



World Wind Energy Association

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WWEA Background Paper

Denmark revitalizes the renewable energies and nationalizes the power transmission system

The Danish government has on 30 March 2004 entered an agreement with six of the coalition parties in the Danish parliament on the construction of two new off-shore wind farms of 200 MW each, and the replacement of 900 windmills up to 450 kW each in unfavourable on-shore locations with 150-200 new megawatt size windmills. This will increase the share of renewable energy in the electricity supply from the present 19% to 25% by 2008.

The agreement of revitalizing the renewable energy sector is the result of pressure of the political opposition, the energy organisations and the industry to end a moratorium imposed on the renewable energies by the conservative government January 2002.

The deal will increase the total capacity of renewable energy in Denmark from now 3.200 MW to 4.000 MW in the period 2005 - 2008. One of the offshore wind farms will be installed in the North Sea next to the existing Horns Rev wind farm (see www.hornsrev.dk). The second 200 MW offshore wind farm will be placed at the inlet of the Baltic Sea in Great Belt near the island of Omoe.

For the windmills the first 12.000 hours of full load operation, guaranteed feed-in tariffs are being applied. Within the agreement 40 new biogas plants will be installed with tariffs for electricity sale guaranteed for 10 years. In the agreement no reference is made to quota systems and green certificates which Denmark otherwise was pioneering in 1998 to fulfil expected EU policies that did not come into force due to obvious lack of efficiency and appeal.

The agreement includes a sensational decision to nationalize the high-voltage power transmission system in order to allow all users equal access to the grid. At the same time the obligation to purchase power will be abolished considering the growing share of independent power from producers with priority grid access (now more than 50 % of annual power supply). Continuous integration of fluctuating energy supply requires new intelligent structures in order to substitute further shares of conventional energies.

The transfer of ownership of the national electricity grid also eliminates risks of take-over of the national power infrastructure by multinational companies. The present grid system operators, ELTRA and Elkraft are handing over the superior transmission system (over 132 kV) to a new state-owned enterprise, *EnergiNet Danmark*, without any remuneration from the state. In return for this favour, it has been agreed that power distribution systems below 132 kV and power production plants now owned by municipalities and/or consumer cooperatives can be taken over by private enterprises and perhaps sold to foreign investors. How this change of ownership will influence on independent power producers, especially wind power and CHP that account for over 50 % of electricity in Denmark, is still under discussion.

The tangled financial and owner relationship among some of the local electricity utilities in Denmark is being clarified in order to avoid court suits which otherwise might be expected between the government and private enterprises. This removes stumbling blocks that in the past have hindered some local electricity companies in their business development.

An increase of 30% for research, development and demonstration of advanced renewable energy technologies is part of the agreement and will be financed and administrated by the new power authority, *EnergiNet Danmark*.

The agreement does not point at answers to the acute financial problems of the 25 independent energy offices and the Folkecenter for Renewable Energy. The present government in January 2002 cancelled state support they had obtained for more than 20 years. However, leaders of the political opposition have asserted that solutions should be found when the agreement is being implemented.

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