

## Chronology of Ozone Protection Milestones

1974

- Scientists Sherry Rowland and Mario Molina in a scientific article published in the journal *Nature* warn that human-generated chlorofluorocarbons (CFCs) are harming the ozone layer.

1977

- The World Plan of Action on the Ozone Layer adopted by the UNEP Governing Council calls for intensive international research and monitoring of the ozone layer.

1985

- British Antarctic Survey scientists report on the recurring springtime ozone hole over Antarctica.
- The Vienna Convention is signed on 22 March.

1987

- The Montreal Protocol is adopted on 16 September. The day is marked globally as the International Day for the Preservation of the Ozone Layer since 16 September 1995.

1988

- The Vienna Convention enters into force on 22 September.

1989

- The Montreal Protocol enters into force on 1 January.
- First reports by Assessment Panels on the review of control measures under the Montreal Protocol are published, and since then major periodic assessments have been published by all the three panels (SAP, TEAP and EEAP), thus providing critical information to the Parties to the Protocol, based on available scientific, environmental, technical and economic information.
- The first set of control measures under the Montreal Protocol take effect for developed countries.

1990

- Parties to the Montreal Protocol decide to amend the Protocol to create a financial mechanism under the Protocol, including the Multilateral Fund.
- The Interim Non-Compliance Procedure for the Montreal Protocol is adopted.

1991

- Adjustments to the Montreal Protocol agreed in 1990 in London at the Second Meeting of the Parties enter into force.
- The Interim Multilateral Fund becomes operational.
- Implementing agencies commence ozone phase-out activities, with funding from the Multilateral Fund.

1992

- The London Amendment to the Montreal Protocol agreed in 1990 in London at the Second Meeting of the Parties enter into force.
- The Non-Compliance Procedure for the Montreal Protocol is adopted. The Implementation Committee is established.

1993

- Adjustments to the Montreal Protocol agreed in 1992 in Copenhagen at the Fourth Meeting of the Parties enter into force.
- The Multilateral Fund is established on a permanent basis to replace the Interim Multilateral Fund.

1994

- The UN General Assembly proclaims 16 September as the International Day for the Preservation of the Ozone Layer, to be observed from 1995 on 16 September.
- The Copenhagen Amendment to the Montreal Protocol agreed in 1992 in Copenhagen at the Fourth Meeting of the Parties enter into force.
- Developed countries phase out halons used in products such as fire-fighting equipment, followed by developing countries by 2010.

1995

- The Nobel Prize for Chemistry is awarded to Sherwood Rowland, Mario Molina and Paul Crutzen for their pioneering work in atmospheric chemistry, particularly concerning the formation and decomposition of ozone.

1996

- Adjustments to the Montreal Protocol agreed in 1995 in Vienna at the Seventh Meeting of the Parties enter into force.
- Developed countries phase out production and consumption of chlorofluorocarbons (CFCs), followed by developing countries by 2010.

1998

- Adjustments to the Montreal Protocol agreed in 1997 in Montreal at the Ninth Meeting of the Parties enter into force.
- The Non-Compliance Procedure is reviewed and amended.

1999

- The Montreal Amendment to the Montreal Protocol agreed in 1997 in Montreal at the Ninth Meeting of the Parties enter into force.
- The first set of control measures under the Montreal Protocol take effect for developing countries.

2000

- Adjustments to the Montreal Protocol agreed in 1999 in Beijing at the Eleventh Meeting of the Parties enter into force.

2002

- The Beijing Amendment to the Montreal Protocol agreed in 1999 in Beijing at the Eleventh Meeting of the Parties enter into force.

2003

- Former United Nations Secretary-General Kofi Annan terms the Montreal Protocol “perhaps the single most successful international environmental agreement to date.”

2005

- Developed countries phase out methyl bromide, followed by developing countries by 2015.

2006

- The largest Antarctic ozone hole, averaging 26.6 million square kilometres, is recorded.

2007

- The Montreal Protocol is adjusted to accelerate the phase-out of hydrochlorofluorocarbons (HCFCs) by developing countries.

2008

- Adjustments to the Montreal Protocol agreed in 2007 in Montreal at the Nineteenth Meeting of the Parties enter into force.

2009

- The Vienna Convention and the Montreal Protocol become the first multilateral environmental treaties to achieve universal ratification.
- A scientific article published in the *PNAS* journal notes that the Montreal Protocol has averted more than 135 billion tonnes of carbon dioxide equivalent emissions going to the atmosphere, thus significantly contributing to the mitigation of climate change.

2010

- All parties to the Montreal Protocol phase out the consumption and production of chlorofluorocarbons, halons, carbon tetrachloride and other fully hydrogenated ozone depleting substances. As a consequence, the cumulative phase-out of production and consumption of ozone-depleting substances achieves over 98 per cent of the historic levels of these substances.

2013

- Developing countries freeze the production and consumption of HCFCs.
- A scientific article published in the *Photochemistry and Photobiology* journal notes that through ozone protection efforts, up to 2 million cases of skin cancer may be prevented each year by 2030.

2014

- All four Amendments to the Montreal Protocol achieve universal ratification by 197 Parties.
- The scientific assessment of ozone depletion in 2014 confirms that the ozone layer is healing and will return to pre-1980 levels by mid-century, thanks to actions taken by Parties under the Montreal Protocol.

2015

- Developed countries phase out 90 per cent of their production and consumption of HCFCs.
- Developing countries phase out methyl chloroform and reduce by 10 per cent their production and consumption of HCFCs.
- Parties achieve a cumulative commitment of US\$3.7 billion for contribution to the Multilateral Fund for the period 1991 - 2015 to assist developing countries make the transition to more environmentally friendly practices and products through industrial conversion, technical assistance, training and capacity-building.

## Ozone Protection Institutions

