

# A GREENER FUTURE FOR CONSTRUCTION

## FINDING SOLUTIONS WITH INDUSTRY



THE UNIVERSITY OF  
NEWCASTLE  
AUSTRALIA

DR JOSEPHINE VAUGHAN

Working with industry partners on ecologically sustainable construction.

Using industry-focused research to study the impact of buildings and building materials on the natural environment and human health, Josephine has a vision of a future with greater uptake of environmentally sustainable construction practices worldwide. Josephine teaches and conducts research in the fields of Construction Management and Architecture. Josephine's expertise is in the areas of environmental sustainability, building materials, embodied carbon, circular economy, community, traditional knowledge and the relationships between nature and buildings.

### COMPETITIVE ADVANTAGE

- Track record in leveraging financial, academic and multidisciplinary support from the university and a broad network of existing partners
- Researcher, consultant and designer with a big picture understanding of the small variables that contribute to environmental impacts
- Uniquely placed to deliver collaborative solutions to challenging construction problems.

### PARTNERS

- Brickworks Australia
- Footprint Company
- Material & Embodied Carbon Leaders Alliance (MECLA).

### SUCCESSFUL RESEARCH APPLICATION

- A new mortar design enabling the reuse of demolished bricks
- Calculation of embodied carbon in buildings: the accuracy of data in embodied carbon inventories
- Hempcrete- testing and documentation
- Improving thermal comfort in modular buildings.

### MORE INFORMATION

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