



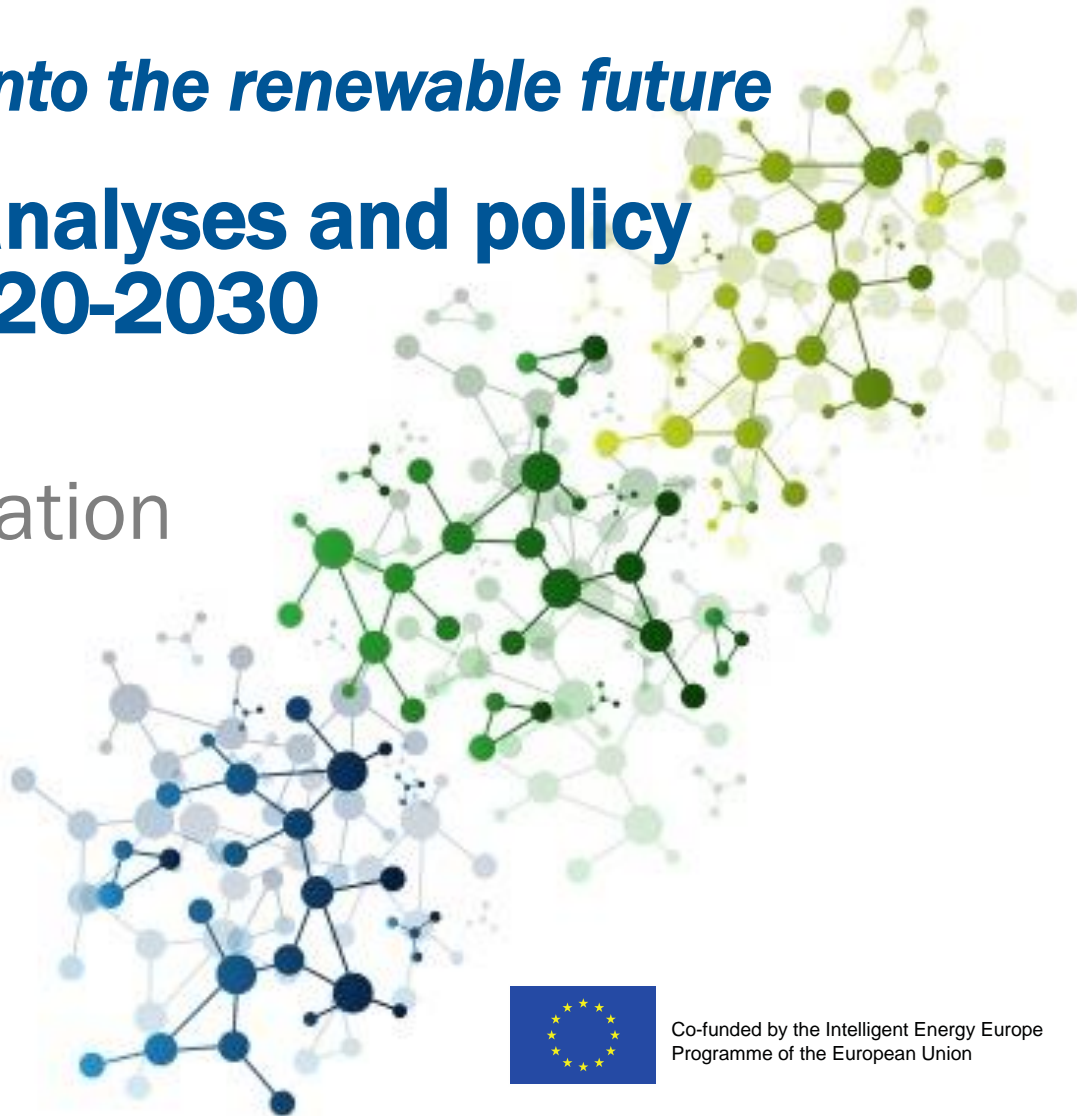
*How to pave the road into the renewable future*

# Electricity market analyses and policy implications for 2020-2030

Stakeholder consultation  
& Expert Workshop

Ove Wolfgang  
*SINTEF Energy Research*

2016-05-19 Brussels



Co-funded by the Intelligent Energy Europe Programme of the European Union

# Background: The Target Model (TM)

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- In 2008, the Florence Forum of European regulators decided to develop a TM for further integration of European electricity markets

Day-ahead

Intraday

Balancing

Forwards

Transmission capacity calculation

- 3<sup>rd</sup> Energy Package in EU (2009)

- Formal roles for **ACER** (Regulators) and **ENTSO-E** (TSOs),
- In developing European legislation through **network codes**

- Considerable progress achieved within some areas

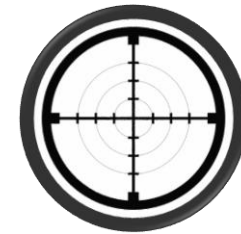
- CACM adopted in 2015: DA, ID, and capacity calculation
- **DA markets connected for 19 countries, 85% of consumption**



# Challenges for future electricity markets

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- ❑ Security of supply with even higher RES shares
  - Today, 1/3 of power generation is renewable (and variable)
  - Firm supply have problems in recovering costs
  
- ❑ Costs of decarbonization
  - Are current instruments cost-effective?
  
- ❑ Market4RES project discuss how the TM should evolve to address these issues
  - RES support schemes
  - Electricity market designs fit for high RES shares
  - Capacity markets



# Project partners

## Coordinator



[www.Market4RES.eu](http://www.Market4RES.eu)

*April 2014 - September 2016*



Co-funded by the Intelligent Energy Europe Programme of the European Union



Budget: 2.4 M €



Market  RES

# Agenda (before lunch)

09:00 Introduction  
*Ove Wolfgang, SINTEF Energy Research*

*Post 2020 evolution of the Target Model: Quantitative assessments*

09:10 Power system evolution in light of investor risk considerations, renewables support, CO2 taxation and demand response incentives  
*Aurele Fontaine, RTE*

09:55 Short term (operational) impacts of the timing of markets and RES support schemes  
*Luis Olmos Camacho, University of Comillas*

10:40 Coffee break

11:10 Market performance: Energy only, capacity remuneration and RES support schemes  
*Peter AHCIN, SINTEF Energy Research*

11:35 Assessment of future balancing market mechanisms  
*Bettina Burgholzer, University of Vienna, EEG*

12:15 Q&A session – open discussion

# Agenda (after lunch)

12:40 Lunch

## *RES Penetration under the current Target Model*

14:00 Impacts of demand flexibility with different RES shares

*Sophie Dourlens-Quaranta, Technofi*

14:45 RES penetration: Roadmap for the transition from Feed-in-Tariffs to market-based schemes

*Daniel Fraile, WindEurope*

15:15 Market4RES project in concluding stages. Preliminary findings and policy recommendations in view of upcoming public consultation

*Ove Wolfgang, SINTEF Energy Research*

15:45 Q&A session – open discussion

16:15 Wrap-up and end of the event



# Feedback and further event

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## Feedbacks to this event

- We will provide a link at <http://market4res.eu/>

## Next week we start written communication of main findings

- You will be invited to participate

## Further events

- 17 June (part of European Sustainable Energy week): to discuss feedback on written communication (and more)
- Final event in October

