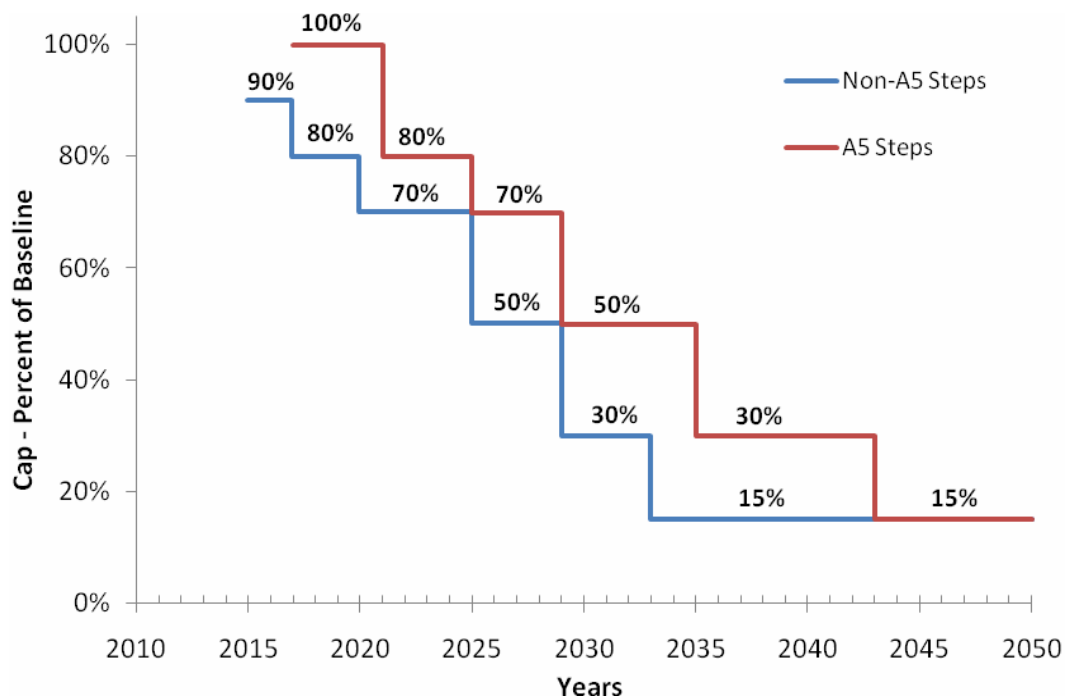


Summary Points: North American HFC Submission to the Montreal Protocol

Key elements of the North American proposal:

- Lists 20 HFCs as a new Annex F, including two substances sometimes referred to as HFOs.
- Recognizes that there may not be alternatives for all HFC applications and therefore utilizes a gradual phasedown mechanism with a plateau, as opposed to a phaseout.
- Establishes provisions for developed country (non-Article 5) and developing country (Article 5) phasedown of production and consumption (see figure below).
 - The baseline for Article 5 countries is calculated based on HCFC consumption and production respectively averaged over years 2005-2008, recognizing there are HFC data limitations in some countries.
 - For non-Article 5 countries, the baseline is determined from a combination of HFC plus 85% of HCFC consumption and production respectively averaged over years 2005-2008.

HFC Reduction Steps for Article 5 and Non-Article 5 Countries (% of baseline)



- Uses weighting by Global Warming Potential for HCFCs and HFCs as compared to typical Montreal Protocol practice of Ozone Depleting Potential.

- Includes provisions to limit HFC-23 byproduct emissions resulting from the production of HCFC-22 in each production line beginning in 2014. The provisions are intended for production lines that do not have an approved project under the Clean Development Mechanism to control emissions of HFC-23.
- Requires licensing of HFC imports and exports, and bans imports and exports to non-Parties.
- Requires reporting on production and consumption of HFCs, and HFC-23 byproduct emissions.
- Makes eligible for funding under the Montreal Protocol's Multilateral Fund the phasedown of HFC production and consumption as well as the reduction of HFC-23 byproduct emissions.

Cumulative Environmental Benefits:

- Total cumulative benefits from the HFC amendment proposal estimated by the U.S. Government amount to reductions of more than 98,000 million metric tons of carbon dioxide equivalent (MMTCO₂ eq) through 2050.
 - Cumulative benefits of the HFC phasedown amount to reductions of 2,700 MMTCO₂ eq through 2020, and about 87,200 MMTCO₂ eq through 2050.
 - Cumulative benefits from HFC-23 byproduct emissions controls amount to an additional 1,300 MMTCO₂eq by 2020 and 11,600 MMTCO₂eq through 2050.

Relationship to HCFC phaseout:

- This amendment is designed to be compatible with the HCFC phaseout.
- The proposal recognizes that HFCs are alternatives in many existing HCFC applications, so baseline levels are set to accommodate some level of transition from HCFCs to HFCs.
- The suite of known alternative chemicals, new technologies, and improved process/handling practices can significantly reduce HFC consumption while simultaneously supporting the HCFC phaseout.

Relationship with the United Nations Framework Convention on Climate Change (UNFCCC):

- The proposal is intended to support overall global efforts aimed at climate system protection.
- The proposal constitutes an amendment to the Montreal Protocol and could be complemented by a related decision by the UNFCCC confirming the Montreal Protocol approach.
- The proposal leaves unchanged the provisions of the UNFCCC / Kyoto Protocol that govern HFC emissions. Parties could follow Montreal Protocol obligations to meet certain UNFCCC obligations.