Explanation of Key Trends - Fine Particulate Matter (PM_{2.5})

Obligations

Germany has made a commitment to reduce particulate matter emissions. The revised Gothenburg Protocol and the revised NEC Directive both define emission reduction targets relative to a 2005 base year, mandating 26% (2020) and 43% (2030) reductions respectively.

While Germany's compliance with these obligations is not discussed here, further information on this subject can be found in Chapter 9 - Projections and Chapter 11 - Adjustments and Emission Ceiling Exceedance.

Main drivers

Total PM2.5 emissions dropped by 55.3% between 1995 and 2019. The Main Drivers for PM2.5 emissions are Fuel Combustion (NFR 1.A) with 72.5% of total 1995 emissions and a 63% reduction between 1995-2019 and as a sum the Industrial Processes (NFR 2) with about 21% of total 1995 emissions and a 41% reduction between 1995-2018.

Within both National totals and NFR 1.A, Transport (NFR 1.A.3) is responsible for the biggest part of PM2.5 emissions. Here, about 77% of 2019 PM2.5 emissions are induced by Road Transport (NFR **1.A.3.b**), caused by two third directly by fuel consumption (NFR 1.A.3.b.i - v) and the other third by road abrasion and tyre and brake wear (NFR 1.A.3.b.vi - vii).

Trend: latest Total Emissions (kt) compared to 1995 2000 2005 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 1995 169 138 120 120 115 114 112 104 103 97 96 95 92 🔰 -55.3%

PM_{2.5} Emissions 1990-2019

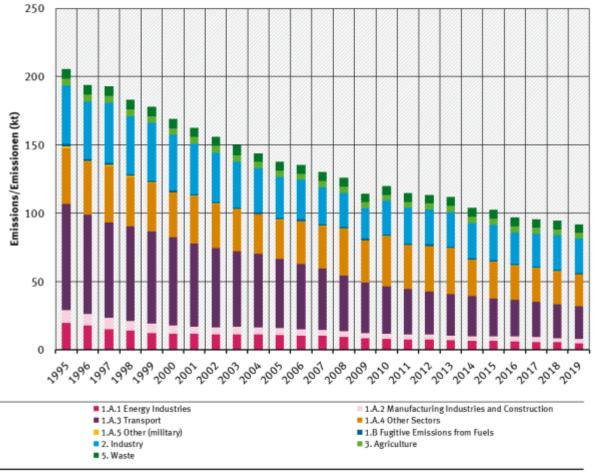
last

years

≌

Fine Particulate Matter / Feinstaub (PM2.5)

Emissions per Sector / Sektorale Emissionen



PM2.5 trend by sector

Quelle: German Emission Inventory (08.01.2021)