SCOTLAND EUROPA

BRIEFING

"Renewable energy, beyond the experiments"

Green Week, Brussels, June 2005

RENEWABLE ENERGY

Renewable energy is a rapidly expanding sector in the EU. They are increasingly becoming economically viable products, in particular with rising oil prices, and are attracting interest from businesses and consumers alike. On the third day of Green Week, the speakers provided an overview on the policy framework for renewable energy in the electricity market and the financing of renewable energy production and products. During the afternoon session successful case studies were presented and experts spoke about research needs to make renewable energy higher performing.

Currently Europe has a high dependency on imports, with 50% of current energy being imported and a predicted 70% by 2025. Developing the renewables sector helps ensure security of the energy supply and reduce this dependency.

Luc Werring from DG TREN spoke about the current situtation and the future of renewable energy in the EU. In 2001 the share of electricity from renewable energy sources was 15%, which should increase up to 21% by 2010 according to the EU's Renewables Directive. The Directive has motivated national governments to take action, leading to an increase in renewable energy across Europe. All Member States have adopted national targets; Bulgaria and Romania have also been set targets for when they join the EU.

Meeting these targets is a "real challenge"; an important first step has been taken, but extra efforts are still needed. Current implemented policies will probably result in a share of between 18% and 19% in 2010. Progress in achieving the national targets differs strongly between the Member States, not all Member States have adopted complementary proactive measures geared to national conditions. The leading countries are Germany, Denmark, Spain and Finland; Greece and Portugal are lagging behind. Another reason is that the success of wind energy is not outweighing the slow growth of biomass electricity.

One method of renewable electricity generation is wind power, which has been a considerable success in Spain, Denmark and Germany, thanks to the implementation of attractive support systems and the removal of administrative barriers. Wind energy is going beyond our expectations, but other renewables are lagging behind: particularly biomass, which is contributing much less to the EU energy mix than had been expected. The 2010 target will only be achieved if biomass contributes 40% to it. Mr. Werring also stressed the importance of focusing on consumption and energy efficiency, not just on producing more renewable energy. Renewables contribute more than just a reduction in carbon emissions, the sector also creates jobs, promotes innovation and technology, as well as contributing to rural and economic development.

Antonio Pflüger from the International Energy Agency predicted that fossil fuels would account for almost 90% of growth in energy demand between now and 2030, which would also mean the growth of CO_2 emission. He suggested an Alternative Policy Scenario, which analyses the impact of new environmental & energy-security policies worldwide. The outcome could be: lower CO_2 emissions, impact on fuel-mix and change of oil, gas and electricity prices. The International Energy Agency wants to see 50% of energy produced from renewable sources by 2050, and the Commission believes it should be possible to reach 33% by 2030.

Mihai Paun from EURELECTRIC provided an overview of the "Direct Support for Renewables" in Europe. The assessment (Report) of direct price support for RES in EU-15 countries aims to provide input into the debate on the way forward. The Report shows that RES direct support based on actual schemes, in case actual level of support would be continued, would lead to substantial amounts, with a significant impact on electricity prices and thus market distortions between countries.

He agreed that renewables can play an increasing role in the electricity market, but support schemes must avoid market distortion. Healthy competition among renewables can ensure this.

FINANCING RENEWABLES

Investors interested in renewable energy projects find that governments and regulators frequently change support schemes and tariffs, making long-term investments difficult. And as governments change, so do the political priorities. The first Kyoto Protocol commitment period sets targets until 2012, but the targets for the next period have not been agreed.

According to George Sorenson, chairman of FE Clean Technologies, long term investments in the Clean Energy Sector will require consistent government policies with regards to tariffs. Most Clean Energy project types require some type of preferential financial treatment. Inconsistent policies will result in higher risk premiums and fewer projects reaching the final investment stage. He underpinned this statement with a Hungarian project, which faced a lot of problems due to the lack of consistency of policy. It is this kind of political uncertainty and inconsistency that makes investors very reluctant to invest in renewable energy projects, according to Adam de Sola Pool, a venture capitalist from Environmental Investment Partners. Investors tend to 'think big': they consider small-scale projects, such as wind power in Poland, as "insignificant". Even so financing of renewables does exist, Mr. de Sola Pool mentioned Sustainable Energy Finance (SEF – www.sef-directory.net). He said the main problem is the risk/return rate: risk adjusted returns are less than in other markets. Raising energy prices and eliminating conventional fuel subsidies can be solutions, as well as the European Commission's "Patient Capital Initiative" and UNEP / SEFI programmes.

SMEs are very capable at delivering efficient, small-scale energy services, said Jan Kappen, from the United Nations Environment Programme (UNEP), particularly as they understand the needs of the local community, but obtaining financing for projects is an "uphill struggle". The conditions for access to capital are very hard, renewable energy SME's are hampered by the so called "funding gap", which means the lack of early stage capital and consumer credit. To close this gap UNEP is developing a new finance facility, called Seed Capital Access Facility (SCAF). SCAF has been designed to close the cost and risk gaps between what clean energy SMEs can offer, in terms of risk adjusted returns on capital, and what energy funds are able to receive, while remaining commercially viable.

Mrs. Beatriz Yordi from DG TREN provided an overview of community financial instruments that are able to support renewable energy projects. "Intelligent Energy – Europe" is the main European instrument for non-technological support activity in the energy field during the period 2003-2006. Mrs. Yordi noted that the major Community financing instruments – Structural and cohesion funds, rural development fund – can also be used for the development of renewable energy sources in the new Member States. She also spoke about the Competitiveness & Innovation framework Programme (2007-2013) and the renewed Lisbon Strategy in relation to renewable energy.
Before the end of 2005, the Commission will adopt a Communication on the financing of renewable energy sources, which will be a systematic description of the funding mechanisms implemented in the EU-25.

Andrew Dlugolecki of Andlug Consulting emphasised the importance of public-private collaboration. Many people in the financial sector do not even believe that climate change is a real problem. Policy-makers should try and convince the financial sector that climate change is a major issue. The renewable energy sector is considered a high risk by investors, but as oil prices rise in an uncertain regulatory framework, growing risk is being attached to the fossil fuel sector. “Soon, nobody will want to invest in the energy sector,” he said, adding that policy-makers need to do more to create confidence in the long-term future of renewables.

CASE STUDIES

In the afternoon session successful case studies were presented. These case studies prove that every region has possibilities to improve the share of renewable energy sources; they just have to find the best way.

Thirty per cent of energy in the Austrian region of Steiermark comes from renewable sources; five times more than the EU average. Almost every new house is equipped with renewable energy. Even so they aim to improve their performance, hoping to achieve 50% by 2010 and two-thirds by 2020.

Wind power alone has increased by 20% over the last six years and currently accounts for 2.4% of EU energy consumption. This is set to increase to 5.5% by 2010 and potentially 12% by 2020, according to Christian Kjaer, Policy Director of the European Wind Energy Association (EWEA). He spoke about the 4 pillars of successful renewable energy framework: good administrative procedures; grid building and fair grid access conditions; payment mechanism that can attract investments; and last but not least public acceptance. If one element is missing, the whole framework can collapse.

There is a growing market for green power in Europe, for households, the commercial sector and public bodies according to Veit Bürger from ÖKO Institut, who provided an overview of existing green power labels in Europe. ÖKO Institut is a member of the European Green Electricity Network (EUGENE), which has an ongoing EIE (Energy Intelligent Europe) project called CLEAN-E. The overall goal of the project is to strengthen and harmonise green power labelling activities in EU Member States. CLEAN-E helps establishing new green power labels or, in countries where labelling schemes already exist, assists national labelling bodies to further develop their labelling standard towards the Eugene standard.

Mr. Pip Squire from Black & Veatch provided an overview of renewable energy resources and priority projects in the former Soviet Union and Eastern Europe, based on an EBRD project “Renewable Energy Project”. The aim of the project was strategic assessment of the potential for Renewable Energy in EBRD countries to help identify projects for possible EBRD investment. Mr. Squire also spoke about the common barriers for all renewable energy sources in the EBRD countries. These are: lack of knowledge among decision makers and general public; high up-front capital costs; lack of long-term finance needed for renewables; and inconsistent, changing government policies. The second stage of the EBRD project is the Renewable Development Initiative. The objective of this initiative is to advance the development and financing of renewable energy projects in the EBRD countries of operation.

More information is available on their recently launched website: www.ebrdrenewables.com

For more information and supporting presentations see:
http://www.europa.eu.int/comm/environment/greenweek/news_thursday_en.htm