197 Nations Unite to Phase Out Potent Greenhouse Gases
Agreement Sets the Stage for a Climate Deal in Paris

November 6, 2015—International negotiations bringing together 197 countries have resulted in an agreement to phase out some of the most potent manmade greenhouse gases. In what is hopefully an indication of more progress to come during the climate talks that will be held in Paris in early December, the signatories of the Montreal Protocol agreed on November 5, after seven years of discussion, to phase out hydrofluorocarbons (HFCs), a group of chemicals that can warm the atmosphere up to 12,000 times more than comparable amounts of carbon dioxide. Eliminating HFCs should prevent 0.5 degrees Celsius of warming (0.9 Fahrenheit), a significant amount as the world community seeks to keep global warming below 2 Celsius.

"Today, the environmental community is praising the Obama Administration's decision to reject the Keystone pipeline," said EESI Executive Director Carol Werner. "Though that is good news for the climate, and a powerful political symbol, the agreement to phase out hydrofluorocarbons is a much, much bigger deal. Not only can it prevent 0.5 degrees Celsius of global warming, it also lays the groundwork for a successful climate deal in Paris."

The details of the phase out will be negotiated throughout 2016 and will take the shape of amendments to the Montreal Protocol, arguably the world's most successful environmental treaty (it has helped save the stratospheric ozone layer and prevented an estimated $1.8 trillion in health care costs). The 1987 Protocol was originally intended to phase out the use of chlorofluorocarbons (CFCs), which deplete the ozone layer.

Ironically, HFCs were introduced to replace CFCs as a refrigerant (for use in refrigeration, air conditioning, insulation foam and aerosols). Though they pose no threat to the ozone layer, HFCs are now the fastest-growing source of greenhouse gas emissions. Carbon emissions remain the primary drivers of climate change (responsible for slightly more than half of all the warming that has taken place until now), but reducing HFC emissions can provide immediate and dramatic benefits. Hydrofluorocarbons are relatively short-lived, with an average lifetime of 15 years, whereas carbon emissions remain in the atmosphere for hundreds of years, creating a legacy warming effect that would maintain current warming rates even if CO2 emissions dropped to zero. By targeting shorter-lived HFCs now, the international community can reap benefits by the 2030s.

Effective HFC substitutes that do not impact the ozone layer or contribute to climate change are already on the market.

For more information:

- Hydrofluorocarbons to be Addressed Under the Montreal Protocol, U.S. Department of State statement.
- Perfect Coolant Hard to Find: Phasing Out Ozone-Depleting Coolants Brings New Challenges
- Fact Sheet: Short-Lived Climate Pollutants: Why Are They Important?
- Issue Brief: The Montreal Protocol and Its Implications for Climate Change
- Congressional Briefing: Fast-Action Climate Mitigation: A Focus on Short-Lived Climate Pollutants
- Congressional Briefing: Reducing Short-Lived Climate Pollutants: An International Response for Fast-Action Climate Mitigation
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