Danish Energy Agency

Renewable energy consumption soars in 2010

Consumption of renewable energy increased by 17.4%, while coal consumption fell in 2010. Observed Danish energy consumption grew by 4.5% because of the cold weather. After adjusting for this, energy consumption was unchanged compared to 2009.

Share of renewable energy growing

Danish consumption of renewable energy increased in 2010 by 17.4% to 170.0 PJ compared with 144.7 PJ in 2009.The greatest contributors to the increase of 25.2 PJ were biomass and wind power, which increased by 19.8 PJ and 3.9 PJ, respectively. The large consumption of renewables was especially in connection with electricity and district heating production. Consumption here increased by 21 PJ. This appears in the Energy Statistics 2010, which were published by the Danish Energy Agency today.

This means that renewables covered 20.2% of the Danish adjusted gross energy consumption in 2010. The target in the Energy Agreement of February 2008 is for renewables to cover 20% by 2011. Calculated in accordance with the EU calculation method, renewable energy's share rose from 20.1% in 2009 to 22.3% in 2010. Denmark has an EU commitment to increase the percentage of renewable energy to 30% by 2020. Production of electricity from renewables accounted for 33.1% of Danish domestic electricity supply in 2010. Of this figure, wind power accounted for 20.7%.

Observed energy consumption increased in 2010

Observed Danish energy consumption increased in 2010 by 4.5% to 846 PJ. This should be seen in the context of significantly colder weather in 2010 than in 2009. In addition to this there was an increase in economic activity in terms of gross domestic product (GDP) of 1.7%.

Besides observed energy consumption, the Danish Energy Agency calculates adjusted gross energy consumption, which is adjusted for fuel linked to foreign trade in electricity and fluctuations in climate with respect to a normal

weather year. Adjusted energy consumption in 2010 was unchanged in relation to 2009 at 815 PJ. This unchanged energy consumption covers a drop of 14.6% in coal consumption, while consumption of natural gas and renewables grew by 6.9% and 13.3% respectively in 2010.

As GDP grew by 1.7% in 2010, this means that energy intensity in the Danish economy continues to fall. Adjusted gross energy consumption fell by 0.5% from 1990 to 2010. Over the same period GDP grew by 37.8%. In 2010, each unit of GDP therefore accounted for 28% less energy than in 1990.

Adjusted carbon emissions fell - slight increase in the observed emissions
Observed emissions of CO2 from energy consumption increased in 2010 by 0.8%. When adjusted for foreign trade in electricity and fluctuations in climate, CO2 emissions fell in 2010 by 4.9%. Adjusted CO2 emissions from energy consumption have fallen by 23.2% since 1990.

For 2010 the total observed emissions of greenhouse gases are estimated at 61.4 mill. tonnes CO2 equivalents against 61.0 mill. tonnes CO2 equivalents in 2009, corresponding to an increase of 0.7%. When adjusted for fluctuations in climate and foreign trade in electricity, the total emissions of greenhouse gases fell by 4.0% in 2010. Observed and adjusted emissions of greenhouse gases fell by 11.4% and 23.8% respectively compared with the base year (1990/1995).

Denmark has to reduce greenhouse gas emissions by 21% in the period 2008-2012 relative to the base year 1990/1995 as part of fulfilling its Kyoto commitment, and an important part of the emissions are covered by the EU emissions trading scheme (ETS). Greenhouse gas emissions from the non-ETS sector have preliminarily been calculated to an increase of 1.7% compared to 2009. 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 in 2010
Total Danish production of primary energy fell by 2.6% to 983 PJ in 2010. Production of crude oil and natural gas fell by 5.8% and 2.4%, respectively. Production of renewable energy grew by 11.0% in 2010.

The degree of self-sufficiency was 121% in 2010. In other words, in 2010, Danish energy production was 21% higher than Danish energy consumption.

The degree of self sufficiency was 124% in 2009.

Continued large foreign exchange revenues The trade surplus from trade in energy was DKK 12.1 billion in 2010 against DKK 11.5 billion in 2009.The increase is attributable to higher energy prices.

Exports of energy technology and equipment such as wind turbines, district heating pipes, thermostat valves, pumps etc. were DKK 52.2 billion in 2010 against DKK 58.5 billion in 2009. Exports of energy products and equipment in 2010 amounted to 9.5% of total Danish exports of goods, compared with 11.7% for the previous year.

Further information:
Peter Dal, Chief Advisor, +45 33 92 75 03, e-mail: pd@ens.dk
Ture Falbe-Hansen, Head of Media Relations, +45 33 92 68 56, mobil: +45 25 13 78 46, e-mail: tfh@ens.dk

Energy Statistics 2010

Peter Dal
Chefkonsulent
Center for Energiressourcer
Tlf.: 3392 7503
pd@ens.dk

Ture Falbe-Hansen
Pressechef
Center for Organisation
Tlf.: 25 13 78 46
tfh@ens.dk

Contacts

Ture Falbe-Hansen
Head of Press (+45) 2513 7846 tfh@ens.dk