

# INFORMATION

- **Newspaper articles or articles from contemporary magazines** (for example, The Economist) can be a good place to start, as they often give an outline of the arguments around an issue. Try your library or find their websites on the Internet. Try a search on The Guardian website first.
- **Use Internet searches to find relevant websites.** To use your time most effectively, try the websites listed on this sheet first before a full search.
- **Books and articles** in your school library, or material that you have yourself could help you in your research.

## SEARCHING THESE WEBSITES FIRST IS A GOOD PLACE TO START:

[www.guardian.co.uk](http://www.guardian.co.uk) (An excellent website with archives of past newspaper articles and also an extensive section of special reports on particular issues.)

[www.economist.com](http://www.economist.com) (Also a very good source of information.)

[www.the-times.co.uk](http://www.the-times.co.uk)

# TOPICS

Select a topic that focuses on a global environmental issue. These are some suggestions, but you may have seen a new issue on the television or in a newspaper.

- **Global Warming**
- **GM Foods**
- **Deforestation**
- **The collapse of Enron**
- **Transport**
- **Alternative energy forms**
- **Recycling**

# Ozone Depletion Glossary

**CFCs - Chlorofluorocarbons** are very unreactive molecules that were widely used in aerosols and coolants. When they are released into the atmosphere they move to the upper atmosphere and eventually to the ozone layer. There they are struck by ultraviolet radiation that causes them to lose chlorine atoms. The chlorine atoms then react with, and destroy, ozone.

**EPA - The United States Environmental Protection Agency** was set up in July 1970, by the United States government. The EPA is responsible for researching and setting national standards for the environment in the US.

**EU – The European Union** is made up of member states that delegate government for certain matters to independent institutions that represent the interests of the Union as a whole. Each national government is represented within the Council, and citizens directly elect the European Parliament.

**HCFCs – Hydro chlorofluorocarbons** are a group of man-made compounds containing hydrogen, chlorine, fluorine and carbon. They are not found anywhere in nature. HCFC production began to take off after countries agreed to phase out the use of CFCs. Like CFCs, HCFCs are used for refrigeration, aerosol propellants, foam manufacture and air conditioning. Unlike the CFCs however, most HCFCs are broken down in the lowest part of the atmosphere, and pose a much smaller risk to the ozone layer. Unfortunately HCFCs are also very potent greenhouse gases, despite their very low atmospheric concentrations, measured in parts per trillion (million million).

**Kyoto Protocol** - from December 1st-11th, 1997, more than 160 nations met in Kyoto, Japan, to negotiate limitations on greenhouse gases for the developed nations. The outcome of the meeting was the Kyoto Protocol, in which the developed nations agreed to limit their greenhouse gas emissions.

**Montreal Protocol** – was agreed upon September 16th, 1987 at the Headquarters of the International Civil Aviation Organization in Montreal. It came into force, on time, on January 1st, 1989, when 29 countries and the EEC representing approximately 82% of world consumption had agreed to it. The Protocol set targets for reducing the amount of ozone-depleting substances being put into the atmosphere by different countries.

**MLF** - the United Nations **Multilateral Fund** was set up after the Montreal Protocol. Its main aim is to help developing countries that do not produce large amounts of ODS to meet their targets in the Montreal Protocol. Contributions to the Multilateral Fund from the industrialised countries, and up to July 2001 they had contributed US \$1.3 billion.

**NASA** – the **National Aeronautics and Space Administration** in the US.

**ODs – ozone-depleting substances** are a group of chemicals that destroy ozone.

# Ozone Depletion Glossary

**Ozone layer** - The ozone layer is a concentration of ozone molecules in the stratosphere. The layer of the Earth's atmosphere that surrounds us is called the troposphere. The stratosphere, the next higher layer, extends about 10-50 km above the Earth's surface. Stratospheric ozone is a naturally occurring gas that filters the sun's ultraviolet (UV) radiation. A diminished ozone layer allows more radiation to reach the Earth's surface. For people, overexposure to UV rays can lead to skin cancer, cataracts, and weakened immune systems. Increased UV can also lead to reduced crop yield and disruptions in the marine food chain. UV also has other harmful effects.

**PFCs - perfluorocarbons** are one type of greenhouse gas, but they do not destroy ozone. They are included in the Kyoto Protocol.

**Scientific Assessment Panel** – a group of scientists from around the world that advises the United Nations about ozone depletion. They make recommendations that countries can choose to agree to, for example, the Montreal Protocol.

**Technology and Economic Assessment Panel** – set up after the Montreal Protocol by the United Nations Environment Programme (UNEP, this group investigates alternative technologies that could make it possible to almost eliminate use of the ozone-depleting substances.

**UV radiation** - the human eye responds to light with wavelengths from about 790 nm (red) to 430 nm (violet). Light with wavelengths shorter than the human eye can detect is called *ultraviolet* (beyond violet) light. Ultraviolet (UV) light is contained in the range of wavelengths radiated by the Sun.