

THE MONTREAL PROTOCOL AND TRADE MEASURES

Communication from the Secretariat for the Vienna Convention for
the Protection of the Ozone Layer and the Montreal Protocol
on Substances that Deplete the Ozone Layer

I. INTRODUCTION

1. The thin layer of ozone in the stratosphere, located between 10 and 50 kilometres above the Earth, absorbs all but a small fraction of the harmful ultraviolet radiation (UV-B) emanating from the sun and protects all life on earth.
2. In the early 1970s, scientists discovered that emissions of some chemicals could deplete the ozone in this layer. The result would be more UV-B radiation reaching the Earth's surface and an increase in skin cancer and cataracts, reduced plant and animal productivity, worse air quality and damage to plastics.
3. Observations of the atmosphere since then have proved that ozone was being depleted at the rate of about 5 per cent every decade over middle and higher latitudes of the Earth and an "ozone hole" appeared annually over the Antarctic. Scientists have linked these phenomena to the increasing emissions of man-made ozone-depleting substances (ODS). The most common of these are the chlorofluorocarbons (CFCs) and halons used in refrigeration, air-conditioning, fire-fighting, metal-cleaning, foam-blowing, etc. These chemicals were regarded as "wonder" chemicals in view of their versatility, suitability for use in many industries, safety characteristics and relative cheapness.

II. THE VIENNA CONVENTION AND THE MONTREAL PROTOCOL

4. Alarmed by these discoveries, the United Nations Environment Programme (UNEP) initiated scientific assessments in 1976 and, as certainty grew, started inter-governmental negotiations to take action to protect the ozone layer. As a result, the Governments of the world agreed first on the Vienna Convention for the Protection of the Ozone Layer in 1985, and then on the Montreal Protocol on Substances that Deplete the Ozone Layer in 1987.
5. The Vienna Convention laid down a general commitment to protect the ozone layer. The Montreal Protocol, which has been strengthened three times subsequently, obliges all Parties to phase out ODS according to a specified timetable. Developing countries are given a grace-period for phasing out. In 1990, the industrialized countries agreed to meet the incremental costs of developing countries and to promote the transfer of the alternative substances and technologies.

III. SOME FEATURES OF THE MONTREAL PROTOCOL

A. Precautionary Principle

6. When the UNEP started negotiations amongst Governments to protect the ozone layer in the early 1980s, no one knew the actual extent of ozone layer depletion, the exact reason for its depletion or the process of such depletion. What forced Governments to act was the "precautionary principle". Many Governments realized that the ozone layer is essential for survival of life on earth, that the consensus of scientists is that CFCs destroy the ozone layer and that if Governments wait for a totally irrefutable proof, the ozone layer would be destroyed to such an extent as to cause severe adverse consequences. Thanks to the ozone agreements, this principle has become a fundamental tenet for action since 1987.

B. Specified, Time-Bound Action

7. The agreements mandated control measures on the ozone-depleting chemicals by every signatory to those agreements in accordance with a specific timetable. This is the first instance of Governments having agreed to controls and the eventual phase out of versatile, profitable and "wonder" chemicals without being certain that they were the cause of the problem or that alternatives to these chemicals were available. This bold step by Governments sent a clear signal to industry that ozone-depleting chemicals had no future. Industry took the cue and quickly developed alternatives. This "technology forcing" broke the back of the usual arguments advanced by industry for its inaction, namely that: "there are no alternatives and the benefits of these chemicals outweigh the damage to the environment".

C. In Step With Science

8. The way these agreements dealt with uncertainty is unique. The agreements followed a slow, step-by-step approach and enabled the Governments to progress in step with the advice of scientists and technologists. What started as a general intent in 1985, with the Vienna Convention, progressed to a partial phase-out of some substances in 1987 with the Montreal Protocol, total phaseout of even more substances in 1990 with the London Amendment and a dramatic acceleration of phase-out and the inclusion of control measures for a new chemical, methyl bromide, in 1992, in step with the discovery of the Antarctic ozone hole in 1985, further confirmations of the ozone depletion and the emergence of viable alternatives to ozone-depleting chemicals in later years.

D. International Cooperative Action

9. One notable feature of the problem of ozone depletion is that its solution requires international cooperative action. Ozone-depleting substances are long-lived and destroy ozone catalytically. The impacts are felt wherever the emissions are made and in whatever quantities. While 85 per cent of the consumption of ODS is by developed countries, phase-out of ODS by these countries alone would have been of little use. The increase in consumption in developing countries, with 80 per cent of the world's population and rising population and economic growth rates which would have led to a rapid increase in the consumption of ODS-containing products (refrigerators etc), would have nullified the efforts of the industrialized countries. Hence, it was essential to secure the cooperation of all countries.

E. Common but Differentiated Responsibility

10. A path-setting feature of the Montreal Protocol is the way in which it accommodates the needs of developing countries. It was recognized that developing countries may not be able to achieve the objectives of the Montreal Protocol as fast as developed countries, owing to their lack of skilled manpower, technologies and resources. It was also explicitly recognized that developing countries

had a right to develop their economies without hindrance, that they had not contributed significantly to the problem, that ODS phase-out by developing countries might hinder their development and that the world-community ought to meet the "incremental" costs of ODS phase-out by contributing the necessary resources. It was also recognized that, in view of the fixed time schedules, developing countries needed prompt action to ensure the transfer of environmentally-sound ODS-free technologies for the phaseout.

F. Fund With a Difference

11. The Multilateral Ozone Fund, established in 1991 as a consequence of the London Amendment, is a unique instrument in financing. The Fund meets, on a grant or concessional basis as appropriate, all the incremental costs approved by the Parties, the costs of country studies, technical cooperation, information exchange and the costs of its secretariat. (So far the incremental costs have been given as grants.) It is administered by a committee of fourteen, divided equally between developed and developing countries. Every country has one vote, unlike in some other financial institutions where countries are given votes proportional to their contribution. Only developed countries and developing countries with a high ODS consumption (accounting for less than 1 per cent of the total contributions) contribute to the Fund. The chairmanship and vice-chairmanship of the committee rotate between developed and developing countries. The committee is responsible, under the overall guidance of the Meeting of the Parties, for policies, budgets, disbursement of resources, criteria for the eligibility of projects and review of performance.

12. Four international organizations - UNEP, United Nations Development Programme (UNDP), United Nations Industrial Development Organization (UNIDO) and the World Bank are the implementing agencies of the Fund. They are subject to the control of the Executive Committee.

G. Legal Non-Compliance Procedure

13. Article 11 of the Vienna Convention lays down the legal procedure for solving disputes. In case of a dispute between them, Parties may seek a solution by negotiation or mediation by another Party. For disputes not solved in either of these two ways, the Party may choose, while ratifying the Vienna Convention or Montreal Protocol, either arbitration in accordance with the procedures adopted by a Conference of Parties to the Vienna Convention, or arbitration by the International Court of Justice. If they have not chosen one of these two options, the matter will be considered by a conciliation commission, which will give a final and recommendatory award. The first meeting of the Conference of Parties to the Vienna Convention laid down the procedure for arbitration.

H. Other Non-Compliance Procedures of the Protocol

14. The way the Montreal Protocol, and the decisions by the Meetings of the Parties to the Protocol, treat non-compliance with the Protocol has established another precedent. Under the legal procedures, non-compliance by a Party is treated as a legal issue which has to be settled between a Party aggrieved by the non-compliance and the Party not in compliance. In the Montreal Protocol, however, it was recognized that the whole world is an aggrieved Party in the case of non-compliance by any Party, since non-compliance is bad for the ozone layer. While the usual legal processes were included in the treaties, the Montreal Protocol also provided for a separate non-compliance procedure through an Implementation Committee set up by the Parties. Non-compliance by Parties can be considered either through a complaint by a Party or through a report of the Secretariat. Interestingly, a Party may itself come before a meeting of the Parties and admit present or potential non-compliance. The first step in the case of non-compliance is to identify the reasons for non-compliance and to assist the Party concerned to comply. More severe steps are contemplated only in the case of persistent and wilful non-compliance.

I. Accomplishments to Date

15. The year 1997 marks the tenth anniversary of the Montreal Protocol. The Protocol has so far been a resounding success. By the end of 1995, the industrialized countries had almost totally phased out their consumption, of about a million tonnes, of many ODS. Contributions to the Multilateral Ozone Fund during the first two triennials amounted to 87 per cent of all pledges. A replenishment of \$466 million has been agreed for 1997-1999. The Fund has financed projects in developing countries to phase out more than a third of their current consumption ahead of the year 1999, when their grace period for CFCs ends. Measurements by scientists have recorded a reduction in ODS in the atmosphere. They predict that the ozone layer will start to recover in a few years and will have fully recovered by the middle of the twenty-first century, if the Protocol continues its vigorous operation.

16. This bright picture of implementation of the Protocol is marred by a few clouds, however, which make it necessary for the Parties not to be complacent but to renew their commitment on the occasion of the tenth anniversary of the Protocol in 1997.

J. Illegal Trade: a Concern

17. Millions of pieces of equipment and vehicles with CFCs still remain in service. This has given rise to a new problem of CFC smuggling. By the end of 1996, the production and consumption of CFCs, halons, carbon tetrachloride and methyl chloroform has ceased in all developed countries, except for a few approved essential uses. The maintenance of CFC-based equipment is not one of the approved uses. Alternatives are available, though perhaps slightly costlier. In spite of stringent controls by developed country Governments, CFCs from other countries continue to leak, for servicing purposes, into developed countries through smuggling. It is said that the profits in such illegal trade are even greater than the profits from cocaine smuggling. While the problem is not of major proportions at the moment and is bound to decline in future, once the controls are in operation in developing countries, there is no doubt that it will need to be controlled. The Ninth Meeting of the Parties in 1997 will consider further steps in this regard.

IV. WHAT IF THERE WERE NO PROTOCOL?

18. What would have happened if there were no Montreal Protocol? Scientists estimate that, if CFCs continued to be emitted as freely as in 1980, the ozone layer could be reduced by about 4 to 5 per cent per decade. Each 1 per cent reduction in ozone is likely to result in a 2 per cent increase in the incidence of non-melanoma skin cancer. The incidence of blindness and melanoma - the most deadly form of skin cancer - may also rise. Human immune systems could be adversely affected, while plant productivity, and hence food security, could fall. Without the Montreal Protocol, continuing use of CFCs and other ozone-destructive compounds would have tripled the present stratospheric abundance of chlorine and bromine by the middle of the next century, leading to very much greater ozone depletion.

19. Even with full international compliance with the existing agreements, chlorine and bromine concentrations are expected to continue increasing in the stratosphere until the turn of the century. Peak global ozone losses are expected to occur during the next 10 years, when another 3-4 per cent of the ozone will be destroyed, before the rates of decline level off and start to diminish. The ozone layer is only expected to return to normal pre-ozone-hole levels by the middle of the next century.

V. TRADE MEASURES

20. The trade measures of the Protocol are so far exclusively directed to non-Parties. These measures are as follows:

- (a) Control of trade in ODS with non-Parties
 - (i) Annex A substances:
 - Import from non-Parties banned from January 1990.
 - Export banned from January 1993.
 - (ii) Annex B substances:
 - Import and export banned from August 1993 for non-Parties to the London Amendment.
 - (iii) Annex C - Group II - HBFCs:
 - Import and export banned from June 1995 for non-Parties to the Copenhagen Amendment.
 - (iv) Annex C Group I (HCFCs), Annex E (methyl bromide) no restrictions as yet.
- (b) Control of Trade in ODS products with non-Parties
 - Import of products (listed in Annex D) containing Annex A substances banned from May 1992.
 - Fifth Meeting of the Parties decided that it is not feasible to ban or restrict trade in products made with, but not containing, Annex A substances.
 - Products containing Annex B and Annex C, Group II, substances not to be listed.

VI. NEW TRADE MEASURES UNDER CONTEMPLATION

21. In order to curb illegal trade in ozone-depleting substances between Parties, the Parties are considering an amendment to the Protocol to incorporate a licensing system for trade between Parties as follows:

- (a) Each Party to introduce a licensing system for the import or export of new or recycled substances;
- (b) Each Party to report to the Secretariat the details of their system;
- (c) Parties to ban trade in substances with other Parties who have not established such a system. Also under consideration is a ban on the export of recycled substances by non-complying Parties. This is intended to prevent the export of new substances under the guise of recycled substances, trade in which is exempt from control measures; and

- (d) The Ninth Meeting of the Parties, to be held on 15-17 September 1997, will decide on these measures.

22. Another issue of concern is the increasing export of new or used CFC-containing equipment, such as refrigerators and airconditioners, to developing countries at low prices. The increase of such equipment in developing countries will increase their demand for CFCs and will make it difficult for them to implement the control measures of the Protocol. The Ninth Meeting of Parties to the Protocol will consider requesting all Parties to control such exports.

VII. SOME ASPECTS OF TRADE MEASURES IN THE MONTREAL PROTOCOL

A. Near-Universal Consensus

23. The Montreal Protocol is based on a near-universal consensus of 162 countries, representing all regions, the rich and poor and the consumers and producers. Non-Parties to the Protocol at the moment number only 25, with a combined population of 122 million, as compared to the population of the world of more than 5 billion.

B. Coordination Between the Ozone and World Trade Organization (WTO) Secretariat

24. The WTO Secretariat is informed regularly of all the potential and actual trade measures. The representatives of the GATT/WTO Secretariat usually have attended all the important meetings of the Protocol. The Protocol Secretariat has the benefit of informal advice from the WTO Secretariat.

C. Need For Responsiveness by the WTO

25. It must be stated, however, that it has not been possible to obtain a formal opinion from the WTO on any contemplated trade measures in the Protocol with reasonable notice. In 1995, at the suggestion of the Open-ended Working Group of the Protocol, the Protocol Secretariat approached the WTO Secretariat for clarification as to whether certain proposals were consistent with GATT. The reply of the WTO Secretariat was not very definite, since the issues involved were under consideration by the WTO Committee on Trade and Environment. Unless the WTO is in a position to respond quickly to queries, the Parties to the Protocol may not be able to consult the WTO before taking trade measures considered by them to be essential.

D. Harmonious Interpretation Necessary

26. The membership of the Protocol is much wider than that of the WTO. Since the same Governments which are negotiating and taking decisions in the Protocol are WTO Members, harmonious interpretation of the provisions of the GATT/WTO and the Protocol is essential to avoid dislocations.

E. Trade Measures Are Not Negative

27. In some of the publications of the WTO and UNCTAD, trade measures are considered "negative" and the financial mechanism of the Protocol is seen as "positive". This perception of trade measures is not generally shared by Parties to the Protocol. The financial mechanism is intended to compensate for the incremental costs of implementing time-bound control measures and not to compensate any alleged loss due to the trade measures. The trade measures are not punitive. They are actually positive, in that they enable the Parties to implement the control measures more easily than would otherwise be possible. Furthermore, many of the suggestions to control trade between Parties have actually been made by small developing countries.

VIII. NEED FOR TRADE MEASURES

28. Trade measures are not punitive measures against non-Parties. Unrestricted trade is an underlying cause of the problem of ozone depletion, in that the greater the volumes of trade, the heavier the use of ODS and the more rapid the rates of depletion. The ODS are somewhat akin to narcotics in this respect. Trade with non-Parties would definitely lead to increased production and consumption and could also lead to the diversion of production facilities to non-Parties.

29. Some of the trade measures are also a matter of common sense for Parties. Since they are phasing out ODS, they obviously cannot encourage the import of these substances or equipment using these substances into their countries, as they will then be unable to maintain the equipment.

30. It is sometimes argued that, instead of using trade measures, the Protocol could use economic measures by taking into account the externalities of the cost of ozone depletion in the price of products using ODS. Unfortunately, these externalities will not be viewed in the same way by different countries, since impacts differ from country to country. In addition, the time taken for such an economic process to yield results would be very long and, in the meantime, there would be irretrievable losses to the environment.