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 complicance 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.

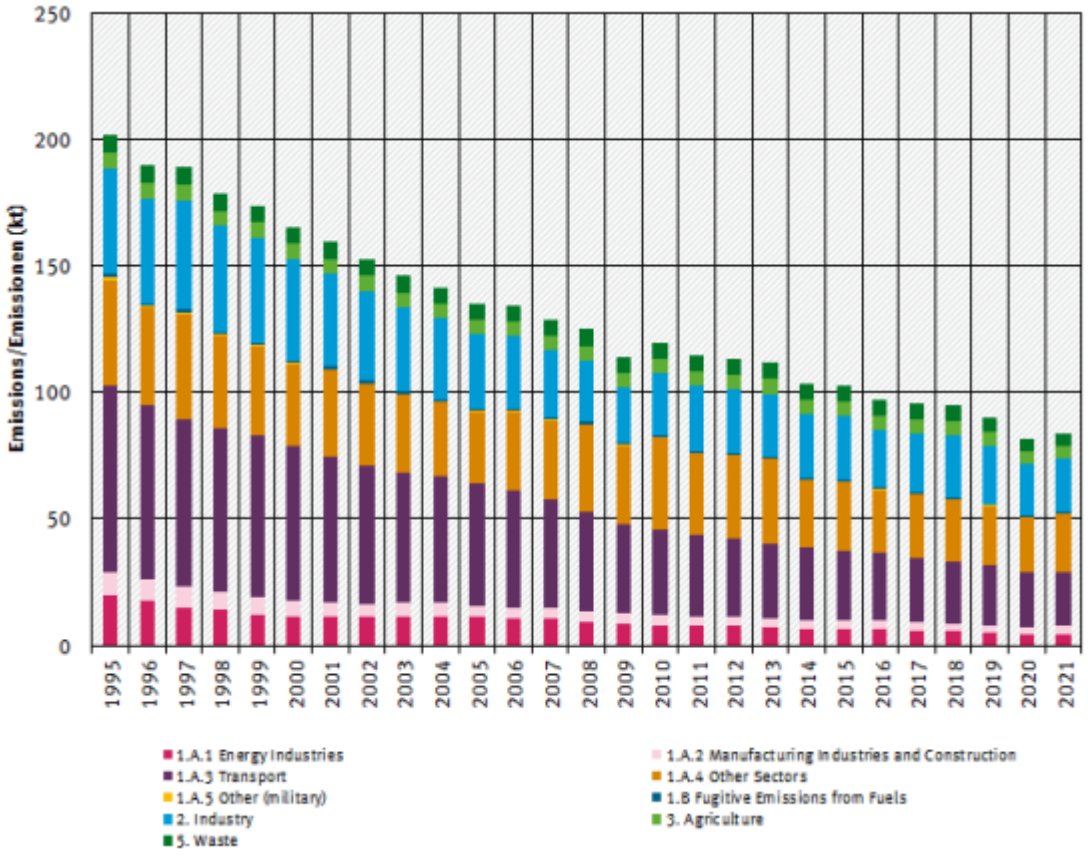
Main drivers

T**otal $PM_{2.5}$ emissions** dropped by 55.3% between 1995 and 2019. The Main Drivers for $PM_{2.5}$ 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 $PM_{2.5}$ emissions. Here, about 77% of 2019 $PM_{2.5}$ 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)**.

$PM_{2.5}$ Emissions 1990-2019

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



$PM_{2.5}$ trend by sector