

European Forum for Science and Industry

Energy Transition from a European Perspective

with a Round Table discussion on

SCIENTIFIC SUPPORT TO CAPACITY MARKETS AND THE SUITABLE INTEGRATION OF VARIABLE RENEWABLE ENERGY

22 July 2013, Charlemagne Building, Room Jenkins Rue de la Loi 170, 1049 Brussels

In the current economic climate, all of our policies that help foster competitiveness, jobs and growth must be mobilised. The supply of affordable and sustainable energy to our industries is therefore crucial. Energy costs in the chemical industry, for example, account for up to 80% of total production costs. Furthermore, the price difference between the EU and U.S. with respect to gas has increased to 5:1 due to the availability of shale gas in the U.S.

The European Council recently agreed on guidelines which will allow the EU to foster its competitiveness and respond to the challenges of high prices and raised costs. This momentum should be used to initiate a process providing scientific advice for the next steps on the pathway to further transforming the electricity sector towards completion of the Internal Energy Market.

The European electricity market is dramatically changing in light of the increased use of renewable energy sources. Variable renewable energy production creates new challenges for the grid infrastructure and energy markets. Above all, there is a growing need for flexibility in electricity production and consumption. The question that needs to be asked is whether the design of market places, support systems for renewables, and grids in the EU are appropriate for facing these challenges.

The supranational dimension in the current discussion on flexibility is crucial and is currently being addressed by ENTSO-E on behalf of the Agency for the Cooperation of Energy Regulators (ACER), and by the Third Package for an internal EU gas and electricity market. This process should lead to Europe-wide rules for the provision of cross-national grid codes and rules for reserves.

Today's technical possibilities for an energy supply system comprising a considerable amount of renewables are ahead of the current legal framework. New technical possibilities and a completed Internal Market for energy could open up new business models supporting a European energy transition towards renewables. Encouraging innovation and cooperation across Europe could lead to considerably lower transition costs.

Rationale and Objectives

The project is to lead to a science-based understanding of the challenges for the electricity system created by intermittent energy sources. It is to use this understanding as a basis for formulating policy recommendations on how to tackle these challenges in the most efficient way.

PROGRAMME

09.30 – 10.00 Registration & welcome

10.00 - 11.00 **OPENING SESSION**

- Dominique Ristori, Director-General, Joint Research Centre, European Commission
- Philip Lowe, Director-General, Directorate-General for Energy, European Commission
- Jos Delbeke, Director-General, Directorate-General for Climate Action, European Commission
- Lithuanian Presidency of the Council of the European Union
- Detlef Dauke, Director-General for Energy Policy, German Federal Ministry of Economics and Technology

11.00 – 12.30 SESSION I: <u>Integrating renewables in the market</u>

- How should renewables best be integrated into grid and market to make renewable electricity production more responsive to system needs, more competitive and innovative?

Moderator:

• Heinz Ossenbrink, Joint Research Centre, European Commission

Key Contributors:

Presentations:

- Håkan Feuk, Vice-President for Policy and Regulatory Affairs, E.ON
- Raimund Wunder, CEO of Volkswagen Kraftwerk GmbH

Panellists:

- Michel Matheu, Director of the Corporate Strategy Division, EDF
- Monique Goyens, Director General of BEUC
- Michael Vassiliadis, President of Industry All and German union IG BCE

12.30 – 13.30 Networking lunch

13.30 – 13.40 INTRODUCTION TO AFTERNOON SESSIONS:

• Jerzy Buzek, Member of the European Parliament (tbc)

13.40 – 15.10 SESSION II: <u>Addressing flexibility and adequacy needs with market based instruments</u>

-How can the increased need for flexibility of generation and energy demand, generation adequacy, and storage be provided at the lowest possible cost?

Moderator:

 Hans Schweickardt, Président du Conseil d'Administration, ALPIQ Holding AG

Key Contributors:

Presentations:

- Tahir Kapetanovic, Power Grid Control, Austrian Power Grid (APG)
- Ewald Woste, CEO of Thüga AG and President BDEW (German Association of Energy and Water Industries)

Panellists:

- Jacek Kaminski, Cracow University of Technology
- Flavio Cattaneo, CEO of Terna
- Ulrich Bang, Dansk Energi

15.10 – 15.30 Coffee break

15.30 – 17.00 SESSION III: Role of Regional Initiatives

-What potential do regional initiatives have for the expansion and progressive integration of regional cross-border energy markets with regard to modernisation and implementation of the grids and other energy infrastructure, market coupling, integration of renewable energies, and generation adequacy?

Moderator:

• André Merlin, President of CIGRE

Key Contributors:

Presentations:

• Daniel Dobbeni, President of Elia Systems and President of ENTSO-E

• Peter Terium, CEO of the Executive Board of RWE AG

Panellists:

- Christian Rynning-Tønnesen, CEO of Statkraft
- Tobias Paulun, Managing Director Exchange, EEX, and Member of the Management Board, EPEX SPOT
- Marc Vogel, Swissgrid

17.00-17.30 CONCLUSIONS:

- Detlef Dauke, Director-General for Energy Policy, German Federal Ministry of Economics and Technology
- Dominique Ristori, Director-General, Joint Research Centre, European Commission