



Shaping Tomorrow's  
Built Environment Today

Farooq Mehboob  
2022-2023 ASHRAE President

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March 21, 2023

The Honorable Elizabeth Olson  
Chair  
Ways and Means Committee  
Minnesota House of Representatives  
100 Rev. Dr. Martin Luther King Blvd  
St. Paul, MN 55155

Letter sent via email to: [rep.liz.olson@house.mn](mailto:rep.liz.olson@house.mn)

Re: HF 772

Dear Chair Olson:

I am writing on behalf of ASHRAE in support of the updates to the state commercial building energy code included in HF 772. ASHRAE, founded in 1894, is a technical and professional society of more than 53,000 members, including over 800 in Minnesota, 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 HF 772 that would ensure that the most recent edition of ASHRAE Standard 90.1, *Energy Efficiency in Buildings Except Low-Rise Residential Buildings*, is adopted beginning in 2024.** 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 latest edition of Standard 90.1, the 2022 edition, includes significant updates and clarifications to previous editions.

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%. In developing the most recent 2022 edition, the 90.1 Standard Project Committee has targeted a 45-50% increase in energy performance compared to 2004.

We also appreciate that Minnesota is set to adopt the 2019 edition of Standard 90.1. This update will result in energy savings and lower operational costs. For buildings in Minnesota, this change will 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 90.1-2019 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.<sup>1</sup>

Again, we support HF 772's proposed adoption of the most recent edition of ASHRAE Standard 90.1 beginning in 2024. This will 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](mailto:GovAffairs@ashrae.org). Thank you for your work to improve building performance and improve the lives of Minnesota residents.

Sincerely,



Farooq Mehboob  
2022-2023 ASHRAE President

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<sup>1</sup> 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/Costeffectiveness\\_of\\_ASHRAE\\_Standard\\_90-1-2019-Minnesota.pdf](https://www.energycodes.gov/sites/default/files/2021-07/Costeffectiveness_of_ASHRAE_Standard_90-1-2019-Minnesota.pdf)