

Bulgaria's Hybrid Energy Model: Legal Aspects of Systemic Sustainability

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Abstract—This study analyzes the critical interaction between centralized nuclear power capacities and emerging decentralized energy communities within the context of the full liberalization of the Bulgarian energy market by 2026. The primary focus is directed toward the regulatory dichotomy between the Energy Act, which ensures systemic security through base-load capacities, and the Energy from Renewable Sources Act, which introduces decentralized entities and derogates the traditional "vertical" energy model. The analysis establishes that the transition to a free market fundamentally alters the status of the Kozloduy Nuclear Power Plant—moving it from a strategic asset with administrative quotas to an active market participant exposed to price volatility and in need of new financial instruments, such as Contracts for Difference. In parallel, the Energy from Renewable Sources Act legitimizes the figures of the "active consumer," the "citizen energy community," and the "independent aggregator," providing them with streamlined administrative regimes and energy-sharing rights. The research identifies a significant regulatory vacuum regarding pecuniary liability for imbalances and the allocation of systemic sustainability costs. It highlights the legal antinomy between the priority grid access granted to renewable energy sources communities and the technological inertia of nuclear capacities, which often leads to the improper socialization of individual costs within the overall system price. In conclusion, specific legislative measures are proposed to achieve regulatory synergy, including the introduction of "flexible grid contracts," the transformation of network services toward capacity-based fees (per kW), and the integration of decentralized sources under the direct operational control of the system operator. The author substantiates the thesis that the sector's sustainability depends on transitioning from a model of parallel existence toward the legally regulated functional integration of generating capacities.

Keywords— communities, dichotomy, nuclear, sustainability.

I. INTRODUCTION

The legal framework of the Bulgarian energy sector faces a unique challenge: reconciling the strictly regulated

regime of strategic nuclear capacities with the liberal legal status of renewable energy communities. While the operational units and the project for new reactors at the Kozloduy NPP require targeted regulatory frameworks and state guarantees for risk management, the transposition of Directive (EU) 2018/2001 via the Energy from Renewable Sources Act (ERSA) introduces decentralized entities that derogate from the traditional "vertical" energy model.

By 2026, legal discourse has evolved from passive regulatory monitoring toward the conceptual construction of a hybrid model. This model aims to ensure regulatory interoperability between strategic centralized capacities (such as NPPs, TPPs, etc.), which guarantee systemic stability, and the subjective right of end-users to energy autonomy and market participation through decentralized production. [1]

The analysis identifies a significant regulatory dichotomy between the Energy Act (EA), focused on systemic security and base-load assurance, and the Energy from Renewable Sources Act (ERSA), directed toward decentralization and sustainability. While the EA establishes nuclear energy as a fundamental guarantor of security, the ERSA reconfigures the linear "producer-consumer" model into a dynamic market ecosystem.

Critical legal conflicts have been identified regarding the allocation of financial responsibility for balancing, priority access to grid capacity, and the absence of a unified tariff model for grid solidarity. [2]

The report concludes that the current regulatory framework treats centralized and decentralized production as mutually exclusive regimes rather than components of an integrated system. In conclusion, it is emphasized that the sustainability of the energy sector depends on the transition from a model of parallel operation to a legally regulated functional integration of diverse generating capacities.

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II. LEGAL REGIME OF CENTRALIZED CAPACITIES (ENERGY ACT)

The legal framework for centralized capacities in Bulgaria is based on the concepts of energy security and continuity of supply. The primary focus here lies on a hierarchical management structure, where the State occupies a central role through strategic planning and regulation.

1. Status of Base-load Capacity and "Critical Infrastructure"

Pursuant to the EA, large-scale centralized capacities (primarily Nuclear Power Plants) function not merely as commercial participants, but as guarantors of national security. Article 69 of the EA imposes an obligation upon energy enterprises to act in the public interest, ensuring the protection of critical infrastructure, continuity of supply, and environmental preservation.

A key aspect of the EA is the regulation of the powers of the Electricity System Operator (ESO). In a legal sense, the operator possesses imperative powers to mandate changes in the load of centralized capacities. A conflict arises from the fact that nuclear reactors, by technological design, have limited maneuverability—a fact reflected by the legislator through the provision of dispatching priority as "base-load."

Nuclear energy is defined as a priority via the mechanism of Art. 4, Para. 2, Item 3 of the EA. This provision empowers the Minister of Energy to propose a list of strategic objects of national importance to the Council of Ministers. In exercise of this power, via Council of Ministers Decree No. 181 of 2009 [1], the "Kozloduy" NPP and activities related to radioactive waste management and nuclear fuel have been classified as strategic objects and activities.

The integration of new nuclear capacities into the national energy mix after 2030 is established as a fundamental prerequisite in the draft updated National Integrated Energy and Climate Plan (NECP), developed in accordance with Regulation (EU) 2018/1999.

The implementation process for these projects is subject to a complex licensing regime, integrating the norms of the EA and the Act on the Safe Use of Nuclear Energy (ASUNE). Legally, these capacities are burdened with strict commitments to provide system services that ensure the inertial reserve of the Electric Power System (EPS). In fulfillment of its obligations to guarantee systemic security, the Electricity System Operator (ESO):

- Enters into transactions for additional services (pursuant to Art. 83 and Art. 91 of the EA) to maintain real-time balance;
- Conducts tender procedures for the procurement of frequency restoration reserves and exchange capacities (Art. 105, Para. 1 and 2 of the EA);
- Organizes auctions to guarantee future availability, including from storage facilities, to complement the operation of base-load capacities.

The Capacity Mechanism transforms the legal framework of the market by establishing "availability" as an independent tradable product. In accordance with Article 22 of Regulation (EU) 2019/943, its implementation

requires notification to the European Commission for compatibility with State Aid rules.

The introduced emission limit of 550 g CO₂/kWh normatively restricts fossil fuels while simultaneously affirming nuclear energy as a critical base-load capacity. To avoid overcompensation (double funding), auctions under Art. 105 of the EA must be strictly coordinated with Contracts for Difference (CfDs).

Concurrently, through the independent aggregator, energy communities are integrated into the capacity market. This introduces the legal innovation of "Demand Response," where "unconsumed energy" acquires the legal and economic value of provided capacity.

2. Electricity Transactions under Market Liberalization

The transition to full market liberalization in 2026 fundamentally reshapes the EA, terminating the functions of the "Public Supplier" (NEK EAD) and repealing the administrative quotas for the Kozloduy NPP under Art. 93a of the EA. A restriction on entering into new long-term contracts is introduced, prohibiting state aid for coal-fired power plants; such agreements are permitted only for renewable sources pursuant to Art. 93a, Para. 3 of the EA. Regarding nuclear capacities (NPP), the legal impact of these amendments is manifested in the following areas:

2.1. Derogation of Quota Allocation (Art. 93a of the EA)

With the abolition of the regulated market for end-users, the mechanism under Art. 93a, Para. 1 of the EA—whereby the Energy and Water Regulatory Commission (EWRC/KEVR) determined mandatory purchase quotas from the Kozloduy NPP at preferential prices—loses its legal basis.

- **Restrictions on Long-term Contracts:** According to the new wording of Art. 93a, Para. 2 and Para. 3, the legislator introduces a mandatory prohibition on concluding new long-term contracts for the purchase of energy and availability, unless they concern production from renewable sources. This norm aims to prevent unlawful state aid and promote market competition.

- **Operational Flexibility:** The provision of Art. 93a, Para. 4 limits changes to the Trade Portfolio Schedules (TPS) of high-efficiency energy producers to the scope of Art. 73, aiming to ensure grid stability.

- **Trading Horizon:** The restriction introduced in Art. 93a, Para. 5 for agreements with a term of up to two years on an organized exchange market (for non-RES producers) positions the NPP as an active market participant, but with a fixed time horizon for risk hedging.

2.2. Legal and Economic Consequences after the Cessation of Household Subsidies

The termination of the obligation to "subsidize" household consumers through administrative prices transforms the NPP into a fully market-based entity. Pursuant to Art. 100 of the EA, the entire available quantity of energy must be realized on the Independent Bulgarian Energy Exchange (IBEX).

- **Legal Risk:** Shifting to full exchange-based realization exposes base-load capacities to sharp market fluctuations. In this context, the institutionalization of Contracts for Difference (Art. 36b) becomes a critical legal

instrument for ensuring the financial sustainability of new nuclear projects as a protection mechanism against price volatility. [3]

2.3. Legal Analysis of Changes in the Functions of the "Security of the Electricity System Fund" (SESF)

Within the legal architecture of the Bulgarian energy market, the SESF functions as a specialized body for managing financial flows aimed at compensating deficits arising from regulatory obligations. According to the amendments to Art. 36b, Para. 1 of the EA, the Fund's resources are earmarked and expended for:

- **Covering Public Supplier Costs:** Regulating deficits resulting from the purchase of energy under long-term contracts and preferential prices, including for past periods in accordance with EWRC decisions (Art. 36b, Para. 1, Item 1).
- **Payment of Premium Contracts:** Financing the "premium" mechanism provided to producers with an installed capacity exceeding 500 kW (pursuant to the ERSA), which replaces preferential prices and integrates producers into the market environment (Item 2).
- **Servicing Financial Instruments:** Covering interest payments under framework agreements with credit institutions for energy efficiency projects (Item 3).
- **Extraordinary Compensatory Mechanisms:** Implementing state programs to compensate end-users (household and non-household) during critical price levels for electricity and natural gas. Here, the Fund acts as a payment agent for the executive branch (Item 4).
- **Social Protection and Transition to Liberalization:** Providing compensation through end-suppliers to cover part of the costs for low-voltage household consumers. This provision is key in the context of the abolition of the regulated market (Items 5 and 6). [4]

3. The New Role of Final Suppliers (Art. 98a)

Previously, Final Suppliers (the regional Electricity Distribution Companies) were legally obligated to purchase electricity from the Public Supplier (NEK EAD). Following the 2026 amendments to the EA, they transition into standard market traders.

- **Legal Conflict:** This shift creates a market niche for energy communities. If a community produces its own energy, it directly competes with the former "guaranteed" buyers of nuclear power. Legally, this is protected under Art. 18b, Para. 2 of the ERSA, which prohibits discrimination against consumers participating in energy communities.

III. REGULATORY FRAMEWORK FOR DECENTRALIZED INITIATIVES UNDER THE ERSA

While the EA is primarily focused on the systemic stability of conventional capacities, the ERSA regulates the transition toward a distributed energy architecture. The legal framework is determined by the European doctrine of "energy market liberalization."

1. Energy Communities and Self-Consumption

The amendments to the ERSA in December 2023 incorporated key legal definitions that lay the groundwork for decentralization:

1.1. **Citizen Energy Communities (CEC):** The ERSA does not contain a separate regime for CECs, as they are subjects of the general electricity market, whereas the ERSA specifically regulates Renewable Energy Communities (REC).

- A Citizen Energy Community (CEC) is a legal entity whose regulation is integrated into the general electricity market framework via the Energy Act. Pursuant to the definition in § 1, Item 76 of the Additional Provisions of the EA, a CEC is a specific legal entity through which natural persons, local authorities, and small enterprises carry out joint investments in RES capacities. The law guarantees their preferential legal status, including the right to produce, consume, store, and trade energy while maintaining the full scope of their rights as end-customers.

- The regulation of CECs in Bulgarian legislation was introduced through references to the European framework; however, currently, the primary operational rights of CECs are systematized in Art. 4, Para. 2, Item 21 (as part of state policy) and detailed in Art. 92 et seq., concerning the free market and aggregation.

1.2. **Active Customers (Consumers):** The legislator regulates the status of the "end-customer as an active consumer," granting them the right to generate energy for self-consumption, to store it, and to sell the surplus on the market.

Pursuant to § 1, Item 59 of the AP of the ERSA, this is an entity operating on its own premises for whom energy production is not a primary commercial activity (for non-household consumers).

Provisions under Art. 18a, Paras. 1–4 guarantee the right to participate in support schemes and energy markets without the entity losing its status as an end-customer.

The ERSA regulates the legal figure of the "Prosumer." A key aspect is the normative recognition of the right to energy sharing within a single building or community, which necessitates a revision of standard grid service and access contracts.

1.3. **Energy Aggregators:** The ERSA introduces the legal figure of the Independent Aggregator, acting as a commercial intermediary and technological integrator. Its primary function is to pool loads from multiple decentralized sources (active customers and energy communities) and offer them to the market as a single, controllable resource. Legally, the aggregator resolves the issue of high entry barriers to organized electricity markets while assuming joint and several liability for the balancing of the entities within its portfolio.

The legal basis is found in § 1, Item 1a of the AP of the EA (Art. 18). An aggregator is a natural or legal person carrying out aggregation activities. This provision is pivotal as it regulates the right of end-customers to enter into aggregation contracts without requiring the consent of

their electricity supplier—a fundamental point for guaranteeing competition and freedom of contract.

2. Rights of Active Consumers and Grid Access

The regulatory framework for decentralized capacities is aimed at reducing administrative barriers to market entry through the following mechanisms:

2.1. Simplified Administrative Regimes

The introduction of a notification regime (pursuant to Art. 25a of the ERSA) for small installations with a capacity of up to 20 kW for self-consumption. This mechanism replaces the classical permit-based process with a simplified registration procedure intended to accelerate market integration.

Article 25a of the ERSA holds a central position in this streamlined regime by establishing a presumption of consent in the absence of a timely objection from the grid operator. This regulatory intervention aims to overcome the administrative inertia of Electricity Distribution Companies (EDCs) by transforming the grid connection process from bilateral negotiation into a unilateral right of the active customer, limited only by proven technical impossibility of the system.

- **Scope of Application (Para. 1):** The regime applies to installations with a capacity of up to 20 kW located on existing buildings and facilities (including within urbanized territories). This restriction aims to stimulate so-called "rooftop installations," which do not require a change in land-use designation.
- **Procedural Preclusion (Para. 3):** This is the strongest legal instrument in favor of the active customer. If the grid operator (EDC) does not provide a written objection based on a lack of technical capacity within 15 days of the notification, the connection is deemed tacitly approved.
- **Contractual Freedom (Para. 5):** The article stipulates that relations between the customer and the operator are governed by a template contract for access and transmission, the content of which is legally predefined. This limits the ability of EDCs to impose additional administrative or financial burdens.

2.2. Preferential Access and Connection

The ERSA imposes an objective obligation on Distribution System Operators (DSOs) for the priority connection of RES facilities. In practice, this creates a legal antinomy between the imperative norm to promote decentralization and the technical limitations of grid capacity. This often results in grid connection denials due to a lack of available capacity—an issue the ERSA attempts to resolve through mechanisms for sharing the costs of grid modernization.

IV. REGULATORY CONFLICTS AND CHALLENGES

The coexistence of centralized nuclear energy and decentralized communities in Bulgaria is not merely a technical issue but a significant legal challenge. Conflicts arise from the fact that the EA and the ERSA are based on divergent principles of liability and management. [5]

1. Protection Mechanism for "Vulnerable Consumers" (Art. 38d of the EA)

Market liberalization introduces the key legal category of the "vulnerable customer," defined by Article 38d of the Energy Act (EA) and its associated Ordinance. This regulatory framework shifts the model from general social welfare to targeted, individually segmented assistance within a free-market environment. From a legal perspective, this mechanism functions as a regulatory safeguard against price volatility for high-risk groups.

Key aspects of the legal framework:

- **Definition of "Energy Poverty":** Unlike traditional heating benefits, a complex multi-criteria model is introduced here. It accounts not only for disposable income but also for the technical characteristics (energy efficiency) of the dwelling and the health status of the residents.

- **Financial Mechanism:** The compensation of price differences is carried out through the Security of the Electricity System Fund (SESF), with resources directly linked to revenues from the trading of greenhouse gas emission allowances.

2. Legal Regime of Electricity System Balancing in a Liberalized Market

In the context of market liberalization, balancing is transformed from a technical function into a direct financial obligation for all participants.

Pursuant to § 1, Item 3 of the Additional Provisions of the EA, balancing encompasses the set of actions and processes through which the Electricity System Operator (ESO) guarantees the stability of the system's frequency by activating the necessary reserves.

This legal framework aligns with the European "balancing responsibility" principle established in Regulation (EU) 2019/943. The transition to a free market defines the following legal consequences:

- **Termination of Cost Socialization:** The previous mechanism, where imbalance costs were partially diluted within the end-user prices of the regulated market, is abolished.

- **Direct Financial Liability:** The financial burden for deviations from forecast schedules is transferred to the entities that caused them ("cost-causative" principle).

- **Contractual Autonomy:** Market participants are required to settle their balancing responsibility by entering into contracts with the ESO or by joining a licensed Balancing Group.

The mechanism is detailed in the following texts of the Energy Act:

2.1. Universal Balancing Responsibility (Art. 102 of the EA) In accordance with the principle of equal treatment of market participants, Art. 102 of the EA establishes a universal obligation for financial liability regarding imbalances.

- **Legal Essence:** Every entity (producer, consumer, or trader) bears direct financial liability for any deviation of its actual production or consumption relative to its registered hourly schedule.

- **Execution Mechanism:** Liability is realized through payments to the Balancing Energy Market Operator (ESO), calculated based on the Methodology for

Determining Balancing Energy Prices approved by the EWRC. Liberalization removes the possibility of offsetting these specific costs by shifting them to other consumer categories.

2.2. The Role of the Aggregator (Art. 96a of the EA) As a risk management tool for small participants (including RES communities and household consumers), pursuant to Art. 96a of the EA, the Independent Aggregator, as a legal entity, pools the loads of multiple end-customers and/or production facilities to operate them as a single portfolio on the energy market.

The primary legal advantage of aggregation is the achievement of internal balancing. By diversifying the profiles of individual members, the aggregator averages out deviations and protects small participants from extreme prices on the balancing market, which would be prohibitive for an individual entity.

2.3. The Conflict: Base-load Capacities vs. RES Communities

Although the law is technologically neutral, the practical application of Art. 102 creates varying intensities of financial risk:

- Predictable Base-load Capacities (NPP, TPP): Due to their high predictability, systemic inertia, and planning capabilities, they rarely generate significant imbalances, providing them with a distinct competitive advantage.

- Stochastic Capacities (RES): Their production depends on meteorological conditions, making them legally vulnerable to the Methodology for Determining Balancing Energy Prices approved by the EWRC. In periods of high deficit or surplus, financial penalties for small communities may exceed their revenues from energy sales. This weather dependency places them in a state of constant imbalance risk. [6]

In a liberalized environment, this necessitates that RES communities enter into contracts for participation in a Balancing Group or utilize the services of an Aggregator, making these contracts a key element of their legal and economic viability. Small RES communities must rely on aggregators (Art. 96a of the EA) to avoid the heavy financial penalties for imbalances that were previously "diluted" within the regulated market.

2.4. Legal Mechanisms for Ensuring Stability (Art. 96a and Art. 103 of the EA)

Under free-market conditions, the protection of participants is realized through strict licensing requirements and the introduction of new operational self-regulation tools.

- The Institute of the "Balancing Group Coordinator": Pursuant to Art. 96a of the EA, the coordinator is an entity licensed for key energy activities (production, transmission, distribution, trade, or aggregation) that cumulatively meets the requirements for financial guarantee of transactions and is registered by the ESO. From a legal standpoint, this requirement functions as a system of shared responsibility: the coordinator

assumes joint and several financial risk for imbalances, guaranteeing systemic sustainability through its solvency.

- Demand Response as a Protective Tool: Although dispatching is subject to market principles, Art. 94a of the EA provides a legal framework for active Demand Response. This is the core mechanism through which small communities and end-customers can minimize their own deviations. By utilizing storage systems (batteries) or consumption flexibility, they transform technical availability into an economic resource, thereby avoiding imbalance penalties.

The regulatory framework (specifically Art. 96a and Art. 102 of the EA) catalyzes the transformation of small communities from passive consumers into active market entities. They are normatively compelled to enter into complex legal and financial relationships with aggregators or coordinators, which represents the only legal path to ensuring their economic survival in a liberalized environment.

The transformation of the energy sector highlights the regulator's role as a guarantor of predictability. Current balancing methodologies penalize energy communities for the stochastic nature of their output, necessitating an urgent revision of pricing mechanisms. Transitioning to capacity-based grid charges will reshape the sector's economic logic. This will act as a direct incentive for investment in local storage systems, which is vital for reducing peak loads. The result would be twofold: fewer technical constraints for baseload generators and a more secure revenue stream for the Security of the Electricity System Fund.

2.5. Collision in the Allocation of Balancing Costs and Financial Liability

The regulatory vacuum regarding Flexible Grid Contracts compels the system operator to employ inefficient measures, such as the suboptimal dispatching of baseload plants like the Kozloduy NPP. The current model of priority access for RES communities - devoid of financial commitments to grid stability - distorts market signals. Transitioning toward market-based dispatch of decentralized resources through aggregators would eliminate the need to socialize balancing costs. Implementing flexibility mechanisms is essential to ending the practice where baseload plants absorb the negative externalities caused by peak production from distributed energy sources.

The primary legal conflict is rooted in the absence of an adequate mechanism for allocating balancing costs. Nuclear capacities operate in a regime of technological inertia. When energy communities generate a sudden surplus, the ESO is obligated by virtue of Art. 73 of the EA to maintain systemic stability, which necessitates the curtailment of capacities.

There is a lack of a legal instrument that assigns financial liability for the operation of a base-load capacity in a non-optimal regime when this is a direct consequence of the priority of RES communities under the ERSA.

Although Art. 93a and Art. 94a of the EA regulate the free energy market and balancing, there is a contradiction with Art. 83, Para. 1. Base-load capacities are forced to violate their approved schedules due to the priority access of RES. Pursuant to Art. 99 of the EA, the ESO organizes the balancing energy market, but the costs from the forced curtailment of base-load plants are not recovered from the initiators of the surplus (the RES communities). This leads to the improper socialization of individual costs within the overall system price.

Despite the introduction of citizen energy communities, the law does not detail their property liability in cases of induced system overloads.

Institutional efforts in the 2024–2026 period have been directed toward liberalization but do not definitively address the structural conflict between base-load and variable capacities:

The amendments to the EA introduced the principle of full financial liability for imbalances for all market participants, including aggregators (Art. 1, Para. 4). Nevertheless, the retention of specific exceptions and derogations for certain entities maintains a state of legal uncertainty and hinders equality in bearing systemic costs. The promulgated Methodology for Calculating Electricity Quantities for Energy Communities represents a technical instrument for net settlement. However, it is of an explicitly administrative nature and does not provide a legal mechanism for the recovery of direct losses of base-load capacities incurred during forced curtailment of their production.

The proposed amendments to the ERSA aim to accelerate administrative procedures for connection. The focus of the legislator remains on the quantitative entry of RES, without the parallel introduction of norms for property liability regarding grid stability or compensatory mechanisms for base-load plant operators.

By 2026, the regulatory framework already identifies the sources of imbalance through the pricing of balancing energy, but a regulatory vacuum remains regarding the guarantees for the financial sustainability of base-load capacities when operating in a non-optimal technical regime.

2.6. Regulatory Uncertainty during "Emergency States"

The legal framework in the EA (Art. 72, 73, 188-191) grants the ESO the right to impose restrictive regimes, yet regulatory uncertainty exists regarding the control over decentralized energy communities during crises. A proposal for a normative solution includes the explicit inclusion of communities under the direct operational control of the ESO, the introduction of a "capacity component" fee (Art. 104), and a mandatory remote control connection (Art. 92b) to prevent risks to national security. The refinement of the term "restrictive regime" and the normative hierarchy is of key importance for the effective management of energy emergencies. [7]

V. CONCLUSIONS

The analysis of the current regulatory framework confirms that although the EA provides a stable foundation for the management of base-load capacities, the legal integration of decentralized production under the ERSA remains in an initial stage. The primary challenge is of a regulatory nature: establishing a normative balance between the technological inertia of nuclear energy and the dynamics of energy communities, without compromising systemic stability and social justice.

Main conclusions:

1. Normative Fragmentation: The EA and ERSA operate under a lack of systemic coordination. The burden of maintaining systemic security is disproportionately distributed upon centralized capacities, while decentralized entities benefit from market preferences, which generates an economic imbalance.
2. Deficit in Capacity Management: The absence of precise rules for grid capacity sharing leads to unjustified restrictions for energy communities in zones with planned development of new nuclear capacities.

Specific recommendations for legislative amendments:

1. Synchronization of Secondary Legislation: Revision of the EWRC Ordinances with the aim of introducing a unified protocol for remote load management, applicable to all categories of producers.
2. Regulation of "Flexible Grid Contracts": Legislative introduction of contractual models in which energy communities receive reduced connection fees in exchange for explicit consent for operational production curtailment during periods of peak load on base-load capacities.
3. Reform of the Tariff Model: Transformation of grid services from volumetric fees (per kWh) to capacity fees (per kW). This will ensure fair participation of communities in the maintenance costs of the grid infrastructure.

The sustainable development of the Bulgarian energy sector depends on a transition from a model of competition to a model of legal symbiosis. The future requires a transformation of the energy grid from passive infrastructure into an intelligent market, regulated through flexible, fair, and technologically neutral legislation. These changes will ensure that energy communities develop as active and responsible partners, rather than as external factors to the system whose benefits are paid for by base-load energy and vulnerable consumers.

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