# 2. Delivering the new electricity market design and gas liquid markets – two case studies

Individual Policy Developments: Showcases from the electricity and gas markets

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- Mr Fernando Hernández, Chair, ACER Electricity Working Group

## "A BRIDGE TO 2025"

## **24 SEPTEMBER 2015**

Ensuring flexibility in the future electricity market to accommodate the market design to RES integration



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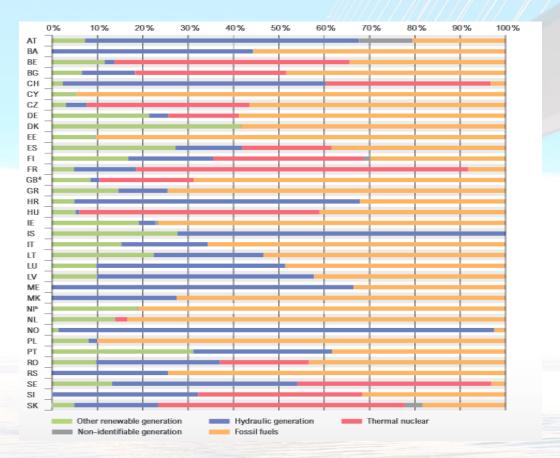






## Currently, the penetration of renewable-based generation has reached significantly high levels in the EU.

With large differences among MS



Generation mix (energy produced) in 2013 per MS.

Source: ENTSO-E Statistical Factsheet



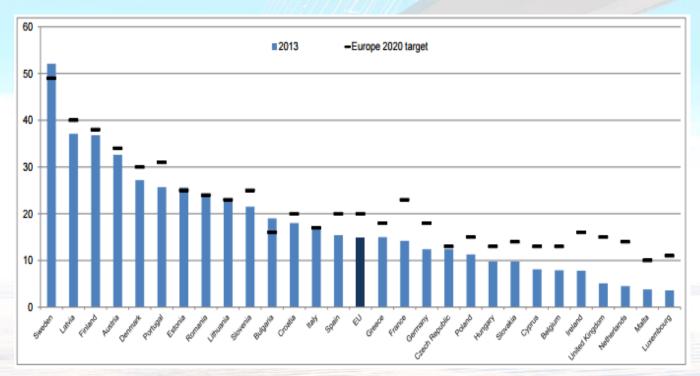




#### Currently, the penetration of renewable-based generation has reached significantly high levels in the EU.

#### Growing:

Most of the increase in the RES share of overall energy consumption forecasted to 2020 is expected to come from the electricity sector



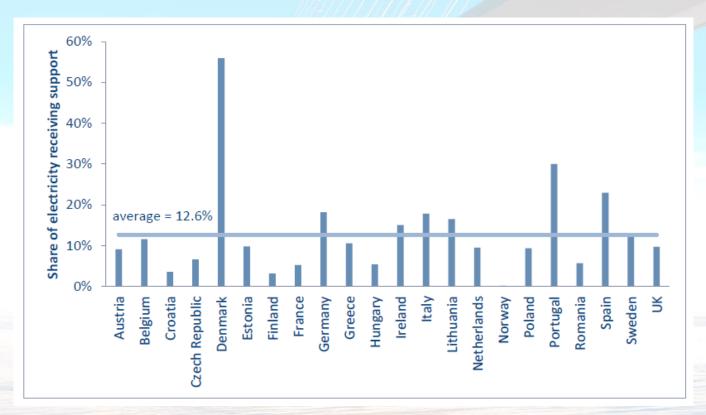
Generation mix (energy produced) in 2013 per MS. Source: ENTSO-E Statistical Factsheet





### Currently, the penetration of renewable-based generation has reached significantly high levels in the EU.

- with a high and growing amount of electricity receiving support;
- and with larger amount of non-manageable renewable energy sources



Source: CEER "Status Review of Renewable and Energy Efficiency Support Schemes in EU".

January, 2015





## Accommodating the market design to RES integration is a core principle of the Bridge paper

#### According to the Bridge to 2025...

The Agency and NRAs will seek to bring renewable generation more into the market through the Electricity Target Model, which will treat all forms of generation (and demand/storage) on a non-discriminatory basis.

#### In other words:

- Implementation of CACM GL, including the delivery of a pan-European intraday trade platform, is a priority
- Early implementation of Balancing NC will contribute to a more flexible internal market able to integrate more RES

GL approved in comitology

**25 July 2015.** CACM GL published in OJ

**20 July 2015.** ACER recommends adoption of EB NC





#### What is at stake?

#### Making the market fit for RES

- Well functioning short term markets allowing to minimise RES imbalances at least cost
- Remove practical barriers in market rules to sell RES into the market. Adaptations in intra-day and ancillary services design as market-driven solutions

#### And making RES fit for the market

- Balancing responsibility
- Cross-border coordination of support schemes (where support is needed)
- Aggregation and storage as technology-driven solutions to facilitate RES selling in the market







#### Accommodating the market design to RES integration

#### Other aspects relevant to the integration of RES in the market

- Avoid distortions to markets caused by RES, inter alia:
  - Cost-shifting from wholesale market to tariffs or taxes potentially hiding scarcity value
  - Avoid market distorting support mechanisms
  - Progressive phase out of support
  - Revisit priority dispatch for RES?
  - Best practices of self-consumption





#### **Ensuring flexibility in the future electricity market**

#### **Problem identification**

- Greater penetration of renewable-based generation is significantly increasing the requirement for market-based flexible response which will include the demand side and the supply side
- Still, difficult to get qualitative and quantitative assessment of the flexibility needs for the future European electric system
- Demand-side flexibility as an alternative to CRMs. Without flexibility, the energy-only market is not viable
- CEER and ACER are working to identify and remove (regulatory, technical, legal or market-related) obstacles to the development of DSR and to facilitate DSR deployment
- The aim is to reveal the need for short term flexibility and enhance the opportunities for participation of all flexible responses, and in particular demand-response





#### **Ensuring flexibility in the future electricity market**

#### **Approach**

- At this stage several options. No "one size fits all" solution
- Manage the entrance of new actors (e.g. aggregators)
- This includes developing an approach for the management (including the collection, dissemination and protection) of consumer data, which is essential for the development and operation of a market in DSR.
- Local dimension/challenges of flexibility: DSOs can consider flexibility means as an option for network management
- More coordinated system operation will also facilitate the integration of RES





#### **Ensuring flexibility in the future electricity market**

#### Warnings

- Avoid the creation of cross-subsidies when developing flexible demand response
- Integrate flexibility in the existing markets
- Customer engagement is crucial. Voluntary changes in response to market signals must be properly rewarded but avoiding artificial response based on potential support schemes, i.e. give the right value to flexible response (not more nor less).





## THANK YOU

IN COOPERATION WITH





## 2. Delivering the new electricity market design and gas liquid markets – two case studies

Electricity and gas as part of a single Internal

Energy Market: Growing interdependence between electricity and gas - Panel discussion

- Mr Florian Ermacora, Head of Unit for Wholesale markets in electricity and gas, DG ENER (Panel Moderator)
- Mr Jan Ingwersen, Business Area Manager, Market, ENTSOG
- Mr Peder Andreasen, President, ENTSO-E
- Mr Gert De Block, Secretary General, CEDEC
- Ms Annette Loske, President, IFIEC Europe
- Mr Peter Styles, Member of the Board of EFET
- Mr Andrew Burgess, Vice-Chair, CEER DSO WG