

SBEnrc Project 2.11.5

Sustainable Procurement for Modern Methods of Construction

PSG #1 06/05/2026

Industry Chair: Davina Rooney
Project Leader: Yingbin Feng

Sustainable Built Environment National Research Centre AUSTRALIA

ACKNOWLEDGEMENTS

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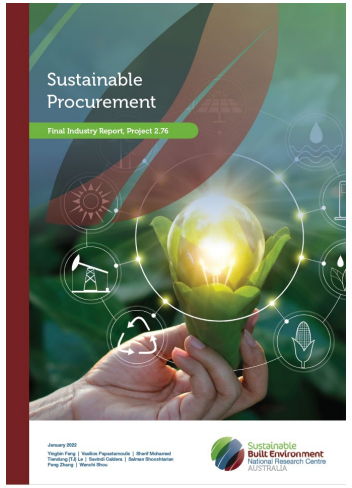
Sustainable Procurement Theme



2020

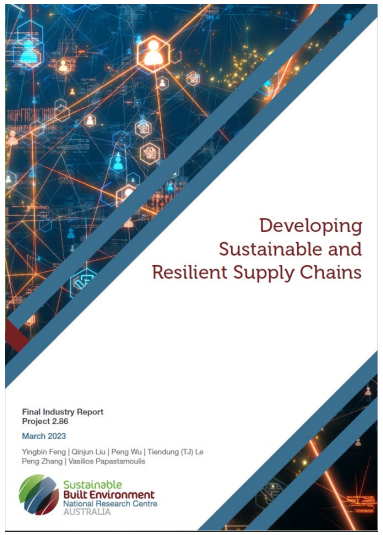
2.76 Sustainable Procurement

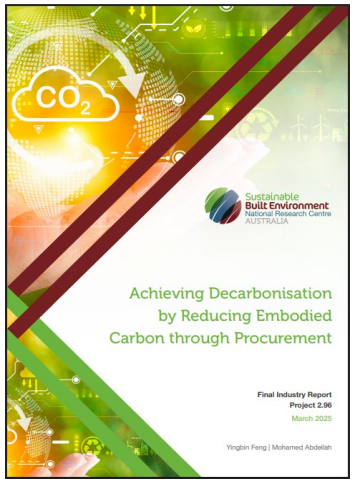
Barriers, drivers and enablers
Role of stakeholders
COVID-19 impact
Framework
Case studies

2.86 Developing Sustainable and Resilient Supply Chains

Maturity model
Maturity assessment and benchmarking tool
Impact of client/government driven initiative
Strategies

2021





2023

2.96 Reducing Embodied Carbon through Procurement

Pathways
Baselines and targets
Procurement criteria and checklist
Contract and incentives clauses

2.10.5 Procuring Building and Infrastructure Projects: Unlocking the Value of ESG

National Industry Survey
ESG in procurement strategy
Creating and measuring Social Value in procurement

2024







Industry Challenges

- Fragmented supply chains and inconsistent demand
- Capturing true value of MMC
- High upfront costs of off-site manufacturing
- Skills gap and long-term workforce transition
- Systemic barriers

PROJECT AIM

This project examines how sustainable procurement and associated market signals can enable the wider adoption and scaling of MMC in the housing, building and infrastructure sectors.

- Procurement-led enablers
- Non-price evaluation
- Workforce transition





PROJECT OBJECTIVES

1. Identify procurement strategies and mechanisms that support and accelerate the adoption and scaling of MMC in housing, building and infrastructure sectors.

2. Identify key non-price procurement criteria for MMC and develop measurable indicators that support supplier selection and post-award reporting.

3. Examine how sustainable procurement can support workforce transition by identifying skills gaps and capability development pathways required for scalable adoption of MMC.

Case study 1

Theme	Challenge	Partners	Approach
Sustainable procurement for scaling MMC in public infrastructure delivery	How a public infrastructure client can develop and use sustainable procurement strategies to de-risk, enable, and scale the adoption of Modern Methods of Construction (MMC) across infrastructure programs while supporting measurable non-price value outcomes and workforce transition.	**Lead industry partner**: Lidija Dumbaloska, Transport for NSW **Participating industry partners**: Main Roads WA, QLD Department of Transport and Main Roads	Focus on a selected infrastructure program or procurement package

Case study 2

Theme	Challenge	Partner	Approach
Sustainable procurement for scaling MMC in public housing and building programs	How a public housing or building client can structure sustainable procurement to accelerate MMC adoption at scale while delivering social value, carbon reduction, and workforce capability development outcomes.	**Lead industry partner:** Peter Vanderaa, QLD Treasury Peter Nelson, QLD Department of Housing and Public Works. **Participating industry partners**: WA Department of Housing and Works, DevelopmentWA, QLD Department of Housing and Public Works, Sunshine Coast Council	Program-level case analysis of a selected public housing or building initiative where MMC has been used or considered. Leverage the Queensland Government's program delivering 219 two- and three-storey social housing apartments across 17 sites.

Case study 3

Theme	Challenge	Partner	Approach
Sustainable procurement for scaling MMC: a supplier perspective	How procurement certainty and broader structural incentives can influence MMC investment decisions and workforce transformation, and move MMC from episodic adoption to systemic normalisation.	**Lead industry partner:** Karim Yngstrom, ATLAS **Participating industry partners:** WA Department of Housing and Works, QLD Department of Housing and Public Works, DevelopmentWA	In addition to public-sector procurement settings, the case study will examine how private developer requirements (e.g., lender expectations, valuation norms, and delivery risk perceptions) influence MMC consideration and supplier confidence.

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