

# Key Achievements of the Montreal Protocol in the past 20 Years



**While much more remains to be accomplished before we can assure the protection of the ozone layer for future generations, the Parties to the Montreal Protocol have accomplished a great deal in the 20 years of its existence.**

## Elimination of ozone depleting substances

As of 2005, the Parties to the Protocol had phased out the consumption of over 95% of all of the chemicals controlled by the Protocol. (Consumption was reduced by 99% in the developed countries.)

\*For reference: Consumption volume = Production volume + Import volume - Export volume

## Healing the ozone layer

Global observations have verified that atmospheric levels of key ozone depleting substances are going down. In addition, it is believed that with further implementation of the Protocol's provisions, the ozone layer should return to pre-1980 levels by 2050 to 2075.

## Contribution to prevent global warming

The Protocol greatly contributes to the global warming control measures because ozone depleting substances also have a greenhouse effect. Reduction of these substances resulted in the reduction of approximately 25 billion tons of CO<sub>2</sub> greenhouse gas in total through 1990 with the maximum value to 2000.\* The Montreal Protocol is recognized as the most successful international agreement for preventing global warming due to such large reduction of greenhouse gas.

\*For reference: Japan's emission in the standard year of 1995 based on the Kyoto Protocol is approximately 1.3 billion tons of CO<sub>2</sub>.

## Global participation

In terms of international cooperation, over 190 countries and the European Community have ratified the Protocol. This high degree of participation has greatly contributed to global compliance with the Montreal Protocol targets.

## Supporting developing countries

With the assistance of the Multilateral Fund for the Implementation of the Montreal Protocol,\* as of 2005, developing countries have eliminated the production of over 116,000 tons of ozone depleting substances, constituting over 70% of developing country totals. Further, projects have already been designed and agreed upon to reduce over 90% of the remaining developing country production.

\*For reference: Japan is the largest contributor, equal to the United States. Japan contributes approximately \$30 million to the Fund, which accounts for 22% of total contributions.

## High rates of compliance

Many countries, both developed and developing, have met their phase-out targets well ahead of schedule.

## Global recognition of the Montreal Protocol

In 2003, then United Nations Secretary-General Kofi Annan said, "It (the Montreal Protocol) is perhaps the single most successful international environmental agreement to date." In 1995, the science world's contribution to ozone layer protection efforts was recognized in the form of the Nobel Prize for Chemistry.

## Health benefits

In terms of health benefits, controls implemented under the Montreal Protocol have enabled the global community to avoid millions of cases of fatal skin cancer and cataracts. The United States estimates that by the year 2165 more than 6.3 million skin cancer deaths will have been avoided in America alone and that efforts to protect the ozone layer will have saved the country an estimated \$4.2 trillion in health care costs over the period 1990-2165.

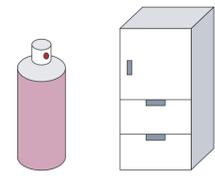
The source: Composed by the Ministry of Economy, Trade and Industry, based on the 'Key Achievements of the Montreal Protocol to Date' of the United Nations Environment Programme (UNEP).

# The Montreal Protocol

## 1 Conclusion of the Montreal Protocol-Background

**In the mid-1970's:**

**! The impact of CFCs upon the ozone layer was uncovered through various research projects.**



It was discovered that the stratospheric ozone absorbs most ultraviolet radiation, which is harmful to life on the earth. During this time period, it also became widely known that CFCs, which are used as refrigerants for refrigerators and air-conditioners, as well as cleaning agents for electronic components, give off chlorine upon reaching the stratosphere and deplete the ozone layer when they are emitted into the atmosphere.

**On March 22, 1985:**

**The Vienna Convention for the Protection of the Ozone Layer was adopted.**

Under this Convention, the framework for international cooperation concerning the protection of the ozone layer was established.

**On September 16, 1987:**

**The Montreal Protocol on Substances that Deplete the Ozone Layer was adopted.**

The purpose of the Protocol is to protect human health and well-being as well as the environment by specifying ozone depleting substances and controlling their production and trade. The secretariat of both the Convention and the Protocol is located at the United Nations Environment Programme (UNEP) in Nairobi, Kenya. 191 nations became party to the Montreal Protocol.

**In May, 1988 (for reference):**

**The Ozone Layer Protection Law, a law concerning the protection of the ozone layer through the control of specified substances and other measures, was enacted in Japan.**

## 2 The Outline of Controls by the Montreal Protocol

The control measures were strengthened five different times over the period of 1990-1999, including several additions of controlled substances and an earlier implementation of several controls before the agreed-upon schedule.

- ① **Establishment of the phase-out schedule for production and consumption of ozone depleting substances (Article 2, A to H)**
- ② **Control of trade with non-Parties (Article 4:Restriction on trade of the controlled substances)**
- ③ **Assessment and review of control measures based on current scientific, environmental, technical and economic information (Article 6)**

## 3 Support to Developing Countries

The financial support system centering on the Multilateral Fund for the Implementation of the Montreal Protocol was agreed to by the various Parties at the second Meeting of the Parties to the Montreal Protocol held in London in June, 1990, to assist developing countries (Article 5 countries) in meeting their commitments to the Protocol. The Multilateral Fund was inaugurated in January, 1991.