



Electricity Market Design: An Integrated System Perspective is Needed to Fully Harness Flexibility

Joint industry statement

The undersigned organisations, representing multiple energy carriers and integrated energy solutions, welcome the focus put on flexibility in the review of the electricity market design. Indeed, a clear definition of flexibility and measures such as the flexibility needs assessments will be essential to harness both the flexibility potential of existing assets and the roll-out of new low-carbon flexible assets. Still, while demand response and electricity storage can contribute to a certain extent to address short-term flexibility needs, we need a range of non-fossil and low-carbon flexibility services to ensure the lowest cost and most optimal balancing of supply and demand over all timeframes.

In this context, the electricity market should not be regarded as a silo within the energy system. Instead, the considerations laid down in the “EU Strategy for Energy System Integration” should be taken seriously.

The flexibility that can be provided via an integrated energy system approach that adequately considers the benefits of a decarbonised gas system and of existing and less carbon-intensive solutions is the quickest path to an affordable and climate-neutral power system. Moreover, the integrated approach to energy systems will allow more affordable energy prices for consumers by delivering the lowest-cost solutions at all stages of electricity production, transmission, distribution, and end-use. The benefits will also stem from system optimizations and efficiencies sector integration generates.

With this in mind, and to harness the full flexibility potential in the electricity market design review under negotiation, we recommend:

- **Setting technology neutral flexibility objectives:** improve the wording in Article 19d to set general flexibility objectives covering all relevant timeframes (at least daily, weekly, seasonal). This should also include locational criteria to address congestions and a more granular approach that could help optimize the response to flexibility needs.
- **Allowing all technologies to participate in support schemes:** improve the wording in Article 19e and 19f to make sure generation is not excluded from these schemes.
- **Considering sector coupling in flexibility needs assessments:** support the Parliament proposal in Recital 22a and Article 19c.1.
- **Supporting the uptake of on-site renewables and high efficiency cogeneration:** support the Parliament proposal in Recital 11, oppose Article 7a.2(g) and Article 19f(c) (excluding behind-the-meter generation).
- **Assessing the implications of making capacity remuneration mechanisms a structural element of the electricity market,** particularly with regards to ensuring investments in flexible capacity compatible with the Union’s climate targets: support the Parliament proposal to add a new Article 69.5.
- **Supporting the introduction of capacity mechanisms as a structural, instead of temporary and last-resort instrument:** support the Parliament and Council proposals to modify Articles 21 and 22 of the Electricity Regulation.

Take an integrated energy system approach to flexibility

We encourage negotiators to consider the benefits of an integrated energy system and the efficiency and flexibility it generates, with the aim to accelerate decarbonization, increase energy resiliency and protect consumers from price shocks. Optimising existing infrastructure, including through the integration of renewable gases and fuels should be allowed to contribute to the flexibility objectives.

While direct electrification and the higher uptake of renewable electricity will be the cornerstones of the energy transition, other energy carriers will also play a key role in a decarbonised energy system, both in storing energy and in providing dispatchable electricity and heat. Thermal and gaseous storage is often possible at lower costs than other forms of storage, and the stored energy can also be converted or reconverted to electricity in scarcity periods.

Increasing efficiency and using the existing gas and heat infrastructure will be key. Efficient generation coming from non-weather dependent decarbonised and dispatchable technologies such as cogeneration, power-only plants, or electrolysis will be critical to cover the remaining demand cost-effectively. As weather-dependent renewable generation will grow further, renewable gases such as biogas, biomethane and hydrogen as well as liquid renewable fuels (bio-methanol, e-methanol, ethanol, renewable diesel and ammonia) will significantly contribute to replace natural gas and ensure sustainable flexibility in the electricity system.

With this in mind, all storage and generation technologies, including CHP, electrolysers and hydrogen power plants as well as all the range of renewable and low-carbon gases and fuels (both liquid or solid) should be allowed to contribute to the flexibility objectives.

Support all types of flexibility in a level playing field

The term of “non-fossil flexibility” could lead to wrongly excluding flexible generation that could run with climate-neutral fuels from national objectives, markets and support schemes while intending to promote decarbonisation. The review of the EU electricity market design should take a technology neutral approach to tap into the full potential of all flexible assets, including flexible generation.

Flexibility can be provided through a wide range of assets, from energy storage to demand side response and flexible generation. As for energy vectors, molecules, including biogas, biomethane and low-carbon hydrogen, will offer and retain an important role in balancing electricity supply and demand and making sure the system is reliable. While they can provide flexibility across all timeframes, their role will be especially crucial in providing inter-annual and seasonal flexibility.

The objective of the ongoing review is to promote climate-neutral technologies to enhance system flexibility. As it currently stands, however, the reform might lead to only creating new capacity markets for some specific technologies – and those likely to target only short-term flexibility needs – instead of allowing all technologies to compete on markets. All low carbon options should be able to participate in the flexibility market so as to optimize the overall functioning of the power markets of the future and facilitate massive integration of variable renewable energy sources. The flexibility support options should be designed in a way to facilitate this level playing field.

Provide coherent investment signals for long-term flexibility

We welcome the recognition by co-legislators that capacity remuneration mechanisms should not anymore be a temporary feature of the market design. As these mechanisms should be open to all technologies and low carbon fuels (including flexible assets), they could be instrumental in ensuring that enough flexible capacity is made available. It is important to ensure that support schemes are designed in a way that ensures that different technologies and services can compete on a level playing field.

While the new definition of flexibility in Article 2(80) refers to all timeframes, the co-legislators then propose to design the new flexibility support schemes only to support certain technologies, more specifically “non-fossil” assets (which are very much focused on short-term flexibility, as in the case of demand response and batteries). This approach lacks a clear forward-looking vision of the need for long-term flexibility, which cannot be provided by demand response and batteries.

Markets and, whenever needed, support schemes should be available for a wide range of flexibility options, covering system services, storage and flexible generation at various time horizons, and thus ensuring long term price signals for potential investors. Indeed, long-term investment certainty is especially needed to promote technologies that can provide seasonal and inter-annual flexibility, which are often large and complex projects that are dependent on a project finance plan to go ahead.

Going forward, the Commission should assess how the design of current capacity mechanisms could be improved and harmonised to ensure investments in long-term flexible solutions compatible with the Union’s climate targets, as proposed by the European Parliament, while making sure the flexibility support schemes are also open to solutions that offer longer time flexibility.



COGEN Europe, the European Association for the Promotion of Cogeneration, is the cross-sectoral voice of the cogeneration industry. Its mission is to work with EU institutions and stakeholders to shape better policies and eliminate administrative, regulatory and market barriers to the wider use of cogeneration in Europe.



The European Biogas Association is the voice of renewable gas in Europe since 2009. EBA advocates the recognition of biomethane and other renewable gases as sustainable, on demand and flexible energy sources that provide multiple knock-on socio-economic and environmental benefits. Supported by its members, EBA is committed to work with European institutions, industry, agricultural partners, NGOs and academia to develop policies which can enable the large-scale deployment of renewable gases and organic fertilisers throughout Europe, supported by transparent, well-established sustainability certification bodies to ensure that sustainability remains at the core of the industry. The association counts today on a well-established network of over 290 national organisations, scientific institutes, and companies from Europe and beyond.



EUGINE is the voice of Europe's engine power plant industry. Our members are the leading European manufacturers of engine power plants and their key components. Engine power plants are a flexible, efficient, reliable and sustainable technology, helping to ensure security of electricity supply and providing (renewable) electricity and heat.



Eurogas is an association of 76 companies and associations. Our members cover gas wholesale and retail gas markets, and the distribution of natural gas, biomethane and hydrogen. We also work with companies active on gases for vehicles, and on value chain methane emissions management. Eurogas accelerates the transition to carbon neutrality through dialogue and advocacy about optimising the use of gases.



EUTurbines represents the interests of the whole sector of the gas and steam turbine industry. As a recognised and respected voice of the sector, it aims at integrating all European manufacturers of the sector, covering all relevant applications. EUTurbines advocates an economic and legislative environment for European turbine manufacturers to develop and grow R&I and manufacturing in Europe and promotes the role of turbine-based power generation in a sustainable, decarbonised European and global energy mix.



Hydrogen Europe is the European association representing the interest of the hydrogen industry and its stakeholders and promoting hydrogen as an enabler of a zero-emission society. With more than 500+ members, including 40+ EU regions and 30+ national associations, we encompass the entire value chain of the European hydrogen and fuel cell ecosystem. Our vision is to propel global carbon neutrality by accelerating European hydrogen industry.