

# Project 1.5

## Harnessing the Potential of Biophilic Urbanism in Australia, an Economic and Policy Investigation



RESEARCH PROGRAM 1: GREENING THE BUILT ENVIRONMENT

The concept of 'Biophilic Urbanism', championed by Tim Beatley and Peter Newman for decades, has been used widely to create more liveable and pleasant cities. This field is about to get a significant boost in activity as the realisation grows that natural features can be used as design elements in cities to help respond to climate change. The concept of biophilic urbanism is inspired by E. O. Wilson's concept of 'biophilia' that suggests we have an innate affinity with nature and that increasing nature in cities can lead to many benefits. Studies show that a connection with nature tends to lead to reductions in depression, anger, tension and fatigue.

Having been applied to a number of aspects of psychology and interior design, the concept is now receiving strong interest as an urban design principle, not only for the human well-being benefits, but a range of direct and indirect economic and environmental benefits. Biophilic urbanism has the potential to make significant contributions to a range of national, state and local government policies related to climate change mitigation and adaptation: reducing urban energy consumption, enhancing urban biodiversity, improving resilience to natural disasters, improving worker productivity, and responding to pressures related to densification and revitalisation of cities.

In collaboration with project partners, the research team from Curtin University and Queensland University of Technology (QUT) are investigating how natural elements can be used in cities as design features and will produce a report on the key elements and aspects of biophilic urbanism, especially related to building landscaping; a report on the economic considerations of the use of biophilic elements; and a report on the policy considerations to underpin the wider uptake of biophilic elements (both based on case study research and interviews). Each of the outcomes will be focused on providing value to partners and will continue to be developed in close collaboration with stakeholders.

Project partners include: Parsons Brinckerhoff, Western Australia Department of Finance, Townsville City Council (CitySolar Program), and PlantUp. The project will be advised by Professor Tim Beatley (University of Virginia, USA), a world leading biophilic urbanism expert and author of the new book 'Biophilic Cities'.

### Project Outputs for 2011

#### Stakeholder Engagement Report

A series of stakeholder meetings and discussions have been held along with the facilitation of two stakeholder workshops involving over 25 participants, in Perth and Brisbane. The workshops were based on the methodology of 'Collective Social Learning', created by Emeritus Professor Valerie Brown, to guide participants through a process to consider first their vision for a biophilic (nature loving) city and the aspects that enable and disable achieving such vision. Following this a brainstorm was undertaken with each workshop group, to inform the research team's consideration of the various elements of an economic consideration of both direct and in-direct economic benefits and costs of the use of biophilic elements in cities and other urban areas.

#### Case Study Assessment

The team is mid-way through a case study investigation of key biophilic urbanism examples in Australia and overseas, to consider both the economic and policy considerations that can inform future use of biophilic elements in Australian cities. This investigation is informed through a number of policy and economic analysis related questions that will ensure a consistent evaluation of what is possible and what precedents can inform future development in Australian cities.



Professor Peter Newman  
PhD DipES&T BSc(Hons) FTSE  
Program Leader, Curtin University



Charlie Hargroves  
BE (Civil)  
Project Manager, Curtin University  
E: c.hargroves@sbenrc.com.au



Dr Cheryl Desha  
BE (Env), PhD  
Project Leader, Queensland University of Technology  
E: cheryl.desha@qut.edu.au



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