



CIB NEWS ARTICLE

International Council for Research and Innovation
in Building and Construction

Providing a global network for international exchange and cooperation in research and innovation in building and construction, in support of an improved building process and of improved performance of the built environment.

July 2010

From CIB Co-sponsored Events

Report on the SB10 Conference considers the Sustainability Challenge held in May 2010 in Wellington, New Zealand

SB10 Wellington was part of the series of Regional SB10 Conferences taking place in 2010 which, together with the World SB11 Conference in 2011, are all organised under the auspices of CIB, iiSBE and UNEP.



The second regional Sustainable Building Conference (SB10) was held at Te Papa in Wellington. With the theme of 'Innovation and transformation', the 2 days of presentations yielded plenty of robust discussion about the challenge of making New Zealand's buildings sustainable.

The mood among the 200-plus delegates was upbeat throughout the Sustainable Building Conference, and the focus was on positive change and how far we have come as an industry.

Keynote Speakers

There were nine plenary speakers spread over the 2 days:

- Kerry Prendergast, Wellington Mayor
- Pieter Burghout, BRANZ CEO
- Professors Brenda and Robert Vale
- Adrian Leaman (UK)
- Craig Pocock
- Nils Larsson (Canada)
- Nick Collins
- Hon Maurice Williamson Ministry for Building and Housing
- Vivian Loftness (USA).

There were also residential and commercial site visits and a workshop on computer simulations of energy consumption in buildings.

International perspective

Craig Pocock, a landscape architect from Christchurch, presented an anecdotal walk through sustainability. Craig shared his experiences of working in diverse situations overseas and how they challenged his preconceived ideas on sustainability. Craig emphasised that landscape architecture was integral to achieving a sustainable built environment outcome. His presentation showed the importance and benefits of getting the landscape working with the building.

Craig's presentation began in Jordan, on the shore of the Dead Sea, where he was involved in the designing of a hotel with 350,000 imported plants along with importing water to feed them. He finished in India where he was involved in landscape design that improved water capture and, therefore, the lives of residents.

Where changes can be made

Professors Brenda and Robert Vale from Victoria University of Wellington gave an inspiring talk on their idea of a carbon ration book (based on Second World War ration books). Brenda and Robert explored what a ration book would look like in order for us to live within our current resources. Brenda and Robert walked the audience through the different areas in everyday life where changes would have to be made.

For example, it was suggested that heating energy would need to be cut by 75%, which would require serious thermal insulation upgrades as well as efficient heating. Cutting lighting by the suggested 70% would require every light to be a CFL, and cutting refrigeration by 50% would mean everyone having A+ fridges.

Looking at the global picture, Brenda and Robert asked the question, if we don't make these changes, who will?

Ease of use for occupants

Adrian Leaman, managing director of Building Use Studies in the UK, has been doing post-occupancy

evaluation on commercial buildings around the world. Adrian emphasised that occupants are happiest when the buildings are easy to use. Low-level problems need to be sorted before innovation can flourish. Adrian has found a very strong relationship of overall comfort to perceived productivity in commercial buildings, showing there are strong commercial benefits to getting a building working well. The methodology he has developed will be used within the Building Energy End-use Study (BEES) within New Zealand.

Minister Supports Excellence

Hon. Maurice Williamson presented what the government is doing to make sustainable building a reality. In the 9-month period to the end of March 2010, the Warm Up New Zealand scheme has seen over 37,000 houses retrofitted and nearly 4,000 houses have an efficient heater installed. The scheme is on schedule to meet its target of 50,000 retrofits in this financial year.



Maurice Williamson

The Minister has been pushing forward with the Starter Home initiative, which shows that a well designed, simple home can be an attractive and sustainable alternative to a larger house. The Simple House Acceptable Solution document has been produced to provide a design solution for simple housing that minimises risks to health and safety and sets appropriate standards of building quality, without inhibiting design creativity. Mr Williamson also talked about work that is happening for solar water heaters, commercial buildings, a residential rating tool, productivity, the Licensed Building Practitioner scheme and the Building Act review.

Mr Williamson stated the view that sustainability is an over-used term, but he supports cutting-edge innovation and excellence in buildings.

Praise for Papers

In total, there were 76 presentations and 14 poster presentations covering case studies, scientific and industry papers.

Paper awards went to:

Best Paper: Maggie Lawton – Energy water relationships in reticulated water infrastructure systems.

Highly Commended: George Baird – What the users think of sustainable buildings – a global overview.

Highly Commended: Nigel Isaacs, Michael Camilleri and Kay Saville-Smith – Understanding buildings – a key step to sustainability.

Best Student Paper: Nick Smith – A cost-benefit analysis of secondary glazing as a retrofit alternative for New Zealand households.

Highly Commended Student Paper: Lee Bint – Water performance benchmarks for New Zealand: understanding water consumption in commercial office buildings.

The conference organising committee consisted of: Lois Easton (chair), Lisa Burrough (deputy chair), George Baird, Adrian Bennett, Jeremy Blake, Jane Cuming, Joanne Duggan, Jane Henley, Sea Rotmann and Ceri Warnock. Wayne Sharman led the scientific committee, which had 31 members from around New Zealand.

Additional Information

For information visit the designated website at www.sb11.org.

Proceedings

All the papers presented at SB10wellington are downloadable from the conference website at www.sb10.co.nz.

Other SB conference

Information about other SB10 conferences and about the SB11 World Conference in 2011 can be found in the SB10/11 Portal (see [here](#)).

A separate news article on the proceedings has also been published (see [here](#)).