The latest in climate adaptation research, news and events

Towards a Resilient Sydney

The Sydney region is a collection of 41 local councils and 4.2 million people. Supporting the region is a mass of assets and infrastructure managed by different tiers of government and the private sector. How should such a large, diverse and complex system adapt to climate change?

After several years of work, the five Towards a Resilient Sydney project reports are now online. 270+ participants from local, state and commonwealth government, universities and key organisations engaged in the project, led by the Office of Environment and Heritage, in partnership with the Department of Planning and Environment, the Sydney Coastal Councils Group and the Western Sydney Regional Organisation of Councils.

This cross government initiative has created a knowledge bank on urban adaptation, and built capacity to inform and enable best practice adaptation in Metropolitan Sydney. Read the Research Synthesis or the full reports.
Food security was identified as a threat to the Sydney Region - watch a quirky animation on Sydney's food security, and check out the newly launched [Sydney Food Futures website](#).

Congratulations to the [Round Two winners of the Building Resilience to Climate Change grants](#). 8 successful projects were selected from over 30 applicants. These projects aim to support local action to deal with climate change risks and vulnerabilities.

**BRCC Grant - Climate Adapted People Shelters (CAPS)**

This uninspiring bus shelter is like many across Western Sydney - poorly designed and offering little

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**Competition winner: How do you explain adaptation?**

Andrew Docking (DPI):

"Adaption is preparing and managing a change in business environment to minimize the risks to ensure business continuity. For example, a drought focusing farmers to be more water wise, changing their old irrigation equipment to more efficient water saving devices and management. I.e Water Smart Farms provided incentives to farmers to purchase equipment and undertake training in exchange for water savings. Results not only prepared farmers in the case of restricted water allocations there were also cost savings."

This month's question: **Give an example of local adaptation you've seen in your community. Win a climate friendly prize!**
shelter from extreme heat. However these spaces are used by our most vulnerable - the aged, school children and others who rely on public transport. Western Sydney is projected to get hit with another 7 days per year of days above 35°C by 2030. How can we rethink the way bus shelters are designed to cope with a hotter climate?

If you’ve got ideas, enter UTS’s Climate Adapted People Shelters (CAPS) design competition. The project is a collaboration managed by the Adaptation Research Hubs – Adaptive Communities Node (hosted by ISF). CAPS wants to develop new concepts for urban infrastructure that are innovative, low cost and climate adapted. A prototype of the winning entry will be built and installed in Western Sydney, but it is hoped the successful designs might provide a blueprint for application across Sydney’s wider transport system. The competition is open from now - find out how you can participate here.
CoP21 and Adaptation - Barbara Norman, Director
Canberra Urban & Regional Futures, University of Canberra

In the aftermath of the Paris climate change talks much of the action will be at the sub national level and many of the solutions will be through our cities and regions.

I had the privilege of participating in COP 21 as part of the Australian National University delegation. It was a moment of global significance culminating in the signing of a new climate change agreement by nearly 200 countries. Australia’s final commitment was to reduce emissions to 26-28 per cent on 2005 levels by 2030 with a commitment to review its domestic policies in 2017. This leaves the door up to strengthen the targets in the near future.

While the focus was clearly on the global negotiations, in another hall adjacent there was substantial activity at the sub national level showcasing leading practice on mitigation and adaptation at the state, regional and local level. There was indeed healthy competition between the Australian capital cities notably Sydney, Canberra, Melbourne and Adelaide as to who would be first to be carbon neutral in city operations. Time will tell!

Cities consume 78% of world’s energy and produce 60% of all carbon. The UN Secretary-General Ban Ki-moon has stated clearly that sustainable futures will be found through the planning of our cities. This was emphasised again in the recently adopted UN Sustainable Development Goals (September 2015 New York with Australia as a signatory). The UNSDGs together with COP 21 provide a solid foundation for global action on developing more environmentally and socially sustainable cities.
Three key steps in Australia could help translate these global agreements to solutions on the ground. The first is to revise our capital city plans to be ‘climate ready’. The second is to invest in strategic planning to better manage our urban growth. The third is to increase our urban resilience by working with and our strengthening our communities. This is a great opportunity to reinvigorate the future planning of our great cities with our urban and regional communities.

Beaches bouncing back from last April’s storm

The huge East Coast Low storm that hit the NSW coast in April last year generated waves of up to 15 m in height and caused widespread erosion across many NSW beaches. Regular coastal monitoring at Narrabeen-Collaroy Beach by the UNSW School of Civil and Environmental Engineering’s Water Research Laboratory reveal that while the beach retreated some 30 m due to the storm, in the prevailing 10 months the beach has slowly recovered. “The storm stirred up a lot of sand and pushed it towards the northern ends of many beaches” explains Dr. Mitchell Harley, of the Water Research Laboratory and manager of the Narrabeen-Collaroy coastal monitoring program. “This effectively stripped the southern ends of sand, exposing the dunes at these sections to erosion that lasted several months. It is only recently that this sand has come back and the beaches are starting to look healthy again”. UNSW is assessing the impacts of East Coast Lows on the NSW coastline as part of the AdaptNSW Coastal Node.
Images: Narrabeen-Collaroy Beach at the peak of the April 2015 storm. The same beach stretch in February 2016 (10 months later). Images taken from the Narrabeen-Collaroy Coastal Imaging Station

Publications, events, news and grants

Publications

Read full papers from the 2015 NSW Coastal Conference


Conferences / events

Climate Adaptation 2016 National Climate Change Adaptation Conference, 5-7 July, Adelaide. The theme for this biennial event is 'Change: Challenge: Opportunity'. Abstracts now open.


The Small Changes environmental conversation series 2016

Coastal vulnerability to sea level rise - 23 March
How to talk about climate change without talking about climate change - 13 April
Plastic water: The social and material life of bottled water - 18 May