What market design for a decarbonized electricity market?

How will the European electricity market develop and function in the future? This is a key question for all stakeholders of the European energy system: energy companies, consumers, policy makers, academics and energy regulators.

The European energy system is facing profound changes whilst it transitions to a decarbonised power system and it leaves behind its heritage of large-scale fossil-fuelled generation units and passive consumers. Nowadays stakeholders are confronted with the deployment of decentralised renewable generation which progressively reduces the sector’s carbon footprint, and the empowering of the energy customer through demand response and storage solutions.

The structure of the electricity market will not only have to adapt to these changes but try to anticipate them and be prepared to conceive and adopt innovative business models.

EURELECTRIC in partnership with The Florence School of Regulation is seeking to open the debate and gather innovative visions for the functioning of a decarbonised electricity market.

Submit your innovative vision for the electricity market of the future!

All stakeholders are encouraged to submit contributions: companies from the electricity sector or other sectors, universities, non-profit organizations, business and sectorial associations, think-thanks, academics, students and individuals.

We are looking for breakthrough contributions that embrace the complexity and uncertainties of market operation in the context of decarbonisation. A holistic and innovative approach to all market design elements will be highly valued. Contributions can develop a single vision/scenario or adopt a comparative approach among a number of scenarios. Proposals based on modelling and/or conceptual and qualitative approaches are both welcome. Contributions that include an economic assessment of the proposed scenario are especially appreciated.

Submissions should:

- Feature a 2050 European electricity system with a very high degree of decarbonisation
- Describe the functioning of the decarbonised electricity market in 2050
Call for Contributions  

Design the electricity market(s) of the future

The contributions should ideally tackle the following key elements (*non-exhaustive list*):

- Short-term market operation (dispatch, flexibility...);
- Investment signals for different types of assets;
- System adequacy and long term security of supply;
- System costs and cost structures;
- Functioning of the retail market, and its links with the wholesale market;
- Level of decentralised generation and role of prosumers;
- Involvement of customers and demand side management.

Undoubtedly, technological progress and innovation, both in terms of power mix and system flexibility will have a significant influence on the future power sector and market functioning. All participants are encouraged to develop a set of assumptions that underpin their vision as well as concrete market design proposals. A description of the evolution from today’s market design to your proposed model as well as an analysis of the key drivers for this evolution (e.g. technological, regulatory) will be appreciated.

HOW TO PARTICIPATE?

The project is divided into two main phases.

**1st Phase**: Submit by 21 December 2016 an abstract of 5,000 characters (indicative) to EURELECTRIC – Florence School of Regulation, for consistency check with the objectives. The abstract should include the following components:

- **Assumptions and approach**: briefly explain the principles of your proposed market model and the rationale for its development, specifying key assumptions and variables;
- **Methodology**: briefly present the methodology for you contribution (e.g. modelling, qualitative approach, comparison of scenarios...).

**2nd Phase**: Due for the 15 April 2017, the final submission should include:

- A comprehensive presentation of the results and a detailed description of the market design;
- If possible:
  - elements on the how the electricity industry may evolve to adapt to this market model in the short, medium, and long term;
  - a description of the key technological, regulatory and economic drivers underpinning the evolution from today’s market model to your proposed model.

Final submission should take one of the following formats:

- Text: 10-20 pages (indicative);
- Presentation: 20 Slides (indicative);
- Video: 5 minutes (indicative).

The EURELECTRIC – Florence School of Regulation team may engage with the participants during the development of their contributions between Phase 1 and Phase 2.
Call for Contributions

Design the electricity market(s) of the future

SELECTION

Jury

A high level qualified jury, including EURELECTRIC industry members and representative from the Florence School of Regulation, will assess the contributions and select the most relevant, complete, comprehensive and innovative visions; independently from these organisations’ current views.

Awards:

- The authors of the most relevant contributions will be invited to present their main proposals and conclusions at a EURELECTRIC – Florence School of Regulation public event in May 2017. Policy makers and regulators will also be invited to debate with the authors;
- A selection of contributions will be presented at EURELECTRIC annual convention in Estoril (Lisbon) in June 2017;
- Selected authors will also have the possibility to publish a summary of their proposal on the Florence School of Regulation and on EURELECTRIC website;
- Authors will be interviewed with videos published on EURELECTRIC website/social networks.

To send your contributions and for any questions:

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