**Protecting the Ozone Layer and Safeguarding the Global Climate**

[](http://www.undp.org/content/undp/en/home/ourwork/environmentandenergy/focus_areas/ozone_and_climate/)

Ozone Depleting Substances (ODS) are a group of man-made chemicals that, when released into the atmosphere, can cause the depletion of the Ozone Layer. This depletion allows increased levels of ultraviolet (UV) radiation to reach the earth’s surface. In turn, increased UV radiation poses significant threats to human health by compromising immune systems and causing higher levels of skin cancer and eye cataracts. It also disturbs the ecological balance of watersheds, agricultural lands and forests.

The [Montreal Protocol on Substances that Deplete the Ozone Layer](http://ozone.unep.org/new_site/en/montreal_protocol.php" \t "_blank) is an international environmental agreement that aims to protect the earth’s ozone layer by phasing out the production and consumption of ozone depleting substances (ODS). The Montreal Protocol, founded on the principle of common but differentiated responsibilities, is the only multilateral environmental agreement with universal ratification. Since its signature in 1987, the Montreal Protocol has been very successful in eliminating the majority of its controlled substances by 1 January 2010 and contributed to reversing the damage done to the ozone layer.

Since most ODS are also powerful greenhouse gases (GHG), activities under the Montreal Protocol have in addition resulted in greenhouse gas reductions equivalent to 25 billion tonnes of CO2-equivalent (UN MDG Report, 2011). As such, the Montreal Protocol has been recognized as a global success, for its contributions to safeguarding the Ozone Layer and the Global Climate.

However, important challenges remain. During the last 20 years, industry went through a transition from CFCs (with a high Ozone Depleting Potential – ODP) to HCFCs (low ODP), and is now starting to transition from HCFCs to alternatives that do not deplete the ozone layer at all. Worldwide, HCFCs are currently used in refrigeration, air conditioning, and foam products and represent the largest portion of remaining ODS consumed. Unfortunately, not all alternatives to HCFCs are climate-friendly. Depending on the alternatives selected, the phase-out of HCFCs can either significantly contribute to climate change mitigation or entirely nullify a country’s efforts to reduce its climate impact.

An additional challenge is posed by ODS that are contained in obsolete equipment (e.g. refrigerators replaced as part of energy efficiency programmes) or present in obsolete chemical stockpiles. These ODS threaten to leak into the atmosphere if they are not properly managed and disposed of, posing significant threats to both the ozone layer and the global climate.

To tackle such challenges, UNDP assists developing countries and countries with economies in transition to comply with Montreal Protocol targets, such as the Phase-out of HCFCs while fostering the introduction of ozone and climate friendly alternatives and proper disposal of ODS Banks, through:

* Institutional capacity development.
* Policy and regulatory interventions.
* Technology needs assessment.
* HCFC Phase-out Management Plans / low-carbon sector strategies.
* Assessment and demonstration of low-carbon alternative technologies.
* Assistance to the developing countries to access, combine and sequence different sources of environmental financing to meet Montreal Protocol compliance targets and bring climate co-benefits.

UNDP helps governments and businesses to compete in a growing green economy and avoid job losses by removing barriers to employing ozone-friendly, energy-efficient, low carbon production processes that are good for the economy and the global environment.