

'Rebuilding the Future: How Circular Thinking is Changing the Way We Build'

By Dr Roberto Minunno

Friday, 24 October 2025

1:45pm to 4:00pm (Jakarta time)

Indonesian graduates and scholars of Australian tertiary institutions who are interested in attending this event, please RSVP by Wednesday, 22 October, via this link:

<http://oz.link/rsvpGL24OCT>

**Due to the limited availability of places, early registration is recommended. A link to this event will be shared with you after registration.*

Lecture overview

Societies around the world generate vast amounts of waste across industries, with the built environment among the largest contributors, responsible for nearly 40 per cent of global waste generation. From construction and operation to demolition, this sector consumes enormous resources and leaves a lasting environmental footprint. Addressing these challenges requires rethinking the traditional 'take, make, dispose' model and embracing a circular economy, where materials are reused, recycled and designed for longevity. Dr Roberto Minunno from Curtin University is at the forefront of this shift, leading research that bridges practical innovation with large-scale monitoring to demonstrate how waste in the built environment can be significantly reduced.

Dr Roberto Minunno ranks among the top 1% of scholars in the field of circular economy (source: ScholarGPS). He leads a range of projects that advance the circular economy of buildings and resources, with his flagship initiative being the Legacy Living Lab, a modular, disassemblable and reusable office that embodies circular design principles in practice. He currently serves as Co-Director of a Western Australia State-wide project developing digital tools to track waste and material flows across Australia. In addition, he is the Courses Coordinator for the Masters of Environment and Climate Emergency at the Curtin University Sustainability Policy (CUSP) Institute.

Dr Roberto completed his PhD at Curtin University, where he focused on the circular economy of buildings. Dr Roberto's research applied Life Cycle Assessments (LCA) and circular economy indicators to evaluate the environmental performance of products and processes. During his doctoral studies, Dr Roberto and the CUSP team conceptualised and developed the Legacy Living Lab, a movable and modular building designed for reuse and adaptability. Now based in Fremantle, the Lab serves as a vibrant hub for research, innovation and industry collaboration.

Dr Roberto also brings methodological expertise in Systematic Literature Reviews (SLRs), enabling him to analyse and synthesise academic findings that inform evidence-based approaches to sustainability and circular design.

This lecture will spotlight two groundbreaking initiatives: the **Legacy Living Lab** and the **WATCH Project**. The Legacy Living Lab is a modular, prefabricated structure designed for disassembly and reuse. It incorporates reclaimed materials, recycled components and smart energy systems, proving that sustainable construction can coexist with high-quality design. Meanwhile, the **WATCH Project** (Western Australian Tool for Circular Horizons) operates at a regional scale, using digital mapping and key indicators to track material flows, monitor waste and support circular economy strategies across Western Australia.

Together, these initiatives illustrate how combining hands-on building innovation with data-driven policy tools can transform the built environment, turning one of the world's largest waste producers into a model of sustainability and resource efficiency.



★ **Dr Roberto Minunno**
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