



ECRB REPORT

ACTIVE CUSTOMERS' PARTICIPATION IN THE ELECTRICITY MARKET

Main obstacles and how to remove them

June 2026

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Introduction

The energy system of the Energy Community Contracting Parties¹ (hereinafter 'Contracting Parties') is experiencing a significant transformation as it advances toward decarbonisation, to which they committed by adopting the Decarbonisation Roadmap² and the adapted EU's Clean Energy for All Europeans package³ in 2021. The transformation path has been strengthened by adopting the electricity sector regulations in 2022⁴, aiming at full electricity market integration of the European Union and the Contracting Parties, and the 2030 Energy Community energy and climate targets for the reduction of energy consumption, increase of the share of renewable energy sources and reduction of greenhouse gas emissions⁵.

The consumers are at the core of such transition, not only by changing the patterns of their energy usage, but also by actively contributing to generation of electricity from renewable energy sources. Guiding their behaviour through the design and implementation of transparent, effective rules can support greater integration of renewable generation but also help mitigate certain energy transition costs by increasing flexibility and storage within the power system. The crucial role of consumers was recognised by 30th Energy Community Electricity Forum, that invited the Energy Community Regulatory Board ('ECRB') *to explore the main obstacles to consumers' active participation in the electricity market and to provide recommendations for actions to be implemented to unlock customer's potential in the electricity market, including through demand response and provision of other flexibility services*⁶.

Building on its previous work, such as Regulatory framework for active customers in the Energy Community Contracting Parties⁷, numerous Retail Market Monitoring Reports⁸, Update on the Developments of Regulatory Framework on Renewables and Flexibility in the Energy Community

¹ Albania, Bosnia and Herzegovina, Georgia, Kosovo*, Moldova, Montenegro, North Macedonia, Serbia and Ukraine.

Throughout this document the symbol * refers to the following statement: This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Advisory Opinion on the Kosovo declaration of independence.

² General Policy Guidelines 01/2021/MC-EnC Decarbonisation Roadmap for the Contracting Parties of the Energy Community (https://www.energy-community.org/dam/jcr:45eab70a-051a-41be-a530-864adb2a669b/19thMC_Decarbonisation_Roadmap_301121.pdf)

³ EU's Clean energy for all Europeans package as adapted and adopted for the Energy Community by the 2021 Ministerial Council: https://www.energy-community.org/dam/jcr:b11e75e1-3e4b-4166-a3ab-0d3ecaa526fd/20211130_Fact%20Sheet.pdf

⁴ Ministerial Council Decision D/2022/03/MC-EnC (https://www.energy-community.org/dam/jcr:e6c3f31f-a770-45db-8c7f-f69d7392628e/Decision03-2022-MC_newELacquis_15-12-2022.pdf)

⁵ Ministerial Council Decision D/2022/02/MC-EnC (https://www.energy-community.org/dam/jcr:018c5d99-efa4-4fc2-ac58-9ecbdb53acc0/Decision_02-2022-MC_CEP_2030targets_15122022.pdf)

⁶ <https://www.energy-community.org/dam/jcr:8e87cf28-f54f-4d34-9fa8-a568f692f7b4/30th%20Athens%20Forum%20Conclusions.pdf>

⁷ https://www.energy-community.org/dam/jcr:cd9f323b-2a55-416c-8313-fed2baa5975e/ECRB%20Regulatory%20framework%20for%20active%20consumers_approved%20by%20ECRB.pdf

⁸ The last published here: <https://www.energy-community.org/dam/jcr:0d846264-402b-4454-8f04-d8134ee09c8c/ECRB%20Retail%20Market%20Monitoring%20Report%202024.pdf>

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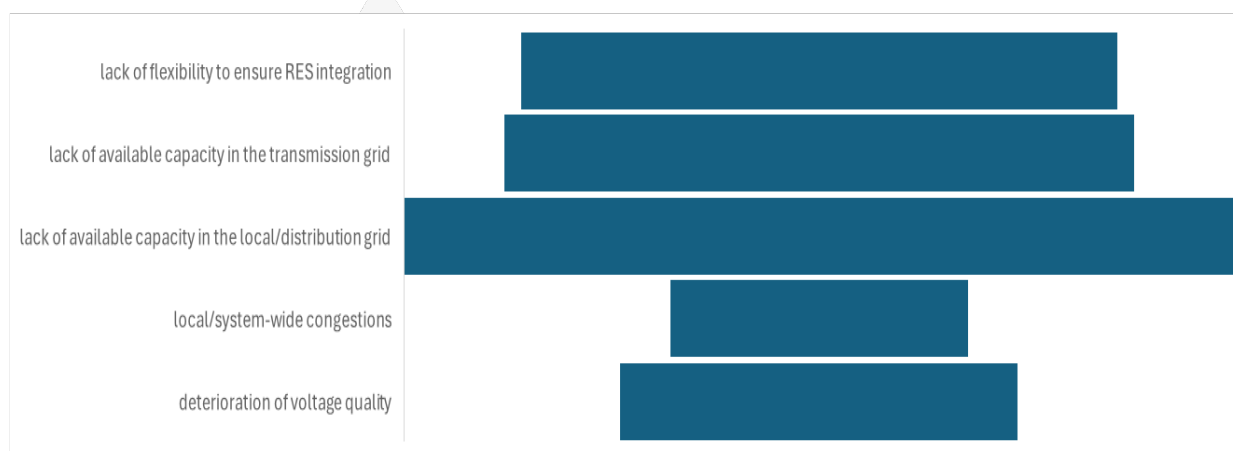


Contracting Parties⁹ and ECRB Best Practice Report on Tariff Methodologies in the Energy Community¹⁰, the ECRB conducted an analysis of the regulatory frameworks for active customers in the Contracting Parties and identified a number of obstacles that should be removed to unlock customer’s potential in the electricity market. The ECRB also recommends actions that should be taken in this respect. Many of these recommendations rely on proper implementation of Electricity Directive (EU) 2019/944 on common rules for the internal market for electricity (‘Electricity Directive’) and other relevant Energy Community legislation¹¹.

If not stated otherwise, the information provided in this document was provided by the regulatory authorities of the Contracting Parties (‘NRAs’).

Before providing analysis, it is worth noting how the NRAs of the Contracting Parties see the main challenges to electricity grids that may hinder energy transition, but also what are the main areas where active customers may positively contribute to energy transition. The findings are below.

Figure 1 Main challenges to electricity grids that may hinder energy transition in the Contracting Parties



Source: NRAs

The lack of available capacity in the local/distribution grid is observed as the main obstacle for installing more capacity by active customers, followed by the lack of available capacity in the transmission grid and lack of flexibility options.

⁹ https://www.energy-community.org/dam/jcr:31258120-6621-4a6d-9dda-1f30ba9107b0/2025_Final_ECRB_RES&Flex_Update_EnCS_website.pdf

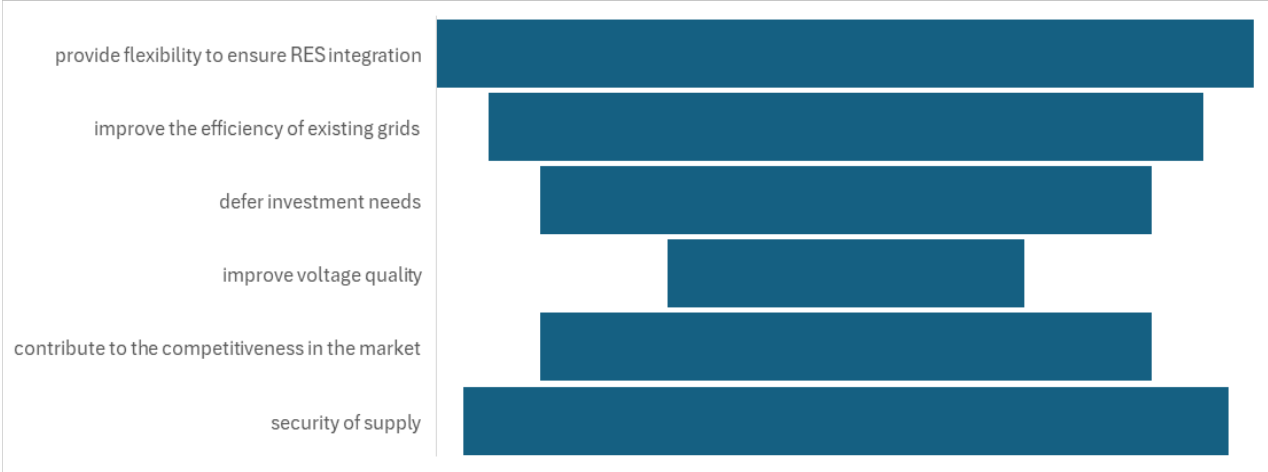
¹⁰ https://www.energy-community.org/dam/jcr:01b9334e-0a76-456e-8bfa-97180f446650/ECRB%20Best%20Practice%20Report_Tariff%20Methodology.pdf

¹¹ These acts will be mentioned in the report, as relevant.

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Figure 2 Main areas where active customers may positively contribute to energy transition



The NRAs of the Contracting Parties clearly identify the increase of security of supply as the main positive effect of having more active customers in the market. They also consider that active customers may contribute to removing the identified obstacles, namely the lack of flexibility in the system, and improve the efficiency of the existing grids and defer investments needs where reasonable.



Summary of recommendations

Basics on active customers in the Contracting Parties

- Define active customers in line with Electricity Directive and develop relevant secondary legislation to support their participation in the electricity market as soon as possible.
- If capacity limits are to be set due to network safety and reliability, maximize them to the extent possible.
- Enable net-billing scheme for remunerating active customers as soon as possible, even before 2027.

Grid connection and access

- To ensure a transparent and non-discriminatory connection process, but also system security and voltage quality, adjust the technical requirements to include clear technical characteristics of renewable sources, storage facilities, in particular for small-scale self-consumption.
- Transpose and implement Regulation 2016/1388 if this is not done so far.
- Introduce the rule requiring network operators to publish on a regular basis the information on available connection capacity, to provide more transparency for the potential customers when they consider a connection application.
- While it is crucial that all technical preconditions for active customer connection are fulfilled, it is recommended to set realistic deadlines for these connections that would encourage active participation of customers in the electricity market.
- Establish a connection queue management rule to better support the connection process and encourage customers to move forward with project implementation.
- Without prejudice to transparent and non-discriminatory connection process, it is recommended that the connection rules count on potential positive impact of relevant users on grid efficiency, supported by relevant analysis and transparent criteria.
- Specific costs linked to connection of installations with bi-directional flows shall be allocated transparently to relevant users seeking such connection. Locational signals may contribute to generation-load distribution across the networks in more system supportive way.
- Introduce the possibility to conclude flexible connection agreements or shared connections, to contribute to higher uptake of active customers' connections, and at the same time maintain the stability of networks. NRAs are recommended to further develop the proper regulatory framework to ensure alternative connection agreements function in a transparent, non-discriminatory and efficient manner.
- To ensure uptake of renewable energy from active customers, the regulatory framework shall provide relevant incentives and mechanisms on both the market and network levels, to manage their behaviour in a way that improves flexibility and reflects the system needs.

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- If applied, the possibility of capacity limitation per energy-intensive equipment rather than per whole connection point should be considered. Also, the capacity threshold may be applied (for big connections). The minimum guaranteed capacity shall provide an active customer with stable operation of the connection point for basic needs.
- According to Regulation 2019/943 on the internal market for electricity, the resources that are redispatched shall be selected from among generating facilities, energy storage or demand response using market-based mechanisms and shall be financially compensated. Non-market-based redispatching of generation, energy storage and demand response may only be used under predefined conditions (Article 13 of Regulation).
- Transaction curtailment procedures shall be used only in emergency situations, namely where the transmission system operator must act in an expeditious manner and redispatching or countertrading is not possible. Any such procedure shall be applied in a non-discriminatory manner.

Market entry

- Right to enter the market in the regulatory framework does not ensure practical operation without adjustment of relevant elements to account for active customers' specifics.
- Active customers shall not be subject to disproportionate or discriminatory technical or administrative requirements to act on the market, and relevant conditions need to reflect the minimum needed conditions to ensure stable market operation.
- Supplier-centred model precludes direct participation of active customers in the market. Regulatory framework shall consider the size of the active customers, allowing larger customers to enter the market directly, while enabling smaller to act through the aggregator (including independent aggregator).
- Active customers shall be balancing responsible parties (BRPs) or shall delegate their balancing responsibility to the BRP of their choice in accordance with Article 5 of Electricity Regulation. Specifics of the independent aggregator model need to be properly addressed in terms of balancing responsibility.
- Collateral requirements shall be proportionate and consider the size of active customer, its market position and risk profile. Administration of collateral shall not be too complicated and required amount foreseeable.
- Further development of DAM/IDM in Contracting Parties may consider introduction of smaller product duration (e.g. 15min) and broader products menu.
- Introduction of IDMs across Contracting Parties shall support trading with renewable energy and demand response closer to real-time, contributing to system flexibility.
- Regulatory restrictions on market price formation disincentivise entering the market for new users, including aggregators and active customers, thus shall be abolished.
- To accommodate new users with new technologies and of different sizes, balancing

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rules and procedures need to be customised accordingly and take into account different technical needs of the electricity system and the different capabilities of generation sources, energy storage and demand response, without prejudice to quality and system security.

- Regulatory framework shall enable active customers participation in the balancing directly (where feasible), via BSPs or through aggregators (including independent aggregators).
- Transmission System operators ('TSOs') in Contracting Parties shall apply the standard products for balancing energy and balancing capacity, according to the Regulation 2017/2195, which shall facilitate the participation of demand facility owners, aggregators, owners of power generating facilities from RES, owners of energy storage units as BSPs.
- If some balancing resources cannot participate in the balancing market via standard balancing products, TSO may provide them with such a possibility through specific balancing products (subject to relevant NRA derogation).
- When designing the specific products, TSOs shall assess and propose a reasonable threshold for balancing capacity and energy bids, allowing entry of smaller users and sufficient for TSO to accommodate in terms of technical implementation.
- Application of Virtual Power Plant ('VPP') concept, combining decentralised, medium-scale power-generating units, storages, supports the introduction of aggregated bids to the market.
- As one of the key prerequisites for participation in balancing, the prequalification process shall consider the different technical needs of the electricity system and the technical capabilities of generation sources, energy storage, and demand response, including reasonable simplification of procedures (such as testing) for small-scale demand under aggregation.
- High entry capacity threshold for balancing services and ancillary services prevents smaller users and aggregators from entering the market; therefore they shall be gradually reconsidered to smaller values.
- Requirements to simultaneously bid for upward and downward regulation may not be feasible for active customers and demand response, due to the specifics of relevant technology and consumption patterns, and shall be removed.
- Short-term auctions for balancing services (no longer than one day), required by Article 6 of Regulation 2019/943, facilitate the participation of a broader range of resources, including active customers, leading to more capacity offers and competitive prices.
- Contracts for balancing capacity shall not be concluded more than one day before the provision of the balancing capacity, as required by Article 6 of Regulation 2019/943.
- To activate aggregated units, including demand response, the balancing rules shall accommodate the procedure for groups of connections, including through the VPP.
- The liability for outperformance with contractual obligations with the TSO, following the proportionality principle, shall consider the size of the BSP, status of implementation of small-scale resources (e.g. pilot projects) and impact on the system. At the initial stage,

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this may not include additional penalties, but the payment decreases proportionally to the service not provided.

Technical enablers

- Ensure deployment of smart metering systems with the minimum functional and technical requirements that enable active participation in practice.
- In addition to providing real time consumption data, accounting for the electricity fed into the grid and enabling final customers to be metered and settled at the same time resolution as the imbalance settlement period, it is crucial that consumers with smart meters understand their functionalities and have trust in data protection mechanisms deployed. This requires setting up a training and communication activity by the network operators.
- Ensure that every final customer is entitled on request to have installed or upgraded a smart meter.
- Where smart meters have not been installed yet or do not provide relevant data, dedicated measurement devices may be used for settlement of demand response and flexibility services.
- Requirements for data protection and privacy shall be ensured, as well as interoperability requirements and procedures for access to data for eligible market participants.

Energy sharing and emerging market actors

- Develop and adopt the secondary legislation detailing the market and technical rules for the functioning of citizen energy communities, aggregators and storages as soon as possible, to allow and incentivise their contribution to market development and flexibility.
- Following Article 17 of the Electricity Directive, NRAs are recommended to approve a calculation method for financial compensation to be paid by independent aggregators to other market participants or to the market participants' balance responsible parties, if those market participants or balance responsible parties are directly affected by demand response activation. Such financial compensation shall not create a barrier to market entry for market participants engaged in aggregation or a barrier to flexibility.
- With the increasing number of electric vehicles and recharging stations, it is recommended for the NRAs to collect relevant data, in order to better understand the electricity demand and the patterns of use. This would help in developing the secondary legislation in this field.

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Network planning and flexibility needs

- Flexibility shall not be limited to balancing and ancillary services but shall encompass a broader range of tools that enable more efficient system operation and network development.
- Contracting Parties are recommended to set regulatory principles for system operators on how to conduct flexibility assessments, including different types of flexibility needs and potential sources to address them. The EU approach to flexibility needs assessment introduced by Article 19e of Regulation 2019/943 recast may be considered.
- The regulatory framework governing the preparation of network development plans shall task relevant system operators to conduct an analysis of possible alternative measures when defining investment proposals on grid development and expansion. A transparent methodology is needed to guide decisions on choosing the most effective solution to meet network needs, between investment into network assets and procuring/utilising flexibility services, including from demand response.
- Congestion management rules to tackle operational congestion in transmission and distribution networks need to be formalised, including the redispatching of relevant resources, and aligned with Article 13 of the Electricity Regulation. Balancing resources shall not be used for congestion management.
- A relevant regulatory framework shall be in place to define criteria for relevant network users subject to mandatory redispatching, relevant system conditions and procedures applied by system operators to ensure non-discriminatory treatment of network users, including active customers.
- NRAs shall define the regulatory framework for network operators to procure and use flexibility services, including congestion management, provided by network users, including active customers or through demand response.
- A definition of specifications for the flexibility services to be procured, and for standardised/non-standardised market products for such services, is needed at the national level. The procurement mechanism shall also be developed and based primarily on market-based principles (where applicable).

Network tariff regime

- NRAs shall consider relevant network users when developing the network tariff methodologies. Network charges applied shall be transparent, non-discriminatory and cost-reflective, ensuring that they contribute in an adequate and balanced way to the overall cost sharing of the system.
- The costs from both generating and consuming shall be properly allocated between injection and withdrawal while leveraging the positive effect of such users on the

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- system and avoiding double-charging.
- NRAs are invited to consider the specifics of some network users, such as storage, and its positive impact on system flexibility, which supports network stability and the security of supply. In this regard, the tariff design may support the operation of storage in a system-needs-oriented mode or location. Following the cost-reflectiveness principle, NRAs shall carefully analyse the impact of such users on network costs, and if any specific treatment is granted, it shall be justified with regular revision to avoid undue cross-subsidisation.
 - NRAs are recommended to consider introducing tariff methodologies that include network connection capacity elements, in accordance with Article 18(7) of Regulation 2019/943.
 - Time differentiation of network tariffs as provided by Article 18 of Regulation 2019/943, shall reflect the use of the network, in a transparent, cost-efficient and foreseeable way for the final customer. Time-of-use network tariffs give the appropriate economic signal to end-users to use grid capacity that decreases peak demand in the relevant network, improves its flexibility and efficiency of existing capacity. They may be of particular interest to prosumers and storage systems that have attributes that adjust their behaviour in response to system needs.
 - Attributes of static time-of-use network tariffs need to be reviewed on a regular basis to follow the system developments and provide right signals.
 - Flexible connection agreements (where applied) shall specify the network charges applicable to both the firm and flexible injection and withdrawal capacities.
 - Distribution tariff methodologies shall provide incentives to distribution system operators for the most cost-efficient operation and development of their networks, including through the procurement of flexibility services, energy efficiency, development of smart grids and intelligent metering systems
 - Revision of approaches for the calculation of allowed revenues and, particularly, for the suitable application of incentives between the CAPEX and OPEX to avoid CAPEX/OPEX bias may be needed to facilitate the application of flexible solutions that may defer network development while still accommodating new capacities.

Electricity prices and contracts

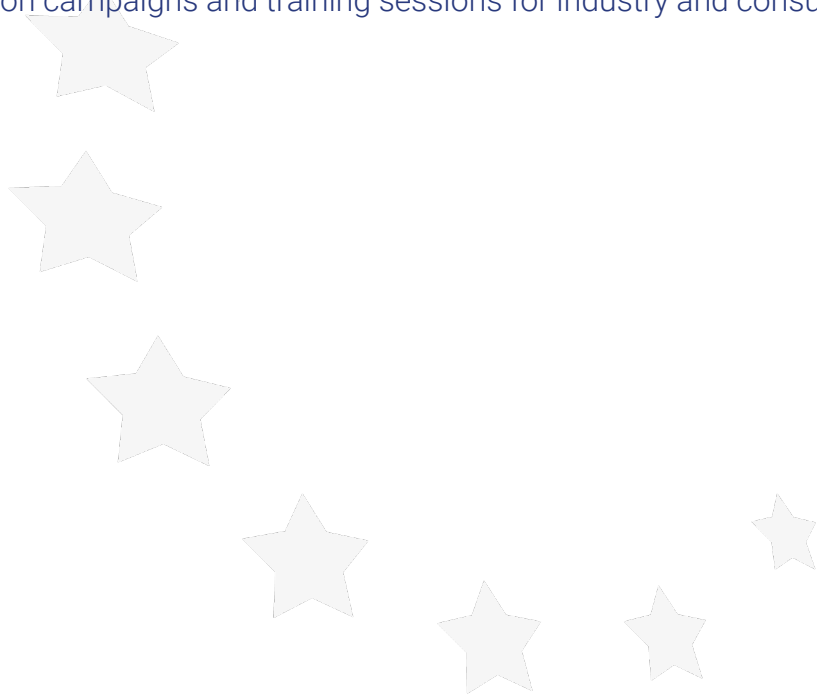
- Abandon price interventions for households as soon as possible, to enable these customers to actively participate in the market.
- Ensure that the national regulatory framework enables suppliers to offer a various range of contracts, including dynamic electricity price contracts, as more flexible offers incentivize the uptake of renewable energy and have benefits for grid management.

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Customer awareness

- NRAs should develop secondary legislation governing the transparency increase for customers i.e. rulebooks on comparison tools and billing, and suppliers shall implement them as soon as possible.
- NRAs and suppliers should take a proactive role and make customers aware of the possibilities and conditions for active participation in the electricity market. This entails not only publishing the relevant information on their websites, but also organising information campaigns and training sessions for industry and consumer associations.



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Basics on active customers in the Contracting Parties

The concept of active customers has been introduced for the Contracting Parties in Electricity Directive, which stipulates that an *active customer is a final customer, or a group of jointly acting final customers, who consumes or stores electricity generated within its premises located within confined boundaries or, where permitted by a Contracting Party, within other premises, or who sells self generated electricity or participates in flexibility or energy efficiency schemes, provided that those activities do not constitute its primary commercial or professional activity.* Currently, six out of nine Contracting Parties (Bosnia and Herzegovina, Moldova, Montenegro, North Macedonia, Serbia and Ukraine) transposed this definition in the primary legislation, with most of the secondary legislation still to be developed and adopted. Albania and Kosovo* are yet to transpose the active customers' definition, however the concept of renewable self-consumer, as provided in Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources, is in place, allowing the consumers to generate electricity from renewable sources. Georgia has neither transposed the active customer definition nor the renewable self-consumer definition. However, Georgia operates net-metering and net-billing mechanisms allowing customers to install up to 500 kW of renewable energy generation.

Despite the still developing regulatory framework for active customers, the Contracting Parties register a significant increase in number of active customers/renewable self-consumers in the last years. The table below shows the increase of number of customers as well as of the capacity installed over the last three years.

Table 1 Number of active customers/renewable self-consumers and the capacity installed in the Contracting Parties, 2023-2025

Contracting Party	Total number of active customers/renewable self-consumers (2023)	Total number of active customers/renewable self-consumers (2025)	Capacity installed for renewables self-consumption in operation in 2023 (in MW)	Capacity installed for active customers/renewable self-consumers in 2025 (in MW)
ALB	1.532	3.551	154,00	288
BIH	47	154	0,80	2,70
GEO	-	2.563	-	323,52
KOS*	289	953	9,80	52,00
MDA	5.055	8.579	116,00	200,00

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MNE	2.420	-	13,70	24,00
MKD	918	-	14,00	33,00
SRB	2.562	6.180	59,50	145
UKR	54.958	83.600	1.820,00	2.678,00

Source: NRAs

To maintain the safety and reliability of electricity networks, certain Contracting Parties introduced capacity limits for active customers. These limits vary substantially among them, as shown in the table below.

Table 2 Maximum level of installed capacity for active customers/renewable self-consumers (capacity limits) in the Contracting Parties

Contracting Party	Households	Non-households
ALB		500kW
GEO	capacity limits: up to 500 kW for net-metering micro-power plants (households and non-households), and up to 100 kW for net-billing micro-power plants	
KOS*	7kW	15kW with support scheme and not invoiced for the engaged active power 100kW with support scheme, 0.4kV and invoiced for the engaged active power 200kW with support scheme, medium voltage and invoiced for the engaged active power Customers without support scheme: evaluated based on value of the consumed energy (low voltage) or on the lowest value of the average engaged power during the 12-month period (medium voltage), and on electro-energetic consent
MKD	10kW	70kW
SRB	10.8kW	150kW
UKR	50kW - for feed-in tariff scheme; 30kW - for net-billing scheme	150kW - for feed-in tariff; 50kW - for small non-households under net-billing scheme; 5 MW - for other non-households under net-billing scheme (20 MW - temporarily until 1 January 2028)

Source: NRAs

Remuneration schemes for active customers in the Contracting Parties are in the transitional phase from net-metering to net-billing. In some of them, as presented in the box, the remuneration differs by the capacity of the customer. Feed-in tariffs are still in place only in Ukraine¹². Net-metering scheme is operational in five Contracting Parties. While it is beneficial for active customers and has proven its effect to provide incentives at the initial stage, with the growing number of customers with self-generation and storage, it leads to substantial cross-subsidisation between network users. Electricity Directive requires that existing schemes that do

¹² Until 2030

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not account separately for the electricity fed into the grid and the electricity consumed from the grid, are not granted after 31 December 2026. Until then, customers subject to existing schemes shall have the possibility at any time to opt for a new scheme that accounts separately for the electricity fed into the grid and the electricity consumed from the grid as the basis for calculating network charges.

Grid connection and access

Connection of active customers to the grid should be based on transparent and simple rules, without disproportionate or discriminatory technical requirements, procedures and charges. It should also support grid stability, reliability and safety. The guiding principles and requirements for connection and access to the grid are stipulated not only in the Electricity Directive, but also in Directive 2018/2001 on the promotion of the use of energy from renewable sources¹³ and Regulation 2016/1388 establishing a network code on demand connection¹⁴.

In the Contracting Parties, customers are allowed to install any type of renewable energy generation and storage facility. Installation of other types of generation by customers is allowed only in Bosnia and Herzegovina (Federation BIH and Republika Srpska entities), Serbia and Ukraine. The connection rules for active customers, which consider their specifics in terms of equipment installation and bi-directional electricity flows, are defined in Albania, Bosnia and Herzegovina-FBIH, Kosovo*, Moldova and Serbia. In Ukraine, different connection procedures are defined for customers already connected to the distribution system and those that plan to connect all their facilities- both consumption and generation or energy storage to the distribution system for the first time. In Montenegro, the connection rules for active customers are under preparation. In Georgia, active customers are connected in line with the same rules as

REMUNERATION SCHEME FOR ACTIVE CUSTOMERS

Net metering: ALB, BIH-RS, GEO, MDA, MNE, SRB

Net billing: BIH-RS, GEO, KOS*, MDA, MNE, MKD, UKR

Feed-in tariffs: UKR

other consumers.

¹³ [https://www.energy-community.org/dam/jcr:93371984-f3ce-4774-894f-0c6ef1aeb1af/DIRECTIVE%20\(EU\)%202018_2001%20of%2011%20December%202018%20on%20the%20promotion%20of%20the%20use%20of%20RES.pdf](https://www.energy-community.org/dam/jcr:93371984-f3ce-4774-894f-0c6ef1aeb1af/DIRECTIVE%20(EU)%202018_2001%20of%2011%20December%202018%20on%20the%20promotion%20of%20the%20use%20of%20RES.pdf)

¹⁴ https://www.energy-community.org/dam/jcr:d276401b-31a1-4bd4-aa79-13340cd214db/Regulation_2016_1388_EL.pdf

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Clear technical characteristics of renewable sources, storage facilities, in particular for small-scale self-consumption, are defined in the regulatory frameworks of Albania, Georgia¹⁵, Kosovo*, North Macedonia, Serbia, Ukraine and, partially, Bosnia and Herzegovina. To ensure a transparent and non-discriminatory connection process, but also system security and voltage quality, adjusting the technical requirements to include such technical characteristics is needed.

Provisions of Regulation 2016/1388 establishing a network code on demand connection related to demand response, adopted for the Energy Community in 2018, are transposed in the majority of the Contracting Parties. The exceptions are Bosnia and Herzegovina, where in Federation BIH entity only the primary legislation includes the general obligation for DSOs to implement all EU grid rules, in Kosovo*, where there is currently only a partial transposition, and Ukraine, where specific provisions for demand units with demand response have been implemented partially. The full transposition and implementation of Regulation 2016/1388 must be a priority for the Contracting Parties still omitting to do so.

The information on available connection capacity should provide more transparency for the potential customers when they consider a connection application. In particular for commercial customers requiring higher amounts of capacity, such information would help in designing the application and managing time expectations. In most of the Contracting Parties, network operators are obliged to publish and regularly update information on available capacities. In case this is not so, it is advisable to introduce the rule requiring them to do so in regular time intervals.

The timeline for connecting active customers to the network is set in the bylaws in most of the Contracting Parties and differs according to the voltage level and complexity of required works. In certain cases, for the active customers at the low voltage level, the deadline for connection is the same as for customers that only consume electricity. Typically, it amounts to 15-60 days, both in rules and practice. The connection deadlines for active customers at medium voltage level are mostly negotiated or, if set, then may be as long as one year, in practice even longer. **While it is crucial that all technical preconditions for active customer connection are fulfilled, it is recommended to set realistic deadlines that would encourage active participation of customers in the electricity market. NRAs are recommended, together with network operators, to monitor the reasons which impact the duration of the connection process for active customers, and design relevant regulatory measures to make the connection process smoother and quicker.**

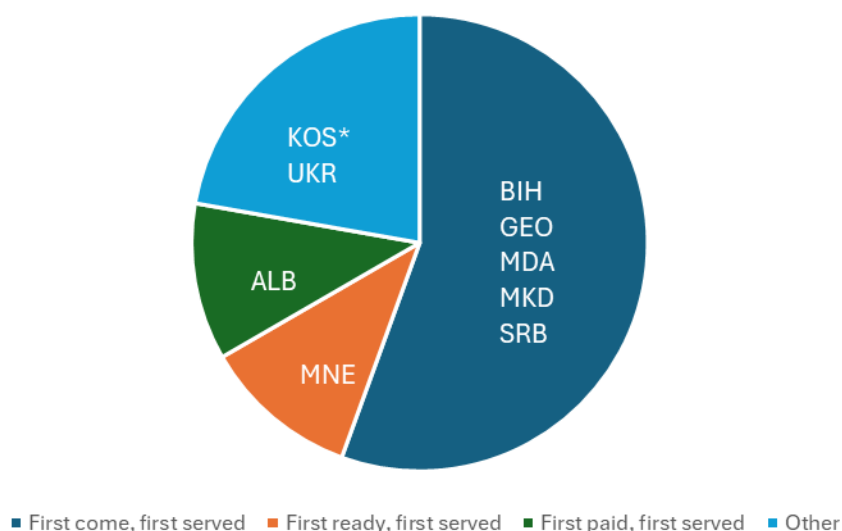
¹⁵ However not for storage

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Connection requests are primarily processed on a ‘first come first served’ basis in the Contracting Parties. However, project maturity also plays an important role in queue management, meaning that a project may lose its position in the process if certain prescribed elements of the connection procedure are not met. This is also reflected in the queue management practices in Albania and Montenegro, where respectively ‘first paid, first served’ and ‘first ready, first served’ rules are applied. In Ukraine, there is no clear approach for managing connection queues, and while the timeframes for connections are strictly defined, network operators have discretion in order of execution. **While the set deadlines may seem to provide enough certainty for applicants, establishing a connection queue management rule, especially for longer deadlines, would better support the process and encourage the customers to move forward with project implementation.**

Figure 3 Management of the connection queues in the Contracting Parties



In the majority of Contracting Parties, the projects that include self-generation and storage are not prioritised in terms of connection. The exceptions are Kosovo* and Bosnia and Herzegovina-Republika Srpska entity and Brcko District. It may be the case that some users (e.g. with storages or self-generation), when connected first, contribute to resolution of congestion in particular point of the grid unlocking the available capacity for other users. **Without prejudice to transparent and non-discriminatory connection process, it is recommended that the connection rules count on potential positive impact of relevant users on grid efficiency, supported by relevant analysis and transparent criteria.**

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The connection charges for active customers are designed in a similar manner to those for other customers: on an actual cost basis, with certain standardized elements i.e. fees. If the reinforcements of the network are required due to the connection, the applicant shall bear such costs. In Georgia, different connection charges apply to prosumers and consumers, EV charging station pays 50% of the connection fee applied for the connection of the final consumers. **Here it's crucial that the regulatory authorities have the right and necessary information to monitor the connection fees and, if needed, react if they are not transparent and justified. Specific costs linked to connection of installations with bi-directional flows shall be allocated transparently to relevant users seeking such connection. Locational signals may contribute to generation-load distribution across the networks in a more system supportive way. Standardised elements, i.e. fees, for typical projects may be designed for the sake of transparency and simplicity.**

Flexible connection agreements¹⁶, as a set of agreed conditions for connecting electrical capacity to the grid that includes conditions to limit and control the electricity injection to and withdrawal from the transmission network or distribution network, are included into national legislation in Montenegro, Moldova, North Macedonia and Ukraine. At the same time, shared connections, allowing to connect multiple users through a common connection infrastructure, are present in Bosnia and Herzegovina (Federation BIH, Brcko District), Kosovo*, Serbia and Ukraine¹⁷. **Having in mind that an increase in renewable energy installation requests by consumers is still not always followed by increasing network capacity, introducing the possibility to conclude flexible connection agreements or shared connections may contribute to higher uptake of active customers' connections, at the same time maintaining the stability of networks. NRAs are recommended to further develop the proper regulatory framework to ensure alternative connection agreements function in a transparent, non-discriminatory and efficient manner.**

The access to grid for active customers may be refused only under justified reasons, such as the lack of capacity, non-compliance with technical requirements or in cases where access would endanger the quality, reliability and safety of system operation. The analysis of reasons for access refusal by the network operators in Contracting Parties did not reveal any discriminating rules for active customers, however it remains **important that the regulators keep an oversight and ensure the efficient and fair system access for all.**

Regulation 2019/943 on the internal market for electricity ('Electricity Regulation') defines the priority dispatch and obliges Contracting Parties to implement it for power-generating facilities

¹⁶ These agreements are defined in Article 2(1)(d)(24c) of Directive (EU) 2024/1711 of the European Parliament and of the Council of 13 June 2024 amending Directives (EU) 2018/2001 and (EU) 2019/944 as regards improving the Union's electricity market design that is not part of the Energy Community legislation.

¹⁷ Regulatory framework under development

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that use renewable energy sources and have an installed electricity capacity of less than 400 kW. The same regulation, however, provides for derogation from this rule if certain preconditions are met¹⁸. In most of the Contracting Parties, priority dispatching is applied for renewable energy generation. The exceptions are Albania and Serbia, however certain preferential treatment may apply under specific conditions in the latter. **To ensure uptake of renewable energy from active customers, the regulatory framework shall provide relevant incentives and mechanisms on both the market and network levels, to manage their behaviour in a way that improves flexibility and reflects the system needs.**

The curtailment rules specific for active customers exist in Kosovo*, Ukraine and Bosnia and Herzegovina-Republika Srpska entity. In Ukraine, active customers under net-billing regime, excluding residential and small non-residential customers, may only under predefined conditions exceed 50% of the contracted consumption capacity.

Excesses of allowed/contracted capacity are the main reasons for limiting injection i.e. withdrawal capacity for active customers. Additionally, violation of operational security limits, congestions in the upper voltage levels and deterioration of voltage quality in connection points represent valid grounds for such limitations. Only in Moldova network operators are not allowed to limit injections or withdrawals of active customers.

Operational capacity limitations are applied for connection points rather than any specific equipment in some of the Contracting Parties (Albania, Bosnia and Herzegovina, Kosovo*, North Macedonia and Serbia). In other Contracting Parties, they are not implemented at all. **If applied, the possibility of limitation per energy-intensive equipment rather than per whole connection point should be considered. Also, the capacity threshold may be applied (for big connections). The minimum guaranteed capacity shall provide an active customer with stable operation of the connection point for basic needs.**

Active customers are not specifically reimbursed for any curtailment of allocated capacity in the Contracting Parties. Nevertheless, like other system users, they are reimbursed when participating in redispatching, in line with applicable market rules. The exception is Kosovo*, where compensation for not realised energy under the support scheme is paid out to active customers. The information on curtailment is usually not provided in advance, unless there are planned outages or maintenance. **According to Regulation 2019/943 on the internal market for electricity, the resources that are redispatched shall be selected from among generating facilities,**

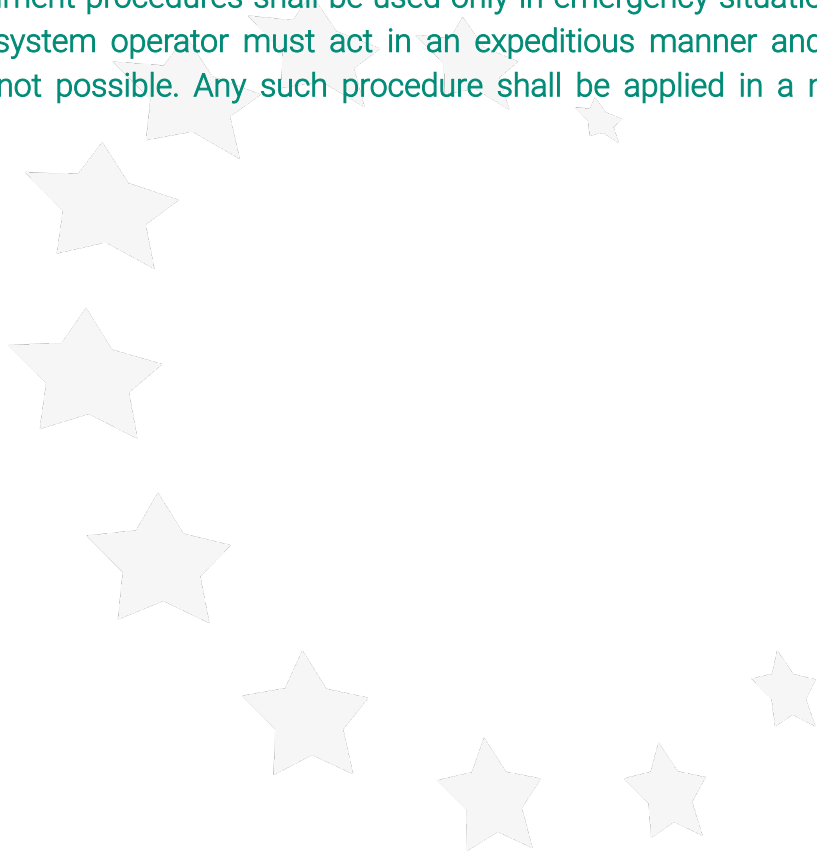
¹⁸ Article 12 of Regulation 2019/943 on the internal market for electricity

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energy storage or demand response using market-based mechanisms and shall be financially compensated. Non-market-based redispatching of generation, energy storage and demand response may only be used under predefined conditions (Article 13 of Regulation).

Transaction curtailment procedures shall be used only in emergency situations, namely where the transmission system operator must act in an expeditious manner and redispatching or countertrading is not possible. Any such procedure shall be applied in a non-discriminatory manner.



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Market entry

In accordance with Electricity Directive and Electricity Regulation, active customers are entitled to act as market participants in the energy market. This means the ability to sell self-generated electricity in electricity market segments, participate in balancing and flexibility schemes, including in the form of demand response, directly or through aggregation¹⁹.

The size of the active customer impacts the model of participation in the market. Large industrial active customers may opt for direct participation, covering all the relevant administrative and financial aspects on their own, while medium and, especially, small commercial and residential customers are more practical to be represented by aggregators (including independent aggregators).

To conduct any activity in the electricity market as a market participant, the active customers shall comply with the relevant entry rules. In the Contracting Parties, market entry requirements for active customers, apart from the connection/transport contract with the TSO/DSO and metering requirements, include a supply contract for the connection point (in Albania, Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia) and balance responsibility (Bosnia and Herzegovina (Federation BiH), Moldova, Montenegro, North Macedonia, Serbia and Ukraine). In Montenegro and in North Macedonia, active customers also require a license/authorisation from the NRA, which may be an additional burden for entering the market. **Active customers shall not be subject to disproportionate or discriminatory technical or administrative requirements to act on the market, and relevant conditions need to reflect the minimum needed conditions to ensure stable market operation.**

Active customers may be responsible for imbalances either directly (in Moldova, Montenegro and Ukraine) or represented by the supplier, as their balancing responsible party ('BRP'). In North Macedonia and Ukraine, an active customer may delegate its balance responsibility to a third party (e.g. supplier or an aggregator). In Albania, Bosnia and Herzegovina, Kosovo*, and Serbia, suppliers are BRPs for active customers according to legislation. To exercise their activity as market participants, **active customers shall be BRPs or shall delegate their balancing responsibility to the BRP of their choice** in accordance with Article 5 of Electricity Regulation.

Calculation of collateral for imbalances of active customers is based on injection behaviour, withdrawal and injection behaviour or based on withdrawal and historical imbalances. The methodology may take into account historical consumption data, forecasted demand and

¹⁹ Article 15 of Directive 2019/944, Article 3 of Regulation 2019/943

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applicable market rules defined by the relevant system operator or market operator. In Bosnia and Herzegovina (RS), relevant provisions are defined according to the concluded supply contract. **Collateral requirements shall be proportionate and consider the size for active**

customer, its market position and risk profile. Administration of collateral shall not be too complicated and requirement amount foreseeable.

Day-Ahead (DAM) and Intraday Markets (IDM) may be of particular interest to active customers who sell self-generated electricity, as trading is done closer to the time of operation, and the predictability of their schedule is increasing. With no buy-off scheme, liquid and transparent DAM/IDM may be effectively utilised by active customers or aggregators to offer their resources in the market. To accommodate smaller users, DAM/IDM shall provide the option to trade

DAM/IDM

Active customers participate directly and/or through an aggregator: MDA, MNE, MKD, UKR

Active customers participate through supplier: ALB, KOS*, MNE, SRB

Min bid size less than 500kW: GEO, KOS*, MNE, MKD, SRB, UKR - 100kW;

MDA – 1kW

products that are sufficiently small in size and enable effective participation by demand-side response, energy storage, and small-scale renewables, including direct customer participation or through aggregation²⁰.

All Contracting Parties, except Bosnia and Herzegovina, have DAMs, some of which were introduced in the last three years, and are continually evolving. Notably, in most Contracting Parties, the minimum bid size at DAM is established at 100kW, which is well below the requirement of Electricity Regulation, allowing for trading with small-scale volumes²¹. While in Moldova, the bid/offer of even 1kW minimum size may be traded. Except for several markets (Moldova, Serbia and Ukraine), the range of proposed products in DAM is limited to simple hourly products, with block products/bids not yet possible. **Further development of DAM/IDM may consider introduction of a smaller product duration (e.g. 15min) and a broader product menu.**

Only in four Contracting Parties (Moldova, Montenegro, North Macedonia and Ukraine), active customers may participate in DAM directly and/or through an aggregator, and in three Contracting Parties (Albania, Kosovo*, and Serbia) only through the supplier. In this respect **the regulatory framework shall consider the size of the active customers, allowing larger to enter the**

²⁰ As required by Article 8 of Regulation 2019/943

²¹ And corresponds to the Electricity Regulation recast

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market directly, while enabling smaller to act through the aggregator (including independent aggregator).

DAM price formation in all markets is based on marginal pricing, and in four Contracting Parties (Georgia, Moldova, Montenegro and Serbia) may be constrained only by technical bidding limits. In four Contracting Parties (Albania, Kosovo*, North Macedonia and Ukraine) there are regulatory price caps on the DAM price, preventing the free market price formation. **This risk disincentivises new users from entering the market, including aggregators and active customers.**

Intraday markets are present in Georgia, Moldova, North Macedonia, Serbia and Ukraine. All markets use a continuous trading approach with a one-hour time granularity. Minimum bid size is the same as in DAM. **Further introduction of IDMs across the Contracting Parties shall support trading with renewable energy and demand response closer to real-time, contributing to system flexibility.**

Active customers may effectively contribute to **system balancing**, including through demand response. Changing the behaviour of active customers in response to relevant market signals and system instructions constitutes an additional, clean and cheaper balancing resource for the system operator, allowing it to avoid the call-up of additional generation capacity. Traditionally, balancing markets (mechanisms) have been designed for the participation of conventional generation with large generating units. Balancing and dispatching procedures required sophisticated technical, communication and metering requirements to ensure the balancing service provider (BSP) performs according to the TSO instructions, and provided services are of the required quality. It also includes strict qualification and pre-qualification requirements for relevant equipment. To accommodate new users with new technologies and of different sizes, balancing rules and procedures need to be customised accordingly and take into account different technical needs of the electricity system and the different technical capabilities of generation sources, energy storage and demand response, without prejudice to quality and system security²².

Almost all Contracting Parties have in place balancing mechanisms and the associated rules on how TSOs shall balance the system. In most Contracting Parties, procurement of balancing services is done through a market-based mechanism, i.e. transparent auction or tender, where the best commercial/technical offers are accepted. Georgia and Kosovo* have not yet implemented an organised balancing market.

²² Article 6 of Regulation 2019/943

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Regulatory framework in six Contracting Parties (Albania, Kosovo*, Montenegro²³, North Macedonia, Serbia and Ukraine) allows the participation of active customers in balancing market/mechanism, directly (Montenegro, North Macedonia and Ukraine), through aggregators/balancing service providers (Kosovo*, Montenegro²⁴, North Macedonia, Serbia and Ukraine) or suppliers (Kosovo*). In practice, active customers and aggregators are rarely present in balancing, with only one reported practical case in Ukraine and through large-scale demand response pilots (Albania). In Bosnia and Herzegovina, only aggregated generation and energy storage systems can participate. Participation through supplier risks conflicting with suppliers' business model. Regulatory framework shall enable active customers participation in the balancing directly (where feasible), via BSPs or through aggregators (including independent aggregators).

Table 3 Model of active customers' participation in the balancing mechanism

	ALB	BIH	GEO	KOS*	MDA	MNE	MKD	SRB	UKR
directly			NA		✓	✓	✓		✓
through BSP	✓		NA	✓		✓		✓	
through aggregator		✓ ²⁵	NA			✓	✓	✓	✓
through supplier			NA	✓					

Source: NRAs

Active customers have the potential to provide all types of reserves, including through the demand response. Their capability depends on the technology used and the relevant incentives. In terms of balancing capacity across three Contracting Parties (Moldova, Serbia and Ukraine), the regulatory framework allows active customers to provide all types of reserves (FCR, aFRR, mFRR, and RR), subject to qualification for the relevant service in accordance with the TSO requirements. When it comes to relevant products, TSOs in Contracting Parties shall apply the standard products for balancing energy and balancing capacity, including those for aFRR and mFRR²⁶ adopted by ACER²⁷ for European Platforms according the Regulation 2017/2195, which shall facilitate the participation of demand facility owners, aggregators, owners of power

²³ In Montenegro, while the primary law provides the right of active customers to participate in the balancing market, the relevant regulatory framework is still under development

²⁴ In Montenegro, while the primary law provides the right of active customers to participate in the balancing market, the relevant regulatory framework is still under development

²⁵ Active customers as defined in the EU Regulation are not included in the Balancing Market. However, aggregated generation and energy storage systems can participate

²⁶ Standard products for RR adopted but the relevant platform (TERRE) stopped operation in March 2026

²⁷ https://www.acer.europa.eu/sites/default/files/documents/Individual%20Decisions_annex/ACER%2520Decision%2520SPBC%2520Annex%2520I_0.pdf

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generating facilities from RES, owners of energy storage units as balancing service providers ('BSPs').

Balancing mechanism

Min bid size: BIH, GEO, KOS*, MDA, MKD, SRB, UKR - 1MW;

Min prequalification threshold: ALB – 3MW;

Active customers may provide: MDA, SRB, UKR – FCR, aFRR, mFRR and RR; other CPs – not applicable

BRP required: ALB - No; BIH, KOS*, MDA, MNE, SRB, UKR – Yes

No Contracting Parties reported any specific balancing products designed for active customers and demand response. In Bosnia and Herzegovina, energy storage capacity may provide a specifically designed (fast aFRR) ancillary service. **If some balancing resources cannot participate in the balancing market via standard balancing products, TSO may provide them with such a possibility through specific balancing products (subject to relevant NRA derogation).**

In six Contracting Parties (Bosnia and Herzegovina, Kosovo*, Moldova, North Macedonia, Serbia and Ukraine), the

minimum amount that must be called up for balancing services is 1MW, which is aligned with current requirements for standard products. At the same time, this product attribute is definitive for entry and bidding into balancing market, thus may be a barrier for smaller market participants with portfolio of less than 1 MW. Therefore, it is recommended that **when designing the specific products, TSOs assess and propose a reasonable threshold for balancing capacity and energy bids, allowing entry of smaller users and sufficient for TSO to accommodate in terms of technical implementation. Application of Virtual Power Plant (VPP) concept, combining decentralised, medium-scale power-generating units, storages, supports the introduction of aggregated bids to the market.** Regarding the standard products, ACER proposes to set the minimum bid quantity of 0.1 MW for all standard products for balancing energy and balancing capacity with gradual implementation supported by a cost-benefit analysis²⁸.

Only in Albania qualification requirements to provide balancing services are defined specifically for demand response; however, any balancing is handled only through the supplier/BSP. In four Contracting Parties (Bosnia and Herzegovina, Moldova, Serbia and Ukraine), qualification requirements are the same as for producers. In Ukraine, the status of an ancillary service provider requires the conclusion of an ancillary services agreement, an imbalance settlement agreement, and an agreement on participation in the balancing electricity market.

²⁸ https://www.acer.europa.eu/sites/default/files/documents/Recommendations_annex/ACER_Recommendation_01-2025_DR_NC-Annex6_EB_Reasoning.pdf

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When it comes to pre-qualification, almost all Contracting Parties have processes for market participants to qualify to submit bids for balancing energy or balancing capacity. The requirements are defined for each type of service and in most cases are the same for all service providers. In Albania, the minimum capacity required to apply for prequalification is at least 3MW. The prequalification process does not exist in Kosovo* and Montenegro. However, in Montenegro, BSPs must have the technical capabilities defined in the contract with the TSO to provide balancing services. Only in North Macedonia, pre-qualification requirements differ for generators and for consumers, but still do not recognise active customers. In Serbia, pre-qualification requirements are not specifically defined for active customers and are aligned with those applicable to other BSPs. As one of the key prerequisites for participation in balancing, the prequalification process shall consider the different technical needs of the electricity system and the technical capabilities of generation sources, energy storage, and demand response, including reasonable simplification of procedures (such as testing) for small-scale demand under aggregation.

Procurement of upward and downward balancing capacity is conducted separately for each direction in most Contracting Parties (Albania, Bosnia and Herzegovina, Georgia²⁹, Kosovo*, Moldova, North Macedonia, Serbia and Ukraine) and complies with Article 6 of Electricity Regulation. In Georgia procurement of upward and downward balancing capacity for aFRR and mFRR is carried out separately, while jointly for FCR. In Montenegro, upward and downward balancing capacity is procured through a single process for both directions. Consumers can provide only upward balancing capacity. In North Macedonia, TSO conducts auctions to purchase aFRR and mFRR balancing capacity through a single process for upward and downward capacity; however, it is possible to bid for mFRR separately for each direction³⁰. **Requirements to simultaneously bid for upward and downward regulation may not be feasible for active customers and demand response, due to the specifics of relevant technology and consumption patterns, and shall be removed.**

Long-term contracts for ancillary services are still in place in most of Contracting Parties (Albania, Bosnia and Herzegovina, Kosovo*, North Macedonia, Serbia and Ukraine), including monthly and seasonal procurement, with the maximum contractual period for balancing capacity being one year (Albania, Bosnia and Herzegovina, Kosovo*, and Serbia). Short-term contracts (weekly, daily) are also present in Albania, Georgia, Moldova and Ukraine. In Albania, most contracts are short-term or seasonal and active customers participate via short-term contracts. In Georgia,

²⁹ According to the balancing market rules, which are not yet active

³⁰ ECRB 2025 MMR

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contracting period for balancing capacity is one week³¹. In Moldova, only daily auctions are in place. In North Macedonia, the maximum contractual period for ancillary services is one month. In Serbia, in 2024, ancillary services were procured through annual contracts (capacity and energy), mainly from large generators (EPS). Active customers are not yet participating. However, following the decision of the AERS adopted on 29 December 2025, an exemption was granted to the TSO (EMS), allowing the application of an alternative market-based procurement mechanism for balancing capacity. This mechanism enables procurement under conditions of limited competition, including the application of price caps as a safeguard measure, and is expected to lead to shorter-term contracting periods in line with market-based principles. In Ukraine, the TSO may also conduct special ancillary services auctions for the procurement of balancing capacity for a period exceeding one year but not more than five years, with a deferred start of service provision. Long-term contracts for balancing services (energy and capacity) saturate the market, and at the same time may not be feasible for active customers and demand response to compete with conventional units due to the intermittent nature of their operation, and the balancing market not being their main activity. **Short-term auctions for balancing services (no longer than one day), required by Article 6 of Electricity Regulation, facilitate the participation of a broader range of resources, including active customers, leading to more capacity offers and competitive prices.**

The contracting period before the service provision depends on the contract duration, however, usually are not defined by the regulatory framework. In Albania, the contracting period is typically short-term (a few days or weeks) and depends on the agreement via a BSP; there is no fixed long-term period for active customers. In Ukraine, the auction schedule specifies the timeframes within which the TSO is required to publish the auction details and the timeframes for conducting the auctions. According to the ancillary services auction schedule for 2026 published on the TSO's website, annual auctions are held approximately two months prior to the start of the year in which the ancillary services will be provided; quarterly auctions are held approximately one and a half months prior to the start of the relevant quarter; monthly auctions are held approximately one month prior to the start of the relevant month; and weekly auctions are held approximately one week prior to the start of the relevant week. Like contract duration, the contracting period before service provision shall be as close as possible to actual operations, at the same time guarantee TSO the relevant resource available, especially in balancing capacity. **According to Article 6 of Electricity Regulation, contracts for balancing capacity shall not be concluded more than one day before the provision of the balancing capacity.**

In five Contracting Parties (Albania, Kosovo*, Moldova, North Macedonia and Serbia), TSO issues instructions for single connections, while in **Bosnia and Herzegovina, TSO may do it both for**

³¹ in the balancing market rules, not active yet

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single connections and for groups of connections. To activate aggregated units, including demand response, the balancing rules shall accommodate the procedure for groups of connections, including through the VPP.

Where active customers provide balancing services to TSO, they are liable for ensuring the required quality as specified in the contracts and relevant technical regulations. The same rules as for other BSPs are applied. The liability for outperformance with contractual obligations with the TSO, following the proportionality principle, shall consider the size of the BSP, status of implementation of small-scale resources (e.g. pilot projects) and impact on the system. At the initial stage, this may not include additional penalties, but the payment decreases proportionally to the service not provided.

Technical enablers

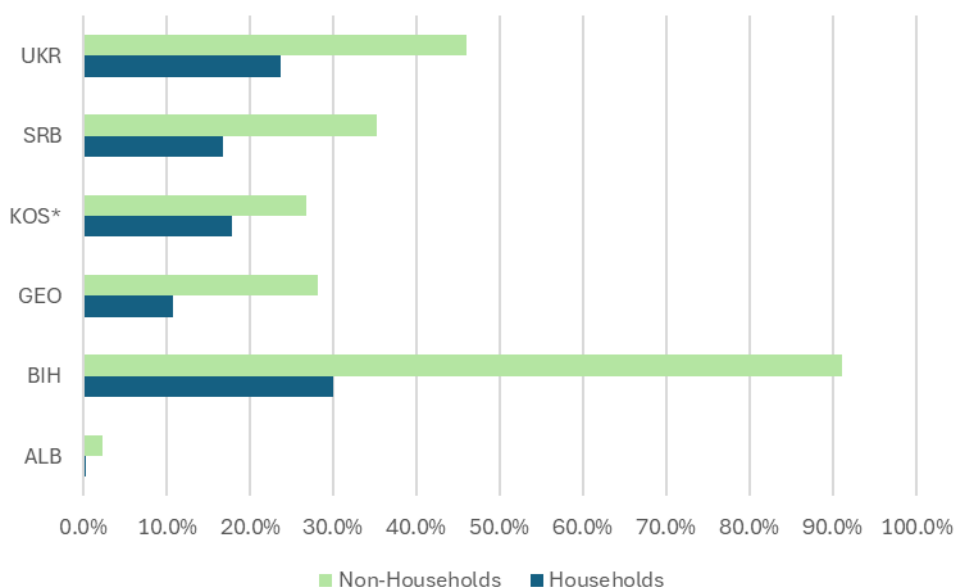
Active participation of consumers in the electricity market, where they can reap the benefits of dynamic pricing and support system operators through demand response, is only possible if they are timely informed about their consumption and can adjust their behavior. To assist the active participation of customers in the electricity market, Contracting Parties must ensure the deployment in their territories of smart metering systems³². Such smart metering systems shall fulfil the minimum functional and technical requirements that enable active participation in practice. The smart meters are already deployed in the Contracting Parties, at various levels (see Figure 4 below), however not all the functional and technical requirements are met. These requirements must apply to future installations and to installations that replace older smart meters. Smart metering systems may remain in operation over their lifetime but, if they do not meet the set requirements, they shall not remain in operation after 5 July 2031.

³² Directive 2019/944

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Figure 4 Share of customers with smart meters in the Contracting Parties in 2025³³



Source: NRAs

The existing smart meters provide real time consumption data to consumers in most of the Contracting Parties, however not in Montenegro and Ukraine. Similarly, the smart meters account for the electricity fed into the grid from the active customers’ premises in all analysed Contracting Parties except Montenegro. On the other side, only in and Bosnia and Herzegovina-RS entity, Georgia and Montenegro, the smart meters enable final customers to be metered and settled at the same time resolution as the imbalance settlement period in the national market. In Ukraine, this is also possible for consumers with commercial metering sites of Group A that includes:

- electrical installations with a connection capacity of 150 kW or more, or an average monthly electricity consumption exceeding 50,000 kWh (actual for the previous calendar year or declared for new electrical installations) at consumer facilities (excluding apartment buildings and household consumers);
- consumer electrical installations, at the consumer’s initiative, provided that the relevant metering devices meet the requirements for generating and transmitting commercial metering data for Group A metering sites;
- electrical installations that are part of an aggregation unit and are aggregated by an aggregator.

³³ In Montenegro and North Macedonia, the shares of customers with smart meters are 80,8% and 21,51% of all customers, respectively, as disaggregated data for households and non-households is not available.

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In addition to providing real time consumption data, accounting for the electricity fed into the grid and enabling final customers to be metered and settled at the same time resolution as the imbalance settlement period, it is crucial that consumers with smart meters understand their functionalities and have trust in data protection mechanisms deployed. This requires setting up a training and communication activity by the network operators.

Finally, if smart metering systems are not systematically deployed, Contracting Parties must ensure that every final customer is entitled on request to have installed or upgraded a smart meter. The associated costs and conditions shall be fair, reasonable and cost-effective. In all Contracting Parties except Serbia and Bosnia and Herzegovina-Federation BIH entity, final consumers are entitled to have smart meters at their own request and cost. The information on estimated costs is available for Ukraine (200-300 EUR) and Bosnia and Herzegovina-RS entity (240 EUR).

Sub-metering (or dedicated measurement device³⁴) per customer's appliances is not applied in any Contracting Party. In Ukraine, there are legislative requirements for active customers installing a generating unit or the storage facility, in addition to the commercial metering of total electricity consumed from and/or fed into the grid, ensuring the metering of electricity generated by its own generating unit and separate metering of the input/output of electricity into/from the energy storage facility. **Following the relevant EU practices, to unlock demand response and flexibility where smart meters have not been installed yet or do not provide relevant data, dedicated measurement devices may be used for the observability and settlement of demand response and flexibility services, including from energy storage facilities. Rules and requirements for a dedicated measurement device and data processing shall be established for these purposes.**

Demand response through aggregation requires relevant technical and informational infrastructure. Relevant exchange and management rules shall be developed for metering and consumption data, as well as data required for customer switching, demand response and other services. **Requirements for data protection and privacy shall be ensured, as well as interoperability requirements and procedures for access to data for eligible market participants (e.g. aggregators, including independent aggregators).**

Further rules are needed for accounting of the position of demand in case it would not have been activated through demand response, e.g. so-called "baselining rules". Clear and transparent

³⁴ 'dedicated measurement device' means a device linked to or embedded in an asset that provides demand response or flexibility services on the electricity market or to system operators (Electricity Directive recast)

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baselining methods are vital for further demand response settlement in the market and the definition of flexibility services provided. Currently, no relevant baselining methodologies have been developed in Contracting Parties. **NRAs are recommended to ensure network operators, in cooperation with relevant stakeholders, design proposals for the definition, calculation and validation of the baselining methods.**

Energy sharing and emerging market actors

Active participation of consumers in the electricity market may be further enabled by introducing and developing citizen energy communities, independent aggregators and energy sharing mechanisms. Energy storage and charging services for electric vehicles may further support their activities. Apart from the energy sharing³⁵, all other concepts and their regulatory frameworks are prescribed by the Electricity Directive.

Currently, citizen energy communities and the basic regulatory frameworks for their functioning are defined in the legislation of the majority of the Contracting Parties. The exception is Kosovo*, where the relevant definition is provided in the draft primary law, still to be adopted by the parliament. Nevertheless, the regulator is currently preparing the Rulebook for renewable energy communities. Being only recently recognised by the laws, in practice, there are no operational citizen energy communities in the Contracting Parties. In Serbia, several pilot initiatives and local projects have emerged in recent years.

Nevertheless, in several cases (Bosnia and Herzegovina-Republika Srpska entity and Moldova) incentives are set for consumers participating in the citizen energy community. In Bosnia and Herzegovina-Republika Srpska entity, there are benefits for grid connections and an incentive in the form of a premium for small plants. In Moldova, citizens' energy communities are exempted from submitting financial guarantees for the execution of connection permits.

Independent aggregators-market participants engaged in aggregation who are not affiliated to the customer's supplier, currently exist only in Bosnia and Herzegovina-six entities for generation aggregation but none for consumption, and four in Moldova. In Ukraine, as of 31 December 2025, licenses for conducting aggregation activities in the electricity market had been issued to seven companies. However, NEURC currently does not have an appropriate monitoring tool to establish

³⁵ Introduced for the EU by Directive (EU) 2024/1711, amending Directives (EU) 2018/2001 and (EU) 2019/944 as regards improving the Union's electricity market design, however still not applicable for the Energy Community Contracting Parties.

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whether these are independent aggregators. The crucial role of independent aggregators is to facilitate demand response, as the consumer driven contribution to the flexibility of electricity networks. The necessary regulatory framework for demand response through aggregation is defined in Article 17 of Electricity Directive.

One of the main preconditions for non-discriminatory access to the market is the possibility to do so without the consent of the supplier. This is currently the case in most of the Contracting Parties, except Bosnia and Herzegovina-Federation BIH entity.

The relations between the consumers and the independent aggregators as well as between the independent aggregators and the suppliers are defined in the following way in the Contracting Parties:

Relations between consumers and independent aggregators are governed by:

Regulatory framework: MDA, UKR

Negotiated contracts: ALB, BIH-RS, MKD, SRB, UKR

Standard contracts: BIH-FBIH

Relations between independent regulators and suppliers are governed by:

Regulatory framework: MDA

Negotiated contracts: ALB, BIH-BIH

No direct relations between them: SRB, UKR

In Ukraine, the procedure for concluding an agreement between the customer and the aggregator is not regulated, however the aggregation contract must contain the requirements specified in the market rules adopted by the regulator. In Kosovo* and Montenegro, the rules on contractual relationships between consumers, aggregators and suppliers are still not set.

The active customers must be entitled and enabled to switch not only supplier, but also market participant engaged in aggregation, in line with Article 12 of Electricity Directive. Currently, the procedure for aggregator switching is in place only in Ukraine and is defined by the wholesale market rules. Aggregator switching procedure shall take into account the specifics of aggregation of demand, especially of small and residential end-users. The relevant process shall not include unnecessary and administrative procedures.

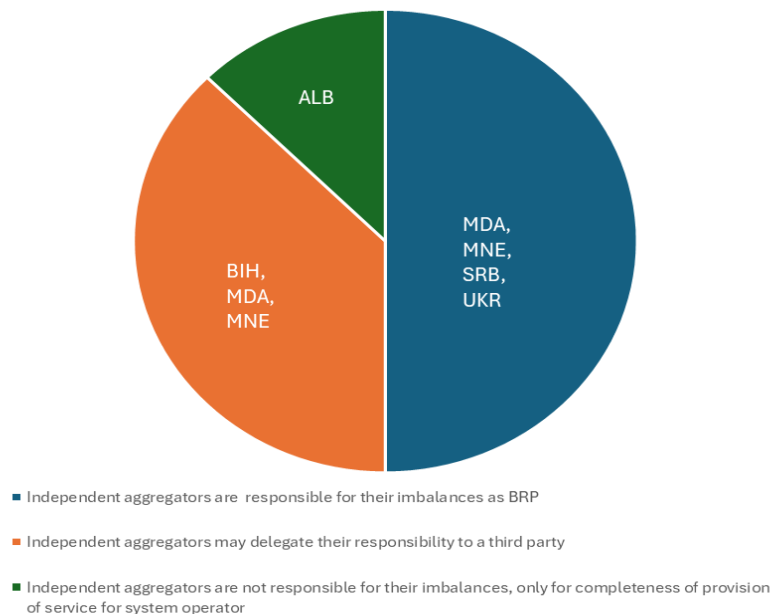
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In 2025, only very limited volume of energy was offered by aggregators: in Albania, small volumes³⁶ are offered via balancing service providers. In Ukraine, the aggregators offered in the balancing market upward energy of 9.9GWh and downward energy of 0.2GWh. At the same time, there was no capacity awarded to aggregators in the balancing and ancillary services market.

Article 17 of Electricity Directive requires that market participants engaged in aggregation are financially responsible for the imbalances that they cause in the electricity system; to that extent they shall be BRPs or shall delegate their balancing responsibility in accordance with Article 5 of Regulation (EU) 2019/943. In the Contracting Parties, the volume of imbalance of the independent aggregator is calculated at the level of BRP. However, in Kosovo*, Moldova, North Macedonia and Montenegro, these rules are still under preparation. The figure below shows how is the balancing responsibility of aggregators regulated in the Contracting Parties. Such a regulation is still pending in Kosovo* and North Macedonia.

Figure 5 Balancing responsibility of independent aggregators in the Contracting Parties



Source: NRAs

The imbalance formula considers the impact of demand response, activated by other market participants, in three Contracting Parties (Albania, Serbia and Ukraine).

³⁶ No exact data available

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When an independent aggregator's activity in demand response and flexibility services creates losses for other market participants, it may lead to negative perceptions and undermine trust in the market. Market rules include compensation rules between aggregators and the supplier in case of demand response activation through an independent aggregator only in Albania and Serbia, the mechanism works through the imbalance settlement formula in Ukraine. Following Article 17 of the Electricity Directive, NRAs are recommended to approve a calculation method for financial compensation to be paid by independent aggregators to other market participants or to the market participants' balance responsible parties, if those market participants or balance responsible parties are directly affected by demand response activation. Such financial compensation shall not create a barrier to market entry for market participants engaged in aggregation or a barrier to flexibility. In such cases, the financial compensation shall be strictly limited to covering the resulting costs incurred by the suppliers of participating customers or the suppliers' balance responsible parties during the activation of demand response.

Finally, undertakings that own, develop, operate or manage recharging points for electric vehicles are also emerging market actors. Article 33 of Electricity Directive envisages a set of rules on how to integrate electromobility into the electricity network. Only in exceptional cases, DSOs may engage in such an activity. Most of the regulators in the Contracting Parties still do not collect data on the number of electric vehicles and the recharging points. The secondary legislation to accommodate the increasing need for recharging services is under preparation in the Contracting Parties. The table below provides the available information on the estimated numbers of electric vehicles and recharging stations in the Contracting Parties.

Table 4 Number of electric vehicles and recharging points in the Contracting Parties in 2025

	ALB	BIH	GEO	KOS*	MDA	MNE	MKD	SRB	UKR
Number of electric vehicles	NA		7,178	6,187	9849	600	NA	NA	NA
Number of recharging points not owned by DSO	225	FBIH-30, RS 25-50	322	200	460	NA	NA	NA	NA

Source: NRAs

With the increasing number of electric vehicles and recharging stations, it is recommended for the NRAs to collect relevant data, in order to better understand the electricity demand and the patterns of use. This would help in developing the secondary legislation in this field.

Network planning and flexibility needs

The Electricity Directive further extends the role of **flexibility in network development planning and operation**. The flexibility needs shall be assessed both by TSOs and DSOs when preparing their 10-year network development plans (TYNDP) and 5-year network development plans accordingly. The network development plans shall also include the use of demand response, energy efficiency, energy storage facilities or other resources that the system operators are to use as an alternative to system expansion. Moreover, Electricity Directive, for the first time, introduces legal provisions mandating DSOs to procure flexibility services, including congestion management, in their areas, to improve the efficiency of the operation and development of the distribution system. Contracting Parties shall provide the necessary regulatory framework for this.

Flexibility

Flexibility is defined in national legislation in BIH, MDA, SRB and UKR

Flexibility services are defined in national legislation in MNE and UKR

The definitions of flexibility and flexibility services affect their practical recognition in network development planning and system operation. Most Contracting Parties (six) have integrated into the national legal framework definitions of “flexibility” and/or “flexibility services. In Moldova and Ukraine, the definition of flexibility follows the EU Electricity Regulation recast³⁷, while in Bosnia and Herzegovina, North Macedonia and Serbia, the national definitions

are introduced. Georgian legislation provides only the list of ancillary services (e.g. FCR, FRR, voltage control and black start), which are used by TSO on a non-market basis. In Kosovo*, while the flexibility is not explicitly defined, the Grid Code defines services that may be considered as flexibility services. In Serbia, the Energy Law defines the term flexibility, while the regulatory framework further operationalises it through ancillary services and balancing services. It should be noted that the national definitions of flexibility in Bosnia and Herzegovina and Serbia apply at the individual or collective facility level, rather than to the electricity system as a whole. **Flexibility shall not be limited to balancing and ancillary services but shall encompass a broader range of flexibility tools that enable more efficient system operation and network development.**

TSOs/DSOs are required by legislation to assess flexibility needs for their networks in six Contracting Parties (Bosnia and Herzegovina, Kosovo*, Moldova, Montenegro, North Macedonia and Serbia). The methodology for assessing the flexibility is defined only in Kosovo* and focuses

³⁷ Regulation (EU) 2024/1747

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only on ancillary services for balancing purposes. In other Contracting Parties, the relevant methodology is not defined. **Contracting Parties are recommended to set regulatory principles for system operators on how to conduct flexibility assessments, including different types of flexibility needs and potential sources to address them. The EU approach to flexibility needs assessment introduced by Article 19e of Regulation 2019/943 recast may be considered.**

Flexibility may contribute to overall system efficiency and defer inefficient investment decisions. While recognising flexibility and relevant flexible users, **most Contracting Parties do not consider them as an alternative to grid expansion during the network development planning.** Only in Moldova and North Macedonia, TSO shall take into account the potential for the use of dispatchable demand, energy storage facilities or other resources as an alternative to the expansion of the electricity transmission network when drawing up the TYNDP. Similar requirements for DSOs are present only in three Contracting Parties (Bosnia and Herzegovina, Montenegro and Ukraine). In Georgia, TYNDP includes a project on storage systems, however the regulations for storage systems are currently under development. The purposes for which demand response and other flexible technologies may be of use instead of or as a complement to the capital investments are defined only in Bosnia and Herzegovina, Moldova and Montenegro. **The regulatory framework governing the preparation of network development plans shall task relevant system operators to conduct an analysis of possible alternative measures when defining investment proposals on grid development and expansion. A transparent methodology is needed to guide decisions on choosing the most effective solution to meet network needs, between investment into network assets and procuring/utilising flexibility services, including from demand response.**

Table 5 Purposes of flexibility utilisation in network development planning in the Contracting Parties

Purposes of flexibility utilisation in network development planning	YES
operational congestion in the network	FBIH, GEO, MNE, MKD
ensure the connection of new users, including RES	FBIH, GEO, MNE
solve voltage issues	FBIH, MNE, MKD
improve efficiency of grid utilisation, e.g. network losses, quality of service	FBIH, SRB, MNE, MKD
reliability, adequacy of the system and the security of supply	MDA
increasing flexibility	GEO

Source: NRAs

Managing network constraints, including by DSOs in distribution networks, is one of the areas where flexibility services may contribute to efficiency of grid utilisation and management. In practice, this includes the redispatching of relevant resources, including active customers and

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A regulatory framework to allow and incentivise DSOs to procure flexibility services, including congestion management in their areas, is pending in all Contracting Parties.

demand response, using market-based mechanisms, e.g., through the procurement of relevant flexibility services. In accordance with Article 13 of Electricity Regulation, non-market-based redispatching may be applied as a derogation, e.g. where no market-based alternative is available, as subject to compensation. **In such cases, a relevant regulatory framework shall be in place to define criteria for relevant network users subject**

to mandatory redispatching, relevant system conditions and procedures applied by system operators to ensure non-discriminatory treatment of network users, including active customers.

Currently, in most Contracting Parties (Albania, Bosnia and Herzegovina, Kosovo*, Moldova, Montenegro, North Macedonia and Ukraine), congestion management rules to tackle operational congestion in transmission and distribution networks are not formalised, except for resolving cross-border congestion. In Georgia, the congestion principle defined in the legislation and is non-market based. In most Contracting Parties (except Serbia), network users are not obligated to provide flexibility services, including congestion management, to system operators during periods of system constraints. In Albania, any activation of flexibility (e.g., demand response or storage) occurs on an ad hoc basis through balancing service providers or pilot projects, without a regulated procedure or defined pricing mechanism.

For flexibility services available in Contracting Parties, products and their attributes are mostly defined within the scope of traditional ancillary and balancing services. In this respect, they relate mostly to TSOs and, in Serbia, to DSOs as well, which in this sense are considered equipped with the tools and mechanisms to procure relevant types of flexibility.

The broader context of flexibility services, including congestion management, for DSOs, as defined in Article 32 of Electricity Regulation, for most cost-efficient operation and development of networks, including through the procurement of services from RES, demand response, and operators of energy storage facilities, is not defined, and the development of a relevant regulatory framework is still pending in Contracting Parties.

A definition of specifications for the flexibility services to be procured, and for standardised/non-standardised market products for such services, is needed at the national level. The procurement mechanism shall also be developed and based primarily on market-based principles (where applicable).

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Network tariff regime

Network tariffs are the main source of funding for network operators. They also account for a substantial share of end-user bills. With the right design, they may provide incentives to both system operators and network users to add flexibility to the system and increase its efficiency. Several aspects of network tariff methodologies are of relevance to align the system needs with the changing end-user patterns, induced by a growing number of active customers with self-generation, energy storage, EV chargers and other types of distributed resources.

Energy Community *acquis* requires that network charges shall not discriminate either positively or negatively against energy storage or aggregation and shall not create disincentives for self-generation, self-consumption or for participation in demand response³⁸. When it comes to active customers with storage facilities providing flexibility services to system operators or storing electricity remaining within their premises, they shall not be subject to double network charges.³⁹ In most Contracting Parties, active customers are not subject to specific rules in terms of network charges. Only in Moldova, for renewable energy communities a 30% discount on the normal distribution tariff ('D-tariff') is applied. **NRAs shall consider relevant network users when developing the network tariff methodologies. Network charges applied shall be transparent, non-discriminatory and cost-reflective, ensuring that they contribute in an adequate and balanced way to the overall cost sharing of the system⁴⁰.**

Types of charges levied on users connected to the transmission and distribution system for the use of the network may include injection and/or withdrawal charges, aiming to reflect the impact of relevant activity (injection/withdrawal) on network operator costs. At the same time, **the appearance of new users with the ability to both generate and consume raised the issue of an appropriate allocation of costs between injection and withdrawal while leveraging their positive effect on the system and avoiding double-charging.**

While all Contracting Parties apply transmission and distribution withdrawal network tariffs, injection charges are less present, namely in five Contracting Parties (Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Ukraine⁴¹) for transmission users and in two Contracting Parties (Montenegro and Ukraine³⁸) for distribution grid users. Where present, injection charges are applied only to producers (including RES).

³⁸ Article 18 of Regulation 2019/943

³⁹ Article 15 of Directive 2019/944

⁴⁰ 2025 ECRB Best Practice report on network tariff methodologies

⁴¹ Dispatch service tariff charged by TSO and paid by producers of types B, C and D for injection, regardless of the network of connection

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Network users who both inject and withdraw from the grid (prosumers, storage facilities) usually pay the transmission and distribution charge only for withdrawing from the relevant grid. In Montenegro, the current transmission tariff ('T-tariff') methodology does not deal with the prosumers and storages as the potential transmission system users, revising is expected to take into account also this type of users. In most Contracting Parties, the withdrawal charges are applied to the total withdrawn energy without considering the injected energy.

Table 6 T-tariff and D-tariff structure for active customers in the Contracting Parties

Tariff	End-user	Tariff basis	ALB	BIH	GEO	KOS*	MDA	MNE	MKD	SRB	UKR
T tariff	RES producer	energy	-	I	-	I	-	I	W	-	I
		power	-	-	-	-	-	I	W	-	-
		fixed		-				-	W	-	-
	Prosumer	energy	W	n/a	W	n/a	n/a	n/a	W	W	W
		power	-		-	n/a		n/a	I / W	W	-
		fixed	-			-			W	-	-
	Storage	energy	n/a	I	n/a	n/a	n/a	n/a	-	-	W _{net}
		power	n/a	-		n/a		n/a	W	-	
		fixed							W		
D tariff	RES producer	energy	-	-	-	-	-	I	W	-	-
		power	-	-	-	-	-	I	W	-	-
		fixed		-	-	-	-	-	W	-	-
	Prosumer	energy	W	W	W _{net}	W	W _{net}	W _{net}	W	W	W
		power	-	W	-	-	-	W	W	W	-
		fixed		W	-	-	-	W	W	-	-
	Storage	energy	-	n/a	n/a	-	n/a	n/a	-	-	W _{net}
		power	-	n/a		-		n/a	W	-	-
		fixed	-	n/a		-		n/a	W	-	-

Source: NRAs

At the same time, the withdrawal charge is still applied to net metered energy in two Contracting Parties (Georgia and Moldova) for T-tariff and in three Contracting Parties (Moldova, Montenegro and Georgia) for D-tariff, leading to the cross-subsidisation of these users by other network users that only inject into or withdraw from the grid. **NRAs are advised to take into account the impact on the costs of both injection and withdrawal of these users when setting the network tariffs. Existing schemes that do not account separately for the electricity fed into the grid and the electricity consumed from the grid for the purpose of network tariffs are recommended to be phased out gradually.**

Storage (e.g. battery storage) is still not a widely installed technology among Contracting Parties, apart from Ukraine. Therefore, in five Contracting Parties (Albania, Georgia, Kosovo*, Moldova and Montenegro), the T-tariff system, and in four Contracting Parties (Bosnia and Herzegovina,

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Georgia, Moldova and Montenegro), the D-tariff system, do not recognise storage as a separate type of grid user. While in Serbia, storage is not subject to any network tariffs, and in Albania and Kosovo* is not subject to the D-tariff. In Ukraine, storage pay network tariffs for net monthly metered energy (difference between withdrawal and injection)⁴². As a general observation, customer participation in demand response and provision of flexibility services is subject to the same tariff structure, with no differentiation or specific incentives. **The missing regulatory framework creates uncertainty for new technologies as to the future regulatory environment and investment decisions. NRAs are invited to consider the specifics of some network users, such as storage and its positive impact on system flexibility, which supports network stability and the security of supply.** In this regard, the tariff design may support the operation of storage in a system-needs-oriented mode or location. Following the cost-reflectiveness principle, NRAs shall carefully analyse the impact of such users on network costs, and if any specific treatment is granted, it shall be justified with regular revision to avoid undue cross-subsidisation.

In terms of tariff basis, when it comes to prosumers and storage, the applied T-tariff includes both energy and power components in Bosnia and Herzegovina, North Macedonia and Serbia. The D-tariff components include energy, power and lump sum (fixed) in Bosnia and Herzegovina, Montenegro (prosumers). In North Macedonia, storage does not pay for energy withdrawn from networks, while it pays power-based and lump-sum charges. In Serbia, an energy and power-based D-tariff applies to prosumers. Most of the Contracting Parties still apply only energy-based network tariffs, not reflecting properly relevant cost-drivers related to capital (power) and variable costs (energy). In view of fluctuating transmission and distribution volumes resulting from the expansion of RES, active customers and distributed generation, **NRAs are recommended to consider introducing tariff methodologies that include network connection capacity elements**, in accordance with Article 18(7) of Electricity Regulation.

Another aspect is the time differentiation of network tariffs as provided by Article 18 of Electricity Regulation, to reflect the use of the network, in a transparent, cost-efficient and foreseeable way for the final customer. Time-of-use network tariffs give the appropriate economic signal to end-users to use grid capacity that decreases peak demand in the relevant network, improves its flexibility and efficiency of existing capacity. They may be of particular interest to prosumers and storage systems that have attributes that adjust their behaviour in response to system needs.

⁴² According to the 2025 ECRB Best Practice Report on Network Tariff Methodologies in the Energy Community report

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Currently, time-of-use network tariffs are not widely applied among Contracting Parties and are not planned to be introduced by the NRAs in the near future. The existence of different T and D-tariffs (low and high) during the day and days of the week is reported only by Montenegro and Serbia, while D-tariffs differentiated by time of day or season are also applied by one DSO in Bosnia and Herzegovina.

Time-of-use network tariffs

Transmission: MNE, SRB

Distribution: BIH, MNE, SRB

Static rates and periods: BIH, MNE, SRB

In Bosnia and Herzegovina-Federation BIH entity and Serbia, the time-of-use T-tariffs and D-tariffs (low and high rates) are aligned with the gross system peak. At the same time, Federation BIH reported that the D-tariff reflects the gross system peak mostly, but not always. Based on monthly data analysis, there are certain months

when the peak system load for a particular DSO occurs during a period of lower tariff.

The relevance between time-of-use network tariffs and the system peak is ensured by analysing past peak load data (Bosnia and Herzegovina-Federation BIH), the peak load of each individual group and the system load (Bosnia and Herzegovina-Republika Srpska).

The regularity of reviews for low/high periods and coefficients in time-of-use tariffs is not specified in most cases. In practice, relevant attributes of time-of-use tariffs have not been reviewed for a long time.

No Contracting Party reported on special network tariffs for flexible connections. As the flexible connection does not guarantee the user full access to the network grid during the whole period, **flexible connection agreements (where applied) shall specify the network charges applicable to both the firm and flexible injection and withdrawal capacities.**

Network tariffs shall facilitate innovation in electricity networks, such as digitalisation, flexibility services and interconnection. Distribution tariff methodologies shall provide incentives to distribution system operators for the most cost-efficient operation and development of their networks, including through the procurement of flexibility services, energy efficiency, development of smart grids and intelligent metering systems.

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Network tariff methodologies across Contracting Parties are highly CAPEX-oriented, incentivising mainly investments and development of electricity grids, while operational controllable costs are usually under the efficiency requirement. The research and development costs constitute a part of the T-tariff and D-tariff only in three (3) Contracting Parties (Bosnia and Herzegovina, Montenegro and Serbia). Finally, recognising the costs of network

operators to procure flexibility reflects the relevant flexibility concept applied by a particular Contracting Party. Where flexibility is procured only in the form of balancing and ancillary services, relevant costs are included in the allowed revenue of TSO in most Contracting Parties⁴³) and of DSO⁴⁴ (Albania, Bosnia and Herzegovina, Georgia, Moldova, North Macedonia Serbia). In Moldova and Ukraine, only the distribution tariff recognises the flexibility services as a separate category⁴⁵-both system operators (TSO and DSOs) are allowed to reimburse relevant flexibility costs through their tariffs. The costs related to congestion management (e.g. re-dispatching) are recognised only in Bosnia and Herzegovina, Montenegro, Serbia and Ukraine. Thus, **facilitating the application of flexible solutions that may defer network development while still accommodating new capacities is highly recommended.** This means that **revision of approaches to the calculation of allowed revenues and, particularly, to the suitable application of incentives between the CAPEX and OPEX to avoid CAPEX/OPEX bias may be needed.**

Recovery of flexibility costs

CAPEX-oriented network tariffs: all CPs

R&D costs recognised: BIH, MNE, SRB

DSO flexibility costs recognised: ALB, BIH, GEO, MDA, MKD

Electricity prices and contracts

Information on energy prices, their structure and the type of offers available in the market are key to understand a context in which the customers can increase their activity and contribute to decarbonisation of energy markets.

Since 2021, due to the war in Ukraine and energy crisis, household electricity prices increased in all Contracting Parties, except Montenegro. The magnitude of increase differed among them, with Moldova facing more than 130% increase, followed by Serbia (43%) and Kosovo* and North Macedonia with around 35% rises. The lowest increase was registered in Bosnia and

⁴³ Dispatch service tariff

⁴⁴ Legaly, although in practice there are no cases of DSOs procuring such services.

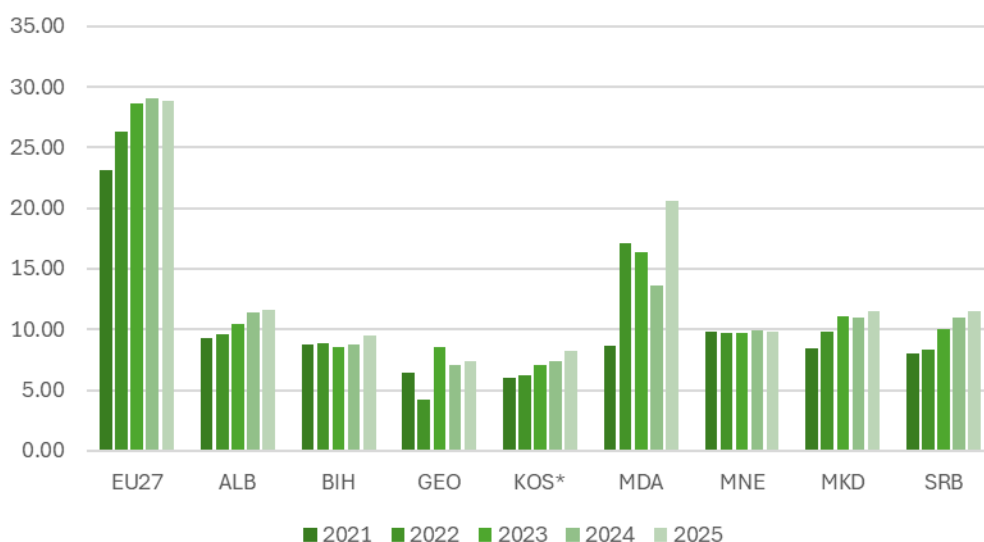
⁴⁵ Will be covered in TSO and DSO revenue, and the secondary legislation is under development

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Herzegovina, where the average household electricity price raised by 9%. Over the same period, EU27 saw an increase of 25% in final household prices. In the industry segment, the end-user prices increased also increased between 2021 and 2025, in four Contracting Parties (Albania, Bosnia and Herzegovina, North Macedonia and Serbia)⁴⁶ even more than the final prices of households, pointing out to a presence of cross-subsidization between these two categories. Industry consumers in the abovementioned Contracting Parties, but also in Moldova, had substantially higher final price increases than the same type of customers in the EU27. Still, these prices are, on average, lower than in the European Union.

Figure 6 Trends in end-user prices for households in the Contracting Parties 2021-2025 (euro cent/kWh)⁴⁷



Source: Eurostat, Band DC: 2,500 –5,000 kWh (household electricity consumption), May 2026
 Note: data for Ukraine not available

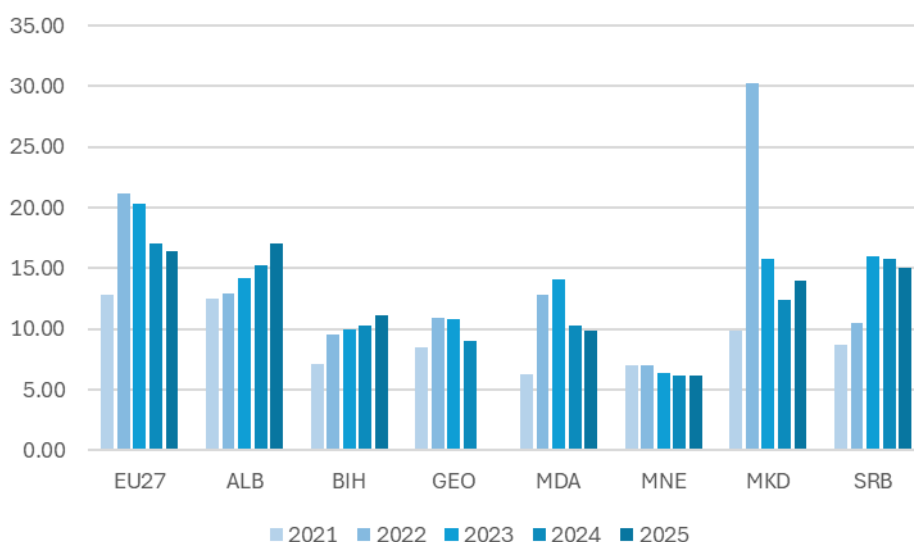
⁴⁶ Industry prices for Georgia, Kosovo* and Ukraine, for 2025, are not available on EUROSTAT.

⁴⁷ In Georgia, the change of household prices recorded on EUROSTAT is the result of exchange rate fluctuation, in practice these prices have not been changed since 2021.

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Figure 7 Trends in end-user industry prices in the Contracting Parties 2021-2025 (euro cent/kWh)



Source: Eurostat, Band IE: 20,000 – 70,000 MWh (industrial electricity consumption), May 2026

End consumer prices for households are still regulated in all Contracting Parties⁴⁸, except Montenegro, sometimes resulting in prices being set below actual costs. Nevertheless, Montenegro is the only Contracting Party with the almost unchanged household electricity prices since 2013. The price interventions are used for all households, while the vulnerable and energy poor are additionally protected through social subsidies in the Contracting Parties.

The influence of price interventions is possible to ascertain also by looking into the breakdowns of electricity prices for households and industry- the shares of energy component in most of the Contracting Parties is much higher for industrial customers (see Figures 8 and 9 below). This impacts the level playing field for active customers in these two customer segments: while commercial customers are incentivized to lower the energy cost by producing and selling electricity⁴⁹, households with regulated prices and lower energy shares have less interest to do so.

The breakdowns also reveal the influence of taxes and levies on the final prices, especially during the crisis, adjusting this price component was used as a mechanism to lower the household prices.

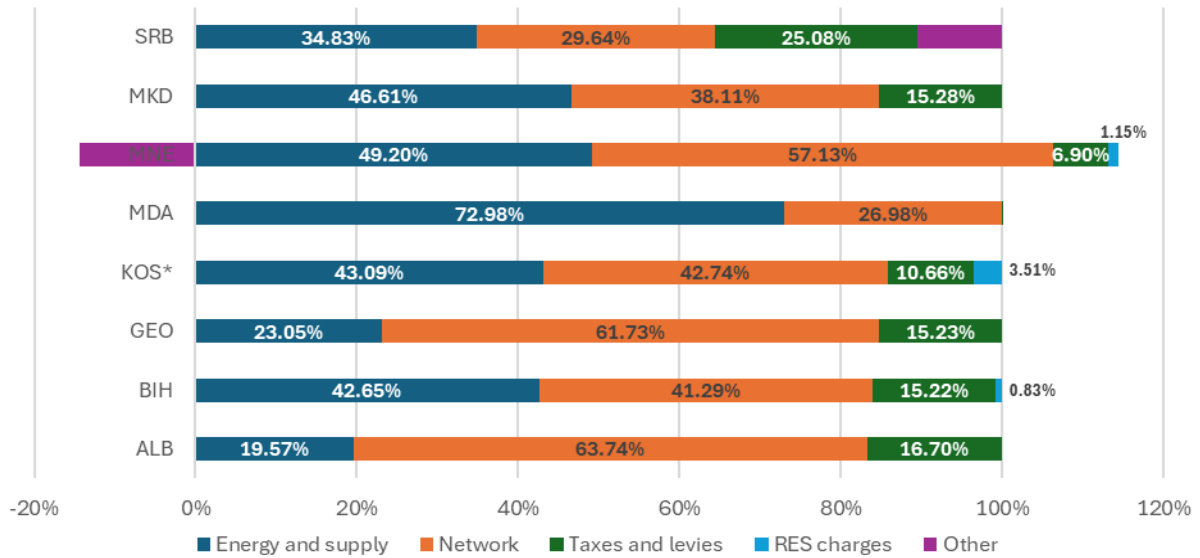
⁴⁸ Households are eligible in all Contracting Parties to be supplied at non-regulated prices, and small numbers of them are using this option. In Kosovo*, household consumers in the four northern municipalities are supplied under unregulated prices.

⁴⁹ Provided the contract design allow this.

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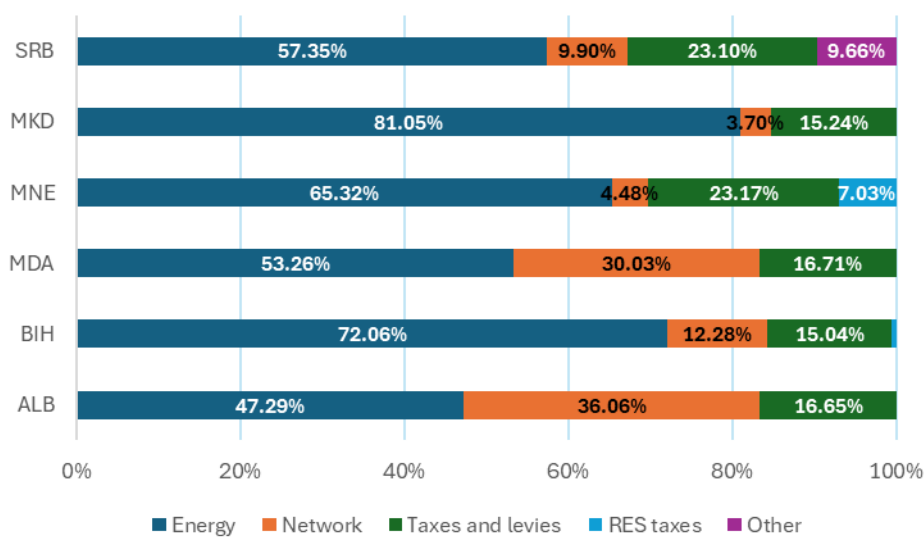


Figure 8 Breakdown of electricity prices for households in the Contracting Parties in 2025 (in Albania for 2024)⁵⁰



Source: ENC Secretariat calculations based on Eurostat, Band DC (May 2026) | Note: Data for Ukraine not available

Figure 9 Breakdown of electricity prices for industry in the Contracting Parties in 2025 (in Albania for 2024)



⁵⁰ In Serbia, the category 'other' includes RES support, energy efficiency support and excise tax. The component 'other' for Montenegro refers to the discount on electricity price applied by the incumbent supplier.

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Source: ENC Secretariat calculations based on Eurostat, Band IE (May 2026)

Note: data for Georgia, Kosovo* and Ukraine not available

While the degree of market liberalization and competition on retail level⁵¹, together with energy mix, network investment and the levels of taxes and subsidies significantly influence the level of electricity prices, the price regulation certainly bears the greatest effect on active customers participation in the market.

To enable and facilitate the active participation of consumers in the evolving electricity market, the Contracting Parties must ensure that the national regulatory framework enables suppliers to offer a various range of contracts, including dynamic electricity price contracts⁵². **More flexible offers incentivize the uptake of renewable energy and have benefits for grid management. The Electricity Directive requires that dynamic price offers are available to customers who have a smart meter installed. Furthermore, suppliers that have more than 200,000 final customers will have to offer dynamic price contracts.** So far, in the Contracting Parties, households are offered only fixed price contracts. For commercial customers, in addition to fixed price contracts, variable spot based and green offers are available in most of the markets.

Customer Awareness

Turning customers into active participants in the market relies also on providing precise billing information. Energy bills should be clear, accurate, concise, user-friendly, and transparent. Beyond ensuring that billing information is provided free of charge and that multiple payment options are available, the minimum requirements for bills are set out in Annex I of the Electricity Directive. In the Contracting Parties, only few of the required items appear on bills– mainly the price, breakdown of price and consumption details. Other information, such as switching details, fuel company and product mix used, links to comparison tools and consumption comparisons, are less commonly found across the Contracting Parties.

Comparison tools are crucial for enabling consumers to easily compare retail electricity offers and make informed decisions about the offers and the suppliers providing them. In none of the Contracting Parties consumers have access to a comparison tool that meets the criteria of

⁵¹ See more on this topic in the last ECRB Retail MMR here: <https://www.energy-community.org/dam/jcr:0d846264-402b-4454-8f04-d8134ee09c8c/ECRB%20Retail%20Market%20Monitoring%20Report%202024.pdf>

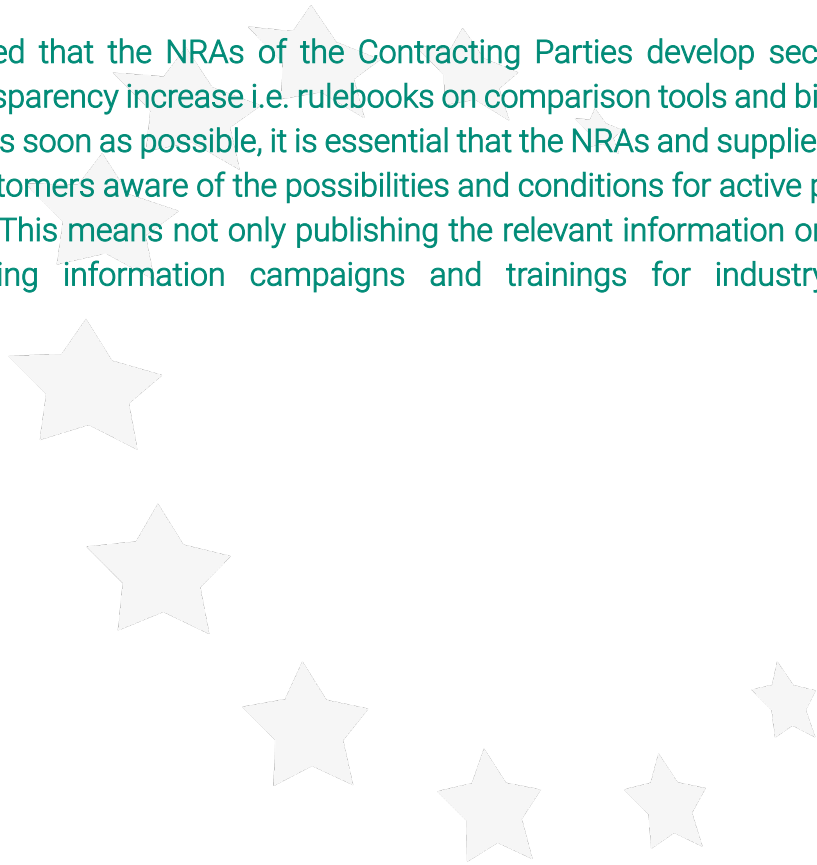
⁵² In its 2025 Retail Market Monitoring Report, ACER analyses the effects of dynamic pricing on costs and behaviour of households (<https://www.acer.europa.eu/sites/default/files/documents/Publications/ACER-CEER-2025-Retail-monitoring.pdf>)

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Article 14 of Electricity Directive. Still, price comparison tools for electricity market exist in Albania, Bosnia and Herzegovina (<http://uporedistruju.ba>), North Macedonia (<https://switch.mk/#/>) and Ukraine (NRA web page for public commercial offers and <https://rep.oree.com.ua> for commercial offers of suppliers by regions).

While it is expected that the NRAs of the Contracting Parties develop secondary legislation governing the transparency increase i.e. rulebooks on comparison tools and billing, and that they are implemented as soon as possible, it is essential that the NRAs and suppliers take a proactive role and make customers aware of the possibilities and conditions for active participation in the electricity market. This means not only publishing the relevant information on their web pages, but also organising information campaigns and trainings for industry and consumer associations.





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