

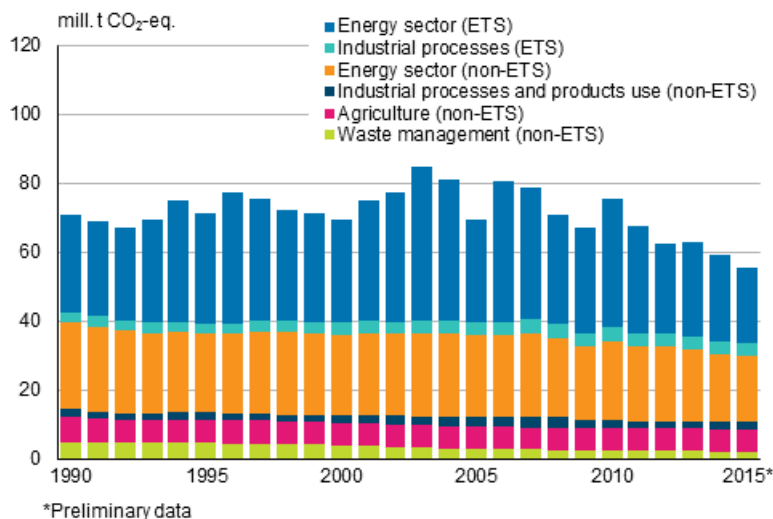
# Greenhouse gases

2015, Preliminary data

## Finland's greenhouse gas emissions continue to decrease

In 2015, Finland's greenhouse gas emissions amounted to 55.6 million tonnes of carbon dioxide (CO<sub>2</sub> eq.), being 16 million tonnes less than in the base year 1990. The trend of emissions has been falling since 2004. Compared with 2014, total emissions decreased by six per cent and emissions from the non-emissions trading sector by one per cent. Emissions from the non-emissions trading sector were below the annual emission allocations set by the EU for 2015 by 0.8 million tonnes. The data are based on the preliminary report to be submitted by Statistics Finland to the European Commission by 15 January 2017 concerning emissions in 2015.

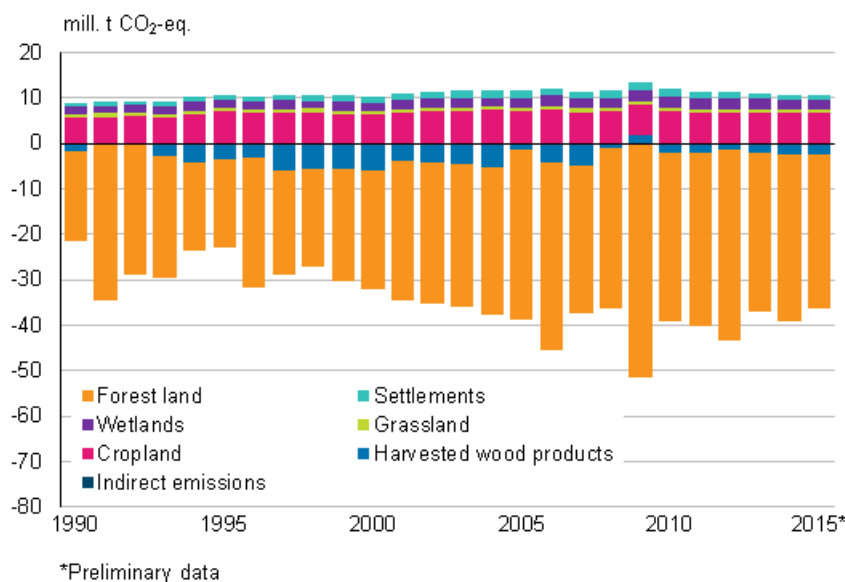
### Greenhouse gas emissions of the emissions trading sector (ETS) and the non-emissions trading sector (non-ETS) by sector in 1990 to 2015 (million tonnes of CO<sub>2</sub> eq.).



Total emissions in 2015 fell by six per cent from the previous year; emissions in the energy sector went down by eight per cent (3.7 million tonnes of CO<sub>2</sub> eq.) and in the waste sector by three per cent (0.1 million tonnes of CO<sub>2</sub> eq.), emissions from industrial processes and product use rose by two per cent (0.1 million tonnes of CO<sub>2</sub> eq.), and emissions from agriculture remained on level with the previous year. In the energy sector, the use of hard coal, natural gas and peat declined. Wood fuels remained the most significant source of energy. [Link to energy release.](#)

The removals of land use, land-use change and forestry sector (LULUCF) decreased by around eight per cent compared to the previous year and amounted to around 26 million tonnes of CO<sub>2</sub> eq. This sector is not included in total emissions.

**Greenhouse gas emissions and removals in the land use, land-use change and forestry sector (LULUCF sector) in 1990 to 2015 (million tonnes of CO<sub>2</sub> eq.) (emissions are positive and removals negative figures)**



**Greenhouse gas emissions in Finland by sector. Emissions, million tonnes of carbon dioxide. Negative figures are removals of greenhouse gases.**

	1990	1995	2000	2005	2010	2013	2014	2015 <sup>4)</sup>
Emissions without LULUCF sector <sup>1)</sup>	71.3	71.8	70.1	69.7	75.8	63.4	59.3	55.6
Energy sector	53.6	55.4	53.8	53.8	60.3	48.6	44.6	40.9
Energy industries	19.0	24.0	22.1	22.1	30.9	22.2	19.6	16.4
Manufacturing industries and construction	13.7	12.4	12.2	11.6	10.2	8.6	8.6	8.3
Transport	12.1	11.3	12.1	12.9	12.7	12.2	11.1	11.1
Other energy <sup>2)</sup>	8.8	7.6	7.3	7.1	6.4	5.6	5.4	5.1
Industrial processes and products use	5.4	4.9	5.8	6.5	6.3	6.0	5.9	6.0
Industrial processes (excl. F-gases) <sup>3)</sup>	5.3	4.8	5.2	5.6	4.8	4.4	4.2	4.5
Consumption of F-gases <sup>3)</sup>	0.1	0.1	0.6	0.9	1.5	1.6	1.7	1.6
Agriculture	7.5	6.8	6.5	6.5	6.6	6.5	6.5	6.5
Waste management	4.7	4.6	3.9	2.8	2.6	2.3	2.2	2.1
Indirect CO <sub>2</sub> emissions	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LULUCF sector	-12.7	-12.4	-21.7	-27.1	-27.3	-26.3	-28.3	-26.0

1) LULUCF refers to the land use, land-use change and forestry sector. The sector does not come under the scope of the emissions trading scheme or the reduction targets under the effort sharing decision.

2) Other energy includes sub-categories heating of buildings, other fuel use in agriculture, forestry and fisheries, working machines in the sector, other fuel use and fugitive emissions from fuels

3) F-gases refer to fluorinated greenhouse gases (HFC, PFC compounds, SF<sub>6</sub> and NF<sub>3</sub>)

4) Preliminary data

Emissions outside the non-emissions trading scheme emissions are calculated as the difference between the total emissions and verified emissions of the emissions trading sector, excluding CO2 emissions from domestic civil aviation according to the inventory. The data on the verified emissions of the emissions trading scheme sector are published by the Energy Authority. Annual emission allocations for the years 2013 to 2020 have been defined in the EU's effort sharing decision for emissions from the non-emissions trading sector. Emissions from the non-emissions trading sector are below the annual emission allocations in 2013 to 2015. More information in Finnish is available in the [Review of the release](#).

**Greenhouse gas emissions broken down between emissions trading and non-emissions trading sectors in 2005, 2008 to 2010, and 2013 to 2015 (million t CO2 eq.)**

	2005	2008	2009	2010	2013 <sup>3)</sup>	2014 <sup>3)</sup>	2015 <sup>4)</sup>	Change, 2014-2015
Emissions without LULUCF sector	69.7	71.3	67.5	75.8	63.4	59.3	55.6	-3.7
CO2 emissions from civil aviation	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.0
Emissions trading sector emissions <sup>1)</sup>	33.1	36.2	34.4	41.3	31.5	28.8	25.5	-3.3
Non-emissions trading sector emissions <sup>2)</sup>	36.3	34.8	32.9	34.2	31.7	30.3	30.0	-0.4

1) Source: Energy Authority. In 2013, emissions trading was expanded with new sectors

2) Excluding CO2 emissions from domestic civil aviation according to the inventory

3) The values differ from those used in the monitoring the commitments under the Effort Sharing Decision (ESD). The values under the ESD are based in the previous inventory submission and are not updated retroactively.

4) Preliminary data

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# Revisions in these statistics

## Revision of Finland's greenhouse gas emissions. Emissions expressed in million tonnes CO2 equivalent

	Statistical reference year	Previous release	Latest release	Change <sup>1)</sup>
		22 May 2016	7 Dec 2016	% points
Total emissions	1990	71.3	71.3	-0.1
	2005	69.5	69.7	0.2
	2008	71.3	71.3	-0.1
	2009	67.7	67.5	-0.2
	2010	75.9	75.8	-0.2
	2013	63.3	63.4	0.2
	2014	59.1	59.3	0.3
	2015	55.7 <sup>3)</sup>	55.6 <sup>4)</sup>	-0.1
Non-emissions trading sector <sup>2)</sup>	2005	36.1	36.3	0.4
	2008	34.9	34.8	-0.1
	2009	33.1	32.9	-0.5
	2010	34.4	34.2	-0.4
	2013	31.6	31.7	0.5
	2014	30.1	30.3	0.6
	2015	30.0 <sup>3)</sup>	30.0 <sup>4)</sup>	-0.1

1) Change between latest and previous release

2) Excluding CO2 emissions from domestic civil aviation

3) Proxy estimate

4) Preliminary data

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Source: Greenhouse gas inventory unit, Statistics Finland