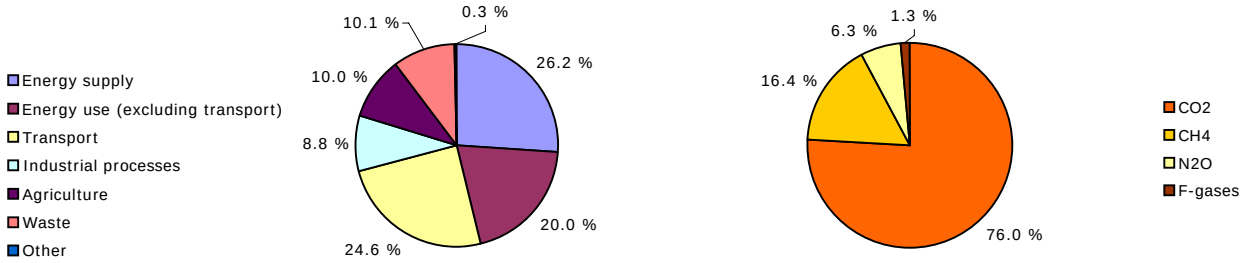
GHG trends and projections in Portugal

European Environment Agency

Key GHG data [1]	1990	2007	2008	2009 [2]	Unit	Rank in EU-27 [3]	Rank in EU-15 [3]
Total greenhouse gas emissions (GHG)	59.3	79.9	78.4	n.a.	Mt CO_2-eq.	13	10
GHG from international bunkers [4]	2.9	4.3	4.6	n.a.	Mt CO_2-eq.	11	11
GHG per capita	5.9	7.5	7.4	n.a.	t CO_2-eq. / capita	21	14
GHG per GDP [5]	651	606	594	n.a.	g CO_2-eq. / euro		
Share of GHG in total EU-27 emissions	1.1 %	1.6 %	1.6 %	n.a.	%		
EU ETS verified emissions [6]		31.2	29.9	28.3	Mt CO_2-eq.	15	11
Share of EU ETS verified emissions in total GHG		39.1 %	38.2 %	n.a.	%		
ETS verified emissions compared to annual allowances [7]		– 15.4 %	– 1.9 %	– 7.4 %	%		

Share of GHG emissions (excluding international bunkers) by main source and by gas in 2008 [1],[8]



Key GHG trends	1990–2008		2007–2008		1990–2009 [2]		2008–2009 [2]	
	Mt CO_2-eq.	%	Mt CO_2-eq.	%	Mt CO_2-eq.	%	Mt CO_2-eq.	%
Total GHG	19.1	32.2 %	– 1.5	– 1.9 %	n.a.	n.a.	n.a.	n.a.
GHG per capita	1.5	24.5 %	– 0.2	– 2.0 %	n.a.	n.a.	n.a.	n.a.
EU ETS verified emissions - all installations			– 1.3	– 4.2 %			– 1.7	– 5.6 %
EU ETS verified emissions - constant scope [9]			n.a.	n.a.			– 2.1	– 7.1 %

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

Emissions increased between 1990 and 2002, driven by strong economic growth, and have been stabilised or even reduced since 2005. A large increase occurred in the transport sector where emissions doubled between 1990 and 2002, due to the rapid growth in private car ownership; however emissions have been stabilised since. Emissions from the production of public electricity and heat increased also significantly, due to a continued increase of electricity demand in particular in the residential/commercial sector. Rising emissions from industrial processes are mostly due to the increase of cement production, road paving, limestone and dolomite use, lime production and, glass and ammonia production. The decrease in emissions from agriculture reflects the declining role of this sector in the national economy, and is associated for instance with the reduction of the livestock production (e.g. swine), and the decrease of fertilizer consumption. In the waste sector, emissions grew significantly in the 1990s, primarily because of rising waste generation and the deposition of waste in landfills.

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

Emissions decreased in all sectors except waste. The largest decrease occurred in the production of public electricity and heat, followed by manufacturing industries and fuel combustion in households. Emissions from waste water handling increased.

Source and additional information

Greenhouse gas emission data and EU ETS data www.eea.europa.eu/themes/climate/data-viewers

List and description of national policies and measures www.eea.europa.eu/themes/climate/pam

[1] 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.

[2] Preliminary estimates reported by the country for total greenhouse gas emissions. EEA estimates in the case of EU-27, EU-15 and Slovakia.

[3] Comparison of 2008 values, 1 = highest value among EU countries.

[4] International bunkers: international aviation and international maritime transport.

[5] GDP in constant 2000 prices - not suitable for a quantitative comparison between countries for the same year.

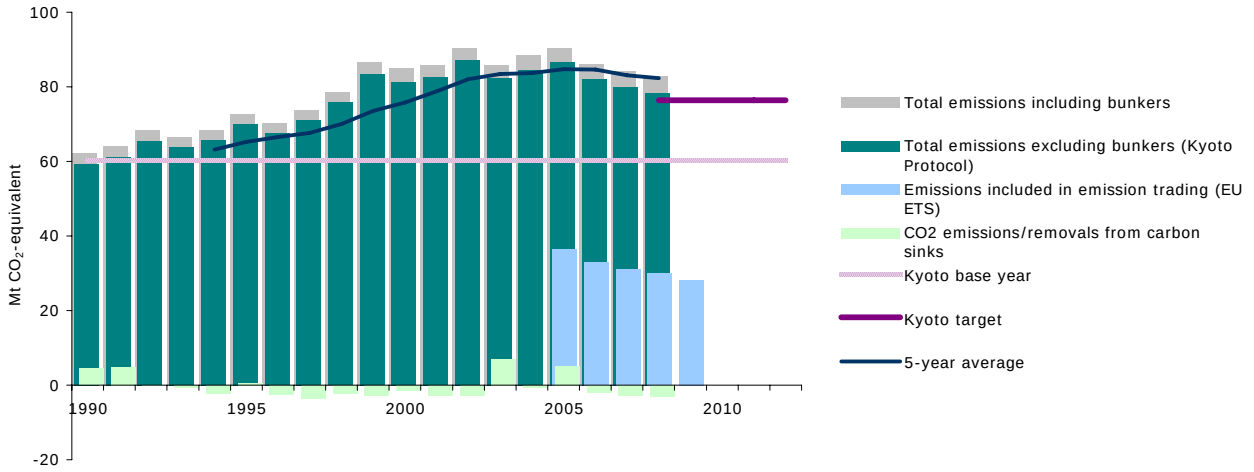
[6] All installations included. This includes new entrants and closures. Data from the community independent transaction log (CITL) released on 29 April 2009 for the reporting years 2005 and 2006, 11 May 2009 for the reporting year 2007 and data as of 17 May 2010 for the reporting year 2008 and 2009.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

[7] "+" and "-" mean that verified emissions exceeded allowances or were below allowances, respectively. Annual allowances include allocated allowances and allowances auctioned during the same year.

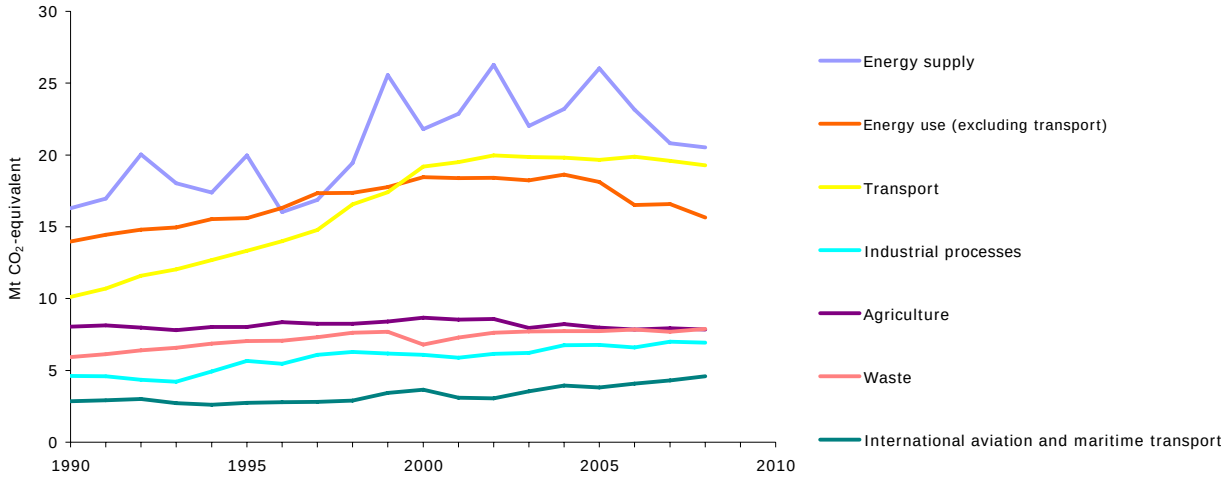
[8] LULUCF sector and emissions from international bunkers excluded. Due to independent rounding the sums do not necessarily add up.

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

GHG trends 1990–2008 - total emissions and removals



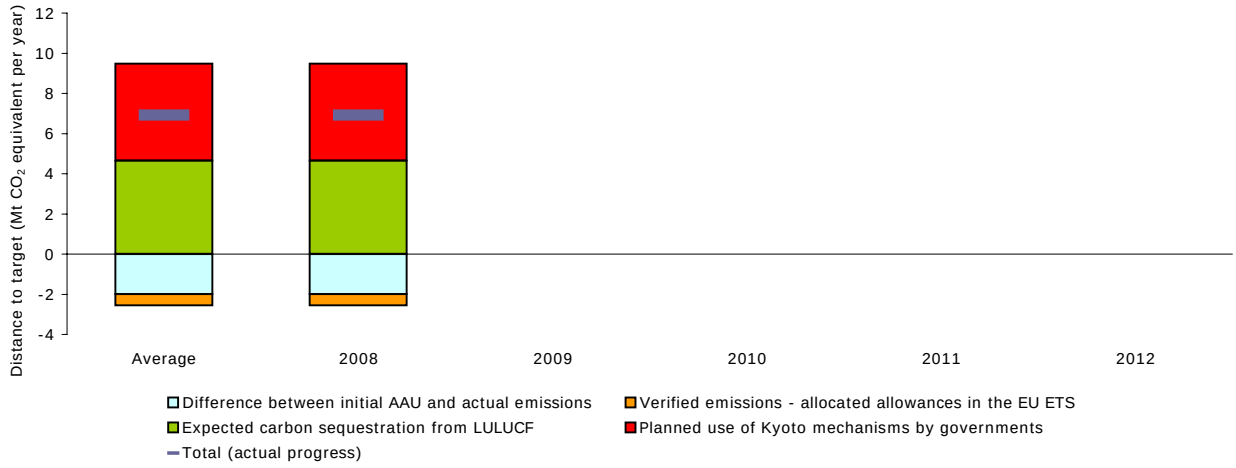
GHG trends 1990–2008 - emissions by sector



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

Progress towards Kyoto target

Emissions in Portugal in 2008 were 30.3 % higher than the base-year level, above the Kyoto target of 27 % for the period 2008–2012. Operators of installations covered by the EU ETS had to surrender less allowances than were issued to the EU ETS, decreasing the countries assigned amount by 0.9 % of base-year level emissions. LULUCF activities are expected to decrease net emissions by 7.7 % of base-year level emissions. Portugal intends to acquire allowances corresponding to 8 % of base-year level emissions per year through the use of flexible mechanisms at government level. Taking all these effects in to account, emissions in the sectors not covered by the EU ETS in Portugal stand currently below their target level, by a gap representing 11.5 % of the base-year emissions.



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