

**Construction Industry Council**

**Committee on Environment and Technology**

Meeting No. 004/12 of the Committee on Environment and Technology for 2012 was held on 6 September 2012 (Thursday) at 2:30 pm at 15/F, Allied Kajima Building, 138 Gloucester Road, Wanchai, Hong Kong.

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Summary notes of the Committee on Environment and Technology (Com-ENT) Meeting No.004/12:

<b>Agenda Item</b>	<b>Paper</b>	<b>Major Resolutions/ Progress Highlights</b>
4.1	CIC/ENT/R/003/12	<b>Confirmation of the Progress Report of the Previous Meeting</b> – Members of the Com-ENT confirmed the Progress Report CIC/ENT/R/003/12 of the meeting held on 12 July 2012.
4.2	---	<b>Matters Arising from the Previous Meeting:</b>  (i) The Secretariat would arrange for the publication of the Study Report of Research on Adhesion Technologies for External Wall Tiles once the Chinese translation by Researcher is done.  (ii) The Secretariat invited Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies (LSCM) to propose a nomination to assume the Chair of the Task Force on Schematic Design for Application of RFID, GPS and Sensor Technology in Monitoring the Movement of Construction Waste.  <i>[Post Meeting Note: The CEO of LSCM - Mr. Simon WONG has accepted CIC's invitation to assume the Chair of the Task Force.]</i>

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4.3	(for information)	<p><b>Presentation on Construction Product Certification by Hong Kong Accreditation Service</b></p> <p>Hong Kong Accreditation Service (HKAS) delivered a presentation on “Product Certification for Construction Materials – What Is It and How It Benefits Your Works?”. HKAS presented the following:</p> <ol style="list-style-type: none"><li>1. the common conformity assessment activities (including: testing, inspection and system certification) in assessment and accreditation market;</li><li>2. the benefit of product certification and the certification schemes;</li><li>3. current situation and examples of construction materials product certification in Hong Kong;</li><li>4. the role of HKAS is to provide accreditation services to testing laboratories, certification bodies and inspection bodies.</li></ol> <p>Some Members considered the certification would be more widely adopted if it could replace site tests. It was acknowledged that in United Kingdom, no site testings would be required if the products were certified. Chairman suggested further discussing the opportunity to leverage Product Certification Scheme in construction industry in next Com-ENT meeting.</p>
4.4	CIC/ENT/P/026/12  (for information)	<p><b>Research on River Sand Substitutes for Concrete Production and Cement Sand Mortar Production (Phase One)</b></p> <p>HKU submitted Progress Report No. 3 in which stated the main concern of the river sand substitute was its adoption in mortar and the initial view was the use of manufactured sand with compositions to be defined in the next phase study.</p> <p>Through field trials and desktop study, manufactured sand (that is, processed crushed rock fine) was</p>

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		<p>technically regarded as a potential alternative to river sand. It is most probably suitable for the production of high-performance concrete, such as high-strength concrete and high-flowability concrete. Manufactured sand also appeared to be suitable for use in mortar for plastering works.</p> <p>The concrete producers in Hong Kong have already adapted to the use of crushed rock fine as river sand substitute in the production of concrete. The use of crushed rock fine in concrete production has been very common in Government projects.</p> <p>HKU opined that preparing a set of specifications for manufactured sand would be a time consuming task which could take two to three years with reference to the preparation of CS3. It was suggested that CIC could consider issuing a reference document after the Phase 2 study of the research for use by local manufacturers as a reference such as optimum fine content, particle size distribution, and roundness of sand particle for the production of manufactured sand, and the standard mixture or specification to follow. After the recommended reference document had been widely adopted in different aspects of the construction industry, the reference document could be converted into a construction standard or specification for manufactured sand.</p> <p>Members advised that:</p> <ol style="list-style-type: none"><li>1. This project is very important and has great impact to the construction industry. CIC should speed up the study/ research and scale up this project with respect to (a) standard mixture/ specification; (b) manufacturing process of the substitutes; (c) put forward pilot scheme;</li><li>2. CIC may consider to apply for other technology support fund to support the further studies;</li><li>3. The cost for the use of crushed waste glass is mainly attributable to transportation of waste glass and cleansing of waste glass, opportunity should be sought to reduce these cost such that the use of crushed waste glass should not be ruled out;</li></ol>

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		4. The construction industry may seek for the change of construction method aiming to reduce the use of plastering and hence reducing the use of river sand.
4.5	CIC/ENT/P/027/12  (for information)	<b>Strengths of the Hong Kong Construction Industry</b>  In order to facilitate fruitful output, Chairman suggested coming up the result through a separate small discussion group together with other practitioners/ experts who are familiar with construction industry in Mainland China.
4.6	CIC/ENT/P/028/12  (for discussion)	<b>Tentative Work Plan of Year 2013</b>  Members expressed the following views:  1. a specific target of the adoption of BIM in Hong Kong should be recommended by the Working Group on Roadmap for BIM Implementation so as to come up a more realistic task plan; 2. task of the determination of the way forward and further development of the Carbon Labelling Scheme was suggested although it was understood that the implementation and operation of the Scheme would be carried out by the CIC; 3. the study on “wider use of machinery with complementary to new construction process aiming to lesser rely on frontline workforce” was suggested to include in Wider Use of Prefabrication and Modularisation Construction Phase 2; 4. three upcoming tasks: use of RFID, adoption of BIM and wider use of prefabrication are mutually complement to each other in the full life cycle of a project and a structure; by which help to promote productivity, work efficiency, and information exchange cross disciplines in construction industry; 5. leverage Product Certification Scheme in construction industry but subject to the discussion in

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		next Com-ENT meeting.
4.7	CIC/ENT/P/029/12  (for information)	<b>Tentative Meeting Schedule for Year 2013</b>  4 numbers of Committee meetings for year 2013 were scheduled for 17 Jan (Thur), 10 Apr (Wed), 3 July (Wed) and 2 Oct (Wed).
4.8	---	Any Other Business  a. A self-explanatory letter from Pneumoconiosis Compensation Fund Board regarding the invitation for submission of research proposal was tabled. The research fund is setup to support projects that relate to the prevention, diagnosis, assessment of disability and treatment of Pneumoconiosis and/ or Mesothelioma in Hong Kong.  b. A self-explanatory letter from The Lift and Escalator Contractors Association regarding the recent Launch of the LECA Charity Fund and the fund application procedures was tabled. The purpose of the fund is to provide immediate financial assistance to the victims or their family members who suffered from accidents in lift or escalator works.