**SBEnrc Project Progress – Quarterly Report**

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| **Project Number & Title** | ***P1.11.4 Benchmarking and Scaling-up Australia's Circular Economy Practices*** |
| **PSG Chair** | Ashleigh Morris (Corro) |
| **Project Leader** | Atiq Zaman (Curtin University) |

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| Overall Project Health and Delivery | Major issues or delays | ☐ | Minor issues or delays | ☐ | Progressing as planned | ☒ |

**Comments on project health/delivery**: *(if amber or red are marked please provide short explanation)*

The project is progressing according to the project plans and activities.

**Progress against milestones/deliverables**:
*To match those listed in the Project Schedule. Complete date in 'Completion/Forecast' column*

| No. | Description | Milestone or Deliverable? | Planned Due Date | Completion/ Forecast Date |
|---|---|---|---|---|
| 01 | Completed PSG#2 | 17 Aug 2026 | 10 Aug 2026 | Yes |
| 02 | Literature Review | 17 Aug 2026 | 10 Aug 2026 | Yes |
| 03 | Quarterly Report 1 | 17 Aug 2026 | 10 Aug 2026 | Yes |
| 04 | Quarterly Report 2 | 14/10/2026 | 26/10/2026 | Yes |
| 05 | Industry Partner Engagement Sessions | 14/10/2026 | 26/10/2026 | Yes |
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**Progress <u>this quarter</u>**:
*A list of dot points or 1-2 paragraphs covering THIS QUARTER (including but not limited to PSG meetings, stakeholder engagement, brief research findings, action points, any changes to the project plan)*

- **PSG#2 meeting, Monday 17 August 2026 (12.00pm–1.30pm AWST):** The project lead presented the project aim, scope, three objectives, industry outcomes and research approach. The objectives are to benchmark current circular economy adoption, integrate circular economy principles into construction and infrastructure projects, and evaluate decision-making factors for scaling up circular economy practices.
- **Case study updates:** Atlas Precast (WA) – co-creating a circular design standard for precast systems through literature review, stakeholder interviews and co-design workshops. Transport for NSW – benchmarking circular economy practices in the NSW rail network, including identification of priority materials, literature review, hotspot prioritisation, stakeholder interviews, gap analysis and recommendations. Queensland – subject to funder confidentiality requirements; only generic findings will be shared in future, pending approval.
- **Stakeholder mapping:** Preliminary stakeholder mapping presented for Atlas Precast and Transport for NSW (designers, manufacturers, regulatory bodies, material suppliers, contractors and professional associations). PSG members were asked for feedback on coverage.
- **Preliminary literature review findings:** (1) Circular design principles for precast concrete (design for disassembly, adaptability, modularity, waste prevention) are well established, but implementation

approaches vary widely and no standardised pathway was identified. (2) Benchmarking is inconsistent across studies in indicators, metrics, reporting units and system boundaries. (3) Semantic inconsistency, rather than a lack of indicators, is a key barrier; the literature supports a standardised benchmarking framework that aligns stakeholder priorities, standardises definitions and harmonises metrics and reporting. (4) Material passports and digital tools (BIM, digital twins) are emerging areas with limited adoption in Australia. (5) Research on circular economy in rail infrastructure is limited compared with buildings.

- **National industry-readiness survey on circular economy:** launched; PSG members asked to circulate the link widely. Plans for data collection and stakeholder engagement were outlined, to follow ethics approval.
- **Key PSG discussion points:** fragmentation of the precast industry and the potential role of the National Precast Association in standardising practices and accreditation; the need for consistent baselines in benchmarking; limits on recycled content in materials (e.g. RAP and SCM); and fair procurement in government projects, including specifying clear options and limitations for recycling and reuse in tender documents.
- **PSG#2 actions:** (1) Circular economy industry-readiness survey link to PSG members (Atiq Zaman). (2) Review stakeholder mapping and give feedback (all PSG members). (3) Approach peak bodies such as the National Precast Association (Will Hackney, Karim Yngstrom, Atiq Zaman). (4) Explore the use and prevalence of material passports in the Australian market (Will Hackney). (5) Investigate availability of data on volumes, age and quality of materials used in NSW Rail (Usha Iyer-Raniga). (6) Share updates on conferences, COP side events and World Circular Economy Forum participation once finalised (Atiq Zaman, Usha Iyer-Raniga). (7) Consider how Transport for NSW case study findings could influence procurement in WA, Victoria and Queensland and identify stakeholders for PSG invitation (Usha Iyer-Raniga, Will Hackney).
- **Next meeting:** PSG#3 scheduled for 19 October 2026.

**Recent engagement/investment/collaborations <u>this quarter</u>**

*Include organisations, contact people and their role in the last quarter (meeting, surveys etc)*

- **Corro:** Ashleigh Morris – PSG Chair (project updates)
- **Curtin University:** Atiq Zaman – Project Lead; Shengping Li; Benjamin Gazeau for the WA case study discussion
- **RMIT:** Usha Iyer-Raniga; Dona Iresha Gurusinghe; Mohana Motiei for the TfNSW case study discussion
- **QU:** Paul Matthew, Paola Leardini, Anthony Halog, Anuradhi Jayasinghe for the QLD case study discussion
- **SBEnrc:** Will Hackney; Adriana Sanchez, Grace Martini, Lindsay Kyle (overall project governance and updates)
- **ATLAS Precast:** Karim Yngstrom (seeking Atlas Precast case study data and stakeholder mapping).
- **GIICA:** Gertrud Hatvani-Kovacs (QLD LR review presentation and case study discussion)
- **Transport for NSW:** Adrian Dawson; Raz Guirguis (TfNSW case study discussion)
- **Stadium Queensland:** Kate Harding (confidentiality and data access discussion)
- **University of Queensland:** Paul Matthew; Paola Leardini.
- **Monash/CSIRO/University of Melbourne/UniTAS/RMIT/Curtin:** Possible consorting for the National Environemnal Science Program Phase 3 grant bid discussion.
- **UN CEET:** Showcasing SBEnrc/Australia's best practices at the COP31

**Other:** National industry-readiness survey distributed via PSG members (see Progress). Engagement with peak bodies including the National Precast Association is planned (action assigned to Will Hackney, Karim Yngstrom and Atiq Zaman).

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**Project outputs and communications <u>to date</u>:**

*Including but not limited to events, presentations, workshops, conference and journal articles, industry reports, social media posts and media releases (intended or published)*

- **Survey:** National industry-readiness survey on circular economy launched (August 2026).
- **Literature review and stakeholder mapping:** preliminary findings presented to PSG#2 and shared with PSG members for feedback.
- **Conferences and events:** participation in the World Sustainable Built Environment Conference reported and the WA Government conference on WA Resource Recovery Conference 2026.
- **Upcoming Conference:** 2nd Clear Production Conference and COP31 (circular economy and zero waste are key themes); COP side events and World Circular Economy Forum participation to be confirmed.
- **Knowledge sharing:** formal conference proceedings and a white paper are being developed to inform future conferences (Usha Iyer-Raniga).

**Industry Quotes:**

*Three quotes from Core Partners (and industry bodies where applicable)*

**Karim Yngstrom, ATLAS Precast**

> *“The precast industry in Western Australia is very fragmented.”*
>
> *"We do things totally differently. There's no coherent approach to pretty much anything we do."*

**Jack Gill (Think Brick)**

> *"Before we even look at benchmarks, just kind of see what everyone's actually doing." …… "If you can get those bodies involved, they might have some good insight in how that can go across a full industry."*

**Meghan Cowling, Queensland Department of Transport and Main Roads**

> *“You're not measuring apples with apples because you've got that different baseline to begin with.”*
>
> *"That baseline and any assumptions around what is zero versus what's your gain or reward or reduction, that needs to be consistent."*
>
> *"We're very good at doing trials and always looking for the new shiny thing, but we're not consolidating the technically proven recycled materials that can be used on projects."*
>
> *"It's actually scaling up the lower percentage use of materials across all projects, rather than consistently trying to push the technical barriers."*

**Chris Skantzos, Main Roads Western Australia**

> *“We do get approached with all these great products or great technologies, but we need to understand the limits of them.”*

**Peter vanderaa, Queensland Treasury**

> *"Just wondering if there's data, digital or otherwise, on the volumes of various materials and potentially the age or quality.*

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