GREEN POWER MARKETING

**THE FUTURE OF GREEN POWER:**
**ACHIEVING AN ENERGY REVOLUTION IN CHALLENGING TIMES**

**With more than 170 experts from 20 European countries and the USA, the *6th European Conference on Green Power Marketing 2009* on 1 and 2 October in Geneva has proven once again to be the key European forum for market players and decision makers in the renewable energy (RE) industry.**

**But it was more than a mere gathering of experts. Above all, the conference was an attempt to index the different approaches and contributions to green power marketing currently afloat and redirect them towards one clear and shared objective: achieving a true energy revolution. Participants were all but unanimous: the transition to a new energy era is feasible and already well under way, and all stakeholders are fully engaged in being part of it.**

**However, the path into the green future is not a smooth one; "business as usual" will hardly suffice to attain the targets set by the European Commission. Several challenges need to be tackled first:**

- **in policy, through effective support schemes;**
- **in infrastructure, through grid integration and extension;**
- **in finance, through extensive but stable funding;**
- **in supply, through more transparent disclosure ; and, finally,**
- **in demand, through more ample consideration of social issues.**

**For a real revolution to take place, a change of perspective is needed, with the present national and regional points of view on energy embedded in a wider global framework.**

Each of these key issues was explored in depth by influential speakers from the different stakeholder groups. On the first day, presentations from delegates of the Swiss Government, the European Commission and the International Energy Agency made clear that sound and stable energy policies are the cornerstone of RES development, and that RES must be at the heart of national, regional and international energy regulation.

Michael Kaufmann, deputy director of the Swiss Federal Office of Energy SFOE, traced the vision of a "2,000 watt society" and the two key pillars of the action plans by the Federal Council: maximising energy efficiency, and increased use of RES. Tom Howes, policy officer at the European Commission, described the roadmap set by the EU RES Directive to reach the 20% renewables target by 2020. Within this framework, the national renewable energy action plans, due in June of next year, will be crucial; they fix the binding targets for each member state and the measures intended to reach them.

Besides this, substantial progress will be needed in the review of support schemes and the development of cross border mechanisms.

Paolo Frankl, head of renewable energy at the International Energy Agency (IEA) put forward a national and regional vision of renewable energy policy embedded in a wider global dimension. The IEA's 450 ppm $CO_2$ policy scenario, where renewables represent 40% of power generation worldwide by 2030, will not be achieved unless global RES investments increase significantly in the years to come.

Interesting insights into RES market integration at European level and conditions for its success were provided by Cornella Kawann from Alpiq, Claes Hedenström from Vattenfall Trading Services (also president of RECS International) and Mario Ragwitz from Fraunhofer ISI. All three speakers emphasised that cooperation mechanisms between member states, and between member states and third countries, as foreseen in the new RES Directive represent a viable instrument to fulfil national RES targets.

However, one crucial factor in all scenarios for increasing green power flows throughout Europe is the grid. It is here that the creation of a European "supergrid" appears both ambitious and critical for the future of Europe's green energy network. A similarly significant factor may be a common green certificates system, which, though voluntary, could rightly become a catalyst for a pan-European market.

The accomplishment of the 20-20-20 targets and a fully integrated European market must be based on evenly distributed support for all regions of the continent. Péter Kiss from KPMG presented a comprehensive outlook of a promising new power market. With very rapid growth in electricity demand, aging power plants and great potential for RES, Central and Eastern Europe is a hotspot for investment in renewable electricity generation.

In line with a vision of Europe embedded in a global power system, the conference welcomed the contribution of Lori Bird from the US National Renewable Energy Laboratory (NREL), who surveyed the latest green power developments in the US, both from a policy and a market point of view.

With financing of RES particularly hard hit by the economic crisis, the presentations by Dr Dominik Thumfart from Deutsche Bank AG London and Dr Oliver Thalmann from Aravis Energy Venture Capital Group were intended to provide recipes for successful projecting and inject some optimism into an area where restraint and diffidence have dominated of late. Both speakers offered an exhaustive view of the key requirements for RES financing and the advantages of integrating alternative instruments such as bank debt and venture capital to fill the purse of RES projectors.

Another highlight of the first day of the conference was a podium discussion on the strategy of the big market players in response to the EU's 2020 targets. Four delegates from European utilities at the forefront of renewable energy – Enel Green Power, Iberdrola, EDF Energies Nouvelles and RWE

Innogy – discussed the challenges of reaching the 2020 goals, investment patterns in RES, and their risks. Despite any differences in appearance, it transpired that the whole utility sector is firmly committed to supporting and expanding the development of RES.

The second day started off with a session dedicated to a fundamental challenge for the energy revolution, the grid infrastructure. The main message: flexible generation is not sufficient, and must be complemented by flexible transmission. The grid has to keep pace with innovations in generation technology and the development of cooperation mechanisms, offshore plants and decentralised production sites. Expanding the transmission grid for cross-border transfers and increasing its flexibility are keys to balancing the different generation sources, and represent one of the most urgent tasks facing the industry.

The grid challenge, said Terje Gjendegal of Statnett, is particularly crucial when it comes to the transfer of green power from highly productive regions such as the North Sea. Moreover, as Wolfgang Fritz of Consentec Consulting pointed out, the dynamic growth of decentralised generation has cost-driving effects on the design and development of transmission and distribution networks. The critical importance of a European supergrid was underlined by Thomas Tillwicks of swissgrid ag, the Swiss TSO, who called for a resolute change from a regional to a Europe-wide way of thinking.

In keeping with this enlarged view of electricity policy and marketing, Edouard Dahomé, secretary general of MEDELEC and department head at EDF, encouraged participants to cross European borders and establish interconnections with more distant countries around the Mediterranean. The creation of a Mediterranean ring would be valuable for both European and non-European countries. Indeed, it would contribute to the development of the Mediterranean Solar Plant, facilitating the transfer of renewable electricity from south to north and guaranteeing supply to meet the growing electricity needs of the south.

The role of regulators is of utmost importance in view of a broader and more flexible grid infrastructure. David Halldearn from the Council of European Energy Regulators (CEER) stressed that EU regulators play a key role in creating a stable framework for investments in grid innovation, and should encourage grid companies to be more dynamic and take more risks.

The last session of the conference gave an outlook on the marketing and sales of green power. Green power certification is essential to address and fix consumers' interest on this kind of energy. And yet, as Christof Timpe from Oeko-Institut explained, there is a risk that lack of transparency and coordination between compulsory statements and voluntary certificates – and between green power labels in particular – will distort the market and impede the clear tracking of electricity attributes. The experience of Klaus Nürnberger at TÜV SÜD largely confirmed this view.

An interesting best-practice example from the demand side was given by Raffaele Chiulli from Holcim, an intensive energy consumer that has initiated green power generation at four different plants to meet

its energy needs in a more sustainable and locally convenient way. This engagement will mean that Holcim is able to self-supply 30% of its power consumption by 2012.

To round off the conference, Anne Favatier from SIG Services Industriels de Géneve put the social dimension of the energy revolution in focus. By selling green power as a competitive advantage, the company has successfully raised consumer awareness of its renewable offerings, and RE now accounts for a whole 97% of its customer portfolio. The active involvement of customers in the production of green energy, as this example shows, is the next step in the energy revolution.

**AUTHOR**

Francesca Ciulli
University of Neuchâtel, Switzerland

**INFORMATION**

**Green Power Marketing GmbH**
Zurich, Switzerland

T +41 43 322 05 56 | F +41 43 322 05 59
info@greenpowermarketing.org | www.greenpowermarketing.org