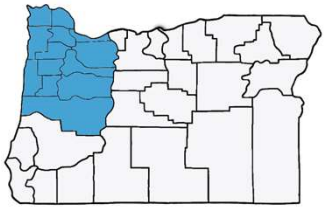

2025 SMMP
TASK FORCE

Built Environment Subcommittee Meeting #3

Wednesday, May 14, 2025

RRS
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2025 SMMP
TASK FORCE

Food &
Organics
Subcommittee

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GROUP AGREEMENTS

- **Raise Hand Before Speaking:** please use the raise hand feature and wait to be called on
- **Prioritize Relationships:** put people before process
- **Acknowledge and Share Power:** Step up, step back
- **Value Many Perspectives:** Elevate lived and work experience
- **Communicate Directly:** Use plain language, ask for what you need
- **Create Shared Understanding:** share historical context, contextualize decisions
- **Exercise Curiosity:** Be willing to listen, learn, and reflect on feedback

FOCUS AREA #1: ADAPTIVE REUSE OF EXISTING BUILDINGS

- **Goal:** Revitalize and repurpose old, vacant, or underused structures for new, uses instead of demolishing them giving buildings a second life.

- **Strategies:**
  - Adaptive reuse for sustainable growth - Encouraging renovation over new construction to retain embodied carbon and cultural value. Building transformation strategies - Policies and incentives to revitalize underutilized structures and prevent unnecessary demolition.
  - Preservation though innovation - Aligning historic preservation with modern energy efficiency and sustainability goals.

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Focus Area #1: Adaptive Reuse of Existing Buildings

Strategy	Organizational Sponsors	Cost	Waste Impact	Time horizon	Economic Impact	Human Health Impact	Environmental Impact
Adaptive Reuse	• Federal/Local Government agencies • Nonprofits and advocacy organizations • Private Sector Sponsors and Foundations • Oregon DEQ • Oregon building codes division	**High:** According to research adaptive reuse projects can range from $250 to $700 per square foot, depending on complexity and building type.	**High** Adaptive reuse significantly decreases the volume of waste generated from demolishing buildings, which constitutes a substantial portion of Oregon's waste stream. By preserving existing structures, the need for new materials is reduced, leading to lower waste production.	**Varies/Unknown** • Building Condition • Regulatory Compliance • Securing funding (grants, tax credits)	**High** Adaptive reuse can be more cost-effective than new construction, as it avoids demolition costs and often requires less capital. Projects may also qualify for tax credits and grants, while boosting nearby property values by enhancing neighborhood appeal.	**Medium** Enhances Indoor Air Quality by incorporating modern ventilation systems and using low-emission materials. Older buildings may harbor hazardous materials such as asbestos, lead-based paint, or mold.	**High** Significantly reduces construction waste, a major contributor to landfill volume. Lowers the need for new materials, helping conserve resources and reduce the environmental impact of development.
Preservation through innovation	• Nonprofits and advocacy organizations • Federal Agencies • US Green Building Council • Oregon DEQ • Oregon building codes division	**High with Benefits** Upfront costs are high but long-term benefits of tax credits and grant opportunities are super beneficial	**Medium** Preservation projects help conserve natural resources and shrink the environmental impact by reducing the demand for newly extracted and processed materials.	**Varies/Unknown** • Historic structure Reports • Design and Planning Phase • Construction and Rehabilitation	**High** • Job Creation • Increased Property Values • Tax incentives and Grants • Sustainable Development and Cost Savings	**Medium** Poorly executed upgrades can lead to ventilation or moisture problems, potentially causing indoor air pollution or mold growth that harms occupant health.	**Medium** Historic preservation often targets centrally located, already developed areas, helping to prevent expansion into undeveloped or natural land.

Strategy #1: Adaptive Reuse of Existing Buildings

Who needs to act?	How is it Funded (Examples)	What are the Barriers
• Property Owners • Local Government and Planning Agencies • Architects and Engineers • State Historic Preservation Office • Community Stakeholders	**Federal and State Incentives – Examples:** • Oregon offers a 10-year property tax freeze for owners of historic properties who commit to a preservation plan and meet minimum rehabilitation expenditures. **Local Programs – Examples:** • Portland's Historic Preservation Incentives offer zoning flexibility for adaptive reuse, relax parking requirements, and allow the transfer of unused development rights to encourage the preservation of historic properties. • Oregon city offers Offers forgivable loans for projects with total costs between $300,000 and $1,000,000, supporting substantial building improvements. **Grants – Examples:** • Oregon Parks and Recreation Department grants, support historic building preservation efforts—such as the "Diamonds in the Rough" grant, which helps restore modified historic facades to their original appearance.	

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RECOMMENDATION #1

- Recommended Strategies:

- Recommended next steps
  - WHO and WHAT
  -

FOCUS AREA #2: EMBODIED CARBON IN CODES

- **Goal:** Reduce the total lifecycle greenhouse gas emissions of buildings by preserving existing structures when possible, minimizing the need for new materials measuring and managing the carbon emissions already locked into the materials that are in use.
- **Strategies:**
  - Low-carbon building standards & codes - Integrating embodied carbon reduction into building regulations to encourage climate-smart material choices, carbon-conscious construction policy. Embedding life-cycle carbon analysis into permitting and compliance processes.
  - Green material certification & incentives - Promoting low-carbon materials and certification programs within building codes.

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Focus Area #1: Embodied Carbon in Codes

Strategy	Organizational Sponsors	Cost	Waste Impact	Time horizon	Economic Impact	Human Health Impact	Environmental Impact
Low Carbon building standard & codes, Carbon-conscious construction policy	• Oregon DEQ • Oregon building codes division • New Buildings Institute • Local Government Initiatives	**Varies/Unknown** Using low-carbon materials like cross-laminated timber and recycled components can be cost-neutral or even lead to savings. They help lower embodied carbon and typically require less energy for production and transportation. 4o	**High** According to the DEQ, building materials account for about 14.4% of Oregon's consumption-based greenhouse gas emissions. To help reduce this impact, the agency promotes low-embodied carbon housing efforts, such as reusing and converting existing buildings.	• According to research and different case studies 2-5 years seems like the average time horizon for implementing this strategy	**High** Oregon DEQ was awarded $25.6 million to help build 940 lower-embodied carbon housing units in nine communities. This effort is expected to cut greenhouse gas emissions by approximately 343,487 metric tons of CO_2 equivalent by 2050.	**Medium** The City of Eugene, Oregon, will phase out gas appliances in certain new buildings to reduce climate pollution, citing evidence that gas stoves emit nitrogen oxides linked to asthma.	**Medium** Jurisdictions with climate action plans could begin prioritizing a coalition asking for exemption for certain upstream strategies
Green material certification & incentives	• U.S. Green Building Council (USGBC) – Oregon Chapter • Green Building Initiative • Oregon DEQ	**Varies/Unknown** • Registration and Certification Fees • Design and Consulting Fees • Construction Costs	**Medium** Oregon DEQ's SB4A program offers a tiered system of incentives to encourage the development of low- and zero-carbon buildings.	According to research and different case studies, 1-5 years seems like the average time horizon for implementing this strategy	**High** Green-certified buildings typically lower operational costs through improved energy and water efficiency. For example, LEED-certified buildings use about 25% less energy and 11% less water, resulting in substantial long-term savings.	**Medium** Oregon's Priority Climate Action Plan emphasizes the added benefits of green building practices, such as better indoor air quality and lower health risks from exposure to pollutants.	**High** Green certifications encourage the use of recycled and fast-renewing materials, prioritize locally sourced products to cut transportation emissions, and support designs that increase building longevity and minimize material replacement.

Strategy #1: Embodied Carbon in Codes

Who needs to act?	How is it Funded (Examples)	What are the Barriers
JS0 • U.S. Department of Energy (DOE) Grants • Environmental Protection Agency (EPA) • State/Local Legislature	• **Example - Federal/State and Utility-Based Funding** The DOE awarded more than $113 million to Oregon to support home energy rebate programs that promote energy-efficient retrofits, with a focus on helping low- to moderate-income households. • **Example - Energy Trust of Oregon Programs** Energy Trust of Oregon uses Public Purpose Charge (PPC) funds to provide cash incentives and technical assistance for energy efficiency and renewable energy projects in residential, commercial, and industrial buildings. • **Example - Portland's Percent for Green Program** Portland's Bureau of Environmental Services provides the Percent for Green grant to support major green infrastructure projects that improve watershed health and benefit local communities.	

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Slide 9

JS0 Any Oregon Example should be included in the table above.
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RECOMMENDATION #2

- Selected Strategies:

- Recommended next steps
  - WHO and WHAT

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FOCUS AREA #3: DECONSTRUCTION AND MATERIAL RECLAMATION

- **Goal:** Carefully dismantle buildings to recover valuable materials for reuse, recycling, or repurposing.
- **Strategies:**
  - Rural-ready deconstruction & salvage - Expanding deconstruction ordinances with rural-friendly adaptations, considering workforce availability and logistics.
  - Construction waste management plans - Ensuring responsible material handling with a focus on high-value salvage like wood and brick.
  - End-of-life building material diversion - Strengthening markets and infrastructure to reuse and recycle post-construction materials.

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Focus Area #1: Embodied Carbon in Codes

Strategy	Organizational Sponsors	Cost	Waste Impact	Time horizon	Economic Impact	Human Health Impact	Environmental Impact
Rural-ready deconstruction & salvage	• Nonprofit and Industry Organizations (BRING Recycling) • Oregon Department of Environmental Quality (DEQ) • Lane County Waste Management • Private Sector Contributors	**Varies/Unknown** Portland provides grants up to $2,500 for full deconstruction projects .	**Medium** Lane County emphasized the importance of building local markets for materials such as wood and gypsum to help make deconstruction a financially sustainable option.	According to research and different case studies 3-5 years seems like the average time horizon for implementing this strategy	**High** In rural areas, the market for salvaged materials may be limited, making it challenging to sell or repurpose reclaimed items, which can affect the financial viability of deconstruction projects.	**Medium** Deconstruction, which carefully dismantles structures, helps limit the spread of hazardous materials. At Portland's Mills Open Air School, this approach reduced dust containing asbestos and lead, lowering health risks for workers and nearby residents.	**High** Lane County found that construction and demolition debris makes up roughly 31% of its waste stream, highlighting the need for material recovery and reuse to reduce environmental impact.
Construction waste management plans	• Oregon Department of Environmental Quality • Oregon Department of Transportation • Waste Management Divisions	In the Portland metropolitan area, disposing of construction and demolition (C&D) waste at landfills costs approximately $94 per ton. Reword. Recycling sorted construction waste is often more affordable, with fees ranging from no cost up to $35 per ton when materials are properly separated.	**High** DEQ has launched waste prevention campaigns and offers support to local governments to promote community-wide waste reduction, emphasizing improvements in material design, purchasing, and usage practices.	According to research and different case studies the average time horizon is several weeks to a few months, depending on the project's scale, complexity, and applicable regulations.	**Medium** Haulers and contractors in the Portland area can lower costs by sending recyclable materials to approved recovery facilities instead of landfills, helping them avoid higher disposal fees.	**High** Properly managing and disposing of hazardous materials helps reduce exposure risks for both workers and surrounding communities. Oregon's Department of Environmental Quality (DEQ) highlights the need to handle potentially toxic building materials safely to protect public health.	**Medium** The Oregon Department of Environmental Quality reports that buildings are responsible for 30% of the state's consumption-based greenhouse gas emissions, with construction materials making up 8% of that total.
End-of-life building material diversion	• Oregon Department of Environmental Quality (DEQ) • Circular Action Alliance (CAA) • Nonprofit and Community Organizations • Oregon Refuse & Recycling Association	• Running a construction and demolition waste management operation can cost $500,000 to $1 million per year. • Permits and environmental certifications can amount to around $10,000 to $30,000 annually.	**High** Construction and demolition debris make up a large share of Oregon's overall waste. In Portland, C&D materials represent roughly 30–35% of what goes to landfills, while Lane County reports that 31% of its landfill waste comes from C&D activities, primarily wood and gypsum.	**Varies/Unknown** Depends on the scale of project.	**High** Diverting construction and demolition materials for reuse or recycling helps contractors cut costs by avoiding landfill tipping fees and lowering material purchase expenses. Deconstruction can also offer tax advantages when salvaged materials are donated to nonprofit organizations.	**Medium** • Reduced exposure to hazardous substances • Improved Air Quality	**High** • Promoting circular economy best practices • Reduces GHG emissions • Conserves Natural resources • Reduces landfill waste and pollution

Strategy #1: Embodied Carbon in Codes

Who needs to act?	How is it Funded (Examples)	What are the Barriers
JS0 • Oregon Département of Environmental Quality (DEQ) • Oregon Buildings Code Division (BCD) • Oregon Department of Energy • Local Jurisdictions • Non-profit partners • Private Sector Builders and Developers	• Grants and Incentives **Example** - The Oregon DEQ received $25.6 million from the EPA's Climate Pollution Reduction Grant to develop 940 low-embodied carbon housing units in nine communities, aiming to cut 343,487 metric tons of CO_2 by 2050 through adaptive reuse, efficient design, and sustainable materials. • Municipal Codes • State Policy and Code Development/Regional Development **Example -** Metro plans to launch the Reuse Impact Fund in FY 2025–2026 to provide stable funding for nonprofit reuse, repair, and share organizations. It will support activities like workforce training, equipment, and infrastructure to boost material reuse and diversion. • Local Initiatives **Example** – Portland's Deconstruction Ordinance and Low carbon concrete initiative,	

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JS0 Any Oregon Example should be included in the table above.
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RECOMMENDATION #3

- Selected Strategies:

- Recommended next steps
  - WHO and WHAT

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Thank You!

Next Meeting:
Built Environment Subcommittee Meeting #4
TBD
Start: TBD

ES0

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Reduce. Reuse. Sustain.

Slide 15

ES0 Update meeting day, date and time range - remove brackets
Elizabeth Start, 2025-02-18T23:43:45.051