Intro:  
- Flexibilisation
Old Electricity World

New Electricity World

80% erneuerbare Energie
2035+

Intro: Flexibilisation
Generation adequacy 2016-2025 – individual Member States
Generation adequacy 2016-2025 – EU aggregated
Uncoordinated backup solutions are costly

expensive

cheap
Aggregation is key...

...but regulatory barriers hamper cross-border trade
Key issue: Coping effectively with deficits and peaks

- Backup generation
- Postpone consumption (and earn money...)

- Postpone generation
- Activate consumption (and earn money...)
Market Design Reform - Possible Elements
Upgrading Wholesale Markets
Upgrading Wholesale Markets

- Decision-making on BZ configurations
- Revision of Rules in Annex I
- Locational Signals
- Transmission tariff structures
- Tariffs
- Level Playing Field
- Priority access and dispatch
- Connection rules
- Balance responsibility
- Curtailment rules
- Self-consumption
- Exist Barriers
- Regional procurement
- Art 15 revision
- Principles
- Consistent products
- Consistent market times
- Gate closure times
- Day-ahead/Intraday

Upgrading the Wholesale Market
Update Retail Markets

Market Design Reform: Elements

Diagram of energy systems including power plants, solar arrays, wind farms, rooftop PV, energy storage, and smart grid sensor/control systems.
Coordinate State Interventions => Generation Adequacy

- Strategic reserve
- Decentralised mechanisms
- System wide central mechanism
- Capacity payment

RoI/NI: Considering to move to a system wide central mechanism (reliability options)
Foster Regional TSO-Cooperation

= Regional Operations Centre (ROC)
----- = Border between Regional Operations Centres

5 Regions instead 42 TSOs

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Central ROC</td>
</tr>
<tr>
<td>2</td>
<td>Nordic ROC</td>
</tr>
<tr>
<td>3</td>
<td>BI ROC</td>
</tr>
<tr>
<td>4</td>
<td>Iberian ROC</td>
</tr>
<tr>
<td>5</td>
<td>SEE ROC</td>
</tr>
</tbody>
</table>

Source: European Commission
Adapt Institutional Framework
Enhance Risk Preparedness
Thank you