The 1987 Montreal Protocol on Substances that Deplete the Ozone Layer (as agreed in 1987)

Preamble

The Parties to this Protocol,

Being Parties to the Vienna Convention for the Protection of the Ozone Layer,

Mindful of their obligation under that Convention to take appropriate measures 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,

Recognizing that world-wide emissions of certain substances can significantly deplete and otherwise modify the ozone layer in a manner that is likely to result in adverse effects on human health and the environment,

Conscious of the potential climatic effects of emissions of these substances,

Aware that measures taken to protect the ozone layer from depletion should be based on relevant scientific knowledge, taking into account technical and economic considerations,

Determined to protect the ozone layer by taking precautionary measures to control equitably total global emissions of substances that deplete it, with the ultimate objective of their elimination on the basis of developments in scientific knowledge, taking into account technical and economic considerations,

Acknowledging that special provision is required to meet the needs of developing countries for these substances,

Noting the precautionary measures for controlling emissions of certain chlorofluorocarbons that have already been taken at national and regional levels,

Considering the importance of promoting international co-operation in the research and development of science and technology relating to the control and reduction of emissions of substances that deplete the ozone layer, bearing in mind in particular the needs of developing countries,

HAVE AGREED AS FOLLOWS:

Article 1: Definitions

For the purposes of this Protocol:

1. "Convention" means the Vienna Convention for the Protection of the Ozone Layer, adopted on 22 March 1985.

2. "Parties" means, unless the text otherwise indicates, Parties to this Protocol.

3. "Secretariat" means the Secretariat of the Convention.

4. "Controlled substance" means a substance listed in Annex A to this Protocol, whether existing alone or in a mixture. It excludes, however, any such substance or mixture which is in a manufactured product other than a container used for the transportation or storage of the substance listed.

5. "Production" means the amount of controlled substances produced, minus the amount destroyed by technologies to be approved by the Parties.

6. "Consumption" means production plus imports minus exports of controlled substances.

7. "Calculated levels" of production, imports, exports and consumption means levels determined in accordance with Article 3.

8. "Industrial rationalization" means the transfer of all or a portion of the calculated level of production of one Party to another, for the purpose of achieving economic efficiencies or responding to anticipated shortfalls in supply as a result of plant closures.

Article 2: Control Measures

1. Each Party shall ensure that for the twelve-month period commencing on the first day of the Seventh month following the date of entry into force of this Protocol, and in each twelve-month period thereafter, its calculated level of consumption of the controlled substances in Group I of Annex A does not exceed its calculated level of consumption in 1986. By the end of the same period, each Party producing one or more of these substances shall ensure that its calculated level of production of the substances does not exceed its calculated level of production in 1986, except that such level may have increased by no more than ten per cent based on the 1986 level. Such increase shall be permitted only so as to satisfy the basic domestic needs of the Parties operating under Article 5 and for the purposes of industrial rationalization between Parties.

2. Each Party shall ensure that for the twelve-month period commencing on the first day of the thirty-seventh month following the date of entry into force of this Protocol, and in each twelve-month period thereafter, its calculated level of consumption of the controlled substances listed in Group II of Annex A does not exceed its calculated level of consumption in 1986. Each Party producing one or more of these substances shall ensure that its calculated level of production of the substances does not exceed its calculated level of production in 1986, except that such levels may have increased by no more than ten per cent based on the 1986 level. Such increase shall be permitted only so as to satisfy the basic domestic needs of the Parties operating under Article 5 and for the purposes of industrial rationalization between Parties. The mechanisms for implementing these measures shall be decided by the Parties at their first meeting following the first scientific review.

3. Each Party shall ensure that for the period I July 1993 to 30 June 1994, and in each twelve-month period thereafter, its calculated level of consumption of the controlled substances in Group I of Annex A does not exceed, annually, eighty per cent of its calculated level of consumption in 1986. Each Party producing one or more of these substances shall, for the same periods, ensure that its calculated level of production of the substances does not exceed, annually, eighty per cent of its calculated level of production in 1986. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5 and for the purposes of industrial rationalization between Parties, its calculated level of production may exceed that limit by up to ten per cent of its calculated level of production in 1986.

4. Each Party shall ensure that for the period I July 1998 to 30 June 1999, and in each twelve-month period thereafter, its calculated level of consumption of the controlled substances in Group I of Annex A does not exceed, annually, fifty per cent of its calculated level of consumption in 1986. Each Party producing one or more of these substances shall, for the same periods, ensure that its calculated level of production of the substances does not exceed, annually, fifty per cent of its calculated level of production in 1986. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5 and for the purposes of industrial rationalization between Parties, its calculated level of production may exceed that limit by up to fifteen per cent of its calculated level of production in 1986. This paragraph will apply unless the Parties decide otherwise at a meeting by a two-thirds majority of Parties present and voting, representing at least two-thirds of the total calculated level of consumption of these substances of the Parties. This decision shall be considered and made in the light of the assessments referred to in Article 6.

5. Any Party whose calculated level of production in 1986 of the controlled substances in Group I of Annex A was less than twenty-five kilotonnes may, for the purposes of industrial rationalization, transfer to or receive from any other Party, production in excess of the limits set out in paragraphs 1, 3 and 4 provided that the total combined calculated levels of production of the Parties concerned does not exceed the production limits set out in this Article. Any transfer of such production shall be notified to the secretariat, no later than the time of the transfer.

6. Any Party not operating under Article 5, that has facilities for the production of controlled substances under construction, or contracted for, prior to 16 September 1987, and provided for in national legislation prior to 1 January 1987, may add the production from such facilities to its 1986 production of such substances for the purposes of determining its calculated level of production for 1986, provided that such facilities are completed by 31 December 1990 and that such production does not raise that Party's annual calculated level of consumption of the controlled substances above 0.5 kilograms per capita.

7. Any transfer of production pursuant to paragraph 5 or any addition of production pursuant to paragraph 6 shall be notified to the Secretariat, no later than the time of the transfer or addition.

8. (a) Any Parties which are Member States of a regional economic integration organization as defined in Article 1 (6) of the Convention may agree that they shall jointly fulfil their obligations respecting consumption under this Article provided that their total combined calculated level of consumption does not exceed the levels required by this Article.

(b) The Parties to any such agreement shall inform the Secretariat of the terms of the agreement before the date of the reduction in consumption with which the agreement is concerned.

(c) Such agreement will become operative only if all Member States of the regional economic integration organization and the organization concerned are Parties to the Protocol and have notified the Secretariat of their manner of implementation.

9. (a) Based on the assessments made pursuant to Article 6, the Parties may decide whether:

(i) Adjustments to the ozone depleting potentials specified in Annex A should be made and, if so, what the adjustments should be; and

(ii) Further adjustments and reductions of production or consumption of the controlled substances from 1986 levels should be undertaken and, if so, what the scope, amount and timing of any such adjustments and reductions should be;

(b) Proposals for such adjustments shall be communicated to the Parties by the Secretariat at least six months before the meeting of the Parties at which they are proposed for adoption;

(c) In taking such decisions, the Parties shall make every effort to reach agreement by consensus. If all efforts at consensus have been exhausted, and no agreement reached, such decisions shall, as a last resort, be adopted by a two-thirds majority vote of the Parties present and voting representing at least fifty per cent of the total consumption of the controlled substances of the Parties;

(d) The decisions, which shall be binding on all Parties, shall forthwith be communicated to the Parties by the Depositary. Unless otherwise provided in the decisions, they shall enter into force on the expiry of six months from the date of the circulation of the communication by the Depositary.

10. (a) Based on the assessments made pursuant to Article 6 of this Protocol and in accordance with the procedure set out in Article 9 of the Convention, the Parties may decide:

(i) whether any substances, and if so which, should be added to or removed from any annex to this Protocol, and

(ii) the mechanism, scope and timing of the control measures that should apply to those substances;

(b) Any such decisions shall become effective, provided that it has been accepted by a two-thirds majority vote of the Parties present and voting.

11. Notwithstanding the provisions contained in this Article, Parties may take more stringent measures than those required by this Article.

Article 3: Calculation of control levels

For the purposes of Articles 2 and 5, each Party shall, for each group of substances in Annex A, determine its calculated levels of:

(a) Production by:

(i) multiplying its annual production of each controlled substance by the ozone depleting potential specified in respect of it in Annex A; and

(ii) adding together, for each such Group, the resulting figures;

(b) Imports and exports, respectively, by following, *mutatis mutandis*, the procedure set out in subparagraph (a); and

(c) Consumption by adding together its calculated levels of production and imports and subtracting its calculated level of exports as determined in accordance with subparagraphs (a) and (b). However, beginning on 1 January 1993, any export of controlled substances to non-Parties shall not be subtracted in calculating the consumption level of the exporting Party.

Article 4: Control of trade with non-Parties

1 Within one year of the entry into force of this Protocol, each Party shall ban the import of controlled substances from any State not party to this Protocol.

2. Beginning on 1 January 1993, no Party operating under paragraph 1 of Article 5 may export any controlled substance to any State not party to this Protocol.

3. Within three years of the date of entry into force of this Protocol, the Parties shall, following the procedure in Article 10 of the Convention, elaborate in an annex a list of products containing controlled substances. Parties that have not objected to the annex in accordance with those procedures shall ban, within one year of the annex having become effective, the import of those products from any State not party to this Protocol.

4. Within five years of the entry into force of this Protocol, the Parties shall determine the feasibility of banning or restricting, from States not party to this Protocol, the import of products produced with, but not containing, controlled substances. If determined feasible, the Parties shall, following the procedures in Article 10 of the Convention, elaborate in an annex a list of such products. Parties that have not objected to it in accordance with those procedures shall ban or restrict, within one year of the annex having become effective, the import of those products from any State not party to this Protocol.

5. Each Party shall discourage the export, to any State not party to this Protocol, of technology for producing and for utilizing controlled substances.

6. Each Party shall refrain from providing new subsidies, aid, credits, guarantees or insurance programmes for the export to States not party to this Protocol of products, equipment, plants or technology that would facilitate the production of controlled substances.

7. Paragraphs 5 and 6 shall not apply to products, equipment, plants or technology that improve the containment, recovery, recycling or destruction of controlled substances, promote the development of alternative substances, or otherwise contribute to the reduction of emissions of controlled substances.

8. Notwithstanding the provisions of this Article, imports referred to in paragraphs 1, 3 and 4 may be permitted from any State not party to this Protocol, if that State is determined, by a meeting of the Parties, to be in full compliance with Article 2 and this Article, and has submitted data to that effect as specified in Article 7.

Article 5: Special situation of developing countries

1. Any Party that is a developing country and whose annual calculated level of consumption of the controlled substances is less than 0.3 kilograms per capita on the date of the entry into force of the Protocol for it, or any time thereafter within ten years of the date of entry into force of the Protocol shall, in order to meet its basic domestic needs, be entitled to delay its compliance with the control measures set out in paragraphs 1 to 4 of Article 2 by ten years after that specified in those paragraphs. However, such Party shall not exceed an annual calculated level of consumption of 0.3 kilograms per capita. Any such Party shall be entitled to use either the average of its annual calculated level of consumption for the period of 1995 to 1997 inclusive or a calculated level of consumption of 0.3 kilograms per capita, whichever is the lower, as the basis for its compliance with the control measures.

2. The Parties undertake to facilitate access to environmentally safe alternative substances and technology for Parties that are developing countries and assist them to make expeditious use of such alternatives.

3. The Parties undertake to facilitate bilaterally or multilaterally the provision of subsidies, aid, credits, guarantees or insurance programmes to Parties that are developing countries for the use of alternative technology and for substitute products.

Article 6: Assessment and review of control measures

Beginning in 1990, and at least every four years thereafter, the Parties shall assess the control measures provided for in Article 2 on the basis of available scientific, environmental, technical and economic information. At least one year before each assessment, the Parties shall convene appropriate panels of experts qualified in the fields mentioned and determine the composition and terms of reference of any such panels. Within one year of being convened, the panels will report their conclusions, through the Secretariat, to the Parties.

Article 7: Reporting of data

1. Each Party shall provide to the Secretariat, within three months of becoming a Party, statistical data on its production, imports and exports of each of the controlled substances for the year 1986, or the best possible estimates of such data where actual data are not available.

2. Each Party shall provide statistical data to the secretariat on its annual production (with separate data on amounts destroyed by technologies to be approved by the Parties), imports, and exports to Parties and non-Parties, respectively, of such substances for the year during which it becomes a Party and for each year thereafter. It shall forward the data no later than nine months after the end of the year to which the data relate.

Article 8: Non-compliance

The Parties, at their first meeting, shall consider and approve procedures and institutional mechanisms for determining non-compliance with the provisions of this Protocol and for treatment of Parties found to be in non-compliance.

Article 9: Research, development, public awareness and exchange of information

1. The Parties shall co-operate, consistent with their national laws, regulations and practices and taking into account in particular the needs of developing countries, in promoting, directly or through competent international bodies, research, development and exchange of information on:

(a) best technologies for improving the containment, recovery, recycling, or destruction of controlled substances or otherwise reducing their emissions;

(b) possible alternatives to controlled substances, to products containing such substances, and to products manufactured with them; and

(c) costs and benefits of relevant control strategies.

2. The Parties, individually, jointly or through competent international bodies, shall co-operate in promoting public awareness of the environmental effects of the emissions of controlled substances and other substances that deplete the ozone layer.

3. Within two years of the entry into force of this Protocol and every two years thereafter, each Party shall submit to the Secretariat a summary of the activities it has conducted pursuant to this Article.

Article 10: Technical assistance

1. The Parties shall in the context of the provisions of Article 4 of the Convention, and taking into account in particular the needs of developing countries, co-operate in promoting technical assistance to facilitate participation in and implementation of this Protocol.

2. Any Party or Signatory to this Protocol may submit a request to the Secretariat for technical assistance for the purposes of implementing or participating in the Protocol.

3. The Parties, at their first meeting, shall begin deliberations on the means of fulfilling the obligations set out in Article 9, and paragraphs 1 and 2 of this Article, including the preparation of workplans. Such workplans shall pay special attention to the needs and circumstances of the developing countries. States and regional economic integration organizations not party to the Protocol should be encouraged to participate in activities specified in such workplans.

Article 11: Meetings of the parties

1. The Parties shall hold meetings at regular intervals. The Secretariat shall convene the first meeting of the Parties not later than one year after the date of the entry into force of this Protocol and in conjunction with a meeting of the Conference of the Parties to the Convention, if a meeting of the latter is scheduled within that period.

2. Subsequent ordinary meetings of the parties shall be held, unless the Parties otherwise decide, in conjunction with meetings of the Conference of the Parties to the Convention. Extraordinary meetings of the Parties shall be held at such other times as may be deemed necessary by a meeting of the Parties, or at the written request of any Party, provided that within six months of such a request being communicated to them by the Secretariat, it is supported by at least one third of the Parties.

3. The Parties, at their first meeting, shall:

(a) adopt by consensus rules of procedure for their meetings;

(b) adopt by consensus the financial rules referred to in paragraph 2 of Article 13;

(c) establish the panels and determine the terms of reference referred to in Article 6;

(d) consider and approve the procedures and institutional mechanisms specified in Article 8; and

(e) begin preparation of workplans pursuant to paragraph 3 of Article 10.

4. The functions of the meetings of the Parties shall be to:

(a) review the implementation of this Protocol;

(b) decide on any adjustments or reductions referred to in paragraph 9 of Article 2;

(c) decide on any addition to, insertion in or removal from any annex of substances and on related control measures in accordance with paragraph 10 of Article 2;

(d) establish, where necessary, guidelines or procedures for reporting of information as provided for in Article 7 and paragraph 3 of Article 9;

(e) review requests for technical assistance submitted pursuant to paragraph 2 of Article 10;

(f) review reports prepared by the secretariat pursuant to subparagraph (c) of Article 12;

(g) assess, in accordance with Article 6, the control measures provided for in Article 2;

(h) consider and adopt, as required, proposals for amendment of this Protocol or any annex and for any new annex;

(i) consider and adopt the budget for implementing this Protocol; and

(j) consider and undertake any additional action that may be required for the achievement of the purposes of this Protocol.

5. The United Nations, its specialized agencies and the International Atomic Energy Agency, as well as any State not party to this Protocol, may be represented at meetings of the Parties as observers. Any body or agency, whether national or international, governmental or non-governmental, qualified in fields relating to the protection of the ozone layer which has informed the secretariat of its wish to be represented at a meeting of the Parties as an observer may be admitted unless at least one third of the Parties present object. The admission and participation of observers shall be subject to the rules of procedure adopted by the Parties.

Article 12: Secretariat

For the purposes of this Protocol, the Secretariat shall:

(a) arrange for and service meetings of the Parties as provided for in Article 11;

(b) receive and make available, upon request by a Party, data provided pursuant to Article 7;

(c) prepare and distribute regularly to the Parties reports based on information received pursuant to Articles 7 and 9;

(d) notify the Parties of any request for technical assistance received pursuant to Article 10 so as to facilitate the provision of such assistance;

(e) encourage non-Parties to attend the meetings of the Parties as observers and to act in accordance with the provisions of this Protocol;

(f) provide, as appropriate, the information and requests referred to in subparagraphs (c) and (d) to such non-party observers; and

(g) perform such other functions for the achievement of the purposes of this Protocol as may be assigned to it by the Parties.

Article 13: Financial provisions

1. The funds required for the operation of this Protocol, including those for the functioning of the Secretariat related to this Protocol, shall be charged exclusively against contributions from the Parties.

2. The Parties, at their first meeting, shall adopt by consensus financial rules for the operation of this Protocol.

Article 14: Relationship of this Protocol to the Convention

Except as otherwise provided in this Protocol, the provisions of the Convention relating to its protocols shall apply to this Protocol.

Article 15: Signature

This Protocol shall be open for signature by States and by regional economic integration organizations in Montreal on 16 September 1987, in Ottawa from 17 September 1987 to 16 January 1988, and at United Nations Headquarters in New York from 17 January 1988 to 15 September 1988.

Article 16: Entry into force

1. This Protocol shall enter into force on 1 January 1989, provided that at least eleven instruments of ratification, acceptance, approval of the Protocol or accession thereto have been deposited by States or regional economic integration organizations representing at least two-thirds of 1986 estimated global consumption of the controlled substances, and the provisions of paragraph 1 of Article 17 of the Convention have been fulfilled. In the event that these conditions have not been fulfilled by that date, the Protocol shall enter into force on the ninetieth day following the date on which the conditions have been fulfilled.

2. For the purposes of paragraph 1, any such instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by member States of such organization.

3. After the entry into force of this Protocol, any State or regional economic integration organization shall become a Party to it on the ninetieth day following the date of deposit of its instrument of ratification, acceptance, approval or accession.

Article 17: Parties joining after entry into force

Subject to Article 5, any State or regional economic integration organization which becomes a Party to this Protocol after the date of its entry into force, shall fulfil forthwith the sum of the obligations under Article 2, as well as under Article 4, that apply at that date to the States and regional economic integration organizations that became Parties on the date the Protocol entered into force.

Article 18: Reservations

No reservations may be made to this Protocol.

Article 19: Withdrawal

For the purposes of this Protocol, the provisions of Article 19 of the Convention relating to withdrawal shall apply, except with respect to Parties referred to in paragraph 1 of Article 5. Any such Party may withdraw from this Protocol by giving written notification to the Depositary at any time after four years of assuming the obligations specified in paragraphs 1 to 4 of Article 2. Any such withdrawal shall take effect upon expiry of one year after the date of its receipt by the Depositary, or on such later date as may be specified in the notification of the withdrawal.

Article 20: Authentic texts

The original of this Protocol, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

IN WITNESS WHEREOF THE UNDERSIGNED, BEING DULY AUTHORIZED TO THAT EFFECT, HAVE SIGNED THIS PROTOCOL.

DONE AT MONTREAL THIS SIXTEENTH DAY OF SEPTEMBER, ONE THOUSAND NINE HUNDRED AND EIGHTY SEVEN.

Annex A: Controlled substances

Group	Substance	Ozone-Depleting Potential*
Group I		
CFCl3	(CFC-11)	1.0
CF2Cl2	(CFC-12)	1.0
C2F3Cl3	(CFC-113)	0.8
C2F4Cl2	(CFC-114)	1.0
C2F5Cl	(CFC-115)	0.6
Group II		
CF2BrCl	(halon-1211)	3.0
CF3Br	(halon-1301)	10.0
C2F4Br2	(halon-2402)	6.0

* These ozone depleting potentials are estimates based on existing knowledge and will be reviewed and revised periodically.