



Shaping Tomorrow's Global Built Environment Today

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Bill McQuade
ASHRAE Society President, 2025-2026

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January 16, 2026

The Honorable Members of the House Local Government Committee
Washington House of Representatives
Office of Program Research
245 John L. O'Brien Building
Olympia, WA 98504-0600

Re: House Bill 2273 "Reducing Embodied Carbon Emissions in Buildings
and Construction Materials."

Dear Chair Duerr, Ranking Member Klicker, and Members of the House Local Government Committee:

I am writing on behalf of ASHRAE, the American Society of Heating Refrigerating, and Air Conditioning Engineers. ASHRAE, founded in 1894, is a global professional society of more than 54,000 members, including 960 in Washington State, that focuses on the engineering of building systems, indoor air quality, sustainability, and resiliency. Through research, standards development, publishing, certification, and continuing education, ASHRAE shapes tomorrow's global built environment today.

ASHRAE stands at the forefront in advancing tools to support decarbonization across a building's entire life cycle, including building design, construction, operation, occupancy, and end of life. Demonstrating its firm commitment to these principles, ASHRAE established a Center for Excellence in Building Decarbonization (CEBD) in 2024 to provide strategic direction for ASHRAE's building decarbonization activities and reliable technical information on decarbonization to policymakers and the public.

ASHRAE supports efforts to reduce embodied carbon emissions from buildings and promote the adoption of whole building life-cycle assessments. **ASHRAE supports the goal of HB 2273 to reduce embodied carbon emissions in the built environment, and has recommendations for strengthening the whole-life carbon assessments and specific definitions in the bill.**

- First, we support the bill's approach to considering buildings of 100,000 ft² and larger. This aligns with the cutoff point in ASHRAE Standard 100-2024, *Energy and Emissions*

Building Performance Standard for Existing Buildings and will be easily recognizable to the industry.

- A standardized whole life carbon calculation methodology is essential to ensure consistent, transparent, and comparable results across projects, enabling credible benchmarking, informed design decisions, and effective regulation. To address this need, ASHRAE is in the final stages of developing a standard for the industry's whole life carbon calculation: ASHRAE Standard 240P, *Quantification of Life Cycle Greenhouse Gas Emissions of Buildings*. With publication expected in 2026, this consensus-based standard will provide a methodology for quantifying and documenting greenhouse gas emissions associated with buildings, building systems, and building equipment throughout their entire life cycle.
- A whole life carbon life cycle assessment is the best way to make the best decision on a building's carbon emissions. While looking at module A1-A3 emissions, as provided in the legislation, is a common method for most jurisdictions, it will not provide the best solution for the environment and effectively create a low barrier that discourages full whole life carbon assessment. Therefore, we suggest that Section 3 of the proposed bill be eliminated.
- The use of consistent definitions of decarbonization terms is important to avoid unnecessary confusion and ensure alignment across the industry. We strongly recommend that the State of Washington use ASHRAE's definition of embodied carbon emissions in lieu of the proposed definition in Section 6 (2), as the ASHRAE definition is already aligned with other industry standards. The following definition of "embodied carbon emissions" was developed and is continually maintained by a technical committee of experts at ASHRAE: "The total greenhouse gas emissions arising from the manufacturing, transportation, installation, maintenance, and disposal of an asset (i.e., building)."
- Additionally, the legislation refers to ISO 14044 and ISO 21931-1 and uses the terms of different modules (example A1 – A3). It should be noted that the ISO standards referenced do not define the specific modules. Those definitions are included in ASHRAE Standard 240P, and ASHRAE would be happy to work with you to ensure these definitions align with the industry. All three of these documents are intended to work in conjunction with one another. ISO 14044 outlines the correct methodology for conducting an LCA, ISO 21931-1 specifies the building life-cycle stages to include, and ASHRAE 240P provides guidance on performing the calculations.

ASHRAE would be happy to meet with legislators and/or legislative staff to discuss these technical issues in greater depth and to share more about the development and content of Standard 240P.

Thank you for your consideration of ASHRAE's comments. We look forward to meeting with you to discuss potential technical refinements to the legislation. To schedule a meeting, please have your staff contact GovAffairs@ashrae.org.

Sincerely,

A handwritten signature in black ink, appearing to read "Bill McQuade". The signature is stylized with a large, looped "B" and "M".

Bill McQuade
ASHRAE Society President, 2025-2026