Ground were returned to the government in 2021. The Wai Lok Street Training Ground has to be returned to the government by June 2022, and the CIC has secured a three-year (renewable) short-term tenancy of a piece of idle land in Lam Tei for relocation with the assistance of Development Bureau. It is expected that the new outdoor training at Lam Tei will come into operation in the second guarter of 2022. In addition to providing training on bar-bending and formwork, a simulated bar-bending and cutting production zone, equipped with computerized automatic machines, will be set up in the new training ground.



HKIC students help elderly in need to repair their homes

Computerised automatic bar-bending and cutting machines

OPERATIONAL REVIEW

In order to enhance workers' skills in safe machinery operation, the 2021 Construction Industry Machinery Operation Competition was organised on 20 November 2021 in Tai Po Outdoor Training Ground, with 27 teams comprising of 39 participants from nine companies and organisations joining the competition's five categories, namely Crawlermounted Mobile Crane, Tower Crane, Truck-mounted Crane, Gantry Crane and Mini-loader.



Competition in the Crawler-mounted Mobile Crane Operation Category

Streamlined SPDC curriculum

 SPDC is committed to offering a variety of innovative and professional training courses to the market, with focus on the provision of up-to-date training to industry practitioners. In line with the development direction, SPDC has streamlined the programme categories into five core areas, namely BIM, MiC/ DfMA, Construction Technology and Quality, Construction Management and Safety Management. In order to promote "Construction 2.0" and meet the industry demand on training, seven new courses were launched in 2021.

New Website and Enrolment Platform

SPDC launched a brand new website and online application platform (www.spdc.hkic.edu.hk) in 2021. The new portal provides a real-time interface for latest programme information and online application. In order to expand the publicity coverage and broaden the reach of courses, SPDC promotes its courses via Electronic Direct Mailing to the alumni, contractors and sub-contractors under CIC's registration scheme, newsfeed in CIC's social media including Facebook, Instagram and Linkedin, placing banners on HKIC website and advertising on CIC eNewsletter "Construction Post".

Extending Collaboration Network

SPDC also proactively reaches out to industry stakeholders and professional associations, for example, the Hong Kong Federation of Electrical and Mechanical Contractors Limited (HKFEMC), Hong Kong Housing Society, Gammon Construction Limited and Hip Hing Construction Co. Ltd., for the provision of SPDC programmes for their members/ employees to expand SPDC collaboration network.



Webinar "Experience Sharing on Modular Integrated Construction (MiC):Married Quarters for the Fire Services Department at Pak Shing Kok in Tseung Kwan O"



"Innovation Engineering Training Course – Innovation Mindset and Technology"

The Construction Industry Council Approved Technical Talents Training Programmes



The Construction Industry Council Approved Technical Talents Training Programmes (CICATP) was launched in September 2019. After two years of systematic on-the-job and enrichment programme training provided by the employers and HKIC, about 100 CICATP apprentices graduated in 2021. They are the first batch of knowledge-based skilled workers trained by HKIC. By the end of 2021, a total of 581 applications have been approved with 130 employers participating.

To embrace the launching of various QF recognized programmes in 2021/22 and 2022/23, and to optimise and enhance the training quality, the parttime "Diploma in Construction" and the part-time "Professional Diploma in Construction for Specialist Trades" have been incorporated into the CICATP in 2021/22 and 2022/23 respectively. In order to provide a complete progression ladder, eligible graduates from the full-time Certificate in Construction, full-time Short Course, and full-time Diploma in Construction may enroll into related apprentices' programmes. The CICATP Approved Employer List was launched in August 2021 to monitor the on-the-job training quality provided by the employers and to ensure the trainees are trained in appropriate construction environment under the supervision of site trainers. By the end of December, a total of 130 eligible employers were added to the list.

To strengthen the traditional spirit of mentorship and apprenticeship of the industry, as of December 2021, 186 (including CICATP and Collaboration Scheme) site trainers have completed the five days Instructing Techniques for Site Trainers course programme to ensure that the site trainers have sufficient knowledge and teaching skills.

Curriculum Development & Quality

In 2021, five streams of Professional Diploma in Construction for Specialist Trades had acquired recognition as QF Level 4. 10 streams of "Diploma in Construction" programme and two safety supervision programmes had completed Accreditation/Reaccreditation for QF Level 3. With eight streams of Full-time Certificate in Construction being recognised as QF Level 2, a total of 25 courses' qualifications were being recognised under the QF. The HKIC continued to drive quality improvements in new programme development and the operation of existing programmes, including enhancing teaching effectiveness of part-time teaching staff on QFrecognised programmes, standardizing arrangement of appointing External Examiners for Foundation Skills Subjects, enhancing the arrangement for class observation, streamlining the structure of HKIC committee and the composition of programme teams, etc. During the year, 10 new or revamped programmes had been vetted or validated based on HKIC quality assurance (QA) mechanism.

To provide articulation to degree programmes for graduates of the new "Professional Diploma in Construction for Specialist Trades" and of the four revamped Advanced Diploma programmes, HKIC signed the Memorandum of Intent and Letter of Intent with The Technological and Higher Education Institute of the Vocational Training Council, Chu Hai College of Higher Education and Hong Kong Metropolitan University in 2021 to explore the cooperation opportunities.

HKIC put in place the "3-year QA and QF training programme for teaching staff" in 2021. Over 40 sharing sessions, seminars and workshops were arranged for teaching staff in the year. 700 participants (man-time) joined the activities covering topics like QA, QF, curriculum development of outcome-based programmes, assessment design, programme management, development of learning and teaching materials and preparation for programme accreditation.



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OPERATIONAL REVIEW

Student Recruitment, Student Development and Career Support Services

HKIC continues to recruit students and assist them with job placements while providing moral and civic education to students despite the pandemic.

For student recruitment, HKIC participated in the "Education and Careers Expo 2021" from 15 to 18 July 2021. The event organiser has designated one of the exhibition days as "Construction Progression Pathway" theme day featuring talks on BIM, Construction Industry Outstanding Young Person sharing and construction craft demonstration, to introduce HKIC courses and prospects of the construction industry. To reach a wider audience of targeted students, HKIC also actively participated in various education exhibitions, including the "Virtual Information Expo on Multiple Pathways 2021" organized by the Education Bureau and the "Wan Chai Job Expo – Building a Multicultural Workplace" organised by the Labour Department.

HKIC launched the "Construction Pathway Project" TV Announcements in the Public Interest (API) in 2021, aiming to promote Vocational and Professional Education and Training in construction industry and HKIC's new progression pathway after the programme revamp. New design of related promotion was also published in outdoor media, MTR stations, bus shelters, online and mobile media to attract youngsters to enrol in HKIC programmes and join the construction industry. The video has reached nearly 630,000 views on Youtube channel. HKIC has also produced a series of social media videos to feature the stories of young graduates. Both HKIC website and YouTube channel recorded significant growth in the number of visitors.

Despite the drop in the number of secondary school leavers, HKIC has attained a slight increase of 5% on enrolment figures of full-time long programmes as compared with last year, including Advanced Diploma, Diploma in Construction and Certificate in Construction. On the other hand, the available training places of full-time short course in the 2020/21 has been adjusted due to the class suspension under pandemic situation and the total number of enrollment was 1,885.



"Construction x STEM Winter Camp" well-received by participating secondary school students

To promote awareness among secondary school students, the HKIC's STEM Alliance held an online quiz "Construction x STEM" in May 2021 about building structure and bar bending and fixing. It attracted around 800 secondary students. In addition, STEM Alliance has also organized the two-and-a-half-day "Construction x STEM" Winter Camp during 18–20 December 2021, which offered workshop experience and introduced construction innovation to secondary school student who joined a tower crane model making competition in teams, and the Award Presentation Ceremony was held at CIC-Zero Carbon Park on 20 December attended by more than 100 students and guests.

Looking forward, the COVID-19 epidemic situation is expected to remain unstable in 2022 and the decrease in number of secondary students will continue, it brings unprecedented challenges to the student recruitment of HKIC. However, HKIC will continue to make best efforts to enhance its branding through diversified promotional channels, and expand website and social media promotions, etc. to maintain growth in the student recruitment number.

Promote a Sense of Belonging

To promote the Vision, Mission and Motto (VMM) of HKIC, the HKIC Anthem Music Video Production work was completed in May 2021. The Music Video of the HKIC Anthem has also been uploaded to the HKIC website as well as CIC and HKIC YouTube Channel for public viewing.

In addition, in order to enhance students' understanding of Moral and Civic Education and build their national identity, HKIC started providing various training programmes in collaboration with the Hong Kong Army Cadets Association in 2021. It included seminars on "The National Flag, National

Emblem and National Anthem of the People's Republic of China", exhibition on "The History of the Development of the National Flag, National Anthem and National Emblem", a series of film appreciation activities on "Records of National Infrastructure Development", and training workshops for the Flag-raising Ceremony held at the HKIC campuses, which were conducted by students of full-time long programmes. In 2021, the Ceremony was conducted to mark the anniversary of the Hong Kong Special Administrative Region Establishment Day, and the National Day of the People's Republic of China.



Flag-raising Ceremony

Career Support

The job market of the construction industry has gradually recovered in 2021, which led to a higher employment rate and retention rate than that of last year. To explore more employment and training opportunities for the graduates, HKIC held 18 job fairs and provided services to more than 2,200 graduates through the career portal. Meanwhile, HKIC also received support from the Hong Kong Bar-Bending Contractors Association and successfully extended the sponsorship scheme to the Diploma in Construction (Bar-Bending & Fixing). Sponsorship and job placements are provided at the early stage of students' admission to encourage students for the completion of the course and to join the construction industry.

HKIC has attached importance to the mission of improving graduates' employability and personal quality. By optimising the Career Advising Scheme and in partnership with the CICATP, HKIC provides three years of personalized career counseling work to establish mutual trust and provide timely assistance to the graduates.



Production of HKIC anthem music video

Networking in the construction industry is essential and HKIC has always focused on exchanging views and deepening cooperation with industry stakeholders. In 2021, 24 briefing sessions on career support services were held for employers and trade associations of the industry, meeting with 147 organizations and 173 representatives. HKIC also conducted 27 employers and students sharing sessions to prepare students well before graduation.



Briefing session of Sponsorship Programme of Diploma in Construction sponsored by Hong Kong Bar-Bending Contractors Association



Career Advising Scheme – provides career counseling service for students

Collaborative Training Schemes

In addition to the running of full-time and part-time courses, HKIC offers a variety of Collaborative training Schemes as supplementary measures to meet the industry demands for intermediate tradesmen and tradesmen and provide comprehensive and structured craft trainings for construction practitioners. Gaining support from main contractors, employers and trade unions, HKIC has trained 1,535 graduates from the Collaborative Training Schemes in 2021.

Intermediate Tradesman Collaborative Training Scheme (ITCTS) Recruitment Days co-organized by the Collaboration Scheme Department, Labour Department and Social Welfare Organizations were held regularly. HKIC arranged on-site and online platform recruitment days in 2021 to assist employers in recruiting trainees and delivering training. 19 ITCTS Recruitment Days were held in 2021, attracting 1,320 job seekers and 1,280 interviews were arranged. On the other hand, "Construction Industry Recruitment Day" was held at CIC-Zero Carbon Park on 27 November 2021 with a total of 28 companies signed up and more than 500 construction industry job vacancies were provided.

About a hundred site trainers participated in 14 "Site Trainers and Trade Test Exchange Sessions" in 2021. By organizing exchange sessions and conducting visits to the Hong Kong Construction Industry Trade Testing Centre regularly enables site

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trainers to share their teaching experience with the trade test instructors and learn more about trade test requirements to improve students' passing rates. In the coming years, Collaboration Scheme Department will focus on enhancing teaching skills of site trainers and improving the scheme's effectiveness.

To promote non-Chinese speakers to participate in Collaborative Training Schemes, the "Employer Seminar – To Enhance the Integration of Ethnic Minorities in Construction Site" was held at the CIC-Zero Carbon Park on 30 July 2021. The Seminar aims to strengthen the relationship among employers who intend to employ non-Chinese speakers and broaden the employers' network by sharing information about opportunities and challenges of employing non-Chinese speakers. Besides, HKIC will also assist employers in organizing recruitment events for non-Chinese speakers to facilitate non-Chinese speakers in joining the construction industry.

In order to show appreciation for the efforts made by employers in training intermediate tradesmen and tradesmen in 2020, "Employers Appreciation Ceremony and Construction Industry Outstanding Apprentice Award Presentation Ceremony 2021" was held at the Royal Plaza Hotel on 8 October 2021. 15 outstanding apprentices received awards for their remarkable performance.



Enrichment programme to build team spirit



Employers Appreciation Ceremony and Construction Industry Outstanding Apprentice Award Presentation Ceremony 2021 was held to express gratitude to the employers for continued support and to express appreciation to apprentices for outstanding performance

HKIC has also set up a Team of WorldSkills Competition to facilitate knowledge exchange between HKIC teaching staff and students with their counterparts around the world, and fostering a culture of pursuing excellence. Due to epidemic measures, HKIC participated in "Arc Cup International Welding Competition 2021" held in Xiamen via the online platform from 3 to 8 December 2021. This competition attracted competitors from different countries and regions, including India, Bulgaria, Indonesia, Malaysia, Thailand, Vietnam, and Ghana. HKIC's team won the 2nd runner up award.

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 Trainee Programme through the "first-hire-then-train" principle. Nearly 100 trainees have participated in the programme as recommended by their employers which include government departments, landscape companies, arboriculture companies, construction companies and so on. The first batch of trainees will complete their training in March 2022.



Tree climber trainee practice in the enrichment programme

To assist these trainees in acquiring professional skills, HKIC has arranged soft skills and knowledge enhancement courses in the form of group activities, lectures and field trips. Seminars and workshops are also arranged for trainees to enhance their industry knowledge, such as applying Building Information Modelling (BIM) in arboriculture landscape planning to enhance the landscape planning.

HKIC has arranged 2 briefing sessions to strengthen the relationship with the industry and enhance their understanding of the trainee programme attracting 100 stakeholders in the industry and 70 students.

Other Administrative Work

In order to enhance the work of HKIC, the CIC has appointed a professional accounting firm to carry out an Internal Audit for HKIC in the end of 2020 and it was completed in the third quarter of 2021. HKIC will make necessary enhancement on management and operation fronts according to the recommendations to provide high quality training programmes to the industry.



Arborist trainees learn to use sonic tomography to detect trees' health status

Trade Testing

The Hong Kong Construction Industry Trade Testing Centre ("HKCITTC") continues to strive for providing independent and creditable trade testing services. The HKCITTC has carried out a series of work to enhance trade testing procedures and upgrade trade testing systems in 2021, aiming to further improve the professionalism of trade testing services. Furthermore, the HKCITTC has also conducted a series of industry engagement activities to further promote the industry's recognition of trade testing qualifications.

Uplift Professionalism of Trade Testing Services

Standardisation of Trade Test Assessment Criteria

The HKCITTC endeavors to standardise and regularise the procedures of trade tests in recent years to further raise the level of the professionalism of trade testing services. In 2021, the HKCITTC fully adopted 6+1 assessment criteria in the practical tests of 150 trades and laid down the related practical test processes and requirements in details, to ensure that all candidates are accurately assessed based on their understanding and handling capability of the entire working procedures and requirements.

Assessment Criteria for Practical Test:

- 1. Understanding of drawing and specification;
- Preparation work before commencement of test;
- Working procedures, accuracy and quality of works;
- 4. Proper handling and use of materials;
- 5. Proper use of tools and equipment;
- 6. Housekeeping after completion of test; and
- 7. Safety precautions.

In addition, the HKCITTC published the assessment criteria of practical test for 150 trades, to facilitate candidates and training institutes to understand more about the trade testing content and scopes of assessment for different trades.



Timely Review of Trade Test Contents and Proactive Response to Social Issues

The HKCITTC maintained close contact with industry stakeholders and conducted timely reviews of trade test contents to ensure that the current trade tests are effectively in line with the practical operations and meet industry needs. In 2021, outbreak of COVID-19 and numerous industrial accidents raised public health and safety concerns in drainage system and bamboo scaffolding works respectively. In view of this, the HKCITTC invited representatives from the industry to discuss preventive initiatives and solutions, and further suggested revisions to plumbing and bamboo scaffolding trade test contents with updated assessment requirements relevant to the latest societal issues, underlining its pioneering role to raise industry awareness towards public health and construction safety.

Strengthen Connections with Training Institutions

The HKCITTC stepped up its communication with various training institutions – a total of 60 trade test exchange sessions and a series of training workshop exchange visits were hosted in 2021, in order to boost synergistic collaboration with training institutions and instructors (including HKIC, Collaboration Training Scheme and other training institutions), and facilitate them to enhance training efficiency.

Boost Recognition of Trade Testing Qualifications

Proactively and Closely Liaise with The Industry to Raise Trade Testing Recognition

The HKCITTC actively promoted trade testing qualifications and the skill level of workers to the industry. With the recognition and support from the industry, some organisations have introduced trade testing qualifications as minimum employment requirement into their works contracts and some contractors and organisations have included trade testing qualifications in their employment contracts as well. Furthermore, certain trade test certificates were added to the admission requirement, as one of the eligibility criteria, of the Voluntary Recognition Scheme for Fire Service Installation (FSI) Technicians of Fire Services Department; and Metal Scaffolder Trade Test Certificate holders are eligible for signing the Labour Department's Form 5 for the Construction Sites (Safety) Regulations 38F(1).

Extend the Promotion to Repair, Maintenance, Alteration and Addition (RMAA) Industry

In 2021, the HKCITTC devoted much efforts to the promotion of trade test to RMAA, minor works and property management industries. The HKCITTC took the initiative to approach the Urban Renewal Authority, RMAA, minor works and property management industry stakeholders to introduce trade testing qualifications and its application to their industries.

Step up Publicity for Trade Test

The HKCITTC produced a series of promotional videos to promote trade test to the general public in the home repairs and maintenance. The videos present stories in a clear and vivid way to call attention to the significance of trade testing qualifications in home renovation. Through the interesting videos, the HKCITTC hopes to raise public awareness and understanding of trade test and to encourage employment of skilled workers, recognizable by their trade test qualifications, in repairs and maintenance works.



Create interesting video to promote trade test to public

OPERATIONAL REVIEW

Further Reinforce Trade Test Resources Utilisation Efficiency and Test Capability

Significantly Increase the Flexibility and Mobility of the Resource Use

The HKCITTC performs regular reviews over trade test resource deployment, and re-allocated resources flexibly in accordance with the changes of market needs. Besides, the HKCITTC adopts modular design and smart replacement parts in workshops aiming to further optimise trade test resources' flexibility, mobility, utilisation ratio and efficiency. The HKCITTC completed the re-planning and setting up for 13 workshops in Aberdeen building, and officially put into use in the year.

Continuous Digitalisation and Automation

In 2021, the HKCITTC continually co-operated with Information Technology Department to enhance the Trade Testing Management System (TTMS) and upgraded various systems, for example, introduced e-Written Test to Trade Test for Grade A Electrical Work and newly launched SMS blasting system. Moreover, the HKCITTC upgraded the e-payment function of TTMS to fully implement cashless payment, and integrated TTMS with Training Management System of HKIC in order to reduce tedious administrative works and provide timely services.

Introduce Artificial Intelligence (AI) Technology for Invigilation

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The HKCITTC first introduced AI technology to assist invigilators to monitor the safety performance of candidates. Metal Scaffolding Workshop installed an artificial intelligence (AI) system for pilot run in December 2021. The system's camara captures candidates' activities and analyse with AI real-time. The system will alert the invigilator immediately while any safety misconducts of candidate are observed, such as not wearing safety helmet.



New bar-banding and fixing workshop adopts modularisation design

Set Up Trade Testing Control Room

For the purpose of strengthening the monitoring and governance of the trade testing operation, the HKCITTC set up a central control room in 2021. The management can monitor the real-time operation and efficiency through different reports, dashboards and real-time internal monitoring systems in the control room.

Workers Registration

Being the front-line service department for over 584,000 registered construction workers, the Workers Registration Office (WRO) continues adopting the traditional and effective service delivery while tapping into potential service innovation.

Registration Figures

The WRO received 52,942 new registrations and 83,408 renewal applications in 2021, maintaining high service volume.

Registration Category	Number of Registered Workers (as at 31/12/2021)	Number of Registered Workers (as at 31/12/2020)
Registered skilled worker	206,411	208,158
Registered semi-skilled worker	34,628	32,972
Registered general worker	343,265	307,198
Total	584,304	548,328

Enhanced registration service online and offline

The new CIC Service Centre (Kowloon Bay) was established in August 2021. On top of onestop workers registration, trade test and training course application, the new Service Centre served as information and activity hub for construction workers on upskill, health and industry news. The CIC also noticed the upward trend of online



New CIC Service Centre (Kowloon Bay)

workers registration. Workers registration submission via "easyJob" Mobile App and online platform accounted for 28% of total applications.

Overcoming challenges of COVID-19

In view of the ongoing impact of COVID-19 epidemic in 2021, the WRO assisted workers in making appointments of COVID-19 testing service online. Industry news were disseminated via SMS messages such as available support from "Construction Industry Caring Campaign", priority vaccination arrangement for workers, as well as updates of training courses and trade tests.

To continue our support to registered workers under the COVID-19, the CIC extended the waiver of the construction workers registration and renewal fees for another year from 1 October 2021 to 30 September 2022. The CIC has waived the relevant fees for construction workers for three consecutive years in total with a sum of approximate HK\$29 million.

Diversified Development and Welfare Activities

The CIC organised a wide range of activities and initiated welfare measures for workers, to promote their balanced development and express our thoughtful care.

The annual signature event, Construction Workers Festival (CWF), collaborated with the CIC Construction Month for the first time, and provided a variety of weekend activities for workers and their families. Themed "continuing professional development and upkeep health", the CWF featured health talks, Construction Industry Exhibition Hub guided tours and Low-Carbon movie nights. Territory-wide Physical Fitness Survey for the Community was held to enable workers to have general understanding of his/her own fitness conditions. CWF was well received and was attended by over 1,580 workers and their family members.

The CIC held night webinar series on "Road to Construction Professional" to encourage registered general workers to become registered skilled workers. The webinars covered trade test scope and support services, career development path and the statutory requirements of the Construction Workers Registration Ordinance (Cap. 583) (CWRO).

The CIC premiered industry sponsorship for the annual signature event, Scholarship for Family Members of Registered Construction Workers. With the support from eight contractors and registered specialist trade contractors, 39 outstanding students were awarded this year with over HK\$300,000 scholarships where both numbers were record high.

The CIC celebrated festivals with workers and cared about their well-being in relation to the seasonal impact on their work. Seasonal giveaways such as card cases, red packets and sun protection gears were given to workers.



Territory-wide Physical Fitness Survey for the Community



Promotion poster of Construction Workers Festival 2021



Holders of Scholarship for Family Members of Registered Construction Workers 2021 shared their experience

Enforcement of CWRO

The CIC is committed to promoting the construction industry's compliance with the statutory requirements of the CWRO, including employment of registered construction workers for carrying out construction works on construction sites and submission of workers daily attendance records (DAR). The CIC continued to discharge its functions in conducting compliance checks and enforcement of the statutory requirements of the CWRO amidst the pandemic. In 2021, a total of 1,560 inspections on construction sites and 2,455 compliance checks on DAR submitted by principal contractors were conducted.

Upon discovery of non-compliances, investigation would be commenced and, if appropriate, prosecution would be initiated against the suspected offenders. A total of 235 summonses were issued for prosecution of the suspected offenders. Including the cases brought forward from the previous years, 408 summonses resulted in convictions in 2021, of which 3 summonses involving non-registered workers who carried out construction works on construction sites and 405 summonses relating to failure in submitting DAR within the prescribed statutory period.

To convey the importance of the submission of DAR and explain the requirements in simple terms, a new poster was produced and disseminated to contractors and construction sites. In addition, a total of 25 webinars and seminars on CWRO requirements and Construction Workers Registration System operation were held.

The Inspection Team and the Hong Kong Construction Association jointly conducted site inspections on the implementation of compulsory testing measures which required all site staff to present either updated negative COVID-19 test results or vaccination records when entering construction sites for work. The inspection also covered checking of site antiepidemic measures and facilities implementation so as to provide advice to site personnel to stay vigilant against COVID-19. Over 1,500 sites were inspected during the year.

Way Forward

The workers registration statistics reflected an aging trend of skilled workers and increasing proportion of general workers. Looking forward, we will focus on incentivizing registered general workers to upskill and collaborate with industry stakeholders to promote professionalism of skilled workers which in turn benefits safety and quality of construction.



Joint site inspections of COVID-19 Measures

Registered Specialist Trade Contractors Scheme

The Registered Specialist Trade Contractors Scheme (RSTCS) emphasizes the professionalism and competency of the registered companies. The RSTCS specifies comprehensive registration requirements to registered companies and provides business opportunities and support for gualified specialist trade contractors to strengthen their competitiveness. As of December 2021, there were 7,808 registered companies, including 1,849 Registered Specialist Trade Contractors (RSTC) and 5,959 Registered Subcontractors. The RSTCS is widely supported by the industry, especially by the public sector such as the Development Bureau (DEVB), Hong Kong Housing Authority, MTR Corporation Limited etc., which have adopted the RSTCS in public work contracts.

Expanding Spectrum of Designated Trades

The RSTCS, launched in 2019, has been upholding structure and safety as its core principles. It uplifts the professionalism of seven designated trades including concreting, concreting formwork, curtain wall, demolition, erection of concrete precast component, reinforcement bar fixing and scaffolding. In January 2021, as requested by the Association of Plastering Sub-Contractors and supported by the industry, the CIC upgraded plastering trade as the eighth designated trade for enhancing professionalism of industry.

Strengthening Core Elements for Registration

In September 2021, the CIC, the DEVB and the Independent Commission Against Corruption colaunched the 'Integrity Charter' which aims to enhance the awareness of corruption prevention and the corporate governance of the construction companies, thereby ensuring the legal and regulatory compliance of their business operations. Along with the current registration requirements in terms of safety, management, job experience, execution and finance, the RSTCS keeps abreast of the latest developments and introduced 'Integrity Management' as the sixth registration requirement. Starting from 2022, registered companies will be required to formulate 'integrity policy' and complete 'integrity training' under the new requirement.

The six registration requirements of the RSTCS are in line with the List of Approved Contractors for Public Works and the List of Approved Suppliers of Materials and Specialist Contractors for Public Works under the DEVB, which established a consistent and credible standard for the registration and management mechanism of local contractors and specialist trade contractors.



Mr. Simon PEH, Commissioner of the ICAC (2nd right), Ir LAM Sai-hung, former Permanent Secretary for Development (Works) (2nd left), Mr. CHAN Ka-kui, former Chairman of the CIC (1st right), and Ir Albert CHENG, Executive Director of the CIC (1st left), officiating at the launching ceremony

Continuous Professional Development

RSTCS encourages continuous professional development and core personnel of the registered companies including the management team, frontline supervisory staff and technical staff were provided with training on advanced knowledge and technologies. The framework of the professional development of the RSTCS includes three major aspects, namely legal and regulatory compliance and industry development, management of specialist trades and the application of construction technologies.

During the year, the RSTCS has organised a series of practical professional development activities for the registered companies including:

- For strengthening the understanding on statutory requirements of the registered companies, representative of the Labour Department was invited to share the updates on the Employment Ordinance and relevant case studies;
- In response to the increasing concerns for Environmental, Social and Governance, representative of Ernst & Young was invited to introduce the topic and encourage the registered companies to elevate their corporate governance;
- Industry leaders were invited to exchange ideas on the latest developments of the RSTCS;
- A webinar on Competition Ordinance was organised and representatives of the Competition Commission were invited to illustrate the Competition Ordinance and share construction industry relevant cases.



The Chairperson of the Committee on RSTCS, Ir Chan Chichiu (1st left), exchanged ideas on the latest developments of the RSTCS with industry leaders

The RSTCS and the Hong Kong Institute of Construction introduced the 'Continuous Professional Development Courses for Registered Specialist Trade Contractor' which covers modules including contract management, site safety, digital transformation and site guidance, aiming to strengthen their teamwork and project management techniques. The registered companies will continue to strive for excellence, in order to keep abreast of the latest developments and seize business opportunities.

Regulatory Actions

The Committee on RSTCS instigates regulatory actions against registered companies arising from court convictions or violations of relevant laws, as well as violating the Rules and Procedures of the RSTCS. When there is a prima facie case, a hearing will be conducted by the Committee and any regulatory actions imposed will be published on the RSTCS website. An independent appeal mechanism is also established to handle appeal cases.

During the year, a total of 19 registered companies were convicted, mainly in relation to violations of safety, wage payment and MPF legislations. The concerned companies were subject to penalties ranging from warning letters to suspension of registration for one to nine months.

The RSTCS Young Leaders Network

The Young Leaders Network under the RSTCS has attracted over 160 management personnel and site supervisors of the registered companies aged 45 or below to join. We delivered the latest industry news and events updates through the Young Leaders Network chat room. We have also organised an executive workshop on leadership

and team management skills and invited experts to introduce Digital Works Supervision System to the young leaders. Through a variety of activities to broaden the young leaders' horizon and enhance their management skills, they are able to embrace the new challenges ahead, as well as to drive industry rejuvenation and technological developments.



Young leaders of RSTCS Young Leaders Network participated the executive course on leadership and team management.

Way Forward

The grace period of Group 1 RSTC under the seven designated trades will close by end of March 2022. By that time all the registered companies under the RSTCS will be recognised as with experienced management, financial competencies and qualified professionals. We welcome the addition of more trades for the continuous advancement of the RSTCS. Meanwhile, we will also explore the enhancement of other trades under the Register of Subcontractors for the sake of upgrading the construction industry as a whole.

OPERATIONAL REVIEW

Technically Competent Persons Registration Scheme

Launched in December 2020, the Technically Competent Persons Registration Scheme (TCPRS) builds a pool of Technically Competent Persons (TCPs) and Competent Person (Logging) (CP(L)) readily accepted by the Building Authority for the purposes of the Code of Practice for Site Supervision 2009 and the Buildings Ordinance (Cap. 123). The TCPRS runs parallel to the current practices of provision of curriculum vitae of TCPs and CP(L) upon submission of supervision plans for individual projects.

Total Digitalisation

A web-based platform, the TCPRS Portal and a TCPRS Mobile App, was developed to allow applicants to submit applications electronically and the TCPRS Secretariat can review and vet each application on the same electronic platform. Successful registrants were issued e-Registration cards housed in the TCPRS Mobile App. The whole process was completely digitalised. 2,494 TCPs and CP(L) had registered before the first anniversary of the TCPRS.

Continuous Development to Boost Digital Capability

With the increasing demand for digitalised supervision in the construction process, the CIC continued to bring latest technological development knowledge for the registered TCPs and CP(L). Executive Seminar on Digitalisation Solutions was held to introduce the Digital Works Supervision System solutions and other digitalised tools for smart construction.

Industry Adoption

To widen the industry adoption of the TCPRS, a total of 13 stakeholder briefings and regular themed webinars were organised for designated trade associations and target groups. Posters and leaflets were distributed to over 600 construction sites while a TCPRS advertisement had been posted in the September 2021 issue of the Construction Post to introduce TCPRS. The adoption of TCPRS in the supervision plans submitted under Buildings Ordinance (Cap. 123) was on the rising trend.

Way Forward

In order to enhance the quality, skills and knowledge of the TCPs and CP(L) through continuous training, TCPRS Continuous Competence Development (CCD) model is established to provide continuous professional development for the registrants in three areas, namely statutory requirements, environment, health and safety and advanced construction practices. The CCD model is expected be promulgated in 2022.

The TCPRS will strive for promoting professionalism and recognition of the registered TCPs and CP(L) so as to uncover business opportunities and expand career development in the construction industry. The launch of the CCD would mark a milestone for the TCPRS in enhancing quality, skills and knowledge of the registrants.



ANNUAL REPORT 2021 121

Construction Innovation and Technology Fund (CITF)

Accelerating Industry Technological Transformation

The Construction Innovation and Technology Fund (CITF) continues to support local construction industry to transform and improve its productivity, quality, safety and environmental performance through automation, digitalisation and industrialisation. As of 31 December 2021, a total of 3,041 applications were received, among which 2,248 applications were approved with an accumulative approved amount increased to HK\$571 million in 2021.

Under the six categories of funding support, namely Building Information Modelling (BIM), Advanced Construction Technologies (ACT), Modular Integrated Construction (MiC), Prefabricated Steel Rebar, Industrialised Process - Robotic Welding and Manpower Development, the total accumulative number of beneficiaries increased to 849 in 2021. The fact that CITF is well-received by the industry somehow reflects a wider adoption of new technologies in construction projects. More than 11,200 training places of different construction-related technologies including BIM have been approved under the CITF, which benefited construction personnel at various levels including professionals, technicians and students and encouraged the adoption of innovative construction technology.



Large-scale briefing session on the Enhancement Measures of the Construction Innovation and Technology Fund

The CITF Mid-Term Review was conducted in 2021 to assess the effectiveness of CITF after two years of operation and identify areas for improvement and enhancement. Through 17 focus group meetings and questionnaire surveys, industry-wide feedback from nearly 800 industry practitioners were collected, with over 80% response affirming CITF's effectiveness to the industry's development. Enhancement measures to CITF were launched on 1 January 2022 alongside with substantial uplift to the funding ceilings and three new funding modes had been rolled out to widen technology adoption among construction projects. Under the new measures, the per-technology and per-company BIM and ACT combined fund ceilings were increased from HK\$0.8 million to HK\$1.5 million and from HK\$3 million to HK\$6 million respectively. Two new BIM funding modes for doorstep Projectbased Coaching and BIM Viewer Collaborative Training were introduced to boost the supply of qualified BIM personnel to cope with the increase in construction digitalisation. The new funding category - Pioneering Application in Hong Kong - with a fund ceiling of HK\$10 million was also established under ACT to encourage industry stakeholders to bring in new technologies for the long-term benefits of the local construction industry. Multi-trade Integrated Mechanical, Electrical and Plumbing (MiMEP) was also accepted as one of the new funding scopes to encourage the adoption of more integrated modular design and off-site prefabrication in the electrical and mechanical (E&M) trades.

The CITF Pre-approved Lists had undergone a comprehensive review in 2021 to ensure the appropriateness of the pre-approved items. In 2021, Advanced Construction Technologies, BIM software and BIM training courses on the Pre-approved Lists continued to expand and by the end of 2021, there were 566 pre-approved items.

Wider Engagement with the Industry

The CITF continued to provide industry stakeholders the latest information on the CITF and new technologies through a hybrid mode of on-line and in-person promotional activities in 2021 amidst the COVID-19 pandemic. In 2021, the CITF Secretariat delivered 18 CITF briefing and case sharing sessions while participating and promoting in 13 key crossdepartmental or partnering organisations' events. A briefing session to announce the latest CITF enhancement measures was held in December 2021. Successful applicants were also invited to share their experience in technology adoption and workflow transformation journey.

Way Forward

As CITF enters into its fourth year of operation, a comprehensive Overall Review on the CITF will be conducted to consolidate the results and set the foundation for future development. CITF will continue its work in cultivating of innovative mindset and driving continuous development of the construction industry through financial support.



CIC proactively encourages industry stakeholders to adopt CITF Pre-approved Technologies

Corporate Secretariat

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

Enhancing Corporate Governance Standards and Quality of Secretarial Services

In 2021, C-SECT conducted three interactive and refresher training workshops on corporate governance and writing skills, and two briefing sessions on "Tender Recommendations Paper Writing". We, through Grade Management, critically reviewed and provided constructive advice/suggestions to uplift the quality of secretarial services delivered by various CIC business units on a regular basis. Noting the surge in webinars and video conferences conducted under COVID-19 epidemic, C-SECT organised an experience sharing session on "Useful Tips for Running a Smooth Online Meeting", benefitting over 50 staff members.

Release of Informative Publications

C-SECT revamped the *Information Booklet for Council Members* in January 2021 and distributed it during the orientation for new Council Members. It also published and distributed the bilingual *CIC 2021 Major Work Plans* in February 2021, the electronic version of which was also uploaded to the CIC website for easy access.

Supporting the 2021 Legislative Council General Election

For the 2021 Legislative Council General Election, C-SECT and Corporate Communications Department organised (a) a Discussion Forum for Election Committee (EC) members and candidates of the EC constituency with around 40 participants, including Council Members, CITB Members, representatives from stakeholder organisations and the CIC senior management in September; and (b) an Election Forum, attended by around 100 EC members and EC constituency candidates in December 2021. The success of these events has strengthened CIC's leading position in the construction industry.

Strengthening Cyber Security and IT System Controls

Given the imminent need to safeguard cyber security, C-SECT assisted in forming the Committee on IT and Cyber Security to formulate the IT and cyber security strategies, and their implementation plans as well as reviewing the structure of the IT Department. We provided secretarial services to the Committee meetings in 2021 and remarkable progress was achieved in the implementation of an enhanced cyber security monitoring system and IT System Controls.

Setting up the CIC Fellows

C-SECT was tasked with setting up of the CIC Fellows in 2021, composed of retired Council Members, retired Chairpersons of major Boards/ Committees and retired Executive Directors. It served as a high level advisory organisation for the benefit and future development of the construction industry as well as a platform to facilitate the exchange of information among stakeholders on industry knowledge, experience and new technology updates. The inaugural gathering was organised on 6 December 2021. It was planned that various functions, site tours and social gatherings would be organised regularly to solicit ideas from the CIC Fellows.

Way Forward

Looking ahead, C-SECT will continue to strengthen corporate governance for the CIC and enhance the quality and standard of our secretarial services. In particular, we will conduct a full review of the Corporate Governance Manual and the Corporate Secretariat Operation Manual with the aim of further enhancing fellow departments' awareness of corporate governance standards and quality of secretarial services. To demonstrate our commitment to high standards in corporate governance, we endeavour to seek formal recognition in excellent corporate governance through exchange and participation in events or competitions organised by renowned bodies.

Corporate Communications

The Corporate Communications Department continues to overcome challenges for the CIC with innovative solutions under the pandemic. The Department forecasts potential threats for the CIC and settles them ahead. Comprehensive promotion strategies are devised by the Department for promoting a positive image for the industry and CIC's position as an advocate of the industry via its constructive media network. The Department maintains effective communications with industry stakeholders to upkeep the CIC's goodwill and boost the promotion of sustainable construction and building a positive and caring industry culture. The Corporate Communications Department manages promotions, public and media relations, Construction Industry Sports and Volunteer Programme (CISVP), outreach services and crisis management for the CIC.

Demonstration of Persistence

The pandemic situation had been volatile throughout 2021, the Corporate Communications Department continued the "Construction Industry Caring Campaign – Fight against Novel Coronavirus" to provide assistance to workers affected by the pandemic. The Department also devised above-the-line and below-the-line promotion strategies to assist the CIC's initiatives to urged construction workers to undertake regular COVID-19 checking and receive vaccination. A "Construction Workers Vaccination Lucky Draw" was also held to encourage and show gratitude to workers receiving vaccination and protecting the community from the pandemic.

Getting Back on Track

Face-to-face events and meetings are greatly affected by the pandemic. To maintain its interaction with the industry, the Department actively maintained exposure through its media network and created high media value. The team overcame hurdles to organise several industry awards in 2021 to recognise construction practitioners' outstanding performance in times of difficulties, including:

- Construction Industry Machinery Operation Competition 2021;
- First CIC Construction Digitalisation Award 2021;
- Inaugural CIC Outstanding Contractor Award 2021.

To nurture the next generation of construction talents and to recognise outstanding achievements of young construction practitioners. The Corporate Communications Department organised a series of events for the younger generation:

- Hong Kong Young Construction Conference 2021 and 2nd Construction Industry Outstanding Young Person Award;
- MiC: Maximise Infinite Creativity Mini-Building Model Competition;

The Corporate Communications Department also supported the organisation of several events to put forward the industry's concerns for further discussion in the Legislative Council, and catalyse further development in the construction industry:

- Discussion Forum with Members (Designate) of the Election Committee (Engineering Subsector) in September 2021;
- A forum for candidates for the Election Committee Constituency with regards to the 2021 Legislative Council General Election in December 2021.

With uncertainties brought by the pandemic, the Corporate Communications Department has to be well prepared for adversity in view of the changing social distancing measures. The Department also adjusted some of its planned activities such as annual events – "Happy Run 2021" and "Construction Industry E-sports Games 2021" to virtual or smaller group events under tightened social distancing measures to protect participants' safety while encouraging a healthy lifestyle during the pandemic.

Building a Better Community

Under the pandemic, some of CISVP's planned events are cancelled, however, the team continued to work closely with the community to understand their need in order to enhance their services. To improve the industry image, CISVP's Construction Industry Volunteer Award Scheme continued to encourage industry practitioners to participate in volunteer activities such as blood donation and shoreline cleaning and recorded a total of 107,090 service hours by 15,498 volunteers (man-time) from 62 organisations from the construction industry and welfare sector.

Although much of the society's operations has resumed in 2021, some underprivileged may still struggle. Hence the CISVP continued distributing Lo Pan Rice in 2021, handed out 32,000 meal boxes and warmth to people in need, in which 5,000 meal boxes were distributed through the "18 Districts Lo Pan Rice" campaign jointly held by the CIC and the Hong Kong Construction Association, to send warmth and care to communities across 18 districts.

Way Forward

The Corporate Communications Department will continue to innovate to overcome challenges brought by the macro environment and promote the sustainable development of the construction industry while safeguarding the CIC's goodwill. The Department will continue its good work to encourage interaction between the CIC and the community, promoting public understand of construction industry and its latest technology to improve its public image and attract more talents.

Human Resources & Administration

Human Resources Department continues to perform as business partner to functional teams in the delivery of human resources services in areas of manpower planning, talent acquisition, compensation & benefit, talent development and staff engagement. Our main objectives are to ensure that our HR policies, procedures and practices support and align with the objectives of CIC and facilitate the accomplishment of the organization's overall development strategies.

The Administration Department ensures that the administration work flow and the work environment facilitate the efficient and effective operations of various functional teams. Our main objectives are to manage and co-ordinate resources effectively and efficiently through standardization, automation and adoption of new technology.

Although 2021 continued to be another challenging year for Human Resources and Administration in providing support to the operations and development of CIC, we overcame the challenges with agility to cope with the epidemic.

Active Support to the Construction Industry COVID-19 Testing Scheme (CITS)

The Human Resources and Administration partnered with the Development Bureau and provided active support in protecting the construction workforce by driving four phases of Construction Industry COVID-19 Testing Scheme (CITS) which commenced from end of December 2020 until June 2021. The 4 phases of CITS provided testing services to a total of 1,250 construction sites and 143,566 construction workers.

Safeguard Staff's Health and Well being

Staff is an important asset of CIC and the health and safety of our staff, students and the public are always our top priority.

In February 2021, CIC supported the pledge of the industry and requested all staff, students and trade testing candidates to take the COVID-19 test regularly and to provide negative test results before entering CIC. We also arranged free testing services for staff and students on a monthly basis (and on bi-weekly basis for front-line staff) from February until September 2021, with a total of 10,483 tests being arranged, including 5,429 for staff and 5,054 for students. CIC also encouraged staff to receive vaccination and allowed Injection Time Off and Vaccination Rest Day for staff to take the COVID-19 vaccine. All staff are required to be vaccinated before entering CIC premises with effect from 15 February 2022. As of today, 99% staff have been vaccinated except 1% with medical conditions who will take the COVID-19 test on regular basis.

As a further protective measure, all persons entering CIC premises are also required to use their mobile phone to scan the "LeaveHomeSafe" QR code.

The Operation Task Force met regularly in 2021 to monitor the pandemic situation and to co-ordinate work operations. Over 30 alerts and announcement were issued to staff in 2021 to update them with instant information on pandemic situation. The "Guide on Measures against COVID-19" was revised and issued to management staff.

The Administration Department played a vital role in supporting CIC's anti-epidemic measures in 2021. Apart from sourcing adequate personal protective equipment for staff and regular deep cleansing of CIC premises, additional cleaning and fogging services were arranged whenever a preliminary positive or confirmed case was reported. New technology was also adopted in various locations including the deployment of body temperature checking smart robots and sanitizing robots.

Talent Development

CIC is cultivating a learning culture amongst staff to prepare themselves to align with CIC's development and to meet the challenges of the ever-changing working environment through Staff Training & Job Enrichment.

Staff Training

CIC engaged an online learning platform "LinkedIn" for staff to access a 24/7 year round free tool to learn, either in office or at home. An "Optimized Learning Time" was allowed for staff to take the online learning within office hours and a Mandatory Learning KPI of no less than 48 hours per year would come into effect from 2022.

In-house training on "Learning and Teaching" for teaching staff continued in 2021, with Certificate in Learning and Teaching (CLT) organised for newly joined teaching staff and Continuous Learning Programme (CLP) as refresher training for current teaching staff. Other in-house trainings were held during the year on various topics, including ordinance awareness, interviewing skills, customer engagement, MS Excel, MS Power BI, etc.

A Job Enrichment Programme was put in place to attract, motivate and retain talented staff by enhancing their exposure to various Industry Development functions. Staff joining the Programme were able to explore individual skills and talents through a series of talks, workshops, sharing and inter-department awareness sessions which were held from January to August 2021. These staff later participated in and provided support to various Industry Development events in 2021.

Cyber Security Awareness

Cyber Security risks are top rated risk and CIC had put much effort and resources on to uphold defense against risk exposure. As staff has the responsibility to protect CIC against any cyber security risk, Human Resources worked closely with the Information Technology Team to educate staff by organizing compulsory training sessions on cyber security protection for current staff as well as for newly joined staff. Phishing email simulations tests were sent out by IT team on regular basis and staff who failed in the test are subject to warning and were arranged to attend further trainings.

Staff Engagement

Human Resources Team continued to encourage staff to demonstrate care for the community and society by supporting the Construction Industry Caring Campaign and the Construction Industry Sports & Volunteering Programme (CISVP). Staff also supported the fund raising activities held during the year for various welfare organisations.

Though large-scale staff activities cannot be held under the pandemic, gestures have been made to care for the well-being of our staff, including Friday Night Activities in small groups held at various offices and a Well Being Day provided to staff in 2022 for them to take a day off to spend some meaningful time with themselves, their families or friends.

Service Enhancement

The Service Enhancement Team handled enquiries / grievances / complaints from public and internal staff. A total of 118 external cases and 11 internal cases were received in 2021. All cases were responded swiftly and handled appropriately, and investigations were instituted as and when required. Areas of improvement were identified and enhancement measures were recommended to relevant departments to ensure our services meet public expectation.

Way Forward

The development of a highly effective and motivated workforce is essential for supporting CIC's development initiatives and overcoming the challenges ahead. CIC is fostering a learning culture amongst staff and empowering them to learn by optimising their learning experience. Cross team collaboration is advocated whereby staff may enrich their exposure and expand their potentials and horizons through supporting and participating duties and functions of other teams. A mentor scheme is also in place to groom and develop potential staff for succession planning.

Staff engagement will be further enhanced through reinvigorating Corporate Culture values. The bondage between new and serving staff is to be strengthened through a series of relationship or team-building activities and workshops. Staff's well-being is one of our major concern especially under the pandemic, various caring initiatives will be undertaken.

Fostering a green mindset amongst staff and initiatives to reduce waste and carbon footprint will be implemented in CIC workplace and a mechanism will be introduced to reduce excessive use of resources.

Corporate Safety

Safety and health for CIC staff, students and other interested parties are major focus of Corporate Safety Department (CST). CST aim to provide a safe and healthy environment for all stakeholders by maintaining an effective safety and health management system to avoid injury and ill health incident.

HKIC Uplifting and Other Development Project

In addition to the ongoing HKIC uplifting project launched in 2019, CST worked closely with internal departments and other project related parties to provide effective monitoring and advice continuously to ensure high safety performance can be delivered during project period. There are no serious accident present in 2021.

Installation of Outdoor Safety Information Board

Production and Installation of Outdoor Safety Information Board (Phase 2) has been completed. CST has also conducted various OSH training (e.g. heat stress prevention) and supported HKIC to promote manual handling safety to training student.

Leading Internal Anti-epidemic Work

As part of its preventive measures against the spread of COVID-19, CST assisted to keep review and update of "A Guideline on Measures Against COVID-19". On the other hand, in order to adopt "Green" idea to COVID-19 prevention implementation, CST has established On-line health declaration form for CIC premises user. This measure offers a green alternative for those users to complete the declaration before entering CIC premises. At the same time CST also work closely with internal task force to formulate relevant contingency and precautionary measures for various operation units.

Way Forward

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

Estates Office

Estates Office (EO) supports the CIC's operation in facilities management and capital projects. The department is responsible for maintenance services for common building services, building structures, landscaping, furniture & equipment and ELV systems (IP phone, CCTV surveillance, access control & IoT devices) via the Estates Office Management System; executing statutory compliance checking and upkeep; and providing license renewal services. For capital projects, the department focuses on contracting and project management of revamp works, A&A Work and new development works, optimizing space utilization, and the adoption of Building Information Modelling (BIM) in CIC's premises.

Estates Office manages both land lease and short term tenancy, as well as applying for short-term use of vacant government sites for CIC campuses and outdoor training grounds.

Renovations and Spatial Changes

EO managed to successfully execute a wide range of commitments in 2021 so as to support continuous development of the CIC. Several changes to premises of the CIC were made throughout the year. Relocation of Construction Innovation and Technology Application Centre was completed with new exhibition booths installed at the Zero Carbon Park to promote innovative technologies in the construction industry. Renovation works on G/F and 1/F at Kowloon Bay Campus of the Hong Kong Institute of Construction were also completed to cater new needs on worker registration services and demands for office space.

Adoption of BIM, IoT and EOMS

EO integrated BIM and Internet of Things (IoT) technology into the Estates Office Management System to enhance facility maintenance as well as asset, safety and environmental management at the ZCP. The integration was completed at the end of 2021 to allow effective and comprehensive management of premises.

Uplifting of Hong Kong Institute of Construction (HKIC)

As a remarkable achievement of the year, uplifting projects at Kowloon Bay Campus, Kwai Chung Campus and Sheung Shui Campus of the HKIC were completed to revitalise aged training facilities. Construction works for new Training Ground at Lam Tei will complete soon. The Wong Lung Hang Training Ground and Yuen Kong Training Ground were returned to the District Lands Office.

Way forward

In 2022, EO will continue to perform its supportive and constructive functions, including:

- Replacement of existing lifts at HKIC Kowloon Bay Campus, Kwai Chung Campus and Sheung Shui Campus with an anticipated completion in 2024;
- Set up new Training Ground at Lam Tei with an anticipated completion in Q2;
- Exploring opportunity on expanding Tai Po Training Ground and establishing new Training Ground at Siu Lam; and,
- Expanding the integration of Estates Office Management System, Internet of Things and Building Information Modeling to HKIC Kowloon Bay Campus and Hong Kong Construction Industry Trade Testing Centre

Information Technology

Information Technology Department is responsible for all CIC information technology services including managing information system implementation, network and infrastructure, service-desk, data management, cybersecurity, information management services, IT governance and procurement, etc. The department strives to support CIC daily operations and serve industry stakeholders, as well as to promote the adoption of Information-Communication-Technology collaboration and Internet-of-Things to support the digital transformation in the construction industry.

Enhance Cybersecurity in the CIC

The department is dedicated to enhancing the cybersecurity in the identity management, network access security and data protection areas to comply with the industry standard. Intensive IT Security Awareness Training and phishing exercises were conducted regularly among staff to cultivate a strong cybersecurity awareness within the CIC.

Improvement on the adoption of Cloud Technology

Adoption of various cloud services such as email, storage and collaboration platform were extended to improve the service availability and scalability, and facilitate better communication and collaboration during the pandemic.

Upgrade of the Wi-Fi Services

> To support the operation of CIC-Zero Carbon Park and Construction Innovation Technology and Application Centre to provide better exhibition facilities, ZCP's Wi-Fi system had been upgraded to Wi-Fi 6 with a high-speed mobile network which could accommodate more Wi-Fi users and bandwidthintensive applications, such as Augmented Reality.

New Digital Channels for Construction Workers and Professionals

New CIC Construction Safety App was launched for public use from late July 2021, providing a user-friendly platform for industry stakeholders and frontline workers to receive timely key safety messages and activities updates. Meanwhile, the app applied user-centric verifiable digital credentials and uplifted the control of data privacy and identity of users for cybersecurity.

A new portal for the School of Professional Development in Construction (SPDC) with electronic application to enroll SPDC courses was launched in September 2021 for public. This allows industry professionals to pursue relevant and recognized qualifications for continuous learning opportunities and pathways, and professional advancement in construction.

Process Optimization and Automation

Trade Test Management System was uplifted to support electronic payment gateway in December 2021. Applicants can now settle trade test enrolment fees in any convenience store with an ePayment Advice. Fees settlement will be managed in the backend system automatically to streamline payment checking and reduce manual procedures.

Training Management System had integrated with Trade Test Management System in December 2021 to allow HKIC staff to submit trade test applications and synchronise with students' trade test result automatically. The manual process will be replaced to avoid repetitive communication.

OPERATIONAL REVIEW

Way Forward

An online course enrolment platform will be developed to simplify application process, increase transparency and enhance the efficiency of HKIC operation.

The system enhancement of Register of Specialist Trade Contractors (RSTC) will be launched to optimize the scalability in managing expansion of RSTC on other designated trades in near future.

ITD will incorporate machine learning and Robotic Process Automation into Trade Testing e-scheduling platform as a trial run. Using pattern recognition technology to automate repetitive processes and eliminate human factors, and ITD aims to enhance productivity of and optimize Trade Testing scheduling and operation.

CIC will further enhance its cybersecurity by strengthening its incident response capability, multifactor authentication and access control. Phishing email simulation will also be conducted to foster user awareness and build strong cybersecurity awareness in the CIC. Meanwhile, cloud services will be further adopted to improve the operational efficiency and service accessibility.

Internal Audit

The Internal Audit Department (IA) assists the CIC in accomplishing its objectives by evaluating the adequacy and effectiveness of the CIC's internal control system, including financial, operational and compliance controls, as well as proposing recommendations for improvement to the management.

A risk assessment exercise is conducted annually to formulate an annual internal audit plan for the approval by the Audit Committee. According to the internal audit plan, IA reviews the key controls in different areas and reports the findings to the Audit Committee quarterly.

Comprehensive Internal Review and Assessment

IA reviewed the operational, financial and compliance control matters on management of cyber security, levy collection process as well as departments of Construction Productivity, Trade Testing and Workers Registration. All key findings and recommendations were communicated, discussed and followed up with the process owners in a timely manner. In general, critical findings were addressed immediately or within 6 months.

During the year, a comprehensive review on the Hong Kong Institute of Construction (HKIC) had been completed. The audit covered reviews on training, campus management, curriculum development and quality assurance, student assessment and staff management of HKIC. Audit recommendations were proposed to improve HKIC's controls and the implementation is in progress.

With input from heads of each department and division, a corporate-wide risk assessment exercise was conducted at year end of 2021. Top risks were highlighted to senior management for further controls and action.

IA also facilitated in drafting internal guidelines on several cross-departmental operation.

Way Forward

In the coming years, IA will continue to cooperate with external consultant to carry out internal audit services. Audit recommendations will be proposed to the CIC management with reference to the best practices in the industry.

IA will further enhance the governance of CIC by reviewing the operation manuals of all departments to assure adequate control procedures are established.

Procurement Department

The Procurement Department supports the CIC's operations by understanding its business requirements, managing internal transactions for ordering and receiving goods and services and handling procurement data, hence maximising its efficiency of transaction flow and reporting.

Management of Major Tenders

The Department assisted the CIC in tender management for several large scale events and facility uplifting projects such as:

- Design and Installation of the Exhibition Booths and Fitting-Out Works at the Zero Carbon Park for Relocation of the Construction Innovation and Technology Application Centre
- Renovation Works of New Office at 1/F, Kowloon Bay Campus
- Renovation Works of New Service Centre at Ground Floor, Kowloon Bay Campus
- Facility Management, Maintenance and Operation Services for Construction Industry Council – Zero Carbon Park
- License to Operate the Zero Carbon Building (ZCB) Eco-Café and Souvenir Shop for the Construction Industry Council
- Event Management and Production Services for Construction Innovation Expo 2022

The Procurement Department also managed a number of major service tenders this year, including:

- Consultancy Services of Development of Design for Safety Management System and Training Programmes for the Hong Kong Construction Industry
- Supply and Delivery of Hong Kong Institute of Construction Student Uniform and Construction Industry Worker Uniform
- Provision of Call Centre Services
- IT User Support Services
- Managed Security Services
- Quantity Surveying Consultancy Services
- Insurance Broker's Service
- Chauffeur Services

- Statutory Audit Services and Special Audit Services
- Communication Link Services
- Legal Services
- Term Contract for Supply of Hand Tools, Consumables & Miscellaneous Items
- Security Guard Services
- Repair and Maintenance for Electrical and Mechanical Works and Builder's Works cum On Site Technician Services
- Repair and Maintenance of Landscaping Works
- Live Streaming and Video Production Services for Conducting Webinars

Project and Supplier Management

The Procurement Department supports the administration works of the Project Committee and the Project Management Policy & Procedures Working Group since its establishment. The Project Management Handbook (Non-Capital Projects) was updated in 2021 and technical project reviews were conducted in accordance with the handbook. In terms of supplier management, the Procurement Department also continues to maintain the qualified vendor list for "Event Management and Multi-Media Design Services" and "Engineering, Construction & Renovation Works and Repair & Maintenance" categories, and conducts quarterly vendor performance reviews and the CIC vendor surveys.

Way Forward

We will review procurement policies and develop vendor lists by making reference to the Government and other public authorities and to review current Terms and Conditions and various Contract Templates bearing organisational needs and the market norms in mind. In addition, the Procurement Department will conduct random project reviews and audits regularly to strengthen user departments compliance with project procedures. To implement procurement digitization and facilitate e-procurement, supplier portal and associated modules such as e-tendering will be established and enhanced.

Finance

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 The Finance Department supports the CIC on a wide spectrum of finance functions, including financial and management reporting, budgeting and forecasting, levy assessment and collection, strategic planning and decision support, treasury and investment management, financial analysis, company secretarial work, bank account operations and all finance related projects.

The Finance Department arranges statutory audit with external auditors and reports the audited accounts to the Audit Committee. It compiles annual budgets, performs budgetary control and monitors business performance. It administers the assessment and collection of construction levies payable by contractors on the value of construction operations under the Construction Industry Council Ordinance and Construction Workers Registration Ordinance.

The Department provides secretarial and decision support to the Investment Task Force in formulating investment strategies and monitoring investment performance. It continuously upgrades systems to improve the finance and levy operations, and also proactively adopts electronic services for the benefits of various stakeholders. It conducts process reviews to streamline workflow and enhance efficiency. In addition to company secretarial support for the subsidiaries of the CIC, it develops and executes internal control policies and procedures for all finance and accounting matters.

Key Achievements in 2021

According to the recommendation from Investment Task Force, 7 bonds were purchased in 2021 from UBS's bond portfolio, with target annual return setting at three times of time deposit.

Besides, we have kicked off the establishment of additional Electronic Collection Platforms, including Payme, BOCPay and FPS. On the other hand, the income control procedures for HKIC were strengthened to enhance accuracy and efficiency of income recognition. During the year, Finance Department completed Internal Audit for Levy with implementation plan of recommendations for improving controls. In addition, development of E-Service 2.0 for Levy System had been commenced to improve levy data quality and processing efficiency.

Way Forward

Digitalisation of finance operation is in progress in order to improve operation efficiency. Levy System will also be enhanced to further automate the Levy Forms submission and to strengthen controls on levy processing. Finance Department will continue to support the CIC and provide professional advices from financial perspective to maximise the benefits of all stakeholders.

Embracing Diversity with Innovation

Construction Digitalisation

The Construction Industry Council (CIC) aspires to propel sustainable development in Hong Kong. This year, the CIC continues to promote innovative technology and the spirit to excel in the industry while advocating industry unity and embracing diversity. The CIC works hand in hand with the industry to serve the community at large and build a harmonious society.

To promote sustainable development of the construction industry, the CIC is committed to advocate the adoption of advanced technology and construction methods. Innovative ideas are welcomed for improving construction productivity to overcome potential challenges in the future. We believe digitalisation is the future of construction. The CIC is determined to be the advocate to boost the development of Building Information Modelling (BIM) and hence has driven a series of initiatives, including publication of the "Construction Digitalization Roadmap", research funding, and production of educational resources to encourage

adoption of BIM during planning, design, execution, facilities operation and management stage of construction projects, forging ahead the new era of construction digitalization.

Established by the CIC, "CIC BIM Space" demonstrates technology application and organize activities related to BIM technology for a broad spectrum of participants, such as professional seminar on BIM development, symposiums and workshops for industry practitioners and "BIM Competition" for tertiary students to familiarise them with BIM technology.







Innovation to improve construction productivity is vital to address the challenges brought by manpower shortage in the industry. Therefore, the CIC is committed to promoting and supporting application of modular Integrated Construction (MiC) method. With its off-site prefabrication feature, MiC minimises manpower and material requirements, and is more environmentally friendly than traditional methods. As building components are prefabricated and assembled in factories before being transported to site for installation, MiC method effectively reduces the risks of working at heights and improves construction safety and working environment. MiC method is ideal for buildings with repetitive features such as school classrooms and staff dormitories; yet it still allows flexibility in design and is suitable

for private residential projects and other buildings. MiC technology provides diverse possibility in application and is conducive to the overall sustainable development.



CIC-Zero Carbon Park Sets an Example of Sustainable Development

The CIC firmly believes that endless possibilities can be created with innovative technology. Aiming to establish a test bed for advanced ecological building design and technology, the CIC established the CIC-Zero Carbon Park (CIC-ZCP) as an exhibition, education and information center to promote lowcarbon living and smart construction, as well as to raise public awareness on sustainable living. The CIC hopes to set an example for the industry and inspire the industry to make good use of technology to reduce carbon emissions.

CIC-ZCP is the first zero-carbon building in Hong Kong featuring forward-looking design, operation and architectural highlights. CIC-ZCP teamed up with the adjacent MiC Resource Center, BIM SPACE and The Construction Industry Innovation and Technology Application Center (CITAC) to form the "iHub" to showcase low-carbon building technologies, new materials and best practices of smart cities, to bring inspiration to the construction industry in innovative technology application.





Advocate Gender Equality in the Construction Industry

The construction industry was traditionally seen as a male-dominated industry. As our society progresses, we are seeing growth in the number of female employees in the industry. The CIC welcomes the change and seeks to break such gender stereotyping in the industry to build a fair working environment for all genders. The "CIC Power Talk" themed "Construction Women" in August 2021 invited three female leaders in the industry, including Ar. Winnie HO, Director of Architectural Services, Ms. Alice PANG, Director of Drainage Services and Ms. Rosana WONG, Executive Director of Yau Lee Holdings Limited to share their experience and how they overcame challenges.

In addition to these leaders, female takes up more than 15% of all frontline registered workers. To reflect such representation, the CIC also featured female industry practitioners in the CIC calendar. Themed "Construction Power", the calendar invited female practitioners to participate in the photo shoot to strengthen the awareness of gender equality and that contribution should not be bounded by our gender.



Nurturing the Younger Generation

The younger generation today will become the leaders to navigate the industry tomorrow. Hence training is a major focus of CIC's work. We provide adequate opportunities to young practitioners to gain experience and reach their full potential. Interactive platforms are also made available for young practitioners to express their opinion and promote idea exchange and unity in the industry.

To provide a progression pathway for young practitioners and train knowledge-based skilled technical personnel, the Hong Kong Institute of Construction seeks accreditation for its training courses and completes the total study pathway for further study for its graduates. Under the "Progression Pathway" project, the HKIC offers a variety of courses at certificate, diploma, higher diploma and professional diploma levels. Together with the Approved Technical Talents Training Programmes, students can earn professional skills and acquire professional recognition at the same time.

The biennial Hong Kong Young Construction Conference provides a platform to young construction practitioners to share their aspiration for the industry. The CIC organised the 2nd Construction Industry Outstanding Young Person Award in 2021 to recognise young construction practitioners' achievements. The CIC also promotes the "Youth Professional Network" as an interactive resources platform to encourage cross-discipline collaboration and nurture the new generation leader with vision for registered specialist trade contractors and registered sub-contractors.





Embracing Our Differences

Promote Racial Integration

The CIC is committed to building an inclusive working environment that welcomes diversity, and practitioners can enjoy equal employment opportunities and benefits regardless of cultural background or ethnicity. In order to encourage people of different ethnicity to join the construction industry, the CIC has established a Construction Industry Ethnic Minority Subcommittee to review the needs and rights of practitioners from ethnic minority groups. Relevant regular training courses for frontline staff and management personnel are arranged and representatives from Equal Opportunity Commission are invited to share on racial discrimination ordinance in vocational training and how to effectively implement the equal opportunity policy.

On the training front, the HKIC offers three full time short course and 15 part time safety courses in English while translators are also hired to assist teachers in class. The CIC has been offering Skill Enhancement Course for Ethnic Minorities since 2015 and five part time courses are currently on offer. Moreover, most trade tests and machinery operation qualification tests offers tests in English and allows translators to accompany students during tests. Regular visits, career guidance talks, fun fairs, job matching fairs and family fun days are organised regularly to promote understanding of the construction industry to ethnic minority workers. English teaching materials for general studies are made available to students in need. The CIC collaborates with corresponding secondary schools and NGOs serving ethnic minorities to promote their understanding of the industry.

During the COVID-19 pandemic, the CIC published promotion posters in multilanguages to ensure workers speaking Urdu, Nepalese, Thai, Indian, Indonesian and Filipino can receive the anti-epidemic messages.





Construction Industry Sports and Volunteer Programme

The CIC strives to establish a volunteering culture in the industry and encourages practitioners to participate in volunteering activities to serve people in need and build an inclusive society.

The CIC has set up the Construction Industry Sports and Volunteer Programme (CISVP) to encourage the industry to set up volunteer teams to contribute to the society with their professional skills, such as home repairs and community facilities repair works for the neighbourhood, distribution of Lo Pan Rice, gift bags, visiting elderly living alone and organising charity sales. 32,000 hot meal boxes are distributed while volunteers also contributed more than 100,000 hours of volunteer service in 2021. To elevate the health and living standard of industry practitioners, CISVP organises events like Happy Run and Fun Fair, Dragon Boat Competition, Sports day and charity fun day to encourage friendly exchange and unity in the industry.







Safety Message Promotion Via Multiple Channels

The CIC organises a variety of campaigns to promote the safety concept of "Life First is a Responsibility for All" to raise awareness among practitioners and create an ideal working environment in the industry. Our goal is to achieve "Zero Accidents" in construction sites.

The "Life First" campaign is launched again in 2021 to encourage inspection and review procedures of works at height and identify potential risks in operation to cultivate safety culture in construction sites. The campaign encourages senior management staff to visit their sites and convey safety messages. By strengthening the overall safety responsibility, we hope to lower construction risks. The CIC co-organises the "Safety Week" Campaign with the Development Bureau annually in the past decade to promote safety awareness. During the Construction Safety Week, activities including "Considerate Contractors Site Award Scheme", seminars, online sharing sessions, Zero Accident Ambassador Award were held to raise awareness among the industry to contribute to a "Zero Accident" workplace.

Education is the foundation of construction safety. HKIC offers a series of safety training courses tailored for management staff, site supervisor and site personnel to cultivate safety awareness and culture. The CIC publishes regular safety newsletters and has set up a one-stop promotion platform, Construction Safety App, for frontline workers and industry stakeholders.



Pooling Professionals of Diversified Background

The CIC actively promotes the development of the construction industry and strives to build consensus on long-term strategic issues. The current council structure consists of a chairman and 24 members from relevant sectors of the industry. Members of the council come from diverse backgrounds, including employers, professionals, academics, contractors, workers, independents and government officials. The CIC brings together professionals from all walks of life that represents the voices of the 142 trades in the industry. A number of committees were established to look after various issues in the industry, to gather opinion of experts, management,

officials and frontline workers, raise innovative ideas, and work together to promote measure for the long-term development of the construction industry.


SUSTAINABILITY REPORT

Sustainability is an overarching theme of our era. In recent years the global communities have undertaken a greater commitment to creating a sustainable environment for the present and future generations, with efforts to conserve our mother earth and enhance the well-being of the human race. While the construction industry is a significant driver of the global economy and development, it also brings substantial environmental and social impacts. Under this context, the construction sector is taking up its responsibility to stand at the frontier of the global sustainability movement.

Dedicated to the mission to strengthen sustainable development of the industry, the Construction Industry Council (CIC) does not only embrace the principles of sustainability across its operation within the organisation, but it also aspires to steer and unite the local industry to leap into the path of sustainable construction to support Hong Kong's pledge to achieve the goal of carbon neutrality by 2050.

Sustainability Framework and Governance

In line with the United Nations Sustainable Development Goals (UNSDGs), the CIC Sustainability Framework is developed and built on four strategic pillars, namely Resources, Intelligence, Talent, and Culture. The underlying values and goals of the four pillars are embedded into the CIC internal operations, as well as its external works to drive industry impact and improvement.

Internally, the CIC has established a crossdepartmental Sustainability Working Group (SWG) to formulate and disseminate the sustainability strategy for the organisation, stimulate departments to design and implement sustainability initiatives, as well as to monitor and improve the sustainability performance of the organisation.

On the industry advocacy front, the CIC has established the Committee on Environment (Com-ENV) and different working groups on designated topics with membership comprising key stakeholders along the value chain to devise strategies and plans to promote environmental protection and sustainability in the construction industry.

SUSTAINABILITY REPORT



SUSTAINABILITY REPORT

Resources

Enabling and Incentivising Industry Decarbonisation

The climate crisis presents an imminent challenge to the construction industry, vigorous actions are required immediately to slow down global warming, confining the increase of global temperature to below 1.5°C as compared to the pre-industrial level. Hong Kong has demonstrated its commitment to be part of the global decarbonisation forces in its Climate Action Plan 2030+ published by the Environment Bureau in 2017. In response, the CIC has embarked on its sustainable journey by initiating a series of programmes and tools since 2018 to empower and motivate industry practitioners to decarbonise the value chain.



Fuelling up the Industry with Green Finance

Decarbonisation of the industry is only possible when considerable changes are made to the conventional way of operation, business model and supply chain management, while adoption of innovation and advanced technology is inevitable. One of the enablers that brings about these changes is financial resources. In November 2021, the CIC achieved a major milestone in the sustainable roadmap with the successful launch of the CIC Sustainable Finance Certification Scheme (SFCS). It is the first construction-specific green finance certification scheme in Hong Kong which serves to set standards of the best sustainable construction practices and provide a credible assessment system to facilitate the industry to obtain green capital through green financing.

The scheme covers four financial instruments, including green loan, green guarantee, sustainabilitylinked loan and sustainability-linked guarantee. All stakeholders along the value chain, including project owners, main contractors, sub-contractors, consultants, suppliers and manufacturers are eligible for application. Technical requirements for ten project categories are developed to cater for different project natures. In the design of the SFCS, the application of the CAT and the GPC are adopted as one of the assessment criteria with a view to maximising synergies among various CIC sustainable initiatives and tools.

By the end of 2021, 20 certificates were issued, and 20 assessors were certified. Coming ahead, the scheme is expected to incentivise the industry to proactively decarbonise the supply chain and change the sustainability and green finance landscape in the sector gradually.



Launching ceremony of the CIC Sustainable Finance Certification Scheme in November 2021

Financial Instruments	Recognition	Target Audience	Project Categories
 Green loan Green guarantee Sustainability-linked loan Sustainability-linked guarantee 	 Recognised external reviewer of Hong Kong Monetary Authority Green and Sustainable Finance Grant 80+ supporting organisations 	 Project owners (HKSAR Government, statutory bodies, and developers) Main contractors / sub-contractors Consultants Suppliers / manufacturers 	 Renewable energy Energy efficiency Pollution prevention & control Natural resources & land use Biodiversity conservation Clean transportation Water management Climate change adaptation Circular economy Green buildings

About the CIC Sustainable Finance Certification Scheme

Measuring and Reducing Carbon from Design, Procurement to Construction Stage

Building and construction sector accounts for 39% of the global carbon emissions. Carbon emissions are generated throughout the entire building life cycle, and therefore carbon assessment is a crucial step to facilitate the industry to advance in a low carbon journey. The CIC Carbon Assessment Tool (CAT), launched in 2019, is a web-based carbon assessment tool that aims to provide a standardised assessment method applicable to different types of local building and infrastructure projects. By the end of 2021, 800 construction materials were covered in the database and 300 projects had been actively using the tool.

Simultaneously, to create a vibrant local market of low-carbon building materials and products locally, the CIC Green Product Certification (GPC) scheme was launched in 2019 in collaboration with Hong Kong Green Building Council to certify green products and materials of 28 categories for buildings and construction process. The scheme looks into a comprehensive set of environmental aspects, not limited to carbon emissions. The GPC serves to stimulate the demand for green products, as well as to encourage the supply of low-carbon materials. By the end of 2021, over 600 products had been certified.

Both the CAT and GPC have been integrated into the BEAM Plus rating system to encourage carbon reduction through embracing low-carbon designs, materials and construction processes.

Key Initiatives in Operation

CIC-Zero Carbon Park

The CIC-Zero Carbon Park (CIC-ZCP) is the first zero carbon building in Hong Kong. In 2021, an Advancing Zero Carbon Task Force was established with members drawn from professional fields to explore the sustainable development of CIC-ZCP to achieve carbon neutrality. To promote sustainable development and promulgate carbon neutrality to the public, CIC-ZCP launched the "Sustainable Construction Exhibition" in June 2021. Through a series of interactive fun-packed games, guided tours and educational workshops, CIC-ZCP encouraged members of the public to work together towards the goal of carbon neutrality by 2050. Over 7,000 visitors came to the exhibition.



CIC-ZCP Sustainable Construction Exhibition

In 2021, the following measures were taken to enhance the environmental performance of the premises.

- Timber floor was replaced by bamboo floor, which is more environmental-friendly and has a lower maintenance cost.
- An overhauling study on the bio-diesel generator was conducted to increase renewable energy generation efficiency.



Air Improvement Photovoltaic (AIPV) Glass Canopy in CIC-Zero Carbon Park

Hong Kong Institute of Construction

The Hong Kong Institute of Construction (HKIC) performed the following environmental measures in their premises in 2021:

Energy Use

- Participated in CLP Power Hong Kong's "Peak Demand Management" programme to reduce electricity consumption during peak demand hours. By re-scheduling the training sessions that involve activities of high electricity demand, the electricity usage at peak hours was cut and shifted to off-peak hours.
- Solar panels were installed in certain facilities to generate clean energy.

Materials

- E-feedback survey and e-attendance via mobile device were adopted to reduce paper consumption.
- For training courses on excavator operation, rocks were replaced by concrete elements for the process of rock breaking using hydraulic breakers. Afterwards, the broken concrete elements were recycled and used in drainlayer.

Waste

- Recycling of concrete on campus was highly encouraged, in which waste concrete was recycled to repair facilities or used in trade tests.
- A total of 200 kg of sawdust was recycled to produce compose for ZCP landscape enhancement.

Way Forward

Looking ahead, the CIC endeavours to orchestrate the abovementioned and upcoming initiatives under the sustainable construction roadmap and develop carbon neutrality strategies for the sector and for creating a sustainable built environment in Hong Kong.

The following works will be prioritised:

- Pursue the goal of carbon neutrality by collaborating with industry stakeholders
- Develop a roadmap on decarbonising strategies for the industry
- Advocate energy saving throughout the building life cycle
- Encourage a wide adoption of SFCS in the industry through ongoing publicity and promotional programmes
- Develop a Smart Waste Management Plug-in that can serve as a digital platform to streamline the C&D waste management procedures and data collection process
- Organise CIC Sustainable Construction Award in 2023 to recognise and encourage good sustainable practices

Intelligence

Transforming the Industry through Innovation and Digitalisation

Building Information Modelling (BIM), Modular Integrated Construction (MiC) and Design for Manufacture and Assembly (DfMA), forming the three major blocks of construction innovation and digitalisation, helping the industry to enhance productivity, quality, safety and sustainability. The CIC takes up a vital role to spearhead industry transformation to smart construction by serving as an innovation and digitalisation resources and knowledge hub, as well as providing guidance and reference materials for the industry to follow.



Awards and Recognition

Construction Digitalisation Award

The inaugural CIC Construction Digitalisation Award 2021 was organised to recognise outstanding local projects and organisations for their achievements in construction digitalisation and innovation. Out of 120 entries, 23 winning teams were selected through a rigorous evaluation process.



CIC BIM Competition

The CIC BIM Competition 2021 was organised for three consecutive years. Theming "An Advancing Net Zero (ANZ) Hub in the CIC-Zero Carbon Park" this year, the competition reached the highest record of participation with 53 teams with 252 higher education students participated.

Guidance and Reference Materials

Construction Digitalisation Roadmap

The CIC has been working with experts and key industry stakeholders to craft the Construction Digitalisation Roadmap. The Roadmap identifies six high-value digital application areas, namely Smart Data Sharing, Smart Planning and Design, Smart Submission with BIM, Smart Offsite Fabrication and Delivery, Smart Site Management, and Smart Asset and Facility Management, together with strategies to support construction digitalisation.

Reference Materials on Adopting DfMA for MEP Works

A practical guidebook was published to guide industry practitioners to apply DfMA at various stages of project development involving MEP works. Strategies and action plans were also formulated.



Reference Materials on Adopting DfMA for MEP Works

Knowledge Sharing & Exchange

1. Construction Innovation and Technology Application Centre (CITAC)

The CITAC Conferences

The CITAC Anniversary Conference on Construction Digitalisation was organised in 2021, with a theme on digitalisation across the construction life cycle. The CITAC also co-organised a conference on construction technology with the Consulate General of Israel in Hong Kong with a B2B matching session, facilitating information exchange on the cuttingedge technologies of the two places.

The CITAC Guided Tours and Webinars

In 2021, more than 3,000 visitors joined the guided tours organised by CITAC. In addition, 17 webinars were held in the year, attracting more than 15,500 attendees. Thanks to the warm response from the webinars, plus system integration within the CIC, the size of i-Club membership achieved fourfold growth in the year. The numbers of registered organisation members and individual members increased to 717 and 12,537 respectively.

2. Modular Integrated Construction (MiC)

MiC Conference, Webinars and Workshops

The International Conference on MiC, five webinars and workshops were organised in 2021 on topics of environmental friendliness and sustainability, as well as adoption of MiC in the construction industry. The events attracted almost 7,000 participants.

Site Visits to MiC Project Sites

In order to facilitating a better understanding of the construction processes of MiC among industry practitioners, six local site visits were organised in 2021. Participants including council members, industry practitioners, NGO representatives, developers, and media representatives visited projects including Kwu Tung North Residential Care Homes for the Elderly Mock-up Units, and Yen Chow Street Modular Social Housing Project – James' Concourse, etc.



Industry practitioners visited the Kwu Tung North Residential Care Homes for the Elderly Mock-up Units in September 2021

3. Design for Manufacture and Assembly (DfMA)

Webinar Series on Offsite Construction

In a webinar series organised in 2021, local experts, as well as professionals from the Mainland, Singapore and the United Kingdom were invited to share their experience on offsite construction. Over 5,000 practitioners attended the event.

DfMA MiMEP Tradeshow

The "DfMA MiMEP Tradeshow" (the Tradeshow) was co-organised by the CIC and the Hong Kong Federation of Electrical and Mechanical Contractors in March 2021 at the CIC-ZCP. 25 innovative and inspirational exhibits on Multi-trade integrated Mechanical, Electrical and Plumbing (MiMEP) demonstrated the industry's capability in delivering high-quality MEP works using DfMA approach. Over 6,600 industry practitioners visited the Tradeshow.



International Symposium on Construction Robotics and Automation

The CIC and the Hong Kong Science and Technology Parks Corporation co-organised the Third International Symposium on Construction Robotics and Automation in December 2021. The Symposium brought together local and international experts from Singapore and Israel to exchange on the latest development in automation, artificial intelligence and robotics (AIR) solutions for the construction industry. A business matching session was also held to facilitate the adoption of the Internet of Things (IoT) sensing technologies, AIR solutions, and Digital Works Supervision System. Over 1,100 participants attended the Symposium physically and online.

SUSTAINABILITY REPORT

Research and Development

Research Projects on Construction Innovation

Funded under the CIC Research and Technology Development (R&D) Fund, a mobile phone application has been developed to efficiently monitor construction-induced vibration and noise through a smartphone.

A Practical Guideline on "Maturity Method for Estimation of Concrete Strength" was also published to set out the guiding principles and provide the basis for applying concrete maturity sensors to estimate the early-age and compressive strength in different projects.

Study on Smart City and Common Spatial Data Infrastructure

The CIC kicked off a consultancy study in support of the Government's initiative of developing a smart city and Common Spatial Data Infrastructure (CSDI) in 2020. With the elaboration of one more use case, a "Report on 3D Spatial and BIM Data Use Case Requirements of the Hong Kong Construction Industry" was published in 2021, which summarises the study with details of the 11 selected top use cases including their respective constraints, way forward and benefits. Recommendations for reference of the industry are provided in the report.

Funding Support

Construction Innovation and Technology Fund

Construction Innovation and Technology Fund (CITF) contributed more than HK\$570 million in 2021 to a variety of projects for the adoption of innovative and advanced technologies in the industry. The CITF is one of the initiatives employed to encourage sustainable development of the industry, including enhanced environmental performance of construction projects. The CITF Pre-approved Technologies List consists of over 560 number of products covering different environmental-friendly materials as well as digitalisation and automated solutions for pollution mitigation and monitoring. Over 2,200 funding applications were approved, benefiting more than 840 recipients. In response to the feedback collected from industry stakeholders in the mid-term review, the funding ceiling, scope and mode will be enhanced from 2022.



Report on 3D Spatial and BIM Data Use Case Requirements of the Hong Kong Construction Industry

Key Initiatives in Operation

IoT System at CIC-ZCP

In 2021, the CIC-ZCP implemented the IoT Management System by installing different sensors in the premises, including indoor & outdoor environmental quality sensor, vibration & temperature sensor, door contact sensor, water quality sensor for aquaculture, etc..

Those IoT sensors are mainly used for collecting data, analysing and making real-time reliable reports. It proactively assists the management office to monitor the usage and performance of the facilities and take corresponding immediate actions, work arrangements or maintenance.

Way Forward

The CIC will continue to achieve wider adoption of innovative technologies for the sustainable growth of the construction industry including:

- Continue to develop the Construction Digitalisation Roadmap
- Present various awards to recognise the contributions of outstanding stakeholders in construction innovation and digitalisation
- Develop a Construction Directory on a digital platform for the Greater Bay Area (GBA) supply chain, facilitating knowledge sharing between industry stakeholders in the GBA and Hong Kong

Talent

Developing an Innovative, Professional and Skilled Workforce

An energetic, talented and professional workforce is a prerequisite for the sustainable development of the local industry. Over the past years, the CIC has demonstrated a proven record in attracting, retaining and nurturing talents with the establishment of a systematic and comprehensive training and qualifications system. While the construction workforce has made a significant contribution to the prosperous development of the local economy, the CIC is dedicated to further nourish the fellow practitioners to embrace professionalism, knowledge and skills, innovation, safety and sustainability, with a passion to contribute to the city's development.

Highlights in 2021

Number of HKIC Training Courses	93
Types of Training Offered by HKIC	Advanced Diploma Programme Diploma in Construction Programme Certificate in Construction Programme Short Course and Skill Enhancement Courses
Number of Trade Tests Completed	14,243
Registered Specialist Trade Contractors Scheme	7,808 registered companies

Professional Construction Training

Hong Kong Institute of Construction

Hong Kong Institute of Construction (HKIC) actively conducts programme accreditations under the Qualifications Framework (QF), and moves forward towards the "Construction Pathway Project", aiming to provide graduates with a comprehensive articulation pathway and progressive development in their vocational and professional careers. In 2021, 93 training courses including Advanced Diploma Programme, Diploma in Construction Programme, Certificate in Construction Programme, Short Course and Skill Enhancement Courses were launched.

To cater for the industry's development and market needs, HKIC has incorporated construction innovation in the programmes, aligning with the CIC's strategic approach of integrating innovative technological advancement with talent development.

School of Professional Development in Construction

School of Professional Development in Construction (SPDC) was set up under HKIC in 2020 to develop various professional education and continuing development programmes for industry practitioners, particularly in the areas of construction digitalisation, industrialisation, innovations and new technologies. New BIM and MiC training courses for the construction industry practitioners were launched in 2021.

Development Schemes

Trade Tests

Hong Kong Construction Industry Trade Testing Centre

The Hong Kong Construction Industry Trade Testing Centre (HKCITTC) provides independent and creditable trade testing services to the industry. A total of 14,243 trade tests were completed in 2021.

Registration Scheme

Registered Specialist Trade Contractors Scheme

The Registered Specialist Trade Contractors Scheme (RSTCS), established in 2019, aims to build up a pool of professional and committed trade contractors with specialised skills through a recognised registration system for the development of the construction industry.

To uplift the professionalism of the industry, "Integrity Management" is added as the sixth registration requirement in 2021 along with the current registration requirements in terms of safety, management, job experience, execution and finance. Currently, the RSTCS covers eight designated trades founded upon the above six comprehensive core elements. As of the end of 2021, there is a total of 7,808 registered companies, including 1,849 Registered Specialist Trade Contractors and 5,959 Registered Subcontractors under the RSTCS.

Key Initiatives in Operation

Talent Management and Engagement

To strengthen the CIC's talent management capability, an "Optimized Learning Time" at 52 hours per year is allowed for staff to take online learning within office hours. Meanwhile, an online learning platform "LinkedIn" was engaged in 2021 providing staff with a 24/7 year-round free access to help them learn at their own pace.

Training and Development

The CIC is cultivating a learning culture to prepare its staff to meet the CIC's development needs and staff's own career aspiration. In 2021, the CIC arranged and encouraged staff to participate in training sessions on various topics including interviewing skills, ordinance awareness, customer engagement, cyber security, etc..

Way Forward

The CIC will continue to enhance the knowledge and raise the level of professionalism within the organisation and across the construction industry with measures as follows:

- Launch the Job Enrichment Programme and the Continuous Professional Development Scheme
- Expand the QF accreditation for HKIC's programmes and courses
- Launch new courses including those on construction and innovation technology
- Launch Construction Workers Professional Development Scheme in 2022 to encourage registered workers to enhance their skill levels
- Strive to include "Sustainable Development" as one of the application criteria in the Registered Specialist Trade Contractors Scheme and other different registered schemes

Culture

Instilling a Caring and Safe Culture

Embracing a caring and safe culture, CIC places high emphasis on the physical and mental wellness of the industry practitioners and its staff. Extensive and continuous efforts have been dedicated to enhancing construction safety through different initiatives, including promotional activities, knowledge sharing of safety practices and innovation adoption. At the same time, the CIC cares about the community and the neighbourhood where we live, and is therefore is enthusiastic about uniting the construction workforce to give back to the community with love and compassion.



In May 2021, the CIC and the Development Bureau launched an industry-wide construction safety campaign "Life First". The Campaign received an overwhelming response from the industry, with participants coming from various government departments, client corporations from the public and private sectors as well as a large number of contractors. In total, 106 clients, 220 contractors, and nearly 600 work projects were engaged in the Campaign. An online platform for participants to upload good practices for sharing with the industry was also launched.

Since Virtual Reality (VR) is identified as a useful tool in safety training in which workers can experience and participate in safety exercises in a virtual site environment. A VR safety training kit and a newly VR download platform were developed to facilitate the industry to conduct VR safety training.





VR Safety Training Experience

Cultivating a Heart to Serve

In 2021, especially during the COVID-19 pandemic, the Construction Industry Sports & Volunteering Programme (CISVP) organised over 420 volunteer activities to extend CIC's care to the community and underprivileged groups, benefiting more than 61,000 people. For instance, CISVP organised 37 rounds of home repairing and moving services for the elderly, and emergency repair services for community facilities.

Reaching a record high this year, a total of 61 construction-related organisations and NGOs participated in the 4th Construction Industry Volunteer Award Scheme with 15,376 volunteers (man-time) contributing nearly 100,000 service hours.

Construction Industry Sports & Volunteering Programme			
Volunteer Activities	421		
Number of Beneficiaries	61,010		

Construction Industry Volunteer Award Scheme 2021 (Apr 2020 – Mar 2021)

Participated Organisations	61
Service Hours	976,379
No. of Volunteers (man-time)	15,376



Representatives from the construction industry and NGOs share their experience at the Construction Industry Volunteer Award Presentation Ceremony 2021

Annual CISVP Corporate Award for Activeness

To further encourage companies to actively participate in CISVP activities and organise sports and volunteering programmes for their employees, the CIC set up a new "Annual CISVP Corporate Award for Activeness" Scheme this year. The awards of a Gold, a Silver, a Bronze and meritorious prizes were given to winners of two groups, namely the "SME" group (for companies with less than 50 employees in Hong Kong) and the "Entrepreneur" group (for companies with more than 50 employees in Hong Kong).

Lo Pan Service Month

Under CISVP's annual mega event – Lo Pan Service Month, three signature events successfully concluded, namely Construction Industry Lo Pan Rice Campaign, Construction Industry Blood Donation Day and Construction Industry Shoreline Clean-up Day, which totalled 320 rounds of services with 2,611 volunteers participated.

This year, the CISVP collaborated with the Hong Kong Construction Association to organise the "18 Districts Lo Pan Rice" Campaign in July. Teams of volunteers from 37 construction-related supporting organisations distributed 5,000 hot meal boxes and goodie bags to the underprivileged groups at 51 distribution points across 18 districts. In 2021, a total of 32,006 "Lo Pan Rice" meal boxes were distributed.

18 District Lo Pan Rice			
Rounds of services	320		
Volunteers participated	2,611		
Meal Boxes distributed	32,006		



Guests support the "18 District Lo Pan Rice" Campaign to serve the community



Lo Pan Service Month – Construction Industry Lo Pan Rice Campaign

"Construction Industry Caring Organisations" Logo is an initiative introduce to recognise construction companies and organisations demonstrating good corporate citizenship. The total number of awarded companies has reached 139 this year, representing an increase of 12%.

Number of "Construction Industry Caring Organisations"





Lo Pan Service Month – Construction Industry Shoreline Clean-up Day

Rising Industry Participation

Bearing the commitment to reinforce the objectives of CISVP and further promote the spirit of sports and volunteering to more construction industry organisations, CIC is glad to see a growth in CISVP Corporate Members of over 12%, reaching 139 this year.

Number of CISVP Corporate Members





Lo Pan Service Month – Construction Industry Blood Donation Day

Key Initiatives in Operation

Corporate Safety and Health

To attain continual improvement in occupational safety and health (OS&H), various measures have been adopted to raise OS&H awareness within the organisation.

- Conducted OS&H training (e.g heatstroke prevention)
- Organised promotion activities on manual handling safety for HKIC students
- Produced and installed additional safety information signboards on outdoor training grounds

Way Forward

 Build a sense of ownership in sports and volunteering activities among different stakeholders.

HIGHLIGHTS OF AUDITED FINANCIAL STATEMENTS FOR 2021

Highlight of the audited financial statements of the CIC Group

Based on the audited consolidated financial results for the year ended 31 December 2021, total income of CIC Group was \$1,168.47 million (2020: \$1,245.26 million), a decline of \$76.79 million or 6.2% against last year. Total expenditure for 2021 was increased by \$90.22 million or 8.6% to \$1,143.80 million (2020: \$1,053.58 million). The operating results for 2021 recorded a surplus of \$24.67 million (2020: \$191.68 million).





* Other income in the above bar chart includes registration fee income from sub-contractors, investment and interest income, reimbursement of trainees' allowances and other miscellaneous income.

Total income of CIC in 2021 was \$1,168.47 million, a decline of \$76.79 million or 6.2% against \$1,245.26 million in 2020.

Levy income decreased to \$1,056.12 million in 2021 (2020: \$1,134.64 million) and contributed 90.4% (2020: 91.1%) of total income. The 6.9% year-on-year decrease in levy income in 2021 was mainly caused by the decrease in building works in private sector. Total levy assessed on the value of construction operations in the private and public sectors amounted to \$491.92 million (2020: \$573.45 million) and \$563.30 million (2020: \$560.70 million) respectively, representing 46.6% (2020: 50.5%) and 53.3% (2020: 49.4%) of total levy income. In addition, penalty on overdue levy and surcharge amounted to \$0.82 million (2020: \$0.49 million) and \$0.08 million in 2021 (2020: nil) respectively.

Workers registration fee income for 2021 decreased to \$5.49 million (2020: \$7.61 million) due to amortisation effect of income from previous years.

Course fees and related income increased to \$33.04 million in 2021 (2020: \$16.39 million) with higher income from part-time courses.

Trade testing income for 2021 increased to \$5.29 million (2020: \$5.00 million) primarily due to the increase in the number of trade test conducted in 2021.

Investment and interest income for 2021 declined to \$14.79 million (2020: \$38.47 million). The decrease in investment and interest income was mainly due to lower interest rates on time deposits.

Other income of \$53.74 million in 2021 (2020: \$43.15 million) comprised of the reimbursement income of trainees' allowances from the Government under various schemes, including the Construction Industry Council Approved Technical Talents Training Programme (CICATP), In-service General Workers Upskill Courses, the Advanced Construction Manpower Training Scheme (ACMTS) and other schemes, as well as other miscellaneous income. The increase in other income in 2021 was mainly contributed by increase in reimbursement from CICATP, Intermediate Tradesman Collaborative Training Scheme, In-service General Workers Upskill Courses and Urban Forestry Support Fund – Trainee Programme, which were partly offset by decrease in reimbursement from ACMTS.

Total expenditure of CIC in 2021 \$1,143.80million



* Other expenditure includes depreciation and amortisation and impairment loss on levy receivables

Total expenditure of CIC in 2021 was \$1,143.80 million, an increase of \$90.22 million or 8.6% against \$1,053.58 million in 2020.

Staff costs amounted to \$428.07 million in 2021 (2020: \$455.15 million). The decrease of 6.0% was mainly due to staff movement.

Training expenses amounted to \$157.01 million in 2021 (2020: \$207.25 million), a decrease of 24.2%. Accrual for trainees' allowances and trainers' subsidies of collaborative training programs were reviewed and adjusted in 2021 that led to decline in training expenses. Other decrease was mainly due to lower spending from ACMTS.

Workshop expenses increased by 8.4% to \$24.03 million in 2021 (2020: \$22.17 million) mainly due to the higher expenditure on consumable materials and tools, electricity, and personal protective equipment in 2021. They were partly offset by the decrease in restoration of trade test venues and other expenses.

General and administrative expenses amounted to \$100.67 million in 2021 (2020: \$104.85 million). The 4.0% decrease in 2021 was mainly due to decrease in research and studies expenses and lower funding support to Hong Kong Green Building Council. They were partly offset by higher consultancy and professional fees and other expenses.

Repair and maintenance expenses amounted to \$36.44 million in 2021 (2020: \$39.69 million). The 8.2% decline was mainly due to lower maintenance expenses on training grounds and building premises and landscape area. They were partly offset by higher other repair and maintenance expenses.

Advertising and publicity expenses decreased by 8.4% to \$46.23 million in 2021 (2020: \$50.45 million) mainly due to the expenditure on activities of 45th Anniversary of Construction Training in Hong Kong and Anti-epidemic Fund in prior year, and rescheduling of World Skill Competition to 2022.

Depreciation and amortisation amounted to \$223.84 million in 2021 (2020: \$165.04 million). The year-on-year increase of 35.6% was caused by the capital expenditure completed in 2021, mainly for campuses uplifting project for Hong Kong Institute of Construction.

Relief measures for COVID-19 increased by 1,311.0% to \$126.35 million in 2021 (2020: \$8.96 million) mainly due to CIC Relief Fund, Construction Industry COVID-19 Testing Service Scheme (CITS) expenses, Caring Campaign and other relief measure spending for COVID-19.

As at 31 December 2021, the Council held a total of \$3,185.95 million as accumulated fund and reserves, compared with \$3,161.68 million as at 31 December 2020.

TO THE MEMBERS OF CONSTRUCTION INDUSTRY COUNCIL

(Established under the Construction Industry Council Ordinance, Hong Kong Special Administrative Region)

Opinion

We have audited the consolidated financial statements of Construction Industry Council ("the Council") and its subsidiaries (collectively referred to as the "Group") set out on pages 167 to 203, which comprise the consolidated statement of financial position as at 31 December 2021, and the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in fund and reserves, and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2021, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA").

Basis for Opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

The Council members are responsible for the other information. The other information comprises the information included in the annual report other than the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Council members for the Consolidated Financial Statements

The Council members are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA, and for such internal control as the Council members determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Council members are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Council members either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The Council members are also responsible for overseeing the Group's financial reporting process.

The Audit Committee of the Council assists the Council members in discharging their responsibilities in this regard.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion solely to you, as a body, in accordance with section 26 of the Construction Industry Council Ordinance, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with HKSAs, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Council members.

INDEPENDENT AUDITOR'S REPORT

- Conclude on the appropriateness of the Council members' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

BDO Limited Certified Public Accountants Lam Pik Wah Practising Certificate Number P05325

Hong Kong, 29 April 2022

Consolidated statement of profit or loss and other comprehensive income

For the year ended 31 December 2021

Ν	otes	2021 HK\$	2020 НК\$
Income			
Levy income	4	1,056,115,636	1,134,640,828
Workers registration fee income	5	5,493,108	7,607,553
Course fees and related income	6	33,041,551	16,390,464
Trade testing income	6	5,293,594	4,997,036
Investment and interest income	7	14,786,779	38,472,819
Other income	8	53,735,956	43,149,822
		1,168,466,624	1,245,258,522
Expenditure			
Staff costs	9	428,073,055	455,145,641
Training expenses		157,009,802	207,251,958
Workshop expenses		24,029,044	22,168,615
	10	100,666,033	104,854,898
Relief measures for COVID-19	11	126,354,365	8,955,154
Repair and maintenance expenses		36,436,269	39,691,952
Advertising and publicity expenses		46,225,236	50,450,210
Depreciation	12	223,840,282	165,036,615
Impairment loss on levy receivables	16	1,165,729	27,693
		1,143,799,815	1,053,582,736
Surplus for the year		24,666,809	191,675,786
Other comprehensive expense for the year			
Item that will not be reclassified to profit or loss:			
Equity instruments at fair value through other comprehensive income			
– Decrease in fair value		(388,869)	(10,056,092)
		(500,005)	(10,050,052)
Surplus and total comprehensive income for the year		24,277,940	181,619,694

Consolidated statement of financial position At 31 December 2021

	Notes	2021 HK\$	2020 HK\$
Non-current assets			
Property, plant and equipment	13	1,092,483,743	828,473,382
Construction in progress	13	108,456,632	374,767,707
Debt instruments at amortised cost	14	262,514,998	59,122,814
Equity instruments at fair value through other comprehensive	4.5		
income ("FVTOCI")	15	10,849,445	11,238,314
		1,474,304,818	1,273,602,217
Current assets			
Levy receivables	16	82,061,970	67,857,638
Deposits, prepayments and other receivables	17	86,460,067	54,270,863
Cash and bank balances	18	2,693,625,040	2,964,127,027
		2,862,147,077	3,086,255,528
Current liabilities			
Accounts and other payables and accruals	19	342,460,244	241,279,542
Construction Innovation and Technology Fund	20	773,194,637	920,193,391
Lease liabilities	21	7,033,535	10,154,381
Contract liabilities	22	10,239,727	11,782,751
		1,132,928,143	1,183,410,065
Net current assets		1,729,218,934	1,902,845,463
Total assets less current liabilities		3,203,523,752	3,176,447,680

Consolidated statement of financial position (continued)

At 31 December 2021

N	lotes	2021 HK\$	2020 НК\$
Non-current liabilities	24	42 462 020	4 500 200
	21	12,162,930	4,580,390
Contract liabilities	22	5,407,207	10,191,615
		17,570,137	14,772,005
Net assets		3,185,953,615	3,161,675,675
Represented by:			
Accumulated fund		2,790,962,449	2,766,295,640
General reserve		389,353,310	389,353,310
Investment revaluation reserve		5,637,856	6,026,725
Total fund and reserves		3,185,953,615	3,161,675,675

The consolidated financial statements on pages 167 to 203 were approved and authorised for issue by the Council members of Construction Industry Council on 29 April 2022 and were signed on their behalf by:

HO On-sing, Thomas Chairman **WONG Hin-wing, Simon** *Council member*

Consolidated statement of changes in fund and reserves

For the year ended 31 December 2021

	Accumulated fund HK\$	General reserve HK\$ (Note a)	Investment revaluation reserve HK\$ (Note b)	Total НК\$
At 1 January 2020	2,586,969,204	389,353,310	3,733,467	2,980,055,981
Surplus for the year	191,675,786	-	-	191,675,786
Other comprehensive expense for the year	-	-	(10,056,092)	(10,056,092)
Reclassification adjustment upon disposal				
of equity instruments at FVTOCI	(12,349,350)	-	12,349,350	-
At 31 December 2020	2,766,295,640	389,353,310	6,026,725	3,161,675,675
Surplus for the year	24,666,809	-	-	24,666,809
Other comprehensive expense for the year	-	-	(388,869)	(388,869)
At 31 December 2021	2,790,962,449	389,353,310	5,637,856	3,185,953,615

Notes:

- (a) General reserve has been set up to record the statutory transfer of net assets from Construction Industry Training Authority on 1 January 2008 and Construction Workers Registration Authority on 1 January 2013. The general reserve was created for employing the reserve in the operations of the Council or by investing the reserve in such manner as the Council members think fit. The Council members may apply the general reserve for any other special purpose.
- (b) Investment revaluation reserve comprises the cumulative net change in the fair value of equity investments at FVTOCI held at the end of the reporting period and is dealt with in accordance with the accounting policy in Note 3.

Consolidated statement of cash flows

For the year ended 31 December 2021

	2021	2020
	НК\$	HK\$
Operating activities		
Surplus for the year	24,666,809	191,675,786
Adjustments for:		
Impairment loss on levy receivables	1,165,729	27,693
Interest expense on lease liabilities	280,722	488,254
Depreciation	223,840,282	165,036,615
Investment and interest income	(14,786,779)	(38,472,819)
Loss on disposal of property, plant and equipment	3,134,515	2,871,581
Operating cash flow before movements in working capital	238,301,278	321,627,110
(Increase)/decrease in levy receivables	(15,370,061)	20,688,062
Increase in deposits, prepayments and other receivables	(32,533,491)	(10,084,740)
Increase in accounts and other payables and accruals	87,207,362	3,720,365
Decrease in contract liabilities	(6,327,432)	(7,940,163)
Net cash from operating activities	271,277,656	328,010,634

Consolidated statement of cash flows (continued)

For the year ended 31 December 2021

	Note	2021 НК\$	2020 HK\$
Investing activities			
Withdrawal of bank deposits with maturity over three			
months		1,279,567,989	4,032,567,584
Redemption of debt instruments at amortised cost		-	70,000,000
Interest received		14,786,779	46,739,351
Proceeds from equity instrument through other			
comprehensive income		-	16,173,551
Dividend received from equity instruments at FVTOCI		318,873	318,873
Placement in bank deposits with maturity over three months		(1,033,014,432)	(3,918,785,585)
Proceeds received on disposal of property, plant and		227 400	
equipment		237,488	- //15 502 772)
Payment for purchase of property, plant and equipment		(209,123,269)	(415,582,773)
Purchase of debt instruments at amortised cost		(203,392,184)	(59,528,633)
Net cash used in investing activities		(150,618,756)	(228,097,632)
Financing activity			
Repayment of lease liabilities	21	(11,607,330)	(14,331,854)
Net cash used in financing activity		(11,607,330)	(14,331,854)
Net increase in cash and cash equivalents		109,051,570	85,581,148
Cash and cash equivalents at the beginning of the year		135,646,300	50,065,152
Cash and cash equivalents at the end of the year		244,697,870	135,646,300
Analysis of the balances of cash and cash equivalents			
Cash and bank balances		2,693,625,040	2,964,127,027
Less: Time deposits with original maturity over three months		(2,448,927,170)	(2,828,480,727)
		244,697,870	135,646,300

1. General

The Construction Industry Council (the "Council") was established as a statutory body on 1 February 2007 in Hong Kong under the Construction Industry Council Ordinance. The Council acts as an industry co-ordinating body. Its principal functions are to forge consensus on long-term strategic issues, convey the industry's needs and aspirations to Government, as well as provide a communication channel for Government to solicit advice on all construction-related matters. In order to propagate improvements across the entire industry, the Council is empowered to formulate codes of conduct, administer registration and rating schemes, steer forward research and manpower development, facilitate adoption of construction standards, promote good practices and compile performance indicators.

The address of the registered office of the Council is located at 38/F., COS Centre, 56 Tsun Yip Street, Kwun Tong, Kowloon, Hong Kong.

The Group's consolidated financial statements are presented in Hong Kong dollar, which is the same as the functional currency of the Council and its subsidiaries.

2. Application of new and amendments to Hong Kong financial reporting standards ("HKFRSs")

New and amendments to HKFRSs that are mandatorily effective for the current year

The Group has applied the following new and amendments to HKFRSs issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") for the preparation of the Group's consolidated financial statements for the first time in the current year:

Amendments to HKFRS 9, HKAS 39,	Interest Rate Benchmark Reform – Phase 2
HKFRS 7, HKFRS 4 and HKFRS 16	
Amendment to HKFRS 16	Covid-19-Related Rent Concessions

The application of the above new and amendments to HKFRSs in the current year has had no material impact on the Group's consolidated performance and positions for the current and prior years and/or on the disclosures in these consolidated financial statements.

New and amendments to HKFRSs in issue but not yet effective

The Group has not early applied the following new and amendments to HKFRSs, potentially relevant to the Group, that have been issued but are not yet effective:

Amendment to HKFRS 16	Covid-19-Related Rent Concessions beyond 30 June 2021 ¹
Amendments to HKFRSs	Annual Improvements to HKFRSs 2018-2020 ²
Amendments to HKFRS 3	Reference to the Conceptual Framework ²
Amendments to HKAS 16	Property, Plant and Equipment – Proceeds before Intended Use ²
Amendments to HKAS 37	Onerous Contracts – Cost of Fulfilment a Contract ²
HKFRS 17	Insurance Contracts and the related Amendments ³
Amendments to HKAS 1	Classification of Liabilities as Current or Non-current and related amendments to Hong Kong Interpretation 5 (2020) ³
Amendments to HKAS1 and HKFRS Practice Statement 2	Disclosure of Accounting Policies ³
Amendments to HKAS 8	Definition of Accounting Estimates ³
Amendments to HKAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction ³

Effective for annual periods beginning on or after 1 April 2021

² Effective for annual periods beginning on or after 1 January 2022

³ Effective for annual periods beginning on or after 1 January 2023

The Council members anticipate that the application of these new and amendments to HKFRSs will have no material impact on the consolidated financial statements in the foreseeable future.

3. Significant accounting policies

The consolidated financial statements have been prepared in accordance with HKFRSs issued by the HKICPA under the historical cost basis except for certain financial instruments that are measured at fair values, as explained in the accounting policies set out below. Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of HKFRS 2 "Share-based Payment", net realisable value in HKAS 2 "Inventories" or value in use in HKAS 36 "Impairment of Assets".

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2021

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

The significant accounting policies are set out below:

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Council and entities controlled by the Council and its subsidiaries. Control is achieved where the Council:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

The Council reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary.

Where necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies.

All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Revenue from contracts with customers

The Group recognises revenue when a performance obligation is satisfied, i.e. when "control" of the services underlying the particular performance obligation is transferred to the customer.

Control is transferred over time and revenue is recognised over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of the following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs;
- the Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or
- the Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

Otherwise, revenue is recognised at a point in time when the customer obtains control of the distinct service.

A contract liability represents the Group's obligation to deliver services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

Over time revenue recognition: measurement of progress towards complete satisfaction of a performance obligation

Output method

The progress towards complete satisfaction of a performance obligation is measured based on output method, which is to recognise revenue on the basis of direct measurements of the value of the services delivered to the customer to date relative to the remaining services promised under the contract, that best depict the Group's performance in transferring control of services.

Levy income

Levy income is accounted for on an accrual basis and is recognised when the assessment of the value of construction operations by the Group are complete.

Government grants

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate.

Government grants that are receivable as compensation for expenses or losses already incurred are recognised in profit or loss in the period in which they become receivables.

Property, plant and equipment and construction in progress

Property, plant and equipment held for use in the provision of services or for administrative purposes are stated in the consolidated statement of financial position at cost less subsequent accumulated depreciation and accumulated impairment losses, if any.

Construction in progress represented the expenditure made for construction of property, plant and equipment for provision of services or administrative purpose. Construction in progress are carried at cost less any recognised impairment loss. Such items are classified to the appropriate categories of property, plant and equipment when completed and ready for intended use.

Depreciation is recognised so as to write off the cost of items of property, plant and equipment other than construction in progress less their residual values over their estimated useful lives, using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

Depreciation is calculated using the straight-line method over their estimated useful lives as follows:

Leasehold land and building	25 – 50 years
Motor vehicles	5 years
Computer equipment	3 – 5 years
Renovation and building facilities	3 – 5 years
Furniture and fixtures	10 years
Facilities, tools, machinery and workshop equipment	5 years
Other equipment	10 years

Both the useful life of an asset and its residual value, if any, are reviewed annually.

Right-of-use assets are depreciated over the shorter period of the lease term and the useful life of the underlying asset. If a lease transfers ownership of underlying assets or the cost of the right-of-use asset reflect that the Group expects to exercise a purchase option, the related right-of-use asset is depreciated over the useful life of the underlying assets.

Impairment of tangible assets

At the end of each reporting period, the Group reviews the carrying amounts of the tangible assets to determine whether there is any indication that those assets have suffered an impairment loss or an impairment loss previously recognised no longer exists or may have decreased.

If the recoverable amount (i.e. the greater of the fair value less costs of disposal and value in use) of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. An impairment loss is recognised as an expense immediately, unless the relevant asset is carried at a revalued amount under another HKFRS, in which case the impairment loss is treated as a revaluation decrease under that HKFRS.

Where an impairment loss subsequently reverses, the carrying amount of the asset is increased to the revised estimate of its recoverable amount, to the extent that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years. A reversal of an impairment loss is recognised as income immediately, unless the relevant asset is carried at a revalued amount under another HKFRS, in which case the reversal of the impairment loss is treated as a revaluation increase under that HKFRS.

Employee benefits

Salaries, gratuities, paid annual leave, contributions to defined contribution retirement plans are accrued in the year in which the associated services are rendered by employees.

Leasing

A contract is, or contains, a lease if the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-ofuse asset is initially measured at cost (which comprises the initial measurement of lease liabilities, initial direct costs, reinstatement costs, any payments made at or before the commencement date less any lease incentives received), and subsequently at cost less any accumulated depreciation and impairment losses. The right-ofuse asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the lessee's incremental borrowing rate is used. Generally, the Group uses its incremental borrowing rate as the discount rate. The lease liability is subsequently increased by the interest cost on the lease liability and decreased by lease payments made.

The Group has applied judgement to determine the lease term for some lease contracts in which it is a lessee that include renewal options. The assessment of whether the Group is reasonably certain to exercise such options impacts the lease term, which significantly affects the amount of lease liabilities and right-of-use assets recognised.

Payments associated with short-term leases (i.e., leases with a lease term of 12 months or less) and low value leases are recognised on a straight-line basis as an expense in the profit or loss.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2021

Financial instruments

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instruments. All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

Financial assets and financial liabilities are initially measured at fair value except for receivables arising from contracts with customers which are initially measured in accordance with HKFRS 15. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets or financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition.

The effective interest method is a method of calculating the amortised cost of a financial asset or financial liability and of allocating interest income and interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments through the expected life of the financial asset or financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Financial assets

Classification and subsequent measurement of financial assets

Financial assets that meet the following conditions are subsequently measured at amortised cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets that meet the following conditions are subsequently measured at FVTOCI:

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All other financial assets are subsequently measured at fair value through profit or loss, except that at the date of initial application/initial recognition of a financial asset the Group may irrevocably elect to present subsequent changes in fair value of an equity investment in OCI if that equity investment is neither held for trading nor contingent consideration recognised by an acquirer in a business combination to which HKFRS 3 "Business Combinations" applies.
Amortised cost and interest income

Interest income is recognised using the effective interest method for financial assets measured subsequently at amortised cost and debt instruments subsequently measured at FVTOCI. Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired (see below). For financial assets that have subsequently become is recognised by applying the effective interest rate to the amortised cost of the financial asset starting from the following reporting period. If the credit risk on the credit impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest income is recognised by applying the effective interest income is recognised by applying the redit risk on the credit impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit impaired.

Equity instruments designated as at FVTOCI

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognised in OCI and accumulated in the investment revaluation reserve; and are not subject to impairment assessment. The cumulative gains or losses will not be reclassified to profit or loss on disposal of the equity investments, and will be transferred to accumulated fund.

Dividends from these investments in equity instruments are recognised in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the investment and interest income line item in profit or loss.

Impairment of financial assets

The Group recognises a loss allowance for expected credit loss ("ECL") on financial assets which are subject to impairment under HKFRS 9 (including deposits and other receivables, bank balances and debt instruments at amortised cost). The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month ECL ("12m ECL") represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessment are done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group has elected to measure loss allowances for levy receivables using the HKFRS 9 simplified approach and has calculated ECL based on lifetime ECL. The Group has established a provision matrix that is based on the Group's historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

For other financial assets subject to ECL, the Group measures the loss allowance equal to 12m ECL, unless when there has been a significant increase in credit risk since initial recognition, the Group recognises lifetime ECL. The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

(i) Significant increase in credit risk

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

In particular, the following information is taken into account when assessing whether credit risk has increased significantly:

- an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor;
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

Despite the foregoing, the Group assumes that the credit risk on a debt instrument has not increased significantly since initial recognition if the debt instrument is determined to have low credit risk at the reporting date. A debt instrument is determined to have low credit risk if i) it has a low risk of default, ii) the borrower has a strong capacity to meet its contractual cash flow obligations in the near term and iii) adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations. The Group considers a debt instrument to have low credit risk when it has an internal or external credit rating of 'investment grade' as per globally understood definitions.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

(ii) Definition of default

For internal credit risk management, the Group considers an event of default occurs when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full.

Irrespective of the above, the Group considers that default has occurred when a financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

(iii) Credit-impaired financial assets

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit impaired includes observable data about the following events:

- (a) significant financial difficulty of the issuer or the borrower;
- (b) a breach of contract, such as a default or past due event;
- (c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;
- (d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation; or
- (e) the disappearance of an active market for that financial asset because of financial difficulties.

(iv) Write-off policy

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The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, for example, when the counterparty has been placed under liquidation or has been dissolved by deregistration, whichever occurs sooner. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. A write-off constitutes a derecognition event. Any subsequent recoveries are recognised in profit or loss.

(v) Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2021

Generally, the ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition.

Where ECL is measured on a collective basis or cater for cases where evidence at the individual instrument level may not yet be available, the financial instruments are grouped on the nature of financial instruments and past-due status:

- Nature of financial instruments (i.e. the Group's account and other receivables are each assessed as a separate group);
- Past-due status;
- Nature, size and industry of debtors; and
- External credit ratings where available.

Interest income is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit impaired, in which case interest income is calculated based on the amortised cost of the financial asset.

The Group recognises an impairment gain or loss in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of deposits and other receivables, where the corresponding adjustment is recognised through a loss allowance account.

Financial liabilities

Financial liabilities are classified according to the substance of the contractual arrangements entered into and the definition of a financial liability.

Financial liabilities (including accounts and other payables and Construction Innovation and Technology Fund ("CITF")) are subsequently measured at amortised cost, using the effective interest method.

Derecognition of financial instruments

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss.

On derecognition of an investment in equity instrument which the Group has elected on initial recognition to measure at FVTOCI, the cumulative gains or losses previously accumulated in the investment revaluation reserve is not reclassified to profit or loss, but is transferred to accumulated fund.

The Group derecognises a financial liability when the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

Investment properties

Investment property is property held either to earn rentals or for capital appreciation or for both, but not held for use in the production or supply of goods or services or for administrative purposes. Investment property is stated at cost less subsequent accumulated depreciation and any accumulated impairment loss. Depreciation is charged so as to write off the cost of investment property net of expected residual value over the estimated useful live using the straight-line method. The useful live, residual value and depreciation method are reviewed, and adjusted if appropriate, at the end of each reporting period.

Foreign currencies

Transactions entered into by Group entities in currencies other than the currency of the primary economic environment in which they operates (the "functional currency") are recorded at the rates ruling when the transactions occur. Foreign currency monetary assets and liabilities are translated at the rates ruling at the end of reporting period. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing on the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences arising on the settlement of monetary items, and on the translation of monetary items, are recognised in profit or loss in the period in which they arise. Exchange differences arising on the retranslation of non-monetary items carried at fair value are included in profit or loss for the period except for differences arising on the retranslation of non-monetary items in respect of which gains and losses are recognised in other comprehensive income, in which case, the exchange differences are also recognised in other comprehensive income.

Related parties

- (a) A person, or a close member of that person's family, is related to the Group if that person:
 - (i) has control or joint control of the Group;
 - (ii) has significant influence over the Group; or
 - (iii) is a member of the key management personnel of the Group.
- (b) An entity is related to the Group if any of the following conditions applies:
 - (i) The entity and the Group are members of the same group;
 - (ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member);
 - (iii) Both entities are joint ventures of the same third party;
 - (iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity;
 - (v) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group;

- (vi) The entity is controlled or jointly controlled by a person identified in (a);
- (vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); or
- (viii) The entity, or any member of a group of which it is a part, provides key management personnel services to the Group.

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

4. Levy income

	2021 HK\$	2020 НК\$
Private sector	491,918,316	573,454,825
Public sector	438,444,812	410,485,864
Others (Note)	124,848,688	150,205,605
Penalty on overdue levy	821,173	494,534
Surcharge	82,647	-
	1,056,115,636	1,134,640,828

Note: Others include levy income on construction operations relating to the port and airport development, Mass Transit Railway, Express Rail Link, South Island Line, Kwun Tong Line Extension, West Island Line and Tuen Ma Line.

In accordance with the provisions of section 32 of the Construction Industry Council Ordinance, a levy is imposed at the rate of 0.5% on the value of all construction operations undertaken or carried out in Hong Kong, for which the tender has been submitted on or after 30 July 2018, and with a total value exceeding HK\$3,000,000*(see below).

In addition, in accordance with the provisions of section 23 of the Construction Workers Registration Ordinance, a levy is imposed at the rate of 0.03% on the value of all construction operations undertaken or carried out in Hong Kong, for which the tender has been submitted or a construction contract has been entered or the construction operations have begun on or after 30 July 2018 and with a total value exceeding HK\$3,000,000#(see below).

- * Any construction operations which have commenced or been tendered before 30 July 2018, the levy threshold is HK\$1,000,000. The levy rate for these operations was 0.5%, effective on 20 August 2012 while it was 0.4% before 20 August 2012 and 0.25% before 10 January 2000.
- * Any construction operations which have commenced or been tendered between 24 February 2005 and 29 July 2018, the levy threshold is HK\$1,000,000.

5. Workers registration fee income

Workers registration fees are collected from construction workers who are applying for registration which normally has a validity period of 60 months in accordance with the Construction Workers Registration (Fees) Regulation (Cap 583 (B)). Workers registration fee income is recognised over time and the advances received relating to future periods are treated as contract liabilities (Note 22). Revenue is recognised on a time proportion basis based on the output method.

6. Course fees and related income and trade testing income

Course fees and related income is recognised over time. Trade testing income is recognised at a point in time. All these incomes represent contracts with customers and were derived from Hong Kong.

(i) Course fees and related income

The Group provides construction training courses to trainees. Such courses are recognised as a performance obligation satisfied over time as the trainee simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs. Revenue is recognised over the period of training based on the output method.

All courses are for periods of one year or less. As permitted under HKFRS 15, the transaction price allocated to these unsatisfied contracts is not disclosed.

(ii) Trade testing income

The Group provides trade testing services to construction industry practitioners. Such services are recognised at a point of time upon the completion of the testing.

All trade testing services are for periods of one year or less. As permitted under HKFRS 15, the transaction price allocated to these unsatisfied contracts is not disclosed.

7. Investment and interest income

	2021 HK\$	2020 HK\$
Interest on bank deposits Interest on debt instruments at amortised cost Other interest income Dividend from equity instruments at FVTOCI	12,473,127 1,994,772 7 318,873	36,872,319 1,244,539 37,088 318,873
	14,786,779	38,472,819

8. Other income

	2021 HK\$	2020 HK\$
Reimbursement of trainees' allowance (Note 1) Registration fee income from sub-contractors (Note 2) Income from conferences and workshops Income from short-term rental of devices Other miscellaneous income Foreign exchange gain, net	41,729,738 3,207,940 2,238 1,237,226 6,797,865 760,949	31,164,998 2,883,176 1,792,609 1,402,617 5,906,422 -
	53,735,956	43,149,822

Note 1:

Reimbursement of trainees' allowance represented the receivable from the Government in respect of the allowances paid by the Group to the trainees for several approved training schemes which are regarded as government grants.

Note 2:

Registration fees are collected from sub-contractors who are applying for registration which normally has a validity period of 36 or 60 months on and after 1 July 2017. Registration fee income is recognised over time and the advances received relating to future periods are treated as contract liabilities (Note 22). Revenue is recognised on a time proportion basis based on the output method.

9. Staff costs

	2021 HK\$	2020 НК\$
Salaries, wages and other benefits Contributions to defined contribution retirement plan	407,934,493 20,138,562	433,366,682 21,778,959
	428,073,055	455,145,641

10. General and administrative expenses

General and administrative expenses included:

	2021 HK\$	2020 HK\$
Auditors' remuneration	558,200	521,300
Loss on disposal of property, plant and equipment	3,134,515	2,871,581
Foreign exchange loss, net	–	2,535,589

11. Relief measures for the COVID-19

	2021 HK\$	2020 HK\$ (restated)
One off relief measure for COVID-19	110,125,440	_
Allowance paid and other expense incurred to support workers under		
the Construction Industry Caring Campaign – Fight against Novel Coronavirus	11,124,786	19,269,341
Other COVID-19 relief measures	11,228,925	8,955,154
Less: Fundings from the Construction Industry Caring Campaign	132,479,151 (6,124,786)	28,224,495 (19,269,341)
	126,354,365	8,955,154

12. Depreciation

	2021 HK\$	2020 HK\$
Depreciation charges: – owned assets – right-of-use assets	212,609,905 11,230,377	152,421,216 12,615,399
	223,840,282	165,036,615

13. Property, plant and equipment and construction in progress

	Leasehold land and building (note) HK\$	Motor vehicles HK\$	Computer equipment HK\$	Renovation and building facilities HK\$	Furniture and fixtures HK\$	Facilities, tools, machinery and workshop equipment HK\$	Other equipment HK\$	Total property, plant and equipment HK\$	Construction in progress HK\$	Total HK\$
Cost										
At 1 January 2020	613,070,442	1,341,244	115,290,283	557,634,652	6,152,449	118,923,163	37,350,315	1,449,762,548	20,343,901	1,470,106,449
Additions		-			0,152,445		-	-	417,338,594	417,338,594
Disposals	(2,795,440)	(264,800)	(145,600)	(13,238,496)	(232,824)	(1,442,731)	(827,822)	(18,947,713)	-	(18,947,713)
Transfer	-	(201,000)	24,119,380	27,058,382	2,584,396	3,437,451	5,715,179	62,914,788	(62,914,788)	-
At 31 December 2020	610,275,002	1,076,444	139,264,063	571,454,538	8,504,021	120,917,883	42,237,672	1,493,729,623	374,767,707	1,868,497,330
Additions	18,802,920	-	-	-	-	-	-	18,802,920	206,108,651	224,911,571
Disposals	(26,041,742)	(384,900)	(741,340)	(4,604,467)	(576,870)	(1,856,524)	(3,762,159)	(37,968,002)	-	(37,968,002)
Transfer	-	333,798	14,339,232	444,926,421	1,832,746	7,423,347	3,564,182	472,419,726	(472,419,726)	-
At 31 December 2021	603,036,180	1,025,342	152,861,955	1,011,776,492	9,759,897	126,484,706	42,039,695	1,946,984,267	108,456,632	2,055,440,899
A second start dama station										
Accumulated depreciation At 1 January 2020	103,944,308	962,912	54,982,837	274,945,463	3,523,108	66,647,108	9,534,201	514,539,937	_	514,539,937
Charge for the year	27,465,115	138,309	20,442,674	96,114,361	628,069	15,581,382	4,666,705	165,036,615	_	165,036,615
Written off on disposals	(2,795,440)	(264,800)	20,442,074	(9,220,680)	(174,020)	(1,346,518)	(518,853)	(14,320,311)	-	(14,320,311)
`										
At 31 December 2020	128,613,983	836,421	75,425,511	361,839,144	3,977,157	80,881,972	13,682,053	665,256,241	-	665,256,241
Charge for the year	26,080,091	160,452	21,701,734	155,841,679	913,078	14,091,063	5,052,185	223,840,282	-	223,840,282
Written off on disposals	(26,041,742)	(384,900)	(718,840)	(4,306,353)	(341,314)	(1,767,331)	(1,035,519)	(34,595,999)	-	(34,595,999)
At 31 December 2021	128,652,332	611,973	96,408,405	513,374,470	4,548,921	93,205,704	17,698,719	854,500,524	-	854,500,524
Carrying amounts At 31 December 2021	474,383,848	413,369	56,453,550	498,402,022	5,210,976	33,279,002	24 340 976	1,092,483,743	108 456 632	1,200,940,375
	-,JUJ,0+0	-15,505	50,755,550	730,702,022	5,210,570	55,215,002	27,540,570	1,052,105,145	100,400,002	1,200,040,073
At 31 December 2020	481,661,019	240,023	63,838,552	209,615,394	4,526,864	40,035,911	28,555,619	828,473,382	374 767 707	1,203,241,089

Note: Included in leasehold land and building are office premises carried at historical cost of HK\$1, which is leased out to earn rental income. The market value estimated by the Council as at 31 December 2021 is HK\$36,100,000, the determination of which was supported by market evidence. The gross rental income earned for the year was HK\$912,000 (2020: HK\$912,000) and was included in the miscellaneous income.

14. Debt instruments at amortised cost

	2021 HK\$	2020 HK\$
Debt instruments, with fixed interest rate of 1.653% to 4.65% (2020: 3.20% to 4.25%)		
per annum and maturity date in 2025 to 2027 (2020: 2025)	262,514,998	59,122,814

15. Equity instruments at FVTOCI

	2021 HK\$	2020 HK\$
Equity securities listed on the Stock Exchange of Hong Kong, at fair value	10,849,445	11,238,314

Note:

The above listed equity investments represent ordinary shares of entities listed in Hong Kong. These investments are not held for trading, instead, they are held for long-term strategic purposes. The Council members have elected to designate these investments in equity instruments as at FVTOCI as they believe that recognising short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Group's strategy of holding these investments for long-term purposes and realising their performance potential in the long run.

On disposal of these equity investments, any related balance within the FVTOCI reserve is reclassified to accumulated fund.

During the year ended 31 December 2020, the Group disposed some of its equity investments listed on the Stock Exchange of Hong Kong as these investments no longer suited the Group's investment strategy. These shares sold had a fair value of HK\$16,173,551 and the Group realised a loss of HK\$12,349,350.

16. Levy receivables

	2021 HK\$	2020 HK\$
Levy receivables Less: loss allowance	89,741,567 (7,679,597)	74,371,506 (6,513,868)
	82,061,970	67,857,638

All levy receivables are expected to be recovered within one year.

The average credit period on levy receivables granted to the contractors is 28 days (2020: 28 days) after the date of the notice of assessment.

No penalty is imposed on the contractor for the specified period of 28 days. Thereafter, penalty is imposed at 5% of the unpaid amount. If the amount of the levy or surcharge, including any penalty imposed remains unpaid within three months after the expiry of the specified period, a further penalty of 5% of the unpaid amount will be imposed on the outstanding balance. The Group would provide fully for all long outstanding receivables, having considered, inter alia, the likelihood of recoverability based on historical experience.

As at 31 December 2021, included in the Group's levy receivables balance are debtors with a carrying amount of HK\$2,281,193 (2020: HK\$2,931,199) which were past due at the end of the reporting period for which the Group had not provided for any impairment loss as there has not been a significant change in credit quality and the amounts are still considered recoverable.

Impairment of levy receivables

Impairment losses on levy receivables are recorded using an allowance account unless the Group is satisfied that recovery of the amount is remote, in which case the impairment loss is written off against levy receivables directly.

The movement in the loss allowance for levy receivables is as follows:

	HK\$
At 1 January 2020	6,486,175
Impairment losses recognised	27,693
At 31 December 2020	6,513,868
Impairment losses recognised	1,165,729
At 31 December 2021	7,679,597

At 31 December 2021, levy receivables of HK\$6,349,198 (2020: HK\$6,405,161) were individually determined to be impaired and full impairment loss were recognised in the allowance account. The individually impaired receivables related to contractors that were either under liquidation or in financial difficulties and the Group assessed that the full amount of the receivables to be irrecoverable.

In determining the recoverability of levy receivables, the Group collectively considered any change in the credit quality of the levy receivables from the date credit was initially granted up to the reporting date. The concentration of credit risk is limited due to the contractor base being large and unrelated.

17. Deposits, prepayments and other receivables

	2021 HK\$	2020 HK\$
Deposits and prepayments	8,055,971	11,958,829
Other receivables		
– Interest receivables – The Group	6,169,394	8,588,952
– Interest receivables – CITF (Note 20)	14,721	40,136
– Receivable from the Government	27,132,775	29,257,963
– Receivables from Anti-epidemic Fund applicants (Note 19)	40,199,646	73,469
- Others	4,887,560	4,351,514
	78,404,096	42,312,034
	86,460,067	54,270,863

18. Cash and bank balances

Cash and deposits at banks comprise cash and demand deposits held by the Group.

	2021 HK\$	2020 HK\$
Deposits with banks		
– with original maturity over three months		
- The Group	1,686,927,170	1,933,480,727
- CITF (Note 20)	762,000,000	895,000,000
	2,448,927,170	2,828,480,727
Deal heleness and each		
Bank balances and cash	152 060 792	82 057 260
– The Group – Construction Industry – Anti-epidemic fund	152,069,782 81,448,172	83,057,269 27,435,776
– CITF (Note 20)	11,179,916	25,153,255
	, ., ., ., ., .	23,133,233
	2,693,625,040	2,964,127,027

Deposits and bank balances totalling HK\$773,194,637 (2020: HK\$920,153,255) being CITF (Note 20) are kept at earmarked bank accounts.

19. Accounts and other payables and accruals		
	2021 HK\$	2020 HK\$
Construction Industry – Anti-epidemic Fund (Note) Other amount payables and accruals	121,647,818 220,812,426	27,509,245 213,770,297
	342,460,244	241,279,542

Note:

On 11 June 2020, Development Bureau announced that the Anti-epidemic Fund will provide support to the construction industry.

CIC was commissioned by Development Bureau to be the implementation partner to handle application and disburse the subsidies of the Anti-epidemic Fund. CIC opened a designated bank account for the custody of the fund.

As at 31 December 2021, the fund balance accumulated to HK\$121,647,818 (2020: HK\$27,509,245) for which HK\$81,448,172 (2020: HK\$27,435,776) and HK\$40,199,646 (2020: HK\$73,469) are included in cash and bank balances (Note 18) and other receivables (Note 17) respectively.

20. Construction innovation and technology fund

The Finance Committee of the Legislative Council approved the establishment of the CITF on 16 July 2018, with an allocation of HK\$1,000,000,000 for use over a tentative period of 5 years. CITF is to encourage wider adoption of innovative construction methods and technology in the construction industry with a view to promoting productivity, uplifting built quality, improving site safety and enhancing environmental performance by the Government of Hong Kong Special Administrative Region. CIC was commissioned by the Development Bureau to be the implementation partner. CIC opened a designated bank account and keep separate books for the CITF.

As at 31 December 2021, the fund balance accumulated to HK\$773,194,637 (2020: HK\$920,193,391) of which HK\$773,179,916 (2020: HK\$920,153,255) and HK\$14,721 (2020: HK\$40,136) are included in cash and bank balances (Note 18) and interest receivables respectively. The unutilised amount has to be returned to the Development Bureau.

21. Lease liabilities

The group leases a number of properties in Hong Kong with fixed periodic payments over the lease terms.

The group also leases certain items of equipment with fixed payments over the lease terms.

Right-of-Use Assets

The analysis of the net book value of right-of-use assets by class of underlying asset is as follows:

Right-of-use assets	Leasehold land and building HK\$	Other equipment HK\$
At 1 January 2020	19,025,934	7,981,606
Depreciation	(10,873,958)	(1,741,441)
At 31 December 2020	8,151,976	6,240,165
Additions	18,802,920	-
Depreciation	(9,488,936)	(1,741,441)
At 31 December 2021	17,465,960	4,498,724

Future lease payments are due as follows:

	Minimum lease payments HK\$	Interest HK\$	Present value HK\$
2021			
Not later than one year	7,380,994	347,459	7,033,535
Later than one year and not later than five years	12,397,778	234,848	12,162,930
	19,778,772	582,307	19,196,465
	Minimum lease		
	payments	Interest	Present value
	HK\$	HK\$	HK\$
2020			
Not later than one year	10,350,040	195,659	10,154,381
Later than one year and not later than five years	4,707,004	126,614	4,580,390
	15,057,044	322,273	14,734,771

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2021

Movement of lease liabilities		
	2021	2020
	HK\$	HK\$
At 1 January	14,734,771	28,578,371
Addition	15,788,302	-
Interest expenses	280,722	488,254
Interest element of lease payment	(280,722)	(488,254)
Capital element of lease payment	(11,326,608)	(13,843,600)
At 31 December	19,196,465	14,734,771

The present value of future lease payments are analysed as:

	2021 HK\$	2020 НК\$
Current liabilities Non-current liabilities	7,033,535 12,162,930	10,154,381 4,580,390
	19,196,465	14,734,771

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2021

Leases - Other disclosures

	2021 HK\$	2020 HK\$
Short term lease expense	538,000	182,000
Low value lease expense	2,521,836	2,530,563
Interest expenses	280,722	488,254

22. Contract liabilities

	2021 HK\$	2020 HK\$
Course fees and related income	3,992,933	3,466,678
Workers registration fees	5,456,278	10,949,386
Registration fees from subcontractors	6,197,723	7,558,302
	15,646,934	21,974,366
Current	10,239,727	11,782,751
Non-current	5,407,207	10,191,615
	15,646,934	21,974,366

Contract liabilities, that are not expected to be settled within the Group's normal operating cycle, are classified as non-current based on the Group's earliest obligation to transfer services to the customers.

The following table shows how much of the revenue recognised in the current year relates to brought-forward contract liabilities.

	Course fees and related income HK\$	Workers registration fees HK\$	Registration fees from sub- contractors HK\$
At 1 January 2020 Decrease in contract liabilities as a result of recognising revenue during the year that was included in the contract liabilities at the beginning	3,300,001	18,556,879	8,057,649
of the year Increase in contract liabilities as a result of receipt	(3,300,001)	(7,607,493)	(2,442,011)
in advance during the year	3,466,678	_	1,942,664
At 31 December 2020 Decrease in contract liabilities as a result of recognising revenue during the year that was included in the contract liabilities at the beginning	3,466,678	10,949,386	7,558,302
of the year	(3,466,678)	(5,493,108)	(2,822,965)
Increase in contract liabilities as a results of receipt in advance	3,992,933	-	1,462,386
At 31 December 2021	3,992,933	5,456,278	6,197,723

Typical payment terms which impact on the amount of contract liabilities recognised are as follows:

(a) Course fees and related income

When the Group receives course fees before the construction training course commences, it gives rise to contract liabilities at cash receipt, until the amount is recognised as course fees and related income. The Group typically receives the full amount of the construction training course fees before the course commences.

(b) Workers registration fees

The workers registration fees normally have a validity period of 60 months in accordance with the Construction Workers Registration (Fees) Regulation (Cap 583 (B)). When the Group receives the registration fees from the construction workers, it gives rise to contract liabilities at cash receipt, until the amount is recognised as registration fee income over the period.

(c) Registration fees from sub-contractors

The registration fees from sub-contractors normally have a validity period of 60 months under the Registered Specialist Trade Contractors Scheme. When the Group receives the registration fees from the sub-contractors, it gives rise to contract liabilities at cash receipt, until the amount is recognised as registration fee income over the period.

23. Taxation

Pursuant to section 28 of the Construction Industry Council Ordinance, the Council is exempted from taxation under the Inland Revenue Ordinance.

Zero Carbon Building, a wholly owned subsidiary of the Council, is exempted from Hong Kong Profits Tax under section 88 of the Inland Revenue Ordinance.

Hong Kong Institute of Construction, a wholly owned subsidiary of the Council, is exempted from Hong Kong Profits Tax under section 88 of the Inland Revenue Ordinance.

24. Capital risk management

The Group manages its capital to ensure that the Group will be able to continue as a going concern through the optimisation of the debt and equity balances. The Group's overall strategy remains unchanged from prior year.

The capital structure of the Group consists of capital fund. The Council members of the Group review the capital structure periodically. As part of this review, the Group will balance its overall capital structure through obtaining finances from available sources.

25. Financial instruments

(a) Categories of financial instruments

	2021 HK\$	2020 НК\$
Financial assets		
Financial assets at amortised costs (including cash and bank		
balances)	3,038,000,878	3,071,207,809
Equity instrument at FVTOCI	10,849,445	11,238,314
Financial liabilities		
Financial liabilities at amortised cost	954,111,933	996,087,903

(b) Financial risk management objectives and policies

The Group's financial instruments include equity and debt instruments, deposits, levy and other receivables, cash and bank balances, accounts and other payables and accruals and lease liabilities. The risks associated with these financial instruments include credit risk, liquidity risk, interest rate risk and equity price risk. The policies on how to mitigate these risks are set out below. Management manages and monitors these exposures to ensure appropriate measures are implemented on a timely and effective manner. The Group's overall strategy remains unchanged from prior year.

Credit risk

The Group's maximum exposure to credit risk which will cause a financial loss to the Group due to failure to discharge an obligation by the counterparties is arising from the carrying amounts of the respective recognised financial assets as stated in the consolidated statement of financial position.

In order to minimise credit risk, the Group has policies in place for the determination of credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, the Group reviews the recoverable amount of each individual receivable at the end of each reporting period to ensure that adequate impairment losses are made for irrecoverable amounts. In this regard, the Council members consider that the Group's credit risk is significantly reduced.

For deposits and other receivables, the Group performs impairment assessment under 12m ECL model upon application of HKFRS 9. The credit risk on deposits and other receivables are limited because the counterparties are entities with good repayment history and credit ratings and/or exposure at default is low. In this regard, the Council members consider that the Group's credit risk is significantly reduced.

The Group only invests in debt securities with low credit risk. The Group's debt instruments at amortised cost are bonds issued by corporations that are graded in the top credit rating among rating agencies. Therefore, these investments are considered to be low credit risk investments and the loss allowance is assessed on 12m ECL basis.

The Group's bank balances are deposited with banks with high credit ratings and therefore the credit risk of these bank balances is low and the loss allowance is assessed on 12m ECL basis.

The Council members considered that no additional provision for the above items has to be made as it is immaterial.

Other than concentration of credit risk on liquid funds which are deposited with several banks with high credit rating and the investments in two debt instruments at amortised cost, the Group has no significant concentration of credit risk, with exposure spread over a number of counterparties.

Liquidity risk

Ultimate responsibility for liquidity risk management rests with the Council, which has built an appropriate liquidity risk management framework for the management of the Group's short, medium and long-term funding and liquidity requirements. The Group managed liquidity risk by continuously monitoring forecast and actual cash flows.

The following table details the remaining contractual maturities at the end of the reporting period of the non-derivative financial liabilities, which are based on the contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on rates current at the reporting date) and the earliest date the Group can be required to pay.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2021

	Carrying amounts HK\$	Total contractual undiscounted cash flows HK\$	Within 1 year or on demand HK\$	More than 1 year but less than 5 years HK\$
2021				
Accounts and other payables and				
accruals	342,460,244	342,460,244	342,460,244	-
Construction Innovation and				
Technology Fund	773,194,637	773,194,637	773,194,637	-
Lease liabilities	19,196,465	19,778,772	7,380,994	12,397,778
	1,134,851,346	1,135,433,653	1,123,035,875	12,397,778
2020				
Accounts and other payables and				
accruals	241,279,542	241,279,542	241,279,542	-
Construction Innovation and				
Technology Fund	920,193,391	920,193,391	920,193,391	-
Lease liabilities	14,734,771	15,057,044	10,350,040	4,707,004
	1,176,207,704	1,176,529,977	1,171,822,973	4,707,004

Interest rate risk

The Group is exposed to fair value interest rate risk in relation to debt instruments at amortised cost. The Group currently does not use any derivative contracts to hedge its exposure to interest rate risk. However, the Council members will consider hedging significant interest rate exposure should the need arise.

The Group is exposed to cash flow interest rate risk through the impact of rate changes on interest bearing financial assets. Interest bearing financial assets are mainly cash and deposits at banks which are all short term in nature. Therefore, any future variations in interest rates will not have a significant impact on the results of the Group.

Equity price risk

The Group is exposed to equity price changes arising from equity investments at FVTOCI. All of these investments are listed on the Stock Exchange of Hong Kong.

Listed investments held in equity investments at FVTOCI portfolio have been chosen based on their longer term growth potential and are monitored regularly for performance against expectations.

Equity price risk sensitivity analysis

The sensitivity analysis below has been determined based on the exposure to equity price risk on listed equity interests at the reporting date.

If the prices of the equity investments at FVTOCI had been 20% higher/lower, the Group's investment revaluation reserve would increase/decrease by HK\$2,169,889 (2020: HK\$2,247,663).

Currency risk

The Group exposed to currency risk primarily through holding debt instruments at amortised cost in USD.

As USD is pegged with HKD, no sensitivity analysis has been disclosed.

(c) Fair value measurements of financial instruments

(i) Financial instruments measured at fair value

The fair values of listed equity investments at FVTOCI which are traded on active markets are determined with reference to quoted market bid prices. The Group holds listed equity investments at FVTOCI amounting to HK\$10,849,445 (2020: HK\$11,238,314), which are grouped into Level 1 in the fair value hierarchy.

During the years ended 31 December 2021 and 2020, there were no transfers between Level 1 and Level 2, or transfers into or out of Level 3. The Group's policy is to recognise transfers between levels of fair value hierarchy as at the end of the reporting period in which they occur.

(ii) Fair values of financial instruments carried at other than fair value

The carrying amounts of the Group's financial instruments carried at amortised cost are not materially different from their fair values as at 31 December 2021 and 2020.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2021

26. Capital commitments

Capital commitments outstanding at 31 December 2021 and 2020 not provided for in the consolidated financial statements were as follows:

	2021 HK\$	2020 HK\$
Contracted for	84,350,605	223,613,693

Capital commitments relate to the acquisition of plant and equipment, renovation works and acquisition or development of computer equipment.

27. Related party disclosures

(a) Related party transactions

As the members of the Council were being drawn from private or public construction industry sector organisations, it is inevitable that transactions will take place with organisation in which a member may have an interest. All transactions involving organisations in which members of the Group may have an interest, subsisted at the end of the year or at any time during the year, were conducted on normal commercial terms and in accordance with the Group's procurement procedures.

During the year, the Group entered into the following non-trade transactions with related parties:

	2021 HK\$	2020 HK\$
Nature of transactions Funding support to Hong Kong Green Building Council Limited	3,988,734	4,772,945

(b) Related party balances

Balances with related parties at the end of the reporting period are as follows:

	2021 HK\$	2020 HK\$
Net amount due from/(to) Hong Kong Green Building Council Limited	770,245	(196,083)

Hong Kong Green Building Council Limited is a related company, in which several members of the Council are also directors of Hong Kong Green Building Council Limited.

28. Subsidiaries

Details of the Council's subsidiaries at 31 December 2021 and 2020 are as follows:

Name of subsidiaries	Place of incorporation	Effective interest held by the Council		Principal activities
		2021	2020	
		Directly	Directly	
		%	%	
Zero Carbon Building (Note)	Hong Kong	100	100	Operating and managing CIC
				Zero Carbon Park
Hong Kong Institute of	Hong Kong	100	100	Provision of training courses
Construction				for the construction industry

Note: As at 31 December 2021, the capital fund of this subsidiary amounting to HK\$94,456,035 (2020: HK\$94,456,035) representing the accumulated contributions from the Council.

29. Comparative figures

To conform with current year presentation, other COVID-19 relief measures expenditure of HK\$8,955,154 for 2020 was reclassified from general and administrative expense to Relief measures for COVID-19.

Number of Higher Paid Staff

The actual remuneration of staff members exceeding \$1,000,000 in 2020 and 2021 is shown below:

	2021 Number of Individuals	2020 Number of Individuals
\$1,000,000 and above	34	36

CONSTRUCTION INDUSTRY COUNCIL

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