

EMISSIONS STANDARDS

TURKEY



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TURKEY

The Turkish government published the first Environment Law (Law no. 2872) in the Official Gazette on 11 August 1983 ([Resmî Gazete no. 18132](#)). The purpose was to protect and improve the environment. The Law outlines Turkey's environmental policy in general terms and includes the polluter pays principle. Amendments have been published in the Official Gazette. Emission limits for air pollutants from industrial and power plant boilers greater than 1 MW were first established in 2004 (Resmî Gazete no. 25606, 7 October 2004). Over the years these have been amended and replaced. Turkey's air emission regulations and standards are gradually being harmonised with the relevant European Union's emission regulations and directives as part of the country's European Union accession agenda.

The Ministry of Environment and Urbanisation ([T.C. Çevre ve Şehircilik Bakanlığı](#)) has overall responsibility for emission standards. These can be downloaded from the website of the Directorate General of Environmental Management ([Çevre Yönetimi Genel Müdürlüğü](#)). Emissions from combustion plants are covered in the *Regulation on the control of industrial air pollution* ([Resmî Gazete no. 27277](#) and later amendments). The emission limits in the tables below are taken from the *Regulation on the control of industrial air pollution Annex 1*. The latest amendment, *The Implementing regulation on the amendment of the regulation on the control of industrial air pollution*, was published in the Official Gazette in December 2014 ([Resmî Gazete no. 29211](#)).

EMISSION LIMIT VALUES FOR LARGE COMBUSTION PLANTS

Large combustion plants cover installations with a rated thermal input of 50 MW or over.

Emission limits for existing plants

Plant size, MWth	Particulate matter*, mg/m ³	SO ₂ †‡, mg/m ³	NO ₂ (NO + NO ₂)§, mg/m ³	CO, mg/m ³
≥50 – <100	100	2000	600	200
≥100 – <500	100	2000 – 400 (linear decrease)	600	200
≥500	50	400	200	200

* A limit of 100 mg/m³ for particulate matter may be applied to plants licensed prior to 1 June 1987 with a rated thermal input greater than or equal to 500 MW burning solid fuel with a heat content of less than 5800 kJ/kg (net calorific value), a moisture content greater than 45% by weight, a combined moisture and ash content greater than 60% by weight and a calcium oxide content greater than 10%.

† If the SO₂ emission limits cannot be met due to the characteristics of the fuel, a desulphurisation rate of at least 60% must be met in the case of plants with a rated thermal input of more than 50 MW and less than 100 MW, 75% for plants greater than or equal to 100 MW and less than 300 MW, 90% for plants greater than or equal to 300 MW and less than 500 MW, and 94% for plants greater than or equal to 500 MW. A desulphurisation rate of at least 92% applies to plants greater than or equal to 500 MW where a contract for the fitting of flue gas desulphurisation equipment had been entered into, and work on its installation had commenced, before 1 January 2006.

‡ Plants with a rated thermal input equal to or greater than 400 MW which do not operate for more than 1500 hours a year (averaged over a period of five years), must meet a SO₂ emission limit of 800 mg/m³.

§ From 1 January 2016, plants which do not operate for more than 1500 hours a year (averaged over a period of five years), are subject to a nitrogen dioxide emission limit of 450 mg/m³.

Emission limits for new plants

Plant size, MWth	Particulate matter, mg/m ³	SO ₂ *, mg/m ³	NO ₂ (NO + NO ₂), mg/m ³	CO, mg/m ³
≥50 – <100	50	850	400	150
≥100	30	200	200	200

* If the SO₂ emission limits cannot be met due to the high sulphur content of the fuel, then installations with a rated thermal input between 100 MW and 300 MW must meet an emission limit of 300 mg/m³ or a desulphurisation rate of at least 92%. For plants with a rated thermal input greater than or equal to 300 MW, the emission limit value is 400 mg/m³ and a desulphurisation rate of at least 95% must be met.

EMISSION LIMIT VALUES FOR COMBUSTION PLANTS BELOW 50 MWth

The following emission limits apply to installations with a rated thermal input of less than 50 MW burning solid fuels.

Particulate matter emission limits

Plant size	Emission limit value, mg/m ³
>500 kW – ≤5 MWth	200
>5 MWth – <50 MWth	150

SO₂ emission limits

Installations should avoid emitting sulphur dioxide (and sulphur trioxide). Those with a rated thermal input of less than 50 MW do not require a desulphurisation system if the sulphur dioxide (SO₂ and SO₃) emissions are below 2000 mg/m³. If the 2000 mg/m³ limit is exceeded (in plants <50 MWth), then SO₂ emissions must be reduced to 10% by applying a sulphur treatment process, which can be carried out before, during or after combustion. Combustion plants with a rated thermal input of 50 MW that do not meet the 2000 mg/m³ limit can be operated with sulphur reduction measures capable of maintaining a maximum SO₂ emission limit of 10%.

NO_x emission limits

NO_x emissions should be reduced by technical measures such as reducing the flame temperature by recirculating the flue gas.

CO emission limits

Emissions of carbon monoxide should not exceed 200 mg/m³.

GENERAL NOTES

1. For large combustion plants (≥50 MWth), existing plants are those established before 8 June 2010. For all other combustion plants, existing plants are those established before 3 July 2009.
2. New plants are any plants other than an existing plant.
3. All emission limit values are expressed at 0°C, 101.3 kPa and on a dry waste gas basis with 6% of O₂ in the waste gas

This paper reflects the IEACCC understanding of the relevant legislation and is not a substitute for the official version. The IEACCC does not guarantee the accuracy of the data included in this paper and accepts no responsibility for any consequences of their use.

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