



Federatie van de Belgische Elektriciteits- en Gasbedrijven
Fédération Belge des Entreprises Électriques et Gazières
Federation of Belgian Electricity and Gas Companies

Clean Energy for All Europeans

FEPEG assessment and priorities

EU as global leader of energy transition towards low-carbon economy

Clean Energy for All European Package (30.11.2016)

High level content

- New electricity market design
- Security of supply
- Renewables
- Energy efficiency, E-mobility and Eco-design
- Governance

Goals

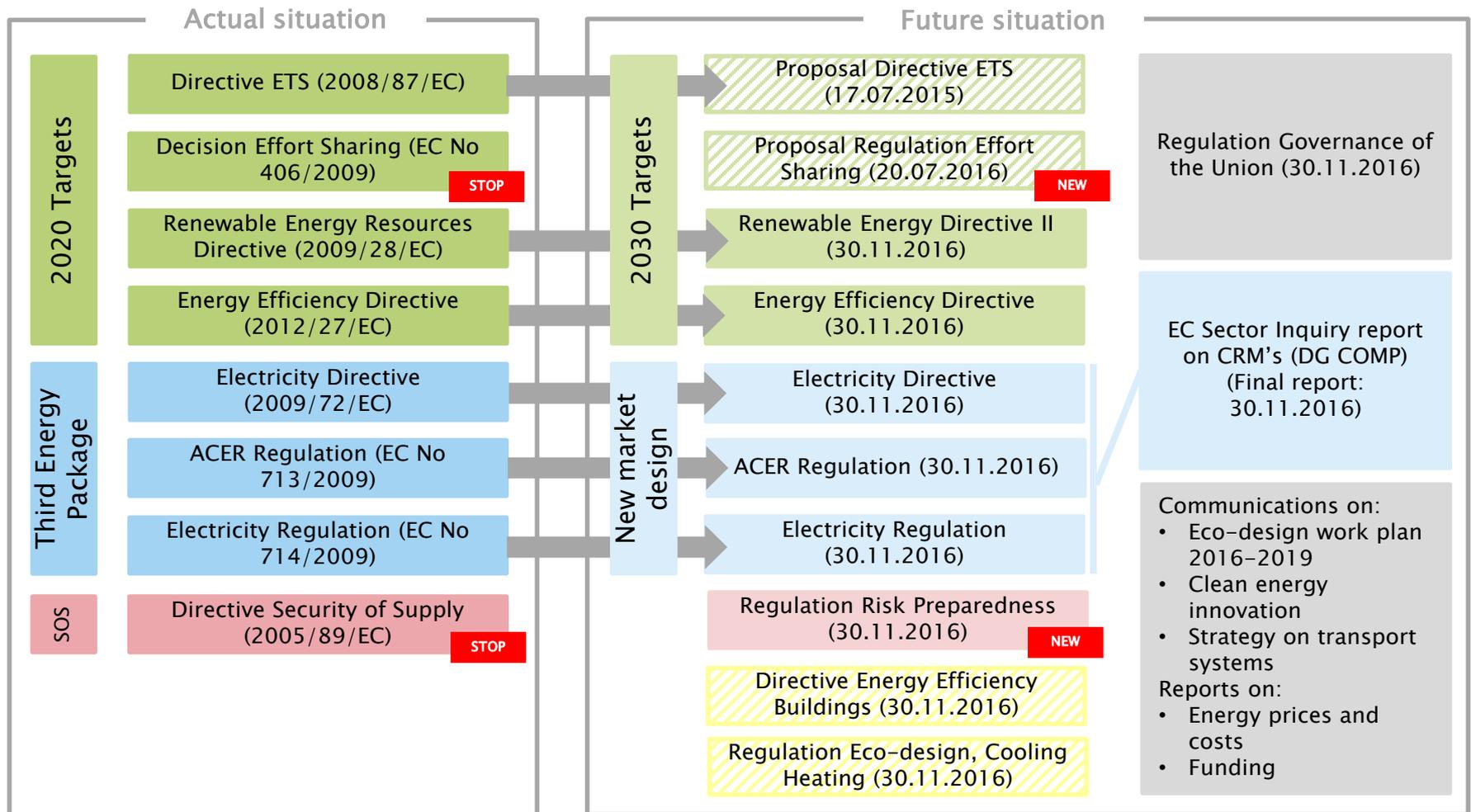
- Putting **energy efficiency** first
- Achieving global leadership in **renewables**
 - Strong energy policy ambitions for RES
 - Improved market integration
- Providing a fair deal for **consumers**
 - Make consumers active players of the markets in a competitive way

Proposals

- 4 Directives
- 4 Regulations
- 3 Communications
- 2 Reports
- 1 Sector Inquiry

Overview actual versus future situation

Proposals for Clean Energy for All Europeans Package



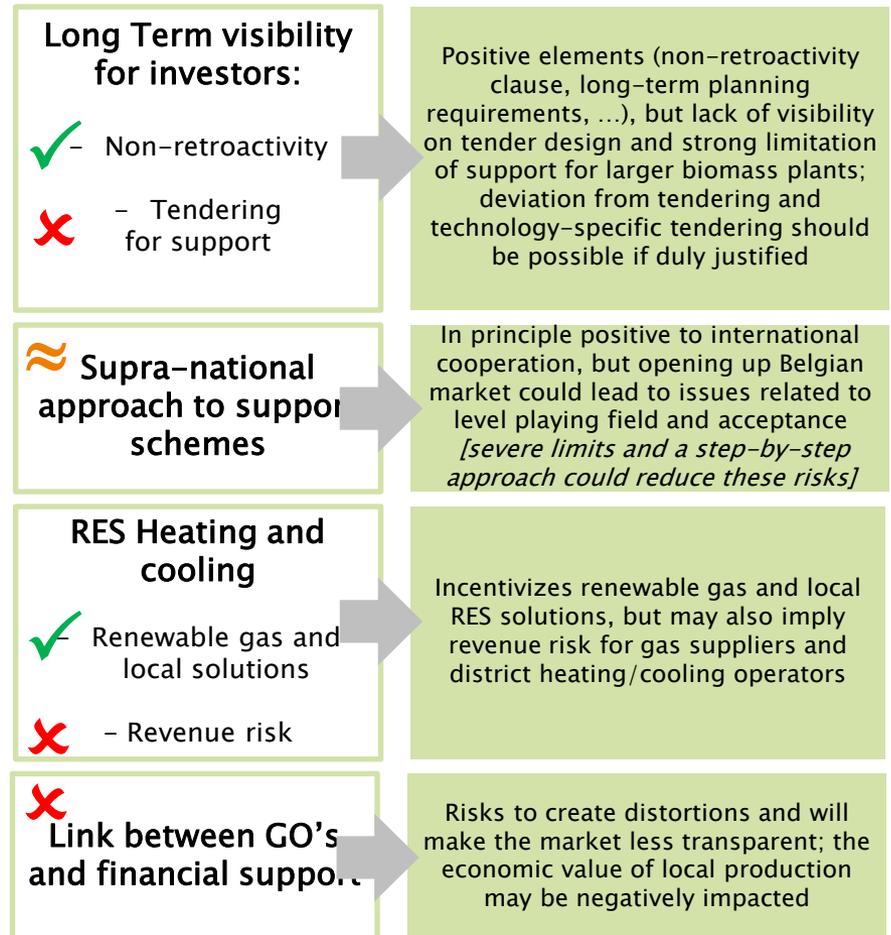
Targets 2030

Renewable Energy
Energy Efficiency

Renewables become a cornerstone of the electricity markets

Renewable energy resources

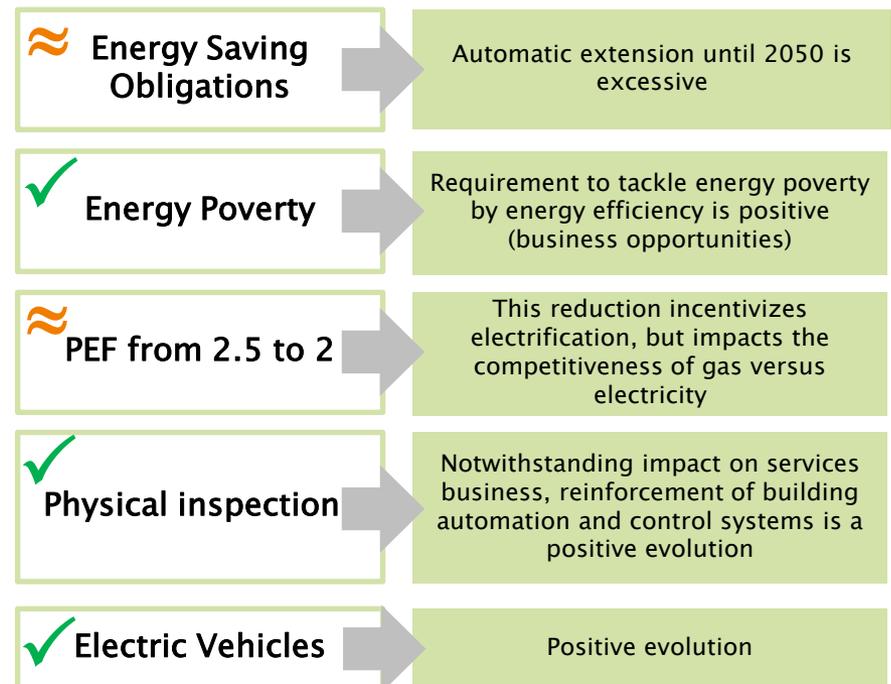
- EU has a (binding) RES target of 27 % in final consumption (all sectors) by 2030. It is expected to result in a substantial share (49 % RES in the EU electricity mix by 2030).
- **Subsidies** to RES are still allowed after 2020, but must be **market-based** and increasingly organized on supranational level to limit distortions of the internal market.
- While gradually exposing RES to market signals and competition, the proposal also includes provisions to protect RES investors and provide **longer term visibility**. These do not go far enough, in particular the design of RES auctions.
- The proposal also shifts the focus towards RES deployment in **heating and cooling sector** (so far lagging behind) by requiring an increasing share of RES in heating and cooling (1%/year) and opening district heating networks.
- RES producers receiving financial support from a support scheme should **not receive GOs**. However member States shall still issue such GOs and transfer them to the market by auctioning them.



Opportunities for electricity, but threats for natural gas

Energy efficiency

- **Yearly energy saving obligations** of 1.5 % are confirmed up to 2030 and further until 2050. RES can contribute to reach target in limited way.
- Energy efficiency alternative measures: Member States should take into account **energy poverty**.
- Primary Energy Factor (PEF) value **lowered from 2.5 to 2.0** but Member States may apply a different coefficient provided they can justify it.
- Reinforcement of **building automation and control systems** are considered as a way to streamline inspection and as an effective replacement for physical inspections.
- Proposal fosters the infrastructure for **electromobility** (pre-cabling and charging stations for electric vehicles (EV)).



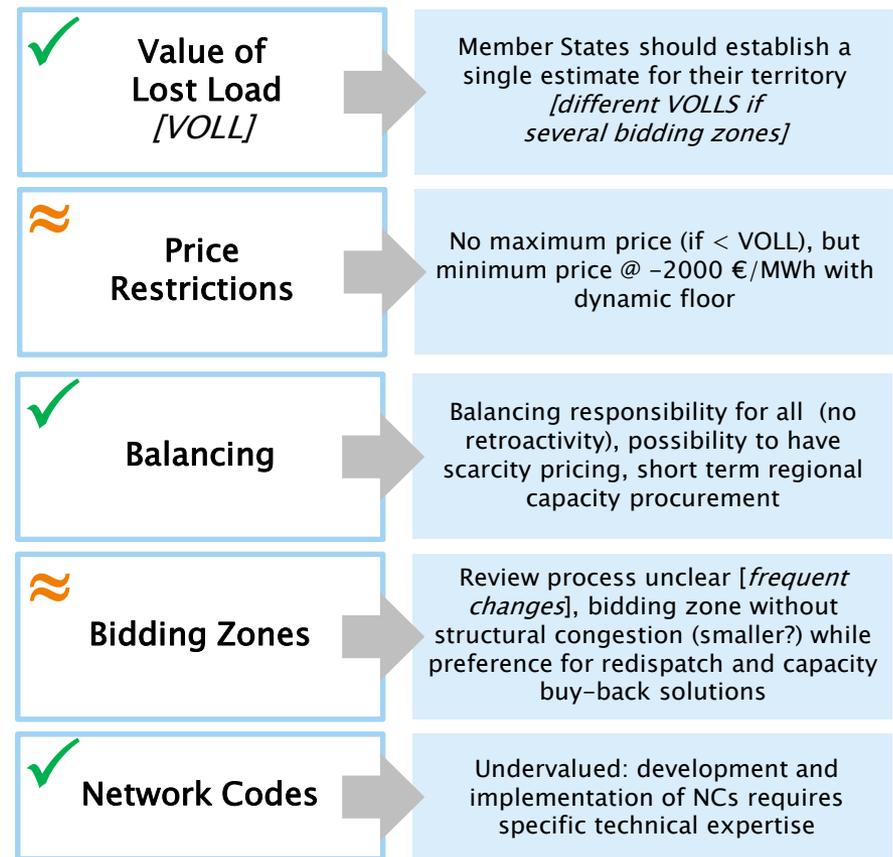
New Electricity Market Design

Improvements to short-term markets
Capacity mechanisms
Integration renewables
Empowering customers
Demand flexibility and aggregation
More decentralized electricity system
Role of System Operators

Improving market functioning is no regret measures

Improvements to short-term markets

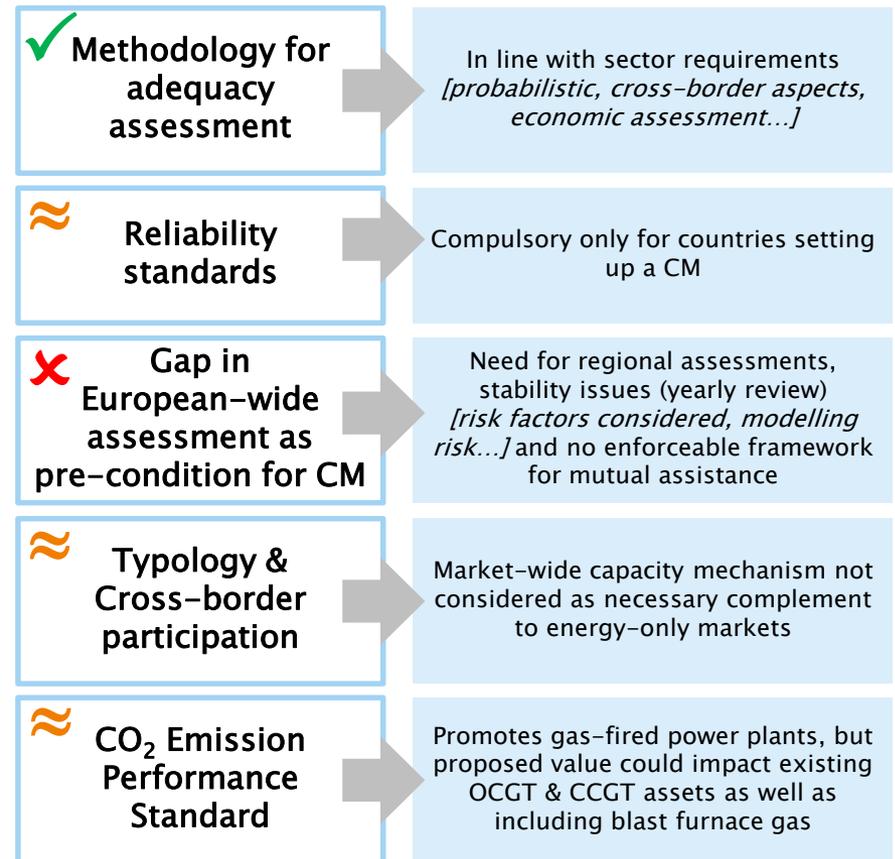
- The proposal is setting the legal principles applicable to **forward, day-ahead, intraday and balancing markets**, including the aspects related to balancing responsibility (cfr. supply-demand equilibrium at the perimeter of all market actors)
- Regarding network access and congestion management, the proposal defines the concept and the review process of **bidding zones** (defined as zones with uniform market prices and an absence of congestion), the way cross-border flows should be handled and the principles for managing congestion revenues.
- The proposal is also reviewing the **list of network codes and guidelines** and the associated processes. This provision allows to delegate more technical discussions to ACER, ENTSO-E, ENDSO, market operators and other relevant stakeholders while leaving the approval decision on them to the Commission.



Capacity markets are tolerated under strict conditions

Capacity mechanisms (CM)

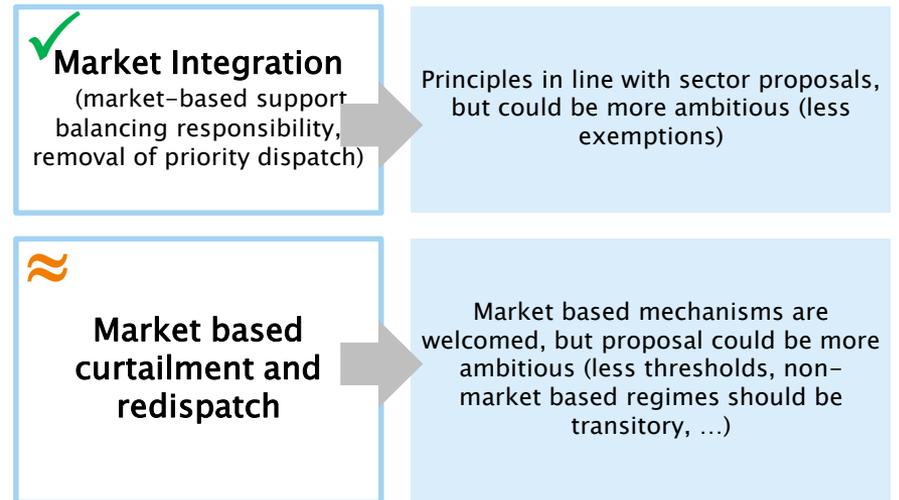
- The proposal sets the requirements for the **European-wide assessment performed by ENTSO-E**, the existence of **reliability standards** and the **design principles** for CM's.
- A CM would be allowed **only if** the European-wide assessment (performed by ENTSO-E on a yearly basis) has identified an adequacy concern in the country. **The need for CM should be regularly reviewed.**
- Type of CM should be decided **according to problem identified**, e.g. long-term adequacy risk: market-wide CM (like UK or FR), temporary risk: strategic reserve (SR); interruptibility schemes/demand response (DR) seen as alternative to full CM; capacity payments (like ES) are unlikely to be appropriate.
- CM should be;
 - **Open to all capacity types** (except SR & DR)
 - **Mandatory cross-border participation** (except SR)
 - **Only accessible to generation capacity satisfying a CO₂ emission limit (550 gCO₂/kWh) after a transition period**



Towards level playing field with other capacities

Integration renewables

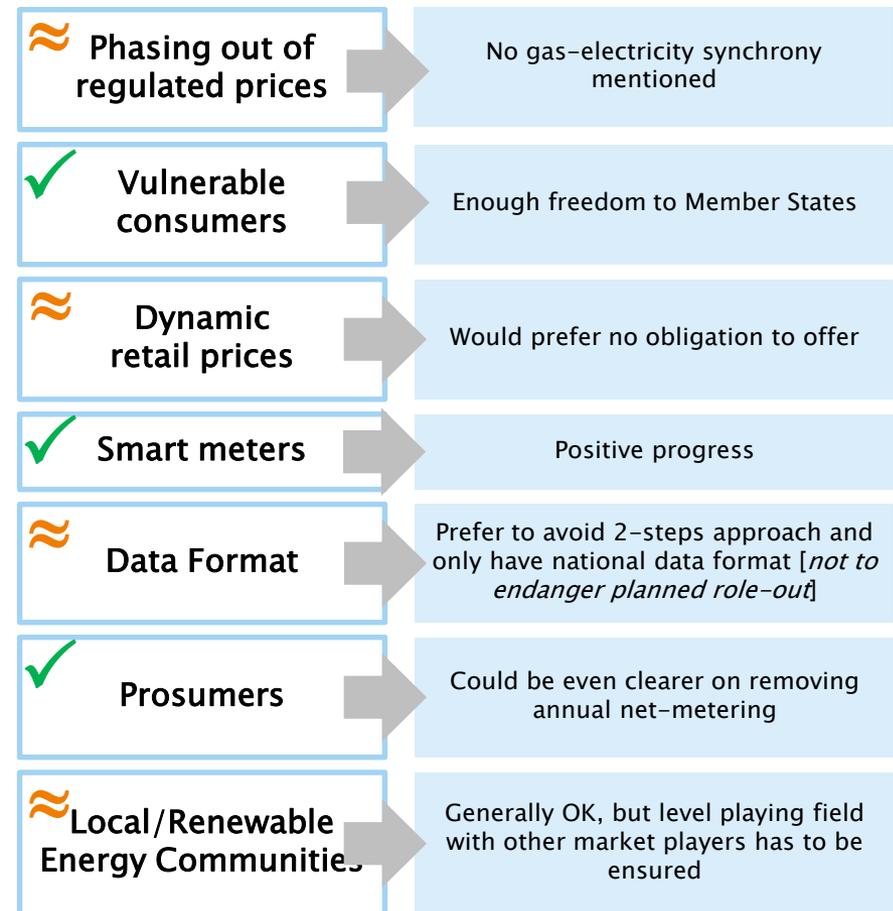
- Proper integration of RES is key to maintain market functioning and system security. EC therefore proposes to **remove priority dispatch** for new RES projects > 500 kW as of 2020 (not retroactively) and make RES **balancing responsible**.
- The EU supports **market based mechanisms and financial compensation for curtailment and redispatch** of generation as well as demand. Where non-market based measures are used, RES and high efficiency cogeneration should only be subject to downward regulation/curtailment if no other alternative exists or if alternatives result in disproportionate costs or risks to network security.



Consumers should become active players no the market

Empowering consumers

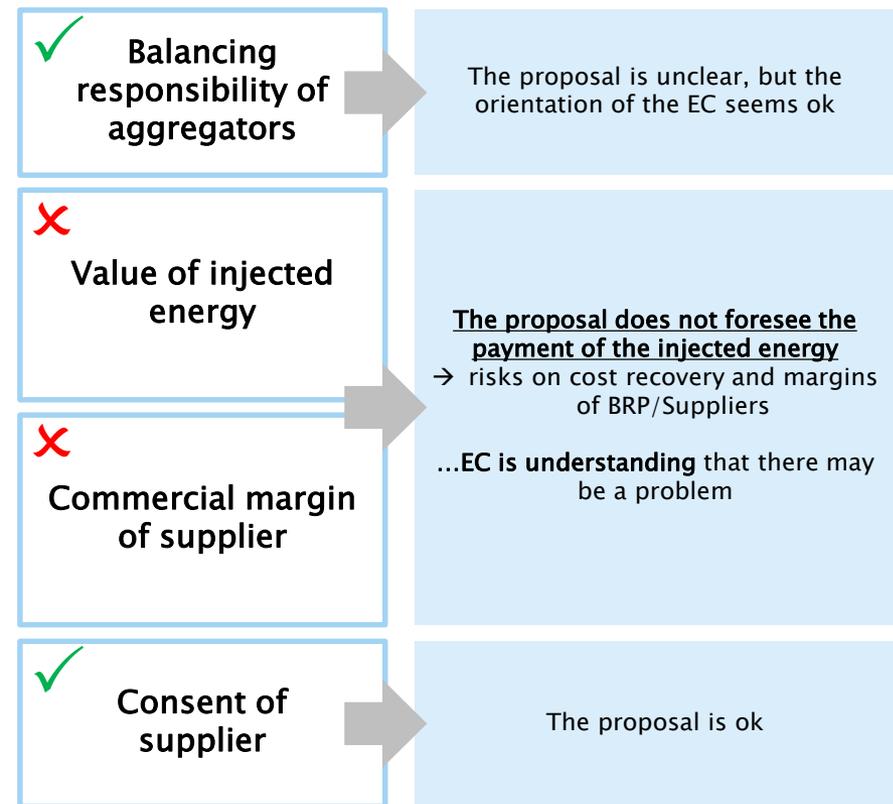
- **Regulated prices** should be phased out – MS can only maintain price regulation for vulnerable consumers for 5 years after the entry into force of the Directive.
- MS should define **vulnerable consumers**, with their protection enabled by other means than public interventions in the prices
- Every final customer is entitled – on request – to a **dynamic electricity price** contract by his supplier.
- **Smart meters** should have minimum requirements in line with EC recommendation, every final customer is entitled to have installed on request a smart meter. Member States, and then also the EC, shall define a common **data format** and a transparent procedure for eligible parties to have access to the data
- **Consumers** are encouraged to produce their own renewable energy and consume it locally, store it or sell to the grid against a fair, market-based remuneration.
- More broadly, they should be able to organize themselves as ‘**local or renewable energy communities**’ without being subject to undue restrictions or charges.



Demand side flexibility is strongly supported

Demand side flexibility and aggregation

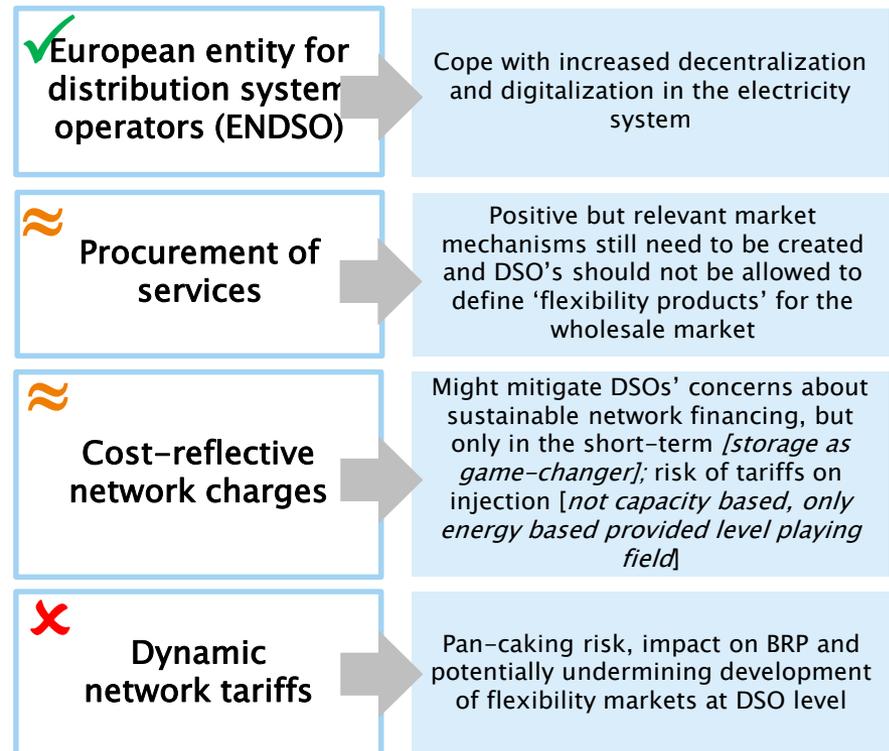
- **All customer groups** (industrial, commercial and households) should have access to the energy markets to **trade their flexibility and self-generated electricity**.
- **Aggregators are market actors likely to play an important role** as intermediaries between customer groups and the market, by combining multiple customer loads or generated electricity for sale, for purchase or auction in any organized energy market.
- The **market integration of independent aggregators requires specific rules** that do not damage or increase the risk profile of other market players (mainly suppliers). Several integration models exist.
- Where a final customer wishes to conclude a contract with an aggregator, such engagement shall not require the **consent** of the final customer's supplier.



Roles of consumers, suppliers and generators become intertwined

More decentralized electricity system

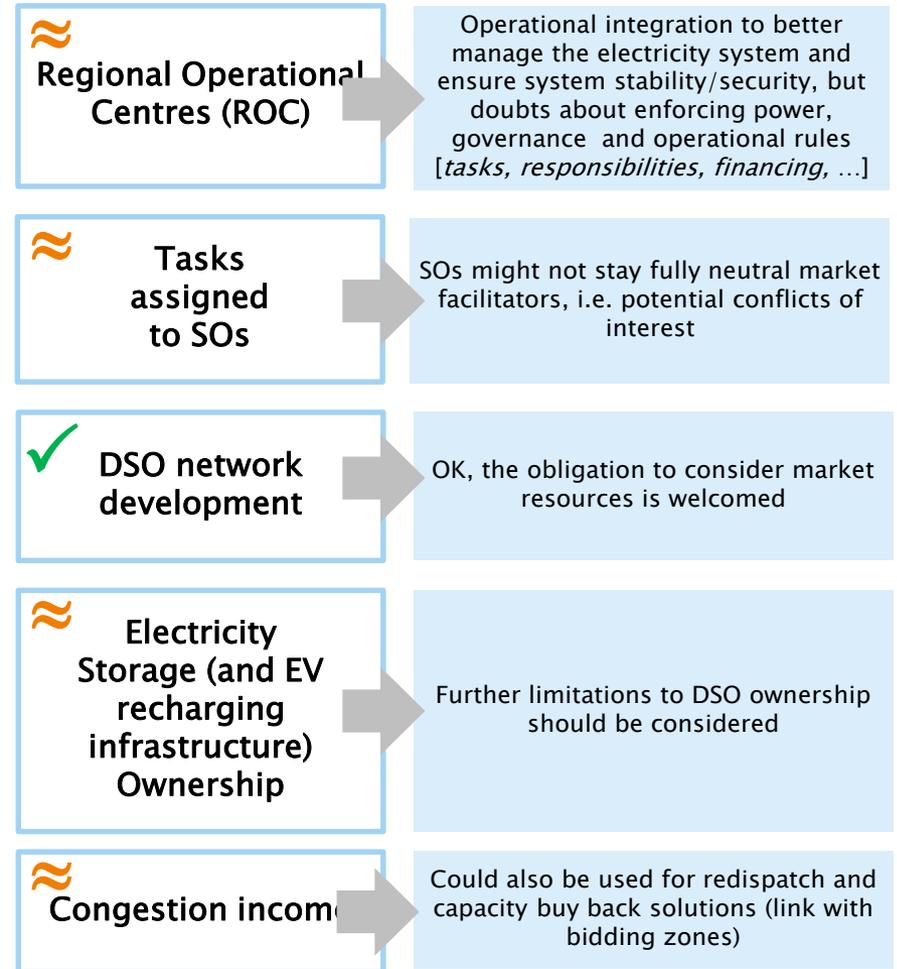
- Regarding distribution networks, the text is setting up a **European entity for distribution system operators (ENDSO)**, which acknowledges their roles within the energy transition – an environment with more decentralized actors.
- DSOs shall be incentivized to **procure services** from market parties and innovate in order to better enable integration of decentralized, intermittent renewables.
- **Distribution network tariffs shall reflect the cost** of using the distribution grid and may be differentiated based on system users' consumption and/or generation profiles. This opens the door to more capacity-based tariffs as well as specific consideration of prosumers' profiles in network tariff design.
- Moreover, where smart meters exist, network tariffs can include **time of use elements** or be **dynamic**.



Increased integration of SO's, but also risks of conflict of interest

Role of system operators

- Regarding transmission networks, the tasks and duties of ENTSO-E are adapted and some monitoring tasks are allocated to ACER. Given the need for fostering regional cooperation, **Regional Operational Centres (ROC)** are established and allocated this responsibility on their perimeter.
- Tasks assigned to system operators (TSOs/DSOs) might create **conflicts of interest with market players** (e.g. grid investment vs market activities).
- The **network development plans of DSOs** shall demonstrate the use of demand response, energy efficiency, energy storage facilities or other resources that distribution system operator is using as an alternative to system expansion
- Notwithstanding the **general unbundling principle** (implying that grid operators are not allowed to own, develop, manage or operate energy storage facilities or other market activities), grid operators are temporarily allowed to enter the storage business (or EV recharging infrastructure) **in case of market failure**.
- **Congestion income** should be used for guaranteeing allocated capacity and/or maintaining or increasing interconnection capacity.



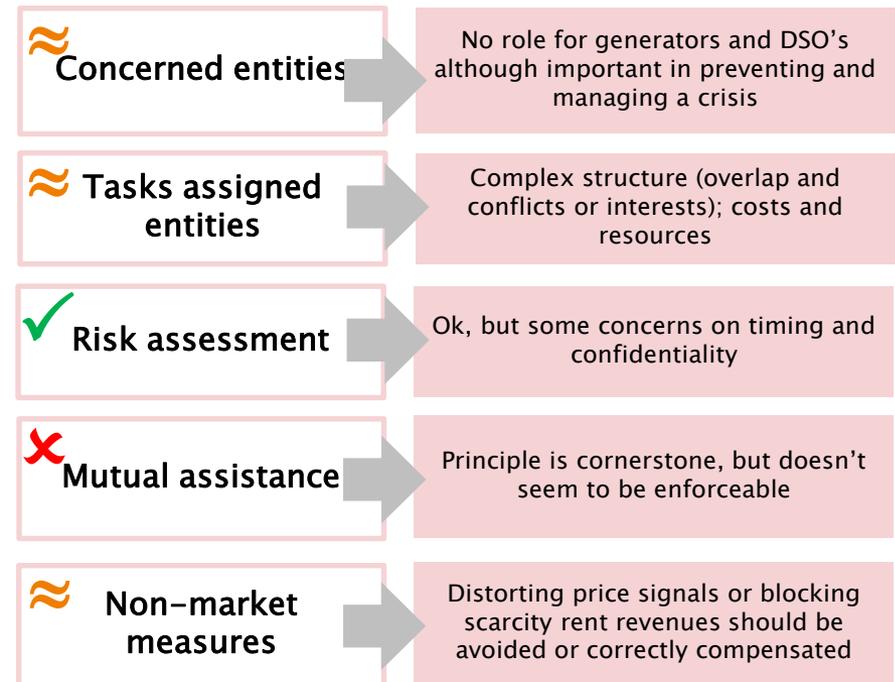
Security of supply

Risk Preparedness

New tools, but to what extent can one really rely on other MS

Increased cooperation between MS for SoS

- The Regulation establishes a number of **new entities** (ROC, competent authorities, crisis manager, crisis team, ...) and re-enforces existing entities (Electricity Coordination Group, ENTSO-E, Commission, ...).
- A common framework of rules on how to **prevent and manage crisis situations** is elaborated, i.e. security of supply assessment, identification crisis scenario's (regional and national), short term adequacy assessments and risk preparedness plans.
- The regulation describes how electricity crisis situations are declared, that **MS shall act and cooperate in a spirit of solidarity and offer each other assistance**. Measures should comply with rules of internal market and system operations; non-market measures may be activated if options by the market have been exhausted.



Conclusions

- CEP is an **ambitious proposal** by the EC to tackle in a consistent way the challenges of the **energy transition**
- Risk that **buy-in of European citizens** is overestimated when it will come to **bearing the cost of the energy transition**
- **Critical points:**
 - **Energy efficiency** framework creates opportunities for electricity and services, but impact competitiveness of natural gas
 - The EC **only tolerates capacity mechanisms**: CO₂ emission standard is counterproductive
 - **RES generation** will become mainstream: new assets will be exposed to full market integration, but uncertainty on evolution design support schemes
 - **Distribution system operators** should stick to out of market activities and relay on market players when needed (e.g. call for tenders)
 - **Demand side flexibility** is strongly encouraged, but financial flows with new players remain a critical concern
 - Further integration of **transmission system operators** creates governance issues and potential conflicts of interests



thanks