



Croatia

Environmental protection in the Republic of Croatia is the responsibility of the Ministry of Environmental and Nature Protection (see <http://www.mzoip.hr/hr/>). Air protection is regulated under the Environmental Protection Act, and the Air Protection Act (Official Gazette No. 130/11, 47/14). As a member state of the European Union (EU), Croatia has implemented the Industrial Emissions Directive (2010/75/EU) into law under the revised Environmental Protection Act (Official Gazette No. 80/2013, 78/15, available, in Croatian, at http://narodne-novine.nn.hr/clanci/sluzbeni/2013_06_80_1659.html). Although the Industrial Emissions Directive (IED) has been adopted, Croatia has also implemented a transitional national plan (TNP). This exempts existing large combustion plants from compliance with the emission limits set out in the IED for a set period of time. The list of plants covered by this plan, the pollutants for which the plants are covered, and the applicable emission ceilings (up to 30 June 2020) can be found in the EU Decision of 19 September 2014 (C(2014) 6519 final), available at [https://circabc.europa.eu/sd/a/b3c164d6-9099-4382-9675-80e846667ffe/Croatia%20TNP%20-%20Commission%20Decision%2019-09-2014%20\(EN%20version\).pdf](https://circabc.europa.eu/sd/a/b3c164d6-9099-4382-9675-80e846667ffe/Croatia%20TNP%20-%20Commission%20Decision%2019-09-2014%20(EN%20version).pdf).

Large combustion plants

The IED was adopted as the *Regulation on the limitation of emissions of air pollutants from stationary sources*, published in the Official Gazette 117/12 (available, in Croatian, from http://narodne-novine.nn.hr/clanci/sluzbeni/2012_10_117_2520.html). Amendments were published in the Official Gazette, 90/14, available from http://narodne-novine.nn.hr/clanci/sluzbeni/2014_07_90_1813.html (in Croatian). The emission limits are given in the following tables. They apply to large coal-fired combustion plants with a rated thermal input of 50 MW and above, and are due to be met from 1 January 2016.

Particulate matter emission limits

Total rated thermal input, MW	Existing plants, mg/Nm ³	New plants, mg/Nm ³
50-100	30	20
100-300	25	20
>300	20	10

SO₂ emission limits

Total rated thermal input, MW	Existing plants, mg/Nm ³	New plants, mg/Nm ³
50-100	400	400
100-300	250	200
>300	200	150
		200 for circulating or pressurised fluidised bed combustion

Exception: Plants that were granted a permit, or had submitted an application for one, before 27 November 2002 and were operating prior to 27 November 2003 can meet a limit of 800 mg/Nm³, provided they do not operate for more than 1500 hours as a rolling average over 5 years.

If able to demonstrate that these emissions limits are impossible to meet due to fuel characteristics, plants using domestic solid fuels have the option of instead meeting desulphurisation rates given in the following table:

Total rated thermal power input, MW	Plants operational prior to 2003*	Other existing plants	New plants
50-100	80%	92%	93%
100-300	90%	92%	93%
>300	96%	96%	97%

* Plants which were granted a permit, or had submitted an application for one, before 27 November 2002 and were in operation before 27 November 2003.

NOx emission limits

Total rated thermal input, MW	Existing plants, mg/Nm ³	New plants, mg/Nm ³
50-100	300 450 for pulverised lignite combustion	300 400 for pulverised lignite combustion
100-300	200	200
>300	200	150 200 for pulverised lignite combustion

Exceptions: Plants with a total rated thermal input under 500 MW that were granted a permit, or had submitted an application for one, before 27 November 2002 and were operating prior to 27 November 2003 can meet a limit of 450 mg/Nm³, provided they do not operate for more than 1500 hours as a rolling average over 5 years.

Plants with a total rated thermal input over 500 MW that were granted a permit before 1 July 1987 can meet a limit of 450 mg/Nm³, provided they do not operate for more than 1500 hours as a rolling average over 5 years.

General notes:

1. 'Existing plant' means any combustion plant for which the application for a construction and/or operation permit was granted before 7 January 2013, or the operator had submitted a complete application for a permit before this date, provided the plant was put into operation no later than 7 January 2014.
2. 'New plants' are plants not covered by the existing plants definition, such as those that entered into operation after 7 January 2014.
3. The total thermal input (MW) is the maximum heat of the fuel consumed per unit of time determined by the lower heating value of the fuel at a temperature of 0°C and a pressure of 101.3 kPa.

4. All the above emission limit values are expressed at 0°C, 101.3 kPa, on a dry basis, and with 6% of O₂ in the flue gas.

Small and medium combustion plants

The *Regulation on the limitation of emissions of air pollutants from stationary sources* (published in the Official Gazette 117/12 and available, in Croatian, from http://narodne-novine.nn.hr/clanci/sluzbeni/2012_10_117_2520.html) also includes emission limit values for small (≥0.1 to 1 MW) and medium (≥1 to 50 MW) combustion plants that need to be met by 31 December 2015. The limits are given in the following table, and are expressed at 0°C, 101.3 kPa, on a dry basis, and with 7% of O₂ in the flue gas.

Total rated thermal power input, MW	Particulates, mg/Nm ³	SO ₂ , mg/Nm ³	NO ₂ , mg/Nm ³	CO, mg/Nm ³	Opacity, (Ringelmann scale)
≥0.1 – 1	-	-	-	1000	1
≥1 – 50	150	2000	500 (300 for turbulent combustion)	500	-

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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