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.

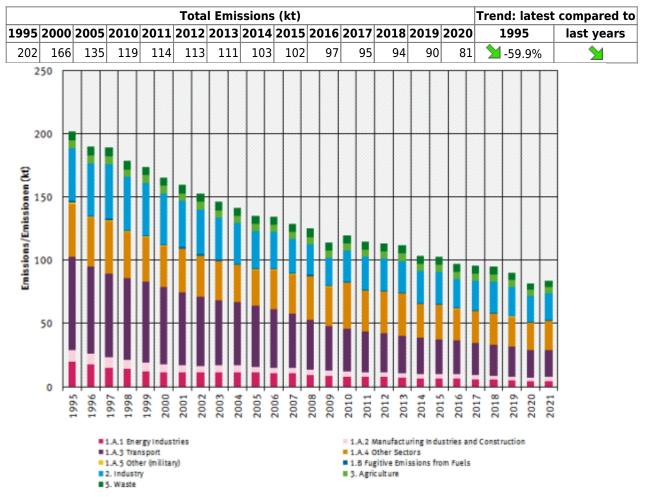
While Germany's compliance with these obligations is not discussed here, further information on this subject can be found in Chapter 9 - Projections and Chapter 11 - Adjustments and Emission Ceiling Exceedance.

Main drivers

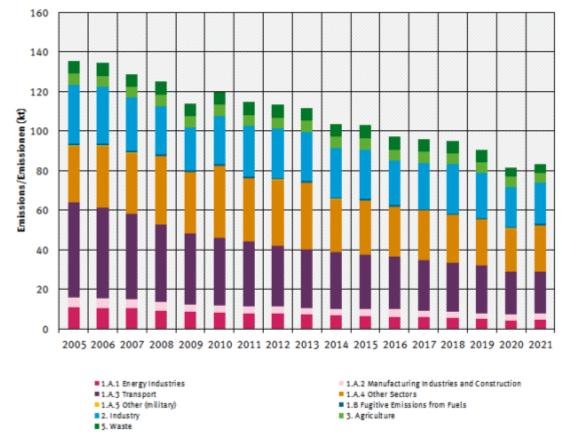
Total PM_{2.5} emissions dropped by 59.9% between 1995 and 2020. The Main Drivers for PM_{2.5} emissions are **Fuel Combustion (NFR 1.A)** with 72% of total 1995 emissions and a 65% reduction between 1995-2020 and as a sum the **Industrial Processes (NFR 2)** with about 21% of total 1995 emissions and a 51% reduction between 1995-2020.

Within both National totals and NFR 1.A, **Transport (NFR 1.A.3)** is responsible for the biggest part of PM_{2.5} emissions. Here, about 77% of 2019 PM_{2.5} transport 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**).

PM_{2.5} Emissions 1990-2020



PM_{2.5} trend by sector



PM_{2.5} trend by sector, from 2005