




WESTERN SYDNEY
UNIVERSITY



URBAN TRANSFORMATIONS RESEARCH CENTRE

UNLOCKING POSSIBILITIES

4 NOVEMBER 2022

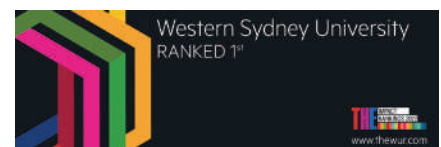


The Urban Transformations Research Centre addresses one of the greatest challenges facing humankind: making cities and human settlements inclusive, safe, resilient and sustainable.

**BOLDNESS, FAIRNESS,
INTEGRITY, EXCELLENCE.**

Our Western Sydney University's values frame how we at the Urban Transformations Research Centre think and act. We are committed to:

- Enabling our communities and infrastructure to be sustainable, equitable and resilient.
- Delivering action-oriented research and innovation in partnership with industry and society.
- Leading urban transformations research and innovation in Western Sydney and across the world.



Our Centre has the drive, support, and ability to take leadership and unlock possibilities in Western Sydney and across the world.

The Centre draws on expertise from across Western Sydney University, and within the community, to deliver outcomes based on exemplary demonstration of action-oriented research that will enable impact at scale. We will demonstrate what is possible through the adoption of innovation, becoming a global showcase for urban transformations.

LEADERSHIP OF THE URBAN TRANSFORMATIONS RESEARCH CENTRE

The Centre is led by the Directors Professor Nicky Morrison and Professor Greg Morrison.

Nicky Morrison is the Professor of Planning at Western Sydney University. Nicky is a leading authority on delivering healthy and sustainable communities and securing affordable housing through the planning system. Nicky is Western Sydney University's academic lead in delivering Penrith Sustainable Community.

Greg Morrison is the Lang Walker endowed Chair in Urban Transformation. Greg is a leader in environment and environmental engineering. Greg has made demonstrable impact in Circular Economy, Net Zero, Living Labs, climate adaptation and innovation.

The Centre will be guided by an External Advisory Board of highly qualified, nationally respected, and passionate industry leaders chaired by Monica Richter.

Monica is a Western Sydney University Alumnus and the Senior Manager at the Low Carbon Futures, WWF Australia. She is an economist and social ecologist, strategic collaborator, and problem solver. Monica has extensive experience working across business, government and the NGO sector pursuing ambitious zero carbon and circular economy solutions.

The Centre works with experts and politicians, visionary leaders, and passionate communities to deliver projects that can be universalized and replicated in communities across Australia and the world.

Tackling complex urban challenges requires the involvement, commitment, and co-ordination of multiple organisations, stakeholders and end-users working together in collaborative, innovative ways. It requires leadership. It requires challenging conventional thinking and ways of working.

The Centre is affiliated with Western Sydney University's Institute for Culture and Society, and the Schools of Engineering, Design and Built Environment and the Social Sciences. We harness transdisciplinary research capabilities from across the University to solve the complex challenges facing our contemporary built environments.

Complex change can only occur through a transdisciplinary, systematic approach to designing and delivering the future needs of Western Sydney and beyond.

TRANSFORMATIVE RESEARCH

The Centre's transdisciplinary teams transcend three interrelated Research and Innovation programs:

SYSTEMS INNOVATION AND DEMONSTRATION

This program tackles the complex interconnected aspects of energy, water, transport, and resource systems. It draws on systems expertise from across the University, with an emphasis on life cycle and circular economy assessment, net zero analysis and urban metabolism modelling. The program contributes to net zero buildings and precincts by guiding the use of materials and their provenance towards reuse and recycling at scale.

PEOPLE-CENTRED SUSTAINABLE PRECINCT DESIGN

This program focuses on the delivery of healthy, inclusive, and resilient urban places. It draws on the University's interdisciplinary excellence, from geography and urban planning, culture and society, design thinking, health, and environmental sciences. The program contributes to effective integration of sustainable design principles into planning practices, and enabling the creation of sustainable development outcomes at scale.

RESILIENT CONSTRUCTION AND INFRASTRUCTURE

This program centres on developing safe and resilient infrastructure, with enhanced resilience to extreme weather and natural disasters. It draws on the University's established strengths in the areas of construction sustainability, structural engineering, infrastructure safety, advanced engineering materials, advanced manufacturing, and construction management. The program contributes to improved and sustainable building materials and construction methods adopted at scale.

This land was created in the Dreaming.
And once we dared to dream.
But this century came the heatwaves and floods.
Now we dream to dare.

The Centre delivers impactful co-designed research outcomes,
in collaboration with our industry and community partners.

**Contact the Urban
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