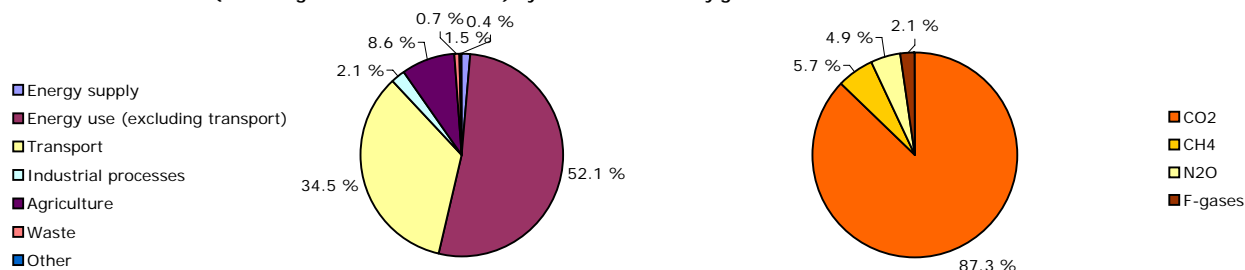


Key GHG data ⁽¹⁾	1990	2007	2008	2009 ⁽²⁾	Unit	Rank in EU-27 ⁽³⁾	Rank in EU-15 ⁽³⁾
Total greenhouse gas emissions (GHG)	0.230	0.243	0.263	n.a.	Mt CO ₂ -eq.	n.a.	n.a.
GHG from international bunkers ⁽⁴⁾	0.00043	0.00077	0.00075	n.a.	Mt CO ₂ -eq.	n.a.	n.a.
GHG per capita	8.1	6.9	7.4	n.a.	t CO ₂ -eq. / capita	n.a.	n.a.
GHG per GDP ⁽⁵⁾	n.a.	n.a.	n.a.	n.a.	g CO ₂ -eq. / euro		
EU ETS verified emissions ⁽⁶⁾		n.a.	0.0199	0.0134	Mt CO ₂ -eq.	n.a.	n.a.
Share of EU ETS verified emissions in total GHG		n.a.	n.a.	n.a.	%		
ETS verified emissions compared to annual allowances ⁽⁷⁾		n.a.	n.a.	- 31.4 %	%		

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	0.034	14.7 %	0.020	8.2 %	n.a.	n.a.	n.a.	n.a.
GHG per capita	- 0.6	- 7.7 %	0.5	7.6 %	n.a.	n.a.	n.a.	n.a.
EU ETS verified emissions - all installations			n.a.	n.a.			- 0.0065	- 32.7 %
EU ETS verified emissions - constant scope ⁽⁹⁾			n.a.	n.a.			- 0.0065	- 32.7 %

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

Emissions have been increasing since the early 1990s, due to increased fuel combustion by households and services. During the period 1990–2008, the number of inhabitants increased by 23 % whereas employment increased by 40 %. This is reflected in a 31 % increase of related GHG emissions until 2006, with fluctuations caused by warm and cold winter periods. Emissions fell by almost a fourth between 2006 and 2007. This may have been due to a very high price for gas oil, which led people to reduce fuel consumption and to hold off the filling of their oil tanks. Simultaneously, warm winter months at the beginning and at the end of 2007 caused lower consumption of heating fuels. Accompanied by an extension of the gas-grid, natural gas has replaced gas oil as the main heating fuel in buildings. In parallel with the built-up of the gas supply network since 1990, fugitive emissions have strongly increased over the period. Emissions from agriculture show a minimum around 2000 due to decreasing and increasing animal numbers. 2008 were comparable with the 1990 emission level. Only few emissions from the waste sector are occurring, because municipal solid waste is exported to a Swiss incineration plant.

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

Annual variations are mostly observed in energy use from households and services for heating purposes. With significantly low emission levels in 2007 due to limited fuel consumption and reduced filling of fuel tanks (warm winter and high fuel prices), emissions from energy use picked up again in 2008, although at a level lower than that observed over the period 2002-2006. The number of heating degree days increased only by 2 % between 2007 and 2008, while the consumption of heating fuels – and related emission increased by 13.5 % in 2008. 2008 emissions from agriculture 2008 were 0.8 % above their 1990 level.

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.

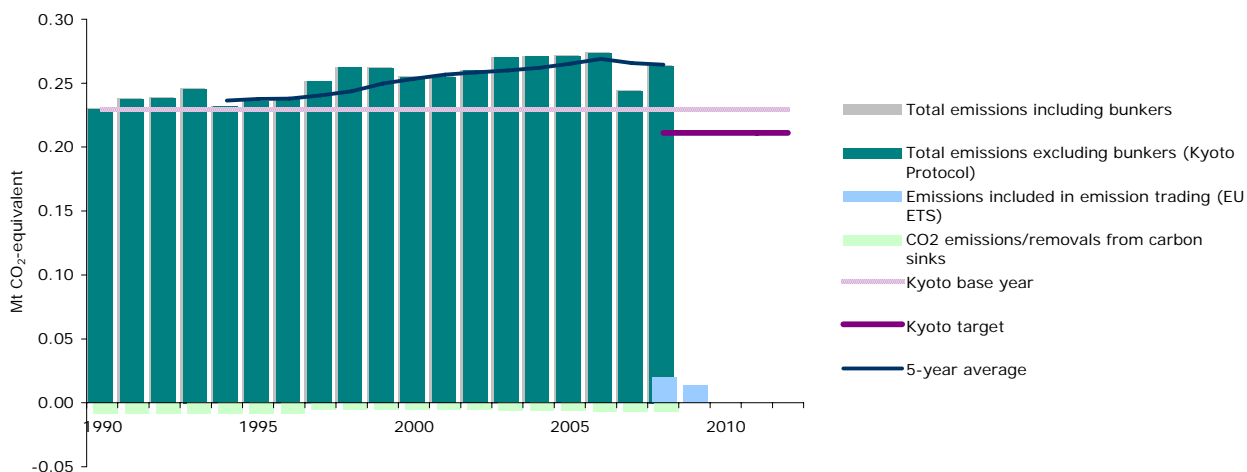
⁽³⁾ Comparison of 2008 values, 1 = highest value among EU countries.

⁽⁴⁾ International bunkers: international aviation and international maritime transport.

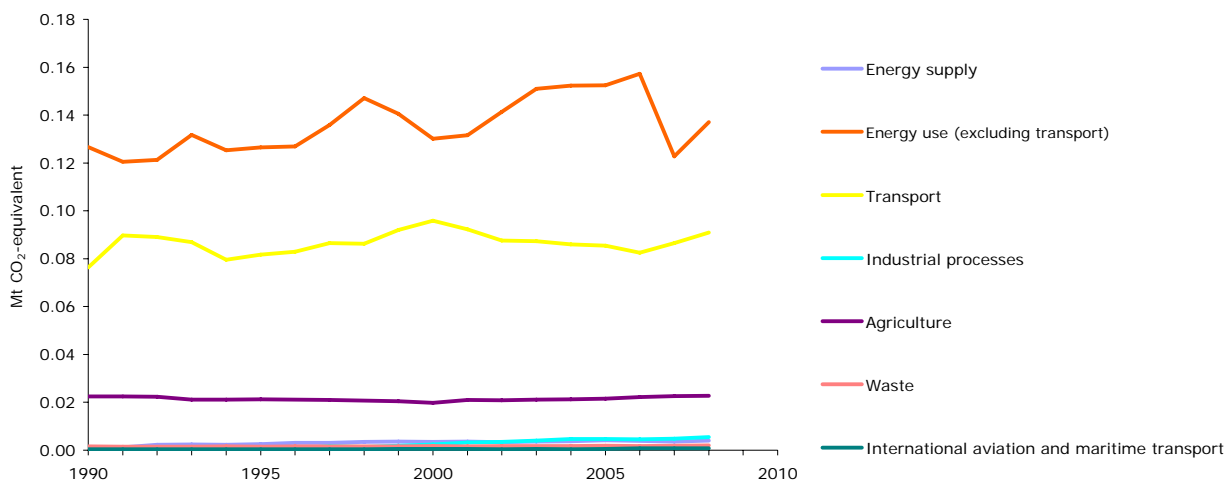
⁽⁵⁾ GDP in constant 2000 prices - not suitable for a quantitative comparison between countries for the same year.

⁽⁶⁾ LULUCF sector and emissions from international bunkers excluded. Due to independent rounding the sums do not necessarily add up.

GHG trends 1990–2008 - total emissions and removals



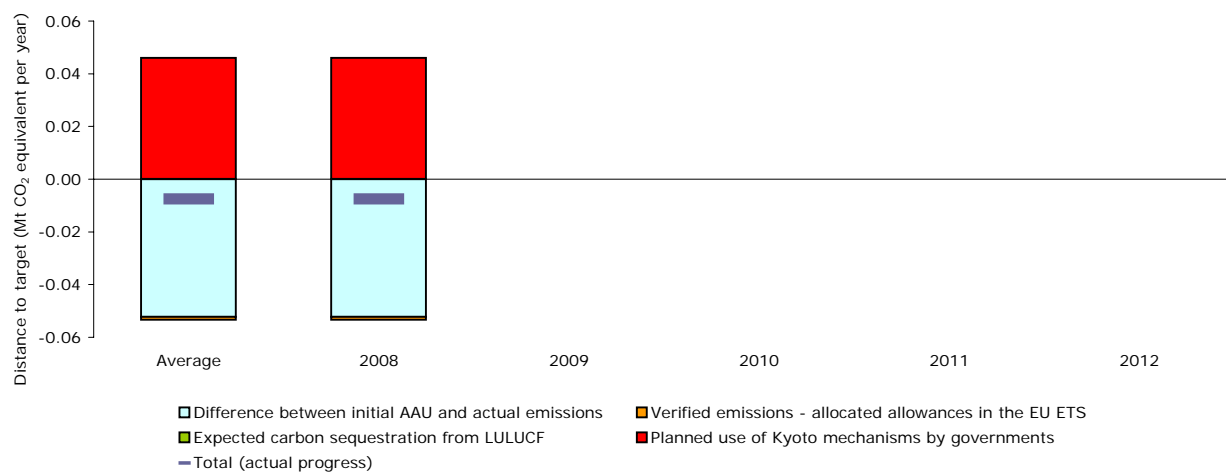
GHG trends 1990–2008 - emissions by sector



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

Progress towards Kyoto target

Emissions in Liechtenstein in 2008 were 14.8 % higher than the base-year level, significantly above the Kyoto target of -8 % 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. Liechtenstein intends to acquire allowances corresponding to 20 % of base-year level emissions per year through the use of flexible mechanisms at government level. Taking all these effects into account, emissions in the sectors not covered by the EU ETS in Liechtenstein stand currently above their target level, by a gap representing 3.3 % of the base-year emissions.



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