

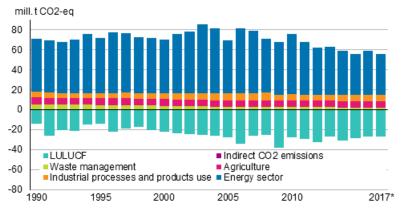
## Greenhouse gases

2017, instant preliminary data

# Greenhouse gas emissions decreased, the emission allocation was still exceeded

According to Statistics Finland's instant preliminary data, the total emissions of greenhouse gases in 2017 corresponded with 56.1 million tonnes of carbon dioxide (CO2 eq.). Emissions fell by almost five per cent compared with the previous year and were on level with 2015. The fall in emissions was most influenced by the decreased consumption of the main fossil fuels and the increased share of biofuels in traffic. Emissions outside the EU emissions trading system went down by two per cent from 2016, but they exceeded the emission allocation set by the EU for the second time.

## Finland's greenhouse gas emissions by sector (emissions are positive and removals negative figures)



LULUCF refers to the land use, land use change and forestry sector \*Proxy estimate

Statistics Finland releases instant preliminary data on greenhouse gas emissions of the previous year by sector and broken down between emissions trading sources and non-emissions trading sectors. More information on greenhouse gas emissions, their development and factors affecting the development, as well as the fulfilment of international obligations can be found in Statistics Finland's report <u>Finland's greenhouse gas emissions in 1990 to 2017</u> (only in Finnish).

According to the instant preliminary data, total emissions in 2017 decreased by nearly five per cent compared with the previous year. Emissions in the energy sector diminished by six per cent and the fall in emissions was influenced most by the lower consumption of the main fossil fuels and the increased share of biofuels in traffic. Emissions from industrial processes and product use fell by one per cent, emissions from agriculture by half a per cent and emissions in the waste sector by six per cent from 2016 to 2017. According to the instant preliminary data, the carbon sink of the LULUCF sector was in 2017 equal to 2016, being around 27.1 million tonnes CO2 equivalent. Emissions and removals in this sector are not included in total emissions.

Emissions outside the EU emissions trading system are calculated as the difference between the total emissions and verified emissions of the emissions trading sector, excluding CO2 emissions from domestic civil aviation as reported in the greenhouse gas inventory. The data on the verified emissions of the emissions trading 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 outside emissions trading sector. The emissions in question were below the target path defined by the annual emission allocations in 2013 to 2015. The 2016 emissions exceeded the target path as did the emissions according to the instant preliminary data for the year 2017. Emission allocations not used for 2013 to 2015 can be used to compensate for the emissions in 2016 and 2017 that exceed the target path. More information in Finnish is available in the Review of the release.

## Greenhouse gas emissions and removals by sector broken down between emissions trading sources and non-emissions trading sectors in 2005, 2010 and 2015 to 2017 (million t CO2 eq.)

	2005	2010	2015	2016	2017 1)	Change, 2016-2017
	million t CO2 eq.					
Emissions without LULUCF sector <sup>2)</sup>	69.8	75.5	55.4	58.8	56.1	-2.7
CO2 emissions from civil aviation	0.3	0.2	0.2	0.2	0.2	0.0
Emissions trading sector emissions <sup>3)</sup>	33.1	41.3	25.5	27.2	25.1	-2.1
Energy sector	29.6	37.3	21.7	23.1	20.9	-2.2
Industrial processes	3.6	4.0	3.9	4.2	4.3	0.1
Difference between the emissions trading registry and the inventory <sup>4)</sup>	0.0	0.0	-0.1	0.0		
Non- emissions trading sector emissions <sup>5)</sup>	36.4	34.0	29.7	31.4	30.8	-0.6
Energy sector	23.8	22.6	19.0	20.9	20.5	-0.3
Transport <sup>5)</sup>	12.6	12.5	10.9	12.4	11.6	-0.8
Energy, other than transport	11.2	10.1	8.1	8.4	8.9	0.5
Industrial processes and products use	3.1	2.1	2.0	1.9	1.8	-0.1
Industrial processes (excl. F-gases) <sup>6)</sup>	2.0	0.7	0.5	0.5	0.4	-0.1
Consumption of F-gases <sup>6)</sup>	1.1	1.4	1.5	1.4	1.4	0.0
Agriculture	6.5	6.6	6.5	6.5	6.5	0.0
Waste management	2.8	2.6	2.1	2.0	1.9	-0.1
Indirect CO2 emissions	0.1	0.1	0.1	0.1	0.1	0.0
Difference between the emissions trading registry an the inventory <sup>4)</sup>	0.0	0.0	0.1	0.0		
LULUCF sector <sup>2)</sup>	-27.7	-27.5	-28.8	-27.1	-27.1	0.0

<sup>1)</sup> Proxy estimate

The calculation of instant preliminary emissions and removals is carried out at a less detailed level than the actual inventory calculation for 2017. The emissions become revised as all data used in the calculation are completed. Preliminary data of the statistics on greenhouse gases will be released in December 2018 and official data in March 2019.

<sup>2)</sup> 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

<sup>3)</sup> Source: Energy Authority. In 2013, emissions trading was expanded with new sectors

<sup>4)</sup> The divergence caused by the methodological and definitional differences in total emissions in the emissions trading sector between the data of the Energy Authority and the Greenhouse Gas Inventory

<sup>5)</sup> Excluding CO2 emission from domestic civil aviation according to the inventory

<sup>6)</sup> F-gases refer to fluorinated greenhouse gases (HFC, PFC compounds, SF6 and NF3)

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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>
		27 March 2018	24 May 2018	%
Total emissions (without LULUCF sector)	1990	71.3	71.3	0.0
	2005	69.8	69.8	0.0
	2010	75.5	75.5	0.0
	2013	63.1	63.1	0.0
	2014	58.9	58.9	0.0
	2015	55.4	55.4	0.0
	2016	58.8	58.8	0.0
	2017		56.1 <sup>2)</sup>	
LULUCF sector	1990	-14.0	-14.0	0.0
	2005	-27.7	-27.7	0.0
	2010	-27.5	-27.5	0.0
	2013	-27.3	-27.3	0.0
	2014	-30.9	-30.9	0.0
	2015	-28.8	-28.8	0.0
	2016	-27.1	-27.1	0.0
	2017		-27.1 <sup>2)</sup>	
Non-emissions trading sector <sup>3)</sup>	2013	31.4	31.4	0.0
	2014	30.0	30.0	0.0
	2015	29.7	29.7	0.0
	2016	31.4	31.4	0.0
	2017		30.8 <sup>2)</sup>	

<sup>1)</sup> Change between the latest and previous releases.

<sup>2)</sup> Proxy estimate

<sup>3)</sup> Excluding CO2 emissions from domestic civil aviation



Suomen virallinen tilasto Finlands officiella statistik Official Statistics of Finland

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Source: Greenhouse gas inventory unit. Statistics Finland