

**Welcome to the first EPE Joint Wind Energy and T&D Chapters Seminar  
The Norwegian University of Science and Technology, NTNU, Trondheim, Norway  
9, 10 and 11 May 2011**

Since the publication of the European Commission's Green Book "Towards a European strategy for the security of energy supply" in November 2000, Europe has been a long way implementing renewable energy sources. Most member states have built important renewable energy production capacities. In its last report "Europe's energy position, market and supply", the market observatory for energy states that 7,1 % of the final energy consumption is covered by renewable energy sources (RES). Biomass and wastes account for 69,8 % of them, Hydro, 18,9 %, Wind, 6,4%, Solar, 0,9% and Geothermal, 4,1%.

When it comes to electricity generation, RES cover 15,6 % of the total, and wind energy covers 19,8 % of the gross electricity consumption. These shares are growing steadily and large offshore wind projects show that this field is still developing rapidly with the support of the European Commission. The European Strategic Energy Technology Plan, also known as SET-Plan "Towards a low carbon future" states for his Wind initiative: "The European Wind Initiative aims to make wind energy more competitive, to harness the potential of offshore resources and deep waters, and to facilitate grid integration of wind power". Within the Electricity Grid Initiative, one can read "enable the transmission and distribution of up to 35 % of electricity from dispersed and concentrated renewable sources by 2020 and make electricity production completely decarbonised by 2050."

European companies are global market leaders in RES technologies and their wide use can also have a significant impact on Europe's international competitiveness, states Eurelectric. The efficiency and size of wind turbines is steadily growing but the impact of large wind farms on the operation of the power grids is still a key challenge to be addressed. The implementation of large wind farms in both the Baltic Sea and the North Sea need new grid solutions.

This background convinced the Boards of both EPE chapters on Wind and on Transmission and Distribution of electrical energy (T&D) to join and organize a joint event. Norway being one of the places where huge investment are currently taking place with several projects as the planned 9000 MW offshore wind park Dogger Bank and the more far reaching Hywind concept, were convincing enough to organize this event in Trondheim, Norway, next May.

The topics will cover all power electronics aspects related to the development of those ambitious projects and the Call for papers is available on [www.epe-association.org](http://www.epe-association.org), under "conferences" or directly at [http://etec.vub.ac.be/EPE/EPE-WECS-2011/01\\_Frameset.htm](http://etec.vub.ac.be/EPE/EPE-WECS-2011/01_Frameset.htm)

The deadline is for the receipt of synopses is January 10<sup>th</sup>, 2011.

Together with the seminar, we are organizing a visit to Smøla, a flat island in the North Sea, West of Trondheim. We will visit the 68 turbines Wind Farm with close to offshore wind energy harvesting conditions. It is operated by Statkraft. The total installed power is  $20 \times 2.0$  MW (phase one) plus  $48 \times 2.3$  MW (phase two). The maximum production capacity is 150 MW and the total generating capacity is in average 450 GWh per year, making Smøla the largest wind farm in the country and the largest onshore wind farm in Europe. The farm covers an area of 18 square kilometers. Some details are on page 62 of this issue.

We are working towards the organization of a great event around wind energy and power electronics solutions for the power grid, and we look forward to welcoming you all in Trondheim next May.

Brigitte Sneyers  
EPE Association  
Secretary General