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March 14, 2023

My name is Webly Bowles, and a Senior Project Manager at New Buildings Institute (NBI) and I live in Portland, Oregon. NBI is a non-profit headquartered in Portland. NBI is dedicated to advancing building decarbonization through research, development of design guidance, and innovative codes and policies. I serve on the ASHRAE 189.1 committee, which maintains the Standard for Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings. I also volunteer on the ASHRAE Building Decarbonization Task Force's working group for Whole Life Carbon. And I am currently engaged with multiple U.S. jurisdictions interested in integrating embodied carbon in their building codes to meet GHG emission reduction goals.

NBI supports SB 869 because building codes have been one of the most influential tools to address climate change - they establish minimum requirements to safeguard the public from the hazards associated with buildings. Building and energy codes support resilient and efficient buildings, which lead to better health, lower costs, less pollution, safer communities, and a more livable future for all Oregonians

SB 869 presents three essential actions that align with Executive Order 20-04 to "facilitate the state's achievement of greenhouse gas emissions." Coordinating research and implementation between DEQ and BCD creates a 10-year path that Oregonians can trust to reduce greenhouse (GHG) emissions from building product manufacturers and buildings.

However, the bill should also direct BCD to incorporate embodied carbon requirements in the building code in the next cycle and progress the requirements each cycle. As the building code continues to reduce operational emissions, embodied carbon will become a larger part of a building's footprint. The building and energy codes must continue protecting the public by addressing embodied carbon as we aim to reduce Oregon's GHG emissions by 45% by 2035.

Over the last three years, my work has focused on researching and engaging with jurisdictions to support embodied carbon in building codes. Through this effort, we know that building codes are the place to address embodied carbon because their mission is to protect the community from a wide range of hazards, and it utilizes a longstanding policy tool that addresses health, life, and safety in buildings.

Other West Coast jurisdictions are considering embodied carbon requirements in their codes – Seattle has formed a work group to identify the structure and requirements. California is considering three paths for projects over 50,000 square feet to comply with embodied carbon requirements in

Title 24, Part 11. Unfortunately, in January 2023, Oregon's Building Codes Board voted down a proposal that would have limited the GHG emissions associated with concrete in residential projects.

Recent Oregon policies have started to address high GWP emissions in concrete and it's time for the building code to do the same. Oregon Buy Clean applies to transportation, and Portland's Low-Carbon Concrete Initiative requirement applies to City of Portland-funded projects. While these two policies cover many projects in the state, it misses one of the most common, and growing source of concrete – residential and commercial construction. Residential projects alone use the second most amount of concrete, second only to jurisdictional projects.

To minimize the impacts of building products on human health, Oregonians need SB 869 to not only address research on this critical topic but to require the building code to set limits on the global warming potential (GWP) of building products. The code should start with the most common building products that are used in the highest quantities and those with the highest GHG emissions – concrete and steel.

For these reasons, I strongly urge you to require DEQ's recommendations to BCD to be incorporated in the code. Please vote YES on SB 869 with the addition of updating the code to address embodied carbon.

Sincerely,

Webly Bowles, AIA, LEED-BD+C & O+M

Senior Project Manager New Buildings Institute

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