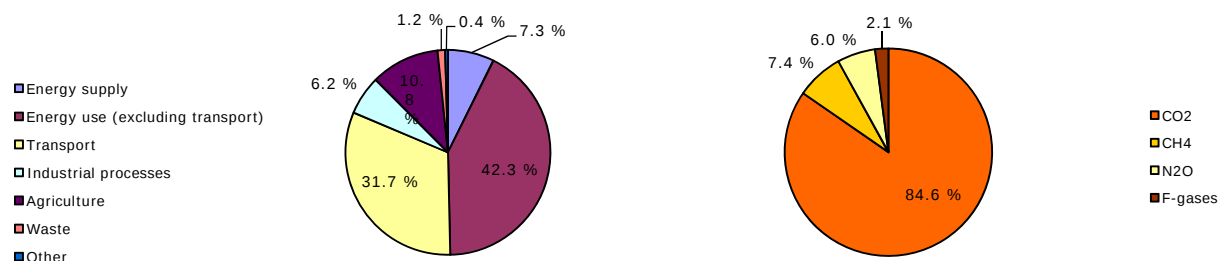


| Key GHG data <sup>(1)</sup>                   | 1990 | 2008 | 2009 | 2010 <sup>(2)</sup> | Unit                            | Rank in EU-27 <sup>(3)</sup> | Rank in EU-15 <sup>(3)</sup> |
|-----------------------------------------------|------|------|------|---------------------|---------------------------------|------------------------------|------------------------------|
| Total greenhouse gas emissions (GHG)          | 53.1 | 53.4 | 51.9 | n.a.                | Mt CO <sub>2</sub> -eq.         | n.a.                         | n.a.                         |
| GHG from international bunkers <sup>(4)</sup> | 3.2  | 4.3  | 4.1  | n.a.                | Mt CO <sub>2</sub> -eq.         | n.a.                         | n.a.                         |
| GHG per capita                                | 8.0  | 7.0  | 6.7  | n.a.                | t CO <sub>2</sub> -eq. / capita | n.a.                         | n.a.                         |
| GHG per GDP (constant prices) <sup>(5)</sup>  | 218  | 169  | 167  | 0                   | g CO <sub>2</sub> -eq. / euro   |                              |                              |

**Share of GHG emissions (excluding international bunkers) by main source and by gas in 2009 <sup>(1)</sup> <sup>(8)</sup>**

| Key GHG trends | 1990–2009               |          | 2008–2009               |         | 1990–2010 <sup>(2)</sup> |      | 2009–2010 <sup>(2)</sup> |      |
|----------------|-------------------------|----------|-------------------------|---------|--------------------------|------|--------------------------|------|
|                | Mt CO <sub>2</sub> -eq. | %        | Mt CO <sub>2</sub> -eq. | %       | Mt CO <sub>2</sub> -eq.  | %    | Mt CO <sub>2</sub> -eq.  | %    |
| Total GHG      | – 1.2                   | – 2.2 %  | – 1.5                   | – 2.8 % | n.a.                     | n.a. | n.a.                     | n.a. |
| GHG per capita | – 1.2                   | – 15.3 % | – 0.3                   | – 4.2 % | n.a.                     | n.a. | n.a.                     | n.a. |

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

Despite clear trends in some GHG emissions, there is no significant trend in the total emissions of the period 1990–2009. Year-to-year variations of total emissions are mainly caused by changing winter temperatures and their effect on CO<sub>2</sub> emissions from fuel combustion. With about 95.1 % of electricity generated by hydroelectric and nuclear power plants in 2008, emissions from energy supply are relatively limited. Overall, energy-related emissions remained relatively constant. Emissions from transport increased in fairly strong correlation with economic development. CO<sub>2</sub> emissions from the residential sector are strongly correlated with winter climatic conditions. Increases in the number of buildings and apartments and in the average floor space per person and workplace led to an increase in the total area heated, compensated by the specification of higher standards for insulation and for combustion equipment efficiency for both new and renovated buildings. Declining populations of cattle and swine and reduced fertilizer use have led to a decrease in emissions from agriculture until 2004. Since then, CH<sub>4</sub> emissions slightly increased again due to higher livestock numbers, mainly cattle. Total emissions from waste management decreased steadily throughout the period 1990–2003. Since 2000, emissions have been reduced further by a ban on the disposal of combustible municipal solid wastes on landfills been banned. However this reduction was offset due to more municipal solid waste being incinerated.

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

Emissions decreased in 2008 and returned to their 2007 level. Reduced energy used by the industry, households and the tertiary sector, likely due to the economic recession, resulted in lower energy-related emissions. A decline in process-related emissions was also observed, in particular in the mineral industry.

**Source and additional information**

Greenhouse gas emission data and EU ETS data

[www.eea.europa.eu/themes/climate/data-viewers](http://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.

(<sup>2</sup>) Based on EEA estimate of 2010 emissions.

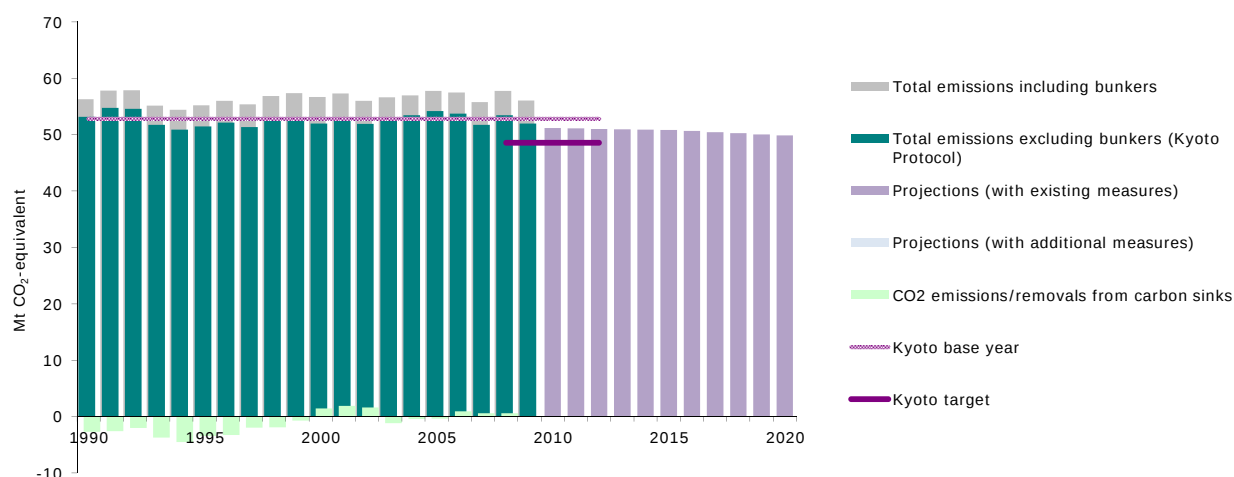
(<sup>3</sup>) Comparison of 2009 values, 1 = highest value among EU countries.

(<sup>4</sup>) International bunkers: international aviation and international maritime transport.

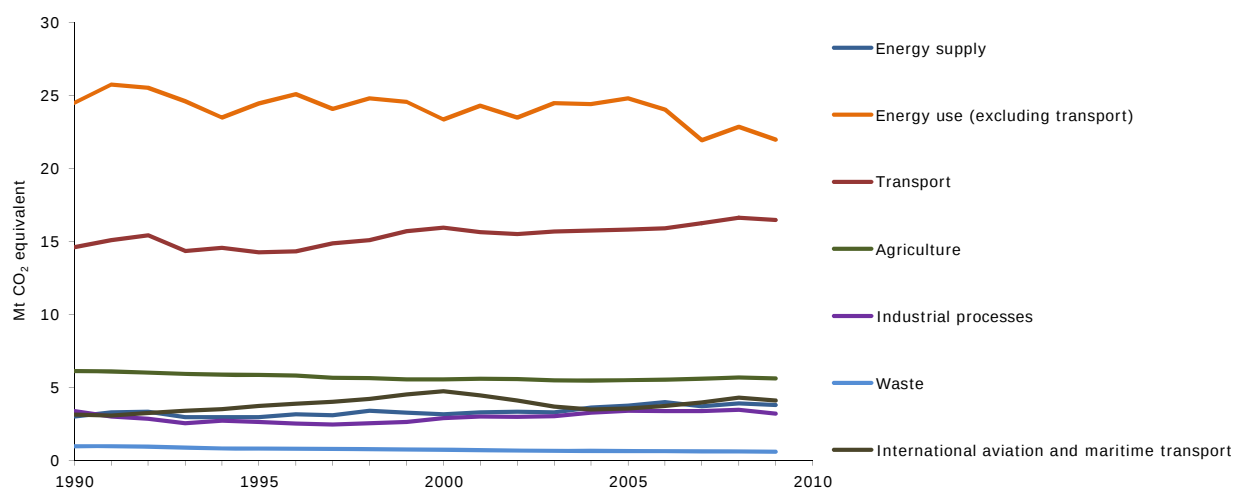
(<sup>5</sup>) GDP in constant 2000 prices - not suitable for a ranking or quantitative comparison between countries for the same year. 1990 information not available for some countries, replaced by later years: 1991 (Bulgaria, Germany, Hungary and Malta), 1992 (Slovakia), 1993 (Estonia) and 1995 (Croatia). Source GDP: Eurostat, 2011; Ameco database, 2011.

(<sup>8</sup>) 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 1990–2009 - emissions by sector

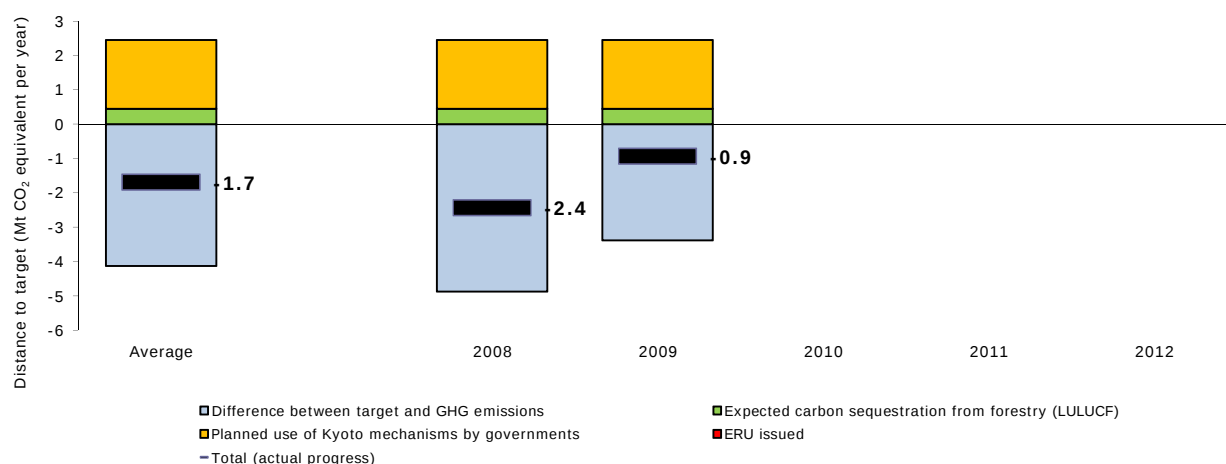


Source: National GHG inventory, 2011.

See: <http://dataservice.eea.europa.eu/PivotApp/pivot.aspx?pivotid=475>

## Progress towards Kyoto target

Average 2008–2009 emissions in Switzerland were 0.2 % lower than the base-year level, significantly above the Kyoto target of -8 % for the period 2008–2012. LULUCF activities are expected to decrease net emissions by an annual amount equivalent to 0.9 % of base-year level emissions. Switzerland intends to use the flexible mechanisms at government level by acquiring an amount of Kyoto units equivalent to 3.8 % of base-year emissions per year. Taking all these effects into account, average emissions Switzerland were standing above their target level, by a gap representing 3.2 % of the base-year emissions. Switzerland was therefore not on track towards its Kyoto target by the end of 2009. Based on these actual 2008–2009 emissions and on projections for the remaining years of the first commitment period, the Swiss government decided on 10 June 2011 to increase its use of flexible mechanisms over the full commitment period to meet its Kyoto target.



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