



# CLEAN ENERGY FOR ALL EUROPEANS

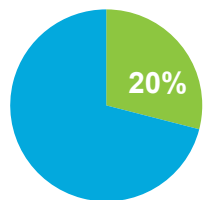
**Electricity Market Design: Update on CEP & Arts. 14-16**  
Brussels, MESC meeting of 5 March 2019

European Commission – DG ENERGY

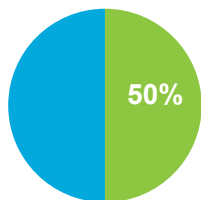


1. **Why** we need a new electricity market design? - General objectives
2. **What** is the regulatory framework? – The Clean Energy Package (CEP)
3. **How** will we reach the objectives?
  - Making the markets fit for renewables
  - Making renewables fit for the market
  - Framing bidding zones and cross-border capacity allocation
  - Securing the needed flexibility and adequacy
  - Fostering regional cooperation
  - Other measures

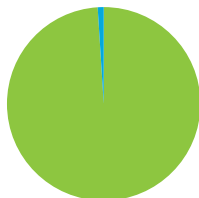
# General objectives: Sustainability



**2020**  
20% of RES



**2030**  
27% of RES  
(50% electricity)

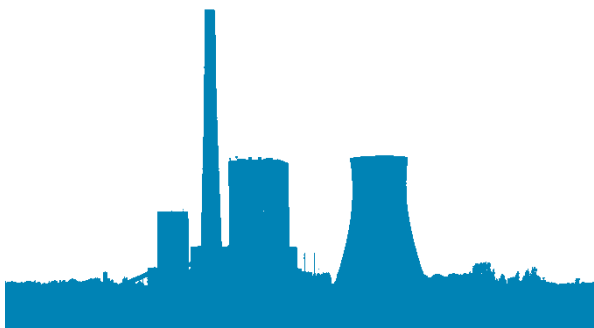


**2050**  
Electricity  
completely  
carbon free

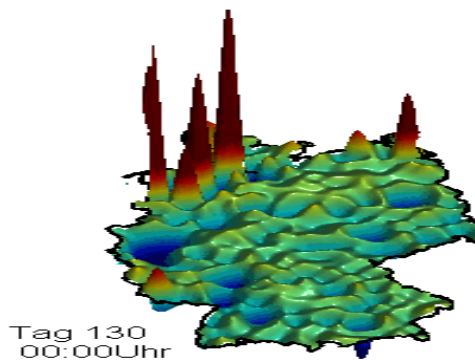


# General objectives: Security of supply

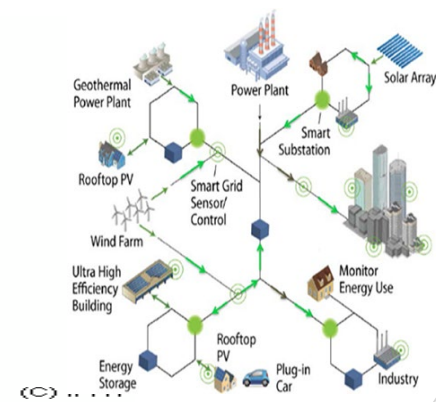
## Old Electricity World



## New Electricity World



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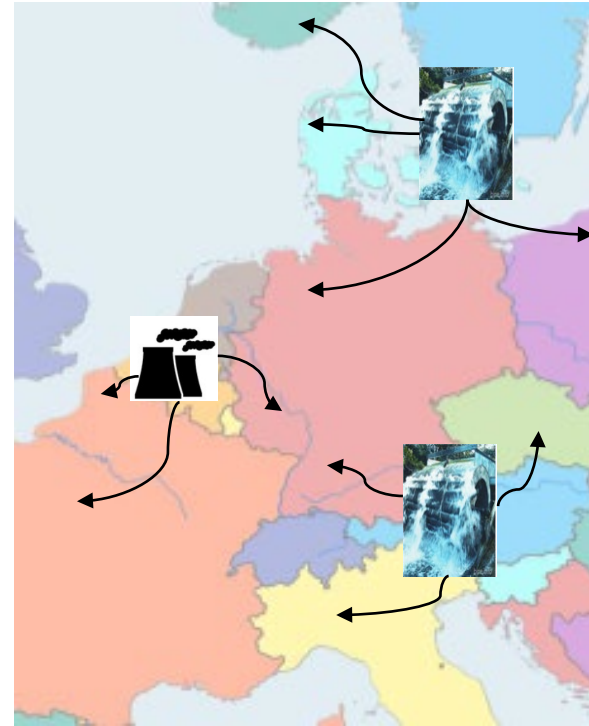


From central/ dispatchable...  
...to decentralised/ volatile

# General objectives: Cost-effective / promote investment



expensive



cheap

- Level playing field + strong short-term markets + demand response = €9.5 billion/year of cost savings by 2030;
- Coordinated approach to resource adequacy = capacity savings of ~80 GW (4.8 b€/year of investments!)

# The regulatory framework - CEP

## THE RIGHT REGULATORY FRAMEWORK FOR POST – 2020

*" In essence the new package is about tapping our green growth potential across the board"*

*Commissioner Miguel Arias Cañete (2016)*



**Energy Union  
Governance**



**Energy Efficiency**  
(Energy Efficiency  
Directive, Energy  
Performance of  
Buildings Directive)



**Renewables**  
(Revised Renewable  
Energy Directive)



**New Electricity  
Market Design**  
(including Risk  
Preparedness)



**Energy prices  
and costs  
report**



European  
Commission

# The regulatory framework - CEP

## Electricity Regulation (RECAST)

- Contains majority of new wholesale rules

## Electricity Directive (RECAST)

- Contains majority of new retail provisions

## ACER Regulation (RECAST)

- ACER tasks and procedure

## Regulation on Risk preparedness (NEW)

- Member States put in place appropriate tools to prevent, prepare for and manage electricity crisis situations

# Electricity Regulation: MARKETS FIT FOR PURPOSE

COMPETITIVE ENERGY MARKETS ARE AT THE HEART OF A COMPETITIVE ECONOMY

## Strengthened short-term markets

Increase **cross-border trading opportunities** over shorter timeframes (intraday and balancing markets)

**Reward flexibility** for generation, demand-response and storage

Allow **prices to show real value** of electricity in terms of time and location (scarcity pricing)

## Regional cooperation

**Regional Coordination Centres (TSOs)**

Common rules on **crisis prevention**

European framework for **capacity mechanisms**

New tasks for **ACER**

**Enhancing  
System Flexibility:**

**INTEGRATION OF  
RENEWABLES**

**MARKET-DRIVEN  
INVESTMENTS**

## Level-playing field among sources

**Remuneration** on equal terms on market principles=> full market access for RES & demand response

Phase out **priority dispatch**

Extended **balancing** responsibilities

**Curtailment** rules

Non-discriminatory charges for **distributed generation**

## No discrimination of cross border trade

Market principles from **Network Codes/Guidelines**

**Address congestion** through Action Plans or bidding zone reconfiguration  
=> EC decision on BZs if MS do not agree

New **target for cross-zonal trade** (70%) by 2025 at the latest



## More details ...

### Network Codes & Guidelines

- Delegated and Implementing Acts
- New empowerments (e.g. cybersecurity, demand response)

### Tariffs & Congestion revenues

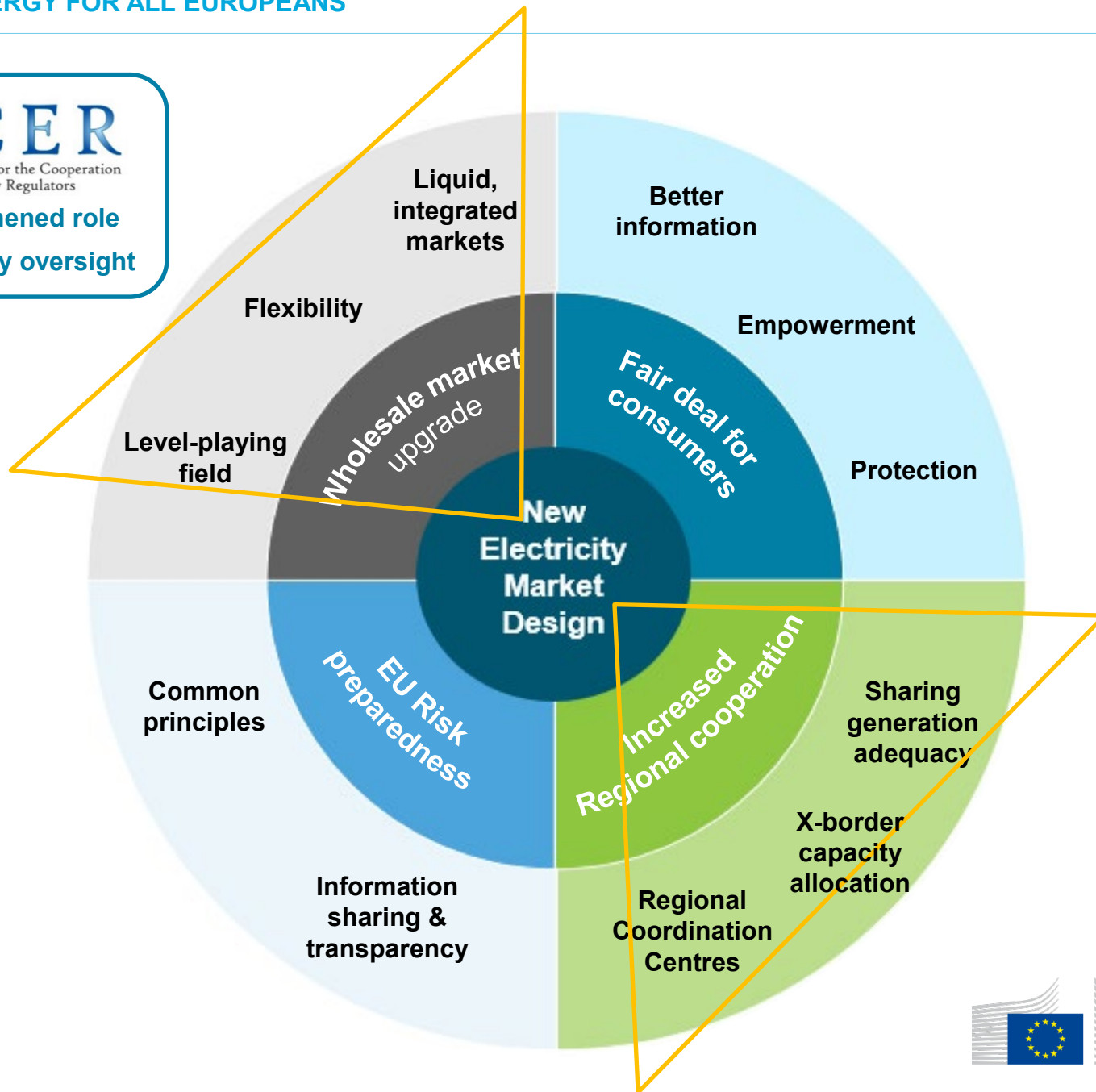
- ACER best practice report on tariffs
- Priority spending to reduce congestion but revenues may still be used for national tariffs

### Imbalance settlement period

- 15 minutes as of 2025 (exemption for 30 mins possible)

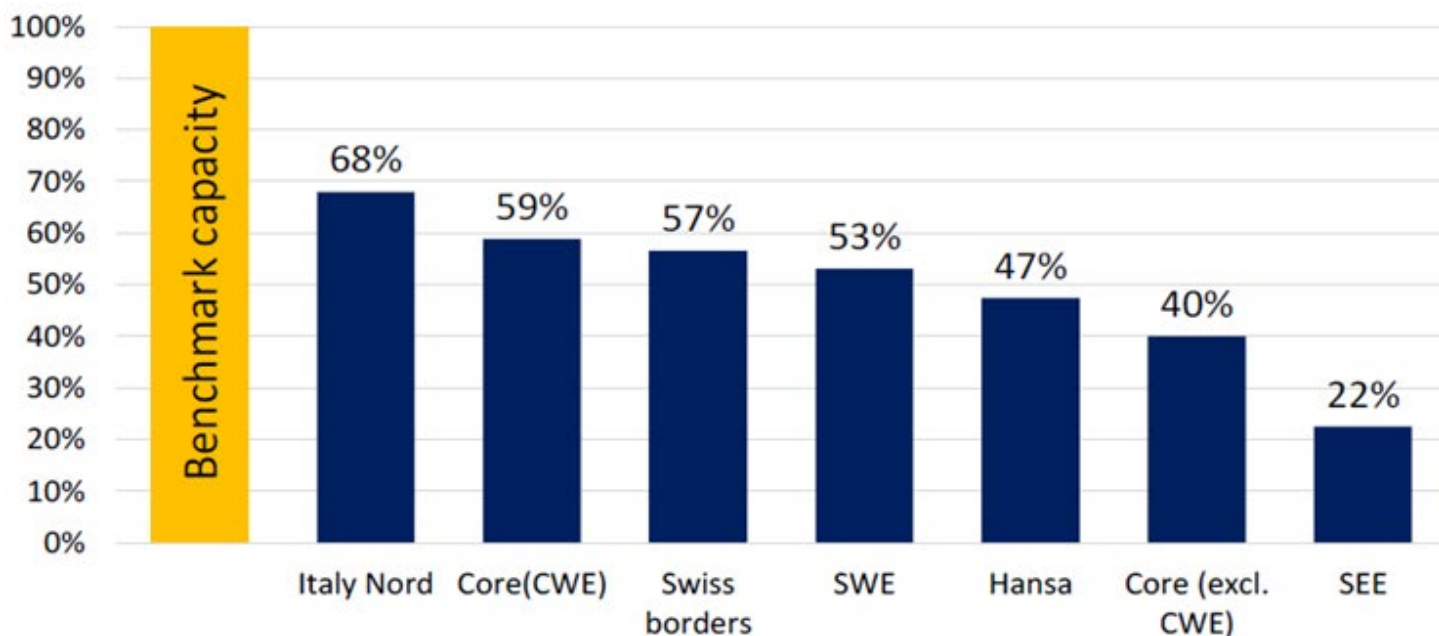
### TSO/DSO ownership of ancillary services (Directive)

- In principle excluded (competing with Generation)
- Derogation with NRA approval after failed tender



## Framing bidding zones & cross border capacity allocation

Ratio between available cross-border capacity and the benchmark capacity\* of HVAC interconnectors per region – 2016 (%)



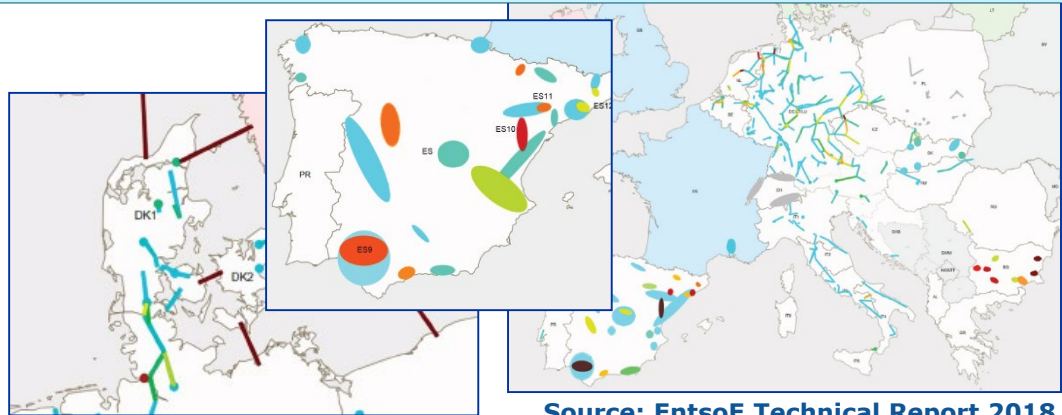
Borders with the lowest ratio between tradable capacity (NTC) and benchmark capacity (ranked) – 2016 (% , MW)

Border-Direction	ratio NTC/benchmark
DE/LU->PL	0%
CZ->PL	1%
SK->PL	2%
DE/LU->CZ	10%
RO->BG	10%
DK1->DE/LU	12%
PL->SE-4	16%
AT->CZ	28%
AT->CH	29%
DE->CH	29%
PL->LT	30%

Source: ACER calculations based on ENTSO-E and NRAs (2017)

*Less than 50% of interconnection capacity is made available (!)  
 ⇒ Objective: Limit undue restrictions of imports and exports*

## Bidding zones and structural congestion (Regulation – Articles 14&15)



Source: EntsoE Technical Report 2018

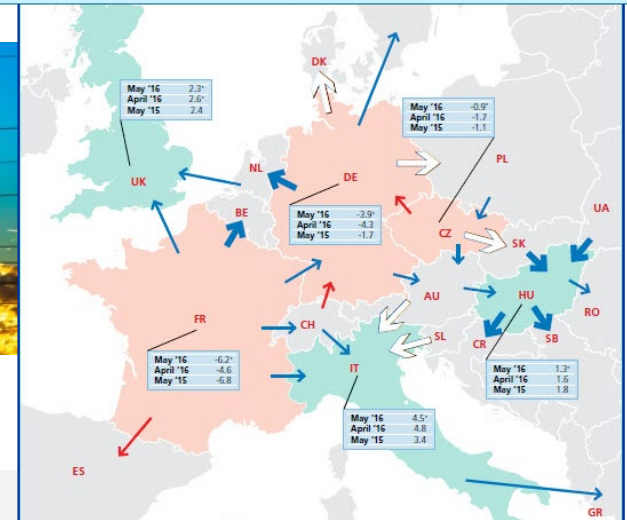
### New in the regulation

- Addressing structural congestion a key priority. MS can choose:
  - an Action Plan with network investments until 2025, or
  - a bidding zone reconfiguration
- Bidding zone review: no agreement by MS → EC decides

### Benefits

- A market better aligned to the physical grid which increases trade &:
- reduces the need for costly after-market remedial actions
  - decreases the impact of congestion in one zone on the neighbours
  - enhances security of supply by ensuring that electricity can be traded to where it is most needed.

## Cross border electricity trading (capacity allocation) – Regulation Article 16



### New in the regulation

- Key principles:
  - Maximisation of trade across borders
  - No discrimination of cross-zonal vs internal trades
- Deductions by TSOs for loop flows and reliability margins capped
- New min. threshold of 70% of cross-zonal capacity for trade

### Benefits

- Increased trade provides reliable access to electricity imports for:
  - Increased security of supply
  - Reduced need for new investments, thereby  
...reducing the cost of electricity for final consumers

## Timeline for implementation of key points in Articles 14-16

### NOTE!

- **Entry into force (EIF) expected mid-2019**
- **Regulation applies from January 2020**

#### 1 Articles 14 & 15 apply from date of EIF:

- Technical report **3 years after EIF** - Art 14(2)
- BZ Review: methodology should be sent to NRAs **3 months after EIF** - Art 14(4)

#### 2 Article 16 (70% available for trade) applies in general from Jan 2020.

However, Art 16 "for the purpose of implementing Article 14" applies from EIF:

- In our view, this allows TSOs to assess congestion under 14(6) from EIF
- Then, the MS has 6 months to decide whether to amend the BZ configuration or implement an Action Plan and apply a linear trajectory

⇒ By Jan 2020, 70% will apply unless:

- ⇒ a **linear trajectory** applies
- ⇒ a **derogation** has been approved – Art 16(9)

**Proactive  
coordination  
between  
NRAs needed**





**Thank you for your  
attention!**