

# NP2003: CURTIN UNIVERSITY NODE OF EXCELLENCE: REGENERATIVE CITIES AND REGIONS. INNOVATING IN AN INNOVATIVE CITY

## Research Question

How can universities, industry and society partner to deliver low carbon innovation suitable for the Anthropocene?

Figure 1: Greater Curtin redevelopment underway



## Methodology

The research methodology is based on heuristic enquiry. This is an immersive methodology where the life experiences of the researcher as well as those researched inform the research outputs.

My research is in three phases:

- initial question setting and literature review;
- semi-structured interviews to better develop an understanding of the gaps in research and practice followed up by a survey of all Australian universities to develop an understanding of current practice;
- followed by workshops to develop a solution that delivers the benefits outlined in table 1.

## Results so far

My initial work has been around understanding the baseline for

university/industry partnership for low carbon collaboration. To date I have been looking at Universities' performance in:

- a. delivering low carbon campus (re)development
- b. adoption of their own research; and
- c. partnering with business to commercialise that research.

I have conducted semi-structured interviews to better understand these issues. The high level results from these initial interviews show:

1. little evidence of seeking innovation in both the process or product;
2. little evidence of a desire to understand the potential of the redevelopment to deliver research or teaching outcomes;
3. little evidence of discussions happening between academics and professional staff to inform the redevelopment

As the analysis was not undertaken many, if not all opportunities to derive teaching and research outcomes as part of the process have not been realised – and it is not clear how they will be.

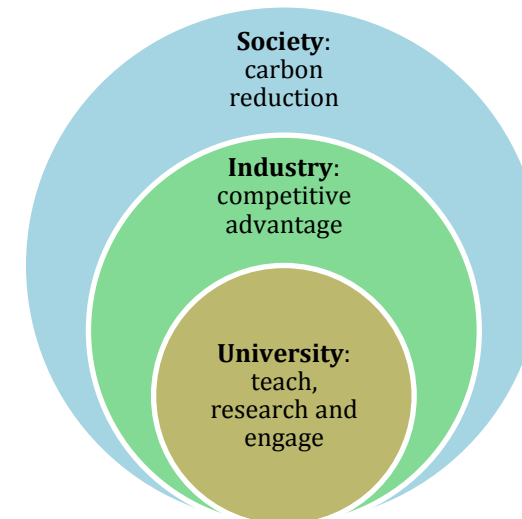
There are many concerns within Universities and their advisors about the risks (financial and time) associated with using campus development to innovate or develop research. The adoption of climate science in redevelopment to multiply the perceived risks

A willingness to consider doing things differently was regularly communicated.

In order to understand the potential benefits of a more integrated model the benefits would need to be clearly demonstrated.

These results are supported by the literature – particularly around path dependency theory. Further work (currently in progress) is looking at both the issue of leading by example and how to overcome evidenced resistance to change. My hypothesis is that unless these issues can be resolved the gap between what we say and what we do will be sufficient to remain a barrier to effective partnerships.

Table 1: Developing the evidence based university



The next stage of my research will be to conduct an online survey across all Australian universities to get a better understanding of these issues and to develop an understanding of the baseline of practice in Australia.

## Conclusions

Ultimately I want to develop a business model that demonstrates the value to the university sector, business and

government of using campus development as a national innovation park to develop climate compliant products and services with the construction industry.

## Anticipated impacts

This research could provide evidence for three things:

1. for policy makers to consider how universities could leverage funding
2. for universities and business to better understand the potential for using their capital resources to partner to innovate and deliver teaching and research outcomes fit for the Anthropocene.
3. For further research as this work develops the concept of the 'entrepreneurial' university by incorporating the arguments about a scientific social contract.

## Further information

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Figure 2: Greater Curtin in 2020.

