

United Nations

The 1979 Geneva Convention on Long-range Transboundary Air Pollution was the first international legally binding instrument to deal with problems of air pollution on a broad regional basis. It lays down the general principles of international cooperation for air pollution abatement, and sets up an institutional framework bringing together research and policy. Since entering into force in March 1983, the Convention on Long-range Transboundary Air Pollution has been extended by the following eight specific protocols:

- The 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone; ratified by 25 Parties. Entered into force on 17 May 2005.
- The 1998 Protocol on Persistent Organic Pollutants (POPs); ratified by 29 Parties. Entered into force on 23 October 2003.
- The 1998 Protocol on Heavy Metals; ratified by 29 Parties. Entered into force on 29 December 2003.
- The 1994 Protocol on Further Reduction of Sulphur Emissions; ratified by 28 Parties. Entered into force 5 August 1998.
- The 1991 Protocol concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes; ratified by 23 Parties. Entered into force 29 September 1997.
- The 1988 Protocol concerning the Control of Nitrogen Oxides or their Transboundary Fluxes; ratified by 32 Parties. Entered into force 14 February 1991.
- The 1985 Protocol on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent; ratified by 23 Parties. Entered into force 2 September 1987.
- The 1984 Protocol on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP); ratified by 42 Parties. Entered into force 28 January 1988.

The 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone is a multi-effect, multi-pollutant protocol and aims to cut emissions of four pollutants: sulphur dioxide, nitrogen oxides, volatile organic compounds (VOC), and ammonia by setting country-by-country emission ceilings for the year 2010. The Protocol also sets emission limit values for specific emission sources (for example, combustion plants, electricity production, cars and lorries) and requires best available technologies to be used to keep emissions down.

Emissions limit values for SO₂ for boilers and process heaters with rated thermal input exceeding 50 MWth burning solid fuel (applying to all Parties except for Canada and USA)

plant type	plant size, MWth	emission limit vale, mg/m ³	alternative flue gas desulphurisation rate (%) for domestic solid fuels
new plant	50 to 100	850	90*
	100 to 300	850 – 200 (linear decrease)	92*
	> 300	200	95*
existing plant	50 to 100	2000	
	100 to 500	2000 – 400 (linear decrease)	
	> 500	400	
	50 to 150		40
	150 to 500		40 – 90 (linear increase)
	> 500		90

* if an installation achieves 300 mg/m³ SO₂, it may be exempted from applying the desulphurisation rate.

Emissions limit values for NO_x for boilers and process heaters with rated thermal input exceeding 50MWth burning solid fuel (applying to all Parties except for Canada and USA)

plant type	plant size, MWth	emission limit value, mg/m ³
existing plant		650*
new plant	50 to 100	400
	100 to 300	300
	> 300	200

* for existing plants burning solid fuel with volatile content less than 10%, an emission limit value of 1300 mg/m³ may apply.

Note: Above emission limit values are expressed as at 0 °C, 101.325 kPa and dry flue gas basis with 6% of O₂ in flue gas.