



Task Force on Resilient Efficient Building

Meeting Summary

81st Legislative Assembly

2021-2022 Interim

Attendees	Senator Kate Lieber, Co-Chair Representative Pam Marsh, Co-Chair Senator Lynn Findley Representative Mark Owens Neil Baunsgard Andrew Beyer Alex Boetzel Anjeanette Brown Ashley Buchanan Meredith Connolly Ernesto Fonseca Chris Forney Elliott Gall	Mike Goodrich Jay Hansen Kim Heiting David Heslam Bob Jenks Scott Linfesty Jeff McGillivray Tricia Mooney Jairaj Singh Eli Spevak Matt Tidwell Lucy Vinis Bob Westerman
Absent	Don Bohn	
Date/Time	3:00 PM, Tuesday, April 19, 2022 (recording).	
Meeting Topics	Climate Protection Program <ul style="list-style-type: none">• Climate Protection Program (CPP), adopted in 2021, sets mandatory limits on greenhouse gas (GHG) emissions from fossil fuel use by natural gas utilities and liquid and gaseous fuel suppliers in Oregon.• Oregon is the second state to set these types of limits on these sectors, the first being California, and Washington State is starting to set up a similar program.• Explanation of how program “cap” works and expected emission reductions.• Compliance instruments are distributed to fuel suppliers to be used to comply with the program, or if unused they could be banked or traded. One compliance instrument is equivalent to one metric ton of allowable emissions.• Examples of compliance strategies and compliance periods.• Fuel supplier has the option of paying a fixed amount to a third-party entity to receive a Community Climate Investments (CCI) credit to be used similarly to how they use a compliance credit.• The CCI third-party entity must use the CCI funds to implement projects, using certain priorities, to reduce anthropogenic GHG emissions in Oregon, which includes cost of implementing the projects.	



- Role of the Equity Advisory Committee.
- Other state policies and programs that address fossil fuels.

Embodied Carbon of Building Materials

- Embodied carbon is GHG emissions from the manufacture, transport, installation, and disposal/recovery of construction materials.
- Buildings are responsible for 30 percent of Oregon's consumption-based emission inventory of GHG emissions; one quarter of those emissions are attributed to embodied carbon.
- Importance of including strategies to address both operational and embodied carbon when designing carbon-reduction strategies.
- Typical embodied carbon profiles of certain building materials.
- Opportunities to reduce embodied carbon: build less, reuse existing buildings, build smaller, reuse materials, optimize building, optimize materials, minimize waste, and recover waste.
- Pathways to apply implementation: building codes and procurement, among other options.
- Marin County, California, is the only current example of a municipality requiring lower-carbon materials with their concrete requirements, but it is being considered by the International Building Code, Denver Green Code, and Washington State IBC Code.
- Cost of lower-carbon materials:
 - optimize concrete – 14-33 percent reduction, no- to low-cost premium;
 - use high recycled content in rebar – 4-10 percent reduction, no- to low-cost premium; low- or no-embodied carbon insulation – 16 percent reduction, no cost premium; and
 - low-embodied carbon glazing products – 3 percent reduction, 10 percent cost premium.
- Availability and use of environmental product declarations (EPDs) in buy-clean programs.
- House Bill 4139 (2022) requires Oregon Department of Transportation (ODOT) to require EPDs for concrete, steel, and asphalt for select infrastructure projects but does not include vertically constructed state buildings as California and Colorado do.
- Carbon levels by material scale vs. building scale.

Oregon Department of Energy (ODOE) Supported Programs, Including: Oregon's Greenhouse Gas Reduction Plan (Roadmap to 2035), Product Efficiency Standards, and Efficiency and Renewable Energy Incentive Programs



	<ul style="list-style-type: none">• Roadmap to 2035 is a plan with recommended actions across all sectors to help achieve Oregon’s GHG reduction and sequestration goals.• Process for developing the roadmap (TIGHGER Project), including three different decarbonization strategies, emission reduction analysis, and co-benefits/co-harm analysis.• Next Steps in Roadmap to 2035 process:<ul style="list-style-type: none">○ Completion of analyses (May)○ Public input on co-benefits (May-July)○ Oregon Global Warming Commission (OGWC) scores and ranks the actions (June-Sept.)○ OGWC creates a new “Roadmap to 2035” (Sept-Jan.)• Consumer product efficiency standards are complementary to building codes to address natural resource consumption in the built environment.• As of 2021, ODOE estimates that recent energy standards will result in an estimated savings of \$30 million in annual energy cost savings in 2025, \$100 million in savings by 2035, a reduction of 50,000 metric tons of annual carbon dioxide emissions in 2025, and a reduction of over 100,000 metric tons in 2035.• Oregon Solar + Storage Rebate Program – Funds solar and solar with paired storage systems. The Oregon Legislative Assembly allocated an additional \$10 million to the program in 2021, and \$5 million in 2022.• Energy Efficient Wildfire Rebuilding Incentive Program – Incentivizes energy efficient rebuilding of residential and commercial structures destroyed during the 2020 Labor Day wildfires. The Oregon Legislative Assembly allocated \$10 million to the program.• Community Renewable Energy Grant Program – Provides grants for planning and developing community renewable energy and energy resilience projects. The Oregon Legislative Assembly allocated \$50 million to the program.• Senate Bill 1536 (2022) created the following programs: \$10 million Heat Pump Deployment Program, \$15 million Residential Heat Pump Fund for Renters, and the \$2 million Community Cooling Center Program (to be administered by Energy Trust of Oregon).
Issues Discussed	<ul style="list-style-type: none">• Nexus of CPP to work of RE-Build Task Force, including the use of CCI funds in the building sector and the possibility of Task Force to inform potential uses of CCI funds.• CPP program clarifications.• Outcomes of modeling showing need for multiple strategies to



	<p>address GHG emissions.</p> <ul style="list-style-type: none">• Impact of mandating low-carbon building materials on product availability.• Potential for shared analysis with the Roadmap to 2035 project and future scenarios analysis at the next OGWC meeting.• Interaction between ODOE and Building Codes during the code adoption process.• Methodology for modeling and policy analysis.
Action Items	<ul style="list-style-type: none">• Obtain future scenarios from the Roadmap to 2035 project from the upcoming OGWC meeting.
Meeting Materials (OLIS)	<p>Climate Protection Program PowerPoint</p> <p>Embodied Carbon of Building Materials PowerPoint</p> <p>Roadmap to 2035 PowerPoint</p> <p>Product Efficiency Standards and Incentive Programs PowerPoint</p>