Hardly anything irritates the Danes more than to be told that they deliver "dirty power" and export it as well. But the fact remains, the Scandinavians continue to be dependent on coal and will remain so for a long time to come.

Danish coal trumps wind

by Reiner Gatermann

According to the Danish energy balance sheet for 2007, the Danes produced 37,395 GWh of electricity: 7,201 GWh came from wind turbines, but 22,731 GWh (over 60%) from 'centralised power stations'. These power stations run for 70 to 80% on coal. This means that about 45% of electricity produced in Denmark is based on coal.

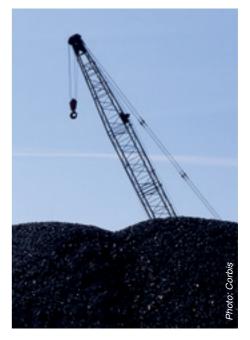
In 1985 the Danish parliament decided to completely renounce nuclear power, which meant the only large-scale alternative was coal. It is mainly used in the 15 large power plants, 13 of which also supply district heating.

Along with the development of wind power - an area Denmark had been a leader in for many years and now is working hard to regain its position at the top, intensive effort has been undertaken to improve coal technology and with some success. Denmark, by its own account, has no problems with the CO₂ regulations of the EU. At the beginning of this year, there was an intense discussion in parliament about a new energy strategy which was also finally decided upon in February by an overwhelming majority. At that time the conservative Climate and Energy Minister Connie Hadegaard declared, 'Globally Denmark is in the vanguard and wants to stay there. In 2025 our total energy consumption will be at the same level as it was 50 years ago. We have set the agenda in Europe for a transition towards both environmentally friendly and safe energy supplies.'

Coal certainly wasn't left out of this debate, and it was even suggested that it be prohibited. However, it is hardly mentioned in the agreement passed by parliament. It talks more about the development of renewable energy sources, which in 2011 should cover 20% of energy consumption. But this will hardly change anything with regards to the continued supremacy of coal. Lars Aagaard, vice director of the industry organisation Dansk Energi comments, 'A Danish coal prohibition is in direct contradiction to our climate policies. The Danish power plant companies are substantially more efficient than many of their foreign competitors. Should they be given the opportunity to compete unhindered by restrictions, there is evidence that they would save Europe 430,000 tons of CO₂ per year. The battle is not between coal and windmills, it is a battle between inefficient and efficient power plants.'

The finger is often pointed at "inefficient foreigners", namely Germany and Poland. However, the proportion of old plants in Denmark is still significant. According to Dansk Energi, 55% of existing power plants were older than 25 years at the end of 2007. Six years ago this figure stood at around 30%. The reason for this is found in the increased development of decentralised, smaller power plants. In 1998, 82% of total capacity was derived from large power plants; by the end of 2007, this was just 57%.

Denmark's electricity consumption has remained more or less constant since 1996, as have its CO_2 emissions, totalling slightly more than 50 million tons, although the trend has been increasing slightly since 2005. The mainly coal-fired, large power plants contributed just less than 20 million tons of this total. Although they have not been granted a larger future role in the energy agreement, Dansk Energi at least is convinced that they will remain a significant part of the energy supply for a long time. However, it is equally certain that there will be no further expansion.



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