SBEnrc Case Study Summary

Project Number & Title	SBEnrc Project 2.11.5 Sustainable Procurement for Modern Methods of Construction
PSG Chair	Davina Rooney, CEO, Green Building Council of Australia
Project Leader	Yingbin Feng, Professor, Western Sydney University

Case Study Title:
Sustainable procurement for scaling MMC in public infrastructure delivery

Overall Goal:
To examine 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.

Industry Partners and Offerings:
Lead industry partner: Transport for NSW

Participating industry partners: Main Roads WA, QLD Department of Transport and Main Roads

Objectives:
1. To identify procurement strategies, contracting mechanisms, pipeline strategies, and risk allocation approaches that support and accelerate MMC adoption within infrastructure programs
2. To develop infrastructure-specific non-price evaluation criteria (e.g., speed of delivery, health and safety, carbon footprint, local manufacturing capability, etc) and measurable indicators that can be embedded in tender evaluation and post-award reporting
3. To examine how procurement settings (e.g., contract duration, volume, capability requirements) influence workforce transition from site-based delivery to industrialised and digitally enabled production models.

Research Methodology and Data Compilation:
This case study will adopt a qualitative embedded case study approach focused on a selected infrastructure program or procurement package.

Data will be collected through semi-structured interviews with procurement leaders and project personnel; document analysis of procurement strategies, tender documentation, evaluation frameworks, and post-award reporting requirements; and targeted workshops to validate emerging findings.

The analysis will examine procurement design variables (e.g., risk allocation, contract model, pipeline strategy) and their influence on MMC uptake. Non-price evaluation criteria will be mapped and assessed for measurability and integration into existing evaluation processes. Workforce implications will be analysed by linking procurement requirements to capability development obligations embedded in contracts. Findings will be incorporated into a procurement mechanism framework and non-price evaluation model specific to infrastructure delivery.

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Case Study Title:
Sustainable procurement for scaling MMC in public housing and building programs

Overall Goal:
To investigate 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.

Industry Partners and Offerings:
Lead industry partner: QLD Treasury; 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

Objectives:

1. To adopt a program-level approach to identify procurement strategies such as pipeline aggregation, panel arrangements, specifications, and long-term supply chain partnerships that create commercial certainty and enable scalable MMC delivery across multiple sites.
2. To identify and operationalise non-price procurement criteria relevant to housing and building programs (e.g., whole-of-life costing, embodied and operational carbon, speed of delivery, and health and safety) and develop measurable evaluation indicators
3. To examine how procurement requirements can support local manufacturing capability, skills development, apprenticeships, and workforce diversification in the transition to MMC-based housing and building delivery

Research Methodology and Data Compilation:
This case study will use a program-level case analysis of a selected public housing or building initiative where MMC has been used or considered. Specifically, it will leverage the Queensland Government's program delivering 219 two- and three-storey social housing apartments across 17 sites (targeting practical completion in mid-2026).

The research will combine procurement document review, interviews with client-side procurement and delivery teams, interviews with key delivery partners to understand implementation challenges and feedback on current processes.

A comparative analysis will examine how procurement processes can be optimised to increase clarity and accessibility. Particular attention will be given to how procurement structures create pipeline certainty, enable supplier capability development, and align with the Queensland Productivity Commission's recommendations for agnostic procurement.

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PSG Chair	Davina Rooney, CEO, Green Building Council of Australia
Project Leader	Yingbin Feng, Professor, Western Sydney University

Case Study Title:
Sustainable procurement for scaling MMC: a supplier perspective

Overall Goal:
While government procurement can influence MMC adoption within public programs, large-scale transformation requires sustained demand across both public and private markets. This case study therefore aims to examine how procurement certainty and broader structural incentives can move MMC from episodic adoption to systemic normalisation.

Industry Partners and Offerings:
Lead industry partner: ATLAS

Participating industry partners: WA Department of Housing and Works, QLD Department of Housing and Public Works, DevelopmentWA

Objectives:
1. To identify the procurement conditions, tender structures, structural demand signals, and contractual mechanisms that either enable or constrain supplier investment in MMC production capacity and innovation.
2. To assess which non-price performance indicators (e.g., carbon, capability, health and safety) suppliers can reliably provide and how these can be aligned with client evaluation frameworks and private developer risk profiles (including valuer and lender comfort).
3. To examine how procurement certainty, continuity of demand, and contract duration affect supplier decisions regarding workforce restructuring, digital capability development, factory-based production skills, and training investment.

Research Methodology and Data Compilation:
This case study will adopt a supplier-centred case study approach to examine how procurement signals and broader market levers influence MMC investment decisions and workforce transformation. 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.

Data will be gathered through executive and operational interviews (commercial, manufacturing, tendering, and workforce leads), analysis of recent tender submissions (won and lost), and review of internal investment and capability development planning documents where appropriate.

The case study will assess how tender structures, weighting, risk allocation, and pipeline visibility affect investment decisions, production scaling, and training commitments. The case study will also explore broader structural levers that may influence MMC uptake, including incentives, feasibility assessment requirements, evaluation weightings, and aggregated multi-project supply commitments. A gap analysis will be conducted to compare client-side non-price expectations with supplier data readiness and reporting capability.