



Shaping Tomorrow's
Built Environment Today

Ginger Scoggins
2023-2024 ASHRAE President

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The Honorable Daniel B. Verdin
Chair
Committee on Medical Affairs
South Carolina Senate
1101 Pendleton Street
Columbia, SC 29201

Letter sent via email to: DannyVerdin@scsenate.gov

Re: S. 1205, "State Building Construction Energy Standards"

Dear Chair Verdin:

I am writing on behalf of ASHRAE, in support of the provision in S. 1205 that would require "state-owned buildings to comply with the latest edition of ASHRAE, as referenced in the International Codes adopted by the South Carolina Building Codes Council." ASHRAE, founded in 1894, is a technical and professional society of more than 53,000 members, including over 450 in South Carolina, 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.

We support the proposed requirement for state-owned buildings to comply with the latest edition of ASHRAE standards, and suggest that the bill be amended to specify the latest 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. ASHRAE Standard 90.1 is under continuous maintenance by the 90.1 Standard Project Committee, and 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.

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 We are pleased to see that, with the passage of this bill, South Carolina would be on track to achieve these energy efficiency benefits in a timely manner.

Again, we support the requirement for state-owned buildings to comply with the latest edition of ASHRAE, and suggest that the bill specifically reference Standard 90.1. 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 South Carolina residents.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Ginger Scoggins', with a stylized, cursive script.

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