RP2010

INFORMING AND TRIALLING LOW CARBON INCLUSIONS IN STATE GOVERNMENT BUILT ENVIRONMENT SECTOR TENDERS

Problem

The reduction of greenhouse gas emissions will be a key challenge for the built environment sector, a sector that directly and indirectly generates a high level of carbon dioxide emissions. This project, called for by UrbanGrowth NSW, focuses on the opportunity for State Government to influence low carbon outcomes in the built environment sector by supporting and motivating change in the supply chain.

The uptake of options for reducing the carbon emissions along the supply chain is influenced by a number of factors, one being the creation of low carbon tender inclusions in government tendering.

Figure 1: "Renwick" Bong Bong Road, Mittagong, UrbanGrowth NSW

Solution

This project will develop a Living Laboratory with UrbanGrowth NSW focused on land development in close collaboration with stakeholders and the Sustainable Built Environment National Research Centre (SBEnrc) and Curtin University.

The living laboratories will focus on identifying suitable low carbon inclusions and road-testing these with the supply chain, including contractors and suppliers, to identify barriers and benefits to enhance their uptake. The project will then assist the trialling of such inclusions, and the response from the supply chain, to increase low carbon outcomes of projects.

As a PhD student, my role is to ensure the project is well informed of best practices and academic advances. Low carbon tendering provides a valuable mechanism for reducing greenhouse gas emissions and my thesis will inform global efforts to harness supply chains.

A key aspect of our research will be to investigate the 'Low Carbon Readiness' of the supply chain in collaboration with the SBEnrc. The investigation will provide an indication of the current ability of the supply chain to provide low carbon solutions. The findings will inform consideration of low carbon tender inclusions by UrbanGrowth NSW and other State land development agencies.

Low carbon tendering offers a powerful mechanism for the transition in the built environment sector to low carbon operation

Benefits

The project will be a valuable showcase of the potential for public procurement to reach deep into the supply chain and support and motivate low carbon outcomes. The research methodology for the project will provide an insightful model for future 'Living Laboratories'.

This project will contribute to the CRC for Low Carbon Living's goal of a reduction in emissions of 10MTCO2e/yr by 2020.

Research Team

Prof. Peter Newman and Charlie Hargroves (Curtin University); Kate Read (UrbanGrowth NSW); Prof. Russell Kenley and Julianna Bedggood (Swinburne University of Technology)

Contact

Juliana Bedggood, Swinburne University of Technology, jbedggood@swin.edu.au

LOW CARBON LIVING CRC