Submission to UNFCCC on Ways and Means of Limiting Emissions of HFCs and PFCs

In response to decision 13/CP.4, Canada would like to submit the following views on ways and means of limiting emissions of HFCs and PFCs. Canada has chosen not to submit views on ways and means of limiting emissions of SF_6, as recently requested by the UNFCCC Secretariat, since this was not part of the original COP-4 decision.

Introduction

Hydrofluorocarbons (HFC) and perfluorocarbons (PFC) are two classes of substances which are increasingly being used as substitutes for ozone-depleting substances (ODS) as these are phased-out under the provisions of the Montreal Protocol. HFCs and PFCs are potent greenhouse gases and contribute directly to climate change. Policies to limit the use of ODS, because of their effects on the ozone layer, are affecting the use patterns and the emissions of HFCs and PFCs. Similarly, policies restricting the use of HFCs and PFCs, because of their effect on the climate, could slow down the conversion or replacement of equipment using ODS. A holistic approach to the management of HFCs and PFCs and an appropriate balance of policy measures need to be considered in order to achieve the greatest benefit from both a climate change and ozone protection point of view.

Current Canadian Approach

Canada has been a strong supporter of the development and implementation of the Montreal Protocol and has actively promoted the goals of eliminating ODS and furthering ozone science. Canada has tracked its ODS consumption, as required under the Montreal Protocol, and has successfully phased out or is in the process of phasing out these substances, in some cases faster than required by the Protocol. In accordance with UNFCCC requirements, Canada has also tracked the increase in the use of HFCs and PFCs in order to properly inventory and report these emissions. By 2010, Canada's emissions of HFCs and PFCs are anticipated to increase to approximately 13 Megatonnes (Mt) of CO_2 equivalent, which would represent 2% of Canada's assigned Kyoto Protocol amount.

Canada is developing or has implemented a number of initiatives for dealing with emissions of HFCs and PFCs. These include:

- The National Action Plan for the Environmental Control of Ozone-Depleting Substances and their Halocarbon Alternatives, which has prompted the development of regulations at the provincial level which require recycling, recovery and reclamation of ODS and their halocarbon alternatives used as refrigerants, including HFCs and PFCs;

- The Federal Halocarbon Regulation (FHR) which harmonises regulations at Government of Canada installations and installations under federal jurisdiction with those developed at the provincial level. The FHR also goes further than provincial regulations by also prohibiting the use of HFCs and PFCs as solvents in Government of Canada installations and installations under federal jurisdiction beginning in 2005;
- Under the 'Substances New to Canada' provisions of the Canadian Environmental Protection Act (CEPA), Environment Canada has identified a suspicion of toxicity for certain HFCs that have been subject to notification as new substances. As a consequence, the use of these new HFCs are now limited to applications where they replace ODSs.

Canada has also addressed process emissions of PFCs from aluminium smelters by encouraging voluntary initiatives within the aluminium industry.

Future Initiatives

Since there are some existing HFCs that are not controlled as new substances, Environment Canada is planning the development of regulations which would limit the use of HFCs to the replacement of ODS. As part of the development of this regulation, an assessment will be conducted to establish the expected costs and benefits (environmental, economic and social) of this approach.

Additionally, Canada is assessing, through an expert panel, the potential and barriers for introduction of alternatives to ODS, including hydrocarbons, in the refrigeration and air conditioning sector. A multi-stakeholder working group is being considered to provide a forum for discussion of these issues.

Quantitative Assessment

Through its National Climate Change Process (described to the Secretariat in various other submissions and interventions), Canada is conducting thorough assessments of the potential for emission reductions in various economic sectors. At present, the analysis and conclusions of this process are not complete.