

VALUE PROPOSITION OF LOW CARBON TRANSIT ORIENTED DEVELOPMENTS

Research Question

With low carbon buildings and precincts identified as a key solution to anthropogenic climate change, what is the value proposition of low carbon transit oriented developments from different stakeholders' perspectives?



Figure 1: What is low carbon living worth to various stakeholders?
(Image source: Google Images)

Methodology

This research will use a realist methodology focusing on evidence from three developments in South Australia, utilising primary and secondary data from Government, industry and the community to identify and quantify the impacts of low carbon living from various stakeholders' perspectives.

Initially the research will need to establish a reference frame against alternative, often higher carbon impact, built environments.

Where possible, stakeholders' unique experiences will be monetised and incorporated into total costs and benefits associated with low carbon living. Non-monetised experiences will be utilised to provide a more complete description of the value proposition.

Anticipated Outcome

In the context of addressing anthropogenic climate change, the creation and operation of low carbon buildings and precincts is represented as a key solution, however the transition to a low carbon built environment represents various costs and benefits to different stakeholders such as residents, the building sector or wider society.

The literature presents multiple impacts of a low carbon built environment associated with energy use, air quality, carbon emissions, health, productivity, employment, poverty alleviation, and public budgets, yet little evidence is available on the impacts in Australian climates and associated with local building typologies.

This research project will draw on evidence from Lochiel Park, Bowden and Tonsley developments, to identify and quantify the multiple impacts of low carbon living from different stakeholders' perspectives.

Anticipated impacts

The research is designed to increase our understanding of the value associated in creating the physical and social infrastructure required to deliver vibrant, socially inclusive, low carbon communities; as well as community scale energy, water, waste management, and transport systems that extend benefits beyond individual building boundaries.

In particular, this research will determine the value proposition of low carbon living in medium density accommodation to households, urban developers, and the wider community.



Figure 2: Community engagement is a key component in assessing stakeholders' value propositions (Image source: www.lowcarbonlivingcrc.com.au)

Anticipated impacts:

- **Greater stakeholder understanding**
- **Effective policy development**
- **Practical innovation and planning**
- **Increased end user adoption**
- **Investment incentive**

What is low carbon living worth from different stakeholders' perspectives?

It is critical to address each stakeholders' value proposition to motivate behavioural change and end user adoption to enable effective transition to a low carbon built environment and attract investment to perpetuate research and change.

Further information

www.lowcarbonlivingcrc.com.au

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Project timeline:
3 years commencing November 2015