Joint ECRB-CEER-Eastern Partnership Workshop for Energy Regulatory Bodies



Energy Market Evolution



- Significant changes in the energy system – environmental policy and technological development
 - Increased share of (intermittent) renewable energy sources, distributed generation
 - New market players and services
 - Technology: from smart meters and smart grids to digitalization of the energy system (+sophisticated home appliances)
 - Security of supply concerns
 - Customers: raising awareness (PCT, price, trust, privacy, environment)

Interactive session: How does digitalisation in the energy sector affect end-consumers?



Energy transition

- Sustainable digitalised system
- Active and protected customers
- Digitalization tool for sustainable develpment
 - Impact to the market
- Opportunities
 - New players and services (active customers, aggregators, local energy communities, energy storage, electro-mobility integration, etc.)

Challenges

- Complexity of the energy sector (interconnected)
- Cyber-security, data privacy, awareness
- Information, education, knowledge, understanding
- Special focus on vulnerable customers

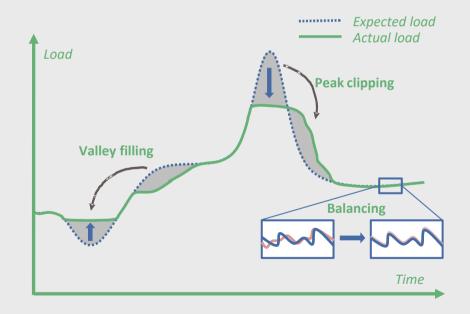
Interactive session: How does digitalisation in the energy sector affect end-consumers?



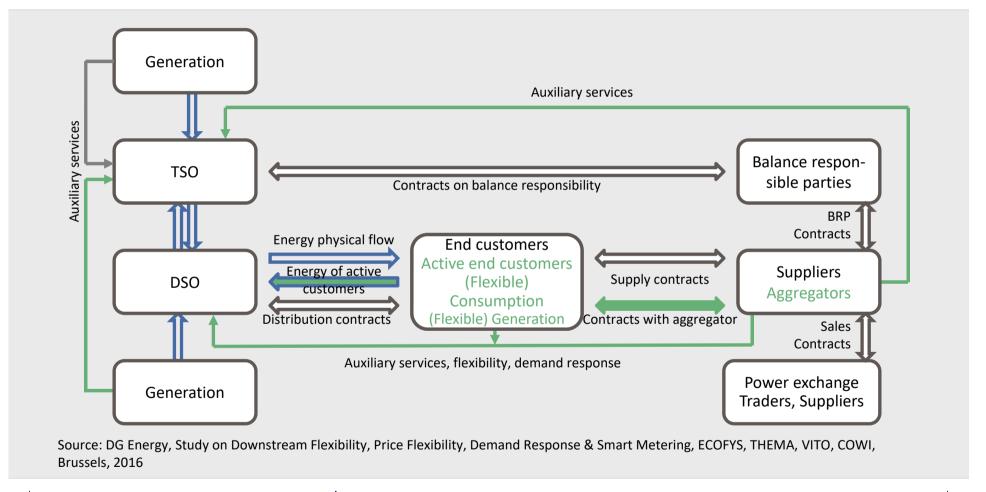
- Exchange of knowledge and experience on topics of common interest
 - Consumer empowerment and digitalisation ahead: debating the future from a regulatory perspective

Load Curve Flattening

- Demand side flexibility (DSF) is part of the answer
- Flexibility ability of (active) consumers to change their electricity usage in response to some form of signal
- Benefits of DSF:
 - Balancing
 - Capacity
 - Generation
 - Grid



Example of Model Market – New Players



Digitalisation Challenges and Opportunities



- The main challenge adapting to rapid market evolution – accelerating the processes
 - It is not just the industry that needs to change
 - Changes in legislation, regulation and standards
 - Threats to be pro-actively managed
- A number of benefits coming from new opportunities
 - New markets (storage, demand response, smart charging)
 - New opportunities (active customers, aggregators, etc.)
 - Smoother integration of renewables
 - Boost in energy efficiency
 - More efficient grid operation, planning and asset management through smart networks.



