

**The Hong Kong Institution of Engineers**  
**45th Annual Dinner**

**17 March 2023 (Friday)**

**Speech by Ir Thomas Ho (Guest of Honour)**  
**Chairman, Construction Industry Council**

Acting Chief Executive of the Hong Kong Administrative Region, the Honourable Mr. KK Chan,  
[other government officials]

Distinguished engineers and professionals, ladies and gentlemen, good evening.

It is my great honour to speak in front of you all, in particular all high powered government officials and distinguished fellow engineers, and celebrate the 45th anniversary of The Hong Kong Institution of Engineers together!

Nowadays, construction practitioners may not need to know ABC, but everyone should understand what is CDE (Common Data Environment) and MiC (Modular Integrated Construction) in order to strive for growth!

Behind all the facades and concrete, data laid the foundation of construction. The establishment of National Data Bureau in the central government is no sudden act! The adoption of CDE serves as an entry point for the digitalisation of our beloved industry.

It is a goal of mine to popularise the use of it. CDE brings so many advantages that we need in construction projects: improving project coordination efficiency, effective management of information flow, risk minimisation, reduction of wastes and carbon emissions and also enhancing site's safety. The recent promotion of Smart Safety Site System 安全智慧工地 by the Development Bureau will significantly create a lot more CDE's applications in the industry and benefit the Industry efficiencies in big time.

Thank you Secretary Linn and PSW Ricky Lau.

CDE and MiC and Mi-Infinity are complementary to each other. I fully understand that only through MiC's "factory assembly followed by on-site installation" approach can alleviate current challenges of construction industry, such as labour shortages and site constraints. MiC, Mi-Infinity can also bring about effective monitoring of construction quality, high productivity, high safety and sustainability.

We can foresee that CDE and MiC and Mi-Infinity will be paramount to the sustainable development of construction industry. In my recent "Safety Walk (安全誠行)", to the HKU Student Residence site showcased the efficiency of adopting CDE and MiC.

With only a working gang of 6 versus a working group of 40-50 people of traditional reinforced concrete structures on site, HKU hostel enhance the commissioning time for over one year, which demonstrates how construction digitisation and modern methods of high productivity construction benefits students and improve their well-being.

Please note they have put in blockchain, BIM, IoTs and GIS, for monitoring the manufacture and assembly for the whole process from Mainland China to HKU site at Pokfulam. We called this Integrated Digital Project Delivery (IDPD) system! - The IDPD.

In today's world, well-being is at the highest rank on everybody's agenda! In addition to provide Liveability (宜居), creating a living environment with a greater sense of well-being is part of our priorities, including the government of course. Light Public Housing (LPH) for better well-being (有幸福感的簡約公屋) is definitely one main direction. If I may quote the design concept of Steve Jobs, cofounder of Apple, "Simplicity is the ultimate sophistication".

I think it also applies to the light public housing, because behind the LPH, applications of different technologies help to simplify the building process and then shorten the waiting time of residents, thus Simplicity do not mean shabby, but "modesty and well-being". The MiC, MiMEP, Mi-Lift, Mi-Interior, Mi-Landscape and Mi-Infinity and the IDPD will definitely excel in LPH to fullest extent! We are looking forward for this to commence ASAP – Secretary Miss Winnie Ho. In addition, if you look around all other jurisdictions, Modern Methods of High Productivity Construction (MMC) will certainly embrace the essence of sustainability.

Sustainability is a multi-disciplinary subject, developers, projects initiators need to consider operating carbon and embodied carbon, design for Safety, buildability and green space and engagement with the community. Mainland China, UK, Europe are all moving in this direction. The main goal of sustainability is not only to reduce the environmental impact, but also to achieve a well-being development in the end and brings value to the community in the long run!

No doubt Hong Kong is properly towards the same direction as well. Many enlightened and visionary developers are actively looking into these already, as evidenced by Housing Bureau, Development Bureau, MTR Corporation Limited, Urban Renewal Authority and some enlightened private developers. We can find a lot of good stories in Hong Kong!

This is exactly what we called 高質量發展 High Quality Development in Construction Sector!  
Embracing Sustainability & Capitalising on Technology!

Hong Kong went through decades of phenomenal growth in areas of infrastructure, industrial and social development, which were attributed to engineers playing their pivotal roles during the process. However, it is not easy for me to say "Proud to Be an Engineer". Why?

Remembering my first formal encounter with the Chief Executive last year, he asked me "what are the solutions to address the multiple fatalities", due to the collapse of tower crane at the construction site on Anderson Road, and in the last 3 months, the industry have suffered major accidents, several fatalities, how can we be proud of this? And what can we do to let us feel prouder?

The dismal safety records of the construction industry have been criticized for some time. In order to fix the problems, I made some suggestions to the Chief Executive during our conversation – there are four areas we can work on, first, design for Safety, second, clearly defined roles and responsibilities, third, temporary works management plan and last but not least. Smart safety site systems. These 4 actions can change the safety culture of the industry.

If we can all perform our duties properly among these areas and provide a safe working environment for all, then we can all be proud of ourselves as engineers, architects, surveyors..... even the whole Construction Industry. I really feel that now is the right time to push this further in front of the Acting Chief Executive and many Secretaries here tonight! In case you are in doubt, please ask and quickly come up with the draft for further enhancements!

Hence, by doing the above, we can make out construction-related courses be regarded as "decent courses (神科) ", same as bio-technology, AI, medicine and law, we can then attract more young people to join us.

The whole industry had gathered together led by CIC and the Development Bureau to kick off the "Design for Future Build for Life 看建未來築及生活" campaign a few months ago. It is not just a promotional campaign for increasing public understanding of the industry's expertise and contributions, but also represents our ideal development prospects.

Turning into how to trawl talents for construction industry, my humble view is that we have to sort out safety together! First, do the right thing. Second, exercise our professionalism in all directions. Third, exercise design for safety, high productivity and sustainability now. Fourth, look at temporary works in the same way as permanent works.

Last but not least, put the whole Life Cycle Management into the development in day 1 and formulate an integrated and collaborated team on day 1. As we all know, collaboration is the key for innovation and today's project management! While it is easier said than done, we should all put huge effort to do so together.

Then what is the target of construction industry while competing for talents (搶人才)? The answer is "young people". Borrowing the quote of President Xi Jinping, "Hong Kong will prosper only when youth thrive (「青年興，則香港興」), I would like to say that "Construction will prosper only when youth thrive". Our young people are looking for understanding, presence and importance, not just passively joining national studies programmes (國情研習班) or site visits, in other words, they wish to be seen.

A promising career path will definitely be a pull factor for attracting young people. Riding on the "Construction Expenditure Forecast" published by the CIC last month, the Hong Kong construction expenditure will reach over 300 billion dollars per annum in the next decade. There is only a few jurisdictions around the world who could reach this volume, golden opportunity is lying ahead of construction industry! Ladies and Gentlemen, we should walk our talk to grab this opportunity, act now!

Fellow engineers, thank you for your hard work in building Hong Kong, I must applaud President Aaron Bok for giving back the pride, prestige, presence, importance to both young and fellow engineers in the "Proud to be Engineers Campaign" this is really successful, and came to our Silent Tribute to pay tribute to the deceased and sending safety messages to the front line and the workers for onsite last week. That means a lot to the engineers and the society.

I would like to wish HKIE another 45 years of prosperity and everyone good health as we will have a lot to work on in the coming years, the golden age of construction!