## **Construction Industry Council**

# **Committee on Environment and Technology**

Meeting No. 005/10 of the Committee on Environment and Technology for 2010 was held on 7 October 2010 (Thursday) at 2:30 pm at Hong Kong Construction Association, 16/F, 180 – 182 Hennessy Road, Wanchai, Hong Kong.

Present:	Conrad WONG Hau-wai CHEUNG Wai-wah HO Jan-ming KO	(CW) (HWC) (WWH) (JMK)	Chairman	
	James KWAN	(YCK)		
	Wo-hei LAM	(WHL)		
	Connie YEUNG	(CYG)	for Permanent Secretary for Transport and Housing (Housing)	
	Siu-tong LAM	(STL)	for Director of Buildings	
	Ping-wai CHOW	(PCH)	Hong Kong Construction Industry Employees General Union	
	Wing-wah CHUI	(WWC)	Development Bureau	
	Anthony FOK	(AFK)	Environmental Protection Department	
	Pun-hing HO	(PHH)	Hong Kong Federation of Electrical and Mechanical Contractors	
	Russell JONES	(RJ)	Hong Kong Construction Association	
	Peter LEE	(PL)	The University of Hong Kong	
	Derrick PANG	(DP)	Chun Wo Development Holdings Ltd	
In Attendance:	Patrick CHEUNG	(YFC)	Architectural Services Department	
	Terry TAM	(TTA)	Architectural Services Department	
	Ki-cheung TANG	(KCT)	Hong Kong Institute of Surveyors	
	Christopher TO	(CT)	Executive Director	
	Guiyi LI	(GYL)	Senior Manager (Research)	
	Ivan WONG	(IW)	Senior Manager (Council Services) 2	
	Phoebe LEUNG	(PLG)	Manager (Council Services) 2	
	For Agenda Item 5.3 only			
	David MAK	U	ousing Department	
	Alex HO	_	Department	
	Heng LI	The Hon	g Kong Polytechnic University	
Apologies:	Andrew CHAN	(AC)		
	Siu-hung CHAN	(SHC)		
	Joseph LEE	(HWL)		

Kam-hung YU	(KHY)	
Wai-wai YU	(WWY)	
Choi-kai AU	(CKA)	Director of Buildings
Tat-tong CHEUNG	(TTC)	Hong Kong Institute of Surveyors
Long PANG	(LP)	Construction Site Workers General
		Union

#### PROGRESS REPORT

**Action** 

### 5.1 Confirmation of the Progress Report of the Previous Meeting

Members took note of Paper CIC/ENT/R/004/10 and confirmed the progress report of the last meeting held on Tuesday, 24 August 2010 at Hong Kong Construction Association, Hong Kong.

### 5.2 Matters Arising from the Previous Meeting

5.2.1 Research on Establishing a Hong Kong Based Carbon Labelling Framework for Construction Materials (Research-CLS)

The CIC approved commissioning The University of Hong Kong (HKU) to conduct the Research-CLS.

[Post-meeting notes: there was a signing ceremony for the research agreement on 26 October 2010 at the HKU with Mr LEE Shing-see, CIC chairman, and Professor Paul TAM, Pro-Vice-Chancellor and Vice-President (Research) of the HKU officiating at the ceremony.]

5.2.2 CIC Research Funding Application Procedures

The Committee Chairman and some Members had discussed with the CIC chairman about the details of the captioned procedures. The proposal would be re-considered by the Committee on Administration and Finance (Com-ANF) at its meeting held on 8 October 2010.

5.2.3 Research on Adhesion Technologies for External Wall Tiles and Rendering – building sites for on-site testing

Apart from the Architectural Services Department, two developers had agreed to provide suitable sites for on-site

**Action** 

testing. There were three building sites available in total. For confidentiality, the names of the developers and the corresponding sites would not be mentioned in the study report.

As the use of glass mosaic tiles as finishes to external walls of buildings had become obsolete, Members considered research into glass mosaic tiles unnecessary.

5.2.4 Forum on the use of standardisation and modularisation in Hong Kong works projects

The Secretariat would discuss with the Hong Kong Institution of Engineers to co-organise the forum.

CIC Secretariat

5.2.5 Construction Technology Forum

Discussed under Agenda Item 5.7

5.2.6 Initial Key Performance Indicators for Benchmarking the Performance of Construction Industry

Discussed under Agenda Item 5.5

5.2.7 Use of Building Information Modelling

Discussed under Agenda Item 5.3

#### 5.3 Use of Building Information Modelling (BIM)

Members received two presentations on the use of BIM with Mr David MAK of the Housing Department sharing their experience in the adoption of BIM and Prof Heng LI of The Hong Kong Polytechnic University on BIM research and application.

Members agreed that there was a growing trend towards the adoption of BIM. Though such technology would impact the whole construction supply chain and cause changes in work processes, it would greatly improve building workflows and productivity. Indeed, the Building and Construction Authority of Singapore had allocated SGD250 million to set up the Construction Productivity and Capability Fund and part of the funding was designated to support the use of BIM.

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After deliberation, Members agreed that BIM would add great value to the construction industry and that a forum should be arranged to explore its applications in works projects. Industry stakeholders and IT experts should be invited to take part in the forum. A Member also suggested examining the compatibility of the existing standard methods of measurement for Bills of Quantities (BQ) preparation and the classification of relevant elements in BIM with a view to automating the BQ preparation through the BIM.

CIC Secretariat

[Mr MAK, Mr Alex HO and Prof LI left the meeting after the discussion.]

# 5.4 Draft Guidelines on Trip Ticket System for Disposal of Construction & Demolition Materials in Private Sector Works

Members took note of the Paper CIC/ENT/P/026/10 which contained the third draft of the Guidelines on Trip Ticket System for Disposal of Construction & Demolition Materials in Private Sector Works (Guidelines). This draft was prepared with reference to stakeholders' comments and the Technical Circular (Works) No.6/2010 issued by the Development Bureau in September 2010.

After deliberations, Members supported submission of the Guidelines to the CIC for approval subject to further refinements to the draft, if any, provided by Members to the Secretariat in the following week before submission to the CIC.

CIC Secretariat

#### 5.5 Key Performance Indicators (KPIs) for Construction Industry

Members took note of the Paper CIC/ENT/P/027/10. It was agreed that the proposed KPIs should fulfil a dual purpose:

- (i) serve as a tool to analyse and guide the performance of the local construction industry; and
- (ii) assist in assessing the performance of the construction industry in Hong Kong against other countries.

It was reminded that in the context of comparison, such as the comparison of accident statistics between Hong Kong and other countries, the difference in the definition of the relevant indicators in different countries should always be made clearly with care to avoid any incompatibility in comparison and misunderstanding of the results and conclusions.

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It was also considered that the KPIs proposed for discussion should not be limited by the readiness of statistical data. The significance of KPIs in helping assess and improve the performance of the industry should be accorded higher priority. For those statistics so required but not currently available, engagement of consultancy services could be a possible option for data collection.

The Secretariat was requested to propose a list of KPIs and elaborate on their practical significance for Members' further discussion at the coming meetings.

CIC Secretariat

# 5.6 Task Force on River Sand Substitutes Research – Draft Tender Documents

Members took note of the Paper CIC/ENT/P/028/10 and agreed that the Research on River Sand Substitutes for Concrete Production and Cement Sand Mortar Production (Research-RSS) should be conducted in two phases with an ultimate aim of developing a set of practical guidelines and specifications on river sand substitutes for the production of concrete and cement sand mortar. The first part of the Research-RSS (Phase One) would be a 6-month desktop research to identify suitable river sand substitutes for practical applications in the local construction industry. The second part would involve extensive laboratory and on-site testing to validate the findings of Phase One and develop a set of practical guidelines for adoption by the industry. Members viewed that finding mortar alternatives should not be the objective of the Research-RSS. also agreed that the requirement of submission of audited financial statements for the latest three years was stringent and it should not be made mandatory. After deliberations, Members approved the tender documents for Research-RSS as annexed to the Paper.

In order to commission a researcher to conduct the Research-RSS (Phase One), the Secretariat was requested to seek funding from the Com-ANF and carry out the tender exercise as detailed in paragraphs 2.4 and 2.54 of the Paper.

CIC Secretariat

[DP left the meeting at this juncture.]

#### 5.7 Task Force on Research Activities – Progress Update

Members took note of the Paper CIC/ENT/P/029/10 and agreed that the Committee should hold 2 to 3 seminars/forums in 2011 to facilitate information exchange between industry practitioners such

#### **Action**

as those Specified Bodies under the CIC Ordinance and academics. As it was planned to hold forums in 2011 on BIM as well as standardisation and modularisation of components in construction works, Members concerned about the resources for organising more seminars and inclined not to conduct a seminar on low carbon construction in the near future.

For the Construction Technology Forum to be held on 10 December 2010, Members agreed to hold it at the Holiday Inn Golden Mile Hotel in Tsim Sha Tsui where adequate facilities for sit-down lunch could be provided. Registration fee would be charged to avoid no-shows and yet it would be set at a minimal rate. Members also noted that the Construction Technology Forum would not be acknowledged as continuing professional development activities.

A Member advised the meeting that at the last meeting of the Task Force on Research Activities, it was proposed that committees of the Hong Kong Construction Association (HKCA) could participate in workshops organised by the Committee to identify opportunities for research and development to assist the Hong Kong construction industry in finding solutions to problems commonly encountered by contractors, and that the first such workshop could be with HKCA's Environmental Committee. Members viewed that joint workshops with the HKCA and professional bodies such as the Hong Kong Institution of Engineers, the Hong Kong Institution of Surveyors and the Hong Kong Institute of Architects would be helpful in identifying practical research topics. The Secretariat was advised to review the required financial and manpower resources in organising such workshops taking into account the forums planned for 2011.

Some Members asked whether the Task Force on Research Activities should be dismissed after addressing the issues covered in its terms of reference. Members appreciated the efforts of the Task Force and agreed to review the arrangement after deliberations on the CIC Research Funding Application Procedures.

# 5.8 Public Consultation on Hong Kong's Climate Change Strategy and Action Agenda

Members took note of the Paper CIC/ENT/P/030/10. It was clarified that the consultation document not only set the direction for reducing greenhouse gas emissions in Hong Kong but also long-term strategies to combat climate change.

#### **Action**

Members considered careful deliberations on the subject would be required in order for the CIC to formulate responses to the consultation. Members also requested the Secretariat to arrange a meeting with the Environmental Protection Department and its consultant to provide Members with more detailed information about the consultation document. The Hong Kong Green Building Council would also be invited to participate in the meeting.

CIC Secretariat

Members would submit their recommendations to the CIC for approval at its meeting to be held on 17 December 2010.

### 5.9 Tentatively Meeting Schedule for 2011

Members took note of Paper CIC/ENT/P/031/10.

## 5.10 Any Other Business

At the CIC meeting held on 27 August 2010, it was discussed that construction workers had to bring along multiple cards such as Construction Workers Registration Card and Green Card at workplace. The Committee was requested to look into the issue and explore means to coordinate concerned systems to reduce the number of cards. As such, the Secretariat was directed to consult industry stakeholders such as Construction Workers Registration Authority, Hong Kong Construction Association and construction workers unions on the current practices and identify the root causes of the problem. The Development Bureau had noted such concerns from workers and was reviewing the relevant statutory requirements.

CIC Secretariat

#### 5.11 Tentative Date of Next Meeting for 2011

13 January 2011 at 2:30 pm at Hong Kong Construction All to note Association, 16/F, 180 – 182 Hennessy Road, Wanchai, Hong Kong.

There being no further business, the meeting was adjourned at 5:00 pm.