

# Decarbonising Infrastructure Delivery | Capability Survey Results Summary



## Background

In April 2024, NSW Government launched the Decarbonising Infrastructure Delivery Policy (the Policy) and the Embodied Carbon Measurement for Infrastructure: Technical Guidance (Measurement Guidance). This is a key step towards realising the NSW Government's net zero ambition in the construction of public infrastructure.

To support implementation of the Policy, Infrastructure NSW conducted two surveys assessing readiness to comply with the Policy: one with the infrastructure and construction industry and another with NSW Government agencies. Close to 400 industry and government infrastructure professionals responded to the survey.

## Key insights

**A high level of awareness creates a strong foundation, but many respondents core to project development and delivery have low confidence in their ability to reduce upfront carbon**

- ➔ **There is a high level of upfront carbon awareness in the infrastructure sector:** 90% of government and 95% of industry respondents are aware of upfront carbon and its implications in construction.
- ➔ **Government and industry require additional support in uplifting capability:** despite the high degree of awareness, over 1/3 of government and 1/5 of industry respondents have low confidence in their own capability to reduce upfront carbon (Figure 1). Within industry, professions core to the development and delivery of infrastructure have the lowest confidence in their ability to reduce upfront carbon (construction managers, architects/engineers, and business case developers, see Figure 2).

Figure 1: Level of confidence in personal capability to reduce upfront carbon

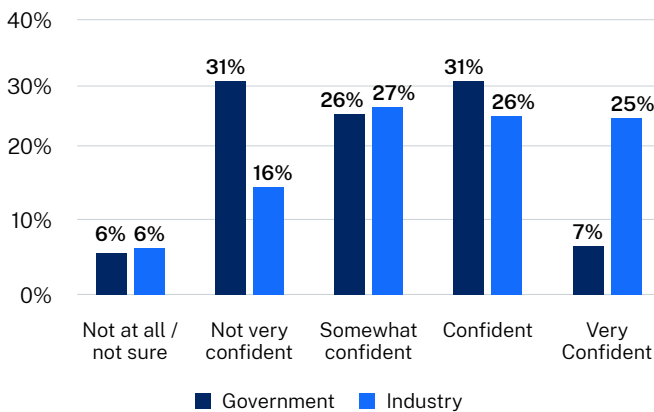
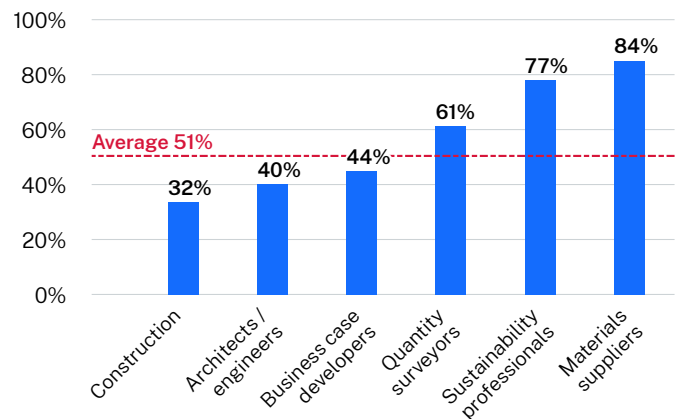


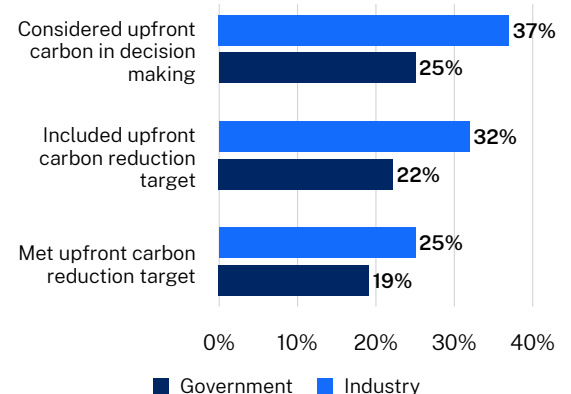
Figure 2: % of industry respondents that are confident / very confident in their personal capability to reduce upfront carbon



**Infrastructure projects are already considering upfront carbon, and setting carbon reduction targets**

- ➔ **Over 1/3 of projects that industry respondents have worked on in the past 5 years have considered upfront carbon in decision-making:** most of these projects also included and met upfront carbon reduction targets (Figure 3). These figures are lower for government respondents, with 1/4 of them indicating that they have worked on projects that considered upfront carbon in decision making.
- ➔ **Multiple industry sustainability professionals raised the need for carbon reduction targets to support action:** they have highlighted that government targets would have a large impact in changing behaviour on projects.

Figure 3: % of building or infrastructure projects the respondents have worked on that considered upfront carbon, included and met carbon targets



**Government and industry have a strong interest in learning about a range of decarbonisation topics**

**High priority areas for improved capability were reported to be:**

- NSW Government Decarbonising Infrastructure Delivery Policy and Measurement Guidance overview
- Measurement / estimation of carbon
- Decarbonisation in business cases and planning
- Low carbon solutions for design and construction
- Decarbonisation in procurement and early market engagement.

**Case studies, live sessions, and recorded webinars are industry’s preferred ways of learning:** case studies and worked examples were highlighted as the most useful approach to building capability (72% of industry respondents), with live sessions and recorded webinars being the second and third most preferred methods (60% and 56%, respectively).

**The top 3 barriers to capability uplift** were reported to be ease of access to the relevant materials, time, senior executive buy-in.

**Beyond capability, industry highlighted that the key barriers to decarbonisation are:** government demand for decarbonisation, cost, and specifications.



**Next steps**

Based on the results of the survey, Infrastructure NSW has developed a plan of key activities needed to uplift capability over the coming months (Figure 4).

**Figure 4: Indicative Infrastructure NSW decarbonisation capability uplift activities**

<b>Phase 1</b> Sep 2024 – Mar 2025	<b>Phase 2</b> Nov 2024+	<b>Phase 3</b> TBC
<p><b>Policy specific materials</b></p> <ul style="list-style-type: none"> <li>✓ Policy and toolkit overview</li> <li>✓ Carbon management plan template</li> <li>✓ Reporting templates</li> <li>✓ Worked examples</li> <li>✓ Case studies</li> <li>✓ Fact sheets</li> </ul>	<p><b>Investigate / plan broader capability uplift initiatives</b></p> <ul style="list-style-type: none"> <li>✓ Government stakeholder engagement*</li> <li>✓ Industry stakeholder engagement**</li> <li>✓ Broader decarbonisation capability uplift program</li> <li>✓ Governance</li> </ul>	<p><b>Capability uplift initiatives delivery</b></p> <ul style="list-style-type: none"> <li>✓ Based on Phase 2 results</li> </ul>

**Notes:** \*Including Transport for NSW; NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW); Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA)

\*\*Including Materials and Embodied Carbon Leaders’ Alliance (MECLA), Engineers Australia, Consult Australia, Australian Sustainable Built Environment Council (ASBEC), Infrastructure Sustainability Council (ISC), Green Building Council of Australia (GBCA)



**For any questions, feedback, and suggestion, please do not hesitate to contact the team on [industry@infrastructure.nsw.gov.au](mailto:industry@infrastructure.nsw.gov.au)**