

Energy supply and consumption

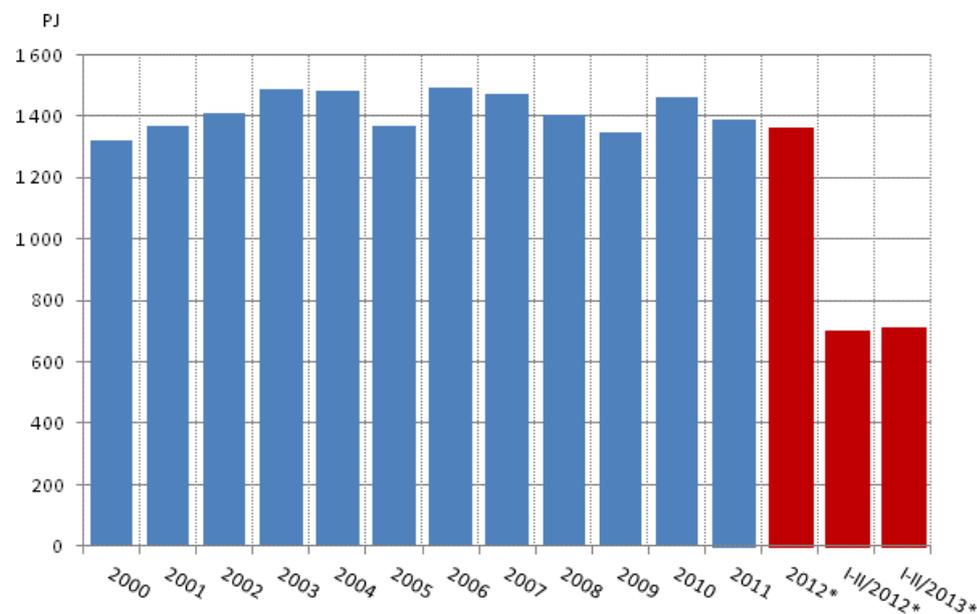
2013, 2nd quarter

More energy produced with wood fuels than before

Corrected on 23 September 2013. The correction is indicated in red. Was previously 33.3.

According to Statistics Finland's preliminary data, total energy consumption in the first half of 2013 amounted to around 710 petajoule (PJ), which is one per cent more than one year earlier in 2012. Consumption of electricity amounted to 43.4 terawatt hours (TWh), which is almost at the same level as one year before. Net imports of electricity went down by around 1.8 TWh, or by about 21 per cent. Imported electricity was replaced with domestic production, but mainly with imported fuels. Consumption of coal went up by 24 per cent (17 PJ) and separate production of electricity with hard coal grew by over 80 per cent. The consumption of peat fell by 33 per cent. Carbon dioxide emissions decreased by four per cent from the corresponding period last year.

Total energy consumption



*preliminary

Consumption of coal increased most and that of wood fuels second most. According to preliminary data, consumption of wood increased by over seven per cent. Wood fuels were used more than before in heating and it covered over one-quarter of Finland's total energy consumption. The consumption of nuclear energy grew by 3.5 PJ, or some three per cent. Among individual energy sources, the largest reduction of 33 per cent was seen in the consumption of peat (14.6 PJ). Consumption of natural gas decreased by three per cent (1.9 PJ), and the decrease in hydro power in absolute numbers was the same. The consumption of hydro power decreased by seven per cent (1.9 PJ).

Domestic production of electricity increased by five per cent. Around 18 per cent of the electricity consumed in Finland was covered with imported electricity. Imports of electricity from Russia made an upturn after the decrease in imports seen last year. Five per cent more electricity was imported from Russia in the first half of the year. The production of condensate power went up by over 80 per cent. Combined heat and power production remained on the same level as last year. Combined heat and power production increased by four per cent in industry's combined power plants, but decreased by four per cent in district heating plants. The production of electricity by wind power in Finland during the first half of the year only amounted to 0.3 PJ, which was 22 per cent more than one year earlier.

Diverse energy products were imported into Finland to the value of EUR 6.6 billion in the first half of 2013, which was one per cent more than one year ago. Most energy products were imported from Russia, to the value of EUR 4.5 billion. Correspondingly, energy products were exported from Finland to the value of EUR 3.3 billion, which was seven per cent more than one year previously. Most energy products were exported from Finland to Sweden. Growth was due to livelier exports and imports of medium distillates and petrol. In June, stocks of coal amounted to some 20 TWh, which was 27 per cent less than one year earlier. Stocks of fuel peat were estimated to be around 10 TWh, which was 34 per cent more than one year ago.

Total energy consumption by source (TJ) and CO2 emissions (Mt)

Energy source	I-II/2013* ⁴⁾	Annual change-%*	Percentage share of total energy consumption*
Oil	156,463	-3	22
Coal ¹⁾	86,476	24	12
Natural gas	59,662	-3	8
Nuclear energy ²⁾	124,337	3	18
Net imports of electricity ³⁾	24,434	-21	3
Hydro and wind power ³⁾	28,047	-6	4
Peat	30,010	-33	4
Wood fuels	183,696	7	26
Others	17,170	0	2
TOTAL ENERGY CONSUMPTION	710,295	1	100
Bunkers	15,833	4	.
CO2 emissions from energy sector	25	-4	.

1) Coal: includes hard coal, coke, blast furnace gas and coke oven gas.

2) Conversion of electricity generation into fuel units: Nuclear power: 10.91 TJ/GWh (33% total efficiency)

3) Conversion of electricity generation into fuel units: Hydro power, wind power and net imports of electricity: 3.6 TJ/GWh (100%)

4) *preliminary

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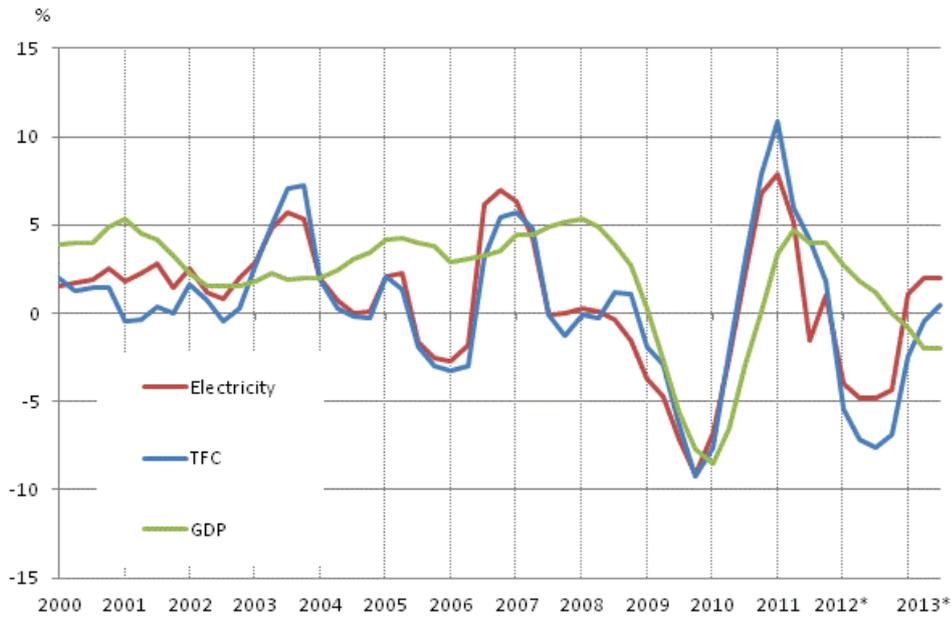
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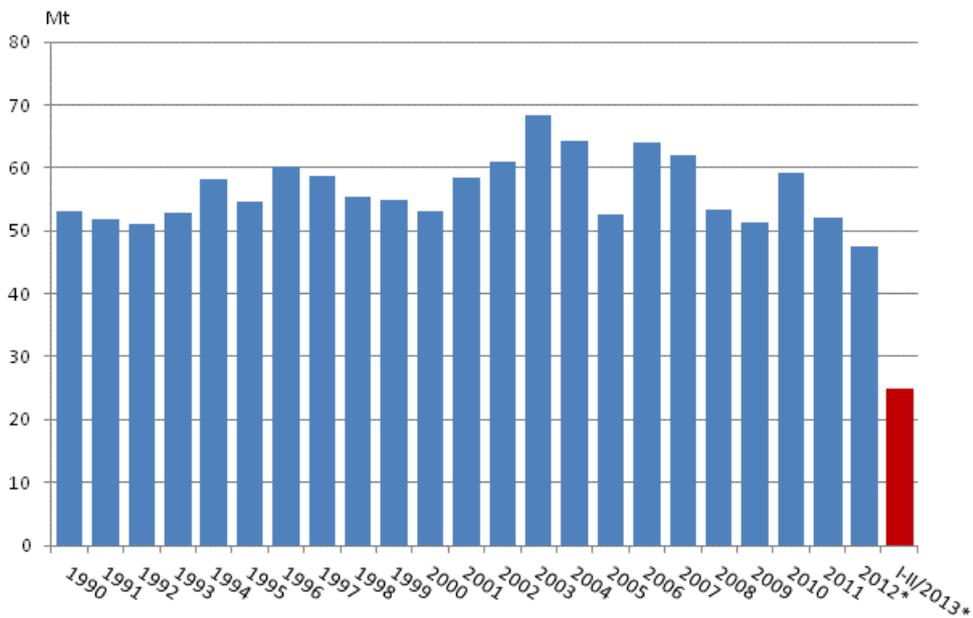
Appendix figures

Appendix figure 1. Changes in GDP, final energy consumption and electricity consumption



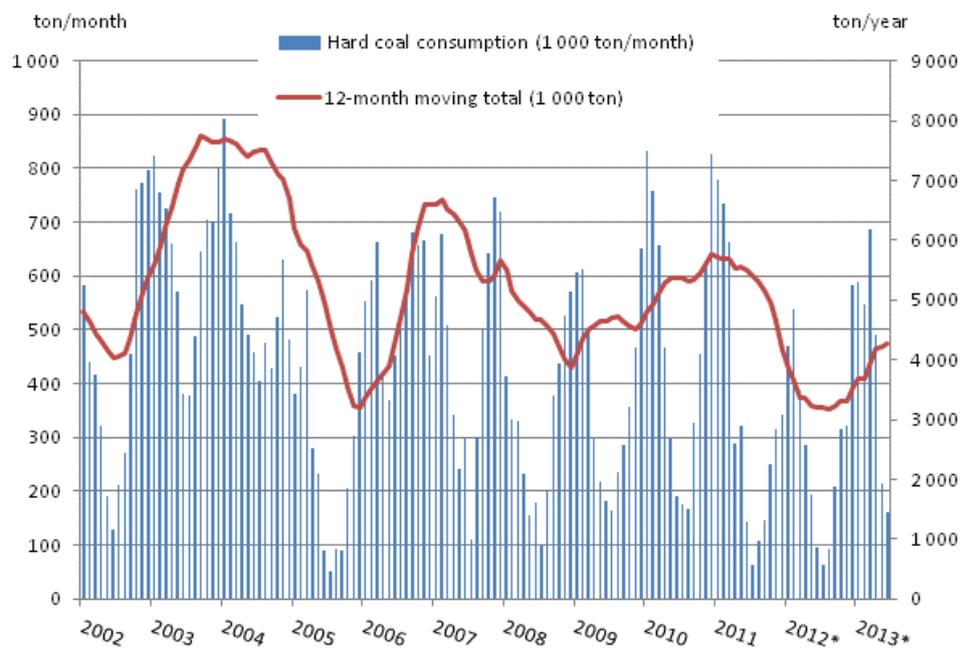
*preliminary, 12-month moving total

Appendix figure 2. Carbon dioxide emissions from fossil fuels and energy peat use



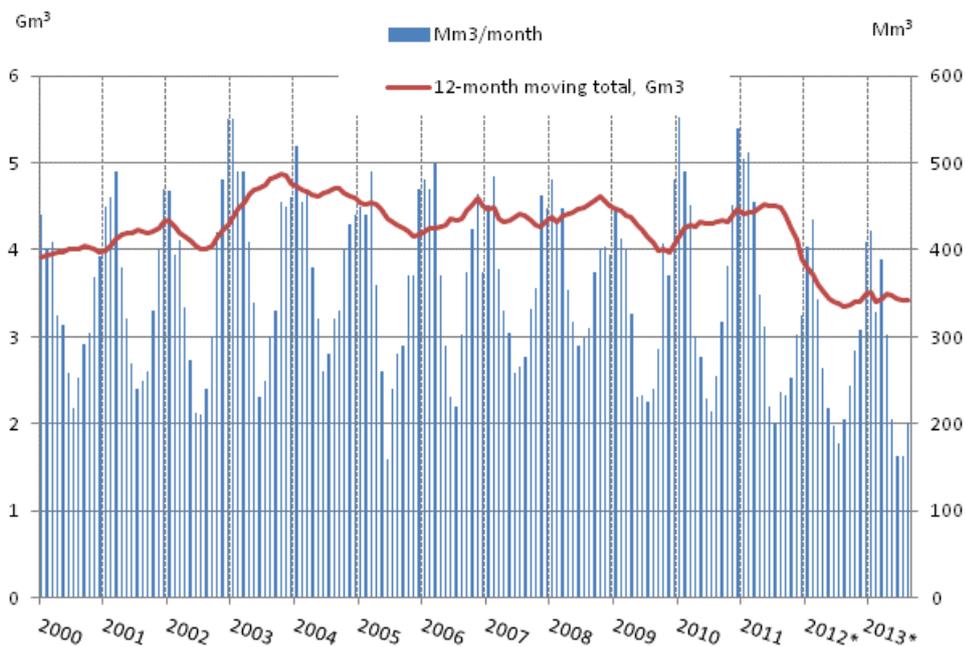
*preliminary

Appendix figure 3. Hard coal consumption



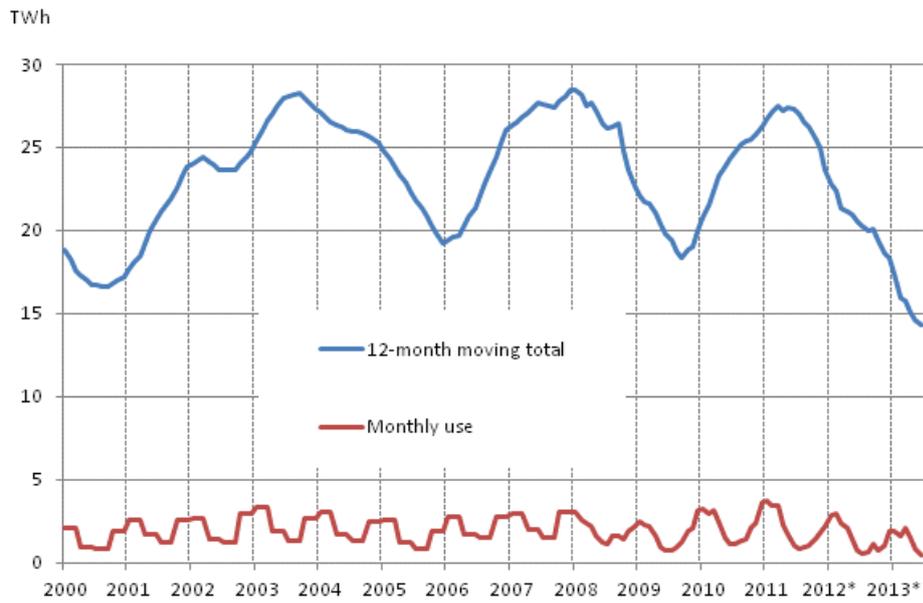
*preliminary

Appendix figure 4. Natural gas consumption



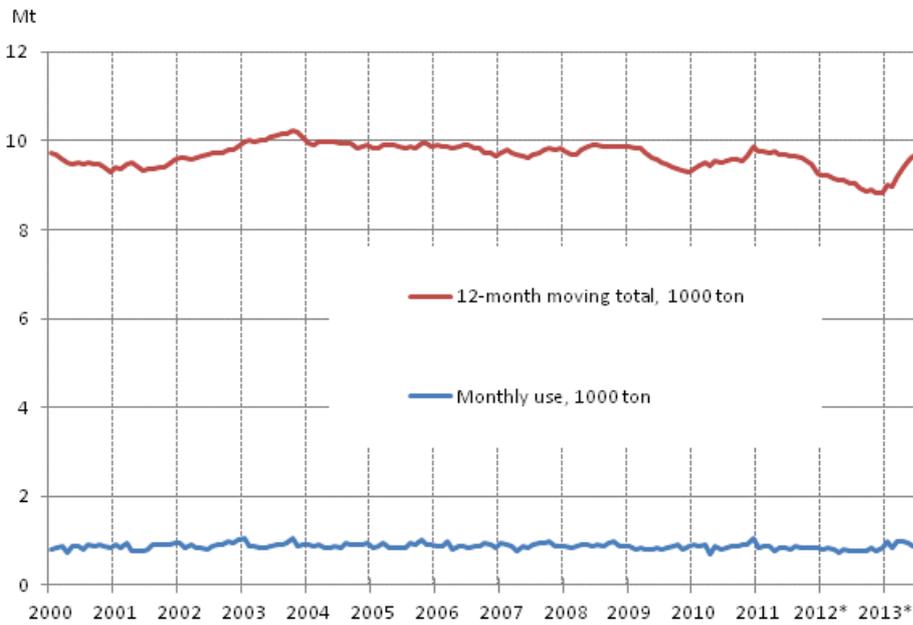
Source: Gasum, * preliminary

Appendix figure 5. Energy peat consumption



Source: The Bioenergy Association of Finland/Association of Finnish Peat Industries, *preliminary

Appendix figure 6. Domestic oil deliveries



Source: Finnish Petroleum Federation, *preliminary

Revisions in these statistics

The data of the statistics have become revised according to the table below. For more information about data revisions, see Section 3 of the quality description (only in Finnish).

Revisions to data on annual changes in total energy consumption¹⁾

Total energy consumption and quarter		Annual change (%)		Revision (%-point)
		1st release	Latest release 20.9.2013 (%)	
Total energy consumption	I-IV/2012	-2	-2	0
	I/2012	-3	-7	-4
	II/2012	-1	-1	0
	III/2012	-1	0	1
	IV/2012	1	2	1
	I/2013	-1	-1	0

1) The revisions describe the difference between the annual change percentages of the latest and first releases in percentages. The first release refers to the time when preliminary data for the statistical reference quarter in question were released for the first time.

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Source: Statistics Finland, Energy supply and consumption