

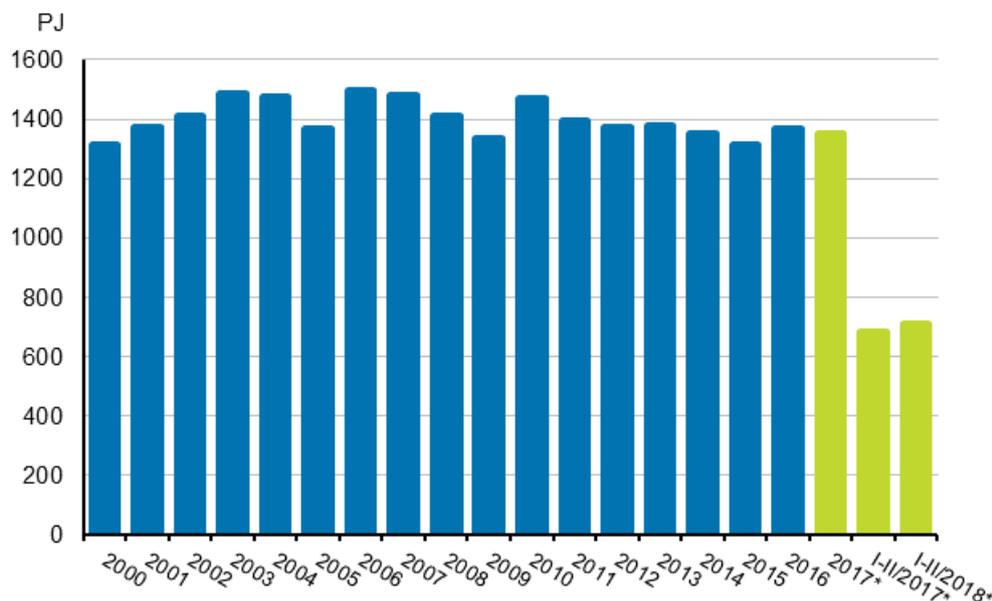
# Energy supply and consumption

2018, 2nd quarter

## Total energy consumption rose by 4 per cent in January to June

According to Statistics Finland's preliminary data, total energy consumption in January to June amounted to 709 petajoule (PJ), which was four per cent more than in the corresponding period last year. Electricity consumption amounted to 45 terawatt hours (TWh), which was four per cent more than one year earlier. Carbon dioxide emissions of the energy sector rose by eight per cent year-on-year.

### Total energy consumption



\*preliminary

The cold weather increased the consumption of fuels in the first quarter of the year. The consumption of peat grew most, by as much as 47 per cent from the year before. In turn, the consumption of fuels decreased as a result of the warm weather in the second quarter. The consumption of coal declined most, by 16 per cent from the previous year. As a whole, the consumption of fuels grew during the first half of the year

except for hard coal and wood fuels. The consumption of natural gas turned upwards for the first time in seven years.

During the first half of the year, the growth in the consumption of electricity was caused by the cold weather as well as the improved economic situation of industry. The productions of hydro, wind, solar and condensate power grew clearly from the year before. The relative growth in solar power was clearly sharper than in other production modes, but its total share still remained very small. Net imports of electricity decreased by four per cent, which was mostly due to increased exports to Estonia.

In January to June, diverse energy products were imported into Finland to the value of EUR 5 billion, which was 14 per cent more than one year earlier. Most energy products were imported from Russia, whose share of the value of imports was 63 per cent. Energy products were exported to the value of EUR 2.6 billion, which was 18 per cent more than one year previously. Most energy products were exported from Finland to EU countries, which accounted for 80 per cent of the value of exports.

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

| Energy source                            | I-II/2018*     | Annual change-%* | Percentage share of total energy consumption* |
|--|----------------|------------------|---|
| Oil <sup>1)</sup>                        | 156,537        | 3                | 22  |
| Coal <sup>2)</sup>                       | 62,893         | -3               | 9   |
| Natural gas <sup>3)</sup>                | 41,885         | 7                | 6   |
| Nuclear energy <sup>4)</sup>             | 118,003        | 2                | 17  |
| Net imports of electricity <sup>5)</sup> | 36,133         | -4               | 5   |
| Hydro power <sup>5)</sup>                | 28,756         | 17               | 4   |
| Wind power <sup>5)</sup>                 | 9,800          | 19               | 1   |
| Peat                                     | 42,122         | 32               | 6   |
| Wood fuels                               | 179,446        | -1               | 25  |
| Others <sup>6)</sup>                     | 33,801         | 16               | 5   |
| <b>TOTAL ENERGY CONSUMPTION</b>          | <b>709,377</b> | <b>4</b>         | <b>100</b>                                    |
| Bunkers                                  | 22,674         | 10               | .   |
| CO2 emissions from energy sector         | 24             | 8                | .   |

\* = Preliminary data

. = Category not applicable

1) Oil: includes the bio part of transport fuels.

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

3) The consumption of natural gas does not include raw material use.

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

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

6) Others: includes exothermic heat from industry, recovered fuels, heat pumps, hydrogen, biogas, other bioenergy and solar energy.

# Contents

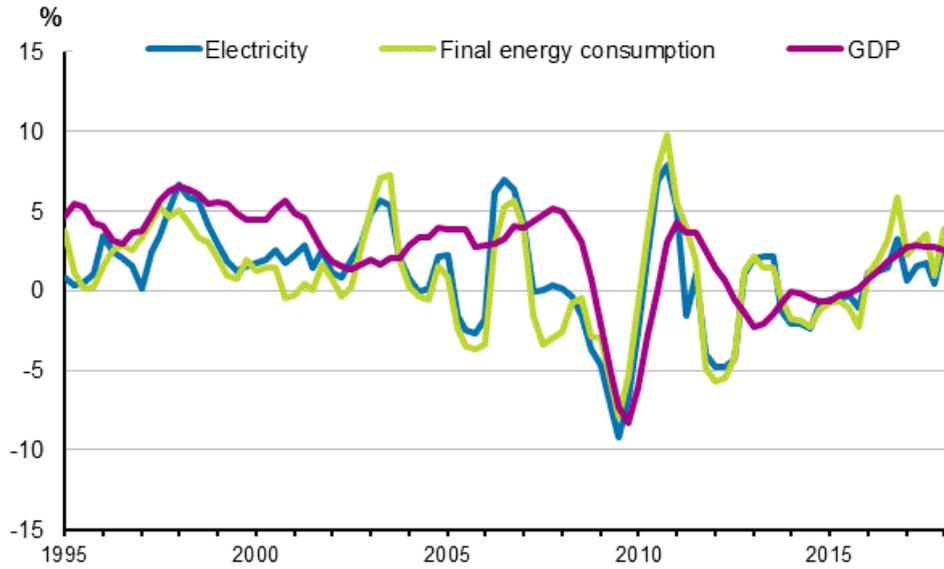
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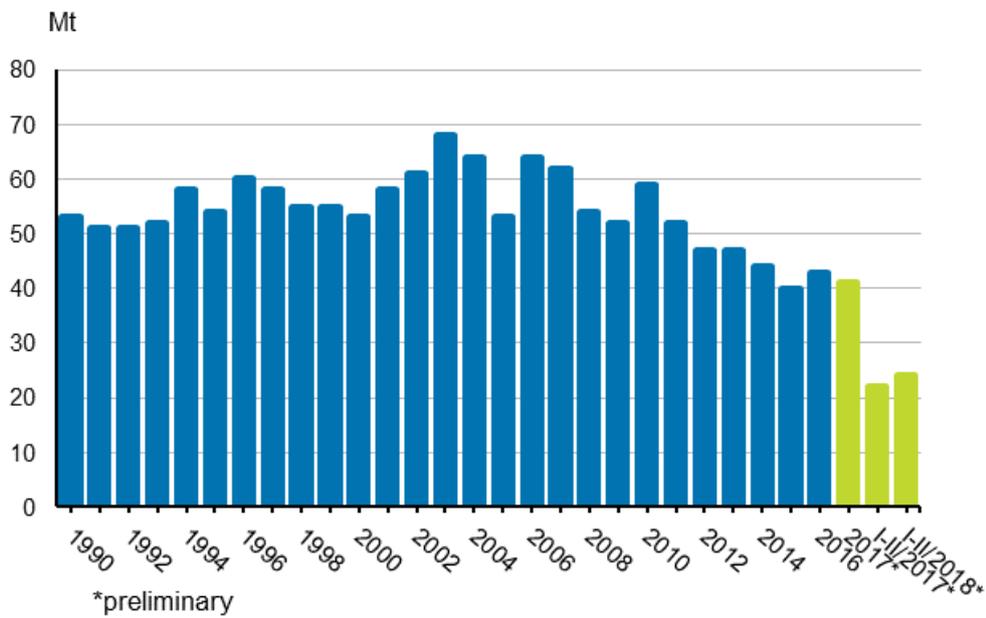
# Appendix figures

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



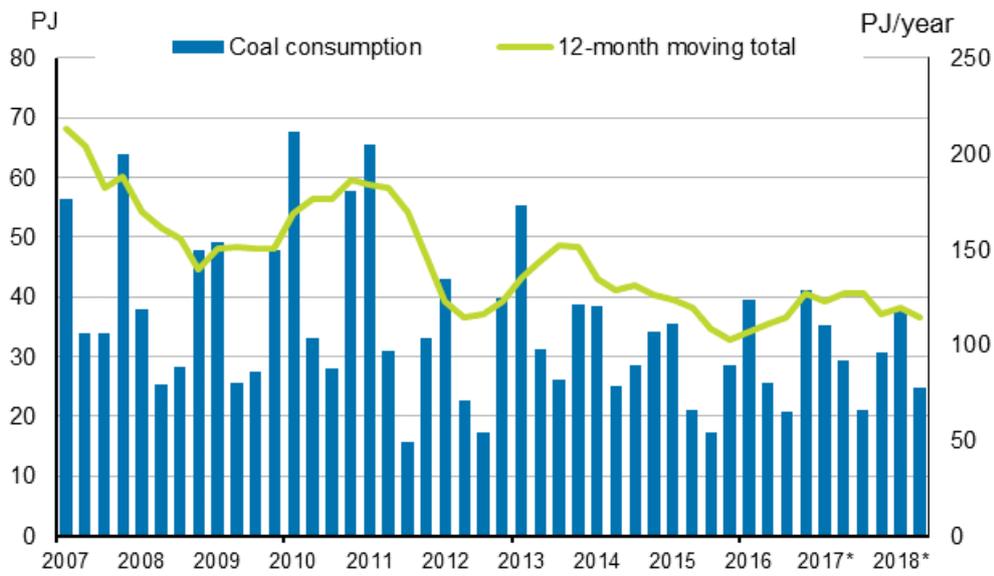
\*preliminary, 12-month moving total

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



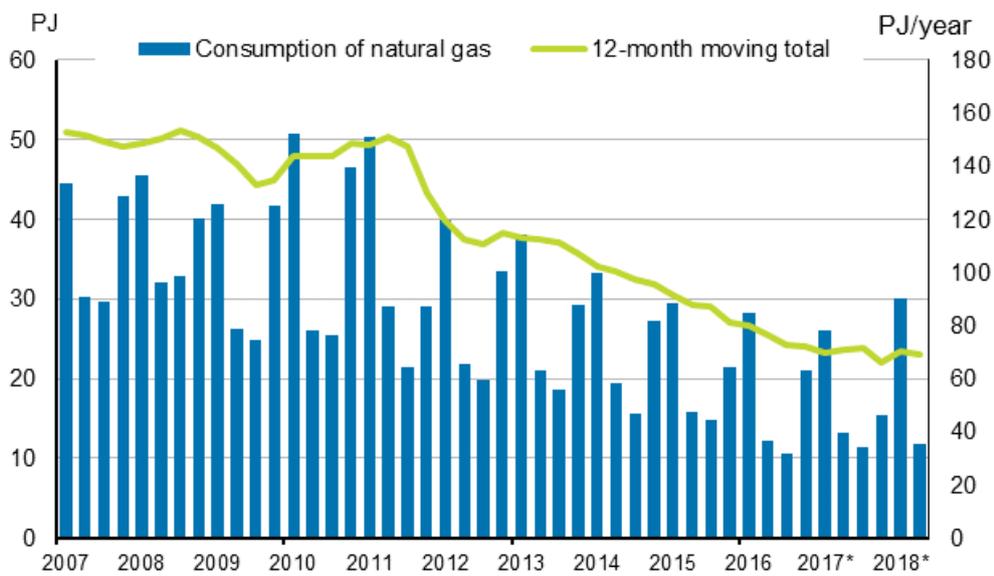
\*preliminary

**Appendix figure 3. Coal consumption**



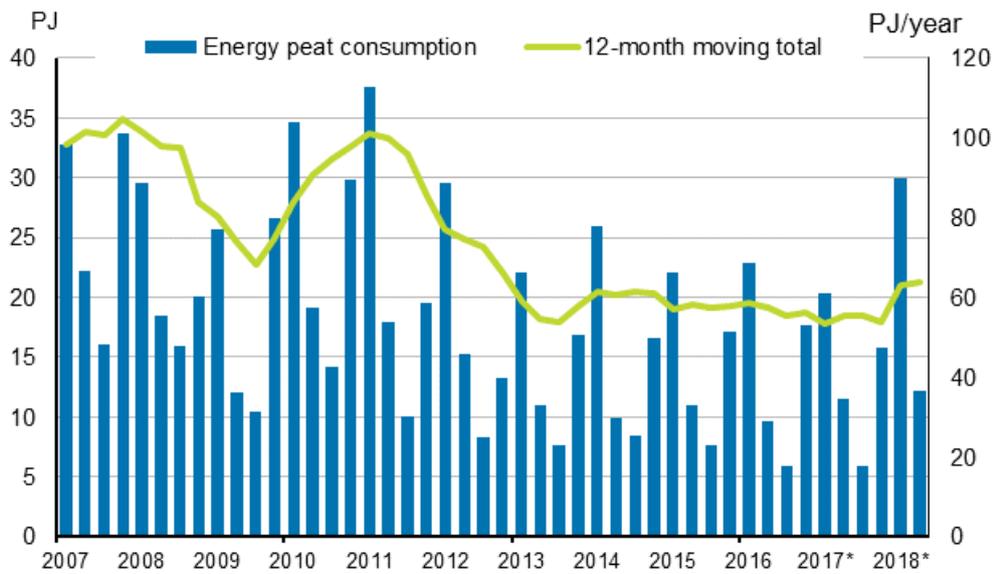
\*preliminary

**Appendix figure 4. Natural gas consumption**



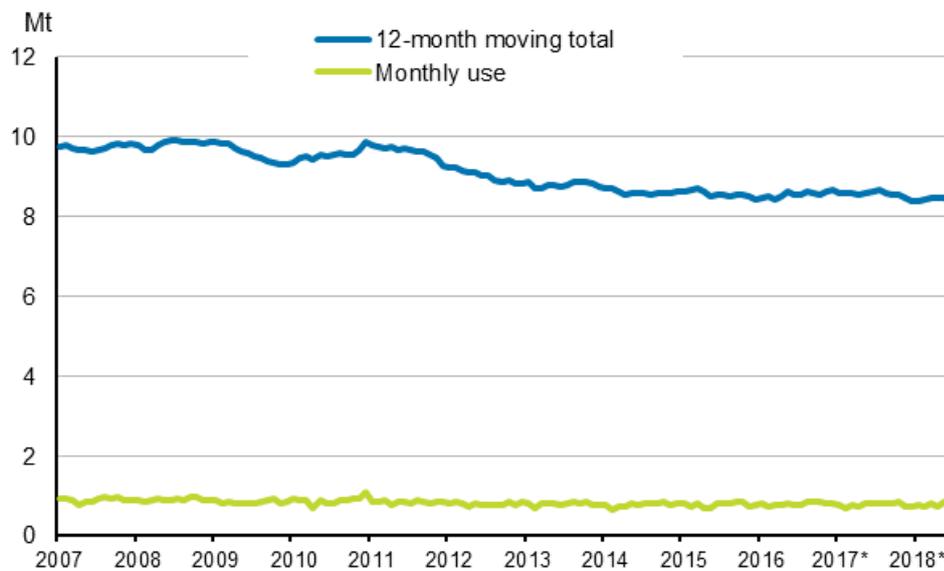
Source: Gasum, \* preliminary

**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 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<sup>1)</sup>

| Total energy consumption and quarter | Annual change (%) |  | Revision (%-point) |
|--------------------------------------|-------------------|--|--------------------|
|                                      | 1st release (%)   | Latest release 27th September 2018 (%) |                    |
| I-IV 2017                            | -1                | -1                                     | 0                  |
| I/2017                               | -4                | -6                                     | -2                 |
| II/2017                              | 5                 | 4                                      | -1                 |
| III/2017                             | 5                 | 4                                      | -1                 |
| IV/2017                              | -3                | -4                                     | -1                 |
| I/2018                               | 9                 | 9                                      | 0                  |
| II/2018                              | .                 | -3                                     | .                  |

. = Category not applicable

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