



PROCURE + CIRCULAR
Advancing Circularity Through The Power Of Procurement

Building the Loop: Industry Workshop on Deconstruction and Material Reuse

June 4th, 2026

Workshop Summary

Funded in part by



EXECUTIVE SUMMARY – KEY WORKSHOP FINDINGS

This preliminary industry workshop brought together more than 80 participants to collect insights and potential solutions from suppliers from across the value chain for municipal and public sector organizations exploring deconstruction and material reuse in upcoming building projects.

Invited stakeholders included demolition and deconstruction contractors, material audit and salvage specialists, reuse and recycling companies, storage and marketplace operators, architect/engineering firms in addition to representatives of multiple department representatives of municipal and public sector organizations participating in P4C Construction.

1. Early planning is the critical enabler for cost-effective deconstruction and reuse.

The workshop feedback suggests that many of the perceived cost and schedule barriers associated with deconstruction are not inherent to deconstruction itself; they arise when material recovery is introduced too late in the project. Participants emphasized integrating material audits, deconstruction and salvage at the planning, zoning/site-plan approval or early design stages. They noted opportunities to align material audits with activities that are already required, such as contamination assessments, rather than treating them as an additional late-stage process. When these activities are planned and budgeted from the outset, potential schedule and cost impacts can be reduced or eliminated.

2. Material audits can become a design and procurement tool—not simply a demolition report.

The workshop identified a shift from viewing a material audit as documentation of what exists in a building toward treating the building as a material bank. Participants emphasized that material information has greatest value when it is available early enough to influence design decisions, before major material selections are finalized.

Suggestions included that material audits should evolve into live material inventories that can be searched and used by multiple parties. Design teams need visibility into available materials before schematic design is complete if reuse opportunities are to be maximized.

3. The lowest-cost material reuse strategy may be to avoid storage and secondary handling altogether.

The most economical material to store is material that never needs to be stored off-site. Participants emphasized direct project-to-project transfers, internal portfolio reuse, on-site reuse and pre-sale of materials before deconstruction.

Where storage is unavoidable, participants identified centralized hubs, temporary municipal land, digital marketplaces and improved logistics as potential solutions.

4. Public procurement can create the predictable demand needed to make reuse commercially viable.

The workshop confirmed that industry sees owner requirements and public-sector procurement as important market drivers. Participants proposed material recovery plans as procurement requirements, point-rated criteria for salvage, performance-based specifications, incentives for using salvaged materials and refundable demolition/renovation deposits tied to salvage outcomes.

At the same time, participants identified technical verification, quality assurance and liability as barriers to making salvaged materials a predictable alternative to new materials. They called for proportional verification, standardized documentation, material provenance and performance-based specifications.

5. Scaling reuse requires coordination across the project ecosystem.

Across the workshop discussions, barriers were distributed across the entire project ecosystem: owners need to plan earlier; designers need visibility into available materials; contractors need clear material destinations; salvage specialists need appropriate procurement conditions; and buyers need reliable information about quality and availability. Participants consequently identified directories, marketplaces, material tracking and stronger connections between the design community and material marketplaces as important enabling infrastructure.

The energy and engagement throughout this workshop made one thing clear: organizations across the sector want more opportunities to connect, learn, and problem solve together. Procure4Circular is committed to building on this momentum. P4C Construction participants will be leveraging the feedback from this workshop to identify guidance, as well as targeted tools/templates that the network will further co-develop, for future industry feedback through market engagement.

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ABOUT PROCURE 4 CIRCULAR CONSTRUCTION NETWORK

The Procure4Circular (P4C) Construction network, powered by the Circular Innovation Council, is a national learning action network designed to accelerate Canada's circular economy by leveraging the purchasing power of public procurement. The program's core mission is to build public sector capacity and ultimately simplify circular procurement by:

- Identifying common buying needs with participating organizations
- Fostering collective learning from subject matter experts and case studies
- Co-ordinating market engagements to seek feedback on current vendor capacity, potential innovative circular solutions to key challenges and barriers, and circular criteria and metrics
- Developing procurement guidance, tools and templates that can be shared broadly

Procure4Circular Construction network participants include the following organizations: City of Toronto, City of Mississauga, City of Brampton, Waterfront Toronto, Unity Health Network, City of Guelph, City of Calgary, City of Edmonton, City of Richmond, and Metro Vancouver. Participation in P4C is a collaborative learning opportunity. Decisions to make use of circular procurement guidelines, tools and templates developed by the P4C Construction network are solely at the discretion of each organization.

Through a collaborative development and selection process, participants were invited to bring potential building projects for which they were exploring circular construction opportunities. Deconstruction and material reuse were identified as a common circular procurement opportunity that many participants are currently investigating for public-sector-owned office, utility and community buildings. As a result, the P4C group selected public sector building deconstruction and material reuse as the initial focus of the network.

PROCURE 4 CIRCULAR CONSTRUCTION OUTCOMES

At the initial stages of the P4C Construction cohort engagement, participants reviewed the circular procurement framework below. The greatest opportunities for circular solutions are often identified early in the pre-tender phase, where purchasing needs are initially identified and planned.

Participants identified key outcomes that will define success from the P4C Construction network, as summarized below. Collective market engagement sessions to create consistent market signals, as well as solicit feedback on circular outcomes and criteria, is a key outcome of CIC's Procure4Circular Construction network, leading to the development of this industry workshop.

P4C Construction Outcome Summary

Key Long-Term Outcomes:

1. Harmonize approaches to create consistent market signals for transition to circular construction & renovation
2. Leverage P4C to make circular procurement practices operational standard at scale, driving market-based adoption at scale

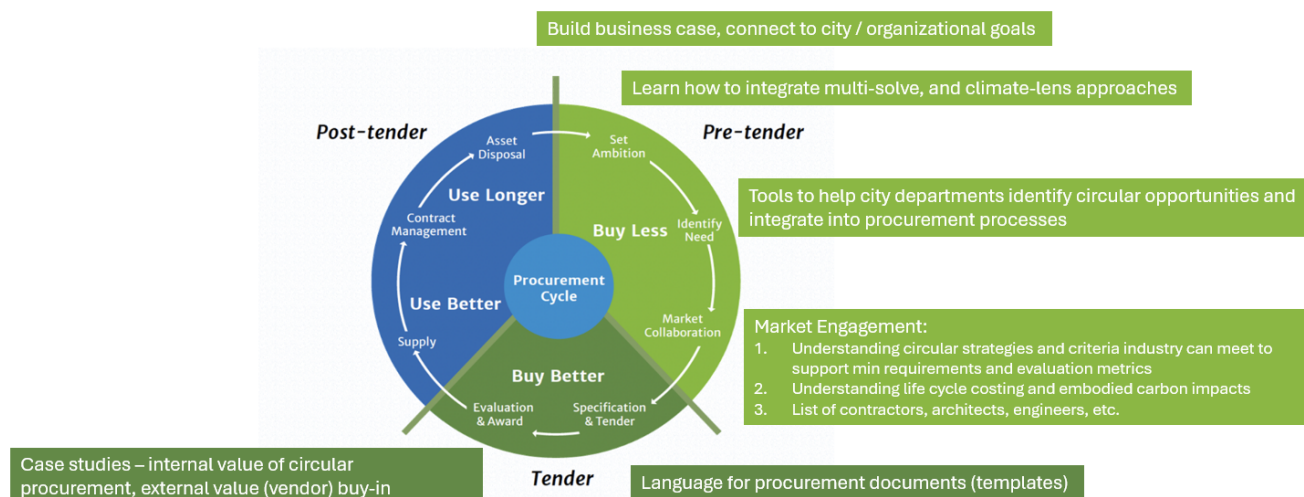


Figure 1: Procure4Circular Construction desired outcomes developed by participating organizations

INDUSTRY WORKSHOP OBJECTIVES

This preliminary industry workshop brought together more than 100 participants to collect insights and potential solutions from suppliers from across the value chain regarding deconstruction and material reuse for building projects owned and managed by municipal

and public sector organizations.

Invited stakeholders included demolition and deconstruction contractors, material audit and salvage specialists, reuse and recycling companies, storage and marketplace operators, architect/engineering firms in addition to colleagues from multiple departments of municipal and public sector organizations participating in P4C Construction.

The workshop was designed around three core objectives:

- **Gather Preliminary Market Stakeholder Feedback:** Collect insights on current experiences, capabilities, challenges, and opportunities regarding deconstruction, material audits, salvage, valuation, design, and building with reused materials.
- **Support Public Sector Project Direction:** Explore how public sector projects can better champion deconstruction and material reuse in ways that are both cost-effective and scalable for P4C participants.
- **Inform Future Procurement and Engagement:** Shape the development of procurement guidance, reference approaches, and future engagement strategies that P4C organizations can adapt for their specific regional contexts.

For public sector organizations transitioning away from linear “take-make-waste” models, early market engagement is a key circular procurement process enabler that delivers multiple benefits, including:

- **Preparing the Market:** For less mature sectors, early engagement “prepares” suppliers to deliver circular outcomes in future tenders that they might not currently be equipped to handle.
- **Encouraging Innovative Solutions:** Engaging the market early enables bidders to develop their own creative solutions that the procurer may not have considered, fostering innovation.
- **Demonstrating Market Demand:** When multiple organizations within a community of practice explore circular solutions, it sends signals to the market to invest in circular innovations with greater confidence.
- **Informing Specifications:** Input from suppliers helps procurement teams draft more effective tender criteria and clauses that reflect real-world market solutions rather than theoretical goals.
- **Achieving Cost Efficiency and “Quick Wins”:** Early discussions help identify cost-neutral opportunities and potential market-ready solutions, while also identifying areas where further investments or solutions are required.
- **Mitigating Financial and Operational Risks:** Provides opportunities for suppliers to provide insights into cost drivers, total cost of ownership (TCO) and lifecycle

cost implications, and also supports verification of supplier capacity and experience to deliver circular solutions.

CASE STUDIES AND INDUSTRY PERSPECTIVES

The workshop paired public sector case studies with industry examples through focused presentations:

● **Marcos Badra | City of Richmond (Presentation Slides)**

- **Data-Driven Circular Policy:** Richmond is translating systems thinking into municipal action by combining circular policy, material-flow data, procurement, pilot projects and partnerships. Its Circular City Strategy and Material Flow Analysis identify how coordinated action across sectors could reduce the city's material footprint by up to 37% and support Richmond's long-term transition to 100% circularity by 2050.
- **Advancing Low-Carbon Circular Concrete:** The City of Richmond completed a low-carbon circular concrete project at the City Hall Annex sidewalk connection, using ready-mix concrete with 30% recycled concrete aggregate and optimized cementitious content. Field and laboratory testing confirmed that the mix met municipal sidewalk performance requirements, including compressive strength, workability and air content, while achieving an estimated 20% reduction in embodied carbon and reducing virgin aggregate use. The pilot generated practical data to inform future City specifications, procurement practices, and broader use of low-carbon concrete in civic infrastructure and applicable building projects.

● **Marie-Hélène Gaboury | City of Montreal (Presentation Slides)**

- **The ÉcoQuartier Louvain Project:** Circular opportunities were identified early in the planning phase through a material inventory. Further analysis, including quality testing of key materials, supported the decision to focus material reuse on concrete panels and glazed blue bricks. The city required an 85% material diversion rate within the project's RFP.
- **Community Identity Through Reuse:** Salvaging items like glazed blue bricks provided a tangible way to weave storytelling and community engagement into the new development.

● **Erick Serpas Ventura | Vema Deconstructions (Presentation Slides)**

- **Experience with Demolition Procurement:** From the contractor's perspective, Vema suggested that municipalities value material salvage for reuse as a point-rated criterion within their RFPs, since this contributes to higher diversion rates, and that they engage deconstruction experts early in the project lifecycle. However, he noted that current challenges, such as high liability and bond demolition tender requirements, limit the ability of small, innovative deconstruction service providers to respond.
- **Deconstruction Material Value:** Vema Deconstruction noted that market demand already exists for a range of salvaged materials. For instance, salvaged first-growth era Douglas Fir commands \$6.50 per board feet, demonstrating the market value of high-quality secondary materials.

STAKEHOLDER FEEDBACK - KEY TAKEAWAYS

This session was designed to capture preliminary market feedback on deconstruction and material reuse to support P4C Construction network participants as they explore shifting towards deconstruction and material reuse in upcoming projects. Feedback from three breakout rooms was captured in each mural board (see Figure 2). The discussion questions were kept intentionally broad to encourage open, exploratory dialogue and were focused on potential solutions to key challenges that P4C participants identified within their own organizations to advancing deconstruction and material reuse.

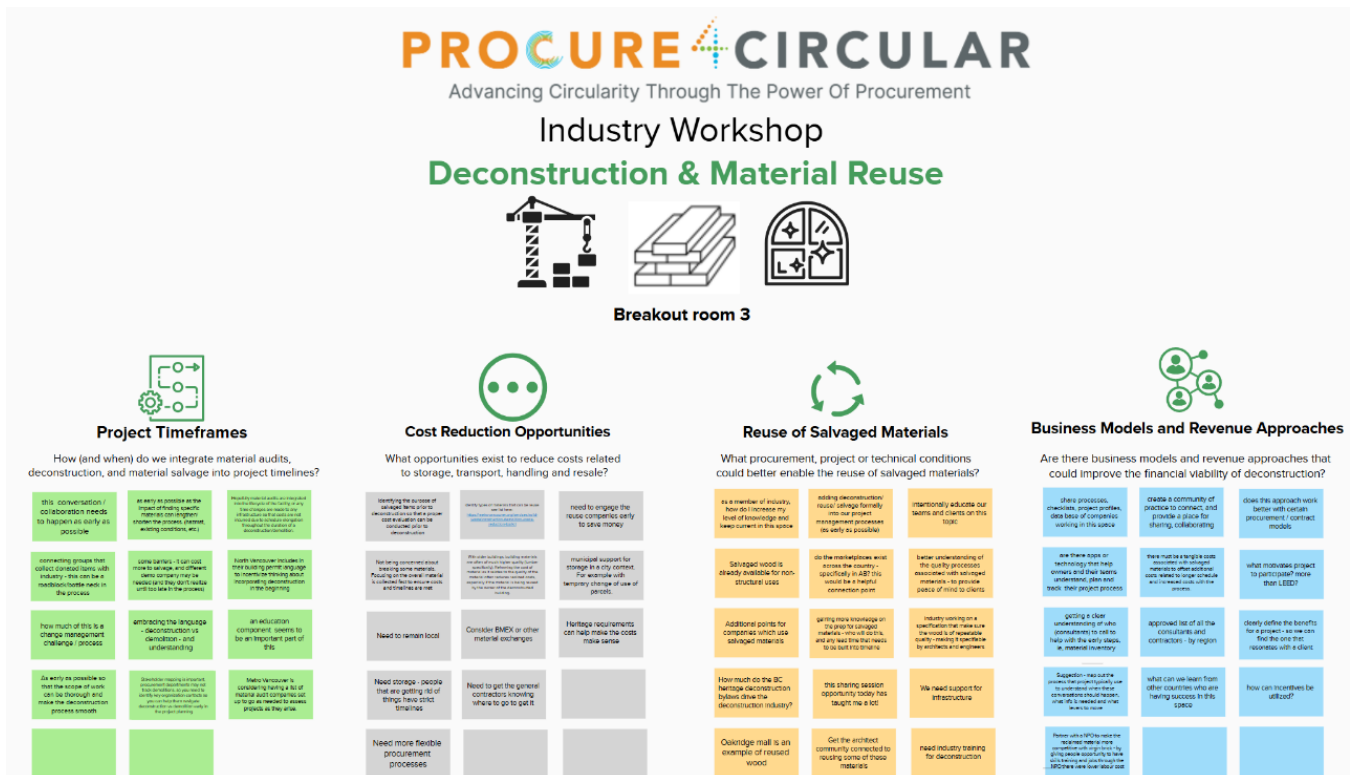


Figure 2: Industry Workshop Stakeholder Feedback Sample, one of three breakout rooms

The key themes summarized below should be viewed as a launchpad for P4C's development of procurement guidance and templates to be further refined with market feedback.

Project Timeframes: How (and when) do we integrate material audits, deconstruction, and material salvage into project timelines?

1. Early Integration into Planning and Procurement

The clear consensus is that these processes must be introduced as soon as possible to prevent project delays and capture maximum value.

- **Front-Loading Timelines:** Feedback suggests starting as early as the planning, Zoning Approval, or Site Plan Approval stages or at least by 30% design.
- **Tendering and RFPs:** Requirements must be integrated directly into the initial RFP, call for tenders, and building permit language.

Many of the perceived time barriers associated with deconstruction often disappear when it is planned and budgeted for from the beginning. Contamination assessments, as an example, are already required regardless of the approach taken, so this presents an opportunity to integrate material audits at the same time.

2. Data-Driven Design (Treating Buildings as "Material Banks")

Rather than viewing an existing building as waste to be cleared, the feedback highlighted a shift toward treating structures as active assets that enable future design choices.

1. **Influencing the New Build:** Material audits should not just document demolition conditions; they add greater value as material inventories that can be searched by multiple parties to influence design decisions before schematic designs are complete.
2. **Design Visibility:** Design teams need full visibility into available salvaged materials before major material selections for the new build are finalized to maximize reuse opportunities.

Other recommendations included:

- **Market Identification:** Procurement will benefit from a list of identified specialists in material audits, salvage, and deconstruction for market dialogue and/or prequalification. Contractors' risk and effort would be reduced by knowing where to send salvaged materials, whether for storage, to upcycling enterprises, or to local donation options for reuse.

Stakeholder Feedback Highlights

- *"Deconstruction doesn't delay new construction timeline if done early."*
- *"Reuse opportunities increase when material information is available before schematic design is complete."*
- *"Material audits should transition from static reports into live material inventories."*

Cost Reduction: What opportunities exist to reduce costs related to storage, transport, handling and resale?

Stakeholders shared the following suggestions and recommendations:

1. Direct Material Transfers and Eliminating Physical Storage

Participants noted that physical storage introduces significant logistical hurdles and costs, meaning the best storage strategy is avoiding it entirely whenever possible.

- **Avoiding Warehouse Overhead:** The most cost-effective material to store is the material that never enters a warehouse in the first place.
- **Direct Project Matching:** Prioritizing direct project-to-project transfers allows portfolio owners to move salvaged items seamlessly between sites, bypassing storage constraints entirely.
- **Pre-Sales and On-Site Reuse:** Enabling the pre-sale of materials before deconstruction starts and identifying opportunities to reuse materials on-site or internally helps match supply with demand before items are even removed.

2. Centralized Municipal Hubs and Regulatory Support

When storage and processing are unavoidable, participants pointed to opportunities for public-sector intervention and centralized infrastructure.

- **Centralized City Hubs:** Establishing municipally run central hubs creates a physical marketplace where materials can be consolidated, processed, and viewed by potential buyers.
- **Flexible Land Use:** Municipalities can offer support by allowing a temporary change of use for vacant land parcels to accommodate short-term storage needs.
- **Policy and Financial Incentives:** Leveraging non-profit tax incentives (such as Habitat for Humanity), utilizing existing heritage requirements, and enacting demolition waste reduction bylaws help normalize the economics of salvage.

3. Digital Exchanges, Data Tracking, and Localized Transport

Optimizing transport and tracking emerged as a critical opportunity to save money and lower emissions.

- **Data-Driven Logistics:** Utilizing digital tracking tools and material passports reduces transaction and verification costs more effectively than simply buying more warehouse space.
- **Early Transport Planning:** Transportation planning should begin as early as the material audit stage, particularly because moving heavy items like bricks is highly

Stakeholder Feedback Highlights

- *"The cheapest material to store is the material that never enters storage. Match supply to demand before materials are removed from site."*
- *"Portfolio owners can move materials between projects and avoid off-site storage."*
- *"Plan ahead for salvaged material desination to reduce costs, if not being used for the next project. Materials relevant to local upcycling enterprises (e.g wood for flooring) should not go to storage first"*

expensive and emissions intensive.

- **Localized Marketplaces:** Digital material exchanges (such as BMEx) should prioritize local matchmaking to minimize transport distances and give general contractors a clear directory of where to source materials.

Enabling Salvaged Material Reuse: What procurement, project or technical conditions could better enable the reuse of salvaged materials?

Participants agreed that to achieve large-scale adoption of reused materials, progress is required on two interconnected fronts: standards and verification, and demand driven through procurement and policy.

Formal Procurement Frameworks and Owner Mandates

Workshop participants emphasized that updating procurement rules and leveraging policy-driven mechanisms are the most effective ways to drive market adoption.

- **Contractual and Procurement Requirements:** Feedback suggests embedding explicit material recovery plans, standard Division 01 language, and consideration of salvaged options right alongside new materials into project procurement.
- **Policy Incentives:** Municipalities can use "carrot and stick" approaches, such as awarding extra evaluation points during tendering to companies using salvaged materials, or implementing refundable demolition/renovation permit deposits tied to proof of salvage.
- **The Power of Ownership:** Owner requirements and public sector buying power drive market transformation much faster than technical standards alone.

Stakeholder Feedback Highlights

- *"Require material recovery plans as part of project procurement."*
- *"Industry working on a specification to ensure the wood is of repeatable quality — making it specifiable by architects and engineers."*
- *"Small wins are still wins — not always about reusing 100% of materials"*

Technical Standardization, Verification, and Risk Management

To make salvaged materials a legitimate, predictable alternative to new goods, technical hurdles around quality verification and engineering liabilities must be cleared.

- **Proportional Verification and Grading:** Standardized documentation and material standards adapted specifically for salvaged items can dramatically reduce engineering review costs and provide peace of mind to clients. However, verification requirements should remain proportional to actual material risk.
- **Data and Provenance:** Material passports and tracking tools should accompany salvaged goods to ensure that the material's provenance and history travel with it down the supply chain.
- **Performance-Based Specs:** Procurement should transition toward performance-based specifications to enable salvaged or recycled materials that meet the required performance.

Industry Capacity Building and Design Alignment

Successful reuse relies heavily on closing the knowledge gap across the construction ecosystem and giving design teams early visibility into what is available.

- **Upskilling and Training:** There is an expressed need for dedicated industry training on deconstruction, alongside intentional education for teams and clients regarding the preparation and lead times required for salvaged materials.
- **Connecting the Design Community:** Architects and engineers need to be actively connected to material marketplaces to foster an understanding of how to specify salvaged wood or non-structural elements safely and repeatably.
- **Early Visibility:** Design teams must have clear visibility into available material inventories before major design decisions occur. Where internal resistance is high, target low-barrier reuse pathways (e.g., using bricks as landscape pavers).

Financial Viability: Are there business models and revenue approaches that could improve the financial viability of deconstruction?

Strategic Asset Valuation and Optimizing Internal Reuse

Participants noted that the financial fundamentals of a project shift drastically when buildings and salvaged materials are treated as active financial assets rather than waste by-products.

- **Buildings as Material Banks:** Shifting the mindset to treat existing buildings as "material banks" with unrealized value allows salvaged goods to be managed as inventory assets rather than demolition waste.
- **Pre-Sales and Internal Optimization:** To capture maximum returns, the highest-

value materials should ideally be sold before they are even removed from the site. Furthermore, internal reuse within an organization or portfolio-wide reuse often delivers the strongest financial return.

- **Shared Savings Models:** Introducing shared savings contractual frameworks can financially align owners and contractors around identical reuse goals.

Data Monetization, Digital Marketplaces, and Alternative Markets

The financial viability of deconstruction relies heavily on the digital tracking and data ecosystems built around the physical materials.

- **Data as a Financial Product:** Material data and information can become just as valuable as individual material transactions. Establishing robust material tracking and reporting creates long-term, recurring revenue opportunities.
- **Shared Online Marketplaces:** Instead of fragmented, per-organization software, participants suggest collective online marketplaces and brokerage/matching services that share infrastructure costs and help fund market infrastructure.
- **Alternative Financial Incentives:** Exploring a more accessible carbon credit market for the public and utilizing on-site tax receipts can serve as powerful new financial pathways to reward participation beyond traditional certifications like LEED.

Stakeholder Feedback Highlights

- *"Quantify material value reused to offset potential additional process costs."*
- *"Partner with a non-profit to make the material recovery more competitive — skills training and jobs may be subsidized for social impact and lower labour cost."*
- *"Shared savings models can align owners and contractors around reuse goals."*

Lastly, participants emphasized the importance of accessible networks that help owners and contractors know who to call at each stage of a project, from early planning through deconstruction to material reuse. Directories of consultants and contractors organized by region and project stage were seen as valuable supporting infrastructure for reducing barriers to entry for those who want to participate but are unsure where to start.

NEXT STEPS

The energy and engagement throughout this workshop made one thing clear: people across the sector want more opportunities to connect, learn, and problem solve together.

Procure4Circular is committed to building on this momentum.

The insights provided by stakeholders will support Procure4Circular Construction participants in developing guidance that incorporates the project planning process to improve opportunities to make material salvage and reuse economically and operationally viable.

P4C participants will be leveraging the feedback from this workshop to identify targeted tools and templates that the P4C Construction network will further co-develop. Additional market engagement will be undertaken for targeted industry feedback to the tools and templates developed. We will also work with partner organizations and subject matter experts to develop additional peer learning opportunities to this community.