

**Construction Industry Council**

**Committee on Environment and Technology**

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Meeting No. 001/12 of the Committee on Environment and Technology for 2012 was held on 12 January 2012 (Thursday) at 2:30 pm at 15/F, Allied Kajima Building, 138 Gloucester Road, Wan Chai, Hong Kong.

Present:

Conrad WONG	(CW)	Chairman
Andrew CHAN	(AC)	
Siu-hung CHAN	(SHC)	
Hau-wai CHEUNG	(HWC)	
Wai-wah HO	(WWH)	
Jan-ming KO	(JMK)	
Kam-hung YU	(KHY)	
Choi-kai AU	(CKA)	Director of Buildings
Dan FUNG	(DF)	Environmental Protection Department
Ping-wai CHOW	(PCH)	Hong Kong Construction Industry Employees General Union
Pun-hing HO	(PHH)	Hong Kong Federation of Electrical and Mechanical Contractors
Russell JONES	(RJ)	Hong Kong Construction Association
Derrick PANG	(DP)	Chun Wo Development Holdings Ltd
Connie YEUNG	(CYG)	Housing Department

In Attendance:

Carl LAM	(CL)	Architectural Services Department
Michael FONG	(MF)	Development Bureau
James WONG	(JW)	The University of Hong Kong (HKU)
Greg CHEN	(GC)	The University of Hong Kong (HKU)
Guiyi LI	(GYL)	Senior Manager (Research)
Ivan WONG	(IW)	Senior Manager (Council Services) 2
Ivan KO	(IK)	Manager (Council Services) 2

Apologies:

James KWAN	(YCK)	
Wo-hei LAM	(WHL)	
Joseph LEE	(HWL)	
Jonathan LEUNG	(JL)	
Wai-wai, YU	(WWY)	
Peter LEE	(PL)	The University of Hong Kong

Tat-tong CHEUNG	(TTC)	Hong Kong Institute of Surveyors
Ada FUNG	(AF)	for Permanent Secretary for
		Transport and Housing (Housing)
Long PANG	(LP)	Construction Site Workers General
		Union

## **PROGRESS REPORT**

### **Action**

#### **1.1 Confirmation of the Progress Report of the Previous Meeting**

Members took note of Paper CIC/ENT/R/005/11 and confirmed the progress report of the last meeting held on Monday, 5 December 2011 at 15/F, Allied Kajima Building, 138 Gloucester Road, Wan Chai , Hong Kong.

#### **1.2 Matters Arising from the Previous Meeting**

1.2.1 Brief Update on Research on Establishing a Hong Kong Based Carbon Labelling Framework for Construction Materials

Discussed under Agenda Item 1.3

1.2.2 Formation of Working Group on Building Information Modelling

Discussed under Agenda Item 1.5

1.2.3 Update on Review of Construction Standards

CIC Secretariat was receiving responses from works departments on their brief status and upcoming activities of their consultancy studies and would compile an updated report accordingly.

1.2.4 Alert for Overloading of Dump Trucks

Discussed under Agenda Item 1.9

1.2.5 Proposed Research Policy

Discussed under Agenda Item 1.8

**1.3 Research on Establishing a Hong Kong Based Carbon Labelling Framework for Construction Materials**

Members took note of the Paper CIC/ENT/P/001/12 and CIC/ENT/P/002/12 and received a presentation from the researcher – The University of Hong Kong (HKU) on the research methodology, carbon assessment frameworks, benchmarking, implementation strategies and etc.

In response to Members' comments, HKU advised the following:

- (a) The benchmark for the Carbon Rating in Carbon Label was under development. The full description and rationale of the design would be stated in Study Report.
- (b) Six commonly used construction materials, namely cement, reinforcing bar, structural steel, glass, aluminium and ceramic tile, were selected for the verification of carbon auditing frameworks in this project. It was clarified that the scope of this project was to determine a framework but not to work out individual carbon labels for those construction materials.
- (c) The accuracy of the carbon assessment might be improved by carbon audit and/ or assessment by independent accreditation body.
- (d) Carbon Trust was to provide support to business and public sector to help cut carbon emission, save energy and commercialise low carbon technologies. It did not specifically determine carbon emission of construction raw materials; whereas, this project was to address carbon emission of construction raw materials relevant to Hong Kong's applications.
- (e) The classification of carbon emission of construction raw materials should be conducted with reference to the types and properties of the materials e.g. strength, weight, size and etc.
- (f) The scope of this project was to develop a framework for raw materials for construction industry but not for manufactured products/ semi-products. However, based on the same idea of this project, a further enhanced framework might be worked out to the assessment of manufactured products/ semi-products as well.

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(g) Carbon Labelling was quite a new scheme over the world. The adoption of the scheme overseas was on voluntary basis and no legislation had been enacted.

**1.4 Research on Adhesion Technologies for External Wall Tiles**

Members took note of the Paper CIC/ENT/P/003/12 at the meeting.

CIC Secretariat reported that only one Task Force Member had reservation on the Study Report and Reference Manual. After CIC Secretariat had made further discussion with him, he considered not necessary to have another meeting to discuss his views but would respect the views of other Task Force Members and the Com-ENT. All other Task Force Members had no further comments on the Study Report and the Reference Manual. Besides, the Task Force would need further discussion before recommending Com-ENT if any parts or none of the Reference Manual would be published.

**TF-EWT**

In view of the change of document type from “the Guidelines” to “the Reference Manual” and the need of further study, the consultation would not be made at this stage, the Task Force proposed to replace the Supplementary Report by an Outline Brief for Phase Two Study. AECOM agreed the revision of required deliverable without cost implication. Members noted that according to the present procurement procedure of CIC, the procurement of the Phase Two study was subject to an open tender.

Members expressed no objection to endorse on:

1. Study Report and the Reference Manual
2. Replacement of Supplementary Report by Study Brief for Phase 2 Study

**1.5 Working Group on Building Information Modelling**

Members took note of the Paper CIC/ENT/P/004/12.

At the last Com-ENT Meeting, Members agreed to set up the Working Group to recommend implementation strategies and roadmap for adopting BIM, to consider the limitations of using BIM and framework for the corresponding solutions.

Ms Ada Fung agreed to be the Chairperson of this Working Group and the below organisations were recommended in the paper to join

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the Working Group:

- (i) Architectural Services Department
- (ii) Buildings Department
- (iii) MTRC
- (iv) Hong Kong Construction Association
- (v) Hong Kong Institute of Architects
- (vi) Hong Kong Institute of Surveyors
- (vii) Hong Kong Institution of Engineers
- (viii) Hong Kong Institute of BIM
- (ix) Polytechnic University
- (x) University of Hong Kong

After deliberation, Members suggested inviting the following organisations/ corporations in additional to the ones listed above:

- (a) The Real Estate Developers Association of Hong Kong or their member
- (b) The Association of Architectural Practices
- (c) The Association of Consulting Engineers of Hong Kong
- (d) Highways Department (Development Bureau would assist in the invitation)

**CIC  
Secretariat**

Members hoped that the task would preferably be completed in 6 – 9 months' time.

**1.6 Research on River Sand Substitutes for Concrete Production and Cement Sand Mortar Production (Phase One)**

Members took note of the Paper CIC/ENT/P/005/12, CIC/ENT/P/006/12 and CIC/ENT/P/007/12.

The researcher submitted the Inception Report early December 2011. The second meeting was held on 30<sup>th</sup> December 2011. Up to the moment, the progress of the work was on schedule.

After reviewing the Inception Report and the subsequent deliberation, the Task Force had the following views:

- (a) the area of focus in the research should be the production of “Cement Sand Mortar” in view of the substantial quantity

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- currently used in the industry;
- (b) limited laboratory test would be performed to verify the arguments stated in the study report;
- (c) a technology roadmap that set out the expected direction for the next three years would be preferable.

Members agreed that the proposed substitutes should be marketable in terms of pricing and stability of supply.

Besides, impact on productivity such as labour hours required and on workmanship should also be considered.

**1.7 Working Group on Strategic Implementation of Prefabrication and Modular Construction**

Members took note of the Paper CIC/ENT/P/008/12.

The first Working Group Meeting was held on 13th December 2011. The Working Group would strive to complete the discussion within three to four meetings.

Working Group Chair reported that discussion items were set forth for the upcoming meetings. The first meeting had covered the scope and areas of the application, the following meeting would discuss the driving forces of the adoption in terms of productivity, cost, quality, site safety, environmental, government support, legislation, views of stakeholders and creativity; and the third meeting would discuss the constraints on the usage in respect of technical and spatial aspects, safety, transportation, social impact, regulations, planning and views of stakeholders. The working group targeted to wrap up the discussion in the forth meeting.

Members noted that some stakeholders might consider the precast unit casting yard should be situated in Hong Kong instead of Mainland China though it was understood that there was spatial concern in Hong Kong.

**1.8 Proposed Research Policy**

Members took note of the Paper CIC/ENT/P/009/12.

GYL reported that the revised proposed Research Policy was ready and would be circulated to Members, after the meeting, for their review and comment.

**GYL**

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**1.9 Environmental Alert for Transportation of Construction Waste**

Members took note of the Paper CIC/ENT/P/010/12.

At the last Com-ENT Meeting, it was decided to issue an “Environmental Alert” to industry in response to EPD’s letter regarding overloading of dump truck. EPD had subsequently sent CIC another letter also relating to dump truck with respect to cleanliness during the transportation of construction waste. As both concerns of EPD were similar, one single Environmental Alert was proposed to cover both issues.

Members reviewed the proposed alert and their comments were as follows:

1. the target audience of the alert should be the working level personnel of the construction industry;
2. the presentation should be eye-catching and easy to read; more graphic (or even cartoon/ CIC Icons) and lesser words were preferable;
3. simpler disclaimer was suggested;
4. content should include maximum penalty for the offence.

CIC Secretariat would revise the proposed alert accordingly for Members’ comment.

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**1.10 Any Other Business**

1.10.1 The terms of office for Co-opted Members and some of the CIC Members would expire by 31<sup>st</sup> January 2012. The Chairman thanked them for their heartfelt contribution to the Com-ENT.

1.10.2 Owing to the heavier engagement in HKGBC, the Chairman resigned his chairmanship of Com-ENT. Members proposed a vote of thanks to the Chairman for his brilliant leadership throughout the past years.

**1.11 Tentative Date of Next Meeting for 2012**

29 March 2012 at 2:30 pm at the CIC Headquarters, 15/F, Allied Kajima Building, 138 Gloucester Road, Wanchai, Hong Kong

**All to note**

There being no further business, the meeting was adjourned at 4:30 pm.