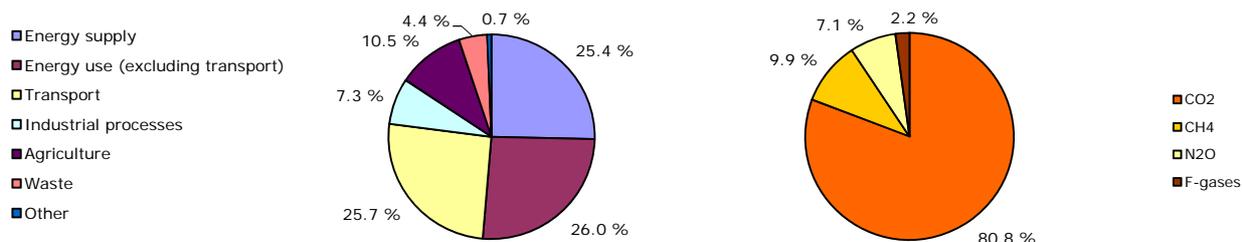


Key GHG data ⁽¹⁾	1990	2008	2009	2010 ⁽²⁾	Unit	Rank in EU-27 ⁽³⁾	Rank in EU-15 ⁽³⁾
Total greenhouse gas emissions (GHG)	283.2	404.8	367.5	353.9	Mt CO ₂ -eq.	6	5
GHG from international bunkers ⁽⁴⁾	17.3	41.8	40.6	n.a.	Mt CO ₂ -eq.	3	3
GHG per capita	7.3	8.9	8.0	7.7	t CO ₂ -eq. / capita	18	13
GHG per GDP (constant prices) ⁽⁵⁾	592	503	475	458	g CO ₂ -eq. / euro		
Share of GHG in total EU-27 emissions	5.1 %	8.1 %	8.0 %	7.5 %	%		
EU ETS verified emissions - all installations ⁽⁶⁾		163.5	136.9	121.5	Mt CO ₂ -eq.	5	4
EU ETS verified emissions - constant scope ⁽⁷⁾		163.4	136.7	120.4	Mt CO ₂ -eq.		
Share of EU ETS verified emissions (all installations) in total GHG		40.4 %	37.3 %	34.3 %	%		
ETS verified emissions compared to annual allowances ⁽⁸⁾		6.2 %	- 9.1 %	- 19.1 %	%		

Share of GHG emissions (excluding international bunkers) by main source and by gas in 2009 ⁽¹⁾ ⁽⁹⁾



Key GHG trends	1990–2009		2008–2009		1990–2010 ⁽²⁾		2009–2010 ⁽²⁾	
	Mt CO ₂ -eq.	%	Mt CO ₂ -eq.	%	Mt CO ₂ -eq.	%	Mt CO ₂ -eq.	%
Total GHG	84.4	29.8 %	- 37.2	- 9.2 %	70.8	25.0 %	- 13.6	- 3.7 %
GHG per capita	0.7	10.0 %	- 0.9	- 10.3 %	0.4	5.5 %	- 0.3	- 4.0 %
EU ETS verified emissions - all installations ⁽⁶⁾			- 26.5	- 16.2 %			- 15.4	- 11.3 %
EU ETS verified emissions - constant scope ⁽⁷⁾			- 26.6	- 16.3 %			- 26.6	- 16.3 %

Assessment of long-term GHG trend (1990–2009)

Emissions from all sectors increased between 1990 and 2007, with the highest increases from energy use in transport, public electricity and heat production and fuel use in industry and households/services. The increase in emissions from industrial processes occurred mainly in the mineral industry and the consumption of halocarbons. Cement production increased by 70 % between 1993 and 2007 reflecting booming housing construction. In general, the two recent years 2008 and 2009 saw marked emission declines, particularly in 2009. The economic recession, mainly, and the growth in renewables were two key factors explaining the decrease in GHG emissions in 2009. In 2008, the main reasons for lower GHG emissions were less economic activity triggered by the start of the economic recession, less use of coal in electricity generation, more use gas and more use of renewable energy, as well as improved efficiency in the transformation of energy.

Assessment of short-term GHG trend (2008–2009)

The 5 % reduction in final electricity consumption and the increase in hydro and wind power electricity generation resulted in a marked decline of thermal power production, which led in turn to large emission decreases in the energy industry. The economic downturn was mainly reflected in emission decreases in industry (in particular cement production) and in the transport sector. Strong sustained growth in renewable energy also contributed to lower GHG emissions in 2009.

Source and additional information

Greenhouse gas emission data and EU ETS data

www.eea.europa.eu/themes/climate/data-viewers

⁽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⁾ Based on national estimate of 2010 emissions.

⁽³⁾ Comparison of 2009 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 ranking or quantitative comparison between countries for the same year. 1990 information not available for some countries, replaced by later years: 1991 (Bulgaria, Germany, Hungary and Malta), 1992 (Slovakia), 1993 (Estonia) and 1995 (Croatia). Source GDP: Eurostat, 2011; Ameco database, 2011.

⁽⁶⁾ All installations included. This includes new entrants and closures. Data from the community independent transaction log (CITL) as of 29 April 2009 for the reporting years 2005 and 2006, 11 May 2009 for the reporting year 2007, 17 May 2010 for the reporting year 2008 and 23 May for the reporting years 2009 and 2010. The CITL regularly receives new information (including delayed verified emissions data, new entrants and closures) so the figures shown may change over time.

⁽⁷⁾ Constant scope: includes only those installations with verified emissions available for 2008, 2009 and 2010.

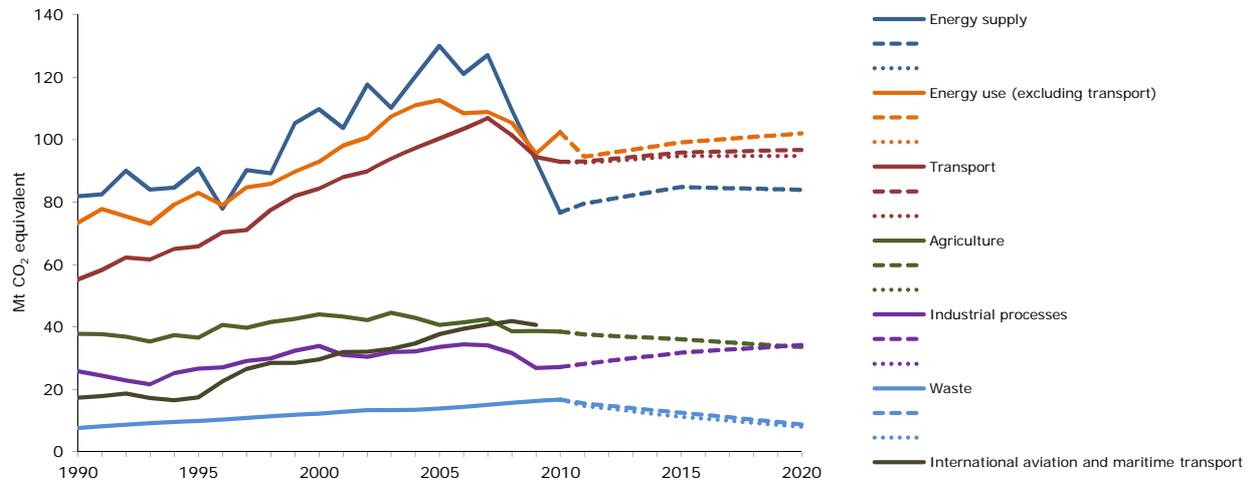
⁽⁸⁾ "+" and "-" mean that verified emissions exceeded allowances or were below allowances, respectively. Annual allowances include allocated allowances and allowances auctioned during the same year.

⁽⁹⁾ LULUCF sector and emissions from international bunkers excluded. Due to independent rounding the sums may not necessarily add up.

GHG trends and projections 1990–2020 — total emissions



GHG trends and projections 1990–2020 — emissions by sector

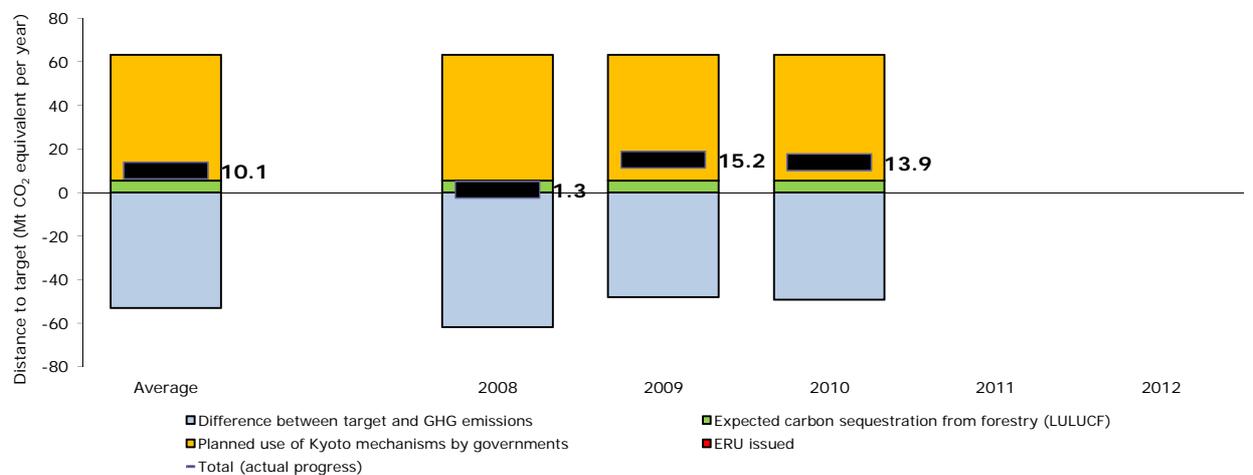


Note: GHG emission projections are represent either through dashed lines (with existing measures) or dotted lines (additional measures).

Source: National inventory, 2011; EEA proxy estimate; 2011; national projection data.

Progress towards Kyoto target

Average 2008–2010 emissions in Spain were 29.6 % higher than the base-year level, significantly above the burden-sharing target of 15 % for the period 2008–2012. In the sectors not covered by the EU ETS, emissions were significantly higher than their respective target, by an amount equivalent to 18.3 % the country's base-year emissions. LULUCF activities are expected to decrease net emissions by an annual amount equivalent to 1.9 % of base-year level emissions. Spain intends to use the flexible mechanisms at government level by acquiring an amount of Kyoto units equivalent to 19.9 % of base-year emissions per year. Taking all these effects in to account, average emissions in the sectors not covered by the EU ETS in Spain were standing below their target level, by a gap representing 3.5 % of the base-year emissions. Spain was therefore on track towards its burden-sharing target by the end of 2010.



Note: The difference between target and GHG emissions concerns the sectors not covered by the EU ETS. A positive value indicates emissions lower than the average target.