



Oregon

Kate Brown, Governor

Department of Environmental Quality

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DATE: February 16, 2022

TO: Joint Committee on Transportation

FROM: Abby Boudouris, Legislative Analyst

SUBJECT: HB 4139-2 of 2022 Session

HB 4139-2 requires the Oregon Department of Transportation (ODOT) to develop a program to reduce the carbon emissions of concrete, asphalt, and steel purchases. The bill requires environmental product declarations (EPDs) for a portion of ODOT's material purchases. EPDs disclose the carbon emissions of making these materials, and help purchasers choose lower impact products. The [State of California](#), [State of Colorado](#), [City of Portland](#), and [Sound Transit Authority](#) in Washington State have similar carbon reduction policies that require EPDs for a selection of building materials.

The carbon impacts of building material consumption in Oregon are significant. [Oregon's 2015 Consumption Based Greenhouse Gas \(GHG\) Inventory](#) shows that building materials comprise approximately 8% of Oregon's emissions. Due to these significant impacts, reducing the impacts of such materials is a focus area in DEQ's [Materials Management Vision & Framework for Action](#). Additionally, ODOT's [recent GHG inventory](#) shows that over 50% of ODOT's operational emissions come from the agency's purchase of materials.

The EPD requirement in this bill would first have ODOT establish a baseline accounting of carbon for materials purchases for concrete, asphalt, and steel. Then ODOT would implement strategies to reduce these impacts for a selection of demonstration projects in Oregon.

An EPD is a product label that provides information on the environmental impacts associated with that product's production and helps purchasers, in this case ODOT, choose products with lower environmental impacts. Typically, EPDs measure and report impacts of raw material extraction, transportation, and manufacturing. Carbon emissions, which are reported as "global warming potential," are one of the many environmental impacts disclosed in EPDs. Third party verification of published EPDs is required by rules established by the international organization of standardization (ISO) 14025. EPDs can also help manufacturers identify opportunities to reduce environmental impacts in their supply chain and manufacturing process.

Private and public building projects are beginning to use EPDs to inform purchasing decisions for lower impact concrete mixes. The City of Portland has required concrete EPDs since January 2020 and will soon set carbon limits on its concrete purchases. EPDs are accessible via numerous websites and Oregon has been a leader in EPD development nationally. Oregon has an extensive number of concrete EPDs, more asphalt EPDs than other state in the USA, and several steel EPDs for locally produced re-bar.

Examples of EPDs for Oregon-based manufacturers:

Concrete	Cal Portland , Knife River , Riverbend , Wilsonville , Hooker Creek , Cadman
Drywall	USG
Steel re-bar	Cascade Steel Mill , Farwest Steel
Doors	Oregon Door
Wood	Roseburg - I-joist, lumber, LVL, plywood, particleboard
Asphalt	Baker Rock , Riverbend Materials , Knife River

DEQ's role in HB 4139-2 is to serve on ODOT's technical advisory committee established by the bill. From 2017-2020, DEQ worked in partnership with the Oregon Concrete and Aggregate Producer's Association (OCAPA) in a voluntary program to help Oregon concrete producers develop EPDs. The program provided technical and financial support to over 20 individual concrete plants around the state, which helped produce over 1,000 concrete EPD labels.

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