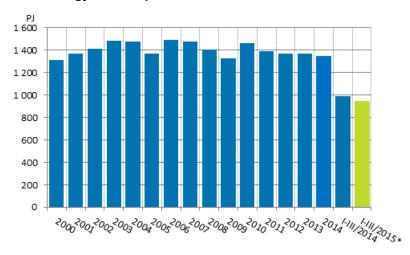
# Energy supply and consumption

2015, 3rd quarter

# Total energy consumption fell by 5 per cent in January to September

According to Statistics Finland's preliminary data, total energy consumption in January to September amounted to 944 petajoule (PJ), which was five per cent less than in the corresponding period in 2014. Electricity consumption amounted to 60 terawatt hours (TWh), or one per cent lower than one year earlier. Carbon dioxide emissions of the energy sector decreased by six per cent year-on-year.

#### **Total energy consumption**



\*preliminary

Among fuels, the consumption of coal (including hard coal, coke, and blast furnace and coke oven gas) decreased the most in January to September, by 19 per cent. The consumption of natural gas and peat both declined by 14 per cent. For wood fuels, the drop was seven per cent. The consumption of oil went up by one per cent. The decrease in the need for heating energy compared with 2014 has also decreased the consumption of fuel.

The low price of electricity on the Nordic electricity market lowered the profitability of electricity production, which, in particular, decreased burning-based electricity production. In January to September,

37 per cent less electricity was produced with condensing power than in the corresponding period last year. Electricity generated in combined heat and power production also declined by five per cent.

More electricity than one year ago was produced with renewable energy sources, hydro and wind power. Production of hydro power increased by 25 per cent due to heavy rains. Plenty of new wind farms have been built in Finland and the production of wind power increased by 107 per cent.

Net imports of electricity decreased by eight per cent in January to September from the corresponding period last year. Imports from the Nordic countries went down by six per cent. The amount of electricity imported from Russia, in turn, grew by 53 per cent due to the low level in the corresponding period in 2014. Exports to Estonia went up by 43 per cent.

In January to September, diverse energy products were imported into Finland to the value of EUR 5.9 billion, which was 37 per cent less than one year earlier. Most energy products were imported from Russia, whose share of the value of imports was 61 per cent. Energy products were exported to the value of EUR 2.7 billion, which was 42 per cent less than one year previously. The decline in exports was most significant in oil products due to a service shutdown. Most energy products were exported from Finland to EU countries, which accounted for 84 per cent of the value of exports.

At the end of September, stocks of coal amounted to 26 TWh, which was three per cent more than one year earlier. At the end of September, stocks of energy peat were estimated to be around 17 TWh, or 26 per cent more than one year earlier.

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

Energy source <sup>4)</sup>	I-III/2015*	Annual change-%*	Percentage share of total energy consumption*
Oil	231,135	1	25
Coal <sup>1)</sup>	74,563	-19	8
Natural gas	58,696	-14	6
Nuclear Energy <sup>2)</sup>	177,605	-2	19
Net Imports of Electricity <sup>3)</sup>	44,237	-8	5
Hydro power <sup>3)</sup>	45,286	25	5
Wind power <sup>3)</sup>	5,294	107	1
Peat	37,150	-14	4
Wood fuels	234,674	-7	25
Others	34,861	-8	4
TOTAL ENERGY CONSUMPTION	943,501	-5	100
Bunkers	27,686	22	
CO2 emissions from energy sector	30	-6	

<sup>1)</sup> Coal: includes hard coal, coke, blast furnace gas and coke oven gas. The consumption of natural gas does not include raw material use

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

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

<sup>4) \*</sup>Preliminary

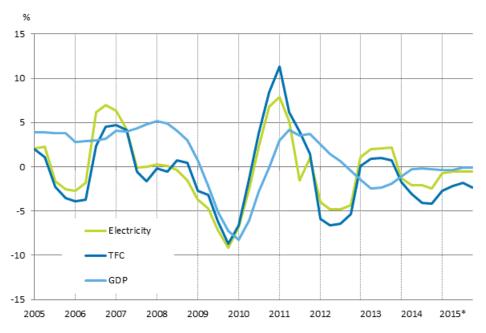
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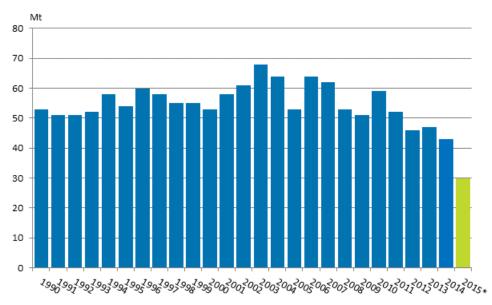
### Appendix figures

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



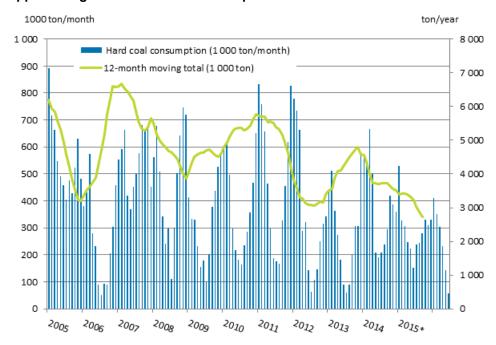
<sup>\*</sup>preliminary, 12-month moving total

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



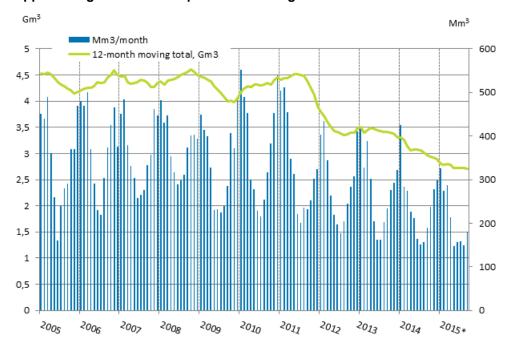
\*preliminary

### Appendix figure 3. Hard coal consumption



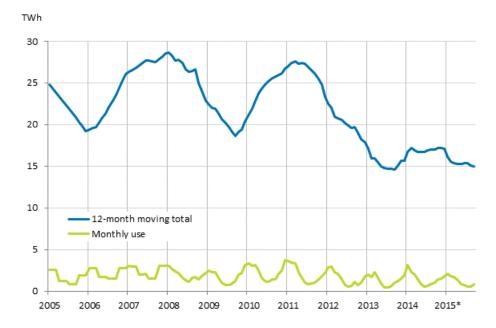
\*preliminary

### Appendix figure 4. Consumption of natural gas



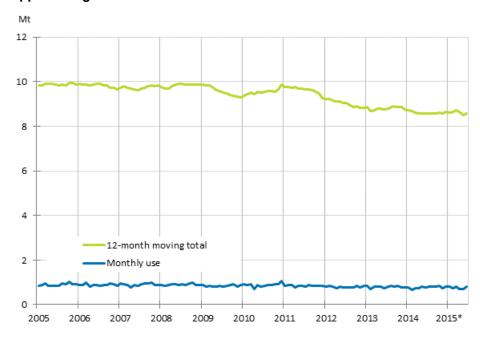
Source: Gasum, \* preliminary

### 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 and Biofuels Association, \*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 18.12.2015 (%)	
Total energy consumption	I-IV 2014	-2	-2	0
	1/2014	-5	-6	-1
	II/2014	-5	-3	2
	III/2014	2	0	-2
	IV/2014	1	1	0
	1/2015	-6	-6	0
	II/2015	-3	-3	0
	III/2015		0	

<sup>1)</sup> 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