Energy use in Finland

http://motiva.fi/en/energy_in_finland/energy_use_in_finland/

Total Energy Consumption

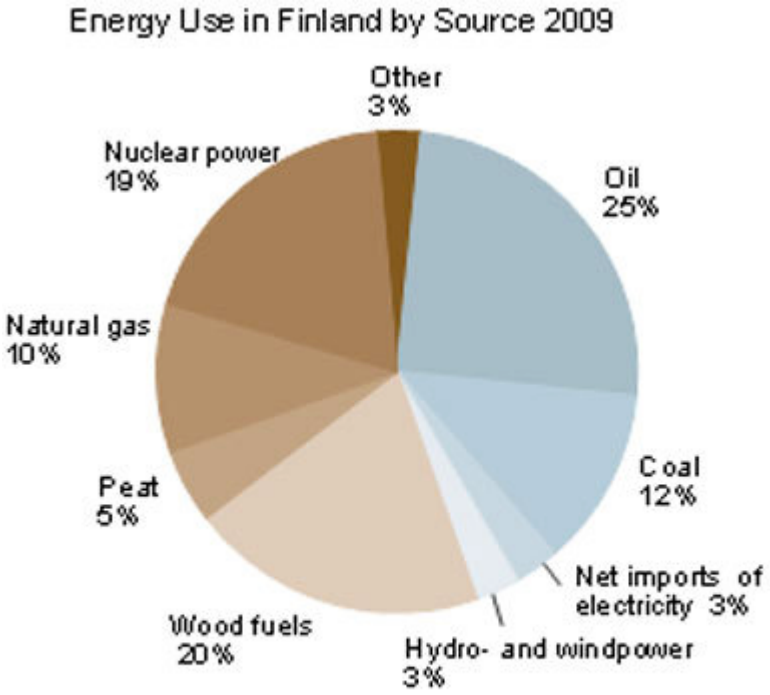
Total energy consumption in 2009 (provisional data)

- 1 330 PJ (31.8 Mtoe)
- 248.8 GJ/capita (5.94 toe/capita)

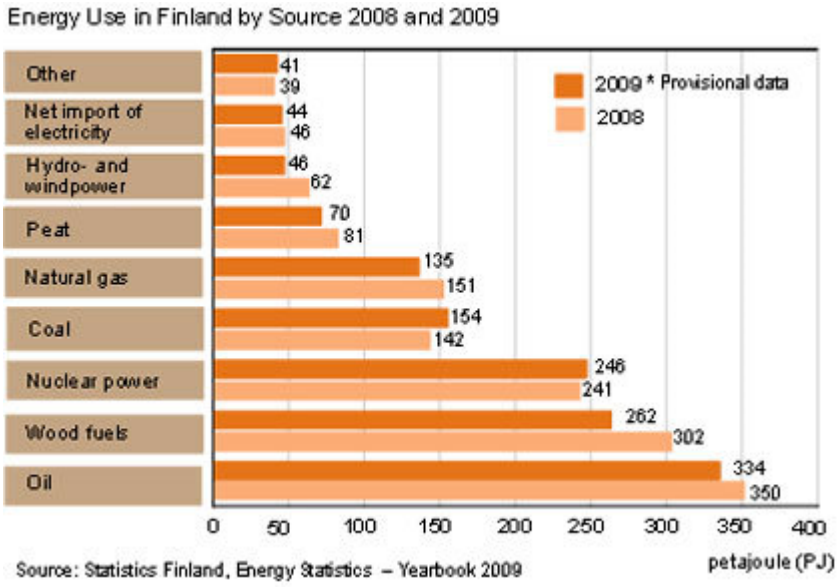
Total energy consumption in 2008

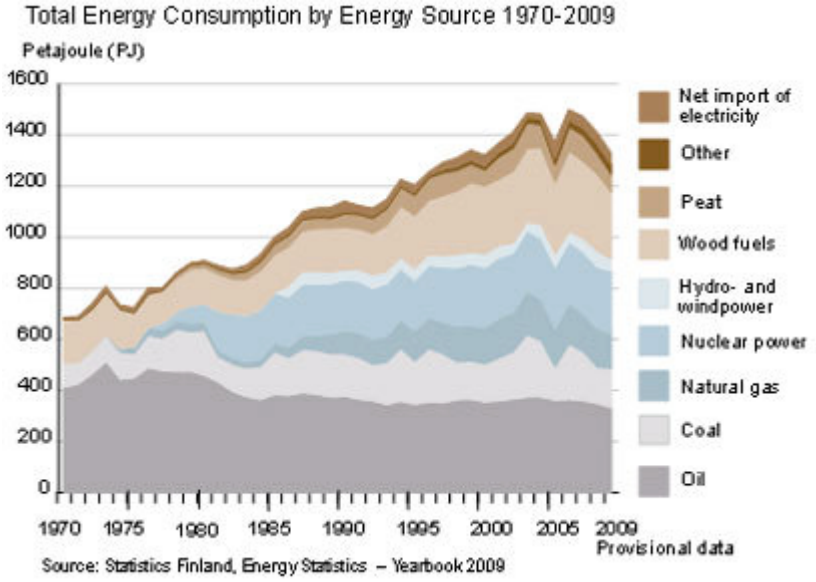
- 1 410 PJ (33.8 Mtoe)
- 265.5 GJ/capita (6.34 toe/capita)

According to Statistics Finland's preliminary data, total energy consumption was 1,330 petajoule (PJ) in 2009, which was 6 per cent less than in 2008. The economic recession lowered consumption of energy particularly in industry. Industrial production collapsed by over 20 per cent from 2008. The fall was historically steep and the volume of production fell to the level of 2000. Total energy



Source : Statistics Finland, Energy Statistics – Yearbook 2009





Final Consumption of Energy

Final consumption of energy measures the consumption of final energy products, i.e. fuels used for electricity, district heating and space heating, and transportation fuels and industrial processing fuels. The difference between total and final consumption is lost through transformation and transmission losses of energy.

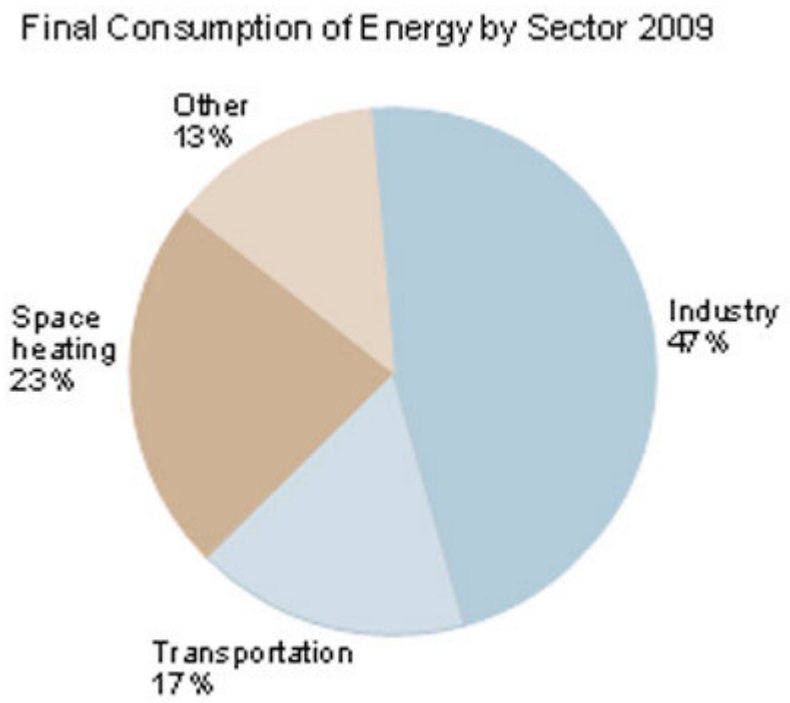
According to Statistics Finland's preliminary data, final consumption of energy declined by 1.5 per cent from the previous year.

Final consumption of energy in 2009 (provisional data)

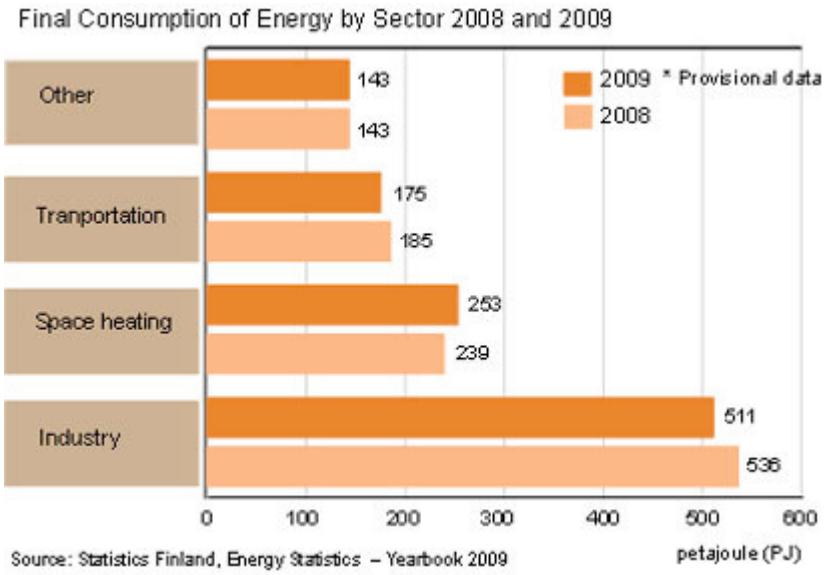
- 1 086 PJ (25.9 Mtoe)
- 202.9 GJ / capita (4.85 toe/capita)

Final consumption of energy in 2008

- 1 103 PJ (26.3 Mtoe)
- 207.0 GJ / capita (4.95 toe/capita)



Source: Statistics Finland, Energy Statistics – Yearbook 2009



Electricity Supply and Demand

Electricity Demand

Total electricity consumption in 2009 (provisional data)

- 80.8 TWh
- 15.1 MWh/capita

Total electricity consumption in 2008

- 87.2 TWh
- 16.4 MWh/capita

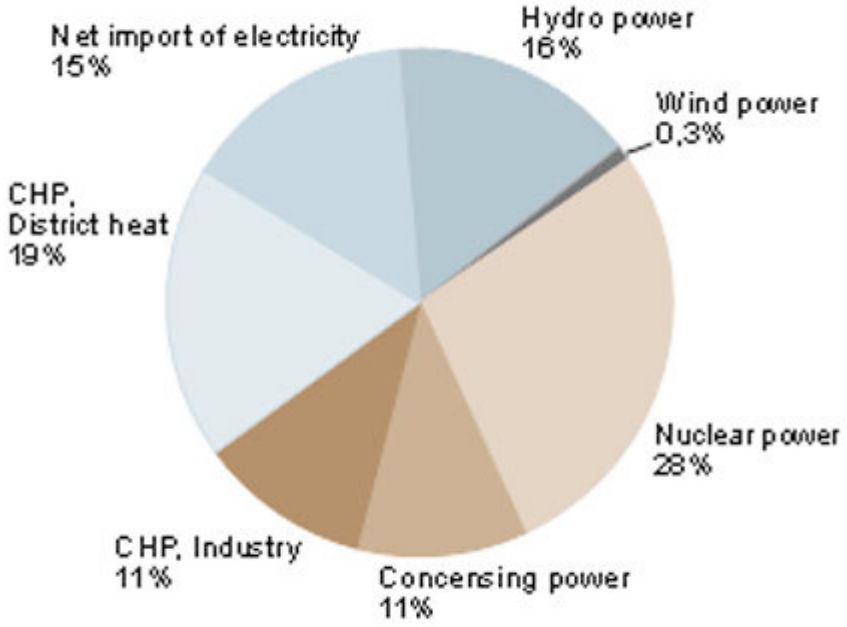
Consumption of electricity totalled 81 terawatt hours (TWh), i.e. 7.4 per cent less than in the year before. The fall in industrial output was reflected in industrial consumption of electricity which decreased exceptionally much, by 17 per cent. Electricity use of services was on level with the previous year but electricity use of households increased by 6% partly due to cold weather.

Electricity Supply

Worsened water situation from the previous year of record reduced the production of hydro power by 26 per cent. Decreased production of water power raised the use of hard coal in separate production of electricity. The lower prices of emission rights compared with the previous year also improved the competitiveness of hard coal as a fuel in heat and power production when compared with fuels with lower emission rates. Two per cent more electricity was produced with nuclear power than the year before and at the same time a record volume thus far was attained in annual production. Wind power production increased by six per cent from the year before, but was still only 0.4 per cent of electricity produced.

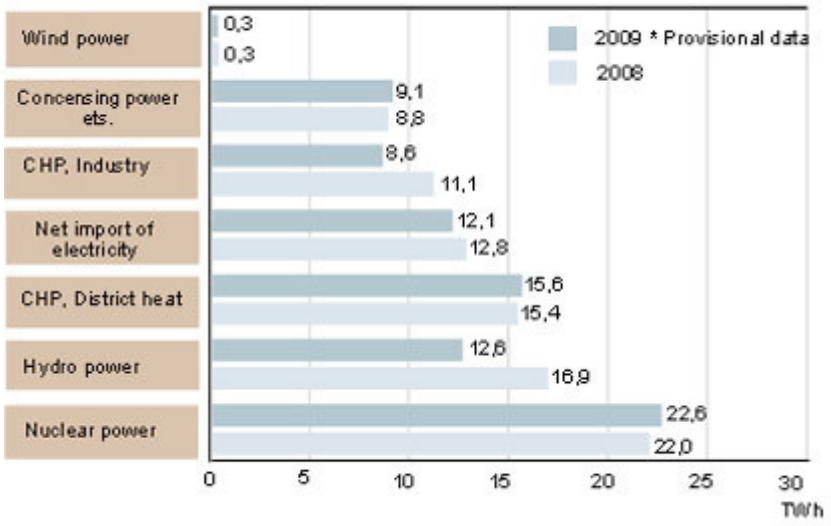
Net imports of electricity declined by five per cent. Fifteen per cent of the electricity consumed in Finland was covered with imported electricity. In the Nordic electricity markets Finland was a net seller but the volume of electricity imported from Russia hit all-time record high.

Electricity Supply 2009 TWh

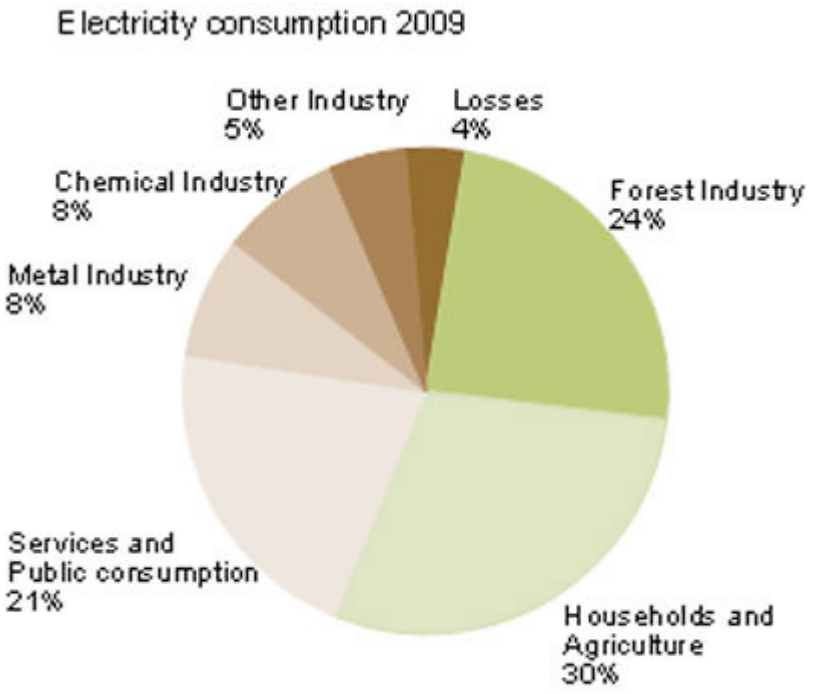


Source: Statistics Finland, Energy Statistics – Yearbook 2009

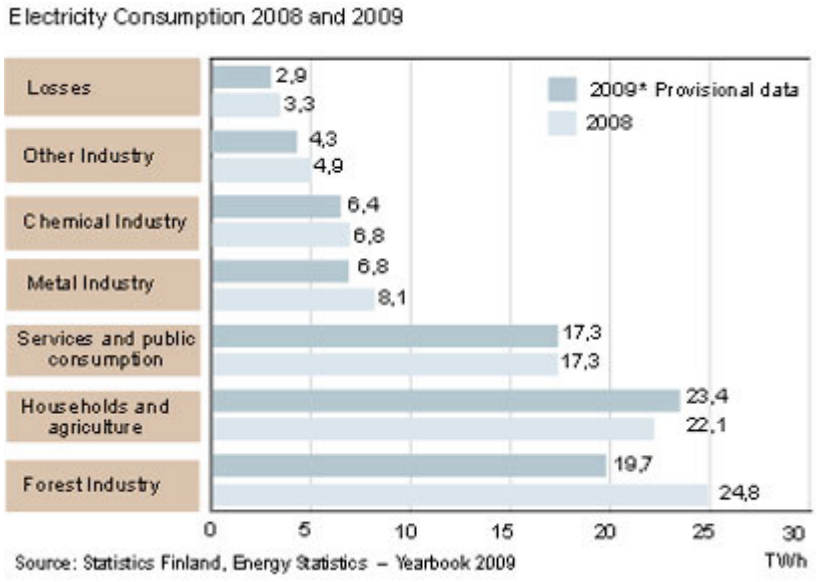
Electricity Supply 2008 and 2009

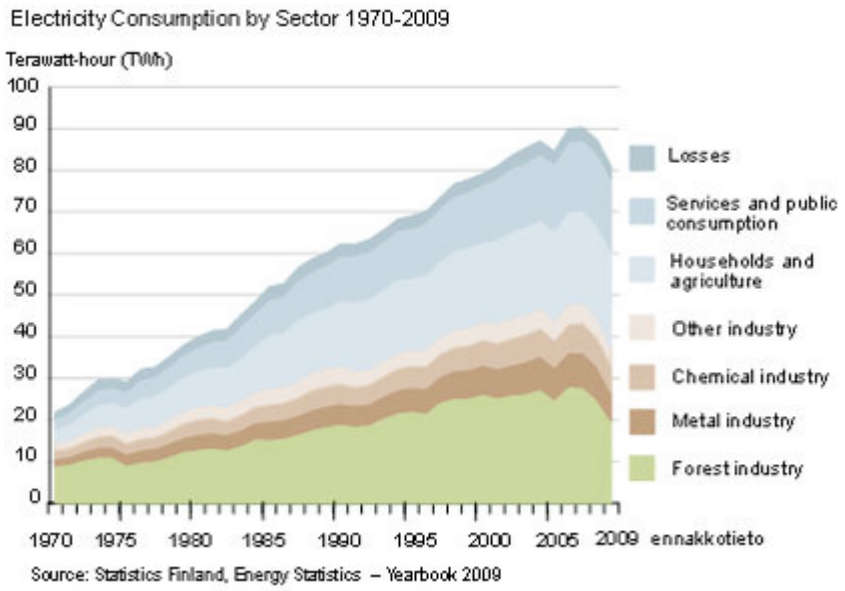


Source: Statistics Finland, Energy Statistics – Yearbook 2009



Source: Statistics Finland, Energy Statistics – Yearbook 2009





Carbon Dioxide Emissions

Carbon Dioxide Emissions from Energy Production and Use

According to Statistics Finland's preliminary data, carbon dioxide emissions of fossil fuels and peat combustion declined in Finland by 3 per cent from the previous year, amounting to 52 million tonnes in 2008. Last year, total consumption of energy was 17 per cent greater and emissions 2 per cent lower than in 1990. The proportion of renewable energy in total energy consumption has increased from 18 to 23 per cent and the proportion of fossil fuels has declined from 56 to 52 per cent.