

Infrastructure NSW

Decarbonising Infrastructure Delivery Policy

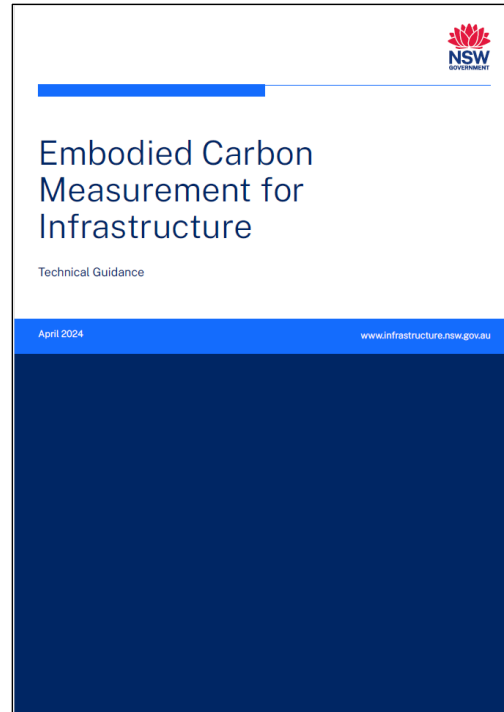
Ash Development Association of Australia (ADAA)
International Symposium

09 October 2024

James Logie, Director, Strategy Planning and Innovation
Infrastructure NSW



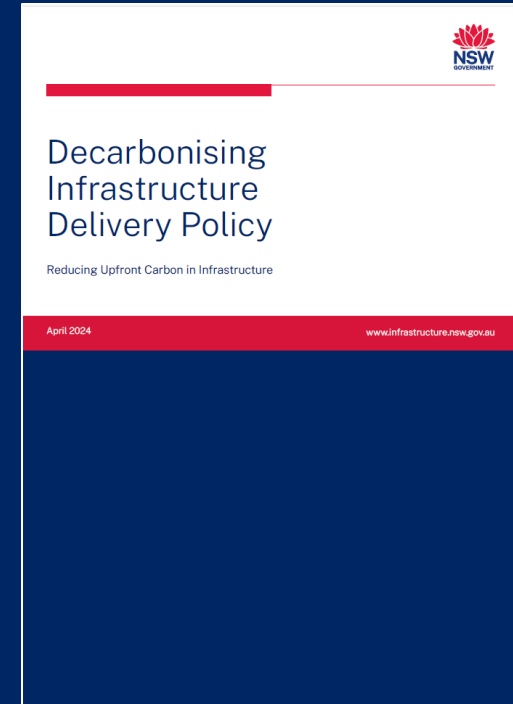
The Policy and Measurement Guidance



- The Policy adapts PAS 2080 and other international best practice examples
- It embeds consideration of embodied carbon in infrastructure decision making
- The Measurement Guidance aligns inputs and outputs for a consistent measurement approach for embodied carbon across asset types

01

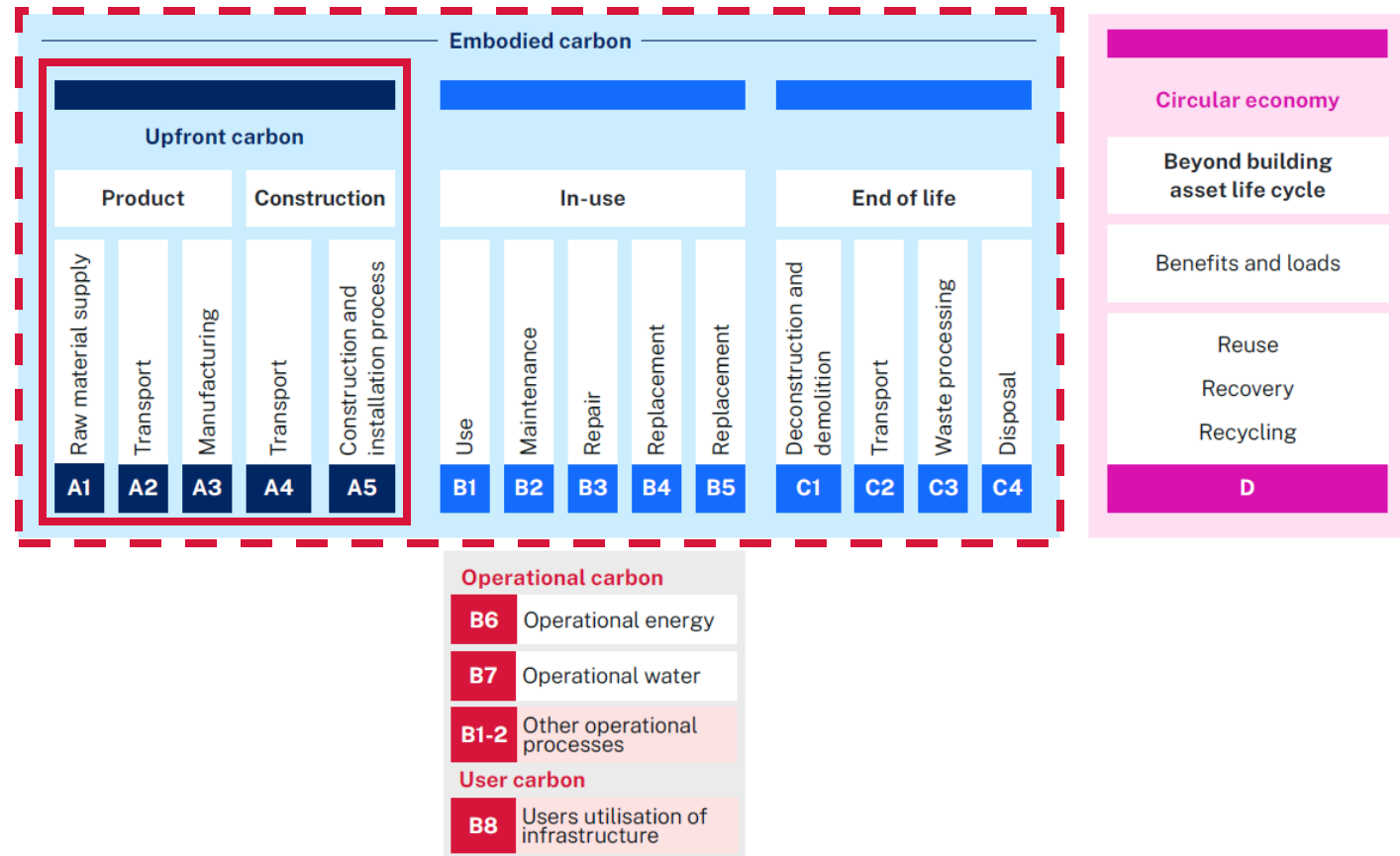
Decarbonising Infrastructure Delivery Policy



Policy scope and key directions

- Applies to all **NSW Government infrastructure delivery agencies** (excl. PNFCs, PFCs and local government authorities)
- Applies to projects over:
 - **\$50 million for building sector projects**
 - **\$100 million for other infrastructure**

Whole of life carbon





Principles underpinning the policy



Apply the Carbon Reduction Hierarchy



Assess the upfront carbon impact



Engage with the market



Develop a Carbon Management Plan

Applying the Carbon Reduction Hierarchy

1. Avoid

Consider 'no build' or 'low build' options for the service or asset.

For example:

- Refurbishment of existing bridge

2. Switch

Consider alternative project scope, design, technology and material options.

For example:

- Assess and compare structural options for a bridge: concrete, steel, timber
- Supplementary cementitious materials in concrete

3. Improve

Improve design and construction techniques to improve the use of resources and design life of an asset.

For example:

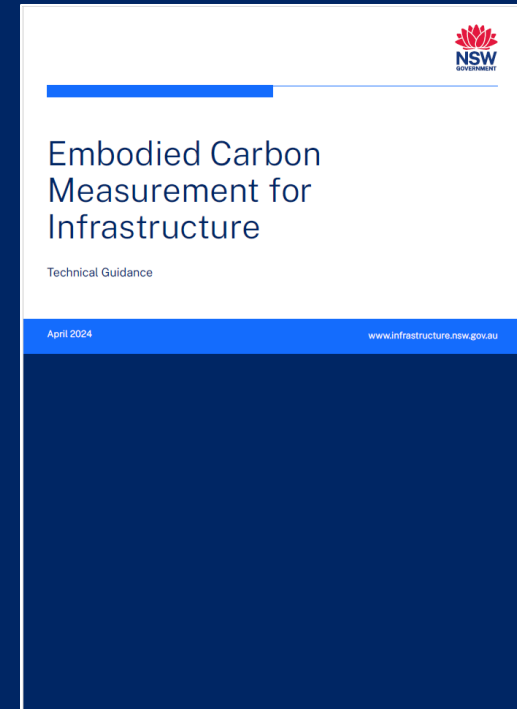
- Improving durability to extend design life of structural elements
- Design for disassembly (reuse and recycling)

← Increasing ability to reduce carbon emissions

02

NSW Government Measurement Guidance

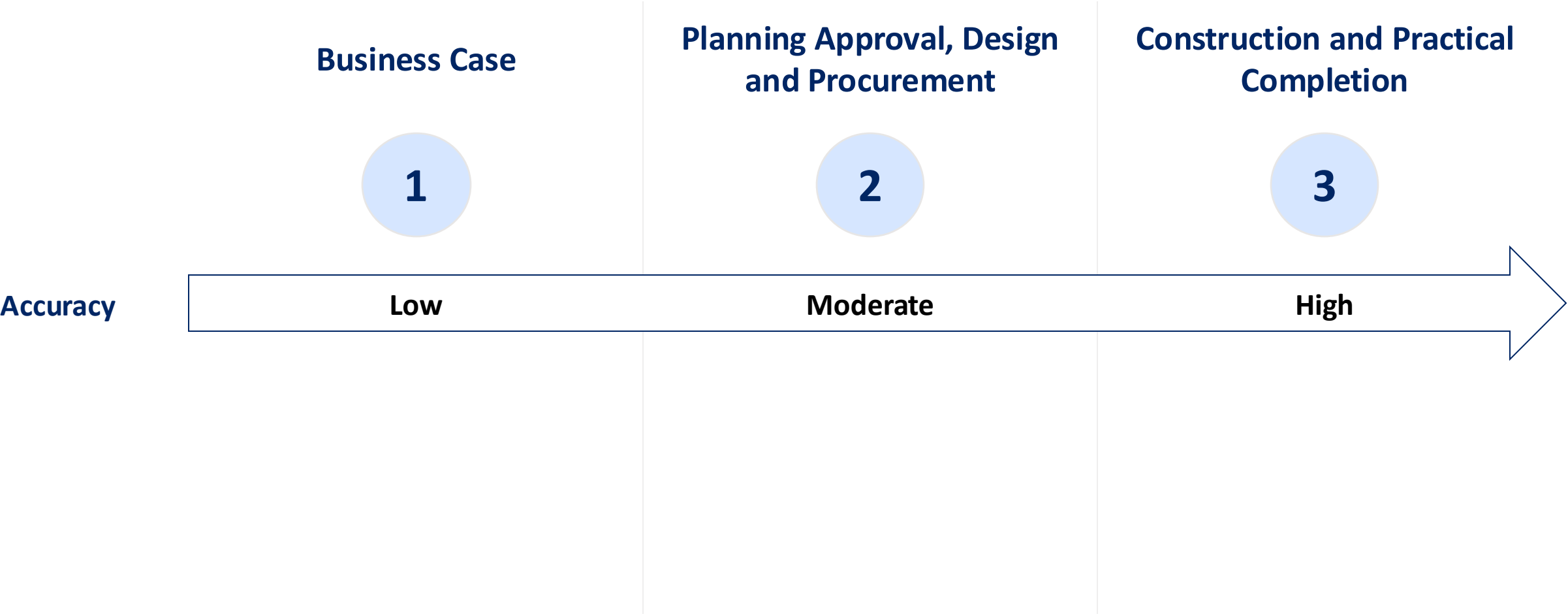
Technical Guidance: Embodied Carbon Measurement for Infrastructure



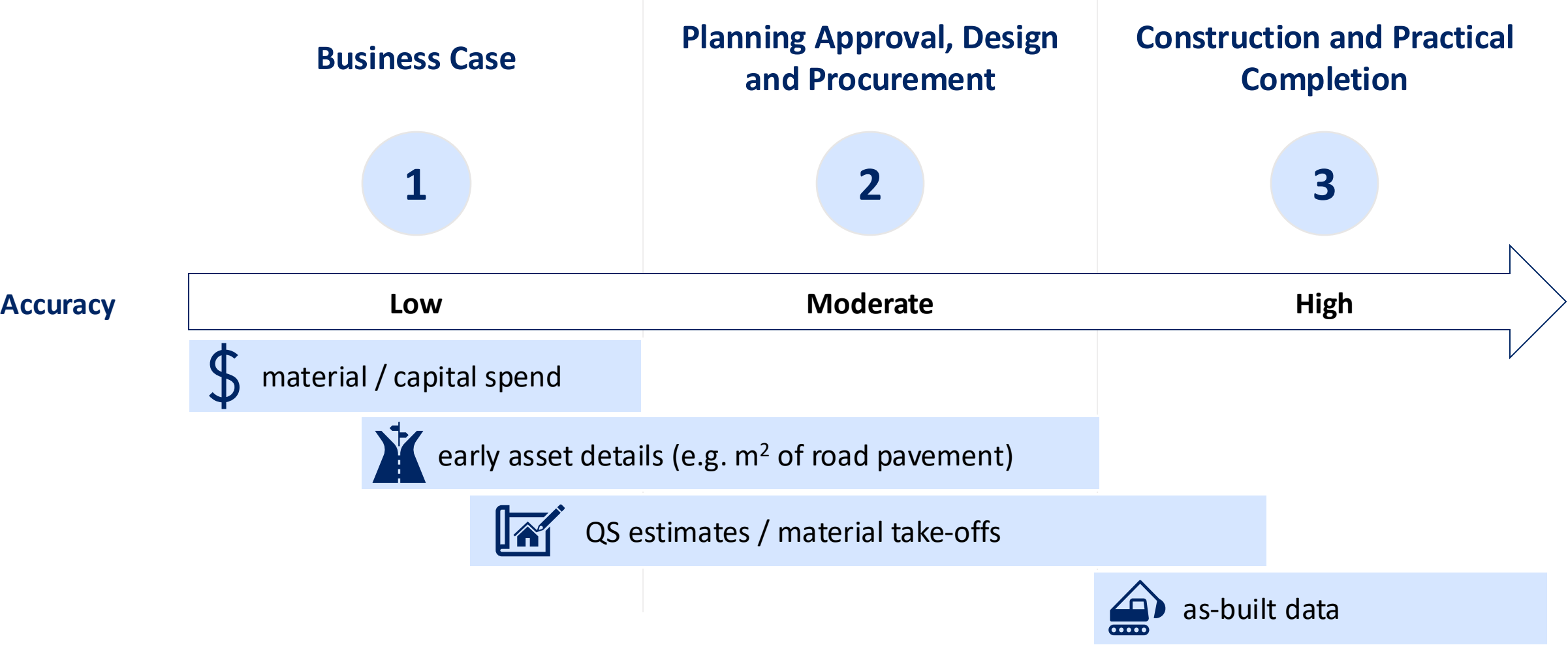
Measurement Guidance overview



Measure at three key project stages








Suitability of data at each project stage



03

Implementation

Implementation program overview

	Workstream	Description
	Capability uplift	Understand maturity and work collaboratively to increase it over time
	Toolkit	Develop tools and templates to help with compliance
	Measurement	Data collation and high-quality emissions factor library
	Monitoring approach	Final monitoring approach via the NSW EPA's Protection of the Environment Policy (PEP)
	Stakeholder engagement	Webinars and regular engagement with government and industry

Capability uplift



April - June 2024

Industry engagement, survey design and consultation



July - October 2024

Capability / maturity assessment and uplift plan



Q4 2024 +

Deliver uplift initiatives and training program

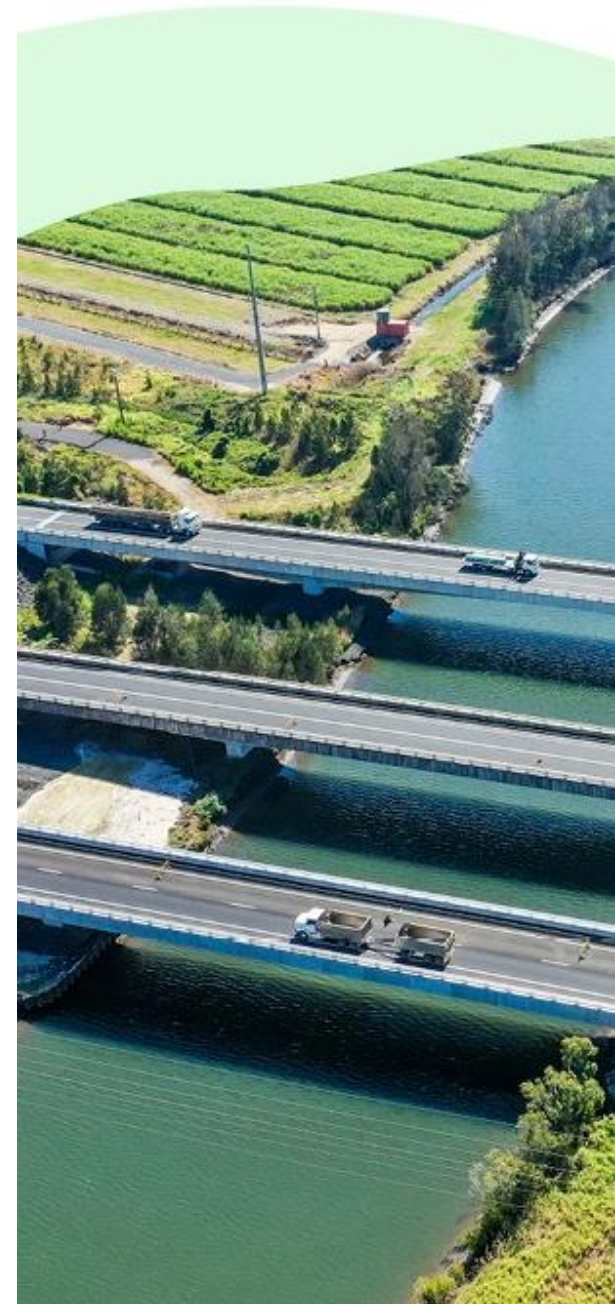


Green Building Council Australia



TAFE NSW

Infrastructure NSW is currently engaging with organisations including ISC, GBCA and TAFE NSW to investigate training options



Survey sneak peeks!



Most respondents have at least some understanding of upfront carbon



Government and industry are confident in each other's readiness



Industry have in house capability or know how to access expertise



Toolkit



Q1 2025
Carbon Management Plan template



Q1 2025
Procurement-related materials



Q1 2025
Other guidance, tools, and templates



Measurement



Q3 2024
National Measurement Guidance



Q1 2025
Emissions Factor Library



Mid 2025
Adoption by tool vendors

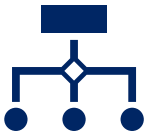


Monitoring and reporting approach



Q1 2024

Streamline reporting requirements



Q1 2025

Reporting framework/mechanism

NSW EPA's Protection of the Environment Policy (PEP)

Provides a compliance and reporting framework for the Policy

PEP public exhibition
(Q4 2024)

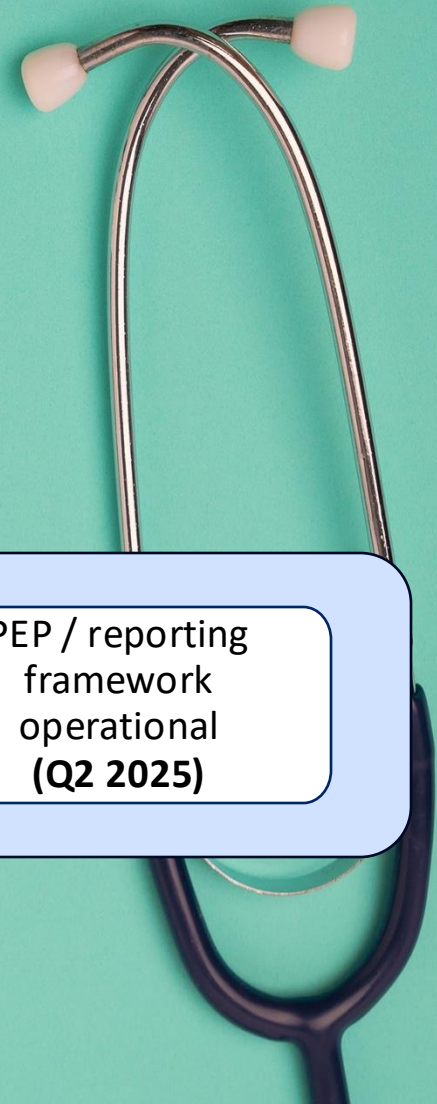
PEP release
(Q1 2025)

PEP / reporting
framework
operational
(Q2 2025)



Q1 2025

Policy KPIs and reporting platform



Thank you