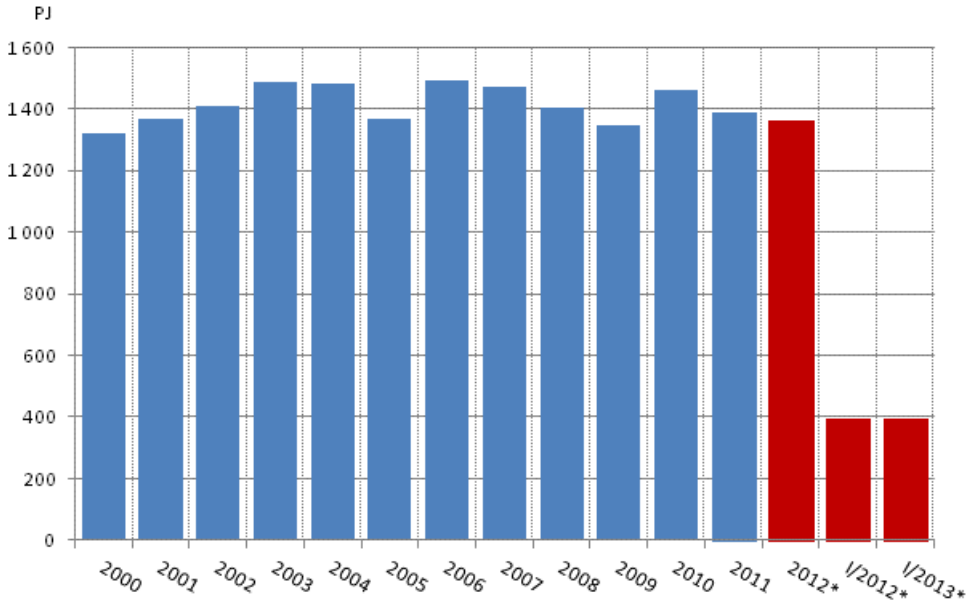
Energy supply and consumption

2013, 1st quarter

Domestic energy replaced with imported energy

According to Statistics Finland's preliminary data, total energy consumption in the first quarter of 2013 amounted to around 392 petajoule (PJ), which is one per cent lower than one year earlier in 2012. The consumption of electricity amounted to 24.6 terawatt hours (TWh), which is almost at the same level as one year before. Net imports of electricity went down by around 1 TWh, or by about 22 per cent. Imported electricity was replaced with domestic production, but mainly with imported energy. The consumption of hard coal went up by 24 per cent (11 PJ) and production of coal condensate grew by 48 per cent. The shortage of peat during the heating period was replaced with wood fuels and hard coal. The consumption of peat fell by 32 per cent. Carbon dioxide emissions were on level with the corresponding period of the year before.

Total energy consumption



*preliminary

Among individual energy sources, the largest reduction of 32 per cent was seen in the consumption of peat (9.4 PJ), while the second largest reduction of four per cent was recorded in the consumption of oil (3.3 PJ). Peat was partly replaced with wood as well as with coal. The consumption of natural gas diminished by four per cent (1.6 PJ). The consumption of nuclear energy went down by 0.7 PJ, or by around one per cent. Nearly one-quarter of Finland's total energy consumption was covered with wood fuels, which is more than consumption of oil. According to preliminary calculations, the use of wood fuels grew by three per cent. Wood fuels were used more than before in heating.

Domestic production of electricity increased by five per cent. Around 17 per cent of the electricity consumed in Finland was covered with imported electricity. Imports of electricity from Russia decreased by ten per cent in the first quarter of the year. The production of condensate power increased by 48 per cent, which was caused by worse availability of hydro power in Sweden and Norway. Combined heat and power production remained on the same level as last year. Combined heat and power production increased by eight 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 increased by 15 per cent from one year earlier.

Diverse energy products were imported into Finland to the value of EUR 3.7 billion in 2013, which was five per cent more than one year earlier. Most energy products were imported from Russia. Correspondingly, energy products were exported from Finland to the value of EUR 1.8 billion, which was 16 per cent more than one year previously. The majority of energy products were exported from Finland to OECD countries. Growth was due to livelier exports and imports of medium distillates and petrol. In March, stocks of coal amounted to some 20 TWh, which was 26 per cent less than one year earlier. Stocks of peat were nearly burnt out during the winter. At the end of April, stocks of fuel peat were estimated to be around two TWh.

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

Energy source[4)]	I/2013*	Annual change-%*	Percentage share of total energy consumption*
Oil	79,408	-4	20
Coal[1)]	56,340	24	14
Natural gas	38,559	-4	10
Nuclear Energy[2)]	65,086	-1	17
Net Imports of Electricity[3)]	13,181	-22	3
Hydro and Wind Power[3)]	14,396	4	4
Peat	20,056	-32	5
Wood fuels	96,581	3	25
Others	8,585	0	2
TOTAL ENERGY CONSUMPTION	392,192	-1	100
Bunkers	7,623	3	.
CO2 emissions from energy sector	15	0	.

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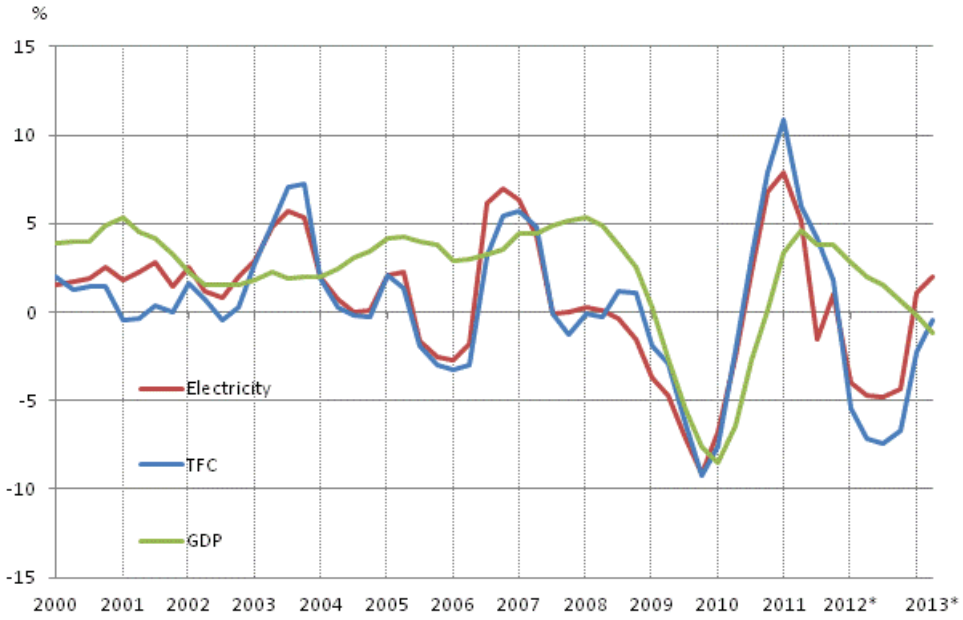
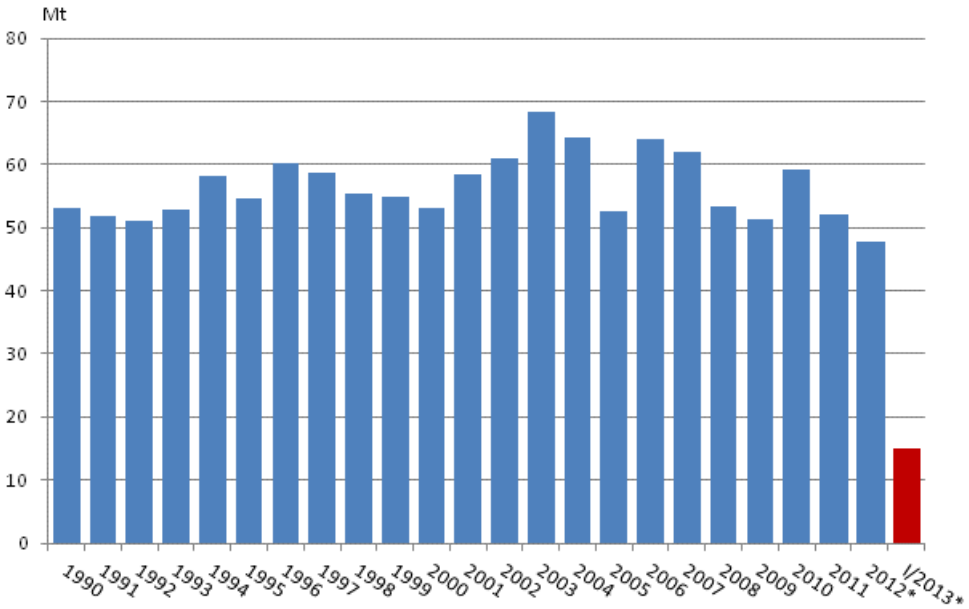
Appendix figure 1. Changes in GDP, Final energy consumption and electricity consumption



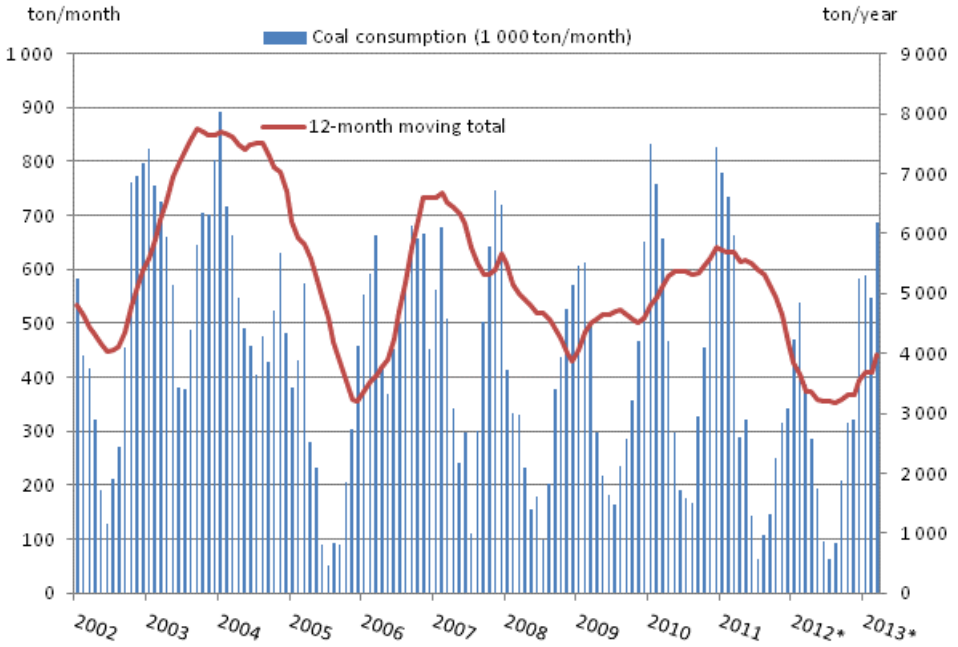
*preliminary, 12-month moving total

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



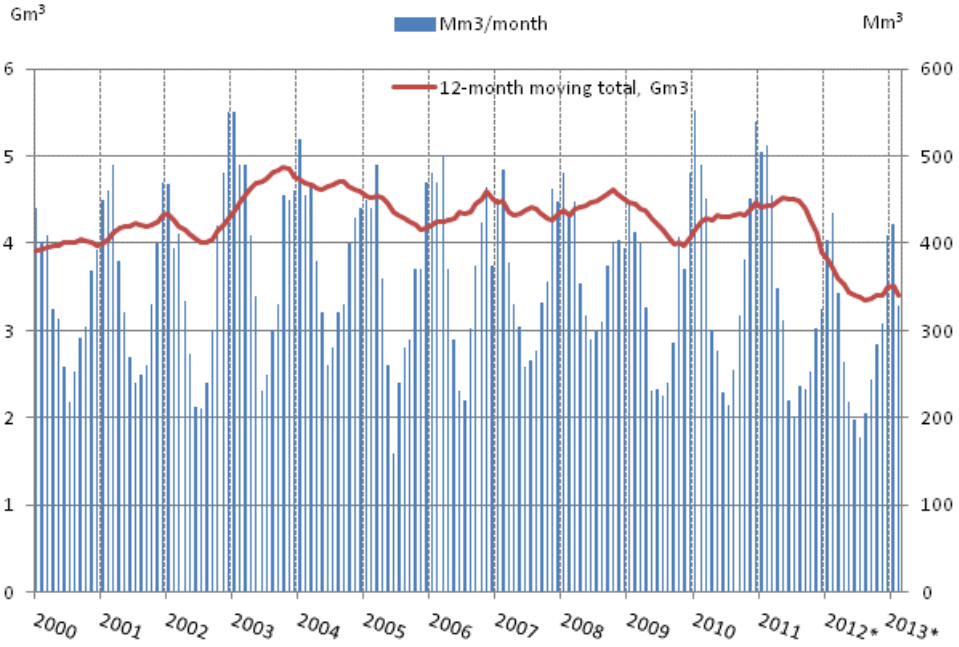
*preliminary

Appendix figure 3. Coal consumption



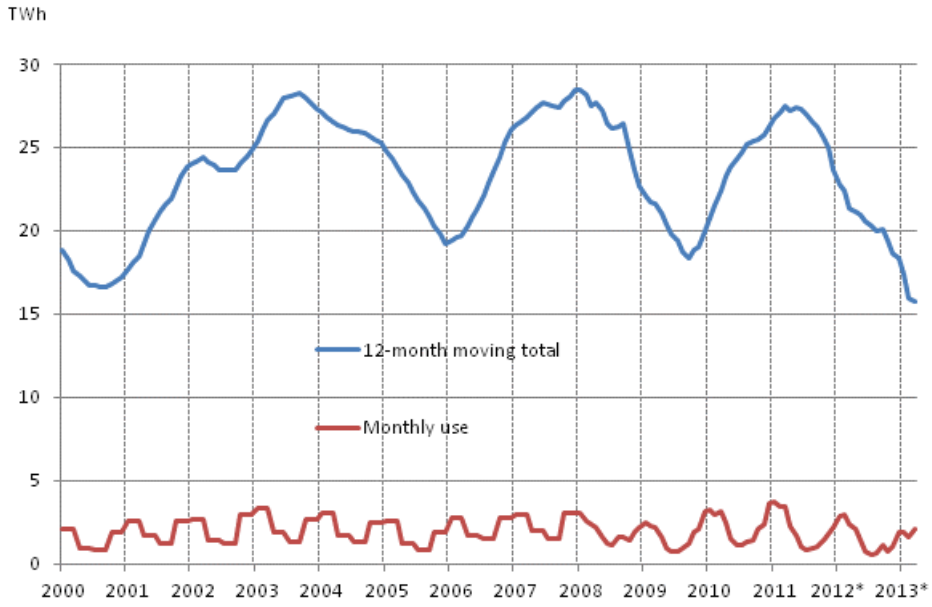
*preliminary

Appendix figure 4. Consumption of natural gas



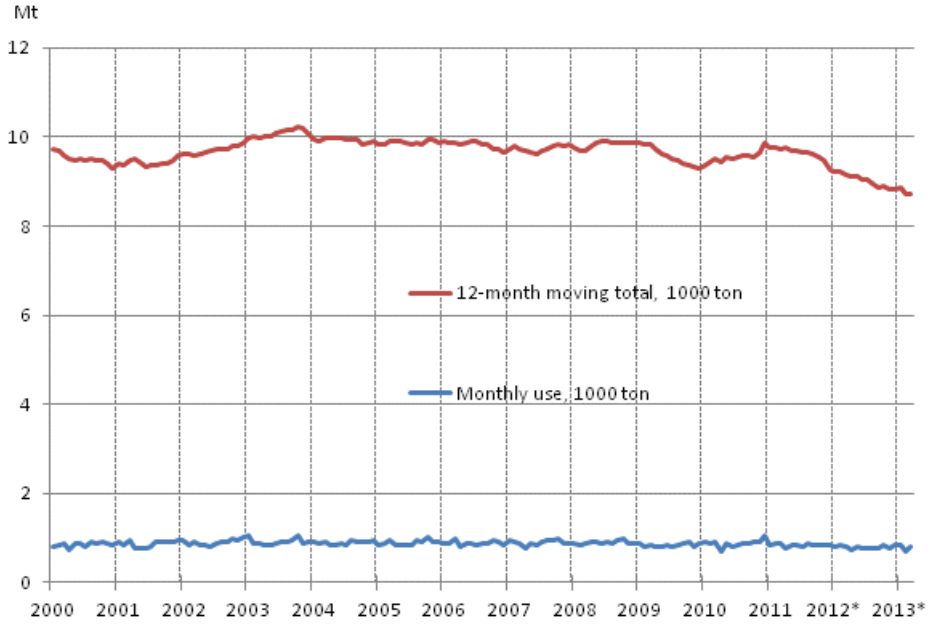
Source: Gasum, * preliminary

Appendix figure 5. 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 consumption[1)]

Total energy consumption and quarter		Annual change (%)		Revision (%-point)
		1st release	Latest release 20.6.2013 (%)	
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

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.

Statistics Finland

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Finlands officiella statistik
Official Statistics of Finland

Energy 2013

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