

Air pollution country profile

Exposure - Italy

The table below shows the percentage of urban population exposed to concentrations above EU standards for selected air pollutants such as PM₁₀, PM_{2.5}, O₃, NO₂ and BaP for the years 2017-2021.

		2017	2018	2019	2020	2021
BaP	annual mean	6,4	1,1	2,6	16,3	0,5
NO₂	annual mean	23,5	7,2	12,4	3,5	1,7
O₃	percentile 93.15	67,6	59,1	59,3	50,9	51,5
PM_{2.5}	annual mean	27,0	1,5	1,0	0,4	0,4
PM₁₀	annual mean	5,2	0,0	2,9	3,6	2,8
	percentile 90.41	47,8	33,3	39,2	49,1	39,1

[Click here](#) to see further information About Air Pollution

[Click here](#) to see further information on EU Policies



Health impacts

Country	Med. Population (x1000)	Population-weighted annual mean (PM _{2.5})	Attributable deaths (PM _{2.5})	Population-weighted annual mean (NO ₂)	Attributable deaths (NO ₂)	Population-weighted SOMO35 (O ₃)	Attributable deaths (O ₃)
Italy	59.235	13,9	46.790	17,8	11.280	6.149	5.120
EU27	442.519	11,4	253.000	14,4	52.000	3.794	22.000
Total	558.768	11,6	293.000	16,1	69.000	4.020	27.000

[Click here](#) to see further information on Health Impacts

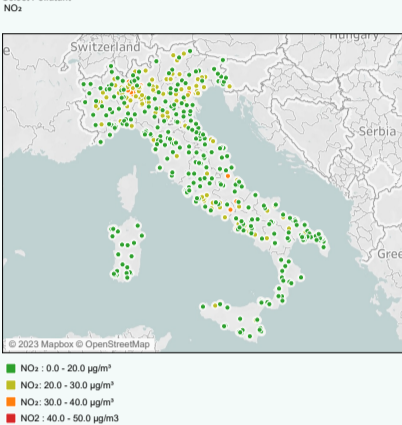


Air quality

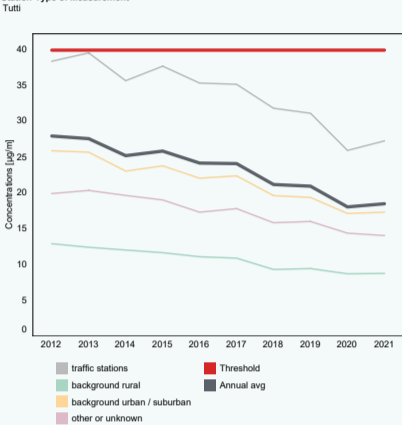
The map on the left is drawn from annual statistics calculated by the EEA from time series reported by countries and present the air quality monitoring stations in country and the concentrations of pollutant monitoring at each station. Year of statistics: 2021

The graph on the right presents the trend in annual mean concentration of pollutant by station type and the mean across all stations against the EU standard (µg/m³ for the years 2012 to 2021. For BaP concentrations are in ng/m³)

Select Pollutant



Station-Type of Measurement



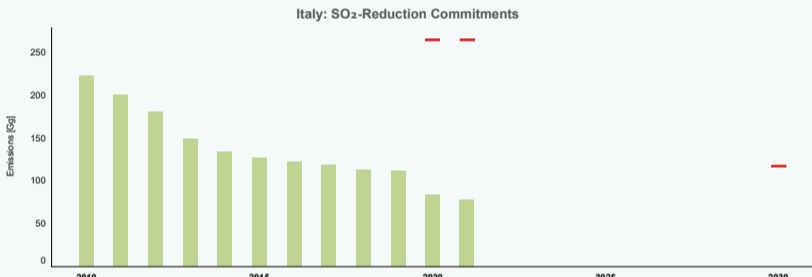
[Click here](#) to see further information on Air Quality Standards



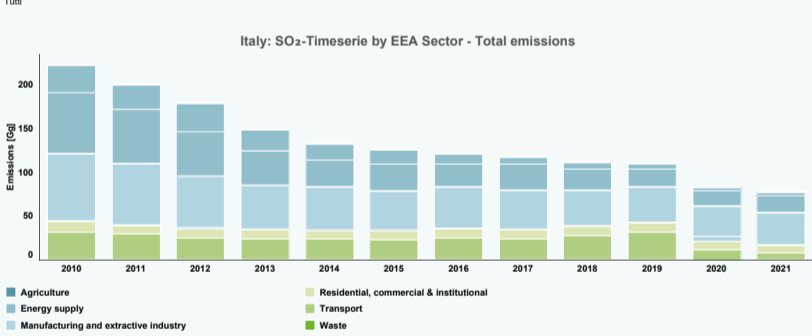
Air emissions

Select Pollutant

Emission reduction commitments for 2020 and 2030 are shown with the emission trends and distance to reduction commitments.



Select EEA Sector(s)



	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
NH ₃	✓	✓									
NM VOC	✗	✗									
NO _x	✓	✓									
PM _{2.5}	✓	✓									
SO ₂	✓	✓									

[Click here](#) to see further information on Emission Sources

[Click here](#) to see further information on Air Pollutants



Data source

Air quality
 - Air quality data are based on reported air quality monitoring and measurement data submitted by EEA member countries under Commission Implementing Decision 2011/850/EU.
 - The Ambient Air Quality Directive (2008/50/EC) sets the objective for monitoring stations of a minimum data capture of 90% but, monitoring stations have to fulfill the criterion of reporting more than 75% of valid data out of all the possible data in a year to be included in this assessment.

[Click here](#) to see the source of air quality data

Air emissions

- Emission data are taken from emissions inventories submitted by EU-27 Member States under the NEC Directive.
 - Emission data from Iceland, Liechtenstein, Norway, Switzerland and Turkey are taken from emission inventories submitted under LRTAP Convention.
 - Compliance with the NEC Directive is shown for all EU-27 Member States (Croatia joined the EU in mid-2013; therefore, for the years 2010 to 2013 emissions cannot be considered for this country); for Norway and Switzerland compliance with the Emission reduction Commitments has been shown.
 - The new NEC Directive establishes a process that allows Member States to 'adjust' their emission inventories downwards if non-compliance with the Emission reduction Commitments is caused by countries having applied improved emission inventory methods in accordance with updated scientific knowledge since the Emission reduction Commitments were originally set. The data provided in this publication are unadjusted emissions.
 - EEA-32 Member Emissions data on the sectoral emission share are taken from data submitted and subsequently gap-filled (if required) under LRTAP Convention.

[Click here](#) to see the source of air emissions data



Acknowledgements

This country profile was prepared by the European Environment Agency (EEA). It presents compiled information based on the latest official air pollution data reported by the EEA's member countries.

A comprehensive overview of information about Europe's air quality is published each year by the EEA in the report series 'Air quality in Europe'. A number of other publications addressing air pollution are also published by the EEA each year.

Country profiles summarise key data on air pollution for each of the 32 EEA member countries, 6 collaborating countries and the EU-27. Indicators on past and future emission trends of key air pollutants are presented, as well as a summary of the national air quality situation in each country. Information on the data sources used is provided in the last section of this country profile.

The country profile of each country describes:

1. general information on air emissions and air quality,
2. the air quality situation of each country based on reported air quality monitoring and measurement data and
3. the air pollutant emissions of each country based on the data reported by countries.

The air pollutants addressed in the country profiles are:

- i. for air quality, selected pollutants regulated under the EU's Air Quality Directives:
 - particulate matter (both PM₁₀ and PM_{2.5})
 - ozone (O₃)
 - nitrogen dioxide (NO₂) and
 - benzo(a)pyrene (BaP).
- ii. for air pollutant emissions, the pollutants regulated under the National Emission Ceilings Directive:
 - nitrogen oxides (NO_x)
 - sulphur dioxide (SO₂)
 - non-methane volatile organic compounds (NMVOC)
 - ammonia (NH₃) and
 - particulate matter (PM_{2.5}).