



## COMPENDIUM OF CANADA'S ENGAGEMENT IN INTERNATIONAL ENVIRONMENTAL AGREEMENTS AND INSTRUMENTS

### *Montreal Protocol on Substances that Deplete the Ozone Layer (Protocol to the Vienna Convention for the Protection of the Ozone Layer)*

**SUBJECT CATEGORY:**

Air

**TYPE OF AGREEMENT / INSTRUMENT:**

Multilateral

**FORM:**

Legally-binding treaty

**STATUS:**

- Signed by Canada September 16, 1987
- Ratified by Canada June 30, 1988
- In force in Canada April 1, 1989
- In force internationally January 1, 1989

**LEAD & PARTNER DEPARTMENTS:**

**Lead:** Environment and Climate Change  
Canada

**Partner:** Global Affairs Canada

**FOR FURTHER INFORMATION:****Web Links:**

- [Ozone Secretariat website](#)
- [Text of the Montreal Protocol](#)
- [Government of Canada website on the ozone layer](#)

**Contacts:**

[ECCC Inquiry Centre](#)

**COMPENDIUM EDITION:**

February 2022

**PLAIN LANGUAGE SUMMARY**

The Montreal Protocol is the international agreement that ensures the protection of the earth's ozone layer through the global phase-out of ozone-depleting substances (ODS). All countries that are members of the United Nations have signed on to the Montreal Protocol and all have obligations to gradually eliminate ODS, which are used in refrigeration and air conditioning, foam blowing, aerosols, solvents and other applications.

Originally signed in Montreal by 24 countries, including Canada, the Montreal Protocol is regarded as one of the most successful multilateral agreements. It has achieved the elimination of the large majority of ODS and, as a result, the ozone layer is on a path to recovery. Since many of the substances controlled by the Protocol are also greenhouse gases, their elimination has also significantly contributed to combatting climate change.

**OBJECTIVE**

The objective of this agreement is to phase out the production and consumption of ODS in order to reduce their abundance in the atmosphere, and thereby protect the earth's fragile ozone layer. An additional objective is to reduce the production and consumption of hydrofluorocarbon (HFCs), powerful greenhouse gases (GHGs) used as alternatives to some ODS.

**KEY ELEMENTS**

The original Montreal Protocol agreement (1987) required developed country Parties to begin phasing out chlorofluorocarbons (CFCs) in 1993 and achieve a 50% reduction relative to 1986 consumption levels by 1998. Under this agreement, CFCs and halons were the only ODS addressed.

Since 1987, the Montreal Protocol has been repeatedly strengthened by controlling additional ODS (now totalling 165), advancing the dates by which already controlled substances must be phased out, and establishing phase-out schedules for developing country-Parties. In 2016, Parties agreed to add HFCs to the control regime of the Montreal Protocol through the Kigali Amendment. HFCs do not deplete the ozone layer, but are powerful GHGs

used as alternatives to ODS phased out under the Protocol. In total, there are five amendments to the Protocol: the London Amendment (1990), the Copenhagen Amendment (1992), the Montreal Amendment (1997), the Beijing Amendment (1999), and the Kigali Amendment (2016). All these amendments are in force internationally and in Canada. The Kigali Amendment entered into force on January 1<sup>st</sup>, 2019.

Parties to the Protocol meet annually and take a variety of decisions aimed at enabling effective implementation of this important legal instrument.

[The Multilateral Fund](#) for the Implementation of the Montreal Protocol was established by a decision of the Parties and began its operation in 1991. The main objective of the Fund is to assist developing country parties to the Montreal Protocol to comply with the control measures of the Protocol.

## EXPECTED RESULTS

The primary expected result of the Montreal Protocol is the gradual reduction of the production and consumption of ODS, thereby reducing threats to the ozone layer. Given that many ODS are also GHGs, a secondary expected result is a reduction of GHGs to protect the climate system. With the adoption of the Kigali Amendment, the role of the Montreal Protocol in protecting the climate has been strengthened through the addition of a phase-down of HFCs.

Indicators of progress in achieving this result are:

- Reduced consumption and production of ODS and HFCs globally;
- Multilateral Fund projects to assist developing countries are successfully implemented and meet their phase-out targets.

For Canada specifically, indicators of progress towards achieving results include:

- Canada meets its obligations under the Montreal Protocol to eliminate and, when applicable, reduces its consumption and production of ODS and HFCs;
- Canada contributes its assessed share to the Multilateral Fund for the Implementation of the Montreal Protocol;
- Canada actively participates in all multilateral negotiations and forums to further strengthen and advance the global implementation of the Montreal Protocol.

## CANADA'S INVOLVEMENT

Canada was one of the first countries to ratify the Montreal Protocol and is the host of the Protocol's Multilateral Fund Secretariat in Montreal.

The means by which this agreement is implemented in Canada is through the federal *Ozone-depleting Substances and Halocarbon Alternatives Regulations* made under the Canadian Environmental Protection Act, 1999. In April 2018, amendments to these regulations entered into force, which added controls on HFCs, in line with Canada's obligations under the Kigali Amendment.

In addition, Canada has in place a suite of federal, provincial and territorial legislation to control various aspects of the life-cycle of ODS and HFCs, an Environmental Code of Practice outlining best practices for minimizing and reducing emissions for refrigeration and air conditioning equipment, and industry-led stewardship programs to manage end of life refrigerants.

As a developed country, Canada also contributes to the Multilateral Fund to assist developing countries phase out substances controlled under the Montreal Protocol. As host of the Multilateral Fund Secretariat located in Montreal, Canada also contributes to the administrative costs of this Secretariat.

## RESULTS / PROGRESS

### Activities

In addition to hosting the Multilateral Fund Secretariat and contributing key scientific data that underpins the Montreal Protocol, Canada operates a comprehensive ozone-monitoring program, which provides the international community with key information on the state of the ozone layer over the Arctic, and in hosting the World Ozone and UV Radiation Centre. The monitoring of ozone in the upper atmosphere is conducted in support of the Montreal Protocol under the Vienna Convention for the Protection of the Ozone Layer.

In recent years, Canada played a leadership role internationally in proposing and contributing to the adoption of the Kigali Amendment to phase down HFCs (adopted in Kigali, Rwanda in October 2016). Subsequently, Canada was among the first countries to ratify the Kigali Amendment and was active in encouraging others to do the same. Partly thanks to Canada's efforts, by November 2017, a sufficient number of countries had ratified the Kigali Amendment to ensure its entry into force on January 1<sup>st</sup>, 2019.

To further support global efforts to eliminate HFCs, Canada is also undertaking several bilateral projects in developing countries to assist them in taking the initial steps to control HFCs.

## **Reports**

Pursuant to Article 7 of the Montreal Protocol, Canada submits annual reports to the Ozone Secretariat on the production and consumption of ODS and HFCs. This information is used to ensure compliance with legal obligations under the Montreal Protocol. Data reported by Canada and other Parties can be found at the following website: <https://ozone.unep.org/countries>

Canada also responds to the various decisions of the Parties that regularly request that information and data on specific issues be submitted to the Secretariat.

## **Results**

Results from continuing global observations have confirmed that atmospheric levels of key ODS are decreasing, and it is believed that, with continued, full implementation of the Protocol's provisions, the ozone layer should return to pre-1980 levels by 2050.

Controls implemented under the Montreal Protocol will enable the global community to avoid millions of cases of fatal skin cancer and tens of millions of cases of non-fatal skin cancer and eye cataracts. The Protocol has also resulted in substantial climate benefits. Because most ODS are GHGs, the Protocol has already averted GHG emissions equivalent to more than 135 billion tonnes of CO<sub>2</sub>.

Emissions reductions resulting from the phase-out of ODS contribute to protecting the environment and health of Canadians. As depletion of the ozone layer is particularly severe above the earth's poles, Canada's Arctic environment is particularly vulnerable to the negative effects of increased levels of UV radiation.

Domestically, ODS (including CFCs and HCFCs) consumption in Canada has been virtually eliminated when measured in terms of ozone-depleting potential (ODP). Globally, over 90% of ODS have been eliminated in ODP terms.

The Kigali Amendment to the Montreal Protocol requires Canada to reduce its annual HFC consumption by 10% below baseline levels for the period 2019-2023. In 2019 and 2020, Canada surpassed this target by reducing consumption of HFCs by 13.8% and 23.6%, respectively, thereby averting emissions exceeding 6.7 million tonnes of CO<sub>2</sub>, relative to Canada's baseline consumption.