

## International Conference on Sustainability in Energy and Buildings

### Invited Sessions

**Title of Session:** Assessment and Monitoring The Environmental Performance of Buildings

**Name of Chair:** Dr John R Littlewood

**Description:**

Since the Brundtland report in 1987, building design emphasis has focused on improving the sustainability of buildings and one aspect of sustainability is environmental performance. Since the mid 2000s, the emphasis for environmental performance has started to shift from minimising finite resource use and associated carbon emissions towards zero finite resource use and low to zero carbon emissions and thus, zero carbon or carbon neutral buildings. Targets for zero carbon buildings are fast approaching in European countries. For example, in the UK the targets for new dwellings to be zero carbon are 2012 (Wales) and 2016 (rest of the UK) and there is an ambition that all new non-domestic buildings should be zero carbon from 2019, with the public sector leading the way from 2018.

Due to the rise in the number of 'sustainable' developments and the move towards zero carbon buildings and the sustainable refurbishment, repair and adaptation of existing buildings there is an increasing need to assess and monitor how effective sustainable and zero carbon design, construction and operation strategies have been and will be in maximising environmental performance, minimising carbon use and allowing occupant comfort at affordable costs.

The aim of this session will provide the opportunity for researchers (including masters and doctoral students), designers, developers, clients and other interested parties to present and review theoretical and applied work in the 'The assessment and monitoring of the environmental performance of buildings'. Thus, the proposed themes within this session will include.

**Themes**

- Comparison of design and construction strategies and details with performance in use;
- Validation of design and environmental assessment tools with performance in use;
- Evaluation of design and construction details, approaches and processes to maximise environmental performance;
- Comparison and illustration of methods for assessing and monitoring the environmental performance of new and existing buildings;
- Case studies:
  - Assessment and or monitoring the environmental performance of new and existing buildings;
  - Assessment and or monitoring the environmental performance of components in new and existing buildings;
- Post occupancy evaluation;
- Education and training;
- Development and enhancement of existing assessment and monitoring methods;
- Comparison of methodologies and regulations in one country or between countries.

**Paper deadlines**

Submission of Full Papers for Review: **14<sup>th</sup> March 2011**

Notification of Acceptance/Revisions: **28<sup>th</sup> March 2011**

Upload of Final Camera-Ready Publication Files: **15<sup>th</sup> April 2011**

**Website URL (if any):**

A new page will be created on this website: <http://www.wirad.ac.uk/research-themes/ecological-built-environment/> similar to <http://www.wirad.ac.uk/research-themes/ecological-built-environment/cobra-2010/>

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