



RECOMMENDATIONS FOR A FUTURE-PROOF ELECTRICITY MARKET DESIGN

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Winter has started, and EU governments and policymakers are still debating how best to contain the dramatic impact of high energy prices on households, industry and the whole economy. In parallel, the European Commission has indicated its intention to formulate proposals for longer-term adjustments to Europe's current electricity market design.

Against this background, the [Centre on Regulation in Europe \(CERRE\)](#), an independent think tank focusing on the regulation of network industries has, throughout 2022, been analysing the impact of the energy crisis and climate goals for Europe's wholesale and retail electricity market designs.

This work is now culminating with the release of *Recommendations for a Future-Proof Electricity Market Design*, an original, 200-page in-depth study authored by CERRE academic co-directors Profs Michael Pollitt (University of Cambridge) and Nils-Henrik von der Fehr (University of Oslo), CERRE research fellows Profs Bert Willems (Tilburg University), Catherine Banet (University of Oslo) and Chloé Le Coq (University Paris-Panthéon-Assas, Stockholm School of Economics), and external contributors Prof Anna Rita Bennato (Loughborough University) and Daniel Navia (University of Cambridge).

The report formulates more than 70 policy recommendations to shape a European electricity market that is resilient to shocks and supports the accelerated rollout of renewables over the next three decades. It emphasises the importance of distinguishing between short-term crisis management and long-term market reform initiatives. Wartime interventions should be proportionate, short-term and reversible, while sensible long-term reform proposals that support the energy transition may not help with the current crisis. Likewise, it is essential to distinguish between pure market design elements and complementary mechanisms aiming to address remaining market failures.

Below are the key takeaways for wholesale and retail markets regulation. A longer list of policy recommendations and the full analysis can be found on the [CERRE website](#). For more information, get in touch with [Albéric Mongrenier](#), CERRE Director for Energy, Mobility and Sustainability.

1. Double down on demand reduction

- We must cut aggregate gas demand to reduce energy prices: a common EU approach must be prioritised. Country-level policies which increase aggregate energy demand are to be rejected;
- All European countries must engage in campaigns to reduce demand and have associated tariff settings that encourage large reductions for non-vulnerable groups, e.g. rising block tariffs;
- Better use of smart meters and smarter contracts can drive **deep demand reduction**;
- The EU could make some concrete proposals to support the roll out of distributed installation (e.g. solar PV) quickly, which will benefit aggregate demand.

2. Deepen the integration of the single energy market

- The single energy market has shown resilience. **Further integration** is critical in reaching climate and security of supply goals at least cost, and the completion of the single energy market must remain a top priority;
- Action should be taken to remove remaining energy trade barriers and ensure a broader area of energy cooperation between the EU and friendly neighbours;
- Actions that weaken the internal market, e.g. Iberian gas for power price cap, must be rejected as they only increase threats on energy systems and costs for customers;
- The regulation of **capacity remuneration mechanisms (CRMs)** has been streamlined at EU level, and harmonisation efforts should continue to avoid raising barriers within the single energy market.



3. Fast-track the rollout of low carbon investments

- The **push for greater levels of investment** in energy efficiency measures, renewables, nuclear, storage, network and interconnections should be accelerated;
- Permitting of both new low carbon generation and associated network capacity should be prioritised, and permitting new low carbon generation capacity under emergency measures must be accompanied by coordination with grid development and consumption scenarios;
- Greater regulatory certainty is required for the development of cross-border, hybrid projects;
- Tighter EU monitoring of the existing **National Energy and Climate Plans** can help achieve better coordination between member states in meeting Europe's energy and climate goals.

4. No dramatic changes: stick to a market design that works

- **Sector coupling** will be a reality by 2050. "Decoupling" energy prices between power, heating and transport should not be done at wholesale level and will be increasingly difficult at retail level;
- Two short-run markets proposals to separate *on demand* and *as available* power would negatively affect **market efficiency** and energy security;
- Moving to a pay-as-bid or US standard market design model is also not recommended due to the lack of evidence of its beneficial effects in a European context;
- Nodal pricing is not the solution to the crisis, although better **locational signals** and long-term incentives to invest in the right places are to be encouraged.

5. Auctions for long-term PPAs can provide stability

- Long-term corporate, retailer or government **power purchase agreements (PPAs)** for new low-carbon generation, often in the form of fixed-price contracts for differences (CfDs), can be sensible financial instruments to provide price stability to consumers and to lower the cost of capital for investors;
- Signing PPAs with existing generation on a voluntary basis will not offer significant reductions in energy costs for consumers over the long-term;
- **Auctions** for long-term PPAs combined with current short-run power markets can lead to a desirable hybrid market arrangement, introducing competition *for* the market in combination with competition *in* the market;
- The EU can recommend the use of PPAs and make observations on which types have worked well but should not recommend a standard contract to cover a fixed proportion of all national output as this would violate the subsidiarity principle and increase systemic risk;
- Well-designed **government PPAs** can improve on older support schemes. The Commission can provide guidance on best practices and favoured approaches, but Countries should decide whether and the extent to which they want to enter into government-backed financial PPAs;
- Where government PPAs are used, they should be designed so that electricity consumers benefit from lower prices when strike prices are below market prices;
- If the EU wants to support this type of PPAs and facilitate their approval under state aid rules, it should clarify their acceptable design features in state aid guidelines.

6. Better link the wholesale and retail markets

- Wholesale prices must be reflected in retail prices at the margin to reduce energy consumption while protecting vulnerable **consumers**;
- Longer-term consumer contracting should be encouraged, and consumers must, to some extent, be held responsible for their choice of contract;
- Financial regulation of **suppliers** should be reinforced, via stress-testing and minimum forward hedging requirements;
- The Commission should intervene where retail market government interventions are increasing European wholesale market demand or have adverse cross-border effects.