



Large drop in energy consumption and greenhouse gas emissions in 2009

In 2009 Denmark's observed energy consumption fell by 4.0 percent, whereas CO₂ emissions and total greenhouse gas emissions fell by 4.1 percent and 2.7 percent, respectively. Adjusted gross energy consumption is now level with the consumption in 1980.

Energy consumption fell by 4.0 percent

Observed Danish energy consumption fell in 2009 by 4.0 per cent to 810 PJ. Consumption of oil and natural gas fell by 5.3 per cent and 4.2 per cent, respectively, whereas coal consumption fell by 2.8 per cent. Consumption of renewable energy rose by 1.0 per cent in 2009. This appears from the Danish Energy Agency's preliminary energy statistics for 2009. The developments should be seen in the context of a significant drop in economic activity. In 2009, gross domestic product (GDP) fell by 5.1 percent. On the other hand, the weather was colder in 2009 than in 2008, and net imports of electricity were lower than 2008.

Adjusted for fluctuations in climate and foreign trade in electricity, gross energy consumption was 815 PJ in 2009, which is 5.6 percent lower than the year before. This means that gross energy consumption almost corresponds to the consumption in 1980 (814 PJ) and is 0.5 percent lower than in 1990.

Renewable energy's share of adjusted gross energy consumption rose from 16.5 percent in 2008 to 17.4 percent in 2009. At the moment it is not possible to calculate the percentage of renewable energy in relation to the final energy consumption in the same way the EU calculates this figure. This information will be included in the final energy statistics in the autumn. In recent years the renewable energy percentage pursuant to the EU method of calculation has been about 2 percentage points higher than in the national statement.

Information from Energinet.dk indicates that domestic electricity consumption fell by almost 4 percent in 2009. A final statement of changes in energy and electricity consumption, broken down by use, will be included in

the final energy statistics.

Given that the fall in energy consumption in 2009 is greater than the fall in Danish gross domestic product, energy intensity is continuing to fall. Adjusted gross energy consumption only grew by 0.5 percent from 1990 to 2009. Over the same period GDP grew by 36.1 percent. This means that there has been a drop in the energy intensity since 1990 of 27 percent.

Drop in emissions of CO₂ and total greenhouse gases

Actual emissions of CO₂ fell in 2009 by 4.1 percent. When adjusted for foreign trade in electricity and fluctuations in climate, CO₂ emissions fell in 2009 by 6.7 percent. Since 1990 adjusted CO₂ emissions from energy-related activities have fallen by 21.0 percent.

The preliminary energy statistics contain an estimate of the changes in Denmark's total emissions of greenhouse gases from 2008 to 2009. For 2009 the actual emission of greenhouse gases are estimated at 62.1 mill. tonnes CO₂ equivalents, against 63.8 mill. tonnes CO₂ equivalents in 2008, corresponding to a drop of 2.7 percent. When adjusted for fluctuations in climate and foreign trade in electricity, the drop was 4.8 percent in 2009. Compared to the base year (1990/1995), actual and adjusted emissions of greenhouse gases fell by 10.4 percent and 19.1 percent, respectively.

In relation to Danish compliance with its Kyoto climate commitments, under which Denmark must reduce emissions by 21 percent in the period 2008-12 compared with the base year of 1990/95, only changes in the emissions not covered by allowances are relevant. Break-down of activities into those covered by allowances and those not covered by allowances will not be available until the final statistics are published in the autumn by the Danish Energy Agency. In addition to emissions of greenhouse gases in Denmark, target achievement also includes the effects of uptake of CO₂ by forests and soil as well as reductions through projects in other countries and purchases of allowances.

Energy production fell by 10 percent

Total Danish production of primary energy fell by 10.0 percent in 2009 to 1007 PJ. Production of crude oil and natural gas fell by 8.2 percent and 16.5 percent, respectively. Production of renewable energy grew by 0.6 percent in 2009.

In 2009 the degree of self sufficiency was 124 percent. This means that in

2009 Danish energy production was 24 percent higher than Danish energy consumption. In 2008 the degree of self sufficiency was 130 percent.

Large drop in energy prices and the trade surplus with energy products

In 2009, the price of crude oil, measured in terms of USD/barrel, fell by 36.7 percent. Measured in terms of DKK, the average price of crude oil (Brent) fell from DKK 487 per barrel in 2008 to DKK 327 per barrel in 2009, corresponding to a 32.8 percent drop. There were large variations in the price of crude oil in 2008. The average Nord Pool price of electricity in 2009 was DKK 0.282 per kWh in Denmark, which is 1/3 below the price in 2008.

The trade surplus in connection with trading in energy was DKK 12.4 bn. in 2009 against DKK 22.6 bn. in 2008. The drop of 45 percent is due to lower production of crude oil and natural gas as well as lower energy prices.

Table of facts

A table of facts is attached of the preliminary statement for 2009 of energy production, energy consumption, CO2 emissions and total greenhouse gases as well as energy prices. Further information on the energy statistics is available on the Energy Agency website at www.ens.dk.



[Key figures from DEA's Provisional Energy Statistics 2009](#)

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