

MOVING FORWARD

FLAMMABLE REFRIGERANTS

Increasing energy efficiency requirements, coupled with a move towards lower Global Warming Potential refrigerants, has increased the use of mildly flammable refrigerants. The usage of refrigerants in the flammable category will continue to grow since a new class of lower flammability refrigerants designated as A2L is deemed to be safer to use in larger quantities.



The Montreal Protocol 25 years of Ozone Protection

The Montreal Protocol was established to restore the ozone layer and has been at the forefront of multilateral efforts to address global environmental issues for the past three decades. The phase-out of CFCs and now HCFCs have set the ozone layer to 'heal' by 2050.

HOW DID WE GET HERE?



The Kigali amendment to phase down HFCs was the result of years of negotiation by parties to the Montreal Protocol, with numerous HFC amendment proposals submitted by North America (United States, Canada, and Mexico), Island States (the Federated States of Micronesia and Mauritius), India, and the European Union (28 Member States).

The United States, Canada, and Mexico submitted a proposal to amend the Montreal Protocol to phase down production and consumption of HFCs. The proposal builds on the commitments made over the past few years by countries seeking to transition to more climate-friendly alternatives.

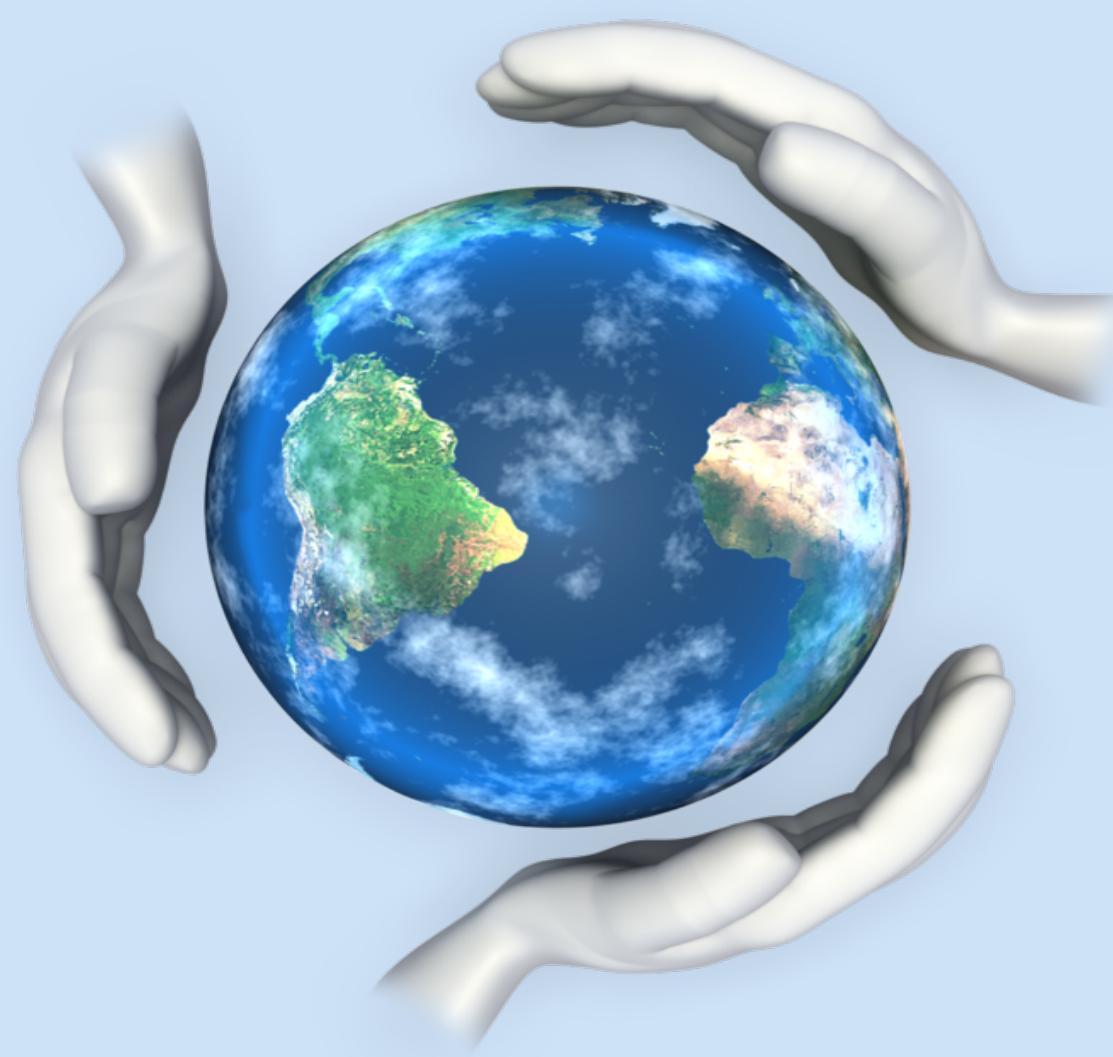
A2L'S ARE HERE TO STAY FACTORS DRIVING THE CHANGE

1 PHASE DOWN



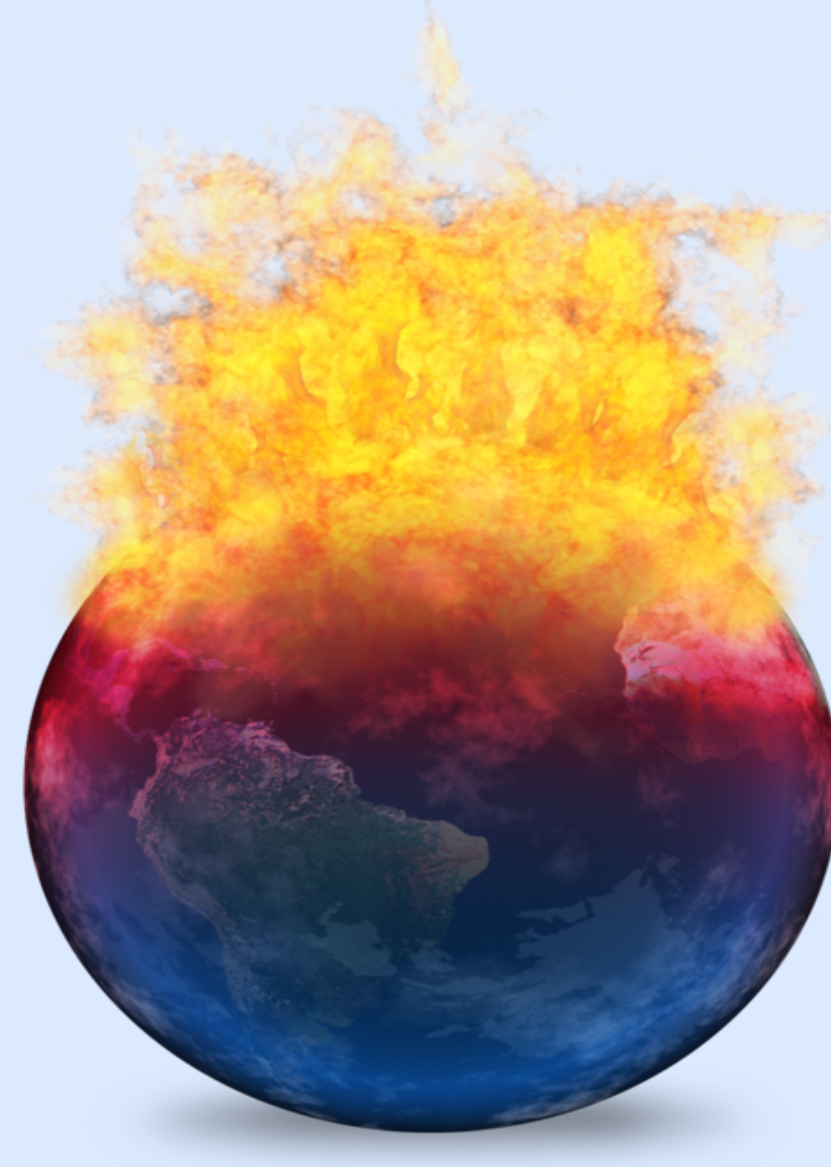
Phase down production and consumption of HFCs worldwide. All 197 parties to the Montreal Protocol agreed in October 2016 to phase down HFCs and to transition to low-global warming potential and energy-efficient substitutes.

2 OZONE



Low impact on ozone depletion. By phasing down HFCs, the Montreal Protocol can restore the ozone layer without impairing global climate change.

3 GLOBAL WARMING



Low impact on global warming. The Montreal Protocol was designed to control the production and consumption of CFCs and other halogenated compounds that were suspected of causing the destruction of the ozone layer.

4 EMISSIONS



It is estimated that the global phase down will reduce emissions by up to 72 billion tons by 2050 or roughly one and a third times global annual emissions.

5 SNAP



The purpose of the SNAP program is to allow a safe, smooth transition away from ozone-depleting compounds by identifying substitutes that offer lower overall risks to human health and the environment.

2010

75% Reduction Consumption & Production
No production or importing of HCFC 142b and HCFC 22, except for use in equipment manufactured before 2010.

90% Reduction Consumption & Production

No production or importing of any HCFCs, except for use in equipment manufactured before 2020.

2015

2020

99.5% Reduction Consumption & Production
No production or importing of HCFC 142b and HCFC 22.

90% Reduction Consumption & Production
No production or importing of any HCFCs.

2030



Air Conditioning Contractors of America