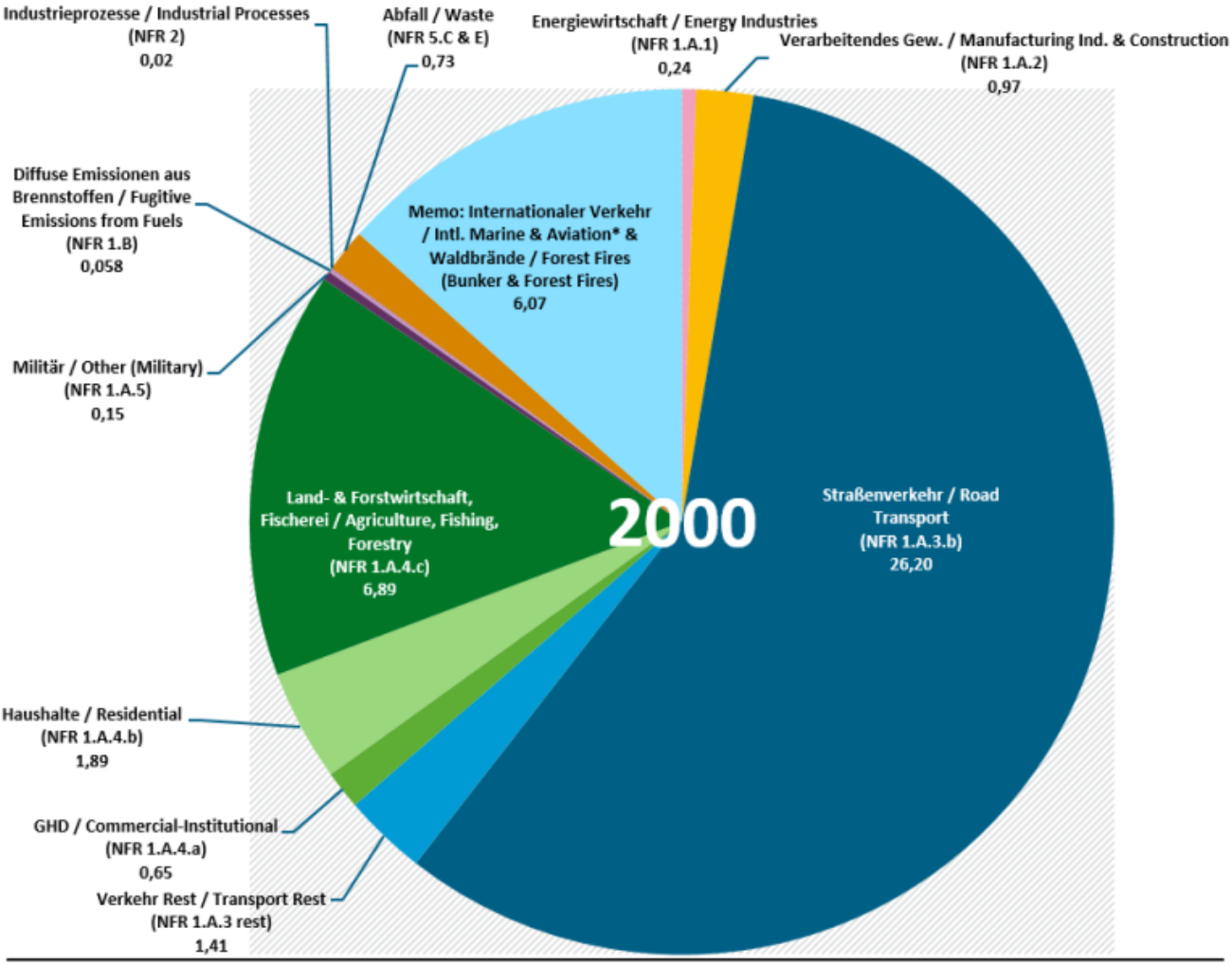
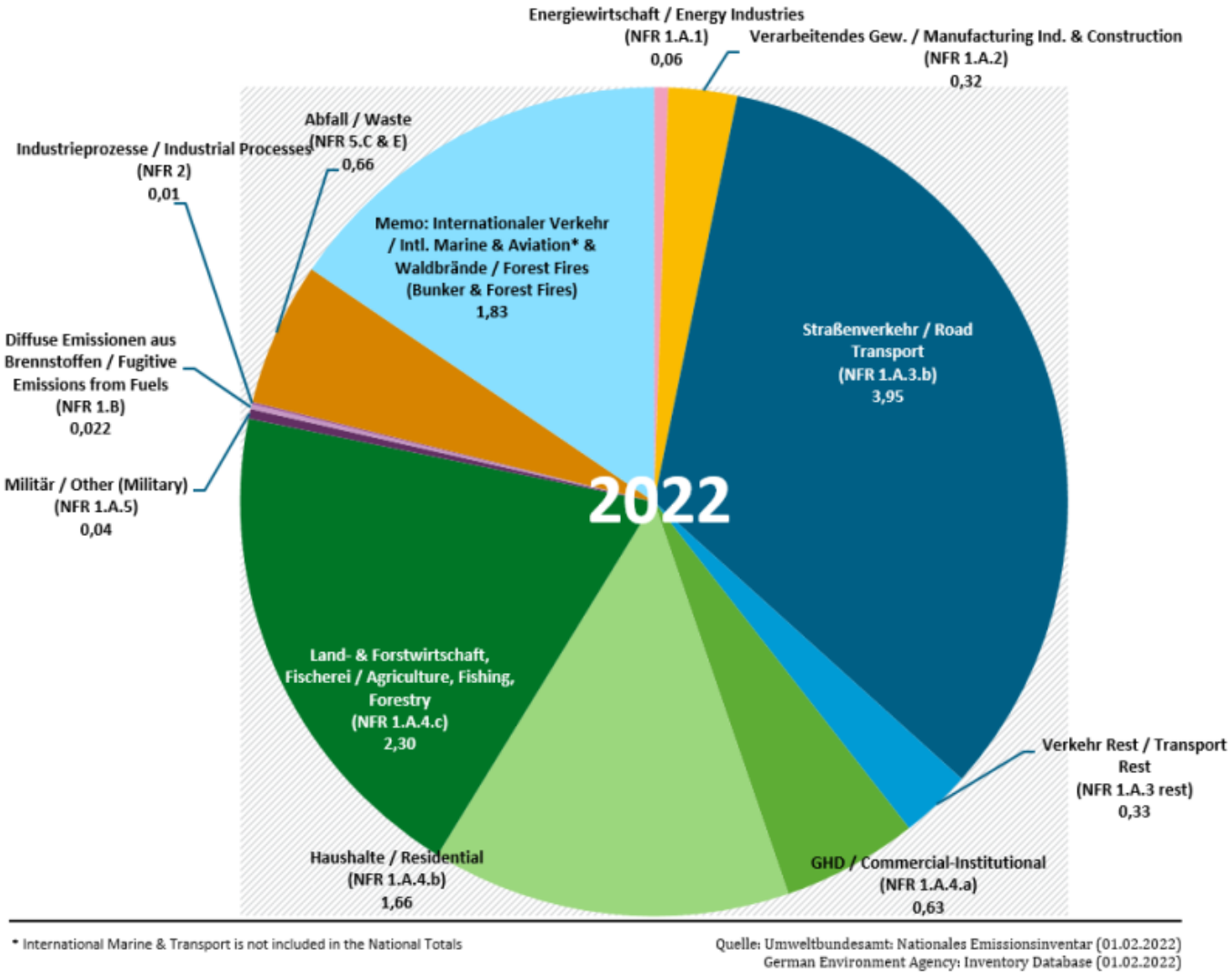
Emission Trends BC

Germany reports Black Carbon (BC) emissions for all years from 2000 onward. The main sources are transport as well as mobile and stationary combustion. Germany uses the EMEP/EEA 2016 Guidebook to estimate BC emissions, augmented by some country specific emission factors, i.e. split factors for the BC portion of $PM_{2.5}$, in particular in road transport. The following figure provides an overview on the sources and their respective contribution to the German national total.



* International Marine & Transport is not included in the National Totals

Quelle: Umweltbundesamt: Nationales Emissionsinventar (01.02.2022)
German Environment Agency: Inventory Database (01.02.2022)



Main drivers

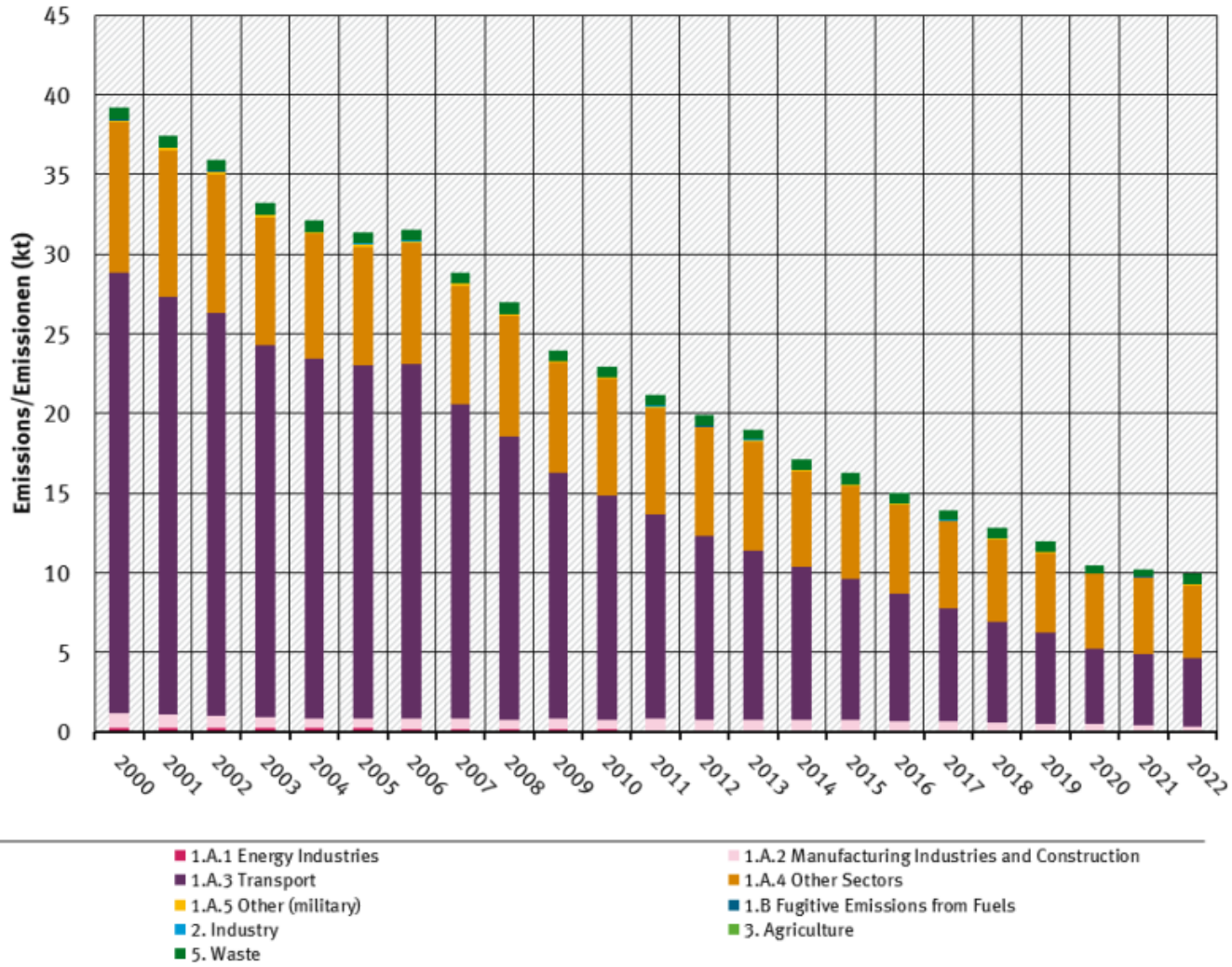
Between 2000 and 2022, **Total Black Carbon emissions dropped by 75%**.

The main drivers are the **transport emissions (NFR 1.A.3)** with 70% of total 2000 emissions, and a 85% reduction between 2000 and 2022. Over the entire time series, 90% of the transport emissions come from **Road Transport (NFR 1.A.3.b)**. The overlying trend towards more diesel cars in the German fleet slowed the decrease in emission over this period (see figure below).

24% of the 2000 total emissions result from **Other Sectors (NFR 1.A.4)**, mostly from residential stationary combustion and mobile sources therein, with a 51% reduction between 2000 and 2022.

Table: Black Carbon emissions 1990-2022, in kilotonnes [kt]

															Trend: latest compared to	
2000	**2005**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2000**	**previous year**
39	31	23	21	20	19	17	16	15	14	13	12	10	10	10	-74.5%	-2,4%



Black Carbon emissions from 2000 / Black Carbon Emissionen erst ab 2000

Quelle: German Emission Inventory (26.04.2024)