



Shaping Tomorrow's
Built Environment Today

Ginger Scoggins
2023-2024 ASHRAE President

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The Honorable Amy Sheldon
Chair
House Committee on Environment and Energy
Vermont House of Representatives

Letter sent via email to: asheldon@leg.state.vt.us

Re: HB 792, "An Act relating to the Residential and Commercial Building Energy Standards"

Dear Chair Sheldon, Vice Chair Sibilia and Members of the House Committee on Environment and Energy:

I am writing on behalf of ASHRAE in support of updating Vermont's energy code to the latest (2022) edition of ASHRAE Standard 90.1. ASHRAE, founded in 1894, is a technical and professional society of more than 53,000 members, including over 100 in Vermont, that focuses on building systems, energy efficiency, indoor air quality, refrigeration, and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today.

ASHRAE supports the provision in House Bill 792 that would enable use of the most recent edition of ANSI/ASHRAE/IES Standard 90.1, [Energy Efficiency in Sites and Buildings Except Low-Rise Residential Buildings](#). Standard 90.1 has been the benchmark for commercial building energy codes in the United States and a key basis for codes and standards around the world for more than 35 years. It is an indispensable reference for engineers and other professionals involved in design of buildings and building systems. Its energy performance has improved in each successive edition, resulting in major improvements over time; over the period of 2004-2019, which included six editions of Standard 90.1, energy performance improved by 36%.

The latest edition of Standard 90.1, the 2022 edition, has made significant updates and expands on previous editions. This 2022 edition begins the Standard's move towards becoming a Net Zero Carbon Emission Code by 2031. It includes a new optional appendix that allows the use of alternative metrics like site energy, source energy, or carbon emissions in addition to the traditional energy cost metric. Most importantly, for the first time in a minimum-efficiency U.S. national energy standard, 90.1-2022 has an expanded scope that includes not just buildings, but the entire building site, including on-site renewable energy.

Additionally, the U.S. Department of Energy (DOE) has recently issued a determination that ASHRAE Standard 90.1-2022 will achieve greater energy efficiency in commercial buildings subject to the code, as compared to the previous 2019 edition of the standard. The determination estimates savings for commercial buildings of approximately 9.8% in site energy and 9.4% in source energy, along with an estimated 8.9% reduction in energy costs and 9.3% savings in carbon emissions.¹ This determination also sets in motion a statutory requirement that within two years of the publication of the affirmative determination by DOE, each state is required to certify that it has reviewed and updated its commercial building code such that it meets or exceeds the revised standard. We are pleased to see that the proposed bill would give Vermont the opportunity to meet this requirement and achieve these energy efficiency benefits in a timely manner.

Again, we support requiring usage of the updated 2022 edition of ASHRAE Standard 90.1. This will benefit the people of Vermont and result in a more sustainable built environment. If you have any questions or need additional information, please feel free to contact GovAffairs@ashrae.org. Thank you for your work to improve building performance and improve the lives of Vermont residents.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Ginger Scoggins', written in a cursive style.

Ginger Scoggins
ASHRAE President

¹ Determination Regarding Energy Efficiency Improvements in ANSI/ASHRAE/IES Standard 90.1-2022, U.S. Department of Energy, February 2024: https://www.energycodes.gov/sites/default/files/2024-02/Standard_90-1-2022_Determination_FR_Notice.pdf