>epexspot

> epexspot

EPEX SPOT's Market Design Vision for Sustainable EU Power Markets

NordReg, 5 Dec 2022 Ina Schjelderup i.schjelderup@epexspot.com

part of eex group

Good market design is more important now than ever

Energy Policy Triangle



- Europe is going through an energy crisis similar to the 1970s oil shock. With the interruption of gas flows from Russia, gas prices have skyrocketed taking power prices at unprecedented levels and making EU consumers vulnerable with high energy costs and risks on security of supply for Winter 2022/23 and coming ones
- It is to be seen how this situation is going to change in the near future

- The short-term wholesale energy markets have been functioning as expected
- Decarbonized energy was considered as expensive CAPEX investments, today it is the only solution to extend the supply. Additionally, demand side reduction and flexibility help to ease the situation
- Although there is a strong signal by the market for decarbonized energy sources and storage solutions, in the short term only embedded flexibility is available as the system needs to embrace much larger amounts of intermittent RES
- In the medium-term only wind/solar capacity can be swiftly commissioned
- Intermittency, increased volatility: More dependent on weather variables (i.e. increased LNG demand in winter)
- Challenges arise on system reliability/flexibility

More than ever, a refined market design needs to address the energy policy conundrum and focus on security, sustainability and affordability

Evolution, not revolution is key for spot markets

Key pillars for the Spot Power Market in the mid- and long-term

Complete the EU power markets integration

- Pan-EU IDA Auctions
- Nordic FBMC
- 15-minutes Products SDAC / SIDC

Implement measures increasing liquidity and granularity

Clean Energy Package: a) 70% XB capacity - b) Market-Based TSO/DSO procurement of flexibility to optimize grid investments

Complement the harmonised EOM with other market-based products

- Hedging/Risk sharing
- Capacity Markets
- Flexibility markets
- Markets to support the energy transition

The markets are expected to answer/deliver a lot

Main questions for a future-proof market design

Wholesale power markets

- How to integrate more RES in the market?
- How to stimulate Demand Response?
- How to hedge/share risks associated with higher volatility?
- What are the hedging tools to make markets affordable without endangering investments?

Flexibility for balancing and congestion management

- How to consider more spatial granularity without starting from a blank page and moving to central dispatch?
 - Zonal + Local flexibility markets

Resource adequacy & investment signals

- How to ensure the most efficient investments are made in electricity generation?
 - Exploit the full capacity of EOM
 - If needed: What is the best set-up for capacity mechanisms?

Market design

Emergence of « Green products »

- How to efficiently support the development of renewable electricity to accelerate the energy transition?
- Strengthen the ETS/CO2 markets
- Further develop Guarantees of Origin markets ?

It will be key will be to get the price signals right

EPEX Spot Design proposes four blocks of measures to address short & long term challenges towards Net zero

cordability	Hedging/Risk sharing	 Ensuring that most vulnerable consumers are protected and risks shared Products to allow sharing the risks associated with increased volatility on short term markets Market based instruments are the least distortive instruments to protect consumers while preserving investments Weather indices/derivatives
AST	Capacity Adequacy	 If exhausted, optimisation of the EOM is not sufficient, complementary capacity mechanism might be necessary – Harmonization across EU will be key Facilitation of XB capacity trading is necessary Decentralized Reliability options could allow reliability and inframarginal rents redistribution
Get bility	Flexibility	 Have enough flexible capacity in short-term that can ramp up/down during unexpected solar/wind variations to balance grid and solve congestions Intraday / Balancing / Congestion management
Sustaina	Facilitating the energy transition	 Foster markets to support an efficient development decarbonized energy sources across EU. EU Guarantees of Origin (Gos) market has the potential to become the main EU-wide support mechanism

EPEX SPOT Recommendations

1	Evolution instead of revolution! Capitalize on what has been achieved over the previous two decades
2	Protect the markets & price signals and address affordability/equity concerns with tools to lower/hedge risks associated with massive RES deployment and increased volatility
3	Decentralized markets guarantee highest system resilience through distributed complexity/optimization and the right incentives to innovate.
4	Strengthen investment signals by facilitating access to and use of energy wholesale markets incl. transparent price signals, trading products and risk management instruments.
5	Value flexibility to ensure balanced grids with less congestions. SOs market based flexibility procurements, demand side, local flexibility markets
6	Boost renewables through markets Foster market-based remunerations, limit support schemes. GOs for RES
7	Facilitate access to the market for all supply/demand resources. Decentralized resources on demand & supply at different voltage levels can be aggregated/disaggregated depending on the system needs and help balance the grid and solve congestions

Thank you for the attention