

INTERNATIONAL TREATIES

AIR PROTECTION


PROBLEMS RELATED TO THE AIR POLLUTION

- ✦ Acid rains and other pollution
- ✦ Ozone layer depletion
- ✦ Global climate change

CASE LAW

Trail Smelter case – 1935

.... Under the principles of international law no state has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.



Establishment of the concept of state liability for environmental harm

CONVENTION ON LONG - RANGE TRANSBOUNDARY AIR POLLUTION (Geneva 1979) LRTAP

Aim:

- to reduce air pollution
- cooperation in research, development and monitoring
- to develop strategies to reduce emissions of pollutants



Long-range transboundary air pollution – air pollution whose physical origin is situated wholly or in part within the area under the national jurisdiction of one state and which has adverse effects in the area under jurisdiction of another state at such a distance that is not generally possible to distinguish the contribution of individual emission sources or groups of sources

CONVENTION ON LONG - RANGE TRANSBOUNDARY AIR POLLUTION (Geneva 1979) LRTAP

Protocol 1984 (EMEP) on the Long Term Financing of the Co-operative Programmes for Monitoring and Evaluating the Long-Range Transmission of Air Pollutants in Europe (Geneva)



Instrument for international cost-sharing of a monitoring programme

CONVENTION ON LONG - RANGE TRANSBOUNDARY AIR POLLUTION (Geneva 1979) LRTAP

Protocol 1985 on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at Least 30 Per Cent (Helsinki)

- Acid deposition
- 1980 - baseline
- 1993 - deadline

CONVENTION ON LONG - RANGE TRANSBOUNDARY AIR POLLUTION (Geneva 1979) LRTAP

Protocol 1994 on Further Reduction of Sulphur Emissions (Oslo)

1980 – baseline
2010 – deadline
Obligation to reduce emissions so that their influence on the nature and ecosystems would not exceed „critical loads“ (72% reductions for the CR)
Emission limitations for new sources of pollution

CONVENTION ON LONG - RANGE TRANSBOUNDARY AIR POLLUTION (Geneva 1979) LRTAP

Protocol 1988 Concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes (Sofia)

1987 – baseline
1994 – deadline
Acid deposition and tropospheric ozone

CONVENTION ON LONG - RANGE TRANSBOUNDARY AIR POLLUTION (Geneva 1979) LRTAP

Protocol 1991 on the Control of Emissions of Volatile Organic Compounds and their Transboundary Fluxes (Geneva)

30% reductions of VOC emissions or introduction of new technologies
Baseline 1984-1990
Deadline 1999

CONVENTION ON LONG - RANGE TRANSBOUNDARY AIR POLLUTION (Geneva 1979) LRTAP

Protocol 1998 on Heavy Metals (Aarhus)

To reduce emissions of heavy metals (lead, cadmium, mercury)
 Baseline 1985 – 1995
 Reductions are set by states individually according their conditions
 2 sets of limitations a) emission limits for heavy metals
 b) emission limits for solid particles
 Reductions of lead content in leaded gasoline; its elimination till 1.1.2005
 Reductions of mercury content in batteries

CONVENTION ON LONG - RANGE TRANSBOUNDARY AIR POLLUTION (Geneva 1979) LRTAP

Protocol 1998 on Persistent Organic Pollutants (Aarhus)

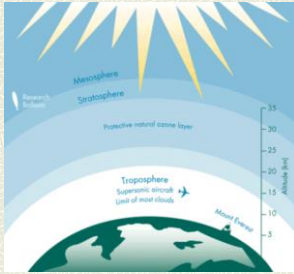
POPs – aldrin, chlordan, DDT, dieldrin, heptachlor, mirex, ...
 To reduce or eliminate emissions and leakages of POPs
 To halt the production and use of substances at the list I.
 To manage environmentally sound disposal of POP products and wastes
 Dibenzo-p-dioxin and dibezofurans emission limits for large stationary sources (Appendix IV and V)

CONVENTION ON LONG - RANGE TRANSBOUNDARY AIR POLLUTION (Geneva 1979) LRTAP

Protocol 1999 to Abate Acidification, Eutrophication and Ground-Level Ozone (Gothenburg)

- ➔ To reduce anthropogenic emissions of
 - Sulphur, NOx,
 - Ammoniac,
 - VOCs.
- ➔ National ceilings to be met in 2010.
- ➔ Tight limit values for specific emission sources
- ➔ BAT requirement

CONVENTION FOR THE PROTECTION OF THE OZONE LAYER (Vienna 1985)



CONVENTION FOR THE PROTECTION OF THE OZONE LAYER (Vienna 1985)

Sunlight consists of 3 types of ultraviolet rays:

UVA rays are most common and cause skin aging and wrinkling. Tanning beds usually use UVA rays.

UVB rays cause sunburns, cataracts, and immune system damage.

UVC rays, the most dangerous, are absorbed by our ozone layer.

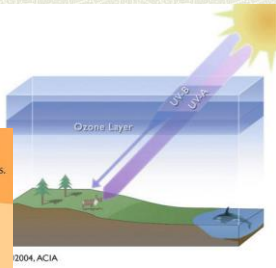


Fig. 2

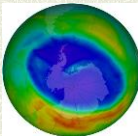
CONSEQUENCES



CONVENTION FOR THE PROTECTION OF THE OZONE LAYER (Vienna 1985)

- Framework convention
- Cooperation in research and information exchange

OZONE LAYER



The Ozone Hole on 12th September 2014 - The latest false-color view of total ozone over the Antarctic pole. The purple and blue colors are where there is the least ozone, and the yellows and reds are where there is more ozone. (Image: NASA)

CONVENTION FOR THE PROTECTION OF THE OZONE LAYER (Vienna 1985)

Protocol 1987 on Substances that Deplete the Ozone Layer (Montreal Protocol)

- Aim: to reduce CFCs production and use
- Tools: division of substances into groups according to their ozone-depletion potential
phase-out of CFCs production and use
regulation of trade with non-parties
multilateral fund (to finance projects in developing countries)
data reporting (the amount of production and consumption)

CONVENTION FOR THE PROTECTION OF THE OZONE LAYER (Vienna 1985)

Adjustments and Amendments to the 1987 Montreal Protocol :

- London 1990
- Copenhagen 1992,
- Montreal 1997,
- Beijing 1999

- The extension of CFCs list
- Acceleration of reductions
- Licence system to control import and export of CFCs
- The end of exemptions for developing countries (1997)

THE OZONE STORY

- 1985: Vienna Convention for the Protection of the Ozone Layer calls for voluntary measures to reduce emissions of ozone-depleting substances (ODS).
- 1987: Montreal Protocol on Substances that Deplete the Ozone Layer establishes a schedule to reduce the production and consumption of CFCs and Halons.
- 1991: The Multilateral Fund established, with UNDP, UNEP, UNIDO and World Bank as the implementing agencies, to provide financial and technical assistance to developing countries (Article 5) to enable them comply with the control measures.

THE OZONE STORY

- 1994: Production and consumption of Halons by developed countries is stopped except for essential uses
- 1996: Production and consumption of CFCs , carbon tetrachloride and methyl chloroform by developed countries stopped except for essential uses while consumption of HBFCs stopped for all parties
- 1997: A system for licensing the import and export of all ozone depleting substances becomes mandatory to all parties to the Montreal Protocol in order to control illegal trade.

ACHIEVEMENTS

- Global Production of CFCs and Halons fell by over one million tonnes (by 92%) between 1986 and 2002.
- Global Consumption fell in the same period by the same margin (92%)
- Atmospheric Concentration of Chlorine peaked in 1994 and is now declining.
- Millions of cases of Eye Cataracts and Skin Cancer averted
- Recovery of the Ozone Layer expected by the year 2050, if the Protocol is fully implemented by all Parties.

CONVENTION ON CLIMATE CHANGE (Rio de Janeiro 1992)

Aim: the stabilization of greenhouse gasses concentrations in the atmosphere at the level that would prevent climate change

Tools: national inventories of greenhouse gasses sources and sinks
national action programs

Obligations: development of ecosystems as GG sinks
support technologies for emission reduction
monitoring, research, cooperation, info-exchange

CONVENTION ON CLIMATE CHANGE (Rio de Janeiro 1992)

Protocol 1997 (Kyoto)

Quantitative aims for GG emission reduction including their sinks
 Commitment of Annex I parties to quantified reduction targets and a timetable for their achievement
 Different obligations (CR – 8% reductions of GG concentrations during 2008 - 2012 comparing to the 1990)
 Six gasses are covered by the emission reductions commitments (*CO₂, NO_x, methane, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride*)


**Convention on Climate Change
(Rio de Janeiro 1992)**

**Protocol 1998 Buenos Aires
Protocol 2001 Bonn**

2 ways to fulfill obligations:

- a) joint implementation of emission reductions commitments
- b) emissions trading – any part may transfer to or acquire from any other party of Annex I emission reduction credits resulting from the projects

**Convention on Climate Change
(Rio de Janeiro 1992)**

UN Climate Change Conference 2015 Paris 
Paris Agreement:

- Goal – to limit global warming to less than 2 degrees Celsius (°C) compared to pre-industrial levels
- The agreement will enter into force when joined by at least 55 countries which together represent at least 55 percent of global greenhouse emissions
- Voluntary emissions reduction commitments, lack of enforcement mechanisms
