Follow-up Questionnaire: Forum on SMM in the Built Environment

Introduction

The following questionnaire is intended to obtain input from participants in the Forum on Life Cycle Approaches to Sustainably Manage Materials in Building and Infrastructure Projects (the Forum), which was held January 31- February 1, 2018 in Washington, DC. During the Forum, participants were asked to identify important next steps for the design and construction industry, non-profits, governments, and others to take to advance sustainable materials management (SMM) in the built environment. EPA intended to conduct a prioritization exercise for these next steps during the Forum. However, due to time constraints, EPA was unable to complete the activity, and we are asking for participants' "virtual" input now.

This questionnaire asks participants for input on the relative priority of the many actions, grouped into six themes, identified during the Forum. For more detailed information on these themes please review the Forum on Life Cycle Approaches to Sustainably Manage Materials in Building and Infrastructure Projects Summary Report available on EPA's website. Survey Gizmo estimates that this questionnaire will take you approximately 8-12 minutes to complete. While the analysis and output will be anonymous and will not include any identifying information, we will use information that you provided when registering for the Forum to help interpret the data. If you would like to opt out of this questionnaire, please email us at Boxman.suzanne@epa.gov by September 17, 2018.

Thank you for taking the time to provide us with your valuable perspective!

Background and Perspective

The following questions ask about your background and perspective to help interpret responses to this questionnaire.

1. What is your primary area of focus? *

○ Buildings

○ Non-building infrastructure (e.g., roads, bridges, water, energy)

○ Both buildings and non-building infrastructure

○ Other

2. How would you describe your primary role(s) relative to SMM in the built environment? (please choose all that apply) *

- ☐ Owner/operator of buildings or infrastructure (public or private)

- ☐ Developer, construction contractor, and/or deconstruction contractor

- ☐ Manufacturer and/or supplier of products/materials

- ☐ Waste/materials handler and/or marketer

- ☐ Architect

- ☐ Engineer

- ☐ Specifier

- ☐ Administrator of certification/rating systems (e.g., director, researcher, staff)

- ☐ Administrator of professional association (e.g., director, researcher, staff)

- ☐ Federal, state or local public official

- ☐ Researcher

- ☐ Other

  [   ]

3. About how many years have you been engaged in projects involving SMM in the built environment? *

- ○ < 5 years

- ○ 5 - 9 years

- ○ 10 - 14 years

- ○ 15+ years

Priorities for Action

The following questions ask you to rate the actions identified by participants in the Forum based on their relative priority for advancing SMM in the built environment. The actions are grouped into six themes (one per page).

Priorities for Collaboration and Partnerships

Forum participants emphasized the importance of collaboration and partnerships for advancing SMM in the built environment—in general and in a specific project setting. Which of the following actions do you feel are most important to promote collaboration and partnerships?

4. Develop and support collaboration among stakeholders across the environmental life cycle for the following reasons: *

	High priority	Medium priority	Low priority	Not a priority	Don't know
Raise awareness and understanding of the value of SMM to encourage adoption of SMM approaches	○	○	○	○	○
Strengthen connections and reduce barriers among practitioners to foster trust and innovation in SMM approaches	○	○	○	○	○

Comments

5. Facilitate collaboration on the following specific topics: *

	High priority	Medium priority	Low priority	Not a priority	Don't know
SMM in non-building infrastructure (e.g., roads, bridges, water, energy)	○	○	○	○	○
Best practices and benefits of early project-level collaboration to advance SMM	○	○	○	○	○
Relationship between resiliency and SMM	○	○	○	○	○
Health-based assessment standards (e.g., related to chemical composition of products)	○	○	○	○	○

Comments

Priorities for Innovation and Research

Forum participants highlighted the fact that sustainable solutions are often innovative, requiring research and testing to demonstrate results, encourage adoption of successful ideas, and foster further innovation. Which of the following actions do you feel are the highest priorities for innovation and research to advance SMM in the built environment?

6. Support proof-of-concept testing of new materials, products and SMM approaches (e.g., conduct demonstration projects, develop testing standards). *

High priority	Medium priority	Low priority	Not a priority	Don't know
○	○	○	○	○

Comments

7. Conduct and/or share research on the following topics: *

	High priority	Medium priority	Low priority	Not a priority	Don't know
Barriers and strategies for materials recovery, processing and storage infrastructure	○	○	○	○	○
Using rating systems and building codes to promote resiliency and SMM	○	○	○	○	○
Innovative techniques for aligning tenant and/or user behavior with sustainability goals	○	○	○	○	○

Comments

8. Conduct research on the impact and best practices for recovery, separation, and reuse, recycling and/or disposal of the following materials: *

	High priority	Medium priority	Low priority	Not a priority	Don't know
Polymers and composites	○	○	○	○	○
Treated wood	○	○	○	○	○
Gypsum wallboard	○	○	○	○	○
Other materials discussed during the Forum (please identify in the Comment box)	○	○	○	○	○

Comments

Priorities for Life-Cycle Data and Tools

Forum participants highlighted the need for more and better data and information management tools. Which of the following actions do you feel are most important for developing life-cycle data and tools to advance SMM in the built environment?

9. Develop and/or enhance life-cycle data in the following areas: *

	High priority	Medium priority	Low priority	Not a priority	Don't know
Life-cycle data for core building materials and products (e.g., expanded scope of products, better quality data)	○	○	○	○	○
Connections between chemicals used in products and potential impacts from product reuse, recycling and/or disposal	○	○	○	○	○

Comments

10. Make existing life-cycle data more accessible and useful through the following actions: *

	High priority	Medium priority	Low priority	Not a priority	Don't know
Improve user-friendliness of existing life-cycle inventory (LCI) data	○	○	○	○	○
Develop a common LCA data platform for use across product transparency reports (e.g., environmental product declarations) and rating systems	○	○	○	○	○

Comments

11. Help decision makers use existing green building and infrastructure rating systems to make more informed choices through the following actions: *

	High priority	Medium priority	Low priority	Not a priority	Don't know
Enhance quality of rating systems to help ensure comparability among different rating systems	○	○	○	○	○
Develop a unified approach for using different rating systems in Federal, state, and local government procurement decisions	○	○	○	○	○
Develop guidance on features and applicability of different rating systems	○	○	○	○	○

Comments

12. Develop a system to track materials from their origin to their current use in building and infrastructure stock. *

High priority	Medium priority	Low priority	Not a priority	Don't know
○	○	○	○	○

Comments

Priorities for Telling a Better Story About SMM Approaches

Forum participants discussed the need to "tell a better story" about the benefits of SMM approaches in the built environment, including not only environmental benefits but also local economic and transformational benefits. Which of the following actions do you feel are most important for conveying the benefits of using SMM approaches in the built environment?

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13. Develop and disseminate the following type of information – in the form of case studies, reports, brochures, fact sheets, info-graphics, ad campaigns, etc. – about SMM approaches: *

	High priority	Medium priority	Low priority	Not a priority	Don't know
Economic benefits, including cost savings and local economic benefits	○	○	○	○	○
Connections to other related movements/initiatives familiar to stakeholders	○	○	○	○	○

Comments

14. Develop the following types of resources to help share information about the benefits of SMM approaches: *

	High priority	Medium priority	Low priority	Not a priority	Don't know
Clearinghouse of success stories and demonstrated best practices	○	○	○	○	○
List of speakers willing and able to explain the benefits in relevant forums	○	○	○	○	○

Comments

Priorities for Enhancing Secondary Material Markets

Forum participants emphasized that promoting next-life uses through secondary material markets will be essential for advancing SMM approaches. Which of the following actions are most important for enhancing secondary material markets?

15. Develop and disseminate the following types of information: *

	High priority	Medium priority	Low priority	Not a priority	Don't know
Practical guidance on collecting and processing secondary materials for new construction	○	○	○	○	○
A risk assessment framework to inform decisions regarding use of secondary materials	○	○	○	○	○
Information and practical guidance on reverse supply chain processes for large quantity products	○	○	○	○	○

Comments

16. Enact public policies intended to achieve the following: *

	High priority	Medium priority	Low priority	Not a priority	Don't know
Provide regulatory clarity regarding "waste" status of recovered materials	○	○	○	○	○
Strengthen demand for secondary materials (e.g., via public agency procurement policies)	○	○	○	○	○
Provide incentives (e.g., tax abatements) for materials recovery and marketing	○	○	○	○	○
Promote independent certification of construction and demolition recycling facilities	○	○	○	○	○

Comments

Priorities for Shifting Paradigms

Throughout the Forum, participants noted important paradigm shifts that are taking place across the country. These included: reducing the quantity of materials needed or the quantity of products needed upfront; shifts from thinking about first costs to life-cycle costs; moving from planned obsolescence of products to designing for durability and next-life uses; and moving from separate teams and roles on individual building projects to more integrated teams and collaborative environments. Which of the following actions do you feel are most important for advancing these paradigm shifts?

17. Raise awareness and foster change through the following actions: *

	High priority	Medium priority	Low priority	Not a priority	Don't know
Post information regarding existing resources and tools regarding SMM approaches on websites frequented by key stakeholders	○	○	○	○	○
Conduct outreach via professional associations to raise awareness of potential benefits, best practices, and resources available for SMM approaches	○	○	○	○	○
Facilitate more widespread use of costing approaches that encourage a shift in emphasis from first costs to life-cycle costs	○	○	○	○	○
Highlight SMM approaches that achieve desired outcomes (e.g., adaptive reuse first, resilient design for long-term savings)	○	○	○	○	○

Comments

Near-term priorities

The preceding questions asked you to rate actions in terms of their importance in advancing SMM in the built environment. The following questions ask you to identify near-term priorities from the actions that you identified as "high priority." Near-term priorities are actions that could be undertaken now to achieve near-term outcomes and/or lay the groundwork for other actions and long-term change.

[Design Note: We are currently working on a survey design approach that will populate the list under this question with just those actions that the respondent identified in previous questions as "high priority."]

18. Please identify five items that you believe are the most important near-term priorities. *

Interest in Further Engagement

19. Please rate your interest in the following: *

	Very interested	Somewhat interested	Not interested
Helping to plan future engagements on SMM in the built environment	○	○	○
Attending and participating in future engagements on SMM in the built environment	○	○	○
Compiling and/or contributing to a list of groups working on similar topics	○	○	○
Compiling and/or contributing to resources to be included or referenced in a clearinghouse of information on SMM in the built environment	○	○	○
Hosting a clearinghouse of information on SMM in the built environment	○	○	○
Receiving additional information on SMM in the built environment (e.g., joining a list serve)	○	○	○

Comments

20. This concludes the questionnaire. Please let us know if there are any additional comments that you would like to share regarding priorities for action discussed during the Forum.

Thank You!

Thank you for completing this questionnaire. Your response is very important to us.