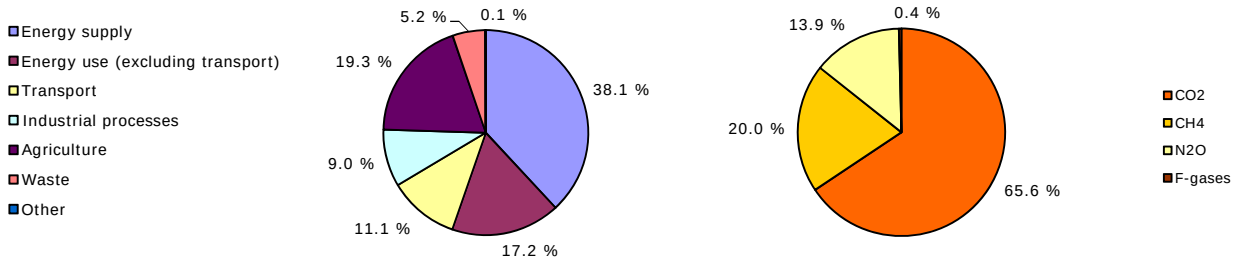
GHG trends and projections in Romania

European Environment Agency

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)	250.1	153.4	130.8	129.7	Mt CO_2-eq.	9	n.a.
GHG from international bunkers (4)	1.1	1.1	1.0	n.a.	Mt CO_2-eq.	22	n.a.
GHG per capita	10.8	7.1	6.1	6.0	t CO_2-eq. / capita	26	n.a.
GHG per GDP (constant prices) (5)	5 411	2 321	2 130	2 138	g CO_2-eq. / euro		
Share of GHG in total EU-27 emissions	4.5 %	3.1 %	2.8 %	2.7 %	%		
EU ETS verified emissions - all installations (6)		64.1	49.0	47.3	Mt CO_2-eq.	10	n.a.
EU ETS verified emissions - constant scope (7)		64.0	48.9	46.7	Mt CO_2-eq.		
Share of EU ETS verified emissions (all installations) in total GHG		41.8 %	37.5 %	36.5 %	%		
ETS verified emissions compared to annual allowances (8)		– 10.7 %	– 33.7 %	– 36.8 %	%		

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	– 119.3	– 47.7 %	– 22.6	– 14.7 %	– 120.4	– 48.2 %	– 1.2	– 0.9 %
GHG per capita	– 4.7	– 43.5 %	– 1.0	– 14.6 %	– 4.7	– 43.9 %	– 0.0	– 0.7 %
EU ETS verified emissions - all installations (6)			– 15.1	– 23.5 %			– 1.7	– 3.4 %
EU ETS verified emissions - constant scope (7)			– 15.1	– 23.6 %			– 15.1	– 23.6 %

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

Total emissions decreased significantly in the 1990s, following the transition process to a market economy but increased between 1999 and 2008. The decrease in energy-related emissions was due to the decline of economic activities and energy consumption. Public electricity and heat production was by far the largest contributor to emission decreases, followed by manufacturing industries and fugitive emissions from energy industries. Emissions from industrial processes decreased due to reduced industrial production levels (in particular in the chemical, mineral and metal industries). In the agriculture sector, the decline of livestock populations, the decreased use of synthetic fertilizer and the decline of cultivated areas and crop productions drove emissions down. Waste emissions increased due to consumption growth, an increase in the number of waste management sites and an increase in the percentage of the population connected to sewerage.

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

The considerable decrease in emissions compared to 2008 represented the second largest decrease in percentage terms across the whole EU. The largest decreases were observed in the production of public electricity and heat, followed by direct fuel use from manufacturing industries and process-related emissions from the cement, lime and, iron and steel industry. Also N2O emissions from nitric acid dropped considerably, mainly due to the introduction abatement measures in two plants 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 EEA 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.

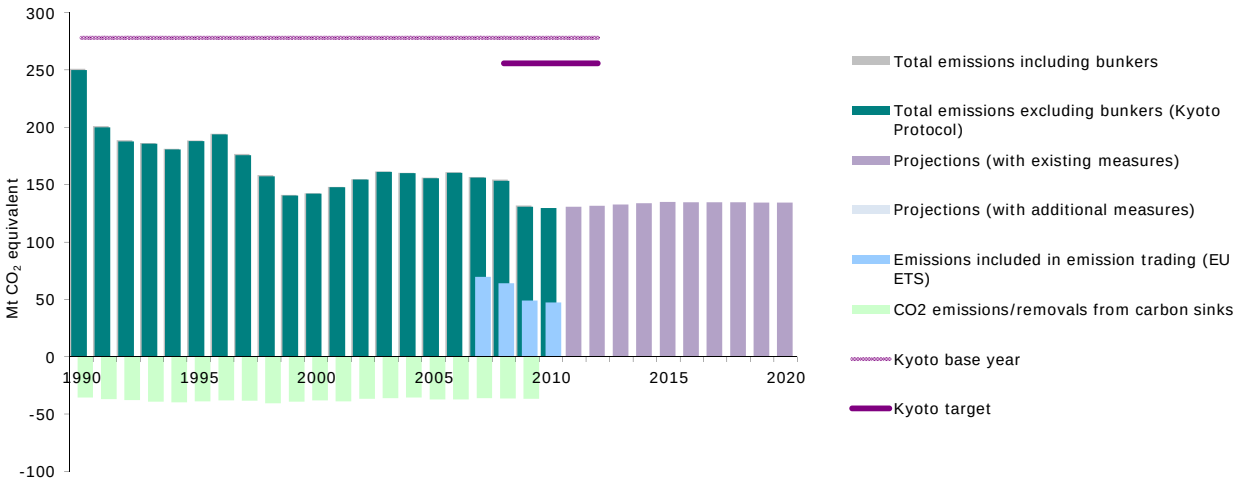
(6) All installations included. This includes new entrants and closures. Data from the community independent transaction log (CITL) as of 29 April 2009 for the reporting years 2005 and 2006, 11 May 2009 for the reporting year 2007, 17 May 2010 for the reporting year 2008 and 23 May for the reporting 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.

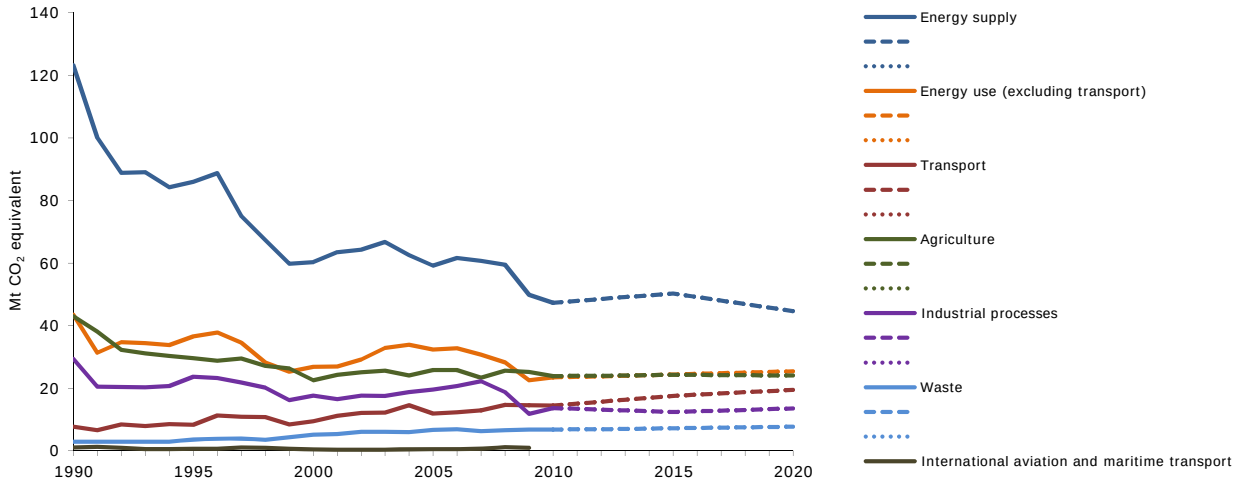
(8) "+" and "-" mean that verified emissions exceeded allowances or were below allowances, respectively. Annual allowances include allocated allowances and allowances auctioned during the same year.

(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

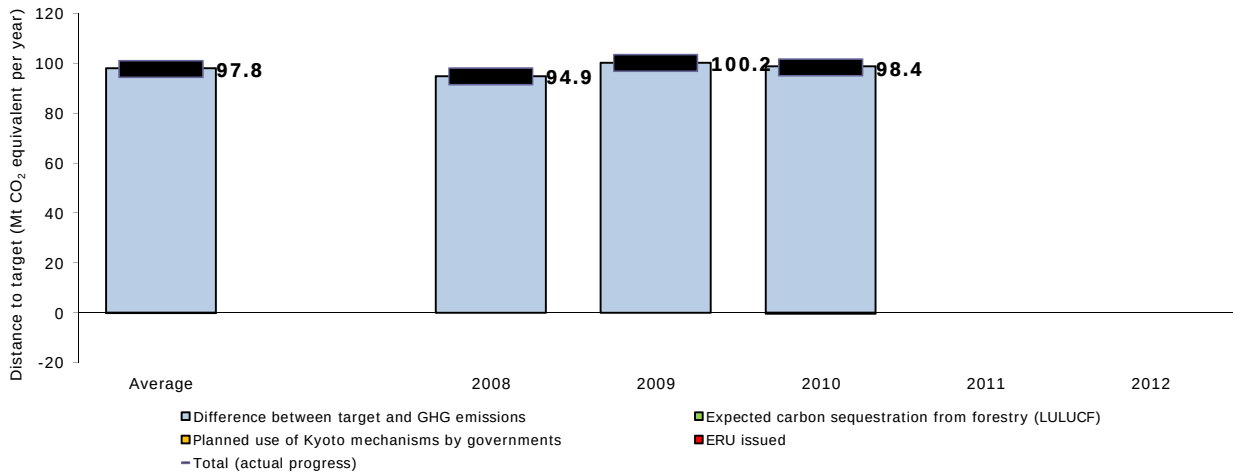


Note: GHG emission projections are represent either through dashed lines (with existing measures) or dotted lines (additional measures).

Source: National inventory, 2011; EEA proxy estimate; 2011; Primes–Gains projections, 2010.

Progress towards Kyoto target

Average 2008–2010 emissions in Romania were 50.4 % lower than the base-year level, well below the Kyoto target of -8 % for the period 2008–2012. In the sectors not covered by the EU ETS, emissions were significantly lower than their respective target, by an amount equivalent to 35.2 % the country's base-year emissions. Taking all these effects in to account, average emissions in the sectors not covered by the EU ETS in Romania were standing below their target level, by a gap representing 35.2 % of the base-year emissions. Romania was therefore on track towards its Kyoto 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.