

Construction Industry Council

Committee on Environment, Innovation and Technology

Meeting No. 003/14 of the Committee on Environment, Innovation and Technology for 2014 was held on 10 July 2014 (Thursday) at 2:30 pm at CIC Headquarters, 15/F, Allied Kajima Building, 138 Gloucester Road, Wanchai, Hong Kong.

Present:	Kevin POOLE	(KP)	Chairman
	Paul CHONG	(PC)	
	Christopher LEUNG	(KYL)	
	Stephen LAI	(SLI)	
	Andrew CHAN	(AKYC)	
	T C CHEUNG		Buildings Department
	Stephen YIM	(SnY)	Housing Department
	Simon WONG	(SW)	Chair of TF-RFID
	Ringo YU	(RY)	Hong Kong Construction Association
	Ping-wai CHOW	(PWC)	Hong Kong Construction Industry Employees General Union
	Sam-choi CHAN	(SCC)	Construction Site Workers General Union
	Chung-leung WONG	(CLWo)	Development Bureau
	Chuen-fai WONG	(CFW)	Environmental Protection Department
In Attendance:	Ka-chun MAK	(KMK)	Architectural Services Department
	Harry LAI	(HLA)	Electrical and Mechanical Services Department
	Conrad WONG	(CW)	The Hong Kong Green Building Council
	Anthony KWOK	(AKk)	LSCM
	Ivan LEUNG	(ILg)	LSCM
	Christopher TO	(CT)	Executive Director
	Miranda YEAP	(MYP)	Senior Manager – Council Services
	Victor WONG	(VWg)	Senior Manager – Council Services
	Julian LEE	(JL)	Manager - Research
	Ivan KO	(IK)	Manager - Council Services 2
	Belle HO	(CYH)	Manager - Council Services 5
	Venus LAU	(VL)	Graduate Trainee
	Apologies:	Reuben CHU	(RC)
Robert LAM		(RL)	
Siu-wai HUI		(SWH)	Director of Buildings (represented by Mr. T C Cheung)

Ada FUNG	(AF)	for Permanent Secretary for Transport and Housing (Housing) (represented by Mr. Stephen YIM)
Wai-wah HO	(WWH)	Chair of TF-RSS
Thomas NG	(TN)	The University of Hong Kong

PROGRESS REPORT

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3.1 Initiatives Implemented by HKGBC

Members received a presentation by CW on the initiatives implemented by HKGBC, including past major large-scale events, local and international outreach activities, policy and research, etc. Some major green initiatives mentioned were as follows:

- Sustainable Building 2013 HK Regional Conference (SB13 HK)
- BEAM Plus Platinum Night
- Hong Kong Green Building Week 2013 (HKGBW2013)
- HK3030 Campaign
- Green Building Product Labelling Scheme

The below issues were also highlighted during the presentation:

- Mr Paul CHAN would lead a group of Hong Kong delegates to the World SB14 Barcelona which would take place on 28-30 October 2014.
- Hong Kong had obtained the hosting right of WorldGBC Congress 2015 which would be held on 28-30 October 2015.
- Hong Kong had won the hosting right of the World Sustainable Built Environment Conference 2017 (WSBE17). CIC and HKGBC would be the co-organisers of the event.

The Chairman asked about the number of projects that had applied for Hong Kong Beam Plus. CW responded that there were more than 500 projects included, and most of them were new buildings. Among them, around 5% was awarded with Platinum rating.

3.2 **Potential Use of New LSCM Technology in the Construction Industry**

Members received a presentation by SW on the potential use of new LSCM technology in the construction industry. Among the several technologies introduced, the Pro-active Construction Management System (PCMS) was highlighted with details listed as follows:

- The system integrated Location Based Services (LBS) solution with Building Information Modeling (BIM) to achieve higher safety level and better logistic management.
- The solution included a custom made device to tag each worker, and state-of-the-art location tracking system integrated with the danger factors.
- The system provided immediate alerts directly to the workers and site manager when a danger was detected.

SW supplemented that trials of the system had not been carried out in any actual construction sites. RY said that he could help in providing simple sites for the conduction of trials if needed. SW also emphasized that the technology was aimed more to improve safety practices than to prevent accidents.

A Member expressed concern over the psychological effect of the location tracking technology on workers as they would feel overly monitored by the employer if the technologies were adopted. SW responded that people's unsafe behaviour could be tracked anonymously and different layers of privacy protection could be adopted depending on the needs. The Chairman concluded that it was thus important to carry out trials to test workers' responses and the general acceptability of such monitoring.

3.3 Task Force on Schematic Design for Application of RFID, GPS and Sensor Technology in Monitoring the Movement of Construction Waste

Members received a brief report by MYP on Paper CIC/EIT/P/018/14.

The following were highlighted:

- Regarding the monitoring model for small sites where a weight bridge cannot be installed LSCM was working on alternatives and will contact other weight sensor providers.
- The time required for the software development would be 6-9 months.
- The estimated cost would be HKD 100,000 and would be borne by the CIC.

Members had no comments towards the Paper.

3.4 Confirmation of the Progress Report of the Previous Meeting

Members took note of Paper CIC/EIT/R/002/14 and confirmed the progress report of the last meeting held on Thursday, 10 April 2014 at CIC Headquarters, 15/F, Allied Kajima Building, 138 Gloucester Road, Wanchai, Hong Kong.

3.5 Matters Arising from the Previous meeting

3.5.1 Proposed Nomination of Co-opted Members from Feb 2014 to Jan 2016

Item 2.3 of the Previous Progress Report – The following nominations of Co-opted Members were received:

- Mr. Thomas NG from the University of Hong Kong;
- Mr. Ringo YU from the Hong Kong Construction Association;
- Mr. CHOW Ping-wai from the Hong Kong Construction Industry Employees General Union;

- and
- Mr. CHAN Sam-choi from the Construction Site Workers General Union.

Members took note and endorsed the nominations.

3.6 Tender for the Study on the Establishment of a Prefabrication Yard in Hong Kong (Phase Two Study)

Members received a brief report by MYP on Paper CIC/EIT/P/012/14.

It was noted that the tender for the Phase Two Study only received one tender, with nine tenderers declining to bid. In accordance with the CIC Procurement Manual, three quotations must be received and thus no award recommendation could be made due to insufficient number of tenders received.

The Chairman noted that the Phase Two Study comprised two parts: 1) Survey on Potential Utilisation; and 2) Study on Technical Feasibility. He invited CLWo to comment on the Paper. CLWo advised that the proposed prefabrication yard in Tsing Yi was only for steel reinforcement and to alleviate the problem of shortage of bar benders. In response to a Member's enquiry, CLWo advised that the Government had not carried out any similar study in the past. After much discussion, the Committee considered that the Survey on Potential Utilisation covered in the first part of the proposed study should still proceed.

The Committee endorsed that the Secretariat would proceed to engage a survey company to complete the Survey on Potential Utilisation first and would then consider whether the next stage of the study should proceed.

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3.7 New Research Projects for Com-EIT

Members received a brief report by MYP on Paper CIC/EIT/P/013/14.

Two research proposals were recommended to the Committee, namely

- (a) Retrofitting existing building (energy efficiency) – a

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- quantitative approach; and
- (b) Green Architectural & Interior Design Guide for Minimisation of Construction and Demolition Waste.

Members had no comments on the two proposals and endorsed to conduct the two researches at a total amount of HK\$2,480,360. The conduction of the projects would still be subject to the endorsement of the Task Force on Research.

Also, CLWo proposed a project either by research or consultancy study for formulation of the overall strategy and specific measures for management and reduction of construction waste in Hong Kong. The feasibility of conducting the proposed research would be further studied by the Committee.

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[PMN: The Hong Kong Green Building Council (HKGBC) and Business Environment Council (BEC) Joint Working Group on construction waste management issued a C&D Waste Policy Report and C&D Waste Technical Report. The papers served as the C&D waste reduction recommendations to the Government. Those reports were presented in the Com-ENT meeting in January 2014.]

3.8 Final Report of the Roadmap for BIM Strategic Implementation in Hong Kong's Construction Industry

Members received a brief report by IK on Paper CIC/EIT/P/014/14.

IK explained that the final report had been reviewed by professional copywriting and editing services and the edited version had been reviewed by the Working Group Members.

The following minor comments had been received:

- To change the name of the report from 'Final Report of the Roadmap for BIM Strategic Implementation in Hong Kong's Construction Industry' to 'Roadmap for BIM Strategic Implementation in Hong Kong's Construction Industry'
- "The consultancy study recommends that the Buildings Department solicit the assistance of the Office of the Government Chief Information Officer (OGCIO) and

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Development Bureau liaise with relevant departments...” should be amended as “The consultancy study recommends that the Buildings Department liaises with relevant bureaux/departments...”

Members had no other comments and endorsed on publishing the Report at the CIC Website subject to the approval of the Council.

3.9 Task Group on Establishment of Industry Standard for BIM Implementation

Members received a brief report by IK on Paper CIC/EIT/P/015/14.

IK explained that the Inception Report submitted by the consultant had been endorsed in principle by the Task Group and the draft standards could be downloaded from the CIC Website. Stakeholders engagement forums would be arranged to collect views from members of stakeholders’ organisations.

Suggestions of the Task Group members on the Inception Report were as follows:

- The standards should be concise, simple, and plain English should be used;
- Standard 2 should cover both the Level of Development and Level of Details;
- To have better quality, international peers review would be conducted. The cost would be absorbed by the consultant; and
- China standards should be included in the study so that HK standards could cover local, national and international aspects.

3.10 BIM Hong Kong Standard – Draft 2

Members received a brief report by IK on Paper CIC/EIT/P/016/14.

IK explained that the Task Group had provided comments to the draft standards and the consultant would continue to conduct a few more engagement forums to collect views on the draft standards.

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Standards would be provided to Task Group Members for final review in December 2014.

3.11 Task Force on River Sand Substitutes Research

Members received a brief report by MYP on Paper CIC/EIT/P/017/14.

Of the 5 objectives to be achieved in the study, the first objective of “Recommended Specifications for Aggregates for Mortar” had been completed and would be revised subject to the comments of stakeholders and laboratory testing results.

Of the other 4 objectives, i.e. Trial concrete mixes, Trial mortar mixes, the use of recycled glass and recycled aggregates, they were being proceeded in parallel at present. It was expected that all the tests would be completed by Aug 2014 and the result could be presented at the next meeting.

3.12 Any Other Business

A Member suggested including page number and hyperlink on the meeting agenda for easy tracing of papers and documents.

The Secretariat would add in the information in the next meeting’s agenda.

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3.13 Tentative Date of Next Meeting for 2014

9 October 2014 at 2:30 pm at 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 4:20 pm