Our mission is to assist in the rapid decarbonisation of our built environment. Our research and industry collaborations facilitate effective new approaches to retrofitting buildings sustainable. We are pioneering research and industry collaborations to address the challenges of making buildings more livable, more sustainable, more cost-effective, and more resonant with nature and is represented throughout our innate connection to the great outdoors and our respect for water as a precious resource.

**RESEARCH STRENGTHS**

Out themes and areas of research are diverse, all focused on making buildings more livable, more sustainable, more cost-effective, and more resonant with nature and is represented throughout our innate connection to the great outdoors and our respect for water as a precious resource.

**ENERGY**

- Net Zero Energy
- Solar Photovoltaics
- Hybrid Power
- Internal Green Walls
- Advanced Energy, Water, and Emissions Reduction
- Advanced Energy, Water, and Emissions Reduction

**WATER**

- Net Zero Water
- On-site Rainwater Harvesting and Water Reuse
- Water Management

**HEALTH**

- Biophilia
- Human Factors
- Resilience and Climate Adaptation
- Measuring and Decision Support

**MATERIALS**

- Locally Sourced Materials
- Recycling and Reuse
- Environmentally Safe Materials

**SITE**

- Urban Agriculture
- Urban Agriculture
- Urban Agriculture
- Urban Agriculture

**BEAUTY**

- Building Layer and Envelope
- Three vertical green walls within the office space naturally cleanse the air and add to the building’s aesthetic appeal.

**EQUITY**

- Human Powered Living
- Pedestrian Oriented
- Dedicated cycling facilities

**LEADERSHIP**

- Taylor Brammer
- Cardno

**SITE**

- University of Wollongong

**PROJECT TEAM**

- McCallum PFCA
- Medland Metroplis
- Cundall
- TLB Engineers
- Thwaite Consulting Group
- Junglefy
- Acoustic Studio
- Energy Matters
- Baulderstone Pty Ltd
- Building Contractor

**FACILITIES**

- University of Wollongong’s Innovation Campus
- One hour south of Sydney at the University of Wollongong’s Innovation Campus
- Living Building Challenge™ Program

**SUSTAINABILITY TARGETS**

- Ultra-low energy consumption
- The first 6 Star Green Star design rated building in the Illawarra
- The first certified Living Building in Australia under the International Living Building Challenge
- The first Net Zero Carbon Design certified building in Australia
- Ultra-low energy consumption

**SDRC FAST FACTS**

- Location: University of Wollongong's Innovation Campus
- Annual Weather:
  - Location: University of Wollongong’s Innovation Campus
  - Annual Weather: An average of 1000mm annual rainfall of 1000mm
  - Location: University of Wollongong’s Innovation Campus
  - Annual Weather: 200+ sunny days with an average 200+ sunny days with an average
  - Location: University of Wollongong’s Innovation Campus

**PROJECTS**

- Advanced Energy, Water, and Emissions Reduction
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The Illawarra Flame House welcomes everyone to take a tour at their leisure. Team UOW students who were involved in design and construction as well as being present in China are in the house ready to show you why the Illawarra Flame is an international, multi-award winning net-zero energy house. A few of the tests measured in the Solar Decathlon will be demonstrated and the team are willing to answer any questions you may have about the design, retrofit technologies and what it was like competing in Datong, China!