

LCQ22: Modular Integrated Construction method

Following is a question by Dr the Hon Lo Wai-kiok and a written reply by the Secretary for Development, Mr Michael Wong, in the Legislative Council today (September 29):

Question:

Compared with traditional construction methods, the Modular Integrated Construction method (MiC) can substantially reduce construction time, uplift on-site productivity and save costs. In 2018, the Government allocated \$1 billion for setting up a Construction Innovation and Technology Fund (the Fund) to subsidize the adoption of innovative technologies (including MiC) by the construction industry in Hong Kong for enhancing construction efficiency. Moreover, to encourage a broader adoption of MiC by developers, the Buildings Department (BD) announced a concessionary measure in May 2019: 6 per cent of the floor area of a development constructed by MiC may be disregarded from the calculation of the gross floor area (GFA) of that development and will not be subject to the current 10 per cent cap on GFA concessions. In this connection, will the Government inform this Council:

(1) given that as at the end of May this year, among the 101 applications for subsidies relating to MiC received under the Fund, only 37 of them were approved (i.e. a success rate of less than 40 per cent), whether the Government has analysed the causes for the low success rate of applications and made improvement; if so, of the details; if not, the reasons for that;

(2) whether it will consider raising the amount of non-recurrent commitment of the Fund and at the same time relaxing the eligibility criteria and streamlining the vetting and approval procedure, so as to further promote the adoption of innovative construction technologies such as MiC in Hong Kong; if so, of the details; if not, the reasons for that;

(3) of the respective numbers of applications related to the aforesaid concessionary measure received, approved and rejected by the BD since June 2019; and

(4) whether it will consider providing more concessions or other incentives in the light of market situations to encourage a greater adoption of MiC by developers; if so, of the details; if not, the reasons for that?

Reply:

President,

Hong Kong's construction industry has been facing challenges, including declining productivity, high construction cost and an ageing workforce. Since

2017, the Government has been actively promoting the adoption of the Modular Integrated Construction method (MiC) in building projects with a view to enhancing the industry's productivity and cost effectiveness. According to the findings of a study carried out by the University of Hong Kong on two completed MiC pilot projects, the adoption of MiC can reduce construction time by about 30 per cent to 50 per cent and save construction costs by about 10 per cent comparing with traditional construction methods. In addition, it will also have better performance on productivity, workmanship, environmental protection and safety aspects.

To further promote the adoption of MiC, the Development Bureau (DEVB) set up a steering committee in 2019 to formulate policies and measures with the relevant departments. The Government also took the lead and issued a technical circular in 2020 mandating the adoption of MiC for designated government buildings such as schools, dormitories, hospitals and office buildings under the Government's Capital Works Programme, unless otherwise exempted by the Steering Committee. Meanwhile, the DEVB has introduced various measures to encourage the industry to adopt MiC, including setting up the Construction Innovation and Technology Fund (the Fund) to subsidise the industry and granting concession of floor area constructed by MiC. There are currently more than 60 projects adopting MiC in the pipeline.

The reply to the four parts of the question raised by Dr the Hon Lo Wai-
kwok is as follows:

(1) The DEVB encourages and supports the construction industry to adopt MiC through the Fund with a view to enhancing the overall performance of the industry. The Fund is well received and supported by the industry. According to the statistics of the Construction Industry Council (CIC), as at the end of August this year, a total of 115 funding applications relating to MiC have been received. Excluding the 13 applications withdrawn by the applicants as well as another 14 applications undergoing vetting procedures, 88 applications have been vetted by the Fund, of which 51 applications have been approved, representing a success rate of about 60 per cent and involving a funding grant of \$115 million. Unsuccessful applications were mostly found in the early phase of implementation where applicants were not familiar with the scope and criteria for application. While the Government noticed that, as compared with the past, there is a drop in the number of unsuccessful applications this year, the DEVB and the CIC will continue to liaise with the industry to explain the application requirements, so as to facilitate their submission of valid applications.

(2) The \$1 billion Fund was launched in October 2018. As at the end of August this year, over \$500 million has been granted to the industry. A total of more than 780 enterprises engaged in the construction industry have been funded to make use of innovative construction technologies in their projects, and the Fund has subsidised about 11 000 training places for construction practitioners to attend technology-related training. The progress of the Fund is right on track. Moreover, the DEVB and the CIC have generally completed the mid-term review of the Fund in order to enhance current funding arrangements by taking consideration of the opinions and suggestions from the

industry. The details will be announced to the industry upon being finalised. The DEVB and the CIC will continue to operate the Fund and review its operational needs from time to time.

To further promote a wider adoption of MiC in the industry, the funding scope of MiC under the Fund has been increased from initially three to currently five areas. The Fund's MiC Vetting Sub-committee will continue to refine the scope, mode and amount of subsidies under the Fund in due course so as to better cope with the needs of the industry.

(3) With a view to promoting a wider use of MiC in Hong Kong, the Building Department (BD) issued a practice note in 2019 promulgating the gross floor area (GFA) concession of 6 per cent of the floor area constructed by MiC. As at August 2021, the BD has received 14 applications for GFA concession in adoption of MiC, of which 11 applications have been approved, and the rest are being processed.

(4) Since 2017, the Government has been actively promoting and encouraging the adoption of MiC in the construction industry. The Government piloted some public projects for the adoption of MiC, including the transitional housing project at Nam Cheong Street in Sham Shui Po by the Hong Kong Council of Social Service, the InnoCell by the Hong Kong Science & Technology Parks Corporation and the Married Quarters for the Fire Services Department at Pak Shing Kok in Tseung Kwan O. The Government also encourage the adoption of MiC by the industry through the Fund and the GFA concessions granted by the BD. On the other hand, the Government has been working with the CIC to organise local and overseas project visits, technical seminars and workshops to equip the industry with the understanding of MiC technology and applications. While MiC has already been adopted in more than 60 projects so far, the DEVB will continue to look into the situation and discuss with the industry and stakeholders on the application of MiC as well as the challenges encountered, with a view to review the relevant subsidies and concessions in a timely manner in order to encourage a wider adoption of such a technology by the industry.