

ASHRAE's Public Policy Priorities: SY 2023-2024

 <u>Support Sustainable Building Practices including Building Decarbonization to Mitigate Climate Change</u> Buildings and their heating, ventilation, air conditioning and refrigeration (HVAC&R) systems directly and indirectly contribute to GHG emissions. Buildings are responsible for more than 35% of global final energy use and nearly 40% of energy-related greenhouse gas emissions worldwide. Eliminating greenhouse gas emissions from the built environment is essential to address climate change. ASHRAE is advancing additional tools to support decarbonization across a building's entire life cycle, including building design, construction, operation, occupancy, and end of life. ASHRAE is targeting emissions from the operation of buildings as well as those embodied in building materials and the construction process.

In addition to government adoption of robust building energy standards such as ASHRAE Standard 90.1 (commercial), 90.2 (residential), 90.4 (data centers), 189.1/IgCC (green buildings) and 189.3 (highperformance health care facilities) for new construction, ASHRAE supports policies and programs to improve the energy and carbon performance of existing buildings such as through the adoption of Standard 100 and policies such as building performance standards, building benchmarking and labeling requirements. To evaluate whether a building or group of buildings meet a definition of "zero net energy" or "zero net carbon," ASHRAE recommends governments use and refer to ASHRAE Standard 228, Standard Method of Evaluating Zero Net Energy and Zero Net Carbon Building Performance.

<u>Promote Healthy Buildings and Reduce Indoor Environmental Risks</u>

Supporting the health and well-being of building occupants is the most important feature of the indoor environment. Providing acceptable indoor air quality is an essential building service that should be achieved while also improving building energy efficiency, sustainability, and resiliency. The latest versions of ASHRAE Standards for Ventilation and Indoor Air Quality (62.1 for commercial buildings, 62.2 for residential, and 170 for health care facilities) should be adopted in building codes and regulations. Jurisdictions should also adopt Standard 241, *Control of Infectious Aerosols*, to reduce the risk of disease transmission including COVID-19. With respect to water systems, Jurisdictions should adopt ASHRAE Standard 188-2021 and Guideline 12-2020, which present a framework and guidance for *Legionella* risk mitigation. ASHRAE recommends that policymakers cite ASHRAE standards and guidance in legislation and policies to reduce the risk of pathogen transmission in building in schools and congregate housing. At a national level, model building codes should be developed that address IAQ.

Ensure the Orderly and Safe Phasedown of High-GWP HFC Refrigerants

ASHRAE supports the global phasedown of the production and consumption of Hydrofluorocarbon (HFCs) refrigerants that have high-Global Warming Potential (GWP), including through legislation, regulations, and policy. Governments are mandating the near-term use of lower GWP refrigerants, which can have some flammability. ASHRAE Standard 15-2022, *Safety Standard for Refrigeration Systems*, and Standard 34-2022, *Designation and Classification of Refrigerants* should be adopted quickly to help ensure the safe use of these refrigerants. Additional ASHRAE resources include the *Update on New Refrigerants Designations and Safety Classifications* factsheet, which was developed through a cooperative agreement with UNEP. ASHRAE is also working with UNEP to assist developing countries with the adoption of state-of-art technologies and deployment of lower-GWP refrigerants to protect supply of food and medicine (including vaccines), as well as provide increased comfort and productivity while meeting sustainability goals.



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Advance Design and Construction of Resilient Buildings and Communities

Resiliency is an important societal, economic, and technical issue that will have a major impact on how buildings are designed, renovated and operated. For example, the increasing threat of wildfires has led ASHRAE to produce technical materials such as the <u>Planning Framework for Protecting Commercial</u> <u>Building Occupants from Smoke During Wildfire Events.</u>

As investments are made to improve infrastructure, buildings should be included, as they are vital for protecting the public when natural and human-induced events occur. A building's ability to recover and be available to occupants following such an event can have widespread economic and health implications. In particular, up-to-date building energy and indoor air quality (e.g., ventilation, filtration) standards are essential elements of providing resilient buildings. Unfortunately, most states have not adopted the most recent standards and codes that are based on the latest research and technological innovation, which could make building occupants more vulnerable to disasters. In addition, policies and regulations that require qualified HVACR engineering and technical professionals to be an integral part of building design, construction, and operation are encouraged as these can result in a more resilient and safer built environment.

• <u>Support Adoption of the Latest Edition of ASHRAE's Energy Standards into Building Codes</u> Energy efficiency can be improved significantly through the adoption and effective implementation of the most recent version of Standard 90.1 *Energy Standard for Buildings Except Low-Rise Residential Buildings*, which has provided the minimum requirements for the energy-efficient design in the United States for over 40 years. Although its adoption in the U.S. by States is required by the Energy Conservation and Production Act (ECPA), most States are using dated versions of the standard, resulting in buildings with higher energy needs and costs. Residential buildings and data centers can also achieve improved performance, save energy costs, and reduce climate impacts when jurisdictions adopt ASHRAE Standard 90.2 (residential) and Standard 90.4 (data centers).

• Strengthen and Increase Diversity in the HVACR Workforce

Strong education in science, technology, engineering and mathematics (STEM) to develop the pipeline of technicians, engineers and scientists is critical to our future well-being and standard of living. ASHRAE supports policies that strengthen STEM at all educational levels, including through use of ASHRAE's extensive educational offerings. Policymakers should consider requiring ASHRAE certification programs to ensure professionals have the knowledge to improve building performance.

ASHRAE's Board of Directors is committed to proactively pursuing and celebrating diverse and inclusive communities, as it fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and for the communities we serve. We respect and welcome all people regardless of age, gender, ethnicity, physical appearance, thought style, religion, nationality, socio-economic status, belief system, sexual orientation or education.