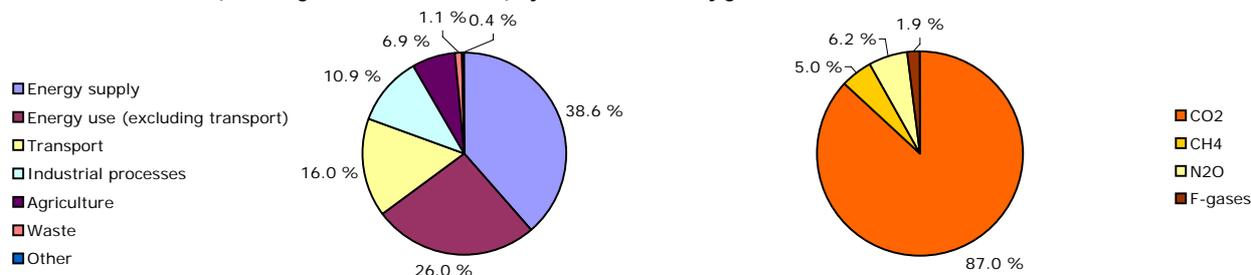


Key GHG data <sup>(1)</sup>	1990	2007	2008	2009 <sup>(2)</sup>	Unit	Rank in EU-27 <sup>(3)</sup>	Rank in EU-15 <sup>(3)</sup>
Total greenhouse gas emissions (GHG)	1 231.8	957.3	958.1	878.3	Mt CO <sub>2</sub> -eq.	1	1
GHG from international bunkers <sup>(4)</sup>	19.6	35.5	35.5	n.a.	Mt CO <sub>2</sub> -eq.	4	4
GHG per capita	15.6	11.6	11.7	10.7	t CO <sub>2</sub> -eq. / capita	10	7
GHG per GDP <sup>(5)</sup>	735	426	421	406	g CO <sub>2</sub> -eq. / euro		
Share of GHG in total EU-27 emissions	22.1 %	19.0 %	19.4 %	19.1 %	%		
EU ETS verified emissions <sup>(6)</sup>		487.1	472.7	428.2	Mt CO <sub>2</sub> -eq.	1	1
Share of EU ETS verified emissions in total GHG		50.9 %	49.3 %	48.8 %	%		
ETS verified emissions compared to annual allowances <sup>(7)</sup>		- 2.0 %	7.9 %	- 1.2 %	%		

**Share of GHG emissions (excluding international bunkers) by main source and by gas in 2008 <sup>(1),(8)</sup>**

Key GHG trends	1990–2008		2007–2008		1990–2009 <sup>(2)</sup>		2008–2009 <sup>(2)</sup>	
	Mt CO <sub>2</sub> -eq.	%	Mt CO <sub>2</sub> -eq.	%	Mt CO <sub>2</sub> -eq.	%	Mt CO <sub>2</sub> -eq.	%
Total GHG	- 273.7	- 22.2 %	0.7	0.1 %	- 353.5	- 28.7 %	- 79.8	- 8.3 %
GHG per capita	- 3.9	- 25.2 %	0.0	0.2 %	- 4.9	- 31.2 %	- 0.9	- 8.3 %
EU ETS verified emissions - all installations			- 14.5	- 3.0 %			- 44.5	- 9.4 %
EU ETS verified emissions - constant scope <sup>(9)</sup>			n.a.	n.a.			- 39.3	- 8.4 %

**Assessment of long-term GHG trend (1990–2008)**

Total emissions have been steadily decreasing since 1990. Energy-related emissions decreased by nearly 22 %, which is due to fuel switching, increased energy and technical efficiency and the increased use of emission-free energy sources. Remarkably, emissions from road transport have been decreasing since 1999. Emissions from industrial processes are closely related to production intensities (e.g. production of iron and steel, chemical industry, cement industry). The decrease in agricultural emissions is mainly caused by reduced livestock, fewer emissions from agricultural soils and less fertiliser use. The waste sector shows the highest reduction due to increased recycling and the off for disposal of biodegradable waste.

**Assessment of short-term GHG trend (2007–2008)**

A number of factors (a mild winter period in 2008, further expansion of use of renewable energies and methodological changes) resulted in 2008 levels of emissions being about the same as those in 2007 and, overall, lower than those in the years prior to 2007.

**Source and additional information**

Greenhouse gas emission data and EU ETS data

[www.eea.europa.eu/themes/climate/data-viewers](http://www.eea.europa.eu/themes/climate/data-viewers)

List and description of national policies and measures

[www.eea.europa.eu/themes/climate/pam](http://www.eea.europa.eu/themes/climate/pam)

<sup>(1)</sup> Total greenhouse gas emissions (GHG), GHG per capita, GHG per GDP and shares of GHG do not include emissions and removals from LULUCF (carbon sinks) and emissions from international bunkers.

<sup>(2)</sup> Preliminary estimates reported by the country for total greenhouse gas emissions. EEA estimates in the case of EU-27, EU-15 and Slovakia.

<sup>(3)</sup> Comparison of 2008 values, 1 = highest value among EU countries.

<sup>(4)</sup> International bunkers: international aviation and international maritime transport.

<sup>(5)</sup> GDP in constant 2000 prices - not suitable for a quantitative comparison between countries for the same year.

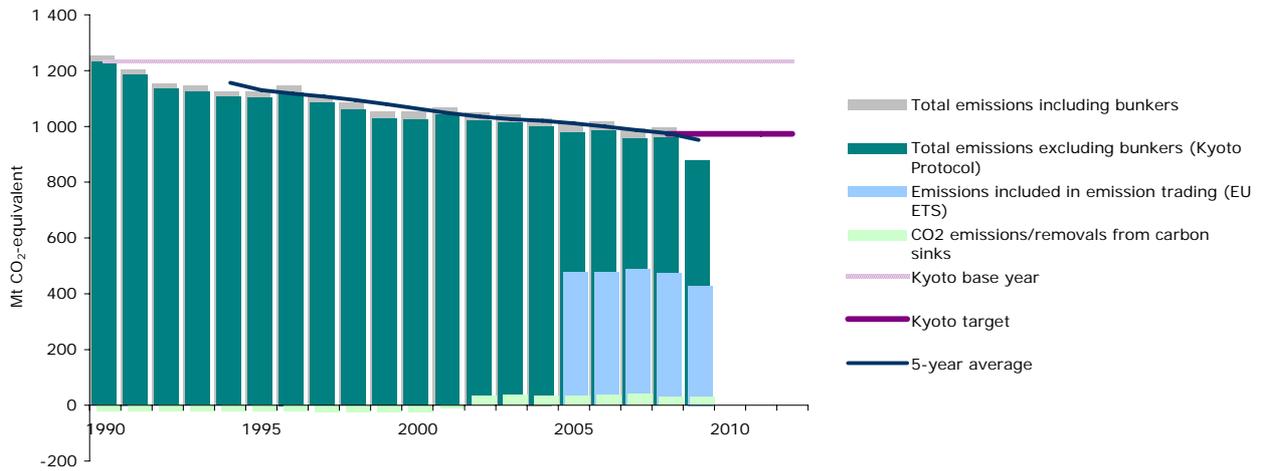
<sup>(6)</sup> All installations included. This includes new entrants and closures. Data from the community independent transaction log (CITL) released on 29 April 2009 for the reporting years 2005 and 2006, 11 May 2009 for the reporting year 2007 and data as of 17 May 2010 for the reporting year 2008 and 2009. The CITL regularly receives new information (including delayed verified emissions data, new entrants and closures) so the figures shown may change over time.

<sup>(7)</sup> "+" and "-" mean that verified emissions exceeded allowances or were below allowances, respectively. Annual allowances include allocated allowances and allowances auctioned during the same year.

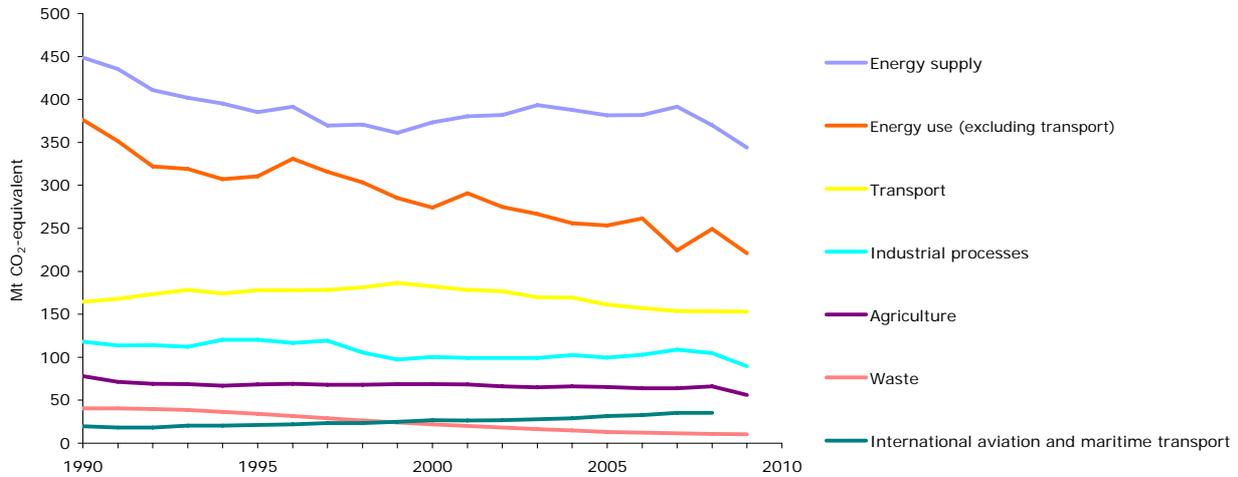
<sup>(8)</sup> LULUCF sector and emissions from international bunkers excluded. Due to independent rounding the sums do not necessarily add up.

<sup>(9)</sup> Constant scope: includes only those installations with verified emissions available for the two most recent years (2008 and 2009).

**GHG trends 1990–2009 - total emissions and removals**



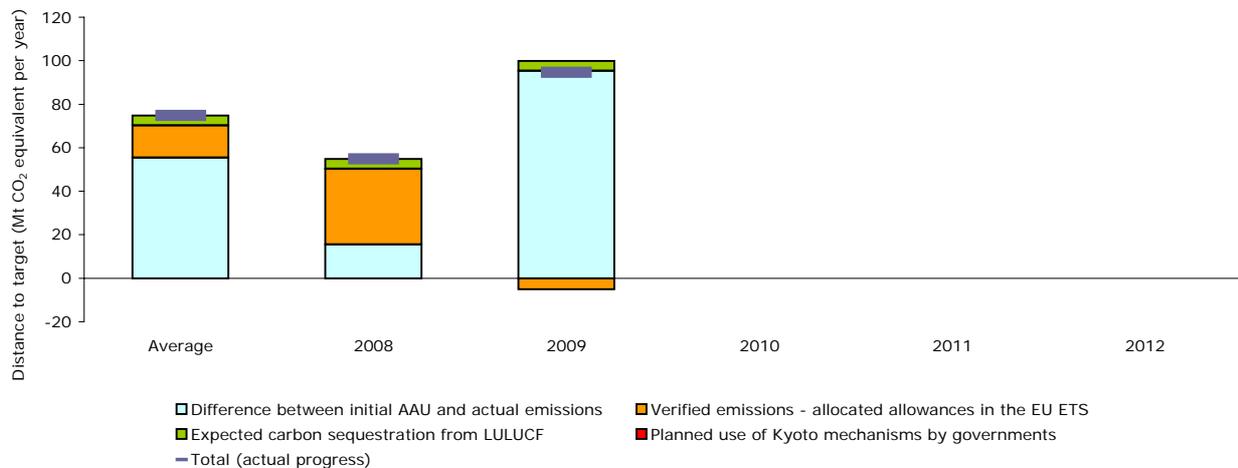
**GHG trends 1990–2008 - emissions by sector**



Note: updated sectoral projections, taking the effects of the economic crisis, will be presented in 2011

**Progress towards Kyoto target**

Average emissions in Germany in 2008–2009 were 25.5 % lower than the base-year level, below the burden-sharing target of -21 % for the period 2008–2012. Operators of installations covered by the EU ETS had to surrender more allowances than were issued to the EU ETS, increasing the countries assigned amount by 1.2 % of base-year level emissions. LULUCF activities are expected to decrease net emissions by 0.4 % of base-year level emissions. Taking all these effects into account, emissions in the sectors not covered by the EU ETS in Germany stand currently below their target level, by a gap representing 6.1 % of the base-year emissions.



Note: A positive value indicates emissions lower than the average target.