

Portugal

In Portugal there are several bodies involved in the enforcement and administration of environmental law such as the Ministry for Environment, Spatial Planning and Regional Development (MESPRD), the City Councils, the Environmental Institute, etc. The principal laws on environment are the Basic Law on Environment (BLE-Law No. 11/87) that sets forth the main principles of the Portuguese environmental legal regime, and the Environmental Impact Assessment Law (EIA - Decree Law No. 69/00) that provides the main legislative tool to prevent environmental damage. Emission standards for air pollutants from large combustion plants were first established in Decreto-Lei n.º 352/90 (from 9 Nov 1990) and supplemented by Portaria n.º 286/93 (from 12 Mar 1993). These regulations laid down emission limit values for sulphur dioxide, nitrogen oxides and particulates from large combustion plants, and set obligations to reduce emissions of such pollutants from these sources, through the National Plan for Emissions Reduction. They were amended in 2003 to transpose the European Directive for Large Combustion Plants (2001/80/EC) into national law Decreto-Lei n.º 178/2003 (from 5 Aug 2003). This law applies to power plants with thermal capacity equal to or larger than 50 MWth, regardless of the type of fuel used (solid, liquid or gas). Under this law, a new National Plan for Emissions Reduction for existing large combustion plants has been set up (published in conjunction order Conjunto n.º 509/2006, from 27 Jun 2006). All large combustion plants must also comply with Decreto-Lei n.º 194/2000 (from 21 Aug 2000) on integrated prevention and control of pollution, which requires environmental permits for new combustion facilities and permits for such installations must ensure that those installations will take all appropriate preventive measures against pollution, in particular through application of the Best Available Techniques (BAT).

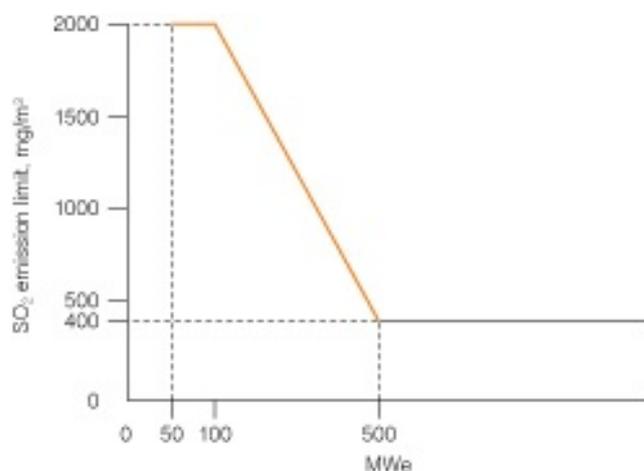
National Emission Standards for Particulate Matter from combustion plants burning solid fuel

plant	plant size (MWth)	emission limit value (mg/m ³)
existing and new plant	< 500	100
	≥ 500	50*
future new plant	50 to 100	50
	> 100	30

* A limit value of 100 mg/m³ can be applied to facilities authorized under paragraph 3 of Article 4 with a thermal capacity greater than or equal to 50 MWth burning a solid fuel with a net heating value of less than 5800 kJ/kg, a moisture content above 45% by weight, a combination of moisture content and ash more than 60% by weight and a calcium oxide content exceeding 10%.

National Emission Standards for SO₂ from large combustion plants

A. Emission limit values for existing and new combustion plants burning solid fuel



- Note:
1. Where the emission limit values above cannot be met due to the characteristics of the fuel, a rate of desulphurisation of at least 60 % shall be achieved in the case of plants with a rated thermal input of less than or equal to 100 MWth, 75 % for plants greater than 100 MWth and less than or equal to 300 MWth and 90 % for plants greater than 300 MWth. For plants greater than 500 MWth, a desulphurisation rate of at least 94 % shall apply or of at least 92 % where a contract for the fitting of flue gas desulphurisation or lime injection equipment has been entered into, and work on its installation has commenced, before 1 January 2001.
 2. Notwithstanding the above emission limit values, facilities with a thermal capacity equal to or greater than 400 MWth, and do not operate more than 2000 hours a year until 31 Dec 2015, and do not operate more than 1500 hours a year from 1 January 2016 (rolling average over a period of five years), an emission limit value of 800 mg/m³ shall apply subject to the prior approval by the competent authority.

B. Emission limit values for future new combustion plants burning solid fuel

plant size (MWth)	emission limit value (mg/m ³)
50 to 100	850
100 to 300	200*
> 300	200

* Except for the Autonomous Regions of Azores and Madeira, where limit values of 850 mg/m³ to 200 mg/m³ (linear decrease) shall apply.

Note: Should it not be possible to comply with the emission limit values due to the characteristics of fuel, the plant should achieve 300 mg/m³ of SO₂, or a desulphurisation rate of at least 92% shall be achieved in the case of plants with a thermal capacity less than or equal to 300 MWth and in the case of plants with a thermal capacity larger than 300 MWth a rate of desulphurisation of at least 95% together with a maximum permissible emission limit value of 400 mg/m³ shall apply.

National emission standards for NOx (as NO₂) from large combustion plants

A. Emission limit values for existing and new combustion plants burning solid fuel

plant size (MWth)	emission limit value* (mg.m ³)
50 to 500	600
> 500	500
> 500	200

(from 1 Jan 2016)

* Except for the Autonomous Regions of Azores and Madeira, where the following values shall apply:

solid fuel in general: 650 mg/m³;

solid fuel with volatile content less than 10%: 1300 mg/m³.

Note: 1. Until 31 Dec 2015 plants of a rated thermal input greater than 500 MWth, which from 2008 onwards do not operate more than 2 000 hours a year (rolling average over a period of five years) and are subject to National Emission Reduction Plan, in accordance with paragraph 3 of Article 4, shall have their contribution to the national plan assessed on the basis of a limit value of 600 mg/m³.

2. Until 1 Jan 2018 in the case of plants that in the 12 month period ending on 1 Jan 2001 operated on, and continue to operate on, solid fuels whose volatile content is less than 10 %, the emission value of 1,200 mg/m³ shall apply.

B. Emission limit values for future new combustion plants burning solid fuel

plant size (MWth)	emission limit value (mg.m ³)
50 to 100	400
100 to 300	200*
> 300	200

* Except for the Autonomous Regions of Azores and Madeira, where an emission limit value of 300 mg/m³ shall apply.

- General note:
1. 'Existing plant' means any combustion plant for which the original construction licence or, in the absence of such a procedure, the original operating licence was granted before 1 Jul 1987.
 2. 'New plant' means any combustion plant for which the original construction licence or, in the absence of such a procedure, the original operating licence was granted on or after 1 Jul 1987.
 3. 'Future new plant' means any combustion plant for which the construction licence or, in the absence of such a procedure, the operating licence was granted on or after 27 Nov 2002, or any combustion plant that began operation after 27 Nov 2003.
 4. Emissions limit values are expressed at 0 °C, 101.3 kPa and dry flue gas basis with 6% of oxygen in the flue gas.