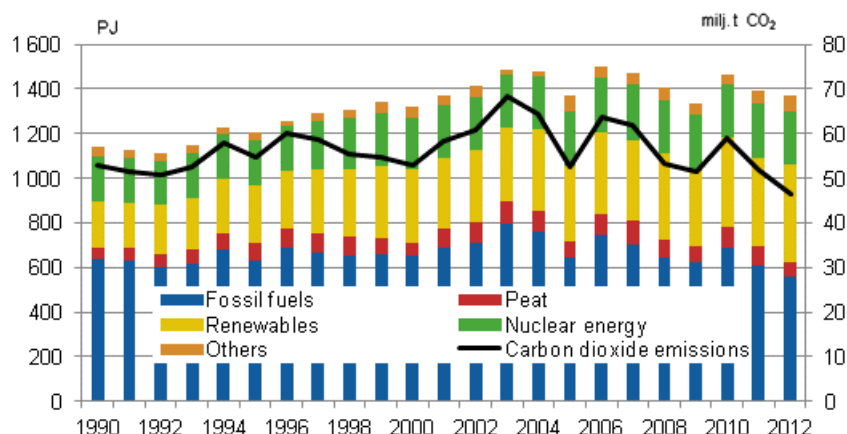


Energy supply and consumption 2012

Wood fuels became the largest source of energy in 2012

According to Statistics Finland, total consumption of energy in Finland amounted to 1.37 million terajoules (TJ) in 2012, which was one per cent less than in 2011. The consumption of electricity totalled 85.1 TWh, which was one per cent more than in the previous year. The use of renewable energy sources increased by ten per cent and that of fossil fuels decreased by eight per cent. Wood fuels rose to the most used source of energy, surpassing oil for the first time.

Total energy consumption and carbon dioxide emissions 1990–2012



The share of renewable energy of total energy consumption increased in 2012 and stood at 32 per cent. The biggest growth was seen in the use of wood fuels that for the first time became the most used source of energy. The use of forest chippings rose to a new record level in 2012 and 11 per cent more was used than in 2011. EU targets for renewable energy are calculated relative to final energy consumption and in Finland this share has been four to five percentage points higher than the share calculated from total energy consumption. Finland's target for the share of renewable energy is 38 per cent of final energy consumption in 2020.

Total energy consumption 2011–2012, terajoule

	2012	2011	Change %
Wood fuels	331 562	316 847	5
Oil	324 903	335 827	-3
Nuclear energy	240 685	242 897	-1
Coal	125 138	148 338	-16
Natural gas	115 002	130 032	-12
Peat	65 000	84 938	-23
Net imports of electricity	62 796	49 863	26
Hydro power	60 001	44 202	36
Wind power	1 780	1 733	3
Others	44 721	36 173	24
Total	1 371 586	1 390 851	-1

The use of fossil fuels went down by eight per cent from the year before. Of fossil fuels, the consumption of coal (including hard coal, coke, and blast furnace and coke oven gas) decreased by 16 per cent. The use of coal diminished significantly in separate production of condensing power. The use of natural gas fell by 12 per cent and the use of peat by 23 per cent from 2011.

The availability of hydro power improved in the Nordic countries in 2012. The production of hydro power increased by 36 per cent in Finland. The production of wind power increased by 2.7 per cent, and it still accounted for 0.7 per cent of all electricity produced. Production of nuclear power fell by one per cent from the year before. In all, 33 per cent of Finland's electricity production was covered by nuclear energy.

Imports of electricity increased by eight per cent. The largest amount of electricity was imported from Sweden, from where imports amounted to 14.2 TWh. Finland was a net buyer on the Nordic electricity market. Imports from Russia decreased by 59 per cent from 2011. Altogether, 57 per cent less electricity was exported than in the year before, which was the result of hydro power being readily available in the Nordic countries. Net imports of electricity covered 20.5 per cent of total electricity consumption.

Total electricity consumption went up by one per cent in 2012. The volume of electricity bought for heating use was boosted by the first and last parts of the year being colder than in the year before. Consumption of electricity totalled 85.1 TWh. The consumption of district heat also grew due to the colder weather than in 2011. The amount of district heating consumed totalled 35.2 TWh.

Final consumption of energy decreased by two per cent in manufacturing and by two per cent in transport. Energy consumption in space heating grew by ten per cent.

Carbon dioxide emissions from the production and use of energy decreased by some 11 per cent from 2011, to 46.4 million tonnes of carbon dioxide. Emissions of the energy sector diminished due to decreased use of fossil fuels in the production of electricity and heat. Carbon dioxide emissions in the energy sector accounted for 76 per cent of all greenhouse gas emissions in Finland in 2012.

CO₂-emissions from fuel combustion 2011–2012, million tonnes

	2012 ¹⁾	2011	Change %
CO ₂ -emissions ²⁾	46,4	51,9	-10,6

1) preliminary data

2) includes emissions from fuel combustion of fossil fuels and peat (CRF 1.A)

Link to [Statistical release on greenhouse gas emissions](#) (12 Dec. 2013)

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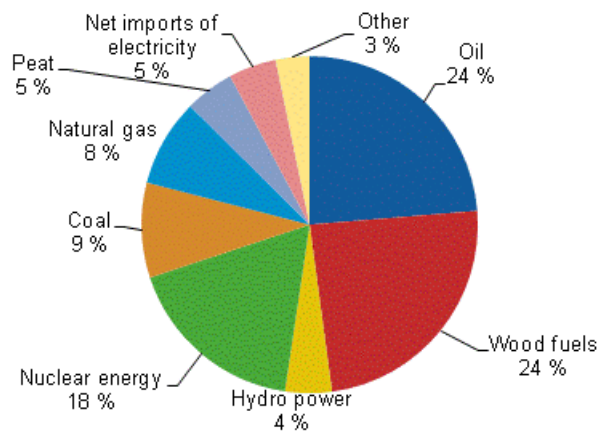
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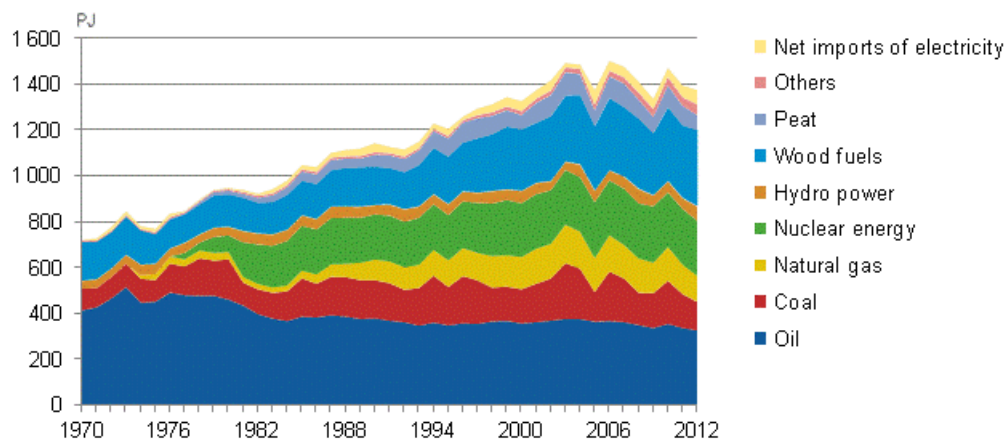
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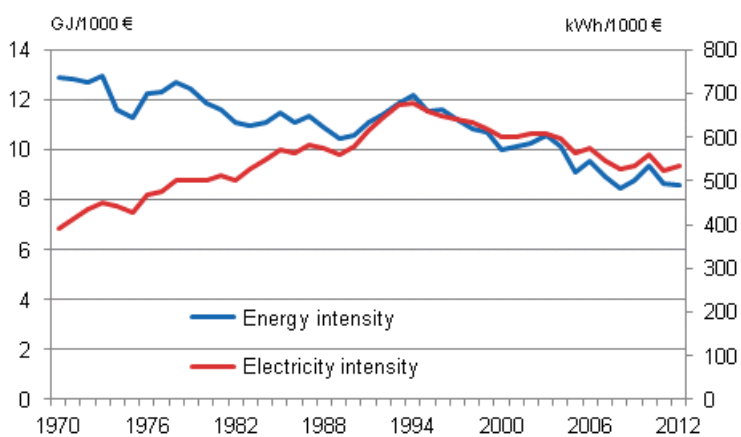
Appendix figure 1. Total energy consumption 2012



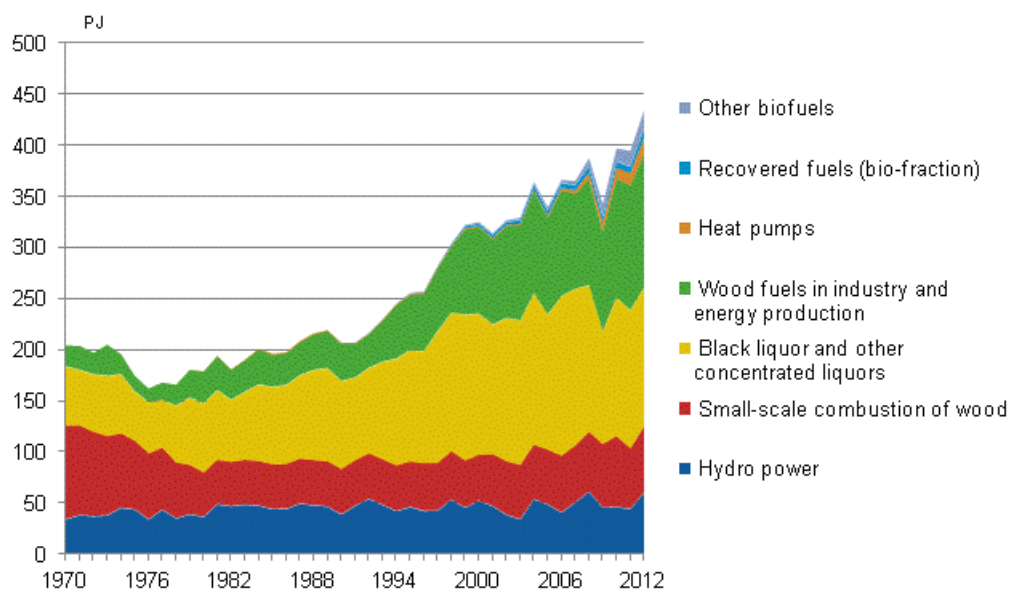
Appendix figure 2. Total energy consumption 1970–2012



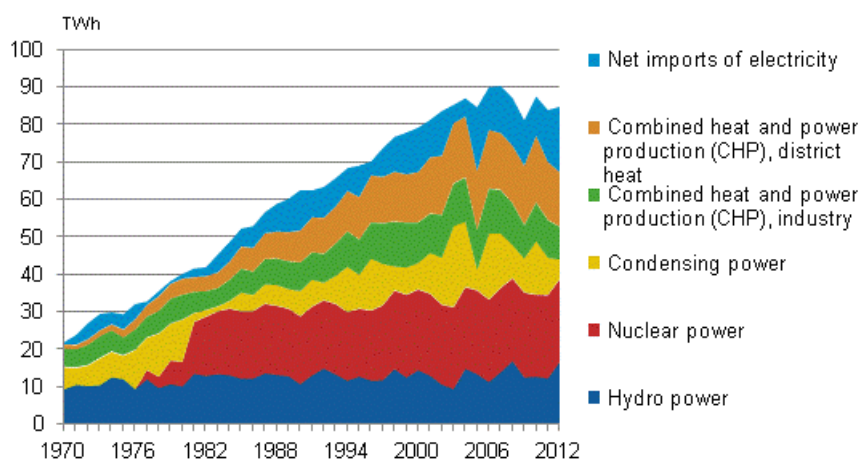
Appendix figure 3. Energy and electricity intensity 1970–2012



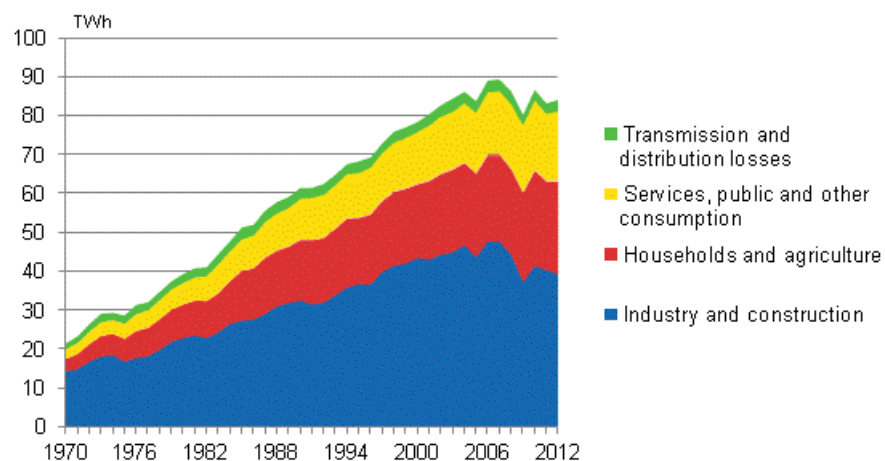
Appendix figure 4. Renewable energy sources 1970–2012



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Appendix figure 6. Electricity consumption by sector 1970–2012



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Source: Energy supply and consumption, Statistics Finland