



Shaping Tomorrow's
Built Environment Today

April 20, 2022

The Honorable Jamie Long
Chair
House Committee on Climate and Energy Finance and Policy
Minnesota House of Representatives
100 Dr. Martin Luther King Jr. Blvd
St. Paul, MN 55155

Letter sent via email to: rep.jamie.long@house.mn

Re: HF 831

Dear Chair Long, Vice Chair Acomb, and Committee Members:

I am writing on behalf of ASHRAE regarding HF 831, “An Act Relating to the State Building Code.” ASHRAE, founded in 1894, is a technical and professional society of more than 51,000 members, including over 800 in Minnesota, that focus 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 adoption of the most up-to-date energy standards. Specifically, we support the provision in HF 831 that would update the state code to successively adopt “each new published edition of ASHRAE Standard 90.1.” Currently, the most up-to-date edition of Standard 90.1 is the 2019 edition.

Adopting Standard 90.1-2019 statewide will result in energy savings and lower operational costs. For buildings in Minnesota, this would amount to estimated energy cost savings of \$663,200 in the first year, and \$279 million over 30 years. These savings are calculated based on the present value of energy savings for a building built under the updated code as compared to the previous 2016 edition of Standard 90.1. Adopting the latest energy standard in Minnesota is also estimated to reduce statewide carbon dioxide emissions by 4.9 million metric tons over 30 years, equivalent to the emissions of 1,076,000 cars driven for one year.¹

ANSI/ASHRAE/IES Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, 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. The 2019 edition of Standard 90.1 includes significant updates and clarifications to previous editions. These include changes to the requirements for administration

¹ Cost-Effectiveness of ANSI/ASHRAE/IES Standard 90.1-2019 for Minnesota, Pacific Northwest National Laboratory, July 2021: https://www.energycodes.gov/sites/default/files/2021-07/Cost-effectiveness_of_ASHRAE_Standard_90-1-2019-Minnesota.pdf

and enforcement, the building envelope, the lighting, mechanical, and energy cost budget sections, and the performance rating method.

Additionally, ASHRAE believes that Section 326B.106, subdivision 1(d) of the proposed bill, which requires “amending [the energy code] as necessary to achieve a minimum of eight percent energy efficiency with each edition,” is unnecessary to achieving the goals of this legislation. ASHRAE Standard 90.1 is under continuous maintenance by the 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%. In developing the upcoming 2022 edition, the 90.1 Standard Project Committee has targeted a 45-50% increase in energy performance compared to 2004.

Again, we appreciate your support of HF 831 and its proposed inclusion of the most recent edition of ASHRAE Standard 90.1, and each subsequently published edition, in the State of Minnesota’s building energy codes. This update would benefit the people of Minnesota 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 Minnesota residents.

Sincerely,

A handwritten signature in green ink that reads "Mich Schwedler".

Michael CA Schwedler, PE
2021-2022 ASHRAE President

cc: The Honorable Heather Edelson
The Honorable Kaela Berg
The Honorable Jay Xiong