



International Council for Research and  
Innovation in Building and Construction

W115 - "Construction Materials Stewardship"

Report on the fourth business meeting of  
CIB Working Commission W115 "Construction Materials Stewardship"  
2010

Wednesday, 28 July 2010, 7:00 – 8:40 AM (US EDT, -5:00 Greenwich)

The fourth business meeting of the CIB W115 was held as a video conference hosted by the University of Florida.

The meeting was attended by participants from the United States, Germany, Switzerland, Israel, The Netherlands, Japan, Turkey, Singapore, Slovenia and United Kingdom.

## **Meeting Attendees**

- Abdol Chini, University of Florida, United States (Coordinator)
- Frank Schultmann, Karlsruhe Institute of Technology (KIT), Germany (Coordinator)
- Bill Porteous, CIB The Netherlands
- Amnon Katz, Technion, Israel
- Anna Kühlen, Karlsruhe Institute of Technology, Germany
- Shiro Nakajima, Building Research Institute, Japan
- Gil Peled, Eco-Challenges, Isreal
- Lucija Hanzic, University of Maribor, Slovenia
- Brad Guy, Catholic University of America, USA
- Soofia Elias Ozkan, Middle East Technical University, Turkey
- Andrew Miller, University of Brighton, UK
- Gillian Hobbs, BRE, United Kingdom
- Holger Wallbaum, ETH Zürich, Switzerland
- Edward Anggadajaja, Building and Construction Authority (BCA) Singapore

## Minutes of the Meeting

1. The coordinators of W115 welcomed the participants, especially the new members of W115 and introduced the organizational structure of the video conference.
2. Reports of subgroups, being currently in preparation, were presented by the respective person in charge and were discussed.

### Subgroup 3:

#### *Develop systems to mitigate and ultimately avoid construction material waste*

The Issues discussed in the context of the report of Gillian Hobbs, which is about waste reduction activities in different countries, is described under 3.

### Subgroup 4:

#### *Develop ways of using material waste as raw materials for making construction materials*

Shiro Nakajima reported that his subgroup is planning to develop a list of barriers for deconstruction and reuse of materials and the best strategies to overcome these barriers. The report should include country-specific barriers connected to recycling activities in construction and life-cycle-impacts as well. The report will be finished by the next meeting of the W115 in the course of the World Sustainable Building Conference in October 2011 in Helsinki, Finland. Soofia Elias Ozkan and Brad Guy will support Shiro Nakajima with regards to the report.

Regarding life-cycle-impacts of recycled concrete aggregate Holger Wallbaum will send a report made in Switzerland to all participants of the meeting.

### Subgroup 5:

#### *Develop methodologies for designing for close loop materials use and the effective recovery of materials and components from existing buildings*

Charles Kibert was not able to attend the video conference. Hence no comments were made on the report including the development of methodologies to design closed-loop-material-usage.

### Subgroup 6:

#### *Develop design and construction methodologies for transformable and adaptable buildings and spaces to extend service life and so reduce overall construction material resource use*

Elma Durmisevic was not able to attend the video conference. Hence no comments were made on the report on design aspects and construction methods for transformable and adaptable buildings.

3. For the report "Waste Reduction around the World" Gillian Hobbs received country reports on national waste reduction activities from 11 commission members until now. The focus of the report will be on waste prevention. Gillian Hobbs will give individual feedback on the provided reports, if they do not offer the required information. A draft of the final report will be available mid/end of September 2010. The deadline for submission of country reports was extended to August 31, 2010.
4. Lucija Hanzic intends to perform a survey to analyze the state of incorporation of sustainable development (SD) and minimisation of construction and demolition waste (CDW) into undergraduate study programmes of architecture, construction/civil engineering and building management. Within this context she sent three preliminary questionnaires subsequent to the meeting, asking for review and response by the commission members. When a sufficient number of members are willing to participate

the questionnaire will be carried out in the beginning of the new academic year (end of September 2010).

5. Construction Materials Stewardship – Country Reports/Updates

Gillian Hobbs reported of an initiative between the government and the industry in the UK, aiming to reduce the amount of waste, especially with regards to packaging.

Brad Guy informed about the revision of LEED for 2012, where a draft will be published by the U.S. Green Building Council (USGBC) this fall (2010). The revision of the certification system includes credits for recycled materials and focuses on standards for green materials.

6. The fifth annual meeting of W115 in 2011 will be in conjunction with the **World Sustainable Building Conference, held from 18-21 October 2011 in Helsinki, Finland**. Within the conference two sessions are blocked for the W115, which will broach the issue of waste management. Hence the group members are encouraged to submit conference papers.

7. The next publication of W115 will be the report by Shiro Nakajima, Brad Guy, and Soofia Elias Ozkan on barriers to recycling of material waste in construction and their life-cycle environmental impacts. The target date for publication of the report is before the World Sustainable Building Conference in October 2011 in Helsinki, as mentioned under 2.

8. With regards to the expansion of the commission membership base by countries, such as India, Russia, Brazil, South Africa and South Korea, Gillian Hobbs has contacts to Brazil, which she will follow up.

9. Liaisons with other CIB Task Groups and Working Commissions, being active in the area of sustainable buildings and construction.

*TG66: Energy and the Built Environment"*

Andrew Miller is being involved in the activities of TG66. He tries to enhance collaborations between TG66 and W115 in connection to high-tech materials and life-cycle-impacts in buildings.

*W116: Smart and Sustainable Built Environments*

Frank Schultmann is member of the steering committee of W116. There will be a business meeting of the commission in the beginning of December 2010 in conjunction with the 8th International Conference on Construction and Real Estate Management (ICCREM 2010). Frank will communicate the results of this meeting to the members of W115.

10. The W115 website had been updated and is now available under the link: [www.cibw115.org](http://www.cibw115.org), connected to the homepage of the Karlsruhe Institute of Technology (KIT). For any issues regarding the website Frank Schultmann and Anna Kuehlen can be contacted.

11. Additional items

Edward Anggadajaja informed the members that BCA is currently exploring the possibility for Singapore to host the next Sustainable Building Conference (SB11) tentatively scheduled in 2013/14. Discussions with the CIB Secretariat and relevant parties are currently on-going. He also invited the members to attend the SGBC Green Building Conference and WorldGBC International Congress 2010 from 13 - 16 Sept 2010 in Singapore.

– 5 –

Gillian Hobbs and Frank Schultmann will share information about waste reduction activities.

Brad Guy asked to let all colleagues and students know about [www.lifecyclebuilding.org](http://www.lifecyclebuilding.org), which is a competition for ideas and projects on material conservation.

Andrew Miller is interested in the life cycle environmental impact of natural building materials, particularly life cycle carbon emissions, and the thermal performance of the buildings.

Soofia Elias Ozkan mentioned her work with straw bale, recycled material and mud bricks. She provided the link (<http://www.kerkenes.metu.edu.tr/>) for further information.

Karlsruhe, 30 July 2010  
Frank Schultmann  
Anna Kühlen