



CAN Europe's Top Five Expectations towards Electricity Market Design trilogues Briefing

Introduction

Electricity Market reform is a structural and legislative response to the fossil gas crisis that led to high electricity prices in all EU countries during the years 2021-2022. It is currently the only available tool, which can address in a systematic way the high volatility of energy prices and move us closer to the energy system of tomorrow, a more renewable, flexible, decentralised, fair, and resilient one.

CAN Europe welcomed the Commission's proposal back in March, 2023, highlighting the role of flexibility in the integration of renewable energy sources into our power systems. The flexibility of the power system is understood as the ability to respond in a timely manner to variations in electricity supply and demand. Demand side flexibility means proactive management of energy use during peak hours, and storing the surplus energy for the times when renewable based electricity is not produced, which is benefiting consumers, the grid, and the climate.

Beyond the changes in the market design, other measures are also mandatory to achieve the climate targets and a safer future for the next generations. These include: deploying ambitious energy-saving measures, scaling and speeding up renewables in a nature-positive and people-centred manner, adequately expanding and upgrading transmission and distribution grids and using the existing grid infrastructure more efficiently, making sure the revised Energy Taxation Directive is addressing the problem of unproportionate taxation of electricity vs fossil fuels¹ (ideally shifting taxes away from electrification to fossil gas and from households to polluters), and phasing out fossil fuels, nuclear energy and energy waste subsidies in a socially just manner. Also, we point out that a Paris Agreement-aligned emissions reduction pathway, with solid and ambitious energy targets for 2030, 2040 and mid-decade benchmarks to comply with the Climate Law's requirement to assess climate impacts, must guide all proposals to amend the internal electricity market design and this reference is missing in the currently discussed document.

¹ In May, EU Member States, taxes and levies on electricity are higher than for coal, gas or heating oil, both in absolute value and as a share of total price. See more in chapter 3.4:

<https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2020:299:FIN>

Below we present the top five elements of the reform (and associated files) that are of key importance:

1. “Demand Side Flexibility”, based on support for storage and demand side response, needs to be quickly ramped up.
2. Improvement of the energy-sharing legal framework is necessary, with a focus on local solutions.
3. Consumer protection must be designed in a way to shield the vulnerable from price spikes while keeping the energy demand reduction incentives
4. Capacity mechanisms should remain temporary.
5. No extra public subsidies to coal. Coal derogation must be removed.

1. “Demand side Flexibility”, based on support for storage and demand side response, needs to be quickly ramped up

- **Accelerating the implementation of existing demand-side flexibility provisions introduced under the Clean Energy Package in 2019.** Many Member States have not implemented the flexibility measures that already exist under current legislation, introduced in 2019². The main provisions introduced at the time were enabling renewables, demand response, and storage to participate in all markets and support mechanisms (meaning wholesale, balancing, intraday, and day-ahead markets, re-dispatching, capacity mechanisms, and strategic reserves). Some progress has been achieved in letting demand response services and storage bid/participate in the wholesale market, but the development remains slow.

SmartEn, in an assessment for 2022³, indicates that for other markets, the barriers prevail. For the EU capacity mechanisms, most of the contracts (meaning financial remuneration) are still awarded to coal/lignite power plants⁴. Other elements introduced in 2019 included: the description and rules for the smart metering systems, the introduction of dynamic price contracts, and regulations on self-consumption to make consumers more active. Acceleration of the implementation by Member States is crucial, as it would resolve some of the concerns that led to the current reform, and assure full complementarity with new, proposed provisions. The currently discussed revision adds new elements which aim to promote further and incentivise more procurement of storage and demand side response by Member States via a) giving Member States the possibility to lower CO2

² Electricity Market Regulation 2019/943, as part of Clean Energy Package

³https://smarten.eu/wp-content/uploads/2022/03/The_implementation_of_the_Electricity_Market_Design_2022_DIGITAL.pdf

⁴ 57% of the the capacity mechanisms across the EU support goes to gas and coal.” as shown by the latest [ACER report](#)

limits that would restrict the participation of fossil gas in the capacity mechanisms, in alignment with the Guidelines on State aid for climate, environmental protection and energy (CEEAG) and b) introduce the idea of flexibility needs assessment, flexibility targets, and additional remuneration (see below).

- **Flexibility needs must be examined 10 years in advance, assessed by National Regulators, and validated by ACER.** The Commission proposal requires Member States to assess their flexibility needs for an upcoming 5-year period. We welcome the European Parliament's addition, proposing that this period should be extended to 10 years and only National Regulating Authorities should be responsible for the flexibility needs estimation. The European Parliament has also added that an assessment should be built having a *climate-neutral future electricity system* as an objective. We propose this term to be expanded to *a climate-neutral fully renewable-based future electricity system*. CAN Europe modelling⁵ shows that achieving such a system by 2040 is possible.

Additionally for the EU level, the Parliament proposed that ACER, as an EU Regulator, should be tasked with flexibility needs estimation. CAN Europe supports that provision. We believe that only a unified methodology and complementary national and EU-wide assessments of flexibility needs can lead to a proper estimation and setting of targets that will ultimately help meet (and exceed) the EU's renewable energy target for 2030 (currently set at 42,5% and aiming for 45%).

- **Clear flexibility target definition, restricted to mature and ready-to-deploy solutions (such as demand side response and storage), avoiding “non-fossil flexibility” language.** The Commission proposed that each Member State should define *an indicative national objective for demand side response and storage* (Regulation, Article 19d). CAN Europe welcomes mentioning demand response and storage explicitly as it guarantees that false flexibility solutions such as the use of biomass power plants, new hydro, or nuclear will be locked out of financial support via flexibility support schemes, which are also introduced by this revision⁶.

We also welcome the Parliament proposal to strengthen the definition of the flexibility target to *indicative, separate quantifiable national objectives for demand side response and storage*. We oppose the wording put forward by the Council, as an *indicative national objective for non-fossil flexibility* as this language leaves the door open for the above-mentioned technologies that can not guarantee the improvement of the flexibility of the system in the time needed. Given the fact the EU is not on track to reach its renewable target for 2030⁷, and three Member States have not

⁵ https://caneurope.org/content/uploads/2020/06/PAC_scenario_technical_summary_29jun20.pdf

⁶ Introduced via Articles 19e and 19d of the [Commission revision proposal](#)

⁷ EEA, in the [Trends and projections in Europe 2023](#) report states that it is “uncertain that the EU will meet its target unless a deep transformation of the European energy system takes place within this decade, encompassing all sectors”. To reach the target level of 42.5% in 2030, the RES shares will need to grow continuously by an average of 2.2 percentage points each year from 2022-2030, which is three times the growth during the period 2005-2022”.

managed to achieve their 2020 targets⁸, flexibility solutions need to be swiftly deployed and limited to mature, nature-friendly and ready-to-deploy solutions.

- **The smart design of Contracts for Difference to support flexibility.** The current revision introduces the recognition of two-way contracts for difference (two-way CfDs, a contract signed between the generator and a public entity) as *best practice direct price support schemes for new investments in electricity generation*. We believe they should be recognised as the standard support mechanism, according to the Commission proposal, and opposed to the Parliament position, which also allows for “equivalent schemes achieving the same goals”. This creates ambiguity, as it is unclear how different forms of support schemes could help mitigate price spikes and what would be their impact on the overall internal electricity market. Parliament's addition to Article 19b should be removed. As new design principles for CfDs are being negotiated, it is furthermore crucial that two-way CfDs are designed in a way that makes sure solar and wind plants still have an incentive to react to the electricity spot market (short-term market). This will ensure the variable renewables, demand-side flexibility and storage can work together well.

INFORMATION BOX

Recommended storage technologies (in terms of energy efficiency) to be taken into account for the flexibility needs assessment and objectives setting:

- **Electrochemical Energy Storage (Batteries):** Lithium-ion, Lead, Nickel, Redox flow, Electric Vehicles, etc
- **Mechanical Energy Storage:** Compressed air (CAES), Liquid air (LAES), Gravity, (existing) pumped-hydro, etc
- **Thermal Energy Storage:** Sensible heat storage (SHS), Latent heat storage (LHS), Thermochemical heat storage (TCS)

2. Improvement of the energy-sharing legal framework is necessary, with a focus on local solutions

Energy Sharing is the possibility to deduct off-site generation from metered consumption, thus allowing the citizens and energy communities to become prosumers, even if they do not have the necessary land/property rights, space, or capital to invest in renewables. This can unleash benefits such as the uptake of local renewable projects, more control over the bills and protection against price spikes for consumers, and potentially an option to dedicate surplus energy for vulnerable households by the bodies engaging in energy sharing (like municipalities or public institutions). Nevertheless, it is important to ensure those involved in energy sharing keep paying their fair share of costs, especially contributing to grid costs. CAN Europe supports the Commission's proposals:

⁸ See page 62: <https://www.eea.europa.eu/publications/trends-and-projections-in-europe-2023>: “In 2021, the total RES shares in Europe ranged from 12% in Luxembourg, to 63% in Sweden, while total RES shares in France, Ireland, the Netherlands and Romania were below their 2020 target.”

- to introduce an effective legal framework and obligations toward the system operators to make energy sharing possible (Directive, Art 15a.i/j/k), including the proposed definition of energy sharing (Directive, Art 2);
- assuring a level playing field for energy communities (Regulation, Art 3).

As a principle, we welcome measures related to supporting and incentivising local ownership.

3. Consumer protection must be designed in a way to shield the vulnerable from price spikes while keeping the energy demand reduction incentives

A system where citizens take ownership of the energy transition, benefit from new technologies to reduce their bills and participate actively in the market, while vulnerable consumers are protected is possible. Therefore we support the Commission proposal that introduces the requirement for Member States to ensure that all customers are free to have more than one electricity supply contract at the same time, as well as the requirement towards suppliers to offer both fixed-term, fixed-price contracts, and dynamic electricity price contracts, depending on the final Customer situation and needs (smart metering infrastructure and equipment). Such a choice can enable all citizens to become active self-prosumers, benefitting from cheaper electricity and hedging against price spikes in wholesale markets.

At the same time, we strongly require that a ban on disconnections for vulnerable consumers, as proposed by the Parliament (Directive, Article 28a), is upheld, keeping the wording that *prohibits disconnecting vulnerable customers and households at risk of energy poverty, and those that are during ongoing legal procedures*. Given that the number of households being exposed to this risk is growing⁹ year to year, and the fact that access to energy has become a prerequisite to enjoy a number of human rights (housing, work, health, etc), we see strong justification for such an approach.

As highlighted by the ACER/CEER Market Monitoring Report 2023¹⁰ a certain percentage of consumers still need to be shielded from the impact of high energy prices. A key lesson from 2022 is also the need for better targeting of support measures (where necessary) and the creation of incentives for further reductions in energy consumption. Within the revision, such an approach could already be implemented via a modification to Article 19b.3, by making sure that the revenues collected by the state as part of two-way Contracts for Difference must be distributed only to vulnerable consumers, to reduce the impact on energy bills (direct, targeted income support), not all final electricity customers in relation to their share of consumption, as proposed by the Commission. In order to avoid legal misinterpretations, a clear reference to the definition of vulnerable consumers enshrined in the current Electricity Market Directive¹¹ should be added to the file.

⁹ [According to EUROSTAT](#) 40 million Europeans across all Member States representing 9,3 % of the Union population were unable to keep their home adequately warm in 2022. That is a sharp increase since 2021 when 6,9 % of the population were in the same situation

¹⁰ https://www.acer.europa.eu/Publications/2023_MMR_Energy_Retail_Consumer_Protection.pdf

¹¹ Article 28 in <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0944>

4. Capacity mechanisms should remain temporary

Capacity mechanisms are public subsidies to remunerate the capacity providers (generators, storage and DSR providers) that can be introduced by governments as a temporary measure to ensure system adequacy in a power market and to eliminate *residual resource adequacy concern* (inability of existing and anticipated resources available to the grid, to ensure the supply of energy to serve the expected system load). If this can not be achieved by the market alone, countries employ different support schemes to reward the capacity. The Electricity Regulation defines high-level design principles for capacity mechanisms such as a temporary nature, a measure of last resort, transparent, competitive and not going beyond what is necessary to address the adequacy concerns. It also sets an emission limit of 550g CO₂/kWh which excludes old coal power plants from the support starting from January 2025.

The propositions put forward by the Parliament remove the mention of measure “as a last resort”. Council position goes even further deleting the condition that requires the phase-out of the existing capacity mechanism before a new one is put in place as well as removing the temporary nature of the provision. Both parties require the Commission to prepare an assessment on the implications of the introduction of capacity mechanisms as a structural element of the electricity market and its impacts on the functioning of the internal electricity market and its evolution towards a net-zero emission system. As much as we recognize the need to support storage and demand side response via capacity mechanisms, such relaxation of rules risks the distortion of the market and excessive support to new fossil gas-fired power plants, which still meet the 550g emission limit. We call on the negotiating parties to keep the current provisions and the temporary nature of this subsidy.

In order to achieve a climate-neutral energy system based on 100% renewables, re-design capacity mechanisms to re-orientate this support towards demand-side flexibility only is needed. This can be achieved by a gradual lowering of the CO₂ emission threshold, which should be also made part of this and any future electricity market reform.

5. No extra public subsidies to coal. Coal derogation must be removed

Despite the fact that neither the Commission's proposal nor Parliament's position has not changed the element of the design related to emission limit (550CO₂g/kWh limit sustained, to apply starting from 2025 for old generation), the Council included a new Article (64) in the text, enabling the prolongation of the 2025 deadline, to December 2028, via a dedicated derogation. Member states can apply to the Commission for a temporary waiver of this rule and if granted, offer extra support to old coal power plants, in the form of 1-year contracts, for the adequacy gap they have.

We demand the removal of this *Coal Derogation* from the text. Such a provision would jeopardise the EU's climate objectives and may cause market distortions that not only undermine renewable solutions, but also pose a significant risk to the EU's transition away

from fossil fuels. Keeping Coal Derogation would also reward the inaction of those Member States who had identified resource concerns and have not resolved them since 2019. The capacity mechanisms across the EU are already “too fossil fuel heavy” as shown by the [latest ACER report](#), which calculated that 57% of support goes to gas and coal currently.