

Cefic position on the proposal of the European Commission amending the EU Electricity Market Design

Access to competitive, abundant renewable and low-carbon energy is critical to the competitiveness of the EU's manufacturing industry and to the transition to climate neutrality. In its reform of the electricity market design, Europe needs to urgently address the triple challenge of decarbonisation, competitiveness, and security of supply to bolster the EU's industrial base and safeguard consumers.

The chemical sector is the single largest industrial electricity consumer in the EU, in 2020 we consumed 163 TWh of electricity, mainly baseload.¹ Further electrification of our industrial processes is one of the essential pathways for the chemical industry to reduce emissions by 2030 and become climate-neutral by 2050. As we deploy key technologies like electrically heated steam crackers, electrification of manufacturing sites, hydrogen production facilities, carbon capture and storage, heat pumps, as well as chemical recycling, our electricity consumption is set to increase even more.

Our sector remains exposed to international competition, with our energy-intensive businesses in particular under stress due to lingering high energy prices in the EU. Meeting these challenges and preparing the EU for any energy crisis will require a market framework that integrates – in the lowest cost to society - the deployment of abundant renewable and low-carbon electricity. This framework should deliver adequacy to meet the increasing electricity demand whilst promoting demand flexibility, and returns the benefits of low-cost electricity to consumers. As a general principle, we hold market instruments to be the most efficient tools for achieving these objectives.

Keeping this background in mind , we make the following recommendations:

- **Promote Access to Competitive Power-Purchase-Agreements (PPAs) Along-side Liquid Forward Markets**, by facilitating PPA market places, improve the roll-out of guarantees of origin, and promote access to aggregation services.
- **Minimise Market Distortions When Applying State Aid Schemes**, via a coherent application of state aid rules, whilst maintaining market based contracts, such as PPAs, as the starting point for electricity purchasing and capacity investment decisions.
- **Build on the Existing Market for Integrating Flexibility, Capacity and Storage** to cope with increasing shares of renewable energy supplies as well as adequacy and flexibility needs.

Access to abundant – preferably renewable and low-carbon baseload – electricity at competitive prices requires an efficient short-term market which transfers the actual system costs to end-users. It also

¹ Eurostat Figures (2020)

requires a liquid forward market that offers opportunities for industry to hedge against high prices as well as access to market-based long term contracts.

However, it remains unclear that the present market review is in itself sufficient to address the lingering competitiveness gap that the EU's manufacturing base faces vis-à-vis other regions with lower energy prices and meet the challenges of the EU's future energy mix.

To address this gap, we urge the EU institutions to tackle the present electricity market review side-by-side with the Net Zero Industry Act (NZIA), the Climate, Environmental Protection, and Energy State Aid Guidelines (CEEAG), and a revision of the Temporary Crisis and Transition Aid Framework (TCTF).

We further urge the EU institutions to promote the competitiveness of the EU's industrial base also with view to facilitating the transition to climate neutrality, which relies on the availability of cost-competitive renewable and low-carbon energy. These legislative pieces should be adopted in way that is cohesive and supports competitive energy prices for industrial consumers, while avoiding undue regulatory burdens, barriers, and distortions to the EU Single Market.

Cefic's recommendations on the proposal of the European Commission amending the EU Electricity Market Design encompass the following:

1. Promote Access to Competitive Power-Purchase-Agreements (PPAs) Along-side Liquid Forward Markets

Long-term contracts, alongside liquid forward markets, play a critical role in supporting large-scale investment in adequacy as well as renewable and low-carbon technologies. For consumers, they are important to reduce price and volume risk and hence also help enable investments in the transition to climate-neutrality, for instance in electrification. For generators, they facilitate financing and reduce the cost of capital by ensuring a long-term reliable offtake.

That being said, different consumers have different characteristics and risk profiles. To accommodate this diversity, the EU electricity system must allow for different, voluntary hedging options to compete on liquid markets.

For renewable and low-carbon energy, already today PPAs deliver many of the benefits that long-term contracting can offer. However, their availability is lacking due to a limited supply of new capacity, also constrained by prohibitive permitting laws, including those that limit the supply of guarantees of origin. In addition, some administrative barriers encumber, for instance, the signing of cross-border PPAs.

Taken together, even large industrial consumers – in addition to SMEs – may struggle to access PPAs in the volumes that would be optimal for them. Therefore, we support the Commission's proposal to reduce barriers to enter into PPAs and ensuring broad access to financial products offering risk guarantees.

Recommendation:

- Further attention should be paid to reducing existing barriers and facilitating the market development for (cross-border) PPAs. To that end, Member States shall create market places for (cross-border) PPAs in the interest of improving price transparency, where these market places do not already exist, including for longer-term financial transmission rights (Regulation Art. 19a, 1).

- To further promote PPAs, we recommend all electricity generation in the EU to receive guarantee of origin certificates, enabling the resulting electricity to be tracked and traded across borders (Regulation 19a, 2; Directive Art. 3).
- Member States should create the conditions for market based contracts, such as PPAs, to form the starting point for electricity purchasing and capacity investment decisions. Where direct aid schemes are combined with market based off-take agreements, Member States should reduce administrative complexity, ensure full price transparency for final consumers, and avoid lowering the liquidity in electricity markets, including PPA markets (Regulation Art. 19a, 4).
- To avoid further market distortions, the evaluation criteria for awarding support schemes should be non-discriminatory as to the off-take agreements that have been concluded by the generator (Regulation Art. 19a, 4).

In addition, the profile of available PPAs often does not meet the consumption profiles of industrial off-takers: renewable pay-as-produced or pay-as-forecast PPAs need to be complemented with (expensive) gap-filling contracts to meet consumption profiles, also for industrial users which often have a baseload profile. This incurs additional shaping costs that reduce the competitiveness of PPAs – particularly if these PPAs have to comply with additional layers of production criteria (like the production rules imposed on renewable fuels of non-biological origin in the respective delegated act²)

Aggregators and suppliers can most efficiently shape PPAs from intermittent generation towards baseload profiles and match contract run-times. As it stands, these services may not be available or accessible for all consumer groups in the EU's different electricity markets. In addition, such aggregation may be impeded by the roll-out of CfDs, if these erode the incentive for generation to adapt their production profile to that of demand profiles.

Recommendation:

- Facilitate access to aggregation services also for industrial consumers to reduce shaping costs and facilitate the matching of PPA profiles to different consumer needs (Directive Art. 27, 1).

In short, PPAs, alongside liquid forward markets, can play an important part in the further development of the EU's electricity market to the benefit of suppliers and the demand side. At the same time, these contracts only remove part of the price risk for consumers. Short-term markets currently impact the price of electricity on forward markets and impact PPAs priced against forward curves – also due to a lack of competition. While they improve price certainty for up-takers and facilitate investments in new capacity, long-term contracts are no comprehensive solution to lowering prices in short-term markets.

2. Minimise Market Distortions When Applying State Aid Schemes

Investments in new capacity should principally be driven by market instruments in the interest of minimising system costs. Only where market instruments fall short, Contracts-for-Difference (CfDs) may offer one possible avenue of recourse, along-side accelerated permitting and establishing a predictable pipeline of large scale tenders for new capacity.

Recommendation:

- Market based contracts, such as PPAs, shall form the starting point for electricity purchasing and capacity investment decisions.

Ex-post interventions in the functioning of electricity markets carry inherent risks that need to be averted via a carefully designed, framework to govern their application. These risks pertain, amongst others, to muddling the dispatch signal for generators, skewing decisions about where to place assets in a system, or when to schedule maintenance operations.

Moreover, the availability of state-backed CfDs carries, in principle, the risk of crowding-out PPA contracting between generators and consumers as market-driven ways that guide investments. Since they are aid schemes, the costs and revenues of CfDs should be carefully considered in their rollout and transparently determined prior to their implementation at national level.

Recommendation:

- CfDs shall be further addressed in the CEEAG as these guidelines consider the financing and cost exemptions for industrial consumers (Regulation Art. 19b).
- These aid guidelines should: promote some exposure of generators to market prices to optimise maintenance scheduling and dispatching, consider limiting pay-outs to times when electricity prices are <0 , and consider the effect of the underlying asset on system efficiency (Regulation Art. 19b).
- These aid guidelines for CfDs should maintain sufficient liquidity in electricity markets.

3. Build on the Existing Market for Integrating Flexibility, Capacity and Storage

Increasing shares of intermittent renewable energy supplies will undoubtedly require more demand flexibility, next to additional storage and additional flexible generation capacity. It will also require systems to facilitate the conversion of surplus electricity to other energy carriers. Anticipatory investment in energy networks and cross-border interconnections, both onshore and offshore, is required to better integrate renewable generation across Europe. To incentivise flexibility, voluntary market-based solutions and exposure to market prices should be promoted through the existing energy markets.

At the same time, the incoherent application of flexibility and capacity regimes between Member States threatens distortions and inefficiencies between markets. Therefore, we call for a technology-neutral and cross-border integrated approach through existing markets. In the interest of system efficiency and to preserve the signalling function of the market, the principle of technology neutrality should be pursued both in the assessment of national flexibility needs, as well as in the design of flexibility products, such as the proposed peak shaving product. Conversely, distinctions on the basis generation technologies and undue interventions in market functioning should be avoided.

Reducing flexibility costs in this way will further support the integration of additional renewable and low-carbon electricity into the system. Notably, objectives for industrial demand side response and other flexibility options should take into account the technological requirements and limitations of industrial plants and industrial power plants (e.g. cogeneration) in the context of sector coupling.

Recommendation:

- Maintain a technology neutral market design: The market design should pursue a technology neutral approach in the assessment of adequacy and flexibility needs, as well as the design of flexibility instruments, such as peak shaving products (Regulation, Art. 19c, 19e).
- ENTSO-E/ ACER should promote a cross-border approach to flexibility by closely cooperating with Member States when these are conducting their flexibility assessments (Regulation, Art. 19c, 19d).
- Promote coherence between incentives for flexibility (meaning energy markets, capacity markets, direct support including support of flexible renewable energies, TSO peak shaving products,...). Flexibility should principally be achieved by allowing the pricing in energy markets to play a signaling function that increases the cost-efficient uptake of flexibility (Regulation, Art. 7a, 19e).
- Reduce barriers for industrial consumers – including SMEs – to voluntarily provide flexibility and capacity to the market, for instance via demand response.

On the whole, capacity and/or flexibility mechanisms should be designed coherently by TSOs and be limited to providing strictly necessary adequacy and flexibility needs, be designed to minimise distortive impacts on energy markets, and avoid stranded investments in view of the transition to climate neutrality.

For more information please contact:
Nicolai Romanowski, Energy Manager
Cefic
Tel. +32496266052, nro@cefic.be

About Cefic
Cefic, the European Chemical Industry Council, founded in 1972, is the voice of large, medium and small chemical companies across Europe, which provide 1.2 million jobs and account for 15% of world chemicals production.