

RP2003

# A REVIEW OF NATIONAL AND INTERNATIONAL LOW CARBON PRECINCTS.

## Problem

Australia's per capita greenhouse gas (GHG) emissions are amongst the highest in the world. To constructively contribute to a global community seeking to reduce GHG emissions, Australian cities must seek to reduce demand and/or decarbonise our energy systems.

## Solution

Precinct scale development offers greater opportunities for the integration of low carbon urban services (such as transport and decentralised energy) than individual buildings. Therefore the project objective is to identify low carbon precinct exemplars (the product) and the human factors and governance models that have enabled their delivery (the process).

The last decade has seen a burgeoning of low carbon precinct initiatives both in Australia and around the world. In particular many international exemplars are not well documented outside of their home country but could be expected to provide valuable lessons.

A scoping study completed in January was used to create a shortlist of successful international low carbon precincts for further study.

This research is also considering the qualitative aspects of urban design that ensure liveability. This is because a high quality of life is essential to ensuring market acceptance of low carbon



Figure 1 West Village in UC Davis is a useful exemplar for low cost, low carbon, precinct scale urban design relevant to Australia.

precincts - qualitative aspects such as aesthetics, open space provision, sense of place and community must not be compromised.

This research is focussing on implementation of low carbon precincts in an Australian context.

Identifying mechanisms to mainstream low carbon precinct delivery will provide a great opportunity for incrementally decarbonising Australian cities.

## Benefits

Beneficiaries of this research will include:

- Policy makers that influence urban planning outcomes
- Developers interested in best practice in precinct scale sustainable urbanism
- Community groups and individuals interested in grass roots delivery of sustainable communities.

By describing development delivery mechanisms of selected exemplar projects we expect to reveal social and policy tools that may help overcome market barriers that currently hinder widespread delivery of cost effective sustainable urbanism and low carbon precincts in Australia.

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