

Governance and community engagement for mainstreaming low carbon housing precincts.

Research Question

How can community engagement and participation, in the early planning and subsequent activation of an infill residential precinct, impact on innovation within the precinct?

Why does this matter?

- because distribution of technological innovation requires uptake by innovation-savvy users.
- because human social practices create the context that influences the adoption of innovation.
- because collective challenges, such as sustainable living, require a community level approach.



Figure 1: WGV Community information session May 2016. (Image courtesy LandCorp)

Methodology

- Examine a real-life residential development in Western Australia: the WGV living laboratory.
- Carry out research in two stages:
 - Stage 1 – examine governance process during planning phase (interviews, co-creation workshop)
 - Stage 2 – examine how residents inhabit the precinct. (observation, interviews, participatory community workshops)

Research Background

The WGV living laboratory:

Suburb: White Gum Valley
 LGA: City of Fremantle
 State: W.A.
 Developer: LandCorp (WA govt agency)



Figure 2: Artist's impression of WGV, surrounded by low density housing (Image courtesy LandCorp)

Innovations @ WGV:

- One Planet Living (OPL) – Australia's first master planned One Planet Community.
- Co-operative social housing – affordable housing + artists studio for SHAC (Sustainable Housing for Artists and Creatives).
- Gen Y demonstration house – a design competition for sustainable, flexible, affordable housing for Gen Y home buyers.
- Sustainability design guidelines (for single lot buyers) – passive solar design, 1.5kW PV, dual plumbing.
- Sustainability package for buyers – PV upgrade to 3.5kW, 3000L plumbed rainwater tank and mature deciduous tree.
- Revitalisation of old drainage sump – nature play public space.
- Renewable energy – PVs on all dwellings and shared PV + battery storage on strata properties.
- Water wise exemplar project – non potable water alternatives: a community bore and rainwater tanks.
- Apartments + maisonettes – increased density, and design tenders with sustainability criteria.
- Baugruppen demonstration project – individuals as co-operative developers.

Conclusions

The aim is to generate future frameworks for engaging with community in decision-making...

- to address a major barrier to infill development ie. gaining community support.
- to know how/when to engage with community to facilitate innovation.
- to identify institutional change required for innovation at the precinct scale.

“It’s about understanding human social practices, because these create the context for the adoption of innovation.”

Anticipated impacts

...local government - understanding what factors impact on achieving densification, diversity in housing and citizen’s sharing the responsibility for desired outcomes.

...industry - discovering scope to connect consumers with innovative technologies/products.

...developers - knowing when and how to engage with community to achieve innovative sustainable outcomes.

...local community - facilitating active citizenship through decision-making processes.

...society - identifying and addressing organisational and institutional barriers to achieve precincts that support innovative sustainable living.



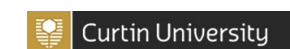
Figure 3: Community members explore the revitalised drainage sump - now transformed into a nature playspace. (Image courtesy LandCorp)

Further information

WGV - Innovation through demonstration: <http://tinyurl.com/j4pjhkj>

CRCLCL research project details: <http://tinyurl.com/zjkwu22>

Project partners



Contact:

Tanya Babaeff BComm MSustainabilityClimPol
 Curtin University (CUSP)
Tanya.Babaeff@postgrad.curtin.edu.au