



# "Challenges in aligning the EU Electricity Policy towards the Energy Union" 18 May 2016

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## I- State of Play

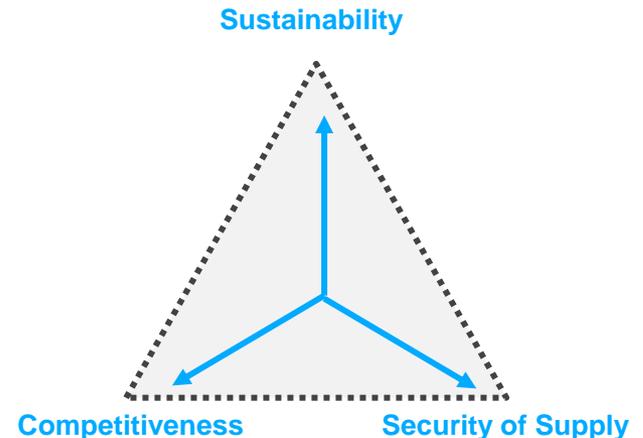
- ✓ A lack of long term prices signals for investors
- ✓ Electricity security of supply at stake

# European Energy policies – ambitions and shortcomings

## Ambitions

- The European Energy was built up to achieve 3 objectives:
  - **Sustainability** - fight against climate change through RES, carbon pricing and energy efficiency policies;
  - **Competitiveness** - keeping energy prices low for the sake of the European companies and domestic consumers
  - **Security of supply** - a better coordination between supply and demand in the framework of a single European Energy Market

→ In the past 10 years, European policies have failed to achieve these 3 aims simultaneously. The Energy Union must urgently address the tensions between these 3 goals



# European Energy policies: their ambitions and shortcomings

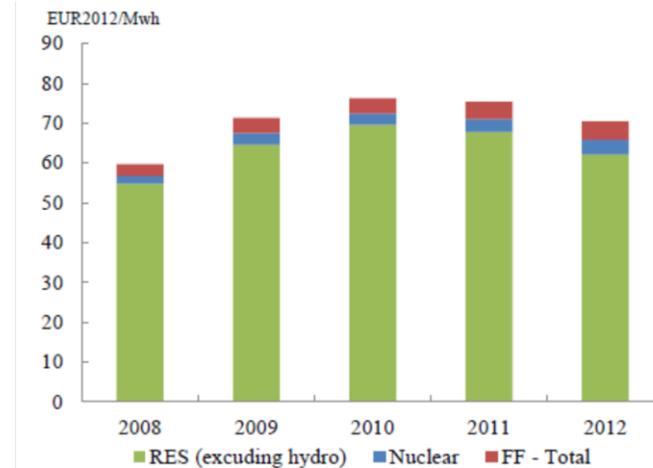
The facts: not a single EU policy but uncoordinated measures between MS and between national and European level

— **On sustainability:** massive amount of subsidies for RES, with some success, great public expenditure and growing imbalances (cf. DE)

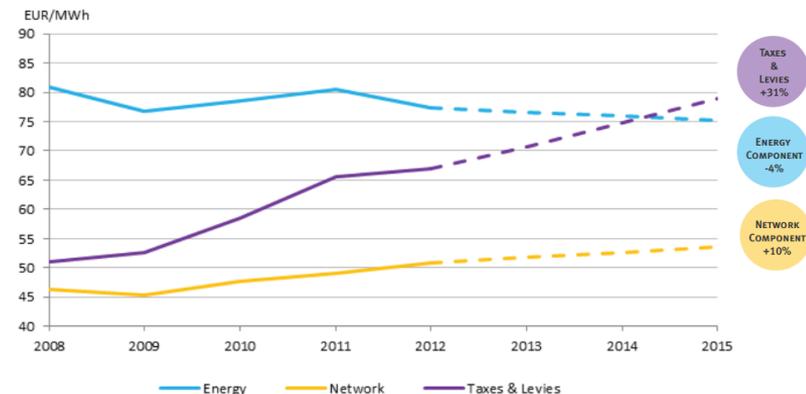
— **On competitiveness:** a direct impact on energy bills for domestic and industrial consumers (taxes and levies, transport and distribution)

Source: DG ECFIN, Eurelectric

Cost of RES subsidies: 2008-2012



Energy bills for final consumers: 2008-2015



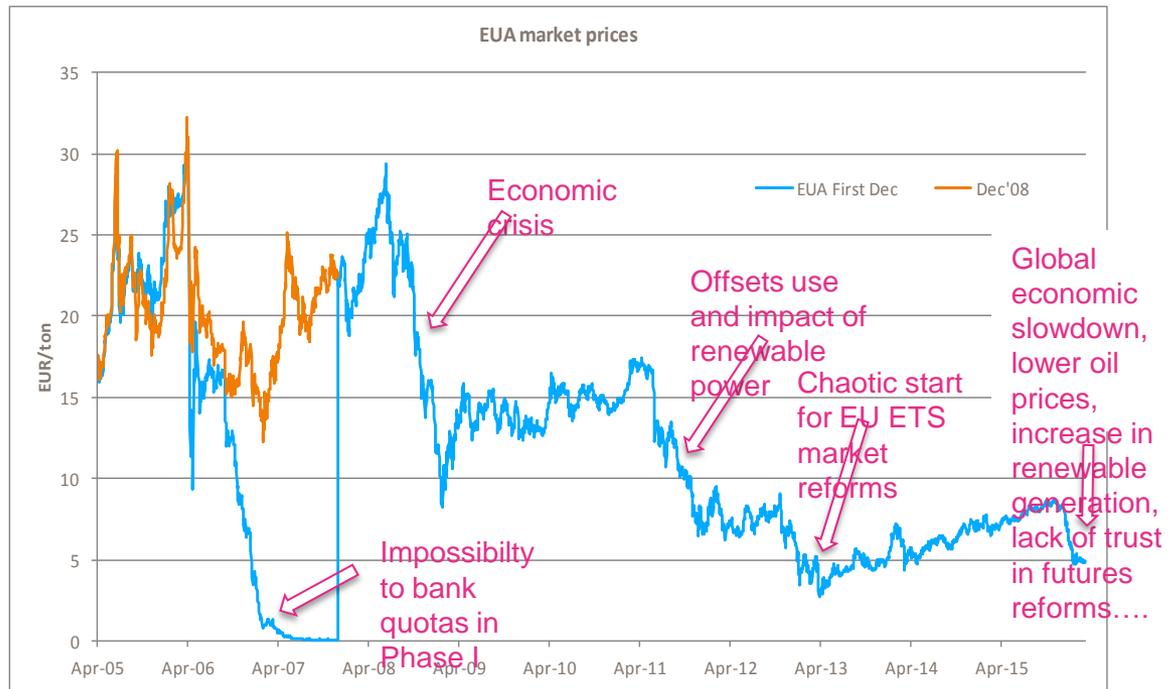
# European Energy policies - Review of the Electricity Market Design – 2016

— Failure of the European carbon market EU-ETS in its current settings (5-7 € / tonne of carbon in 2016)

— A lack of coordination between EU-ETS (European), RES subsidies & Energy efficiency provisions (European objectives but national tools)

— **On security of supply:** over-attention on gas security of supply issues due to recent international crises

« EU ETS » Carbon market prices



# European Energy Policy – Characteristics of the Electricity Market

- **Energy transition towards a low carbon economy = new electricity market conditions**

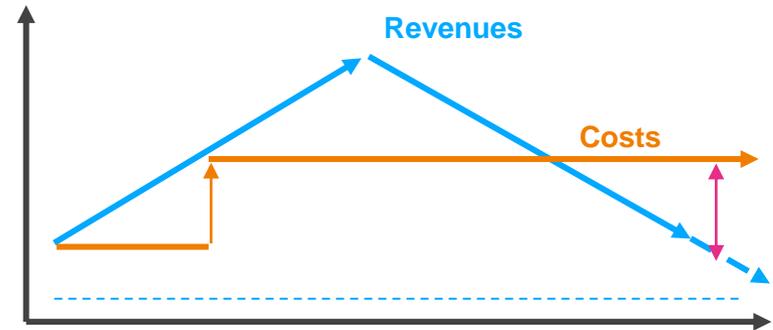
**Increase in capital expenditures** (new investments needed for the energy transition)

- + **Stability of demand** (e.g. economic slowdown & energy efficiency policies)

= **Decrease in revenues** (cf. prices linked to the marginal cost of production) while costs (OPEX + CAPEX) remain at the same level

= **Structural low wholesale prices** (will continue in the future in absence of a new regulatory framework (RES with combination of high investment costs + variable costs close to zero))

Illustrative trends



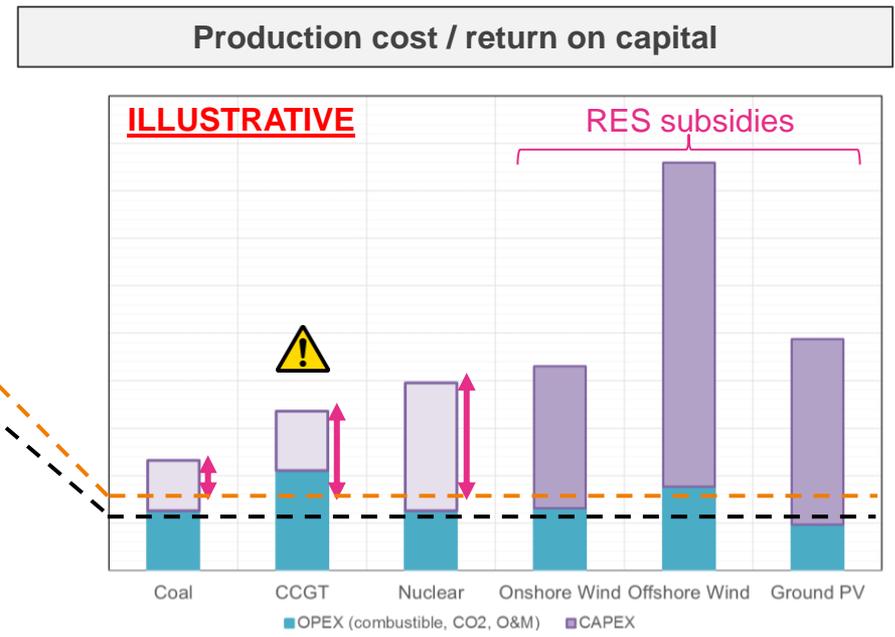
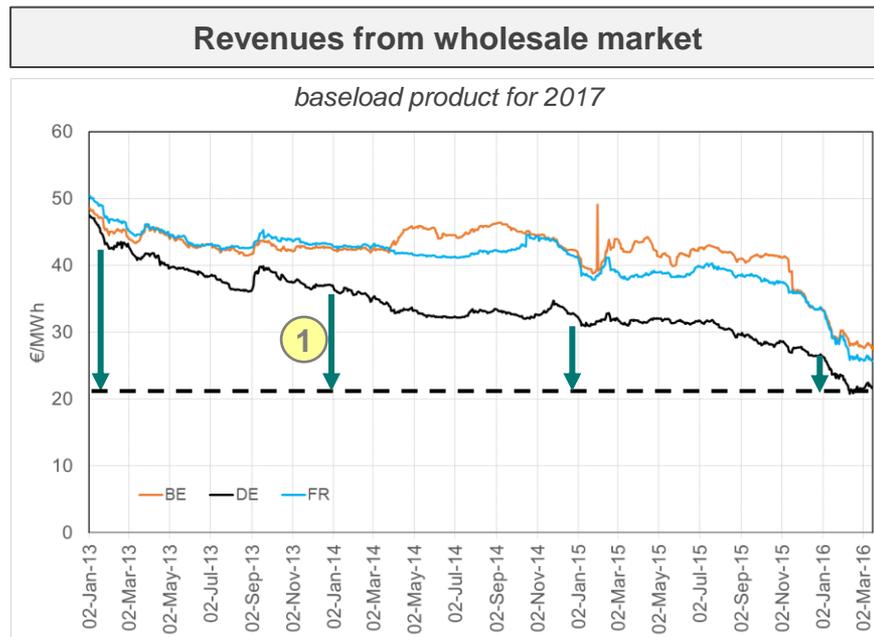
Year-Ahead market prices evolution



# Transition towards a low carbon electric system

## Questioning the cost coverage

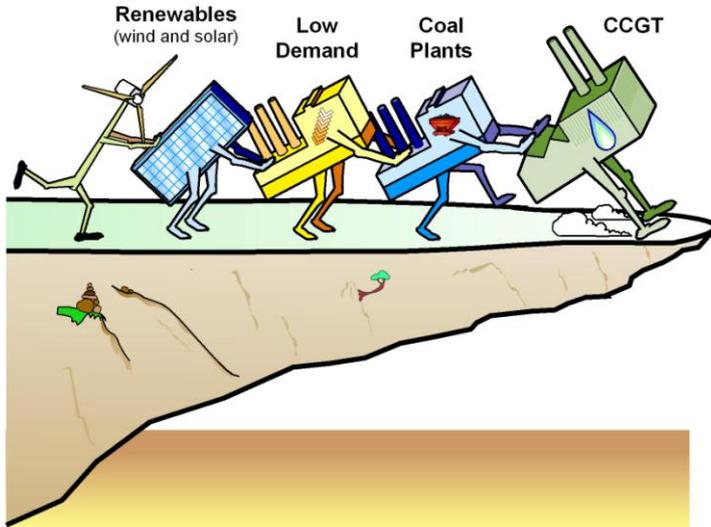
The current market design does not allow costs to be covered by the market. No technology can cover either its capital costs or its operation costs in the current regulatory framework, except for the incentivized RES.



1 Wholesale prices will structurally be under pressure in the current market design.

# European Energy Policy – Characteristics of the Electricity Market

- **Massive decommissioning/mothballing of thermal assets:** 45 GW in the perimeter of the Magritte Group, i.e. 11 major EU utilities; same amount expected by 2025 without regulatory or economic inflexions
- **An overall situation of overcapacity for available capacities but not for peak management:** puts at risk security of supply



→ **The economic decommissioning constitutes a major risk for electricity security of supply (brownouts, blackouts)**

Source: IHS CERA

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## II- Remedies

How to steer the energy transition  
✓ in a cost-efficient way  
✓ while safeguarding security of supply?

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# Long term evolution of the Electricity Market

Electricity prices should **remain structurally low** ① (out of capacity remuneration) and will **become less volatile** ②. A new market design is key in ensuring the economic viability of the overall components of the market (generation, demand management, storage).

**Increase in RES production** ①

Impact on the merit order negative for conventional generations  
Downward pressure on prices

*How to restore conventional assets profitability (CCGT)?*

**Expansion of demand-side management** ②

Positive element for SoS  
Downward pressure on prices

*How to materialise the value of lost load ?*

**Development of storage (centralised / decentralised)** ②

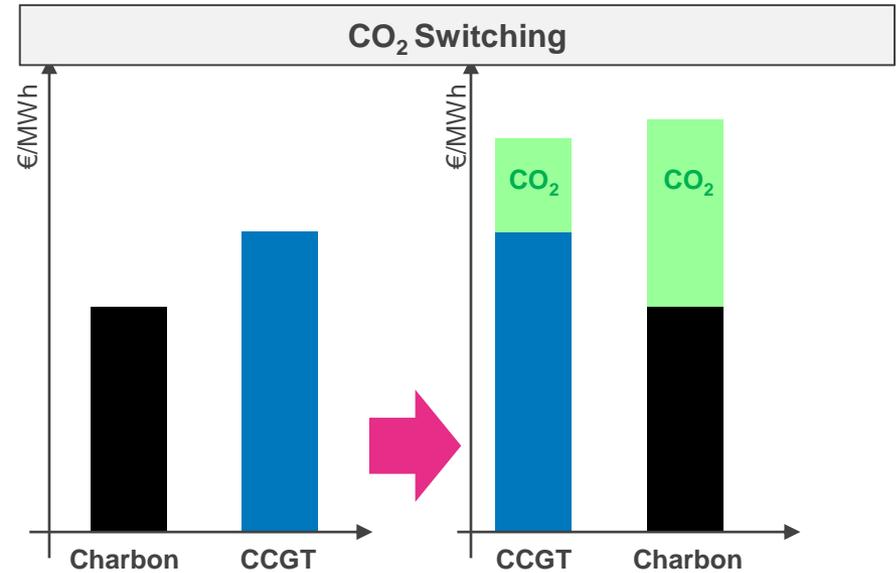
Dynamic management of storage  
Positive contribution on intraday balancing

*Which stabilisation level?*

## — Is the CO<sub>2</sub> Pricing a panacea?

The energy sector needs strong price signals to provide better incentives for investments. A stronger carbon price will trigger low-carbon investments **but will not restore the profitability of existing conventional assets dedicated to security of supply** (cf. combined cycle gas turbines).

- Switching from coal to gas triggered at 25€-30€/tonne → not an efficient decarbonization tool
  - ENGIE advocates for strong long term signals, notably through an ambitious reform of the EU-ETS. The 2015 MSR reform was fully supported. We're advocating for a strong « phase IV » for the EU-ETS (2021-2030).
  - Need for an additional structural reform of the EU ETS, e.g. a soft price collar as proposed by the French government or similar provisions.
  - But a differentiated effect: positive for RES and 'outright power' (nuke, hydro) but modest effect on thermal generations eg CCGT
- **An EU-ETS structural reform, unlikely in the short term, will not be the expected game changer for SOS;**
- **Does not provide the expected long term visibility for investors**



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## Improvements within the current Electricity Market Design

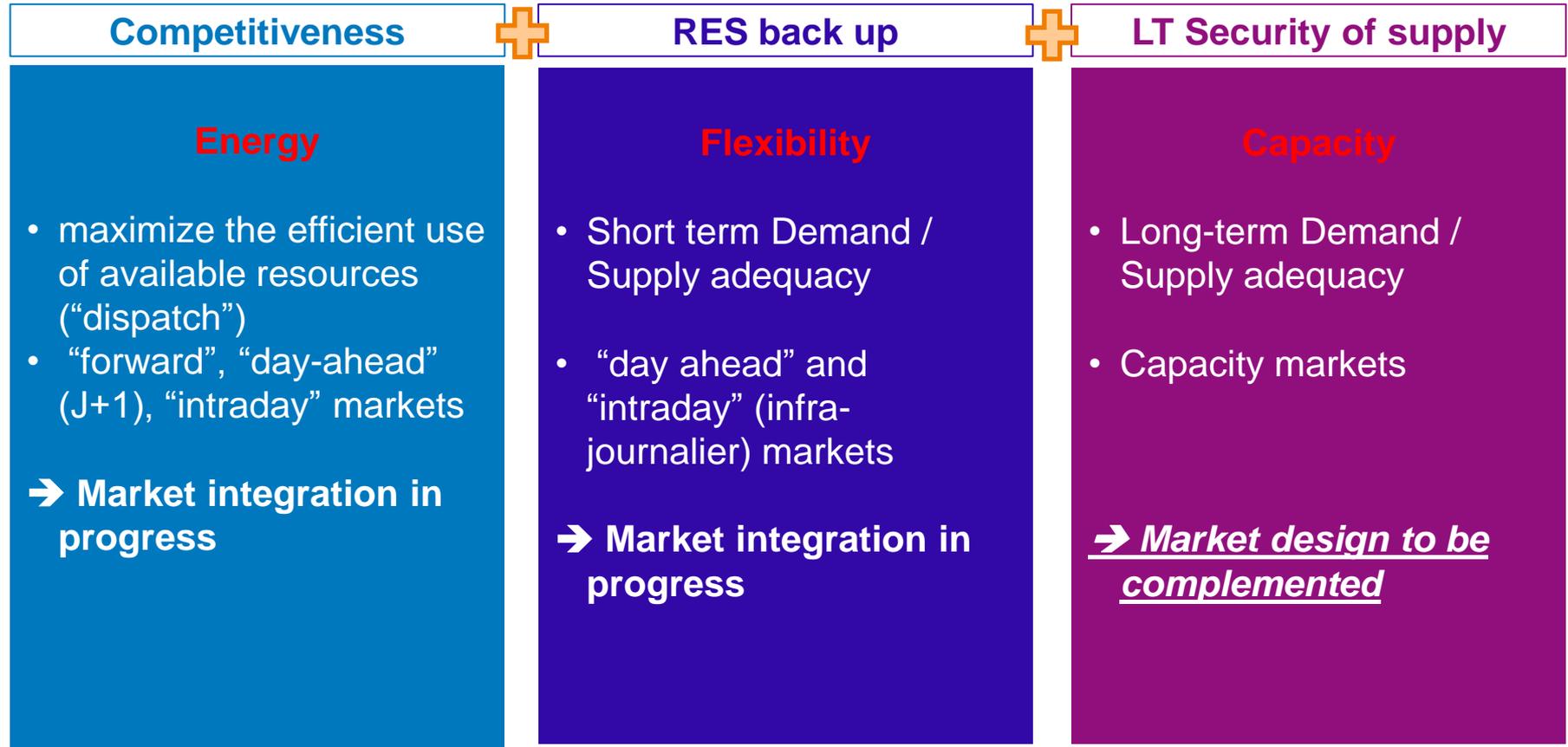
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In the short term, the full implementation of the current electricity market design must be a priority (cf 3<sup>rd</sup> Energy Package).

- **Improvements of the intraday / balancing markets: towards a genuine single electricity market**
    - Standardization, harmonization (gate closure), etc;
    - Cross-border exchanges;
  - **Improvements in price-formation**
    - Removal of price ceilings (e.g. CWE = 3000 €/MWh) ;
    - Scarcity premium;
  - **Removal of exit barriers for unprofitable assets**
  - **Approximation of market rules for supply (conventional and RES) and demand (DSR)**
    - Integration of mature RES in the market
- ➔ **But will not be sufficient to ensure the viability of the existing and future assets dedicated to security of supply**

# Towards a new Electricity Market Design

In order to steer a cost-effective energy transition and take up future challenges, the new market design shall incorporate « energy », « flexibility » and « capacity » as full parts of the future market design



## Capacity mechanisms - Basic principles

- Capacity mechanisms constitute an industrial requirement and must not be seen as subsidies since they are market-based and comply with several common principles at the European level
- **Capacity mechanisms are key elements that provide various services:**
  - Short term: **cost coverage for existing assets** which are not remunerated by energy and flexibility markets
  - In the longer term: provide **visibility and robust signals for new investments** required for SoS purposes
- **CRMs must be part of the new electricity market design**
  - based on a solid generation adequacy assessment (at national and regional level)
  - market-based and compliant with competition rules
  - based on common EU-wide principles
- **Some key requirements**
  - Technology-neutral
  - Open to cross-border cooperation
  - Tackle both new and existing capacities
  - Allow for participation of Demand side management and storage

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# Capacity Mechanisms – the views of European Businesses associations

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- Chart Legend

- Capacity mechanisms as part of the future electricity market design

- Capacity Mechanisms when necessary

- « Energy-only » markets

- **UK** the only country where a CRM has been validated by the EC (DG COMP)
- **Southern countries** (France included) advocate integrating CRMS in the MD
- **Scandinavian countries** and countries with a strong hydro generation (**CH/AT**) are mainly in favor of « energy only » models
- In other countries, eg **DE**, European federations retain pragmatic approaches.
- ➔ **No « one size fits all » solution but a set of common European principles and compliance with competition rules and State Aid guidelines**



**Thanks for your attention**