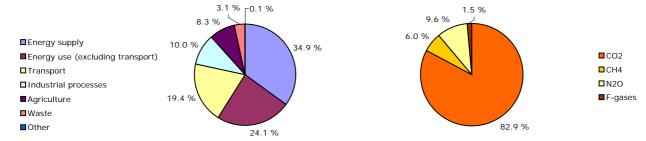
GHG trends and projections in Finland

European Environment Agency

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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)	70.4	78.1	70.1	n.a.	Mt CO ₂ -eq.	16	11
GHG from international bunkers (4)	2.9	3.2	3.1	n.a.	Mt CO ₂ -eq.	12	12
GHG per capita	14.1	14.8	13.2	n.a.	t CO ₂ -eq. / capita	5	3
GHG per GDP ⁽⁵⁾	653	474	421	n.a.	g CO ₂ -eq. / euro		
Share of GHG in total EU-27 emissions	1.3 %	1.5 %	1.4 %	n.a.	%		
EU ETS verified emissions (6)		42.5	36.2	34.3	Mt CO ₂ -eq.	13	9
Share of EU ETS verified emissions in total GHG		54.5 %	51.6 %	n.a.	%		
ETS verified emissions compared to annual allowances (7)		- 4.7 %	- 1.0 %	- 7.5 %	%		

Share of GHG emissions (excluding international bunkers) by main source and by gas in 2008 $\,^{(1),(8)}$



Key GHG trends	1990-	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	- 0.2	- 0.3 %	- 7.9	- 10.2 %	n.a.	n.a.	n.a.	n.a.	
GHG per capita	- 0.9	- 6.4 %	- 1.6	- 10.6 %	n.a.	n.a.	n.a.	n.a.	
EU ETS verified emissions - all installations			- 6.4	- 15.0 %			- 1.9	- 5.2 %	
EU ETS verified emissions - constant scope (9)			n.a.	n.a.			- 1.9	- 5.3 %	

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

The fluctuations of total emissions are mostly due to the important variations in levels of energy-related CO2 emissions, mainly according to the economic trend, the energy supply structure and climate conditions. Emissions from industrial processes have been increasing, in line with economic development. Emissions from the agriculture and waste sectors have decreased since 1990, mainly due to changes in waste legislation, implementation of the Landfill Directive (1999/31/EC), and changes in agricultural policy and farming subsidies.

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

Finland realised the highest relative reduction in emissions of the EU in 2008. This was mainly the result of reduced coal and peat use and extended use of woodier biomass and hydropower for heat and electricity generation. Transport emissions decreased for the first time since 2000.

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.

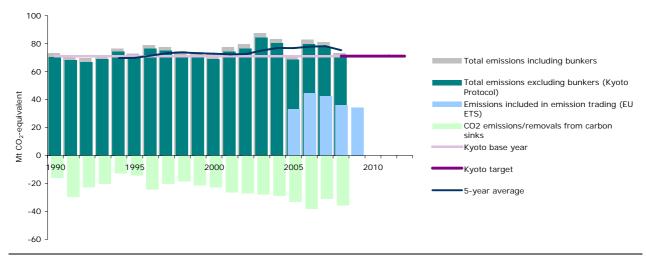
(6) All installations included. This includes new entrants and closures. Data from the community independent transaction log (CITL) released on 29 April 2009 for the reporting years 2005 and 2006, 11 May 2009 for the reporting year 2007 and data as of 17 May 2010 for the reporting year 2008 and 2009.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

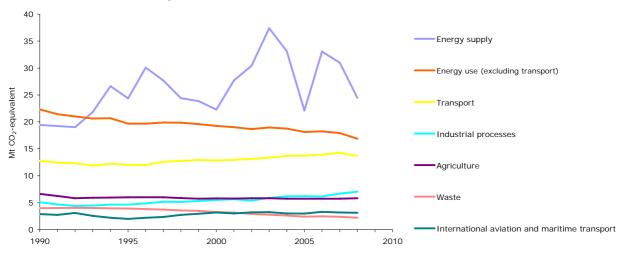
(8) LULUCF sector and emissions from international bunkers excluded. Due to independent rounding the sums do not necessarily add up.

(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



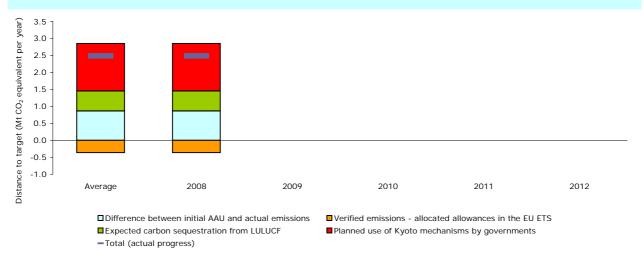
GHG trends 1990–2008 - emissions by sector



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

Progress towards Kyoto target

Emissions in Finland in 2008 were 1.2 % lower than the base-year level, below the burden-sharing target of 0 % 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 0.5 % of base-year level emissions. LULUCF activities are expected to decrease net emissions by 0.8 % of base-year level emissions. Finland intends to acquire allowances corresponding to 2 % 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 Finland stand currently below their target level, by a gap representing 3.5 % of the base-year emissions.



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