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Built Environment Today

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2021-2022 ASHRAE President

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March 14, 2022

The Honorable Robert Menendez
Chairman
U.S. Senate Committee on Foreign Relations
423 Dirksen Senate Office Building
Washington, DC 20510

The Honorable James E. Risch
Ranking Member
U.S. Senate Committee on Foreign Relations
423 Dirksen Senate Office Building
Washington, DC 20510

Re: Ratification of the Kigali Amendment to the Montreal Protocol

Dear Chairman Menendez and Ranking Member Risch:

The Kigali Amendment to the Montreal Protocol is an agreement to phase down the production and consumption of high global warming potential (GWP) hydrofluorocarbons (HFCs) globally before 2050. The phase down began in 2019 and 130 countries around the world have already ratified the amendment, including the EU, UK, China, and India. We urge the Senate Foreign Relations Committee to give prompt consideration and a favorable vote to ratify the Kigali Amendment to the Montreal Protocol at its earliest opportunity, so that it may be considered by the full U.S. Senate.

ASHRAE, founded in 1894, is a technical society advancing human well-being through sustainable technology for the built environment. The Society and its more than 50,000 individual members worldwide focus on building systems, energy efficiency, indoor environmental quality, refrigeration and sustainability. ASHRAE has been involved in research projects and the development of standards to help industry safely transition from the current HFC refrigerants to a next generation of refrigerants without disruption to the end-users that rely on refrigeration and air conditioning technologies.

The Biden Administration committed to ratify the Kigali Amendment in April 2021 and it was transmitted to the Senate for ratification consideration on November 16, 2021. To date, the Senate has not taken substantive action toward ratification. Although the U.S. enacted the American Innovation and Manufacturing Act in 2020, which authorizes the U.S.

Environmental Protection Agency to phase down high GWP refrigerants in line with the Kigali Amendment, ratification is necessary to ensure American technology leadership, to provide more accountability to meet phasedown goals, to expand commerce opportunities, and to enable trade favorability with other ratifying countries. Ratification of the Kigali Amendment has bipartisan support, will reduce potent greenhouse gas emissions, prevent a half degree Celsius of warming by the end of the century, boost domestic manufacturing by over 30,000 jobs, and reestablish the U.S. as a leader in the global effort to combat global warming.

High GWP HFCs are commonly used in refrigeration, air conditioning, heating, building insulation and fire extinguishing systems today. The use of these HFCs is attributed to the phaseout of ozone depleting chloroflourocarbons (CFCs) and hydrochloroflourocarbons (HCFCs) under the Montreal Protocol. While HFCs are not ozone depleting, their GWP can be as much as 14,000 times greater than carbon dioxide. For this reason, alternative refrigerants have been developed with low or no GWP, some of which are mildly flammable.

To safely transition to these next generation refrigerants, ASHRAE Standards 15 and 34 have been updated and are available for immediate adoption. These standards are designed to protect people and property, and provide a uniform system for assigning reference numbers, safety classifications and refrigerant concentration limits to refrigerants:

- Standard 15-2019 *Safety Standard for Refrigeration Systems* establishes procedures for operating equipment and systems associated with refrigerants
- Standard 34-2019 *Safety Classification of Refrigerants* provides shorthand nomenclature and assigned safety classes based on toxicity and flammability

We are ready to offer our support, knowledge, and resources to answer technical questions concerning the phase down of HFCs, particularly those used as refrigerants in buildings. Please contact me with any questions or have your staff contact ASHRAE's government affairs staff at GovAffairs@ASHRAE.org. Thank you again for your consideration of our comments.

Sincerely,



Michael CA (Mick) Schwedler, P.E., Fellow ASHRAE, LEED AP
2021-2022 ASHRAE President