Necessary electricity market reforms for an affordable, secure and decarbonized energy system; an Elia Group vision

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What do we have today?

The **Energy only Market** (EoM) based on marginal pricing has delivered important benefits to European consumers, and has proven to be relatively good at efficiently allocating resources

However…

- The **EoM fails to provide sufficient incentives to invest**, both to achieve decarbonisation and ensure security of supply.
- **Distortive subsidies for renewables** are used as the main approach to achieve increasingly ambitious decarbonisation objectives.
- Adequacy concerns are fixed with **Capacity Remuneration Mechanisms (CRMs), treated as an exception** rather than an acceptable piece of the puzzle.
- **Emergency measures** are being put in place to cap excessive revenues but…
  - the emergency measures come with new distortions.
  - they damage the trust of market parties in reliable market conditions.

Key building blocks for an efficient electricity market reform

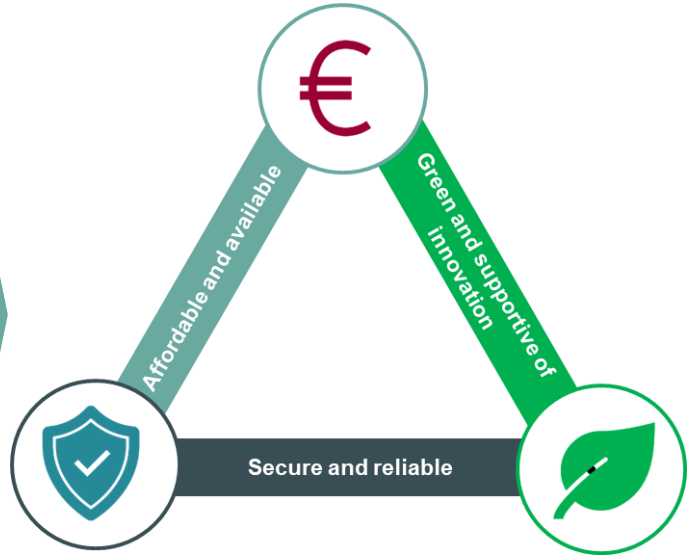
To answer to the multiple policy objectives, several complementary instruments need to be implemented

One policy objective ➔ one instrument – moving away from the belief that EoM will solve everything

Policy objective	Instrument and key characteristics
Reaching **renewable** targets, supporting energy transition	**For publicly supported RES investments, standardise the use of non-distortive CFD mechanisms to de-risk investments and secure affordable clean energy**
Affordability by decoupling gas from electricity prices	▪ **Hedging opportunities offered to all consumer categories by making available any volumes from the CfDs in organised, transparent markets,** where forward products and/or PPAs can be traded ▪ **Improving** the forward energy market
Ensuring **adequacy**	**Capacity Remuneration Mechanism as an integral part of the market design**
Allocating resources efficiently	**Improved Energy only Market** to support the penetration of more renewable sources and increase electrification by: ▪ **Unlocking flexibility from end-user level (“from competition for the meter towards competition behind the meter”)** ▪ **Improving "horizontal" flexibility in the market & reinstating price coupling in the channel region**

What would our Elia Group vision deliver?

- ✓ **Different instruments** (that are understandable/steerable) allowing supporting **different policy objectives**: **renewables, adequacy, affordability**.
- ✓ **An efficient energy market**, without distortion, allocating flexible resources efficiently across the EU, and **enabling competition wherever possible – for the market and in the market**.
- ✓ **Vast flexibility from demand-side**, enabling more RES integration without excessive investment in back-up generation.
- ✓ **No need for additional interventions** in the functioning of the market.



Answering energy trilemma

Our (non-exhaustive) assessment – focus on COMP related aspects

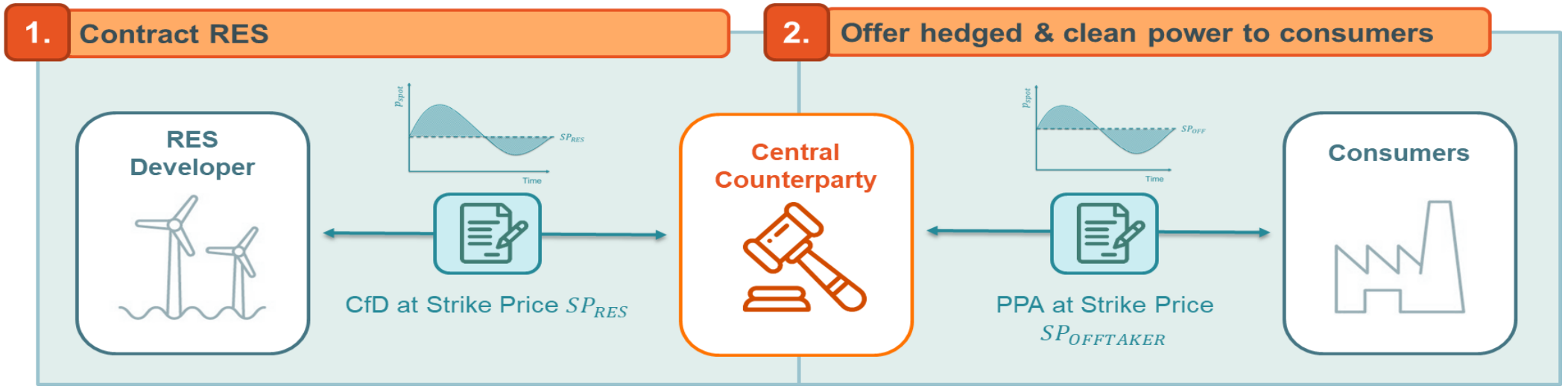
Topic	Views / main improvement	Link COMP policy
CfD framework for supporting investments in renewables	To make two-way CfDs "the" support scheme for new investments, the design should ensure that they: ▪ Do not distort the functioning of the electricity markets. ▪ Can be offered to customers as hedging instruments in a market-based way.	Define more standardized EU design to speed up approval and foster EU wide convergence?
Empowering Consumers	We welcome the framework to unlock flexibility and services behind the meter. ▪ Make sure that data from dedicated metering devices* can be used for participation of consumers' flexibility in e-markets and in system services. ▪ Ensure the right to have multiple suppliers behind the meter.	
Transmission Access Guarantee	C/Wouldn't using congestion income to support specific market players: • Not be considered as discriminatory and detrimental to final electricity consumers? • Not be considered ineffective as the amounts are unpredictable and unstable (proportionality principle)? Aren't there more effective ways to support offshore generation? (like a well designed CfD mechanism)	Is TAG compliant with the proportionality criteria of the state aid guidelines & how will this compliancy be assessed?
Capacity remuneration mechanisms (CRMs)	The proposal misses the opportunity to make CRMs an integral part of the market design by removing conditions for MS to be allowed to implement them: CRMs are key to ensure adequacy in a more electrified society.	Define more standardized EU design to speed up approval and foster EU wide convergence?
Improving "horizontal" flexibility & market coupling in Channel	The proposal does not address the increasing gap between "market" and "physics" that is key to ensure safe and optimal market operations. The latter is essential to ensure a robust underlying (DA) reference price supporting long term market development. Nothing is also said on the need to reinstate price coupling in the Channel region as an essential for hybrid interconnector development	

* Submeters and embedded metering devices in assets

Thank you.

Reaching renewable targets & affordability for consumers

CFD mechanisms with an organised PPA market to secure RES investments and affordable clean energy



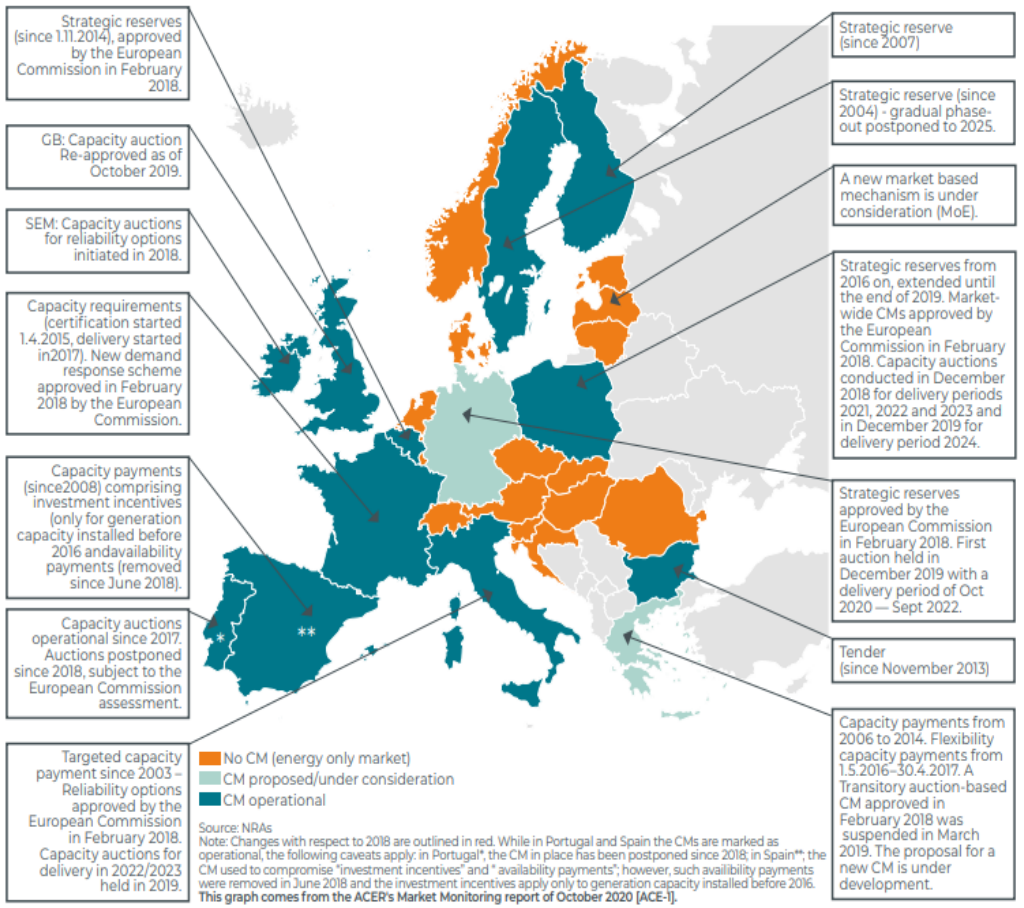
- **Standardising the use of two-sided CfDs** where a support mechanism is required for new RES investments. CfDs should be well designed to avoid distorting the short-term markets.
- Offering hedging possibilities to all types of consumers, the state must **sell back the volume contracted under CfDs**.
- Developing market based tenders, where the state can tender the RES CfDs volumes back to consumers. This can be done **via consumer PPAs, accessible to all type of consumers.**
- **Creating market places** or platform and make use of existing forward markets, where these consumer PPAs can be traded alongside corporate PPAs.

Ensuring adequacy

Effectively recognise Capacity Remuneration Mechanism as an integral part of the market design.

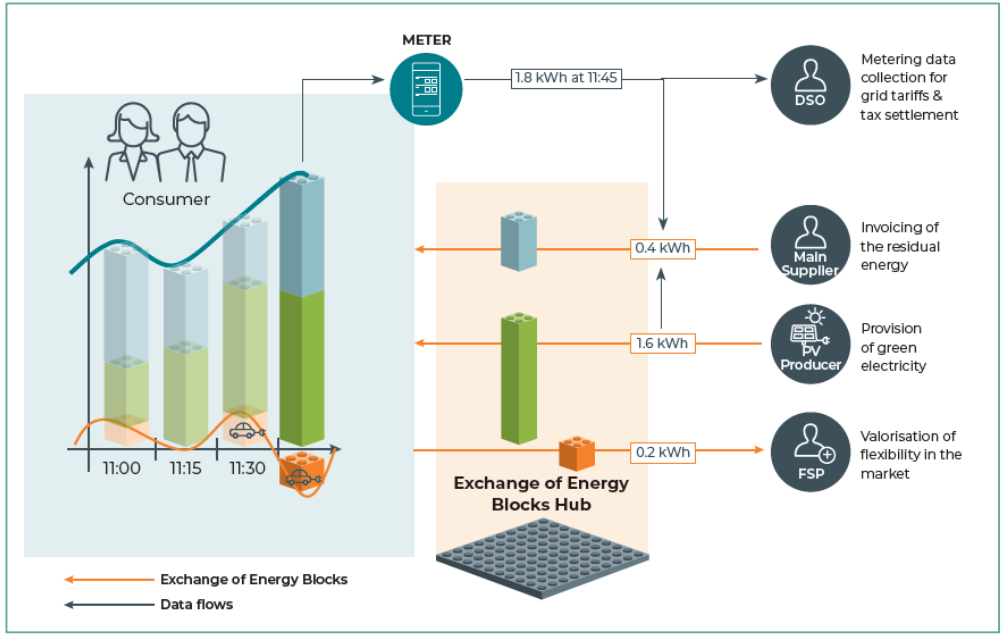
- **Recognise the structural need of long-term investment signals** in national market designs to ensure adequacy in a more electrified economy.
- **Capacity Remuneration Mechanism** (where appropriate with reliability options to automatically capture excess revenues) **as an integral part of the market design**
- **Facilitate Member States** introduction or amendment of capacity mechanisms through **faster, clearer and more fit-for-purpose processes**
- **Improve consistency** and regional/EU coordination of capacity mechanisms by promoting best-practices and high-level design principles.
- **Flexibility** should be introduced to allow **National adequacy assessments** to complement the ERAA in **assessing system adequacy more holistically**

[FIGURE 2-3] — OVERVIEW OF CAPACITY MECHANISMS THROUGHOUT EUROPE



Empowering consumers by unlocking and maximising the value of their flexibility

A generic solution allowing competition for energy services behind the meter, and valorising consumer flexibility in the market, in order to efficiently operate the electricity system



A market model based on individual energy transactions

- **Decentralised exchange of energy ("EEoB") on 15 minute basis** between various consumers and various suppliers and service providers.
- **Enabling different business models and services.**

The principles of this generic model solution are fully in line with the objectives of the CEP provisions to empower consumers. However, for the upcoming reform, additional guidelines are welcome to foster its full implementation:

- **Competition behind the meter must be allowed**.
- **Submetering must be allowed.**
- **Access and sharing of (sub)metering data must be ensured**: consumers should get access to their head & submeter data and share it with any service providers. System operators should have access to head and submeter data according to mandated roles.
- **The market model based on individual energy transactions must be generic**, independent of asset's geographical location and voltage level (one harmonized solution applicable to both DSOs and TSOs), simple and scalable to millions of users.
- **The scope of the market model based on individual energy transactions should at least be equal to the bidding zone**.

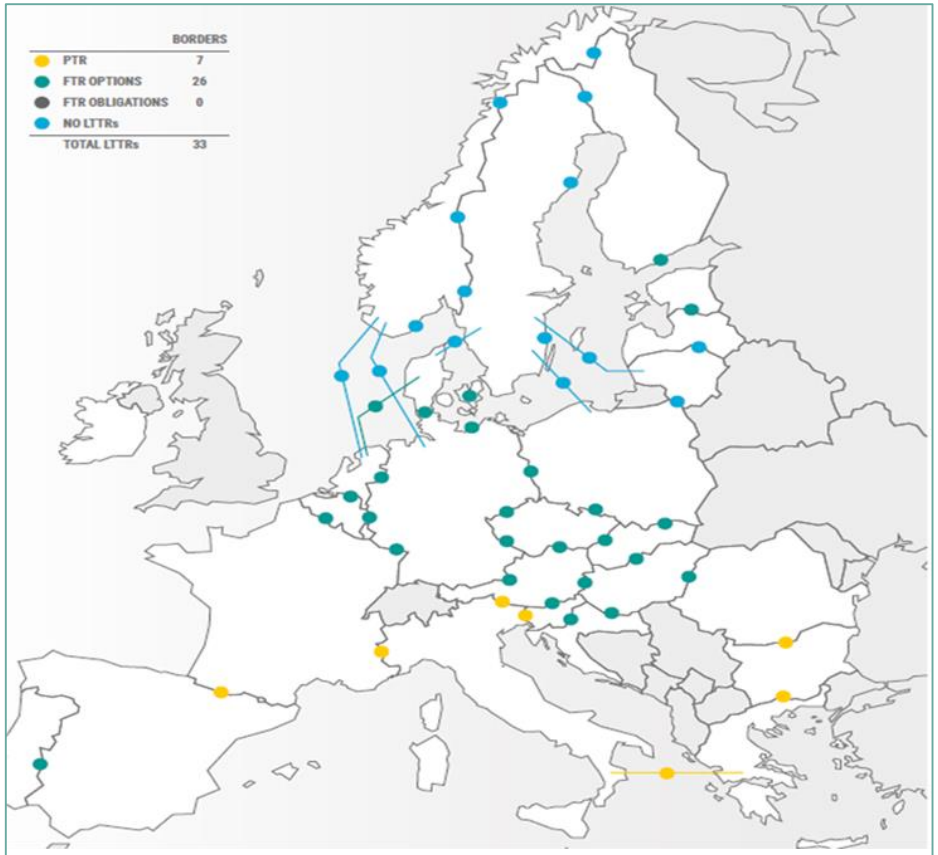
EEoB: Exchange of Energy Blocks; CEP: Clean Energy Package.

Forward energy market

Forward energy markets could be improved by increasing liquidity in smaller bidding zones or less liquid markets to enable sufficient hedging opportunities for all market participants.

- For non-liquid forward markets and smaller bidding zones, the availability of hedging instruments for bidding zone price differences if of importance
- **Long-Term Transmission Rights (LTTR) instruments could evolve** to better align with forward energy market products. Potential Improvements to current products (FTR Options) that should be envisaged
  - Longer maturities: up to three years
  - Better fit with future markets: from FTR Options to FTR Obligations
  - Enhancing liquidity: create hubs with zone to hub LTTR
- A second option is to complement the current forward markets is **moving towards purely financial products**, issued by market participants as they see fit for hedging purposes

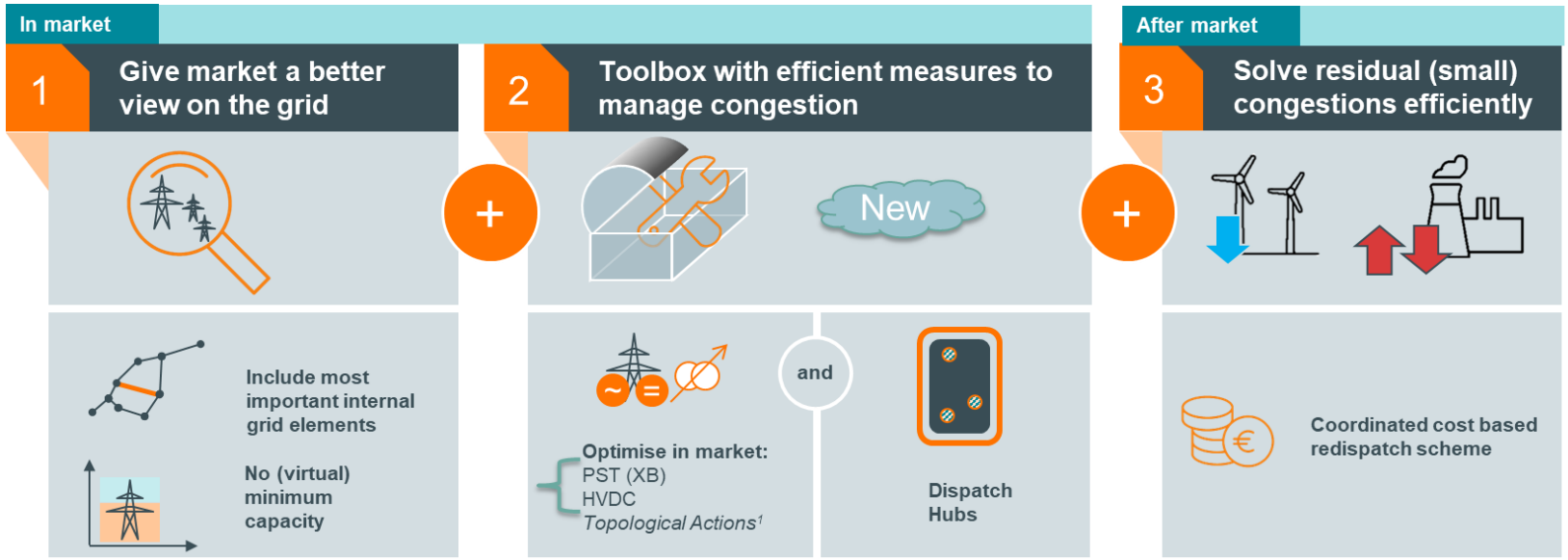
We believe that both ways forward should be further investigated and analysed.



Source: ENTSO-E Policy Paper EU's Electricity Forward Markets, December 2022

Improving Flexibility in the Market

The reform should support the creation of a "regulatory sandbox" to explore and experiment with alternative market models that **allow closing the gap between markets and physics**

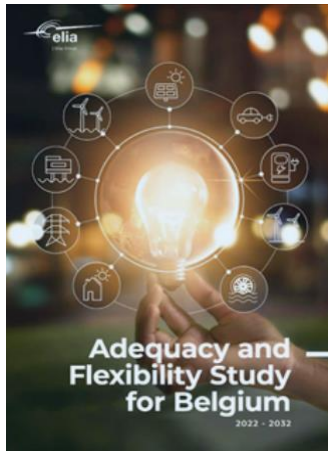


- In the current market design**, the feasibility is not guaranteed** because of the use of **virtual capacities.**
- The market coupling should get:
  - the **necessary visibility on where the congestion appears**
  - the **means to address** congestions efficiently.
- This can be done by **integrating PSTs, HVDCs and Dispatch Hubs in the market coupling.** Steering them to optimize welfare will result in a dispatch much more representative on how the system will be operated.

We have extensive studies and reports available to dive deeper on our proposals

[Harvesting Europe's full offshore wind potential]

[Towards a consumer-centric and sustainable electricity system – Vision paper]



[Adequacy and Flexibility Study for Belgium]

[Future-proofing the EU energy system towards 2030]

For CRMs/PPAs: report on request

We are happy to discuss the overarching vision or any of its building blocks

Thank you.