



Australia's implementation of the Montreal Protocol

As one of the first countries to ratify the Montreal Protocol, Australia continues to be a world leader in the phase out of ozone depleting substances. In many cases, Australia is well ahead of the Protocol requirements. Australia's approach has been based on a cooperative partnership between industry, community, and all levels of government.

Australia acceded to the *Vienna Convention for the Protection of the Ozone Layer* in 1987 and ratified the *Montreal Protocol on Substances that Deplete the Ozone Layer* originally in 1989, and then again for each of the five amendments agreed between 1990 and 1999.

Australia continues to take an active role in ongoing Montreal Protocol negotiations, ensuring that further actions to protect the ozone layer are scientifically based and technically feasible, and that developing countries are supported in their efforts to phase out ozone depleting substances.

Australia has met or exceeded all of its phase out obligations under the Montreal Protocol. For example, Australia will largely phase out consumption of HCFC by 2016, four years ahead of the schedule required under the Protocol. In doing so, Australia will consume 61 per cent less HCFC in the period to 2020 than permitted under the Montreal Protocol—even after the Parties to the Montreal Protocol agreed in 2007 to advance HCFC phase out globally.

Domestic policies for managing ozone depleting substances and synthetic greenhouse gases

The Department of the Environment, Water, Heritage and the Arts is the Australian Government agency responsible for coordinating national ozone protection measures and administering the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*.

To meet our obligations under the Montreal Protocol, the department regulates:

- import, export and manufacture of bulk ozone depleting substances,
- import and domestic manufacture of many products containing ozone depleting substances, and
- end-uses of these substances, including acquisition, possession, handling and disposal.

Currently, specific regulations are in place covering refrigeration and air conditioning, fire protection and methyl bromide.



Universal ratification of the Montreal Protocol

For further information, go to the department's website:

www.environment.gov.au



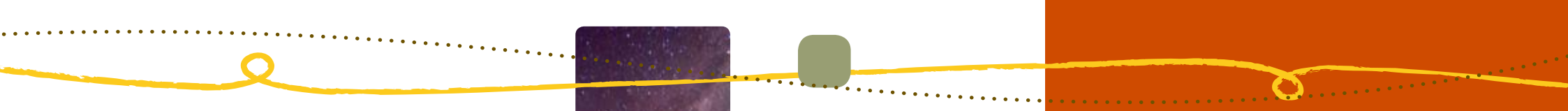
or email the ozone team at:

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Photo credits:

Front cover (L-R): LIDAR (Light Detection and Ranging) beam, Davis Station Antarctica (Greg Stone), Nacreous Clouds after sunset, Mawson Antarctica and Polar Stratospheric Clouds (Peter Tsimnadis)

Inside: (L-R): LIDAR (Light Detection and Ranging) beam and Nacreous Clouds after sunset, Davis Station, Antarctica (Greg Stone)



Universal ratification of the Montreal Protocol on Substances that Deplete the Ozone Layer

Damage to the Earth's protective ozone layer has sparked unprecedented worldwide concern and action. Since it was agreed internationally in 1987 to phase out ozone depleting substances (also known as ODS), 196 countries have ratified the Montreal Protocol. In September 2009, East Timor ratified the Montreal Protocol, making it the first international environmental treaty to achieve complete ratification—a truly remarkable effort that reflects the universal acceptance and success of the agreement.

The ozone layer

The stratospheric ozone layer protects life on Earth by absorbing ultra-violet (UV) radiation from the sun. UV radiation is linked to skin cancer, genetic damage and immune system suppression in living organisms, and reduced productivity in agricultural crops and the food chain.

Scientific evidence has proven that the natural balance of stratospheric ozone has been upset by the production and release into the atmosphere of ozone depleting substances, including chlorofluorocarbons (CFCs), halons, methyl chloroform, carbon tetrachloride, hydrochlorofluorocarbons (HCFCs) and methyl bromide. These substances have applications in refrigerators, air conditioners, fire extinguishers, aerosols, agricultural fumigants, in foam and as solvents for cleaning electronic equipment.

Data collected in the upper atmosphere have shown that there has been a general thinning of the ozone layer over most of the globe. This includes a five to nine per cent depletion over Australia since the 1960s, which has increased the risk that Australians already face from over-exposure to UV radiation resulting from our outdoor lifestyle.

In addition, more dramatic damage occurs over Antarctica each spring when the ozone 'hole' forms. The Antarctic ozone holes in 2000 and 2006 were the largest on record, each measuring around 30 million square kilometres—more than three and a half times the size of Australia—and, at times, extended over populated areas. The 2002 and 2004 ozone holes were much smaller, due in large part to weather conditions in the troposphere and stratosphere disrupting the hole.

Prospects for the long-term recovery of the ozone layer are good. Non-essential consumption of major ozone depleting substances ceased for developed countries in 1996 and will cease for developing countries in 2010. Scientists predict that if the international community continues to comply with the Montreal Protocol, the ozone layer should fully recover between 2050 and 2065.

Highlights of the Montreal Protocol 1989–2009

The Montreal Protocol is widely considered as the most successful environment protection agreement. The Protocol sets out a mandatory timetable for the phase out of ozone depleting substances. This timetable has been reviewed regularly, with phase out dates accelerated in accordance with scientific understanding and technological advances.

The Montreal Protocol sets binding progressive phase out obligations for developed and developing countries for all the major ozone depleting substances, including CFCs, halons and less damaging transitional chemicals such as HCFCs.

The Multilateral Fund, the first financial mechanism to be created under an international treaty, was created under the Protocol in 1990 to provide financial assistance to developing countries to help them achieve their phase out obligations.

The Montreal Protocol targets 96 chemicals in thousands of applications across more than 240 industrial sectors. The Multilateral Fund has provided more than US \$2.5 billion in financial assistance to developing countries to phase out production and consumption of ozone depleting substances since the Protocol's inception in 1987.

The Protocol has been further strengthened through five Amendments—London 1990, Copenhagen 1992, Vienna 1995, Montreal 1997 and Beijing 1999—which have brought forward phase out schedules and added new ozone depleting substances to the list of substances controlled under the Montreal Protocol.

The Montreal Protocol has also produced other significant environmental benefits. Most notably, the phase out of ozone depleting substances is responsible for delaying climate forcing by up to 12 years.

