eurelectric
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A Market Design Fit For Net Zero

A Eurelectric position paper

December 2022

Eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:
- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

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Markets & Investments Committee
Customers & Retail Services Committee

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Executive Summary

On the 15th of December 2022, the European Council will start discussing the future of the electricity market design. Subsequently in Q1 2023, the European Commission is expected to adopt its proposal for a new electricity market design. In this context, the following document will outline the main considerations and key building blocks that this proposal should contain from the perspective of Eurelectric – the Union of the Electricity Industry.

It is essential to understand that **the current market design is not the cause of high electricity prices. The current market design, based on the merit order and marginal pricing, ensures the short-term optimisation and operation of the energy system while delivering significant benefits for consumers.** As reported by ACER's Final Assessment of the EU Wholesale Electricity Market Design, cross-border trade and efforts to integrate electricity markets over the last decade delivered approximately EUR 34bn per year in benefits for consumers. Thus, it is **essential to retain the underlying features of the current market design and assess any possible changes considering their long-term benefits, rather than the impact of the current crisis.**

To deliver 'A Market Design Fit For Net Zero' the upcoming legislative proposal will not only need to preserve the internal EU energy market, its cost-efficiency, cross-border exchanges, and competition between market players; it must include the following additions to the existing market framework:

a. **An enhanced customer contracting framework, enabling sufficient possibilities for long term hedging and contracts,** to bring the benefit of RES and low-carbon generation more directly to consumers, while fostering customer engagement.
b. **A market-compatible investment framework for renewables and low-carbon technologies** (including firm and flexible resources such as demand-side response and storage), which are capital-intensive technologies, that still preserves competition.
c. **A framework that maintains adequacy and security of supply and that meets evolving power system requirements**, in particular because of decentralisation and increasing flexibility and firmness needs.

The implementation of these proposals raises questions about the degree of harmonisation which would be desirable across the EU. There are alternative approaches for market design based on the market principles outlined in this paper, and it is likely that different countries will have different preferences depending on local specificities, but overall priority must be given to preserve the European internal energy market.

A high level of harmonisation should be sought for wholesale (spot and future) markets across the EU, while some diversity of retail markets – acknowledging the different realities across the EU – will be inevitable. A key role of the European Commission will be to ensure – while respecting the principles of subsidiarity – that national implementation does not distort the common EU energy market, instead contributes to its further development, and ensures a competitive level playing field. In this regard, it is important to continue in the path set by the Clean Energy Package.

Introduction

The energy transition towards a net zero economy by 2050 requires a large volume of investment. The current investment rhythm is far from what would be needed to deliver this objective on time.

It is essential to understand that **the current market design is not the root cause of the high electricity prices**. On the contrary, the market has delivered significant benefits. The current energy price is a gas crisis that is having major contagion effects on electricity prices, while most of the interventions and measures adopted in the EU are focused on the electricity market.

At the same time, the ongoing crisis has revealed the need to consistently pass on the benefits of renewables' – and other low-carbon technologies' – lower generation costs to consumers. This in turn will require a greater role in the market for long term hedging instruments and contracts. Indeed:

I. Gas prices currently have a considerable influence on electricity prices, even though the weight of gas in the electricity generation mix is decreasing. **Renewable and low-carbon energy sources can offer energy at low and stable prices. However, their advantages are hidden by the influence of short-term price signals on forward prices.** Such a situation is exacerbated by the current high price peaks. As a result, most customers do not perceive the full benefit of renewable energy sources.
II. **Having said that, wholesale markets based on merit order and marginal pricing ensure short-term optimisation and operation of the energy system**, notably ensuring an efficient dispatch of generation and flexibility, efficient imports/exports, and cross-border sharing of resources to integrate renewables and strengthen security of supply. Wholesale markets reveal the value of electricity (including its scarcity), allowing thousands of generators, consumers, retailers, prosumers, and other flexibility providers to react to economic signals.

A market design review for the long term should not be rushed and its impact should be adequately assessed. There are proposals, such as decoupling short-term wholesale electricity prices from gas prices; changes in market design derived from the various Member States' crisis-related interventions or the introduction of differentiated remuneration for each generation technology based on "its true production costs"[1] that aim at protecting customers against high price peaks. However, they will actually lead to significant negative impacts on cost-efficient dispatch and security of supply, without ensuring a more resilient market design for operators, investors and consumers.

It is key to distinguish between emergency measures and structural solutions. Temporary measures and market interventions, in particular, should not be extended beyond the period foreseen by the Council Regulation on an emergency intervention to address high energy prices.

[1] See EC (European Commission) non-paper – Policy Options to Mitigate the Impact of Natural Gas Prices on Electricity Bills

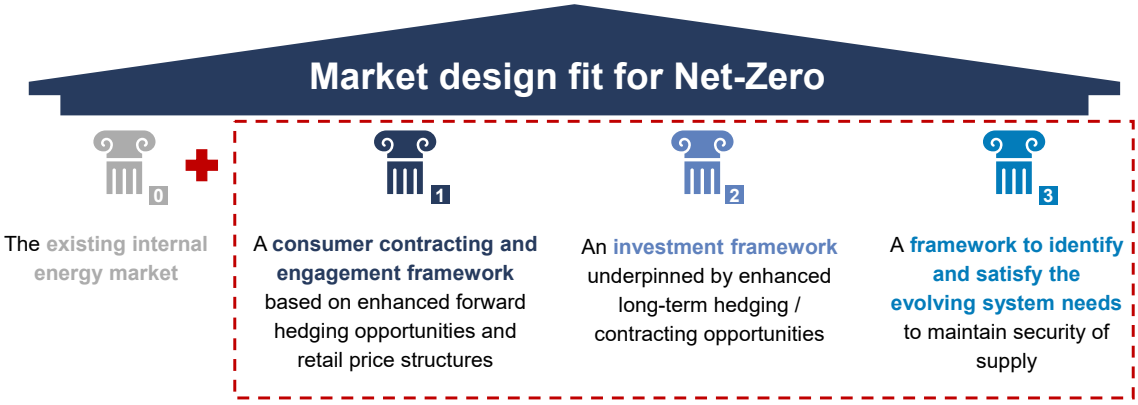
The market design model proposed by Eurelectric builds on the existing internal energy market and add three critical pillars

A market design that will support an efficient transition towards net-zero in the next decade needs to **preserve the cost-efficiency and national and cross-border competition** delivered by the internal EU energy market by building on the current market framework, notably through the following:

1 **Providing an enhanced customer contracting framework enabling sufficient possibilities to hedge and contract, especially for the long-term. This will bring the benefit of RES and low-carbon generation more directly to consumers, while fostering customer engagement.**
   - Customers should have the possibility to access a variety of pricing and supply offers, including not only dynamic pricing, but also long-term contracts.
   - Rather than "decoupling" short-term wholesale electricity and gas prices as advocated by some policymakers, the proposed market design aims to offer a more balanced choice of short-term and long-term price signals in retail prices, ultimately supporting electrification.

2 **Providing a market-compatible investment framework for renewables and low-carbon technologies** (including firm and flexible resources such as demand-side response and storage), which are capital-intensive technologies. This framework should strike a balance between robust revenue stabilization and effective incentives to participate in the market.

3 **Maintaining adequacy and security of supply and meeting evolving power system requirements**, in particular because of decentralisation and increasing flexibility and firmness needs.



Pillar 1 - A consumer contracting and engagement framework

Introducing an enhanced and liquid long-term contracting framework with diverse products to meet both generators and consumers' needs i.e. products with tenors ranging from 2-4 up to 10-15 years or even longer, beyond the current time-horizon of forward markets. **Combined with the removal of regulatory barriers, this will allow consumers to directly receive the benefits from competitive and less volatile energy costs.** This while still providing efficient short-term signals fostering active demand participation in short-term markets.

Different consumers have different characteristics, different capabilities, different risk profiles, etc – there is no "one-size-fits-all" solution and several options should be made available, from which consumers can chose freely, to ensure a resilient and efficient market design.

For many large consumers, who can have an interest in long-term hedging & contracting but find it difficult to do so because of credit risk requirements or lack of available products matching their needs**, the basic no-regret proposal is to focus on the removal of existing barriers to long-term contracts** by removing any legal obstacles, promoting standardisation and transparency, and, where appropriate, reducing credit risk through for instance aggregation and pooling mechanisms or guarantees underwritten or provided by public bodies.

Regarding small consumers, who currently do not have an interest in long-term hedging and contracting or are even sometimes legally prevented from doing so, as well as the retailers who serve them, the key question to be addressed **is how long-term hedging and contracting should be supported or incentivised to pass on the benefits of low-cost RES and low-carbon technologies.** The potential impact of hedging incentives on the resilience of suppliers and retail competition should be thoroughly assessed, as it can pose relevant problems about the risk exposure of retailers and cost recovery in case of early contract termination.

Finally, this enhanced long-term contracting framework does not substitute the need to foster active engagement of consumers in short-term markets and support demand side flexibility (either implicitly or explicitly). Retail price structures will need to provide stronger, but differentiated, incentives to reflect consumer expectations and characteristics. For example, dynamic pricing – which is already widely applied in some Member States and an important tool for flexibility – might not be suitable for all consumer categories. Critical peak pricing, as well as other time-of-use tariffs can also provide simpler but efficient incentives. In all cases, it is important that smart meter rollout is accelerated to allow customers to grasp the benefit of flexibility.

Pillar 2 - An investment framework for capital intensive renewable and low-carbon technologies

Long-term contracts will play a critical role to support large-scale investment in RES and low-carbon technologies which are capital intensive, including at consumer level to electrify uses and develop decentralised resources. Long-term contracts facilitate financing and reduce the cost of capital, thereby reducing the total cost of investments and benefitting consumers. Measures should be introduced to enhance long-term contracting:

a. **Measures mentioned under Building Block 1 will foster the development of long-term contracts—by facilitating voluntary long-term hedging/contracting and enhancing the liquidity of current forward markets** by removing barriers and supporting the development of cross-border forward products.
b. **Capacity mechanisms to procure adequacy or system needs should allocate long-term contracts with generators and other resource providers through market-based solutions.** These mechanisms are particularly relevant for the development of carbon-free firm and flexible capacity, such as storage and demand-side response, by creating a stable long-term source of income.

c. **Member states may also want the market design framework to offer flexibility for specific long-term arrangements to reflect strategic policy choices without distorting the well-functioning of the European internal energy market.**

To ensure the compatibility of such long-term contracts with short-term energy markets, specific care must be given to their design to minimise distortions and ensure that they do not reduce liquidity on short-term markets and notably on organised long-term markets.

Pillar 3 - A framework to coordinate future system needs to meet security of supply and policy objectives

The fast decarbonisation of the power system raises new challenges for its continued safe operation. Timely development of sources of flexibility and firm power will be needed alongside the growth of renewables. At the same time, new opportunities will emerge both on the supply side with new storage technologies and on the demand side with new flexible loads from the electrification of the transport, industry, and buildings sectors.

An enhanced framework for assessing, in a forward looking way, the evolution of system needs in terms of firm and flexible resources is necessary to provide visibility for market participants and network operators.

In practice, **the current indicative network and adequacy planning exercises will need to be expanded/broadened** to provide:

a. **For short and medium-term planning, a more granular definition of system attributes** (firmness, flexibility, etc.) that will be valuable in the future power system
b. **A long-term assessment of system needs** of the EU power system towards net zero (potentially longer term than the current 10-year plans)
c. **Taking a whole-system/cross-sector perspective**, including the potential flexibility contributions of downstream electrified sectors as well as the development of hydrogen

This enhanced indicative system planning framework will need to be coordinated at EU level through the definition of common indicators (e.g., for flexibility needs), methodologies, and responsibilities and completed by more detailed national assessments (reaching the distribution grid level).

The harmonisation of the implementation of new market design legislation

The implementation of these proposals raises questions about the degree of harmonisation which would be desirable across the EU. There are alternative approaches for market design based on the market principles outlined in this paper, and it is likely that different countries will have different preferences depending on their local specificities, but overall priority must be given to preserve the European internal energy market.

A high level of harmonisation should be sought for wholesale markets across the EU, while some diversity of retail markets – acknowledging the different realities across the EU – will be inevitable. A key role of the European Commission will be to ensure – while respecting the principles of subsidiarity – that national implementation does not distort the common EU energy market but instead contributes to its further development while ensuring a competitive, level playing field.

Finally, the European Commission should ensure that Member States are duly implementing the market design rules from the Clean Energy Package. In ACER's Final Assessment of the EU Wholesale Electricity Market Design, the agency stressed the importance of making short-term electricity markets work better. To realise further benefits, ACER encouraged Member States and national regulatory authorities to implement what has already been agreed in EU legislation.

Eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability

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