

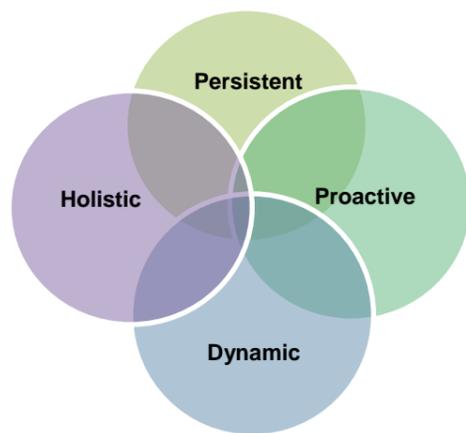
# NODE OF EXCELLENCE IN HIGH PERFORMANCE ARCHITECTURE

## URBAN SUSTAINABLE RESILIENCE: A POLICY FRAMEWORK

### Research Question

- What are the **characteristics** of resilient cities and policy that are sustainable over time?
- What **conditions** are needed to achieve sustainable resilience?
- What are the **drivers, implementation enablers and gaps, and governance tools** which are important for the successful implementation of a *sustainable resilience* urban policy?
- What **indicators** can be used to evaluate and compare sustainable resilience policies across cities, states and countries?

Figure 1: Pillars of Sustainably Resilient Systems.



### Methodology

**Systematic Literature Review** – map current urban resilience concepts and characterise sustainable resilience (emerging, tailored concepts). This will inform the development of a Sustainable Resilience Policy (SRP) framework.

**Expert Consultation** - test the completeness, usefulness and relevance of the SRP framework developed.

**Desktop Case Study Series** – test practical application of SRP framework; analyse processes and content of urban resilience policies across global cities and Australian programs; and identify drivers, gaps and success factors.

**In-Depth Australian Case Studies** – test the SRP framework with a higher level of detail; analyse processes and content of urban resilience policies in Australian cities with high-rating RSP to identify drivers, success factors and gaps; and work collaboratively with the case study city councils in order to provide relevant recommendations.

### Results

This research **started in September 2015** and is due for completion in September 2018.

The systematic literature review is ongoing and has informed a working concept and draft framework. This framework consists of four pillars, seven core characteristics and four policy qualities. These **early results** are being prepared to be presented at the **CIB World Building Congress 2016 in Finland**.

An initial list of case studies has been developed and data is being gathered for the desktop case study series. These currently include **cities across North America, Europe, Asia and Australia/New Zealand**. Within Australia the research has additionally identified **state-level urban resilience**

**policy programs** that can be leveraged by individual councils to fund their resilience initiatives. These programs will also be included in the study in order to have a broad range of policy types.

This project is already attracting interest nationally and internationally from the academic, policy and practitioner communities.

### Conclusions

Australia, like most countries globally, is likely to face significant challenges in the coming years that will test the resilience of its cities. Current resilience policies are often focused on reactive disaster management and have an engineering view of the issues. This approach is unlikely to provide cities with sufficient tools to allow communities to cope with the uncertainty and wide range of changes expected for Australia.

Figure 2: Picture by Sony published in the Daily Telegraph (08 September 2012) illustrating CSIRO study of projected climate change effects across Australia.



New forms of tailored resilience policy that are driven by sustainability principles are emerging and gaining support internationally across academic and global organisations. This research

aims to provide an applied framework to improve policy development and evaluation for more sustainably resilient cities in Australia by leveraging on this global trend and identifying practical policy implications.

### Anticipated impacts

The applied outcomes of this research will help build resilience of urban centres in Australia in a sustainable, as opposed to simply reactive, manner. This will reduce economic, social and environmental impacts of unforeseen and hard to predict future environments by providing tools to develop and improve proactive and reflective policy.

**How to develop and evaluate policy that ensures city resilience is persistent, proactive, holistic and dynamic?**

### Further information

**For more information please see contact details below.**

### Contact

Adriana X Sanchez

PhD Candidate

CRC for Low Carbon Living - UNSW Node

[a.sanchezgomez@student.unsw.edu.au](mailto:a.sanchezgomez@student.unsw.edu.au)

Twitter: @axsanchezg

<https://au.linkedin.com/in/adrianaxsanchez>