

MEDIA RELEASE

EXPERTS ENDORSE SINGAPORE'S APPROACH TOWARDS TACKLING CONSTRUCTION PRODUCTIVITY

The International Panel of Experts (IPE) for Construction Productivity and Prefabrication Technology comprising leading experts in the field of design and construction management; and productive methods such as precast and prefabrication convened in Singapore for its inaugural meeting. For three days (17 to 19 August), the IPE engaged in rigorous discussions with the Building and Construction Authority (BCA) and key representatives from the building and construction sectors, together with relevant public agencies, with a view to accelerating the momentum in building up a productive, professional and technologically advanced construction sector.

2 The IPE noted that the current three-prong strategy that focused on raising the quality of the workforce, incentivizing workforce development, technology adoption and capability building, as well as enhancing the buildability framework was a good start. The IPE lauded BCA's efforts in taking a strong lead to promote productivity improvements for the construction sector, and agreed with the broad direction of the proposed Construction Productivity Roadmap.

Productivity Indicators

3 The IPE noted the use of value-added labour productivity as a measure and suggested the need to incorporate productivity indicators at the project and trade level to track productivity improvement in the construction industry.

Manpower Development

4 Recognising that Singapore is uniquely placed with a large foreign workforce that is mostly transient, the IPE recommended the need to retain and upgrade the foreign workers, who will continue to form the bulk of the construction workforce on site.

5 On local manpower development, the IPE expressed that other countries experienced similar challenges as Singapore in attracting locals to do construction trade work on site. The IPE suggested that it is necessary to consider the need for a more formalised “apprenticeship” programme for locals to help build up their competence and retain them in the industry.

Technology Adoption

6 The IPE also noted that better integration between designers and contractors is key to higher productivity, and Building Information Modeling (BIM) is one vital tool as it brings together all the project parties along the design and construction value chain. The Panel recommended that one way to encourage greater industry buy-in is to get public sector projects to take the lead and use BIM in their projects. In addition, it viewed that it is also necessary to consider a phased approach for the rest of the industry to implement BIM.

- a. The IPE viewed that having modular coordination, which involves designing in standard modules, would help to improve productivity without compromising flexibility in designs so that designers and developers could still retain a distinctive design in their buildings. Thus, the IPE recommended that modular coordination should be emphasised within Singapore’s buildability framework with

additional buildability points awarded for modularisation within different building types.

7 The IPE also discussed the greater use of precast and prefabrication to reduce manpower at the sites, save time and costs. While there is a need for greater adoption of precast and prefabrication, the IPE viewed that the industry should consider the idea of optimal system construction that incorporated precast, prefabrication, system formwork, etc. to raise productivity, given the project's site constraints, availability of resources.

8 Similar to what is being done in Europe, the IPE recommended that it would be useful to raise awareness on the importance of good design and the built environment among the younger generation. At the tertiary level, precast design and technology could be incorporated into the curriculum of relevant courses in institutes of technical education, polytechnics and universities.

9 IPE Chairman and CEO of BCA, Dr John Keung said, "This being our first IPE on construction productivity, it gave us an insight on how different countries manage construction productivity, and the common challenges we share in terms of effective site management, developing accurate measurement indicators of productivity, achieving higher degree of integration in design and construction and convincing the industry to dedicate to detailed planning in the construction process. BCA will take all their recommendations into consideration and collaborate closely with the industry, to integrate our efforts to achieving higher productivity".

10 Apart from reviewing Singapore's approach towards enhancing construction productivity under the Productivity Framework, some of the IPE will

also be sharing their knowledge and experience in productivity improvement at the seminar on Enhancing Construction Productivity held on 20 August 2010.

Issued by the Building and Construction Authority on 20 August 2010

About the Building and Construction Authority (BCA)

The Building and Construction Authority (BCA) of Singapore champions the development of an excellent built environment for Singapore.

At BCA, our mission is to shape a safe, high quality, sustainable and friendly built environment, as these are four key elements where BCA has a significant influence. In doing so, we aim to differentiate Singapore's built environment from those of other cities and contribute to a better quality of life for everyone in Singapore. Hence, our vision is to have "the best built environment for Singapore, our distinctive global city".

Together with our education hub, the BCA Academy of the Built Environment, BCA works closely with its industry partners to develop skills and expertise that help shape the best built environment for Singapore.

Please visit www.bca.gov.sg for more information.