



European Union Agency for the Cooperation  
of Energy Regulators

# Presentation of the ACER Final Assessment of the EU Wholesale Electricity Market Design

EU Director-Generals meeting - Council Presidency of  
France

Paris, 10 May 2022

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- 1. ACER's Final Assessment: Context & approach taken**
- 2. ACER's Final Assessment: Main elements**
- 3. Conclusion: 13 measures for the consideration of policy makers**

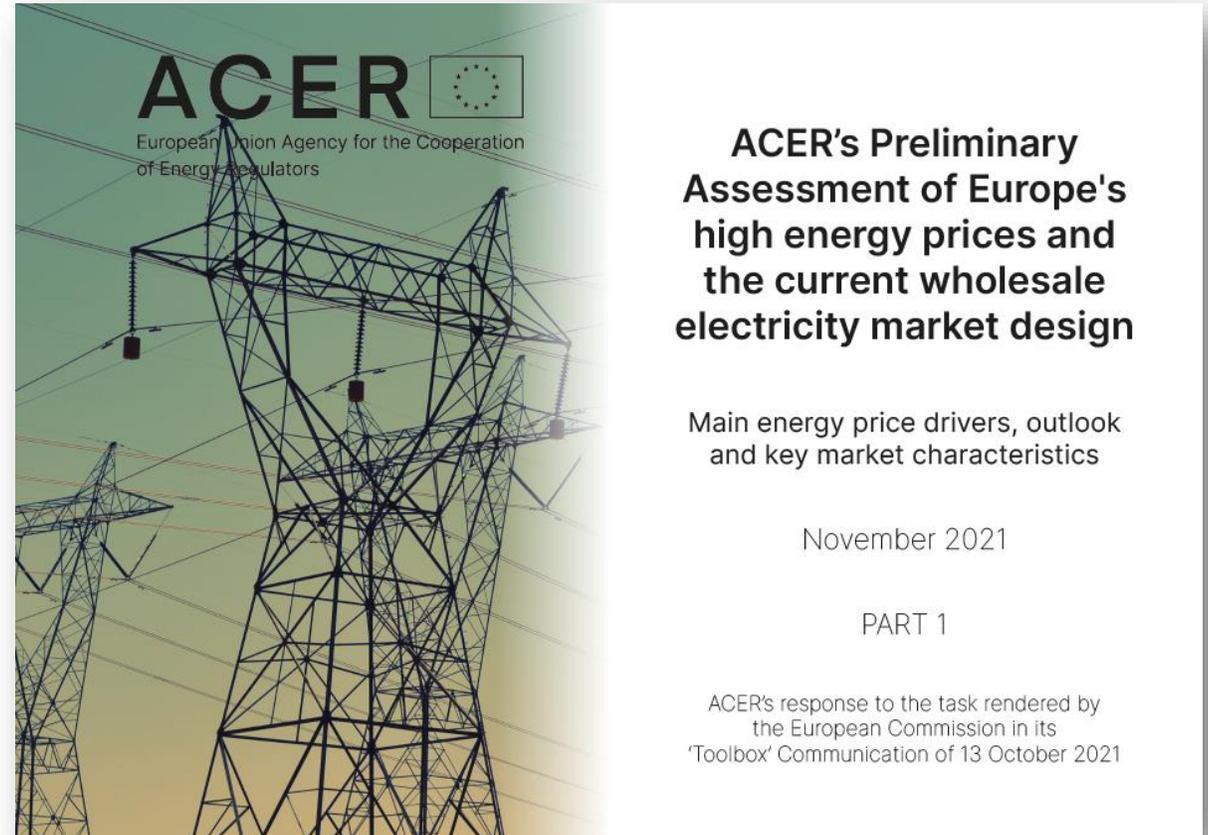
# Context & approach taken

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## European Commission's 'Toolbox' Communication of 13 October tasks

### ACER with:

- studying the benefits and drawbacks of the existing electricity market design & proposing recommendations for assessment by the European Commission **by April 2022**;
- undertaking a preliminary assessment of the situation in the electricity market & reporting by **mid-November**.



## Hence, the main focus of our assessment



European Council

tasks the Council and the Commission, as a matter of urgency, to reach out to the energy stakeholders, and to discuss, if and how, the short-term options as presented by the Commission (direct support to consumers through vouchers, tax rebates or through an "aggregator model/single buyer", State aid, taxation (excises and VAT), price caps, regulatory measures such as contracts for differences) would contribute to reducing the gas price and addressing its contagion effect on electricity markets, taking into account national circumstances;

Energy security and climate neutrality can only be achieved if the European Union relies on a robust and fully interconnected internal electricity market and a well-functioning carbon market. The European Council discussed how to take work forward on monitoring and optimising their functioning. It invites the Commission to take any necessary initiatives by May 2022, also taking into account the final ACER and ESMA reports.

### NOTE

From: General Secretariat of the Council  
To: Delegations  
Subject: European Council meeting (24 and 25 March 2022)  
– Conclusions

# Main elements: Current benefits

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## Overview of events and market fundamentals driving EU gas prices, TTF month-ahead contract (EUR/MWh), (May 2021 - April 2022)



**The current price surge can be split into three distinct phases. In the latest phase, price developments seem less driven by physical shortages and more by the extreme near-term uncertainty.**

## Diverging views on how to tackle price volatility

'Electricity markets do not work'

vs

'Prices behave as expected given the current context'

'Volatility needs to be avoided' (new market design, new pricing rules)

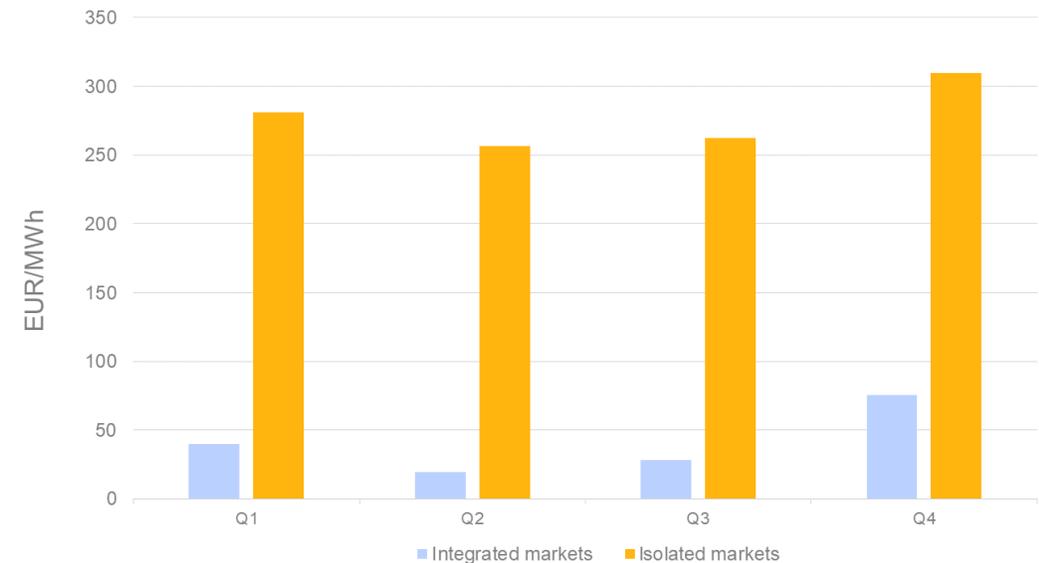
vs

'Volatility needs to be managed'

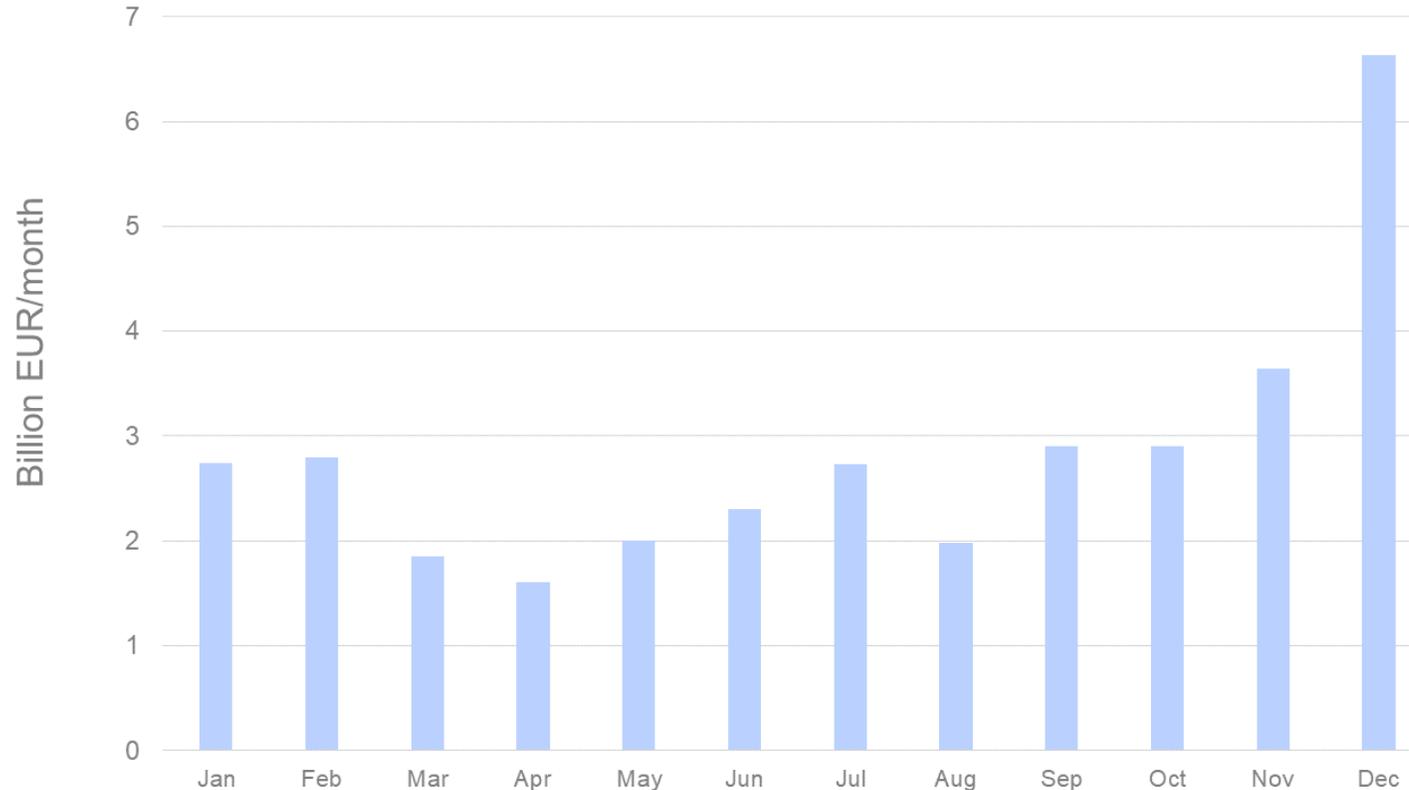
## What are the **tools to tackle price volatility** in ACER's view?

- Preserve price signals: today's volatility triggers tomorrow's flexibility (technologies)
- Strengthened market integration
- Improved forward markets
- Consumer protection remains key

Price volatility (EUR/MWh) in integrated and isolated electricity markets in the EU in 2021



Estimated monthly welfare benefits (Billion EUR) from cross-border electricity trade in 2021

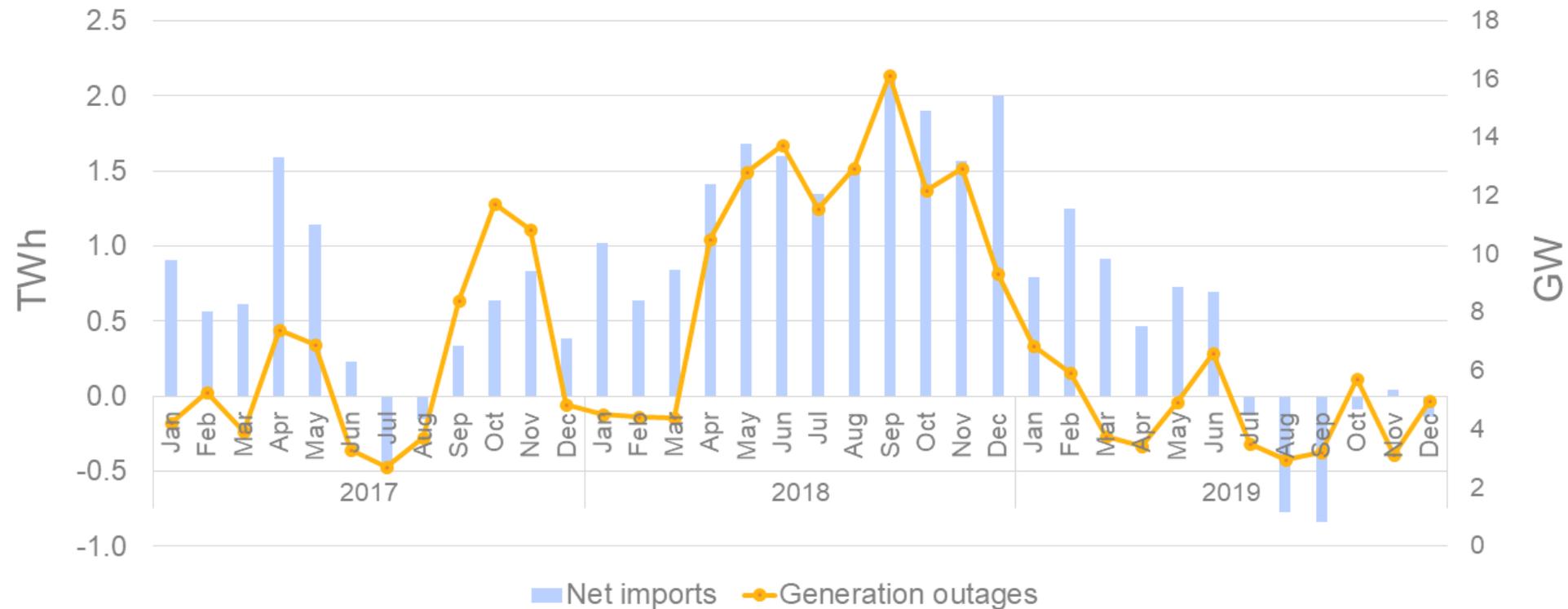


**In 2021, electricity cross-border trade delivered an estimated EUR 34 billion of benefits (source: NEMOs). ACER finds that the current electricity market design is not to blame for the current crisis. On the contrary, the market rules in place have to some extent helped mitigate the current crisis.**

Source: ACER based on NEMOs simulations

Note: The benefits displayed represent the overall value of cross-border trade compared to isolated national markets, rather than the benefits from the implementation of market coupling. Market coupling enables the efficient use of interconnectors and renders more than one billion Euros of benefits per year.

**Belgium imports electricity to meet the shortfall in own generation (2018-2019)**



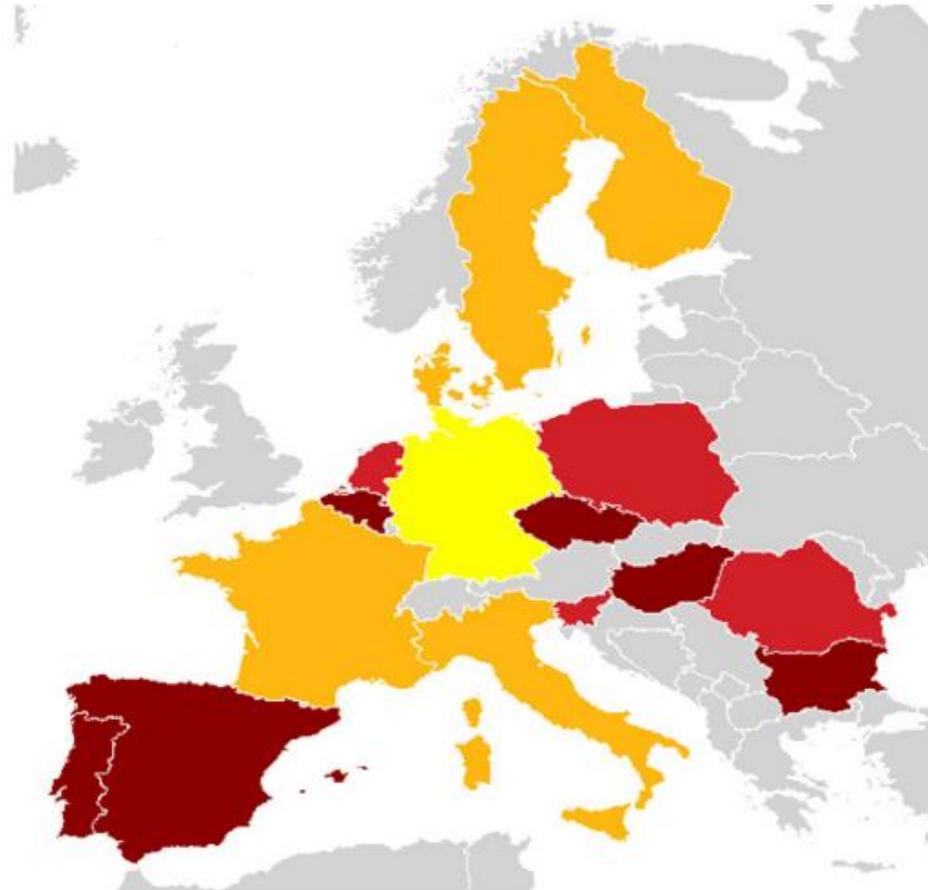
**The EU electricity market design enhances security of supply and resilience to price shocks. For example, it enabled Belgium (and France) to mitigate widespread nuclear outages via increased electricity imports. This is ‘resource sharing’ via market integration.**

# Main elements: future-proofing the market design

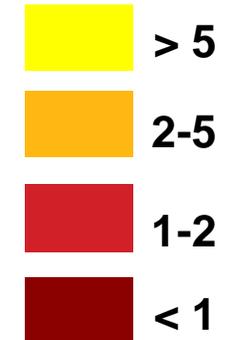
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*“Competitive long-term electricity markets play a key role in managing risk ...”*

*“Many wholesale market participants [...] hedge against risks as a fully integrated part of their business activities.”*



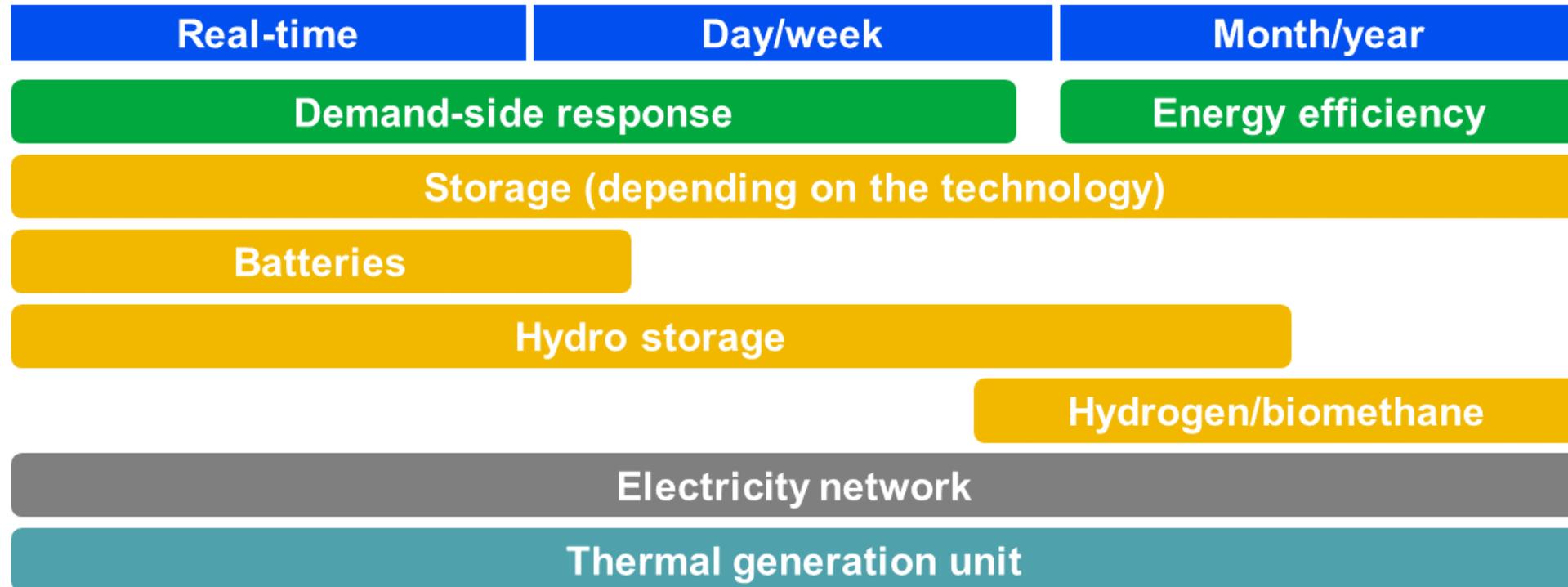
**Liquidity  
(churn factor)**



**Today’s forward electricity markets exhibit limited liquidity (especially beyond 3 years ahead), hampering the hedging of, and thus the development of, (CAPEX-heavy) low-carbon technologies.**

# Driving sufficient investment in flexibility & capacity

Flexibility services provided by various technologies



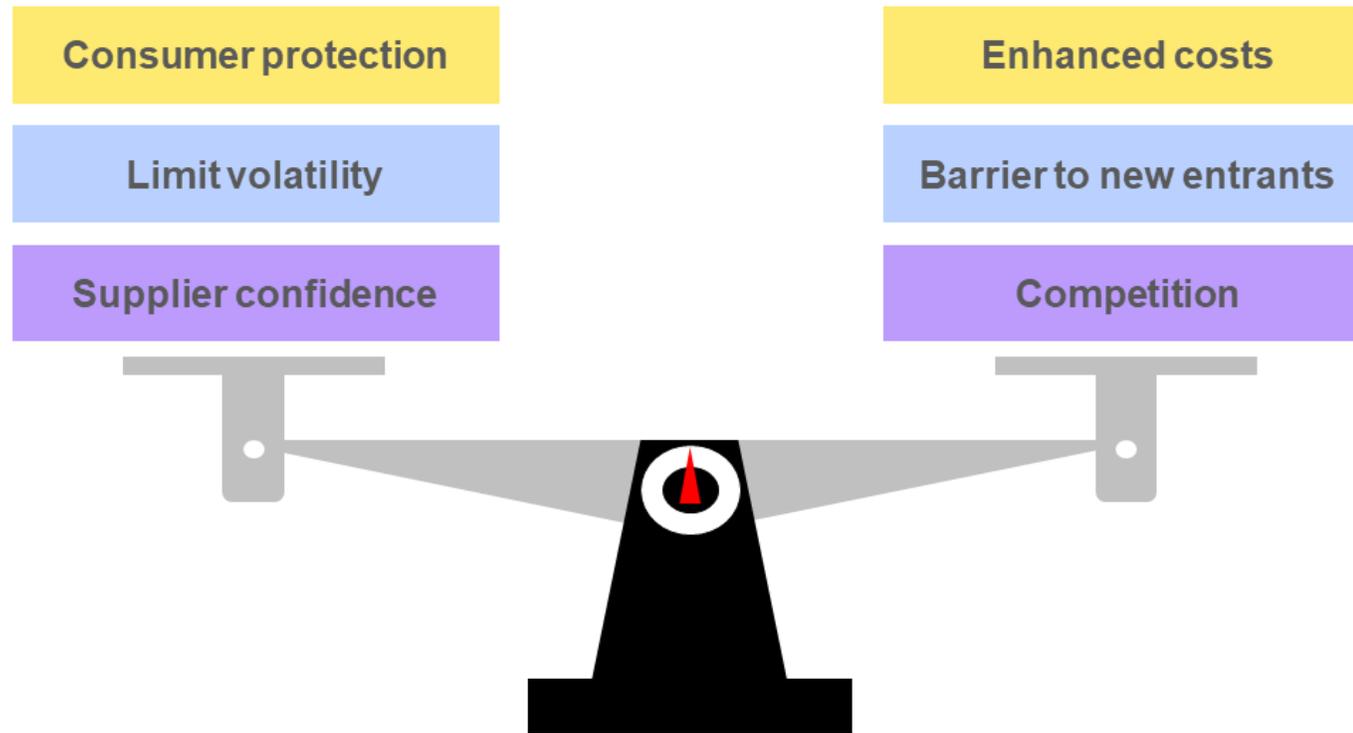
**The power system will need significant and diverse flexible resources across multiple time frames (with seasonal flexibility a key challenge). Price volatility sends a clear signal of the need for flexible resources. In the absence of such signals, innovation in new solutions will be hampered.**

## Not forgetting: Non-market barriers & stumbling blocs

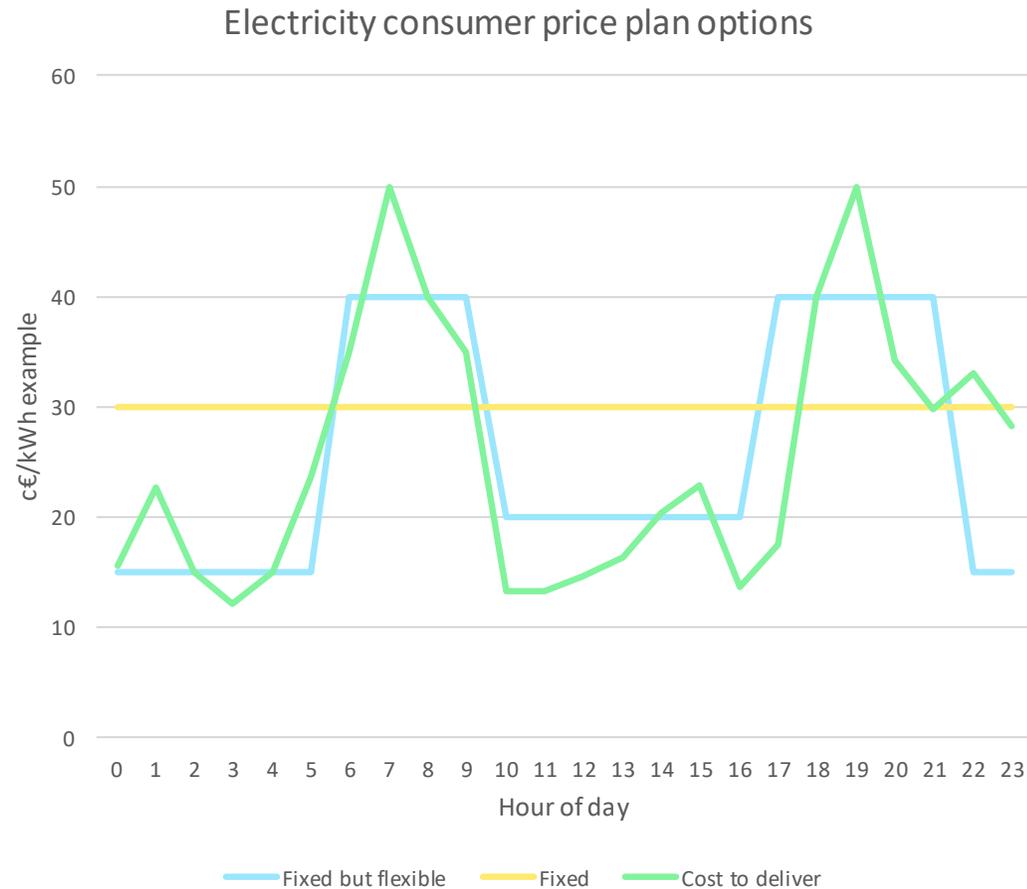
*“... whilst increased energy independence vis-à-vis (particular) third-countries is a policy objective of growing importance, realising this may well depend on enhanced energy inter-dependence amongst EU Member States.”*



**Irrespective of the market design, tackling non-market barriers will be key, e.g. to reduce delays in infrastructure roll-out. Also, enhanced coordination between Member States can optimise investment decisions and remove hurdles, with the exploitation of vast offshore wind resources as one example.**



**Household energy prices have reached record levels.  
Member States have several measures available to protect consumers against supplier bankruptcies.  
However, they all involve trade-offs. One size is unlikely to fit all.**

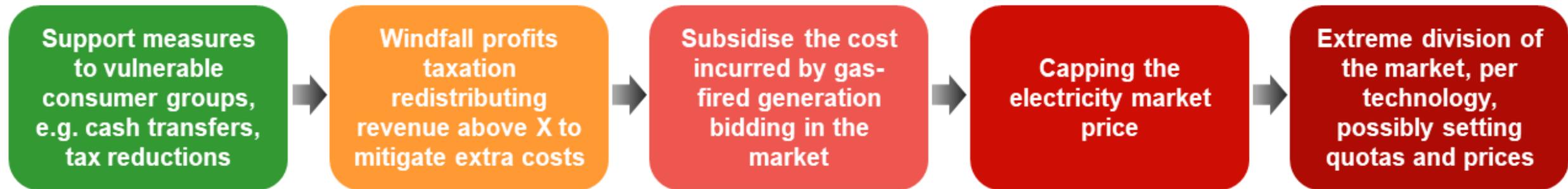


- Consumer protection remains key
- It may not be appropriate for all consumers to default to a full dynamic tariff
- Supplier responsibility may need enhancement – the consumer is not always well placed to shoulder the full risk of volatility
- A ‘fixed but flexible’ tariff model may be an appropriate balance between certainty for the consumer and ensuring responsibility of the supplier

# Main elements: Potential extraordinary measures

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Spectrum of possible structural-interventionist measures relevant for the EU electricity market



**As a rule of thumb, ACER considers that the more structural-interventionist a measure, the higher the potential to distort the market, especially in the medium to long-term.**

**The need for interventions in market functioning should be considered prudently and carefully and if pursued should seek to tackle ‘the root causes’ of the problem (gas prices).**

**'Temporary relief valve'**: Mechanism to temporarily limit prices under predefined conditions (e.g. unusually high price rises in a short period of time), pausing before return to full prices



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- Predefined framework for temporary relief
- Mitigates sustained high prices (and perceived excessive profits)

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- Risks market exit or requests for financial compensation
- Challenging to design
- Risk endangering security of supply or dampening signals for demand-side response

**'Affordability option'**: Hedge pre-defined consumers against future sustained high prices (above a certain threshold); this via a regulatory intervention



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- Hedges vulnerable consumers
- May increase liquidity of long-term markets

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- Comes at a cost
- May be difficult to identify sufficient generators to provide this service

# Conclusions: 13 measures for the consideration of policy makers

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# 13 measures for the consideration of policymakers, future-proofing the EU wholesale electricity market design



**1.** Speed up electricity market integration, implementing what is already agreed



**2.** Improve access to renewable Power Purchase Agreements (PPAs)



**3.** Improve the efficiency of renewable investment support schemes



**4.** Stimulate 'market making' to increase liquidity in long-term markets



**5.** Better integrate forward markets



**6.** Review (and potentially reduce, if warranted) collateral requirements



**7.** Preserve the wholesale price signal and remove barriers to demand resources providing flexibility



**8.** Shield those consumers that need protection the most from price volatility



**9.** Tackle avoidable supplier bankruptcies, getting the balance right



**10.** Tackle non-market barriers, ensuring generation and infrastructure is built at pace



**11.** Consider prudently the need for market interventions in situations of extreme duress; if pursued, consider tackling 'the root causes'



**12.** Consider public intervention to establish hedging instruments against future price shocks



**13.** Consider a 'temporary relief valve' for the future when wholesale prices rise unusually rapidly to high levels



**Want to learn more?**

Check out the full report on ACER's Final Assessment of the EU Wholesale Electricity Market Design.



# Thank you for your attention.



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# Back-up slides

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- **Supporting the integration of energy markets in the EU** (by common rules at EU level). Primarily directed towards transmission system operators and power exchanges.
- **Contributing to efficient trans-European energy infrastructure**, ensuring alignment with EU priorities.
- Monitoring the well-functioning and transparency of energy markets, **detering market manipulation and abusive behaviour**.
- Where necessary, **coordinating cross-national regulatory action**.
- Governance: **Regulatory oversight is shared** with national regulators. **Decision-making** within ACER is collaborative and joint (formal decisions requiring 2/3 majority of national regulators). **Decentralised enforcement** at national level.

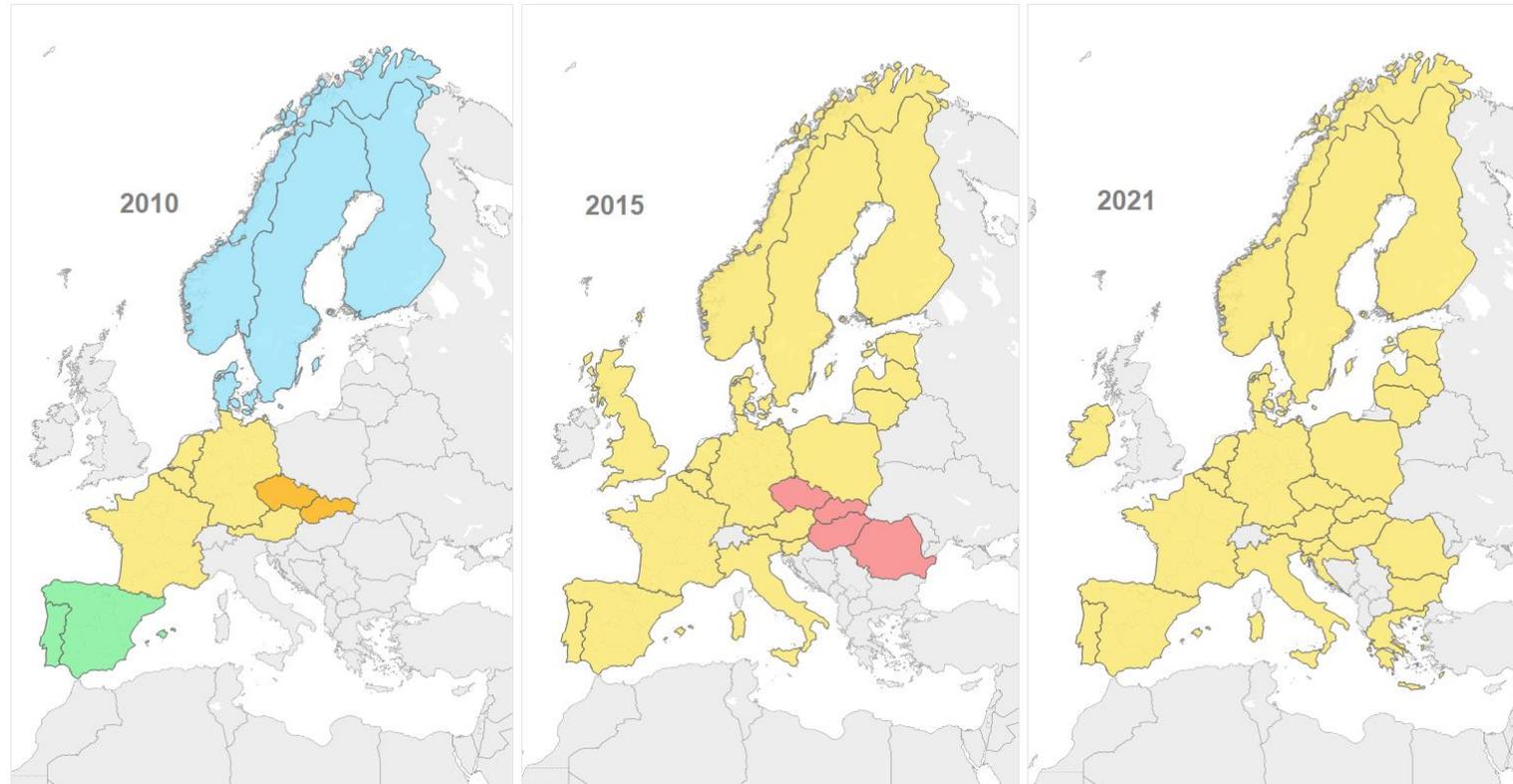
## The assessment is not ‘the full story’



Some evolutionary trends less directly tackled are e.g. the implications of enhanced energy system integration; wider applications of ‘energy efficiency first’ principles (e.g. for system planning); the balance of localised solutions and markets vis-à-vis more centralised solutions etc.

New regulatory challenges and opportunities are likely to appear as the energy transition further unfolds.

## Evolution of EU wholesale electricity day-ahead market coupling (2010 - 2021)



**Speed up electricity market integration, implementing what is already agreed.**

## Future-proofing long-term markets

Improving the efficiency of renewable investment support and improving access to PPAs



Improving long-term market liquidity (market making, forward capacity allocation, collateral requirements)



**Long-term markets can further improve in order to support investment in renewable generation and flexible resources.**

## Comparison of EU and Asian gas prices and year-on-year changes in EU LNG and Russian pipeline imports - (May 2021 - April 2022)



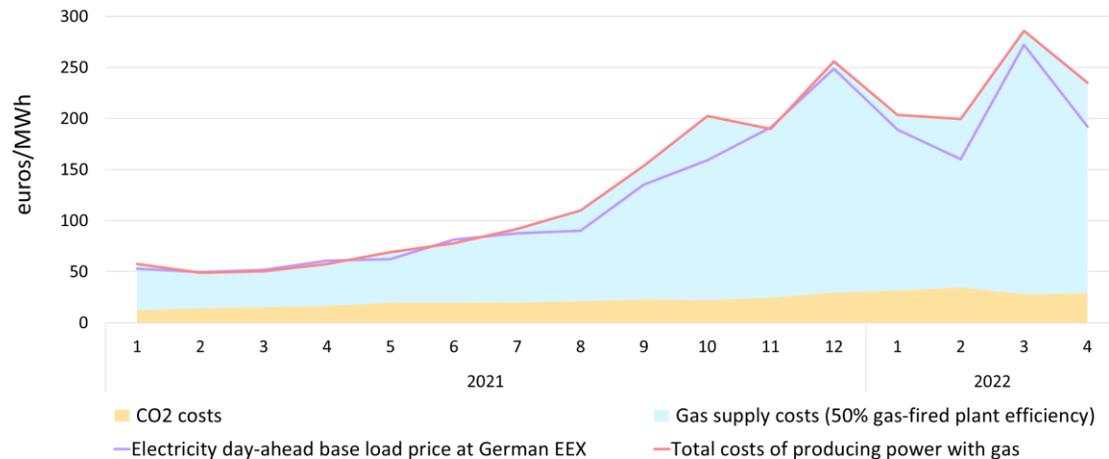
Source: ACER based on GIE and ICIS Heren

- Some corrective measures are moving forward:
  - Demand cuts in view of high price signals
  - Common gas purchases
  - Dialogue with main gas suppliers
- More interventionist measures are attracting increasing attention as well

**Strong EU hub price signals are managing to attract record LNG but they do not offset the effects on prices of lessened Russian pipeline flows.**

# Gas prices have driven electricity prices. Future is uncertain.

Electricity price development in Germany and breakdown of the costs of producing electricity from gas (May 2021 - April 2022) - (EUR/MWh)



Source: ACER based on ICIS Heren

Gas prices will be influenced in coming years by:

1. The shift away from Russian gas
2. Global LNG market dynamics
3. Renewable gas and electricity growth
4. Gas demand reduction:
  - Energy efficiency
  - Energy system electrification
- +
5. Gas market design / policies:
  - Hub based vs long-term bilateral procurement
  - Storages' use and role

**Some of the factors mentioned are likely to put upward pressure on EU gas prices in the near term compared to 'normal' years in the more recent past.**