



IEE-EU Market4RES

“Post 2020 framework in a liberalised electricity market with large share of Renewable Energy Sources”

## Expert Workshops on electricity market design options in 2020 and post 2020 frameworks

Organised by SINTEF, TECHNOFI and EWEA

22 May 2015

Silken Berlaymont, Blvd Charlemagne 11/19,  
Brussels, Belgium

### Objectives of the workshop

The Market4RES consortium is pleased to invite EU-28 Transmission System Operators, European regulators, policy makers, and other relevant stakeholders to our one-day event where we will:

- Validate the specifications of the studies about electricity market design options within the 2015-2020 period. Our analyses are run on the OPTIMATE numerical simulation platform and focus on the effects of RES support schemes and demand flexibility.
- Discuss the market based mechanisms to integrate high levels of renewables while assuring security of supply in the post 2020 period.





## **About Market4RES**

Market4RES is a collaborative Research and Demonstration project co-funded by the European Commission (DG Energy) under the 7th Framework Programme for Research and Technological Development. The project, coordinated by Sintef, aims at investigating the potential evolution of the EU Target Model in order to secure the European power system decarbonisation with large amounts of renewable energy sources (RES).

In this context, Market4RES WP4 activities aim to quantify the impacts of the studied market design options, assuming as an input the generation fleet expected for 2020. In the framework provided by the current European Target Model, the impacts of different RES support schemes as well as different demand flexibility levels will be assessed. The benefits of the studied options will be quantified and compared based on the developed methodology using the [OPTIMATE](#) prototype simulation platform, which allows for the analysis of various market design options within a model of the western European power market.

Financing the transition to a renewables based electricity mix through support mechanisms is not only unsustainable, but it also introduces severe market distortions and compromises the security of supply. An effective market design should provide sufficient investment signals to accommodate a high share of renewables while achieving the required level of security of supply. Which market design can be effective in achieving these two EU energy policy goals given a high RES energy mix and a market increasingly dominated by fixed costs? Work package 5 of the project will test current and innovative market design options and provide a first set of recommendations for achieving the post 2020 RES-e targets.



## PROVISIONAL AGENDA

|   |  |  |
|---|--|--|
| 8.45 a.m.   | Registration / Welcome coffee  |  |
| 9.00  | An overview of the Market4RES project  | Andrei Morch (Sintef )   |
| 9.10  | Introduction to the workshop   | Sophie Dourlens-Quaranta (Technofi) and Peter Ahcin (Sintef)             |
| <b>Expert workshop: Electricity market design options in the 2020 framework</b>       |  |  |
| 9.40  | Introduction to the OPTIMATE numerical simulation platform   | Adrien Atayi (RTE)   |
| 10.20   | Methodology implemented by Market4RES to quantify and compare the impacts of different market design options | Tiziana Pagano (Technofi)  |
| 10.40   | Coffee break   |  |
| 11.00   | Day-Ahead market design options to be studied  | Sophie Dourlens-Quaranta (Technofi)                                      |
| 11.20   | Scenarios to compare market design options   | Sophie Dourlens-Quaranta (Technofi)                                      |
| 11.40   | Q&A session  |  |
| 12.00   | Lunch break  |  |
| <b>Expert workshop : Electricity market design options in the post 2020 framework</b> |  |  |
| 13:00   | RES scenarios 2030: a transition from a variable cost to a fixed cost based electricity market.              | Peter Ahcin (SINTEF)   |
| 13:30   | Q&A session  |  |
| 13:50   | Coffee break   |  |
| 14:10   | The role of the market: Market design alternatives for a RES dominant electricity mix                        | Aurèle Fontaine (RTE)  |
| 14:50   | Q&A session  |  |
| 15:10   | Coffee break   |  |
| <b>Joint WP4-WP5 session</b>  |  |  |
| 15:20   | Q&A session and conclusions  | Animated by Sophie Dourlens-Quaranta (Technofi) and Peter Ahcin (Sintef) |
| 16.00   | End of workshop  |  |

