

Construction Industry Council

Committee on Environment and Technology

Meeting No. 003/12 of the Committee on Environment and Technology for 2012 was held on 12 July 2012 (Thursday) at 2:30 pm at 15/F, Allied Kajima Building, 138 Gloucester Road, Wanchai, Hong Kong.

Summary notes of the Committee on Environment and Technology (Com-ENT) Meeting No.003/12:

Agenda Item	Paper	Major Resolutions/ Progress Highlights
3.1	CIC/ENT/R/002/12	Confirmation of the Progress Report – Members of the Com-ENT confirmed the Progress Report CIC/ENT/R/002/12 of the meeting held on 29 March 2012.
3.2	---	Matters Arising from the Previous Meeting: (i) the following two posters had been released with overwhelming requests, and were available for download from CIC’s official website: 1. Say “No” to Overloading of Dump Trucks (in Chinese: 向泥頭車超重運載說“不”) 2. Say “Yes” to Cleaner Environment by Proper Transportation of Construction Waste (in Chinese: 適當運載建築廢料) (ii) Members endorsed on HKIS’s nomination of Co-opted Membership: Sr James PONG and Sr Kenneth POON.

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		(iii) The Update Report on Migration from British Standards to Eurocodes had been released and was available for download from the CIC’s official website. DevB delivered a presentation to Members updating the Government’s implementation plan for the migration to Eurocodes in public works projects.
3.3	CIC/ENT/P/022/12	<p>Research on Establishing a Hong Kong Based Carbon Labelling Framework for Construction Materials</p> <p>HKU presented the proposed Scheme and reiterated that:</p> <ol style="list-style-type: none"> 1. this study and the Scheme are the first mover in the world because it is the first and unique scheme that is specifically framed for construction materials; 2. a team of BSI Group working on Publicly Available Specification (PAS) 2050 had shown their interest in collaborating with CIC or the body operating the scheme in future on this Scheme; 3. this study was designed for the assessment of raw material product instead of by-product or final product; 4. different production lines of a raw material product may result in different figures in carbon label for a raw material product because different production lines may require different sources of resources; 5. in order to better implement the Scheme, need to setup a specific database for Hong Kong; 6. this study is only the first part of the assessment of carbon emission in the full spectrum. <p>For the implementation of the Scheme, Members suggested that:</p> <ol style="list-style-type: none"> 1. the carbon emission amount and rating stated on the proposed label would only be one of the factors for comparing raw material products because different raw material products have their

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		<p>own characteristics and different operational efficiency;</p> <p>2. in long run, a comprehensive solution for the assessment of carbon emission should be developed with respect of full life cycle of a structure/ project. The following four key areas may make the assessment became comprehensive:</p> <ul style="list-style-type: none"> - Area 1: raw material product used; - Area 2: machinery used during the construction stage; - Area 3: energy efficiency of the built up structure; - Area 4: maintenance of a structure / demolition process/ recycling of used materials and demolished materials. <p>3. it should have a mechanism to ascertain which areas (as aforesaid) could provide the most cost effective solution aiming to lowering carbon emission;</p> <p>4. special credit to be given to those contractor who used lesser carbon emission products during construction stage;</p> <p>5. special credit to be given to the tenderer who proposed to use lesser carbon emission products in the course of tender evaluation process, like Housing Authority's three envelops tender submission.</p> <p>Members endorsed on the study report.</p>
3.4	CIC/ENT/P/023/12	<p>Research on Adhesion Technologies for External Wall Tiles</p> <p>Members agreed:</p> <ol style="list-style-type: none"> 1. <u>to publish the Study Report</u> in full aiming to inform the industry about the progress of the study. It was highlighted that the report is for the Industry's reference only; 2. <u>not to publish the Reference Document</u> in view of further study to be conducted to provide more

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		<p>solid substantiation on the recommendations.</p> <p>Members endorsed on the draft Outline Brief for Phase 2 study aiming to bridge the gaps identified in the present study.</p> <p>Members endorsed the setting up of a new Task Force for Phase 2 study to manage and steer the Phase 2 study so that the new task force could take a fresh view of the present Study Report, Reference Document and the scope of Phase 2 study.</p>
3.5	CIC/ENT/P/024/12	<p>Schematic Design for Application of RFID, GPS and Sensor Technology in Monitoring the Movement of Construction Waste</p> <p>The key objective of the proposed Task Force was to recommend, through commissioning research, a solution aiming to better manage the movement of construction waste by using automatic monitoring system at construction project level.</p> <p>The targeted solution does not aim to replace the present Environmental Protection Department's CHITS system nor to be a tool for prosecution by the relevant government authority. Instead, the targeted solution aimed to make use of modern technology to reduce manual process in monitoring the disposal of construction waste and hence encourage the industry taking a more systematic approach to prevent illegal dumping of construction waste.</p> <p>Members advised that the study should focus on:</p>

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		<ol style="list-style-type: none"> 1. the application of the existing technology as much as possible (but not technological invention); 2. definition of business cases on site especially different site conditions and constraints, scenario of the use, etc; and, 3. suitable business and system implementation plan that pursuing industry buy-in. <p>Members endorsed on the setup of the Task Force, its Proposed Membership, and its Proposed Terms of Reference.</p>
3.6	---	<p>Task Force on Research Activities</p> <p>Members endorsed the dismissal of the Task Force on Research Activities in view of the Research Funding Policy having been approved by the Council.</p>
3.7	CIC/ENT/P/025/12	<p>Working Group on Strategic Implementation of Prefabrication ad Modular Construction</p> <p>All of the discussion sessions were completed. CIC Secretariat would prepare a draft report for Working Group’s comment and onward submission to Com-ENT for deliberation.</p>
3.8	---	<p>Any Other Business</p> <p>The Buildings Department commissioned Ronald Lu & Partners to conduct “Consultancy Study on Design and Construction Requirements for Residential Buildings for Energy Efficiency” aimed to formulate a set of design and construction guidelines/ requirements for improving energy efficiency for new residential buildings. The study and the Draft Code of Practice for Design and</p>

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		<p>Construction Requirements for Residential Buildings for Energy Efficiency (the Draft Code) were undergoing Stage 2 Consultation.</p> <p>The Draft Code proposed the following two key measures to enhance energy efficiency of residential buildings:</p> <ul style="list-style-type: none">- Residential Thermal Transfer Value (RTTV) that aimed to control façade heat gain. Suitable values of RTTV were recommended; and- Natural Ventilation (NV) design that aimed to achieve thermal comfort without sole reliance on active building systems. <p>It was proposed that compliance with the RTTV measure and the submission of report on NV should be the imposed conditions for granting of gross floor area concession for green and amenity features and non-mandatory/ non-essential plant rooms and services proposed to be provided in new residential developments.</p> <p>Moreover, the information on compliance/ non-compliance with the RTTV and NV measures would be uploaded to the Buildings Department’s website for public inspection/checking after issuance of occupation permits.</p>