

Policy recommendations on the Electricity Market Design revision

smartEn comparative analysis of the positions of the 3 European institutions ahead of trilogue negotiations



Introduction

The energy price hikes experienced in the European Union throughout 2022 prompted the Commission to propose a revision of the Electricity Market Design (EMD) to better integrate renewables, enhance the role of flexibility and empower consumers.

The energy crisis would have been softened if key provisions supporting the uptake of demand-side flexibility from the 2019 EMD framework had been correctly implemented by Member States, which is not the case yet¹. Efforts to implement these existing provisions should be accelerated, not questioned.

The proposal from the Commission in March 2023 goes into the right direction by complementing and strengthening the fundamentals of the 2019 EMD with measures to further empower consumers and reward them for activating their flexibility, while ensuring a reliable and clean energy system.

This document aims to provide a comparative analysis on positions of all EU institutions (Commission, Council and European Parliament) in view of inspiring trilogue negotiations to reach a final deal².

In this light, smartEn adopted **policy recommendations** based on **three principles** and classified them in provisions to **SUPPORT**, **IMPROVE**, **OPPOSE** for the following key, selected articles:

ELECTRICITY REGULATION (ER)	ELECTRICITY DIRECTIVE (ED)
o Art. 2 (Definitions)	o Art. 2 (Definitions)
 Art. 7a (Peak shaving product) 	 Art. 11 (Entitlement to a fixed term,
 Art. 7b (Dedicated metering device) 	fixed price and dynamic electricity price
 Art. 8 (Trade on day-ahead and intraday 	contract)
markets)	 Art. 15a (Right to energy sharing)
 Art. 18 (Charges for access to networks, use of networks and reinforcements) 	 Art. 31 (Tasks of distribution system operators)
 Art. 19c (Assessment of flexibility needs) 	 Art. 33 (Integration of electromobility
 Art. 19d (Indicative national objective for demand response and storage) 	into the electricity network)
 Art. 19e (Flexibility support schemes) 	
 Art. 19f (Design principles for flexibility support schemes) 	

THREE KEY PRINCIPLES TO GUIDE SMARTEN POLICY RECOMMENDATIONS

The following principles inspire smartEn recommendations in view of the finalisation of the EMD revision:

1. ENHANCE THE PARTICIPATION OF DEMAND-SIDE FLEXIBILITY RESOURCES IN MARKETS

smartEn welcomes the introduction of a peak shaving product, which should be procured by both Transmission and Distribution System Operators as proposed by the European Parliament (art. 7a ER). This is an additional incentive for clean and flexible assets to participate in markets, notably for those which are *de facto* discriminated or not yet participating in other markets, as evidenced in the UK or Ireland where such schemes have been implemented. To be fully functional, the peak shaving product should not only be a prerogative of TSOs but extended to DSOs, for grid congestion management purposes and to solve local congestion in line with the Network Code on Demand Response currently under development. It should be clarified that such a product

content/uploads/2022/03/The implementation of the Electricity Market Design 2022 DIGITAL.pdf

¹ https://smarten.eu/wp-

² This document builds on smartEn previous <u>position paper</u> as well as <u>reactions and suggestions for amendments</u> on the Commission's proposal.



should not prevent assets to participate in other markets such as wholesale and balancing markets and that efforts to open these markets and reduce barriers to the participation of demand-side flexibility should continue. Finally, it is crucial to preserve the intention of the Commission's proposal to make the peak shaving product a structural and market-based feature of the electricity market design and not to limit it to emergency situations, as peak fluctuations will increasingly occur in a flexible and renewables-based electricity system.

The collection and use of data from dedicated metering/measurement devices (art. 7b ER), beyond the use of smart-meters, is an important development to allow all customers to activate their flexibility and participate in all electricity markets. This is the case notably in countries where smart-meter deployment is lagging behind. Dedicated measurement devices are related to a flexibility asset deployed by market parties - not by system operators - and they can empower consumers to provide flexibility through specific assets behind the meter, while also delivering a more precise and detailed measurement of consumers' flexible actions. Therefore, the use of dedicated measurement devices should not be limited to cases where there is no smart meters or where smart meters do not deliver the necessary data to provide demand response or flexibility services. Data validation process for dedicated measurement devices should be harmonised at EU level to support the free movement of goods and services in the EU.

In addition, the possibility for market participants to trade energy as close to real time and the reduction of the bid size on the day ahead and intraday markets to 100kW (art. 8 ER) increases liquidity and reduces prices by further supporting and incentivising the participation of small-scale assets in markets. Participation through aggregation should be made explicit as clarified by the European Parliament.

2. <u>SUPPORT NEW PROVISIONS INCENTIVISING THE MEASUREMENT, DEVELOPMENT AND ACTIVATION</u> OF DEMAND-SIDE FLEXIBILITY

smartEn welcomes the introduction of measures supporting an enhanced governance and enabling framework for demand-side flexibility.

The requirement to assess system flexibility needs at national level (art. 19c ER) would fill a significant gap as it is currently not done systematically across Europe. It is crucial to link and align such an assessment with other reporting exercises conducted at European level e.g., the European Resource Adequacy Assessment or the Ten-Year Network Development Plan conducted by Transmission System Operators as well as national DSO network development plans as proposed by the European Parliament. Likewise, short-term and long-term flexibility needs should be assessed equally in order to provide a holistic assessment and depending on whether they contribute to address *inter alia* congestion management, adequacy or peak shaving situations.

The national objective for demand response and storage (art. 19d ER) in the National Energy and Climate Plans should maintain the Commission's approach focusing on Decentralised Energy Resources. The link with the system flexibility assessment should be strengthened to ensure that e.g., daily system flexibility needs are achieved cost-effectively via demand response and distributed energy storage facilities, including V2X. To be impactful, such an objective should be quantifiable and supported by concrete measures for its achievement, as suggested by the European Parliament

Dedicated flexibility support schemes (art. 19e/19f ER) that stimulate deployment and activation of decentralised flexible capacity would contribute to delivering on the above-mentioned national objective. All assets coming from the demand-side should be considered, including electric vehicles as supported by the European Parliament. Besides, the introduction of locational criteria in flexibility support schemes by the European Parliament is a welcome addition to foster the flexible consumption of clean energy at local level to solve congestions, in line with a decentralised approach. Flexibility support schemes must be designed in order not to distort market signals in local flexibility markets, ensuring that assets are use in an optimal way from a system (and social welfare) perspective. In parallel, **the participation of decentralised flexible resources in capacity mechanisms** should be facilitated and reinforced as an environmentally responsible and cost-effective allocation of public resources for resource adequacy reasons.



3. EMPOWER CONSUMERS TO FLEXIBLY USE CLEAN ENERGY AT LOCAL LEVEL

The creation of a right to share energy is an important step towards a decentralised and local energy system (art. 15a ED). This further complements existing initiatives aiming at empowering consumers and protecting them from extreme price fluctuations. This new right should not be limited to re-introduce net-metering and in this regard, smartEn welcomes the improvement made by the European Parliament in setting up an energy sharing organiser, a market party whose role is to self-balance the behind the meter loads, distributed generation and storage in a flexible way. This will ensure that energy sharing truly empowers consumers and prosumers and optimises the use of deployed Decentralised Energy Resources to mitigate local congestion. In addition, market parties should bear the responsibility of installing the necessary dedicated measurement devices and any other necessary additional IT equipment, and the related cost should be part of the contractual agreements negotiated with consumers. As congestions will become more and more frequent with the necessary foreseen rollout of renewables the uptake of electrical loads such as EVs or heat pumps and limited grid capacity, smartEn recommends Distribution System Operators to be able to provide information to identify and designate areas where energy sharing should occur, in order to solve local congestions issues.

The development of fixed-term, fixed-price contracts (art. 11 ED) should not undermine the possibility of, nor the incentive to consumers to become active and contribute to the achievement of the national system flexibility needs. Some type of Time of Use Tariffs should be considered to provide a basic price incentive to consumers, as per the definition put forward by the Commission. Dynamic tariffs are an important way for consumers to receive the appropriate price signals that will enable them to provide their flexibility to the system. The right to dynamic contracts for all consumers and for particular devices with a dedicated measurement device should be explicitly included.

The introduction by the European Parliament of flexible connection agreements is welcome (art. 18 ER), as it would ensure that consumers and prosumers can connect and allow them to provide the flexibility of their assets even without a firm connection. However, the use of such a connection agreement should not delay or prevent System Operators in their task of fostering local flexibility markets, which should remain a core objective, as article 32 of the 2019 EMD is not questioned in this revision. As a consequence, and in order to prevent confusion and inefficiencies, it should be 1) clarified that flexible connection agreements may only be signed or used when the conditions for non-market based flexibility alternatives are allowed by the above-mentioned article 32.1, and that there use should be restricted to identified grid situations described in the individual agreement, and 2) that customers with flexible connection agreements should have the right to purchase flexibility from other grid users in a local flexibility market, enabling them to rather pay the disconnection of another grid user then being disconnected at a moment which for them is inappropriate. Furthermore, the use of such agreements should not hamper consumer's flexibility to be activated in other markets. Finally, the decision to limit flexible connection agreements in time should not be left to Regulatory Authorities, as suggested by the European Parliament. Consumers or producers should be the ones with the responsibility to choose in ending the flexible connection agreement, in line with a consumer-centric design. Last, the use of flexible connection agreements and the costs in term of social welfare due to their activation should be monitored by the NRAs and ACER.

In addition, smartEn welcomes the improvements made by the European Parliament to complement the obligation for DSOs to publish information to system users on available capacity for new connection (art. 31 ED) and to require DSOs to ensure a connection to EV users to the grid in a limited timeframe (art 33 ED). This will support and facilitate consumers' connection to the grid, providing them the possibility to provide flexibility from their assets.



ELECTRICITY REGULATION

Article 2: Definitions

- IMPROVE the definition of 'peak hour' (72) from the European Parliament which should not only be based on the forecast of TSOs but be extended to include the forecast to DSOs, in line with the extension of the procurement of a peak shaving product to both TSOs and DSOs, as an additional market-based product to solve local congestion. OPPOSE the definition from the Council, which limits a peak hour to an hour of high electricity consumption or high electricity prices and does no longer consider a peak hour when combined with low levels of renewable generation.
- **SUPPORT** the definitions of 'peak shaving' (73) and 'peak shaving product' (74) from the European Parliament which does no longer limit peak shaving to TSOs but extends it to DSOs.
- IMPROVE the definition of 'dedicated metering/measurement device' (79) by specifying the ownership
 and operation of such devices which are related to flexibility assets deployed by market parties
 (sometimes they can even be embedded in the manufacturing of a product by design) and not by system
 operators.
- SUPPORT the introduction of the definition of 'flexible connection agreement' (79b) from the European Parliament which ensures smart use of electricity grids to avoid bottlenecks due to the increase in electrification but IMPROVE its terminology by referring to the 'connection of electrical capacity to the grid, that includes an agreement to limit and control the injection and withdrawal of electricity from and to the transmission and distribution network'.

Article 7a: Peak shaving product

- SUPPORT §1 from the European Parliament which extends the possibility to procure the peak shaving product to DSOs.
- SUPPORT §1 from the Commission that introduces the peak shaving product as a structural and market-based feature to activate demand shaving in order to address the growing frequency of peak fluctuations, thus mitigating reoccurring instances of high energy prices, low renewable generation or grid congestion issues. To the extent that the Commission's position were not retained, smartEn recommends to at least support §1 from the European Parliament which keeps open the possibility for the peak shaving product to be used in normal circumstances outside regional or Union-wide electricity price crisis situations following a legislative proposal from the Commission taking into account ACER's assessment on the possibility for system operators to procure peak shaving products, including under normal circumstances. Such a legislation should be developed with proper stakeholders' consultation to ensure appropriate scoping of the peak shaving product.
- **SUPPORT** §2 (a) which specifies that the dimensioning of the peak shaving product should be transparent and done in consultation with market participants.
- SUPPORT §2 (b) from the European Parliament which specifies that the procurement of a peak shaving
 product should be based on market-based criteria and should not exclude participating assets from
 accessing other markets.
- SUPPORT §2 (c) from the European Parliament which specifies that the procurement of a peak shaving product shall allow the participation of small consumers, including through aggregation.
- SUPPORT §2 (ca) from the European Parliament which specifies that the minimum bid size should be 100kW including through aggregation but IMPROVE by specifying that it should be 100kW or less, to effectively allow the participation of small consumers, in line with §2 (c) and in consistency with the wording of article 8 on minimum bid-size for day-ahead and intraday markets.

Article 7b: Dedicated metering/measurement device

- SUPPORT §1 from the European Parliament which does not only enable System Operators, but also market participants, including independent aggregators, to use data from dedicated measurement device for settlement of flexibility services as well as for energy sharing.
- SUPPORT §2 from the European Parliament which specifies that harmonised requirements for dedicated measurement devices data validation process should be put in place to check and ensure the



- quality and consistency of the data, and also the interoperability of such data for new dedicated measurement devices in line with the Network Code for Demand Response.
- OPPOSE §2 from the Council which limit the use of data from dedicated measurement device by system
 operators only when smart meters are not installed or when they do not deliver the necessary data to
 provide demand-response and flexibility services.

Article 8: Trade on day ahead and intraday markets

- SUPPORT §1 from the European Parliament and the Council which move to 2026 instead of 2028 the deadline to have the intraday cross zonal gate closure time reduced to 30 min ahead of real time.
- SUPPORT §3 from the European Parliament which includes the participation of small assets through aggregation in the day-ahead and intraday markets.

Article 18: Charges for access to networks, use of networks and reinforcements

- SUPPORT §2 from the European Parliament which adds that the tariff methodology, which shall
 consider both capital and operational expenditure, as proposed by the Commission, shall incentivise the
 use of flexibility services and the optimisation of the existing grid, including the development of a smart
 grid profiting from the flexibility services by energy storage and demand response.
- SUPPORT §8a from the European Parliament which mandates System Operators to offer flexible connection agreements in areas where there is no or limited network capacity for new connections.
- IMPROVE §8a sub-paragraph 3 from the European Parliament which gives the responsibility to Regulatory Authorities to ensure that flexible connection agreements should not be used as a permanent alternative. The decision to have flexible connection agreement should be ultimately left to the choice of consumers in line with a consumer-centric design: if a consumer is satisfied with this type of connection, it should not be subject to a limited timeframe.
- IMPROVE §8a from the European Parliament by explicitly specifying that:
 - When flexible connection agreements are used, system operators cannot deny connection to the grid of assets like solar PV panels or smart/bidirectional charging stations.
 - DSOs should not use flexible connected tariffs to have exclusive access and control of connected assets and only activate them for situations described in the agreement.
 - Grid users with flexible connection agreement should be granted the access to a local flexibility market where they may pay other grid users for providing the agreed flexibility.
 - Flexible connection agreements should only be signed or used where the conditions for applying non market-based alternatives as described in art. 32.1 of the Electricity Directive are met.
 - The NRAs and ACER should monitor the extent to which flexible connection agreements are applied, as well as the impact on social welfare due to disconnection.
- SUPPORT §8a (d) from the European Parliament which obliges System Operators to specify the agreed duration of the flexible connection agreement and the agreed date to grant a firm connection.

Article 19c: Assessment of flexibility needs

- SUPPORT §1 from the European Parliament and the Council which strengthens the governance of the
 assessment of flexibility needs at national level, taking into account the European Resource Adequacy
 Assessment.
- SUPPORT §1 from the European Parliament which requires System Operators to conduct a public consultation involving all relevant stakeholders when providing data and analyses.
- SUPPORT §1a from the European Parliament which requires ACER to draw up a report on the EU-wide
 need for flexibility, including its economic potential, the introduction of shorter-term products for
 flexibility, flexible network assets and connections, and better prequalification requirements for
 participation in the balancing markets.
- SUPPORT §2 from the European Parliament which specifies that both the report from the national regulatory authority referred in §1 and from ACER referred in §1a should distinguish between flexibility needs within all relevant timeframes, between zonal flexibility needs, ensure that all ancillary services



are contemplated, and consider congestion within a bidding zone as well as renewable energy curtailment levels.

- **SUPPORT** §2a from the European Parliament which includes, in the reports from both the national regulatory authority and ACER, measures to improve the participation of non-fossil flexibility sources in markets, as well as recommendations to remove barriers to non-fossil flexibility.
- SUPPORT §4 from the European Parliament which further specifies the data to be transmitted by System Operators for the reports (e.g. on flexibility needs to achieve grid optimisation, level of RES in the electricity mix, etc.), and provides additional requirements to be respected.
- SUPPORT §7 from the European Parliament and the Council which requires ACER to include recommendations on removing barriers to the entry of non-fossil flexibility resources in its report analysing the national flexibility assessment reports.
- SUPPORT §7b from the European Parliament which mandates the reports to be used as inputs for ERAA, the TYNDP and the DSO Network Development Plan.
- **SUPPORT** §7c from the European Parliament which mandates ENTSO-E to update the Union-wide network development plan to include the results of the flexibility assessments.

Article 19d: Indicative national objective for demand response and storage

- OPPOSE from the Council the change of scope of the article, which extends to an 'Indicative national objective for non-fossil flexibility'. This extension blurs the original intention of the Commission to specifically support the deployment of Decentralised Energy Resources; which should be kept and strengthened in line with the European Parliament's position.
- SUPPORT §1 from the European Parliament which specifies that the national objective for demand response and storage should be 1) quantifiable and separate; 2) include a quantification of actual available and forecasted capacity and energy content, and 3) be aligned with the European Resource Adequacy Assessment, the TSO Ten Year Network Development Plan and the DSO Network Development Plan.
- SUPPORT §1 from the European Parliament and the Council which requires member States to include measures to reduce barriers for the participation of flexibility such as demand response and storage in the market.
- SUPPORT §1a from the European Parliament which mandates the Commission to draw up a Union strategy on demand response and energy storage and accompany it, if appropriate, by a proposal amending this Regulation and introducing minimum demand response and energy storage targets at Union level
- SUPPORT §1b from the European Parliament which requires System Operators to include in their Network Development Plans the national objectives for demand response and storage.

Article 19e: Flexibility support schemes

- SUPPORT §1 from the European Parliament which reiterates that capacity mechanisms shall not impose
 any undue barriers to demand response and storage. On the contrary, OPPOSE recital 40a of the
 European Parliament which only stresses the role of back-up generation in capacity mechanisms.
 resource adequacy can be equally provided by demand-side resources and any deviation to this
 principle is inconsistent with the 2019 EMD framework which enshrines the technology neutrality of
 capacity mechanisms.
- OPPOSE §1 from the Council which opens the possibility to set up non-fossil flexibility support schemes
 only in the situation when there is a lack of investments in non-fossil flexibility to achieve the national
 indicated objective of article 19d as this would significantly delay the deployment of non-fossil flexibility
 and the achievement of the national objective.
- **SUPPORT** §3 from the European Parliament which considers charging services for Electric Vehicles as part of the non-fossil flexibility options to be open for payments under flexibility support schemes.

Article 19f: Design principles for flexibility support schemes

 SUPPORT (b) from the European Parliament which no longer limits flexibility support schemes to new investments.



• **SUPPORT** (ba) from the European Parliament as it sets locational incentives for flexibility support schemes, but **IMPROVE** by specifying that such incentives should be set for congestion management purposes only.



ELECTRICITY DIRECTIVE

Article 2: Definitions

SUPPORT the definition of 'fixed term, fixed price electricity supply contract' from the Commission
which may include peak/off-peak price variations within a fixed price contract. OPPOSE the addition
made in the definition by the European Parliament which specifies that such price variations would only
be allowed for consumers equipped with smart meters, whereas dedicated measurement devices could
fit well this purpose.

Article 11: Entitlement to a fixed term, fixed price and dynamic electricity price contract

- SUPPORT §1b from the European Parliament which ensures consumers with fixed-term, fixed-price
 contracts can participate in demand response and energy sharing, and contribute to the achievement
 of the national electricity system flexibility needs.
- IMPROVE §1b by explicitly allowing dynamic contracts to be concluded for all consumers for particular devices when equipped with dedicated measurement devices.

Article 15a: Right to energy sharing

- IMPROVE in §1 the geographical scope of energy sharing by empowering DSOs to provide information to identify relevant areas where energy sharing scheme could be set-up to solve identified local congestions within their distribution area.
- SUPPORT §1 from the European Parliament which extends the right to energy sharing to all customers.
- SUPPORT §1b from the European Parliament which clarifies and reinforces the role of 'energy sharing
 organisers' in managing such a scheme, with the aim to self-balance the behind the meter flexible loads,
 distributed renewable generation and storage assets. This is a crucial aspect to ensure energy sharing
 helps solving local congestions, instead of creating additional stress to the grid.
- SUPPORT §1d(b) from the European Parliament which deletes the sharing capacity limit which ensures
 that all consumers engaging in energy sharing benefit from all consumer rights and obligations. But
 OPPOSE the obligation in §1d(c) from the European Parliament to comply with suppliers obligations
 above the sharing capacity limits (10.8kW for households and 100 kW for multi-family buildings) as this
 is not justified and would discourage higher levels of investment in renewable sources and limiting the
 benefits of local energy sharing. Consumers and prosumers of all types and sizes should be allowed to
 contribute to energy sharing schemes.
- IMPROVE §1e(a) from the European Parliament which mandates operators to implement the appropriate IT infrastructure so that it does not delay the setup of energy sharing schemes, while creating extra costs for all consumers, nor hamper the installation by market parties of dedicated measurement devices supporting energy sharing.

Article 31: Tasks of distribution system operators

SUPPORT §3 from the European Parliament which complements the obligation for DSO to publish
information to system users on the available capacity for new connections, by requiring them to
communicate inter alia on the level of self-consumption capacity installed or the demand and
generation for the next five years.

Article 33: Integration of electromobility into the electricity network

• SUPPORT §1 from the European Parliament which requires DSOs to ensure a connection to system users, in the context of Electric Vehicles connection, within six months, or one year if grid reinforcements are needed.



About smartEn - Smart Energy Europe

smartEn is the European business association integrating the consumer-driven solutions of the clean energy transition. We create opportunities for every company, building and car to support an increasingly renewable energy system. Our membership consists of the following companies:



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