

Information on particulate matter PM_{2,5}

Target and limit value

	Averaging period	value	Date by which limit value is to be met	Margin of tolerance
target value for the protection of human health	Calendar year	25 µg/m ³ PM _{2,5}	Should be met on 1 January 2010	none
Limit value for the protection of human health	Calendar year	25 µg/m ³ PM _{2,5}	1 January 2015	5 µg/m ³ , from 1 January 2009 decreasing every 12 month by 1/7

The sampling volume refers to ambient conditions in terms of temperature and atmospheric pressure at the date of measurements.

Upper and lower assessment thresholds

	Annual average
Upper assessment threshold	17 µg/m ³
Lower assessment threshold	12 µg/m ³

Average exposure indicator

The Average Exposure Indicator is assessed as a three-calendar year running annual mean concentration. The AEI for the reference year 2010 is the mean concentration of the years 2008, 2009 and 2010. The AEI 2020 (averaged over years 2018, 2019 and 2020) is used for the examination whether the national exposure reduction target is met.

Initial concentration in µg/m ³ in 2010	Reduction target in percent, to be met in 2020
< 8,5 = 8,5	0 %
> 8,5 — < 13	10 %
= 13 — < 18	15 %
= 18 — < 22	20 %
>= 22	All appropriate measures to achieve 18 µg/m ³

Exposure concentration obligation	Year by which the obligation value is to be met
AEI – 20 µg/m ³	2015

Data quality objectives

Data collection	Data quality objective
<i>Continuous measurement</i> Uncertainty Minimum data capture	25 % 90 %
<i>Indicative measurement</i> Uncertainty Minimum data capture Minimum time coverage	50 % 90 % 14 % (One day's measurement a week at random, evenly distributed over the year, or eight weeks evenly distributed over the year.)
<i>Modelling</i> Uncertainty Annual averages	50 %
<i>Objective estimation</i> Uncertainty	100 %

Reference method for the assessment of the concentration

The reference method for the sampling and measurement of PM_{2,5} is that described in EN 14907:2005 "Standard gravimetric measurement method for the determination of the PM_{2,5} mass fraction of suspended particulate matter".

Legal basis

- Directive 2008/50/EC of 21 May 2008 on ambient air quality and cleaner air for Europe (OJ EC. L 152/1)
- 39th Ordinance Implementing the Federal Immission Control Act (Ordinance on Air Quality Standards and Emission Ceilings - 39. BImSchV)