Discussion Activity: Reuse and Deconstruction

Extending the life of a material or building avoids extraction and manufacturing emissions from creating a new one and saving embodied carbon. Reuse and deconstruction has many co-benefits such as creating jobs and adding new regional markets for the removal, sale, and distribution of salvaged materials. There are multiple ways policy can move the needle of reuse and deconstruction.

1. Introductions (~5 Minutes)

Introduce your name, title, and what you hope to get from the workshop/discussion

2. Reuse/Deconstruction Strategies (~10-15 Minutes)

- Which of the following **strategies** have you used on projects?
 - <u>Building reuse</u> ('adaptive' reuse) of an entire building or a portion
 - Material reuse (reuse of individual salvaged materials)
 - <u>Deconstruction / Salvage</u> to save materials rather than send them to the landfill, enabling future material reuse ('buildings as material banks')
 - <u>Design for disassembly</u>: designing buildings and assemblies in a way they can be easily taken apart and reused
 - Other
- What were the biggest **challenges** in implementing these strategies? (Or if you have not used any, what barriers did you face that prevented you from implementing them)

3. Reuse/Deconstruction Policies (~5-10 Minutes)

 Which of the following opportunities for policy and government-led programs do you think presents the largest opportunity in your city/region (See image below)? Why?



Site Selection & Building Design

 Choosing an existing building to re-use or add on-to, rather than tearing down and building new

Material Selection and Construction Details

- Specifying existing/salvaged materials and material longevity
- Using design for disassembly principles

Deconstruction & On-site construction waste diversion

- Deconstruction and salvage (rather than demolition)
- Landfill diversion of surplus materials/construction waste

Material Reuse Markets and Storage

- Warehouses for material storage between uses
- Online platforms to enable designers and contractors to identify available materials

4. **Benefits of Reuse and Deconstruction** (~10 minutes)

- Which of the following benefits of reuse and/or deconstruction do you think is most important in communicating why this type of policy would be important in your region? Why?
 - 1 Avoiding carbon emissions from manufacturing new materials for new construction

- 2 Reducing the environmental damage and community health impacts from landfilling construction materials after demolition
- 3 Avoiding environmental damage from new construction on greenfield (i.e., previously undeveloped) sites by encouraging preservation and increased density in historic portions of cities
- 4 Preserving cultural resources and heritage, providing economic and social co-benefits
- 5 Reducing local noise and pollution from demolition activities (depending on the scope of adaptive reuse)
- Other (list here)