



## Latvia

Emission standards are set by the Ministry of Environmental Protection and Regional Development (see <http://www.varam.gov.lv/eng/>). The Law on Pollution requires industrial sources of pollution to obtain permits, and sets basic principles for pollution prevention and control. Emission standards for stationary sources of pollution, including power plants, were first issued on 20 August 2002 under the Cabinet of Ministers' Regulation No. 379 on 'Procedures for preventing, limiting and controlling air pollution emissions from stationary sources'. They were replaced on 2 April 2013 by the Cabinet of Ministers' Regulation No. 187 on 'Procedures for preventing, limiting and controlling air pollution emissions from combustion plants'. These are available in Latvian at <http://likumi.lv/doc.php?id=256098> or <http://likumi.lv/ta/id/256098-kartiba-kada-novers-ierobezo-un-kontrole-gaisu-piesarnojoso-vielu-emisiju-no-sadedzinasanas-iekartam>.

### Emission standards for combustion plants

The emission standards for combustion plants replaced the earlier standards issued in 2002 and brought Latvia's emission standards in line with the European Union. The standards provide limits for the emissions of particulate matter, sulphur dioxide and nitrogen oxides from existing and new power plants. Fuel types used for generation that are covered include coal, oil, natural gas and biomass.

#### *Emission standards for existing large combustion plants valid until 1 January 2016*

The emission limits in the following table apply to plants which were commissioned before 27 November 2003, and for those that applied for a permit before 27 November 2002 to start operating before 27 November 2003.

Plant size, MWth	Particulate matter, mg/m <sup>3</sup>	SO <sub>2</sub> , mg/m <sup>3</sup>	NO <sub>x</sub> , mg/m <sup>3</sup>	CO, mg/m <sup>3</sup>
50-100	100	2000	600 <sup>4</sup>	1000
100-500	100	2000-400 <sup>2,3</sup>	600 <sup>4</sup>	1000
>500	50 <sup>1</sup>	400 <sup>3</sup>	500 <sup>4,5</sup>	1000

<sup>1</sup> A 100 mg/m<sup>3</sup> limit can be applied to combustion plants which started operating before 1 July 1987 and combust a solid fuel with a net calorific value of less than 5800 kJ/kg, a moisture content greater than 45 wt%, a combined moisture and ash content greater than 60 wt% and a calcium oxide content in the ash greater than 10%.

<sup>2</sup> According to output in linear descending order.

<sup>3</sup> Emission limit is 800 mg/m<sup>3</sup> for plants over 400 MWth if the plant operates for less than 2000 operating hours in a year (average over 5 years).

<sup>4</sup> Emission limit is 1200 mg/m<sup>3</sup> for solid fuels with less than 10% volatile matter.

<sup>5</sup> Emission limit is 600 mg/m<sup>3</sup> for plants with less than 2000 operating hours in a year (average over 5 years).

Reference conditions are 273.15 K at 101.3 kPa, on a dry basis, and a 6% O<sub>2</sub> content.

The emission limits in the following table apply to plants which received a permit after 27 November 2002, and to those which applied for a permit before 27 November 2002 and were commissioned after 27 November 2003.

Plant size, MWth	Particulate matter, mg/m <sup>3</sup>	SO <sub>2</sub> , mg/m <sup>3</sup>	NO <sub>x</sub> , mg/m <sup>3</sup>	CO, mg/m <sup>3</sup>
50-100	50	850 <sup>1</sup>	400	1000
100-300	30	200 <sup>1</sup>	200	1000
>300	30	200 <sup>2</sup>	200	1000

<sup>1</sup> If it is not possible to meet the emission limit due to the sulphur content of the solid fuel, then a limit of 300 mg/m<sup>3</sup> applies.

<sup>2</sup> If it is not possible to meet the emission limit due to the sulphur content of the fuel, then a limit of 400 mg/m<sup>3</sup> applies.

Reference conditions are 273.15 K at 101.3 kPa, on a dry basis, O<sub>2</sub> of 6%.

#### *Emission standards for existing large combustion plants that apply from 1 January 2016*

Plant size, MWth	Particulate matter, mg/m <sup>3</sup>	SO <sub>2</sub> , mg/m <sup>3</sup>	NO <sub>x</sub> , mg/m <sup>3</sup>	CO, mg/m <sup>3</sup>
50-100	30	400	300 <sup>1</sup>	1000
100-300	25	250	200	1000
>300	20	200	200	1000

<sup>1</sup> Emission limit is 450 mg/m<sup>3</sup> for pulverised lignite.

Reference conditions are 273.15 K at 101.3 kPa, on a dry basis, and 6% O<sub>2</sub> content.

#### *Emission limits for existing combustion plants operating less than 1500 hours*

The following emission limits apply to existing large combustion plants that do not operate for more than 1500 operating hours a year (average over 5 years) and were given, or had applied, for a permit before 27 November 2002 and had started operations before 27 November 2003.

Plant size, MW	Particulate matter, mg/m <sup>3</sup>	SO <sub>2</sub> , mg/m <sup>3</sup>	NO <sub>x</sub> , mg/m <sup>3</sup>	CO, mg/m <sup>3</sup>
50-500	-	800	450	-
>500	-	800	450 <sup>1</sup>	-

<sup>1</sup> Applies to plants operating before 1 July 1987.

Reference conditions are 273.15 K at 101.3 kPa, on a dry basis, and 6% O<sub>2</sub> content.

### Emission standards for new large combustion plants

Power plant size, MWth	Particulate matter, mg/m <sup>3</sup>	SO <sub>2</sub> , mg/m <sup>3</sup>	NO <sub>x</sub> , mg/m <sup>3</sup>	CO, mg/m <sup>3</sup>
50-100	20	400	300 <sup>2</sup>	1000
100-300	20	200	200	1000
>300	10	150 <sup>1</sup>	150 <sup>2</sup>	1000

<sup>1</sup> Emission limit is 200 mg/m<sup>3</sup> for circulating or pressurised fluidised bed combustion.

<sup>2</sup> For pulverised lignite, the emission limit is 400 mg/m<sup>3</sup> for 100-300 MWth combustion plants, and 200 mg/m<sup>3</sup> for combustion plants with a rated thermal input over 300 MW.

Reference conditions are 273.15 K at 101.3 kPa, on a dry basis, and 6% O<sub>2</sub> content.

### Emission standards for medium-sized combustion plants

Plant size, MWth	Particulate matter, mg/m <sup>3</sup>	SO <sub>2</sub> , mg/m <sup>3</sup>	NO <sub>x</sub> , mg/m <sup>3</sup>	CO, mg/m <sup>3</sup>
up to 10	1000	2500	600	2000
10-50	500	2300	600	2000

Reference conditions are 273.15 K at 101.3 kPa, on a dry basis, and 6% O<sub>2</sub> content.

This paper reflects the IEA CCC understanding of the relevant legislation and is not a substitute for the official version. The IEA CCC 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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