# Vienna Convention for the Protection of the Ozone Layer and Montreal Protocol on Substances that Deplete the Ozone Layer

The Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer are major milestones in international environmental law, striving together to protect the environment from any harmful effects of the ozone layer depletion through control, reduction and ultimately elimination of production and consumption of ozone-depleting substances (ODSs). The Montreal Protocol contains detailed provisions on reporting on control and production of ODSs – the trade of which is through mandatory export and import licensing procedures. This chapter provides an overview of the Vienna Convention and the Montreal Protocol, discussing key institutions under each and provisions that affect trade in ODSs.

#### **Background**

The Vienna Convention for the Protection of the Ozone Layer (Vienna Convention) serves as a framework treaty for legal and practical action to protect the planet's ozone layer. Under the Vienna Convention, its parties aim to promote cooperation by means of systematic observations, research and information exchange on the effects of human activities on the ozone layer and to adopt legislative or administrative measures against activities likely to have adverse effects on the ozone layer. The Vienna Convention is an important part of the international ozone regime, providing the forum for discussions on scientific research and observations of the ozone layer. It was adopted on 22 March 1985 and entered into force on 22 September 1988.

Parties to the Vienna Convention may adopt other treaties and protocols. On 16 September 1987, the contracting parties adopted the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), which entered into force on 1 January 1989. In 2009, it achieved universal ratification together with the Vienna Convention. It is the only protocol to the Vienna Convention, and its objective is to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer. The Montreal Protocol has been amended on five occasions, the last of which was the Kigali Amendment to the Montreal Protocol, agreed on 15 October 2016 and entering into force on 1 January 2019, following ratification by 65 parties.

## **Vienna Convention for the Protection of the Ozone Layer**

#### **Overview**

The overall objective of the Vienna Convention is to protect human health and the environment against the effects of ozone depletion. As a framework convention, it does not establish any specific controls on ozone-depleting substances (ODSs). Instead, it establishes a general obligation upon the parties to protect the ozone layer and emphasizes the need for international cooperation.<sup>2</sup> The Vienna Convention requires parties to take "appropriate measures ... against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer." These measures include:

- adoption of legislative and administrative measures;
- cooperation on research and scientific assessment;
- exchange of information;
- development and transfer of technology.

#### **Key institutions**

The Vienna Convention provided for the creation of the Conference of the Parties (CoP), initially meeting once every three years but now once every two years, the Ozone Secretariat, Ozone Research Managers (ORM) and the Bureau of the Conference of the Parties (Bureau).

The CoP was established to bring together all contracting parties to the Vienna Convention. Article 6 of the Vienna Convention lists some specific functions of the CoP, which include:

- reviewing scientific information;
- promoting the harmonization of appropriate policies, strategies and measures;
- deciding on reporting procedures;
- adopting programmes for research and systematic observations;
- considering and adopting protocols and amendments;
- establishing subsidiary bodies.

The CoP also has a general and more open-ended mandate to undertake any additional action required to achieve the purposes of the Vienna Convention.

The Ozone Secretariat is the administrative office for the Vienna Convention and the Montreal Protocol. It organizes the conferences and meetings for the parties to the Vienna Convention and the Montreal Protocol, manages the implementation of decisions resulting from these conferences and meetings, and provides governments, organizations and individuals with information on how they can protect the ozone layer.

The ORM is a subsidiary body established in response to Article 3 of the Vienna Convention concerning research and systematic observations. The ORM comprises government research managers dealing with atmospheric research and monitoring as well as research on health and environmental effects of ozone modifications. The main purpose of the meetings of the ORM is to ensure proper coordination of activities relating to ozone research and monitoring, and to identify gaps that need to be addressed.

The Bureau's core function is to facilitate, on behalf of the parties, the review of scientific information on the ozone layer, on its possible modification and on possible effects of any such modifications. The Bureau is also mandated to consider programmes for research, systematic observations, scientific and technological cooperation, the exchange of information and the transfer of technology and knowledge.

## Montreal Protocol on Substances that Deplete the Ozone Layer

During the negotiations, states agreed that the Vienna Convention itself would provide a framework of general obligations, conducting research and systematic observations and cooperation in the legal, scientific and technical fields. They also agreed that states would

reconvene within two years to negotiate a separate protocol<sup>3</sup> with set timelines and targets for phasing out ODSs.

During the negotiations of the Montreal Protocol, three issues were of major importance:

- (a) Broad adherence to the Montreal Protocol, including by developing countries. There was considerable concern about the financial abilities of developing countries to implement the Montreal Protocol.
- (b) The Montreal Protocol needed to be drafted in a flexible way to adjust, in a timely manner, to new scientific evidence and to the changing needs of its parties.
- (c) Setting an economically feasible and detailed time schedule for the phasing out of ODSs.

#### **Overview**

The Montreal Protocol requires parties to take measures to reduce global emissions of ODSs with the ultimate objective of their elimination. This is done through the adoption of control measures for the phasing out of the consumption and production of ODSs. The Montreal Protocol also includes control measures for the phasing down of hydrofluorocarbons (HFCs), which do not deplete the ozone layer, but which have a high global-warming potential<sup>4</sup> and are often used as substitutes for ODSs.

The Montreal Protocol establishes concrete and measurable legally binding obligations for parties' control on production and consumption of ODSs and HFCs. In its original form, the Montreal Protocol required developed countries to begin phasing out chlorofluorocarbons (CFCs) and halons in 1989 and set deadlines for achieving specific reductions. The controls in the Montreal Protocol have been made progressively more comprehensive, effective and ambitious through a series of amendments to add more substances and other measures and adjustments to tighten the control measures.

#### Special provisions for developing countries

The Montreal Protocol recognizes that developing countries contributed to ozone depletion to a lesser extent than industrialized countries. Special provisions include a grace period for developing countries in phasing out or down the production and consumption of controlled substances (e.g. ten-year delay in phasing out hydrochlorofluorocarbons and a five-year later start in phasing down HFCs). This grace period is granted under Article 5 of the Montreal Protocol, which applies to developing countries whose annual calculated per capita level of consumption of Annex A controlled substances (CFCs and halons) was below a set threshold of 0.3 kg per capita on the date of the entry into force of the Montreal Protocol or any time thereafter until 1 January 1999. As a result of these provisions, discussions under the Montreal Protocol will often refer to "Article 5 parties" and to "non-Article 5 parties" to differentiate between developing and industrialized countries.

The adoption and implementation of the Montreal Protocol has been a significant milestone in international environmental law. It established stepwise schedules for reducing and eventually eliminating the consumption and production of a range of ODSs and recently also HFCs. These substances are listed in Annexes A, B, C, E and F to the Montreal Protocol and are to be phased out/down within the schedules provided in Articles 2A-2J. The Montreal Protocol controls both consumption and production of ODS and HFCs to protect the interests of producers and importers, who otherwise would have had to sustain high price inflation or engage in overproduction during the phase-out period of the targeted substances.

#### Key institutions

The Meeting of the Parties (MoP) is the organ that makes decisions such as those relating to the adoption of amendments to the Montreal Protocol, making adjustments to schedules for phasing out or down controlled substances and adding or removing substances listed under the annexes to the Protocol. The MoP considers and makes decisions on any additional action that may be required for the implementation of the Montreal Protocol.

The Bureau of the MoP reviews the work of any working groups established by the parties during their meetings and considers topics on the agenda for the next MoP. The first MoP established the Open-ended Working Group, and it comprises all parties, meets annually, and is tasked with preparing for, and supporting the MoP, notably by reviewing reports by the assessment panels.

In addition to the Ozone Secretariat mentioned above, other institutions include the Multilateral Fund, the assessment panels and the Implementation Committee. The Multilateral Fund, established by Decision II/8 of the Second MoP, in June 1990,<sup>5</sup> promotes technology transfer and provides financial assistance to Article 5 parties to meet their obligations under the Montreal Protocol.

In accordance with Article 6 of the Montreal Protocol, three assessment panels provide independent scientific information to the parties regarding ozone depletion, its environmental effects, and the status of alternative substances and technologies and their economic implications. The three panels are the Scientific Assessment Panel, the Technology and Economic Assessment Panel and the Environmental Effects Assessment Panel.

The Implementation Committee considers information and observations submitted to it with a view to securing an amicable solution to issues that are subject to non-compliance by any party or groups of parties. The non-compliance procedure was adopted by the parties under Article 8 of the Montreal Protocol to bring non-complying parties into compliance by engaging them in a cooperative manner. The non-compliance process can be invoked by any party to the Montreal Protocol, by the Ozone Secretariat or by the party itself.

#### Reporting on consumption and production

Under Article 7, each party reports annual statistical data on production, import and export of each of the substances controlled by the Montreal Protocol. All parties are obliged to report this national data for ODS, and for the parties that have ratified the Kigali Amendment to the Montreal Protocol have also to report national data for HFCs. Under Article 7(3), each party is to provide to the Ozone Secretariat statistical data on its annual production of each of the controlled substances listed in the relevant annexes and, separately, for each substance. The information must include information such as the amounts used for feedstocks, amounts destroyed by technologies approved by the parties, and imports from and exports to parties and non-parties, respectively.

The data on consumption and production are reported to the Ozone Secretariat and is available in an aggregated format on the ozone data centre.<sup>6</sup> The reporting obligations have been incorporated into a standard data reporting format, commonly called Article 7 data reporting forms.<sup>7</sup> Parties report their data through the online portal and have a variety of tools to assist them in the process.<sup>8</sup>

### Trade control through mandatory export and import licensing procedures

Parties have an obligation, under Article 4B of the Montreal Protocol, to establish and implement a system for licensing the import and export of new, used, recycled and reclaimed controlled substances. Each party, within three months of the date of introducing its licensing system, also should report to the Ozone Secretariat the information on the establishment and operation of that system. Information regarding national focal points for licensing systems is available from the Ozone Secretariat.<sup>9</sup>

If the Montreal Protocol is amended and new substances are listed in the annexes, a timetable of three months is set for parties to establish licensing systems after ratifying the amendment. For example, the Kigali Amendment requires each party, by 1 January 2019, or within three months of the date of entry into force of that paragraph for the party, whichever is later, to establish and implement licensing systems for HFCs. Article 5 parties could delay taking those actions until 1 January 2021.

Certain decisions of the MoP also deal with illegal trade and production of ODSs. Paragraph 7 of Decision XIV/7 adopted at the 14<sup>th</sup> MoP, invited parties to report to the Ozone Secretariat fully proved cases of illegal trade in ODSs in order to facilitate an exchange of information.<sup>10</sup> Paragraph 5(d) of Decision XXXI/3 adopted at the 31<sup>st</sup> MoP, further encouraged parties to take action to identify and prevent illegal production, import, export and consumption of controlled substances and to report to the Ozone Secretariat on the cause of significant cases and actions taken to address them, to facilitate an exchange of information.<sup>11</sup> More information on the reported cases if illicit trade is available on the United Nations Environment Programme website.<sup>12</sup>

#### Dealing with non-parties

The Montreal Protocol addresses the problem of trade with states that are not yet parties to the treaty (non-parties). These provisions are set out under Article 4 of the Montreal Protocol, which sets deadlines beyond which trade with non-parties in the controlled substances is banned unless the MoP find them to be in compliance with the Protocol. Since the Montreal Protocol achieved universal ratification in 2009, and the first four amendments to the Protocol achieved universal ratification in 2014, provisions regarding trade with non-parties were less relevant for a period. However, the Kigali Amendment, agreed in 2016, has renewed the significance of these provisions under the Protocol. To date, 50 parties to the Montreal Protocol have not yet ratified the Kigali Amendment.

#### **Endnotes**

- 1 See Article 2 of the Vienna Convention.
- 2 Ibio
- 3 A protocol is a treaty negotiated under the umbrella of an existing convention. It constitutes a separate and additional agreement, and which must be signed and ratified by the parties to the convention concerned. Protocols typically strengthen a convention by adding new, more detailed commitments.
- 4 Global warming potential is a measure of the relative global warming effects of different gases. Further information is available at https://wedocs.unep.org/bitstream/handle/20.500.11822/28246/7789G-WPRef\_EN.pdf?sequence=2&isAllowed=y :~:text=Global%20warming%20potential%20(GWP)%20 is,a%20specific%20period%20of%20time.
- 5 Decision II/8: Financial mechanism, Second Meeting of the Parties, June 1990.
- 6 Available at https://ozone.unep.org/countries/data.
- 7 See https://www.ozonactionmeetings.org/system/files/10.4\_background\_a7\_data\_reporting\_final\_1.pdf.
- 8 Available at https://ozone.unep.org/countries/data-reporting-tools.
- 9 See https://ozone.unep.org/countries/additional-reported-information/focal-points-licensing-systems.
- 10 Decision XIV/7: Monitoring of trade in ozone-depleting substances and preventing illegal trade in ozone-depleting substances, Fourteenth Meeting of the Parties, November 2002.
- 11 Decision XXXI/3: Unexpected emissions of CFC 11 and institutional processes to be enhanced to strengthen the effective implementation and enforcement of the Montreal Protocol, Thirty-first Meeting of the Parties, November 2019.
- 12 See https://ozone.unep.org/countries/additional-reported-information/illegal-trade.