

Centre for Infrastructure and Construction Industry Development
The University of Hong Kong
10th Anniversary Conference
31 May 2013

Speech by Secretary for Development
Mr Paul CHAN

Professor Chin (Professor Roland Chin, Deputy Vice-Chancellor and Provost, The University of Hong Kong), Ir Professor Lee (Ir Professor CF Lee, Chairman of the Centre for Infrastructure and Construction Industry Development, The University of Hong Kong), esteemed guests, ladies and gentlemen,

Good Morning.

2. I am incredibly grateful to the host, the Centre for Infrastructure and Construction Industry Development of The University of Hong Kong, for bringing this wonderful conference together. This is a great opportunity for me to speak to such a wide spectrum of the engineering profession.

3. CICID has been at the forefront of research, discourse and dissemination of innovative ideas for the construction industry over the past decade. My deepest gratitude goes to CICID for their impressive work over the years, and my warmest congratulations to them on their tenth anniversary.

4. Not least I would like to thank every one of you, the patrons and supporters of CICID, for joining us today. This signifies a very positive attitude towards innovation and ingenuity from some of the most prominent faces of the construction industry.

5. The theme of the conference today is “The Next Decade of Infrastructure Development and Construction in Hong Kong”. A decade ago when CICID was founded, Hong Kong was hard hit by SARS. It was a destructive pandemic, albeit a short lived one. Our economy, and the construction industry, suffered as a result. But Hong

Kong persevered, and we became more resilient. Today, many will concur with me that the construction industry is in a golden age.

6. In the latest Global Competitiveness Report published by the World Economic Forum, Hong Kong is second to none in the infrastructure index. This reflects the outstanding quality of our facilities across all modes of transportation and our telecommunications and electricity infrastructure.

7. This is what the past generations of engineers have achieved and passed on to us. When I took office as the Secretary for Development almost a year ago, my vision was to engineer a paradigm shift to prepare Hong Kong for future success. We have long associated infrastructure investments with economic stimulus, and the creation of job opportunities. During the Great Depression in the US, for example, the Government rolled out the New Deal programme and invested heavily in roads, water systems and sewage treatment plants, in an effort to bring the economy back on track.

8. I believe that infrastructure is also a pivotal factor not only at times of depression, but also at times of economic boom. Infrastructure stimulates growth in key sectors such as the construction industry, and raises competitiveness of all sectors in the city. It is also fundamental in improving the quality of life of our citizens, and in ensuring sustainability. It is the golden thread that ties us with prosperity, and quality of life. In essence, if our infrastructure is second-rated, so is our city. This is why my team and I have set a high benchmark. **We aim to continue to offer the best infrastructure in the world for our high density city, through low carbon techniques and processes.** Further investments in infrastructure are critical to achieving this aspiration.

9. In March this year, we announced in the 2013-14 Budget our plan to take forward our infrastructure programme. The estimated capital works expenditure for the coming financial year will exceed \$70 billion, a huge increase from \$20.5 billion in the 2007-08 financial year.

10. I have painted a rosy picture of the construction industry, but we are here at this conference today because we aspire to do even better.

In fact, our path is not flat. Locally, we need to deal with the ever increasing demands on infrastructure. There is a steady growth of the number of private cars in Hong Kong, which in turn strains our roads. Our statistics show that average journey speeds at many of the commuter arteries have been on the decline.

11. Globally, our counterparts share the same vision that infrastructure is a key to prosperity. Beijing targets to invest 1.05 trillion renminbi on roads, rail, ports and airports this year, whereas Singapore is also planning to double its railway length by 2021.

12. Our goal is clear. What we need now is a list of priorities. We need to pinpoint the areas that we will focus on in the future if we are to progress and advance.

13. First, we will tackle the challenges head on. The local population is expected to expand to 8.47 million by 2041. The demand for housing, healthcare and education will gradually increase. As the developed urban areas become increasingly dense, Hong Kong's long term growth can only be accommodated by increasing land supply. This is one of the top priorities of the Government.

14. These new development areas will need the support of an efficient transportation system. We will therefore continue to invest in infrastructure projects of varying scales. The coming decade will be one that sees substantial additions to our railway and road systems.

15. To begin with, we are constructing five new railway lines. Our already extensive railway network will cover Kennedy Town and here at The University of Hong Kong in 2014, and further to Wong Chuk Hang and Ap Lei Chau, as well as Ho Man Tin and Whampoa in 2015. The Shatin to Central Link will traverse the city from north to south. Works have commenced and are scheduled for completion by phases from 2018 to 2020. By this time, our railway network will cover about 70% of the area where our population lives.

16. For our roads, we are building a seventh land-based boundary control point at Liantang / Heung Yuen Wai. This new boundary

control point will provide an efficient access across the border to the eastern part of Guangdong. This will also lead to a redistribution of traffic flow and will ease congestion at the existing control points. Speaking of redistribution, the Central-Wan Chai Bypass and the Island Eastern Corridor Link will, on completion in 2017, alleviate congestion in Central and Wan Chai. On the Kowloon side, we are planning to design a new tunnel that will link Tseung Kwan O and urban Kowloon. And of course, everyone here knows about the Hong Kong-Zhuhai-Macao Bridge, which will be opened in 2016.

17. You will remember that our goal has two limbs – first, world class infrastructure, and secondly, the adoption of low carbon techniques and processes. The next area of focus is green construction methods. I have said on many occasions that our buildings are responsible for 90% of our total energy consumption, and 60% of our green house gas emissions. This is something that we direly need to address. The Chief Executive's decision to form a Steering Committee on Green Buildings is a testimony of the importance we attach to this issue.

18. Fortunately, we have many outstanding individuals in the industry who are active players in the green building movement. They have come up with new, innovative ways to revolutionise the building process. Just to give you some examples, I can see in the audience Ir Dr Raymond Yau, who is a frontrunner in sustainable and environmental responsive buildings. Many of his novel ideas have been put into practice in the Construction Industry Council or CIC's ZCB, the first zero carbon building in Hong Kong. It is a project that showcases the actual use of cutting edge green building technologies, and has received the platinum rating, the highest level, under the environmental assessment scheme, BEAM Plus. Speaking of BEAM Plus, we also have with us today the expert who can tell us all about this scheme, Ir Conrad Wong, the Chairman of the Hong Kong Green Building Council. This is a prime example of benchmark setting led by the industry itself. More than 300 projects have applied for assessments under BEAM Plus, and this is very encouraging.

19. Our third area of focus is to change the way that we build, and

ensure smarter use of resources. There are new tools and systems at our disposal now. For instance, the Building Information Modelling system, or BIM in short, is a tool that will assist hugely in more reliable cost estimates, minimising errors on site and improving efficiency over the life-cycle of a project. It is also an innovative technology that bridges communication across multiple professionals and stakeholders. We have had some experience in using BIM in public housing projects. At least 10 more will be selected to pilot BIM technology. I know that Ms Ada Fung, Deputy Director of the Housing Department, will share her experience later this morning. I will add that CIC is also studying the applicability of BIM across the industry.

20. For quite a period of time, our procurement approach is to assess both the technical and price aspects of tender submissions. We cannot afford to make mistakes in the construction process, be it for time, safety, costs and other implications. The construction industry tends to be cautious and traditional. Though rightly so, we intend to turn over a new leaf. We are carrying out a number of pilot procurement programmes that will feature an additional assessment on innovation and creativity. The technically least creative tenders will first be screened out. The preliminary results are promising. In the first trial contract at the Kwun Tong Promenade, new ideas and technical proposals are aplenty in the tenders covering not only construction but also operational aspects beyond, but with little sign of increase in tender price. We are confident that, in the future, this procurement approach will gear the construction industry towards a more creative mindset.

21. Let me recap. As far as infrastructure is concerned, the three areas that the Government will focus on in the coming few years are to continue to invest in infrastructure projects of varying scales, to promote green construction methods, and to ensure smarter resource management. Our vision is to offer the best infrastructure in our high density city, through low carbon techniques and processes. The next step is to turn vision into reality. There will be challenges. As the adage goes, where there is a will, there is a way. We have planned ahead and have solutions. Let me elaborate.

22. The first challenge is manpower. The construction industry

now faces two major problems, namely an ageing workforce, and skills mismatch. To resolve this, I propose two Ps. i.e. to develop a **P**rofessional and **P**roductive workforce to deliver our infrastructure projects timely. For this purpose, we are working closely with CIC and members of the industry to resolve manpower issues. All along, CIC has been nurturing a high quality workforce through its training courses. We have obtained from the Legislative Council a total funding of \$320 million to enhance CIC's training and trade testing programmes, and to enhance publicity and promotion measures. CIC, contractors and subcontractors have also joined hands and have launched various cooperative training schemes. Together, the above measures will bolster total number of training places to around 7,500 to 8,500 annually in 2013 and 2014. We are confident that upcoming manpower demands will be met. CIC is also proactively strengthening job matching, training and trade-testing support to better utilise the entire workforce. In the long run, we aim to nurture a **P**rofessional workforce that is multi-skilled. This will maximise the potential, flexibility and employability of our workers.

23. For the second 'P' on productivity, we are encouraging contractors to use more mechanisation and prefabrication to enhance productivity. On this, I would like to mention that we are planning the setting up of a centralised prefabrication yard for construction works in Yuen Long. This will shift the reinforced steel bar cutting and bending process away from construction sites to a factory-setting.

24. I now come to the second challenge i.e. the need to offer greater certainty of payment to parties involved in the construction supply chain, and promote mutual trust amongst them. This is particularly important as delivery of construction projects is a process that involves multiple layers and networks of participants. To resolve this, I propose another two Ps i.e. **P**ayment and **P**artnership.

25. When payments are not forthcoming from upper-tier parties, all lower-tier parties in the supply chain may suffer. We need a holistic solution to this long-standing problem. On this, we are preparing for the introduction of a new legislation to enhance the security of payment in construction related contracts. This new law will also help combat

wage arrears, and attract foreign investment in our infrastructure. Eventually, this will enhance our infrastructure delivery capacity.

26. For **P**artnership, we have been test-running the New Engineering Contract, or NEC, in selected contracts. Old contracts stress obligations. NECs stress collaboration. NECs will encourage a partnering approach and proactive project management procedures to ensure timely delivery, in a safe, dispute-free and cost effective manner. We achieved very good results in the first completed NEC pilot contract – a nullah improvement contract under the Drainage Services Department. I understand that Ir Tsui, the Deputy Director of the Department, will share his insights on a wider trial of NECs after lunch.

27. Ultimately, our work serves the people. Recently, however, some initiatives have triggered heated debate, and some have even aroused controversies in the community. Of course, there will always be voices for and against Government policies. These are characteristics of a mature, diversified civil society. I now propose the fifth P, **P**ublic engagement.

28. Ideally, **P**ublic engagement can improve policy formulation and governance. It is therefore my vision that we can be broad-minded, and tolerant even of the nay-sayers on the extreme end. To facilitate public participation, we will seek to listen to the views from society, and will strive to embed more transparency in our approach to development. A good example of our commitment is Energising Kowloon East, which adopts a place-making engagement approach. Its Conceptual Master Plan is a dynamic, fluid framework that integrates suggestions directly from the community. In the future, with humility and patience, my colleagues and I will be open to suggestions from all walks of life.

29. In conclusion, we have five “P”s as our solutions to tackle challenges we face, namely, a **P**rofessional and **P**roductive workforce, security of **P**ayment legislation, a **P**artnership approach to our contracts and **P**ublic engagement.

30. Ladies and gentlemen, I am sure you agree with me that Hong Kong has come a long way in the past decade. Of course, we still have

much further to go. I have set out my vision, for our city's development in the next decade. Your thoughts and insights will enrich this vision. I believe that, together, we will bring positive change to the infrastructure in Hong Kong.

31. I look forward to working with you all. Thank you and have a fruitful discussion.