

UNITED NATIONS ENVIRONMENT PROGRAMME INDUSTRY AND ENVIRONMENT OZONACTION PROGRAMME

Saving the Ozone Layer: Guidelines for United Nations Offices





Practical steps to phase out the use of ozone-depleting substances on UN premises

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UNEP IE staff leading the project were:

Jaqueline Aloisi de Larderel, Director, UNEP IE; Rajendra M. Shende, Coordinator, OzonAction Programme; Cecilia T. Mercado, Information Officer, OzonAction Programme

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Preface

The protection of the Earth's stratospheric ozone layer is a significant achievement of international environmental diplomacy and of the United Nations.

The ozone layer is vital to human, animal, and plant life on the Earth's surface. Yet in the 1980s it was discovered that the layer was vulnerable to damage by emissions into the atmosphere of particular industrial chemicals, of which the most important was the family of chlorofluorocarbons. The negotiation of the international treaty—the Montreal Protocol—designed to limit, and ultimately end, the production and use of these chemicals took place under the aegis of the United Nations Environment Programme.

The regime established by the Montreal Protocol has proved highly effective in limiting damage to the ozone layer. Ozone depletion has reached record levels as a result of the last seventy years of production and use of ozone-damaging chemicals. However, the damage is now nearing its peak and it is predicted that the ozone layer will start to recover in the next few years; it should be restored to full health by the middle of the next century.

This process of recovery can be accelerated by actions taken by organizations and individuals. Many offices throughout the world contain equipment, including refrigerators, air-conditioning units and fire extinguishers, which contain ozonedepleting substances. Ensuring that these appliances do not leak, and are adequately serviced or replaced with units that do not contain such substances, will speed up the recovery of the ozone layer. Since substitutes now exist for virtually all uses of CFCs and most other ozone-depleting substances, this is a relatively easily achievable goal. Indeed, in many instances new units containing CFC substitutes are more efficient (for example in energy use) than the old units they replace, resulting in additional benefits.

Individual UN offices can participate in this way in the process of ozone layer protection initiated by UNEP. Although it is international agencies and national governments which agree and monitor ozone protection policies, it is firms, offices and employees—including those of the United Nations—which put them into effect. And, as at the global level, local UN offices should be setting an example and giving the lead to other organisations in the countries in which they are based.



Elizabeth Dowdeswell, Executive Director, United Nations Environment Programme

Contents

How to use these guidelines	3
Background: saving the ozone layer	4
Drawing up an action plan	5
Step 1: Establish the framework	6
Step 2: Identify ODS-using equipment and ODS in use	8
Step 3: Choose the appropriate option	11
Step 4: Review progress	15
Step 5: Keep new equipment ODS-free	16
Case study: the Gigiri complex at Nairobi	17
Conclusion	18
Appendix 1: List of abbreviations	19
Appendix 2: Sources of further information	19
Appendix 3: About UNEP IE's OzonAction Programme	21

How to use these guidelines

These guidelines are written for UN office managers. They are designed to guide you through a series of steps that will help you reduce and eventually eliminate the damage your office equipment does, or may do, to the Earth's protective ozone layer.

In particular, these guidelines will assist you to:

- identify equipment that contains CFCs and other ozone-depleting substances (ODS);
- decide how best to phase out ODS;
- minimize the loss of ODS during phase out; and
- ensure that new equipment purchased is ODS-free.

Throughout this document, text printed with a shaded background summarises the environmental and political information which underpins the decisions you will be taking. Reading it is not essential to follow the steps outlined in the main text, but you may find it helps you understand the reasoning behind them. Sources of further information are listed in Appendix 2.

Applicability of the guidelines

Although these guidelines are written with UN offices in mind and use as examples steps that have already been taken in the UN office complex in Gigiri in Nairobi (see box on page 17), in practice, however, they are applicable to any office-type building or organization (industrial plant may require rather different procedures). We therefore also encourage their use in office complexes within and outside of the UN System.

Background: saving the ozone layer

What is the ozone layer?

The thin layer of ozone high in the Earth's atmosphere plays a crucial role in protecting life on the planet's surface from harmful ultraviolet radiation emanating from the sun. In the 1980s it was discovered that this ozone layer was vulnerable to damage from chlorofluorocarbons (CFCs) and other industrial chemicals. Stable, non-toxic and highly versatile, CFCs have been employed for a wide variety of uses, including aerosol propellants, refrigerants and air-conditioning fluids, solvents and foam-blowing agents. Halons, i.e. related compounds containing bromine rather than chlorine, have been used as fire extinguishants.

What are ozone treaties

The United Nations, through UNEP, was instrumental in negotiating the 1985 Vienna Convention for the Protection of the Ozone Layer, and the subsequent 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. These international treaties, which have now achieved almost universal adherence, applied quantitative controls to the production and consumption of ozone-depleting substances (ODS). Developing countries enjoy rather longer control schedules, with most ODS due for phase out by 2010. The Montreal Protocol contains a mechanism (the Multilateral Fund) for providing financial support to developing countries to assist them in drawing up and implementing ODS phase-out programmes. The Fund operates through four implementing agencies: UNEP, UNDP, UNIDO and the World Bank. Funding is also available through the Global Environment Facility for phase-out projects in countries with economies in transition in central and eastern Europe and the former Soviet Union.

How UN offices can contribute to protecting the ozone layer

Substitutes now exist for virtually all uses of CFCs and halons, and in some areas—aerosol propellants and solvents, for example—ODS are now almost never used. Refrigeration and air-conditioning equipment, and fire extinguishers, on the other hand, have fairly long lifetimes. Many UN offices will therefore still contain products that do use ODS. These include equipment:

- produced before the phase-out dates;
- produced in developing countries;

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