

Outlook for the Future Energy System – General Overview

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How to see the future?

- Starting point
 - IKEM's method as a think tank and research institute
 - Interpreting trends in political and scientific fields
- By topics
 - Energy production
 - Energy market
 - System responsibility



Renewables only?

- High funding rate for renewable energy production all over Europe (but also nuclear)
- Political discussion
 - Coal phase-out (carbon pricing, legal obligations and bans, funding programmes for coal-intensive regions)
 - Increase in renewable Energy demand (EU, import)
 - New generation of nuclear power plants
 - Import of gas (pipelines and LNG)



Centralised or decentralised systems?

- Trends in both directions
 - Decentralised: self-consumers, energy communities, microgrids, DSO
 - Centralised: Energy Union, 15% interconnection target, TSO
 - Market-related aspects: blockchain vs. Guarantees of Origin



Centralised or decentralised systems?

- Strength of decentralisation
 - Less infrastructure, implementation of integrated energy systems
- Strength of centralisation
 - Resilience, common market
- Discussion in both cases
 - Sector unbundling is questioned
 - New models for financing gas, heat, and electricity infrastructure are needed



How quickly does the Energy Union move forward?

- Clear decision on the use of existing infrastructure
- Central EU regulatory authority with more ambitious competences (ACER+) for an integrated energy market across sectors
- The two trends of greater (EU) integration and greater decentralisation leading to a less nation-state-oriented energy policy
- Europe-wide strategy for RES





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