



INTERFAITH CREATION CARE OF THE TRIANGLE

An Opportunity to Eliminate HFC Refrigerants

#1 on the Drawdown List of Climate Change Solutions

A tremendous opportunity to fight climate change is now in the U. S. Congress as the American Innovation and Manufacturing Act, or AIM. This is a bicameral bill, HR 5544 in the House of Representatives and S 2754 in the Senate, with bipartisan support. This bill will phase out hydrofluorocarbon (HFC) super greenhouse gases and help avoid a full half degree centigrade of global warming by the end of this century, which would keep warming below the 1.5°C, the scientifically accepted limit which almost all U. N. member nations agreed to in the Paris Agreement of 2015.

Drawdown, the best-selling book on science-based solutions to fight climate change, cites the proper management and disposal of HFC refrigerants as the number-one most effective strategy in this effort.¹ These materials are among the most potent and long-lived greenhouse gases in our atmosphere, thousands of times more powerful than carbon dioxide.²

The story of HFCs is one of good intentions, environmental success, and unintended consequences. The first commercial refrigerant was ammonia, which was abandoned due to toxicity and explosiveness. The industry then developed chlorofluorocarbons (CFCs), also known as freons. These materials were safe and nontoxic, but had a property that was unknown when they were developed in the early 20th century, namely, destruction of stratospheric ozone. Continued use of CFCs steadily degraded the ozone layer, which protects life from dangerous levels of UV radiation. CFC use ultimately led to a hole in the ozone layer over Antarctica. The world worked together to ban these materials in the Montreal Accord of 1987, and today, the ozone layer is healing nicely.

The replacement for CFCs was HFCs, which were also safe and non-toxic and did not attack ozone. However, when they were introduced in the early 1990s, the world did not fully appreciate their potential as greenhouse gases. It turns out that they are world champions in that regard: 5,000 times more than CO₂ over a 20-year period. The time has come to make another change. Alternative refrigerants are both available and in development.

Interfaith Creation Care of the Triangle is urging its members and friends to contact their representatives and senators to support, or even co-sponsor, the AIM act. Most of the rest of the world has signed on to the Kigali Amendment to the Montreal Accord, which would phase out HFCs, but the current administration has so far refused to do so. Thus, a legislative fix is necessary, in the form of the AIM act. This is truly a bipartisan bill, with an equal number of Republican and Democratic co-sponsors for both the House and Senate versions. Neither Senator Tillis, Senator Burr nor any North Carolina representative have co-sponsored, so our input can help move this critical legislation forward.

¹ Hawken, P. (ed.). *Drawdown: The most comprehensive plan ever proposed to reverse global warming*. New York, New York: Penguin Books; 2017.

² "Overview of Greenhouse Gases," *EPA.gov*, U. S. Environmental Protection Agency, <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>