

Darwin Living Lab

Science and collaboration to support a liveable, sustainable and resilient city

Overview

The Darwin Living Lab was established to foster improvements to the liveability, sustainability and resilience of the city. Our aim is to: accelerate the development and validation of innovative approaches for heat mitigation of the CBD's streets and suburbs, to improve urban design for the dry tropics, and to build the city's resilience to the current and future climate. We will do this by collaborating with local, interstate and overseas practitioners, planners, developers, governments and scientists whose ideas have the greatest potential to work for Darwin. In turn, the lab will help Darwin to develop into a thriving, cool capital of northern Australia.

Focal areas



Smart City Initiatives – Stimulate innovation and learning for a more connected and liveable Darwin



Heat Mitigation – Support the validation of water-sensitive urban cooling trials, including monitoring and benchmarking outcomes



Energy Efficient Design – Trial and validate new approaches for delivering accessible energy and water efficient design and strategies for the tropical north







About the Darwin Living Lab

The Darwin Living Lab is a 10-year collaboration between CSIRO, the Australian and Territory Governments and City of Darwin. It will test and evaluate urban innovation ideas from the Territory and around the world in 'real world' experiments.

The initiative began in July 2019, and creates a place where researchers, industry, government, regulators, developers, businesses and the community can work together to address some of the environmental, social, economic and technological challenges facing Darwin.

During its first year, the lab is focused on delivering key projects and laying the foundations for long term collaboration and outcomes to make a positive impact for Darwin.

CSIRO's Urban Living Labs

CSIRO, through its Future Cities initiative, is developing a portfolio of Urban Living Labs. Our aim is to create labs across Australia, spanning different climates and urban development contexts. As well as establishing the Darwin Living Lab as part of the Darwin City Deal, we have set up Labs at Sydney Science Park in Western Sydney and at Ginninderra, Canberra.

The Darwin Living Lab's first phase priority projects and outcomes

- Develop a Heat Mitigation Strategy for Darwin in collaboration with our partners to improve liveability and to cool the city.
- Bring together leading experts from the Northern Territory, Australia and overseas to exchange ideas and collaborate on Darwin's challenges, and engage the community in the work of the Darwin Living Lab at our Inaugural Symposium on 12–13 December, 2019.
- Create a Your Tropical City website combining science and local knowledge to provide an accessible resource for Darwin on ways to cool streetscapes, adopt climate-sensitive approaches to design, and utilise living strategies appropriate to the dry tropical climate.
- Tracking Darwin develop a monitoring and evaluation approach to track the changes we make together for Darwin.
- Translate knowledge and experience through the Darwin Living Lab into products/services for other tropical cities in Australia and broader Association of Southeast Asian Nations (ASEAN) region.



As Australia's national science agency and innovation catalyst, CSIRO is solving the greatest challenges through innovative science and technology.

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For further information

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