



ENTSO-E's Prospective View on Market Design

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The importance of Market Design for ENTSOE



- **The involvement of TSOs is key for the evolution of Market Design**
- Legal mandate for the drafting of network codes
- TSOs have been driving market integration in Europe (Day-Ahead Market Coupling, Intraday Market Coupling, Balancing pilot projects,...)
- **An efficient and effective Market Design is key for TSOs**
- TSOs reconcile markets and physics
- Ambitious policy objectives, rapidly changing fundamentals require an adapted Market Design

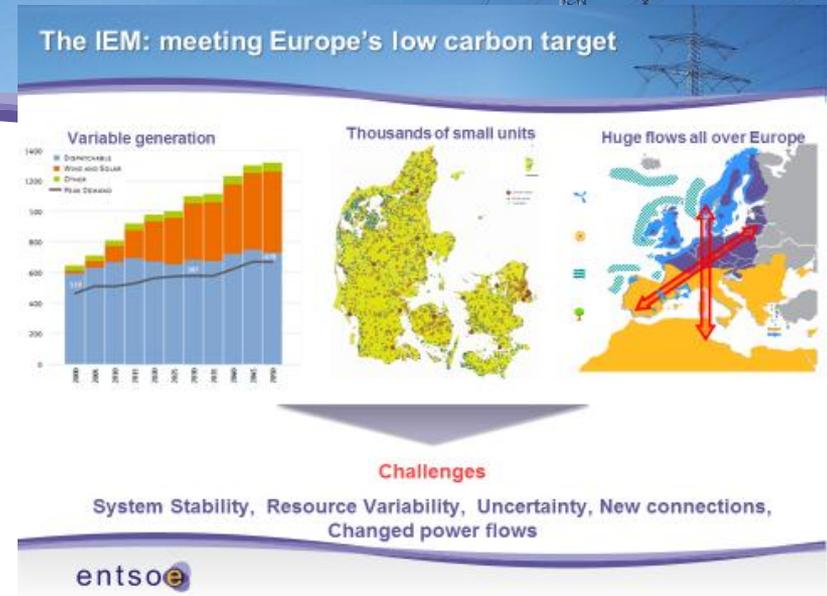
ENTSO-E and its member TSOs have an important role to ensure that the market evolves to meet operational, political and economic expectations.

Key Challenges Ahead

- The power system is facing significant changes and challenges
- The **IEM and adequate infrastructure** to address these challenges
- Both address the challenges for 2020 and lay the foundation for 2030

However

- The **value of Security of Supply** and adequacy are not reflected in market signals
- No focus on **long term investments** for adequacy
- Conflicting or overlapping political targets, and public interventions often **not aligned**
- Fast and massive evolution of the energy mix challenges the **technical resilience** of the pan-European power system
- **Uncertainty** of regulatory framework, market design and of price signals lead to low investments



2 main challenges

Effectiveness of price signals to stimulate appropriate investments and performances

- Externalities not reflected in price signals
- Scarcity pricing issue
- Lack of demand side participation in price formation

Operational issues

- Deviations between market outcomes and system needs increase in magnitude and complexity
- These deviations must remain limited
- TSOs require appropriate tools to correct them

In particular, future market design needs to address capacity and flexibility

Guiding principles



Market participants should be incentivized to contribute solving the system scarcities for which they are responsible

Increasing volatility should be accepted as an efficient market outcome

TSOs are responsible for system security: the market design must provide the means to carry out this task efficiently

The hedging dimension of the market design needs to be developed

Enhancing today's electricity markets is necessary but not sufficient

Evidence based market design: system monitoring and market monitoring to provide guidance on relevant evolutions.

Policy recommendations – Short term actions

1. The Target Model should be fully implemented as soon as possible

2. Current market design should be improved

3. Technical system scarcities must be objectively and collectively assessed by TSOs in a coordinated manner and complemented with ENTSO-E's overall adequacy assessment

All RES should be fully integrated into the market

- Same duties & responsibilities
- Exposure to market prices
- Incentives to forecast feed-in and hedge volatility

Balancing prices should be reflective of full system costs

- Incentive to act in line with system needs

Demand Side should participate as much as possible in all markets

- DA, ID & Balancing but also AS and potential new market layers
- Requires appropriate market rules

Policy recommendations – Medium term actions

4. Appropriate incentives or obligations should be introduced so that market participants take more responsibility for system adequacy – mainly flexibility and capacity

5. To allow market participants to hedge their adequacy related risk, the hedging dimension of the market design needs to be developed via associated insurance products for capability

6. In implementing hedging products for capability, cross-border participation must be allowed and the IEM preserved to ensure a European approach to market design.

Policy recommendations – Long term actions

7. By 2020, long-term technical system scarcities must be assessed at regional and European levels, based on ENTSO-E and TSOs' enhanced system adequacy assessments.

8. In parallel, based on results from regional solutions of hedging products for capability (spontaneous or regulated), a consistent European market design model must be designed for implementation

Conclusions

- **RES integration** to limit market distortions
- **Cost reflective Balancing** for appropriate incentives
- **Demand Side participation** to enhance price formation
- **Development of the hedging dimension of the market** for an effective investment signal

Thank you for your attention!

