## Testimony

of John Galyen

Chairman, Board of Directors, Air-Conditioning, Heating, and Refrigeration Institute (AHRI)

President, Danfoss North America

before the House Committee on Energy and Commerce Subcommittee on Environment and Climate Change

On the American Innovation and Manufacturing Leadership Act (H.R. 5544)

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Good morning, Chairman Tonko, Ranking Member Shimkus, and members of the Subcommittee. My name is John Galyen, and I am the Chairman of the Board of Directors of the Air-Conditioning, Heating, and Refrigeration Institute (AHRI), the trade association for manufacturers of HVACR and water heating equipment.

AHRI's more than 300 member companies manufacture quality, efficient, and innovative residential and commercial air conditioning, space heating, water heating, and commercial refrigeration equipment and components for sale in North America and around the world.

AHRI also develops standards for, and certifies the performance of, many of these products.

AHRI member companies produce more than 90 percent of the previously named equipment used in the United States and more than 70 percent that is used around the world. Simply put, each of your constituents depends on the equipment produced by our member companies multiple times each day to ensure their health, safety, comfort, and productivity.

I also serve as President of Danfoss North America, a manufacturer and member company of AHRI.

Thank you for the opportunity to provide comments on this important bill; a bill that I am happy to note does not require funding to pass.

I would like to highlight that swift enactment of the H.R. 5544, the *American Innovation* and *Manufacturing Leadership Act of 2020* -- would create a federal schedule to phase down a class of chemicals known as hydrofluorocarbons, or HFCs and would, at the same time, create American jobs, stimulate investment, and boost exports. This rare opportunity for bipartisan leadership, with its job creation, investment stimulant, and export increase, will ensure that American companies can continue to lead a rapidly growing and increasingly competitive global market for heating, ventilation, air conditioning, and refrigeration products and equipment. Without passage of this bill, we risk a disorderly transition that put American industry and innovation at risk.

The Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR) industry was born right here in the U.S. and supports 1.3 million American jobs and annually contributes \$158 billion worth of goods and services to the U.S. economy. The companies in this industry with significant business and manufacturing operations here in the United States are among the recognized world leaders in HVACR technologies, with decades of substantial investments in

innovation and R&D that has enabled us to lead and support the successful local and global transitions in refrigerant technologies over the past 30 years.

The lack of federal HFC regulation places at risk that hard-earned leadership role and is giving our foreign competitors an advantage as they develop the next generation technologies that the world will use to ensure health, safety, comfort, and productivity. American-based companies have been preparing for a transition from HFCs for nearly a decade, investing billions of dollars in the development of new refrigerants that will be vital to the next generation of HVACR products and equipment. Without this bill, our investments and leadership are at risk and we face the loss of global, technical innovation and jobs.

The commitment to innovation is one of the hallmarks of the U.S. HVACR industry and American manufacturing in general. Innovation has conferred substantial economic benefits to manufacturers based here in the United States as well as to American workers and consumers. It also has provided important environmental benefits, with each generation of refrigerant technologies designed to be significantly more environmentally friendly, both in terms of impacts on the stratospheric ozone layer and the climate and also in terms of the energy efficiency and overall performance of equipment.

The refrigerants at issue in this bill, hydrofluorocarbons, or HFCs, are commodity chemicals used as refrigerants, solvents, foam blowing agents, propellants, fire suppressants,

and aerosols. HFCs were initially commercialized as substitutes for previous generations of refrigerants and fire suppressants, such as chlorofluorocarbons (CFCs), halons, and HFCs' immediate predecessors, hydrochlorofluorocarbons (HCFCs), which were found to deplete the stratospheric ozone layer. Those chemicals were phased out under the Montreal Protocol, which was negotiated and signed by President Ronald Reagan in 1987. The Montreal Protocol, which is universally recognized as the world's most successful international treaty, was ratified unanimously by the Senate in 1988.

About 15 years ago, American-based companies began preparing for a transition away from HFCs, investing billions of dollars in the research and development of new refrigerants as well as the products and equipment in which they would be used, so our companies could be among the first to bring to market these technologies.

American companies have invested the most in innovation for the next generation of refrigerants and equipment, compared to their global counterparts, and are as a result best prepared to benefit from a transition from HFCs and into American-made next generation refrigerant technologies. What is lacking, is a federal framework for an HFC phase down. This absence of a federal framework leaves American manufacturers at a disadvantage with their foreign counterparts, who are already operating under their own federal frameworks.

The American Innovation and Manufacturing Leadership Act of 2020, if swiftly enacted by Congress, would establish that urgently needed federal framework.

This bill does not ban or cut off the use of HFCs. Rather, it provides a framework for a gradual reduction in the production and import of HFCs over a 15-year period. This provides a market- and consumer-friendly path for transitioning to HFC substitutes. At no point would this bill force anyone to abandon existing refrigeration or air conditioning equipment simply because that equipment uses HFCs. On the contrary, consumers and building owners will be able to continue using HFC-based equipment for as long as that equipment is able to be serviced. What will change, over time, is that new, innovative equipment will become broadly available. Eventually, only equipment using HFC substitutes will be available for new purchase. We expect HFCs will be around to service existing equipment for decades to come. This is something we've done before, and the bill is based on the regulatory programs that shepherded the smooth transition away from older classes of refrigerants such as CFCs.

The legislation protects even small or niche uses of HFCs *as it* only phases *down* HFCs, rather than phasing them out completely, allowing for the use of HFCs in vital refrigerant blends. And it contains exceptions for essential uses for which no substitute is available, also following precedent set in previous refrigerant transitions.

The economic benefits of an HFC transition are significant. According to a recent study by the Interindustry Forecasting at the University of Maryland (INFORUM), a national HFC phase down will:

- Create 33,000 new manufacturing jobs and help sustain 138,400 existing jobs;
- Increase direct manufacturing output by \$12.5 billion and total manufacturing output by \$38.8 billion;
- Improve the U.S. trade balance in equipment and chemicals by \$12.5 billion; and
- Increase the U.S. share of the global export market by 25 percent.

These jobs and benefits extend well beyond refrigerant manufacturers to the entirety of the U.S. HVACR sector and to other sectors that utilize HFCs as solvents, propellants, fire suppressants, and other industrial and commercial applications.

For the states represented by the Members of this Subcommittee alone, the U.S. HVACR sector has a major employment footprint, with more than 62,000 direct jobs and nearly 305,000 total jobs (including direct, indirect, and induced).

Importantly, these jobs and other economic benefits depend on the kind of orderly transition a federal framework established by this legislation would provide. The HFC transition has already started, as markets unavoidably respond to innovation. In addition, many

companies, including my own, are attempting to devise their own internal technology transition timelines.

Lack of federal action is putting us on a path toward a disorderly and chaotic transition, which puts American-based companies at a decided disadvantage in a rapidly growing and increasingly competitive global HVACR market. A disorderly transition increases costs to consumers, strands investments in new products and other technologies.

Without a federal policy many manufacturers could be placed in a position where they would need to produce two types of every piece of equipment they produce. Many distributors would need to reconfigure their distribution networks, build new warehousing facilities, adjust transportation routes, and carry duplicates for every product they carry to ensure compliant products are offered in each state. This would be a huge cost for manufacturers and distributors and, as a result, a cost for consumers as well.

The American Innovation and Manufacturing Leadership Act of 2020, by contrast, puts us on a path for an orderly transition away from HFCs. It provides a discrete grant of authority to the Environmental Protection Agency (EPA) to phase down HFCs over the next 15 years. It is important to note that such authority is strictly limited to HFCs. It provides absolutely no authority to EPA to do anything other than phase down HFCs. The bill also reinforces the

precedent that each administration must seek new authority from Congress before attempting to regulate substances that are not expressly authorized under existing law.

The legislation is based substantially on existing EPA programs that allowed for orderly transitions from earlier generations of refrigerants in ways that protected the environment while supporting American-based companies' market objectives. This bill is a true "win-win" approach for U.S. businesses.

An HFC phase down will *not* force consumers to replace their refrigerators or air conditioners before the end of their useful lives. Just as with previous refrigerant transitions, the phase down structure is carefully designed to ensure HFCs remain available for servicing consumers' existing equipment for decades to come.

Indeed, existing equipment using refrigerants from as many as two generations ago is still able to be serviced by aftermarket supplies of recovered and reclaimed chemicals.

In sum, the American HVACR manufacturing industry is in strong support of H.R. 5544. It would create regulatory certainty and predictability by establishing a federal phase down structure that protects the interests of manufacturers and consumers, allowing the continued use and servicing of existing equipment using HFCs, while also encouraging new technology

investment and development. It would result in job creation, increased trade, vital technology development, and would promote American technological preeminence in an increasingly competitive global market where many of our foreign counterparts already are operating under their own frameworks.

Our industry has a proven track record of success, but we need the right complement of federal legislation. This bill would help us immensely, while not requiring the appropriation of any federal funds. I urge Congress to act swiftly to speed its passage for the benefit of American manufacturers, workers, and consumers.

Thank you for the opportunity to testify, and I welcome any questions you might have.