SHAREs+
empowering communities

Stakeholder Needs Assessment Report

Report D4.1

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Abstract

The SHAREs+ project aims to accelerate the development of citizen-led energy initiatives across five European countries by transferring frontrunner expertise, replicating proven technical tools, and strengthening national Gateway platforms. The project targets the establishment of 13 new energy communities and the support of 50 existing ones, focusing on Cyprus, Romania, North Macedonia, and Ukraine as replication countries. Bulgaria acts both as a pioneer in regulatory development and as a pilot site for renewable thermal communities and vulnerable consumer engagement, while Austria serves as the primary capacity-building partner.

This Stakeholder Needs Assessment Report presents the results of stakeholder mapping and consultation activities conducted under Task 4.1 (M1–M6). A total of 129 national stakeholders were mapped across participating countries, complemented by an EU-level stakeholder analysis. Structured questionnaires were distributed to representatives of energy communities, municipalities, national authorities, energy agencies, civil society organisations, financial actors, and vulnerable consumer representatives.

The assessment demonstrates that energy community scaling is primarily constrained by operational legal uncertainty, limited access to financial de-risking mechanisms, and administrative and grid-related complexity. While ecosystem maturity varies across countries, these structural bottlenecks are consistently ranked as the most critical barriers. The findings further highlight that social inclusion and vulnerable consumer participation must be embedded as systemic design principles rather than treated as secondary policy objectives.

The results directly inform:

- the adaptation and replication of the SHAREs Gateway platform in Cyprus, North Macedonia, Romania, and Ukraine;
- the design of targeted capacity-building and technical assistance activities under WP3;
- and the functional architecture of Gateway development under WP4.

The stakeholder maps developed within this task serve as living documents and will be continuously updated to reflect regulatory developments, emerging actors, and implementation progress.

Overall, this report provides an evidence-based foundation for transforming National Gateways from informational portals into implementation platforms capable of accelerating inclusive, resilient, and locally anchored energy communities across diverse regulatory and socio-economic contexts.

1 | Executive Summary

This Stakeholder Needs Assessment provides a structured and comparative analysis of enabling conditions, barriers, and functional expectations related to energy community development across Bulgaria, North Macedonia, Romania, Cyprus, and Ukraine. The assessment combines systematic stakeholder mapping (129 national stakeholders identified) with questionnaire-based consultation across participating countries.

Austria is included in the stakeholder mapping due to its institutional role within the project, however, it is not part of the needs assessment, as it serves as the technical and capacity-building partner supporting replication countries rather than a target country for Gateway implementation.

The analysis demonstrates that energy community development across all contexts is constrained not by a lack of interest or political relevance, but primarily by operational uncertainty. Three structural bottlenecks consistently rank highest across countries:

- Insufficient legal and regulatory clarity
- Limited access to financial de-risking instruments
- Administrative and grid-related procedural complexity

While several barriers are shared across countries, ecosystem maturity differs significantly. Romania and Bulgaria demonstrate advancing but operationally constrained environments, where legislative frameworks are largely in place but practical implementation, technical capacity, and financial structuring remain bottlenecks. North Macedonia reflects an emerging ecosystem requiring foundational support, including regulatory clarification, institutional capacity-building, and awareness development. Cyprus operates within a formally transposed regulatory framework, however, its main challenges relate to procedural complexity, administrative burden, and financial de-risking rather than to basic ecosystem formation. Ukraine combines strong political alignment and high urgency with ongoing structural transformation driven by energy security priorities, requiring implementation acceleration and crisis-resilient operational tools.

The assessment further reveals that social inclusion and the participation of vulnerable consumers are not peripheral concerns but structural determinants of successful energy community scaling. Without systematic inclusion mechanisms embedded into legal, financial, and governance design, energy communities risk reinforcing existing inequalities.

The findings directly inform the functional replication and enhancement of the SHAREs+ National Gateways. The analysis confirms that Gateways must evolve from

informational portals into implementation platforms integrating legal clarification tools, financial navigation modules, procedural roadmaps, technical guidance, and inclusion-oriented instruments.

If designed with adaptive flexibility, National Gateways can serve as enabling digital infrastructure for scaling inclusive, resilient, and locally anchored energy communities across diverse regulatory and socio-economic environments.

2 | Introduction

The stakeholder needs assessment was implemented as a structured process combining stakeholder mapping and questionnaire-based data collection. The methodology was designed to ensure comparability across countries while allowing sufficient flexibility to reflect national regulatory, socioeconomic, and market-specific contexts.

2.1 Stakeholder mapping approach

The first stage of the assessment consisted of systematic stakeholder identification and mapping. To ensure methodological consistency across partner countries, Ecoaction developed a structured Excel-based stakeholder matrix template. This template provided a harmonised framework for categorising and analysing stakeholders relevant to the development of energy communities and the future use of the SHAREs+ Gateway.

Each national partner used the template to identify and classify stakeholders within their respective country. The mapping process included both existing actors already involved in citizen energy initiatives and potential stakeholders whose engagement would be critical for scaling up energy community models. Particular attention was given to ensuring representation from pilot community, energy community, local authority, policy maker, national energy agency, energy advisors, consumer association, NGO, interest group, service and energy provider, financial institution, educational institutions, partner (EU) project.

Stakeholders were assessed according to several parameters, including their stakeholder type, level of operation (local, regional, national, EU/international), Category in impact/interest matrix (degree of influence, level of interest in energy communities), and potential SHAREs+ relation. Based on this assessment, partners developed preliminary engagement strategies tailored to different stakeholder categories and expected forms of involvement.

In parallel, the Austrian Energy Agency prepared an international/EU-level stakeholder map. This map focuses on European institutions, networks, umbrella organisations, and cross-border initiatives relevant to citizen energy.

All stakeholder engagement maps are designed as living documents. They will be continuously updated throughout the project to reflect new initiatives, emerging actors, regulatory changes, and engagement outcomes.

2.2 Questionnaire design and data collection

Following the stakeholder mapping phase, a structured Stakeholder Needs Assessment Questionnaire was developed to collect comparable, evidence-based insights across participating countries. The questionnaire format and content were

designed by BSERC to ensure clarity of response categories, and usability for follow-up analytical work within the work package.

The questionnaire was structured to cover multiple dimensions of energy community development, including legal and regulatory frameworks, governance and the role of local authorities, financial barriers, social inclusion and vulnerable consumers, technical and grid-related constraints, administrative complexity, and expectations regarding the National Gateway platform. Both quantitative and qualitative (open-ended responses) elements were included to capture measurable trends while allowing respondents to provide contextualised feedback.

National partners distributed the questionnaire to identified stakeholders. Distribution methods included direct email outreach, dissemination through professional networks, targeted, and promotion during relevant stakeholder meetings and events. In countries with emerging energy community ecosystems, particular effort was made to reach actors who may not yet be formally organised but are potential initiators or beneficiaries of citizen energy projects.

2.3 Data processing and analysis

National partners conducted initial screening to ensure completeness and consistency of responses. The aggregated datasets were then analysed to identify recurring barriers, priority needs, and cross-country similarities and differences.

The analysis focused on identifying:

- The most critical legal and regulatory gaps;
- Financial instruments most demanded by stakeholders;
- Technical and administrative bottlenecks;
- The level of awareness of energy community;
- Expected features and functionalities of the National Gateway.

Qualitative responses were systematically reviewed to extract thematic patterns, examples of practical barriers, and recommendations for support tools. Where relevant, findings were contextualised within national regulatory environments and market development levels.

The consolidated findings form the basis for this Deliverable (D4.1) and directly inform the technical replication and enhancement of the SHAREs Gateways, as well as the design of tailored capacity-building activities across participating countries.

3 | Stakeholder Profile Overview

The stakeholder mapping exercise identified a broad and diverse ecosystem of actors across all participating countries. In total, 129 national-level stakeholders were mapped across Bulgaria, Austria, North Macedonia, Romania, Cyprus, and Ukraine, in addition to the EU-level stakeholders identified separately.

The stakeholder mapping includes Austria due to its institutional relevance within the project, however, Austria is not part of the needs assessment as a replication country. Instead, it serves as the technical and capacity-building partner, providing methodological guidance, mentoring, and knowledge transfer. The replication countries within the project are Bulgaria, North Macedonia, Romania, Cyprus, and Ukraine. These countries are the primary focus of the needs assessment and Gateway adaptation activities.

The mapping demonstrates that energy community development involves a multi-layered governance structure, combining public authorities, market actors, civil society organisations, financial institutions, and emerging citizen-led initiatives. However, the composition and maturity of stakeholder ecosystems differ significantly between countries.

Bulgaria

In Bulgaria, 24 national stakeholders were identified. The ecosystem is relatively diversified and includes local authorities (5), service and energy providers (5), NGOs (4), media organisations (4), energy advisors (2), and representatives of national institutions such as the national energy agency and policymakers. Initiators of three existing energy communities and one educational institution were also included.

The Bulgarian stakeholder profile reflects a semi-mature environment where institutional actors and advisory structures are present, but citizen-led initiatives are still limited in number. The strong presence of service providers and advisory bodies suggests a technical support base exists, though broader market scaling remains constrained.

Austria

In Austria, 11 stakeholders were mapped. The Austrian ecosystem reflects a more structured and programmatic landscape, with several regional and national policy programmes and initiatives (5 combined), alongside a national policymaker, a regional energy agency, a one-stop-shop structure, a consumer association, and one energy community.

Compared to other countries, Austria's stakeholder profile indicates a more institutionalised governance framework, where energy communities are embedded within broader policy programmes.

North Macedonia

North Macedonia presents one of the most diverse stakeholder profiles, with 29 stakeholders identified. These include interest groups (5), NGOs (5), service and energy providers (5), energy communities (3), local authorities (3), national policymakers (2), educational institutions (2), and additional actors such as consumer associations and international initiatives.

This distribution suggests an emerging but dynamic ecosystem, characterised by strong civil society engagement and growing technical interest. The presence of several pilot energy communities indicates early-stage implementation, while the involvement of educational institutions reflects capacity-building potential.

Romania

In Romania, 21 stakeholders were mapped. The largest group consists of energy communities (7), followed by service and energy providers (4), NGOs (3), local authorities (3), national policymakers (2), and advisory and interest groups.

Romania stands out for its relatively high number of existing or emerging energy communities. This suggests that practical implementation is advancing, although institutional and regulatory frameworks may still require strengthening to support scaling.

Cyprus

In Cyprus, 13 stakeholders were identified. The ecosystem includes interest groups (4), local authorities (3), national policymakers (2), energy communities (2), and representatives of consumer associations and pilot communities.

The Cypriot stakeholder landscape reflects a developing system with early-stage implementation and strong interest from local authorities.

Ukraine

Ukraine has the largest stakeholder group, with 31 actors identified. These include interest groups (6), national policymakers (5), NGOs (5), educational institutions (4), local authorities (3), media (3), financial institutions (2), and additional actors such as the national energy agency, service providers, and energy advisors.

The Ukrainian stakeholder profile reflects a rapidly evolving environment shaped by energy security concerns, decentralisation reforms, and post-war reconstruction priorities. The strong representation of policymakers and civil society actors indicates high political and societal relevance.

Cross-country observations

Across all countries, several patterns emerge:

Local authorities play a critical role in nearly all ecosystems, highlighting the importance of municipal leadership in enabling energy communities.

Civil society and NGOs are particularly influential in emerging markets (North Macedonia, Romania, Ukraine, Bulgaria), often acting as initiators or facilitators.

Existing energy communities are most numerous in Romania, while in other countries initiatives remain limited, pilot-based, or in preparatory stages.

The stakeholder profile confirms that energy community development requires coordinated engagement across governance levels and sectors. It also highlights varying levels of ecosystem maturity: Austria represents a structured and institutionalised environment; Romania show growing practical implementation; Bulgaria and Cyprus reflect transitional stages; North Macedonia remains at an early stage of regulatory operationalisation, as secondary legislation for the formal establishment of energy communities is not yet in place, and Ukraine demonstrates high strategic importance combined with regulatory and structural transformation needs.

This diversity underscores the necessity of country-tailored Gateway replication and targeted engagement strategies within the SHAREs+ project.

4 | Stakeholder Needs Analysis

This section provides a structured and methodologically consistent analysis of stakeholder consultations conducted in North Macedonia, Romania, Bulgaria, Ukraine, and Cyprus. For each country, the assessment follows the same analytical logic: (1) awareness and strategic positioning, (2) legal and regulatory framework, (3) financial environment, (4) administrative and grid-related conditions, (5) social inclusion and vulnerable consumers, and (6) expectations toward the National Energy Community Gateway.

The objective is to ensure comparability across national ecosystems while reflecting the specific structural characteristics and maturity levels of each country. The analysis is based on structured questionnaires and targeted consultations with representatives of public authorities, energy agencies, civil society organisations, municipalities, private sector actors, and community initiators.

North Macedonia

The stakeholder consultation in North Macedonia reflects an ecosystem that remains at an early stage of practical energy community implementation. The five respondents represent a cross-section of the national landscape, including the state-owned electricity producer ESM, the civil society organisation Habitat Macedonia, the City of Skopje, and two individual citizens (a PV prosumer and a local consumer). This composition provides insight into institutional, municipal, civil society, and end-user perspectives, allowing for a balanced assessment of systemic barriers and enabling conditions.

1. Awareness and strategic positioning

Awareness levels vary significantly across stakeholder categories. Civil society actors demonstrate relatively strong conceptual understanding of energy communities and related mechanisms, including collective self-consumption and energy sharing. In contrast, end-users report low familiarity, particularly regarding thermal renewable communities and participation models for vulnerable consumers. Institutional actors show moderate awareness but limited direct involvement in operational initiatives.

Energy communities are not yet widely perceived as an immediate operational priority within local administration structures. While climate and environmental objectives are acknowledged, energy communities are still viewed more as a future-oriented or pilot concept rather than a mainstream implementation pathway. This confirms that the national ecosystem remains in a preparatory phase, with interest present but not yet translated into structured action.

2. Legal and regulatory framework

Legal and regulatory uncertainty emerges as the most significant structural barrier. Most stakeholders rate the need for additional legal clarity as high to critical. Key areas of uncertainty include:

- Legal definitions and scope of energy communities
- Licensing requirements and taxation treatment
- Market access rules and grid participation conditions
- Internal governance and electricity allocation among members

Several respondents explicitly emphasised unclear rules regarding electricity management and intra-community relations. The absence of simplified, clearly communicated regulatory guidance is perceived as a major deterrent for potential initiators. For municipal actors and citizens alike, the current framework appears complex, fragmented, and insufficiently operationalised.

3. Financial environment

Financial feasibility constitutes a second major bottleneck. All respondents identify high upfront investment costs as a primary barrier. There is broad consensus on the need for structured financial support instruments, particularly:

- Grants and soft loans
- Guarantee schemes
- Risk-sharing mechanisms
- Targeted financial support for vulnerable households

Stakeholders consistently highlight economic risk exposure as a central deterrent. Even motivated actors hesitate to initiate projects without predictable support schemes and de-risking instruments. For vulnerable households, affordability concerns are compounded by limited access to capital and information.

4. Administrative and grid-related conditions

Grid-related and procedural obstacles further constrain development. Respondents report complicated grid connection procedures, lengthy timelines, and a lack of clear coordination mechanisms. The need for simplified grid access rules is rated high across stakeholder groups.

One respondent explicitly referred to distribution network congestion, the complexity of the distribution grid code, and the monopolistic position of the distribution company as systemic constraints. These structural issues reduce confidence in the practical feasibility of collective energy projects.

Administrative fragmentation also represents a key challenge. There is strong support for the establishment of a one-stop-shop model to simplify registration, permitting, contracting, and compliance procedures. The absence of a single point of contact is perceived as creating unnecessary delays and institutional uncertainty.

5. Social inclusion and vulnerable consumers

Institutional and civil society actors recognise the relevance of energy vulnerability. The main barriers identified include high upfront investment costs, lack of information, legal complexity, and, in some cases, digital exclusion and lack of trust. Proposed support

mechanisms include simplified legal models, targeted awareness campaigns, subsidies, and dedicated business models adapted to vulnerable households.

However, individual respondents do not consistently prioritise vulnerability inclusion, indicating that while the topic is institutionally acknowledged, it is not yet embedded in mainstream project design practice.

6. Expectations toward the National Energy Community Gateway

Expectations toward a National Energy Community Gateway are high. Stakeholders express strong interest in:

- Legal Q&A catalogues and regulatory guidance
- Business model development tools
- Financial options databases
- Decision-support instruments
- Training materials and locally relevant case studies

There is particular demand for practical implementation-oriented content rather than purely conceptual information. Civil society stakeholders also stressed the importance of showcasing positive national examples to motivate replication.

At the same time, it is important to contextualise these expectations. According to the aggregated survey data, four out of five respondents in North Macedonia were not aware of any existing National Energy Community Gateway. Their responses therefore reflect expectations toward a future structured support platform rather than experience with an already operational tool. The high level of interest should thus be interpreted as evidence of unmet informational and coordination needs within the ecosystem.

Importantly, respondents expressed willingness to participate in workshops, test the Gateway, and contribute expertise. This indicates that institutional readiness could increase significantly if structured support, coordination mechanisms, and facilitation tools are provided.

Overall assessment

North Macedonia demonstrates emerging interest in citizen-led energy initiatives but remains in a foundational stage of ecosystem development. The consultation reveals three structural priorities:

- **Regulatory clarification and simplification**
- **Accessible and risk-mitigated financing mechanisms**
- **Streamlined grid and administrative procedures**

Without addressing these foundational conditions, scaling potential will remain limited. However, stakeholder willingness to engage further suggests that with targeted support, particularly through a functional, implementation-oriented National Gateway, the country could transition from conceptual awareness to structured pilot deployment within the project timeframe.

Romania

The Romanian consultation reflects a comparatively more mature structurally constrained ecosystem for energy community development. Responses were received from citizen energy initiatives, municipalities, NGOs, regional development agencies, private companies, and distribution operators. This diversity demonstrates broad sectoral engagement and confirms that the concept of energy communities has moved beyond early awareness into active experimentation and institutional debate.

1. Awareness and strategic positioning

Overall awareness and conceptual understanding of citizen energy initiatives are high. Several respondents are directly involved as project leaders, facilitators, service providers, or decision-makers. Familiarity with collective self-consumption, energy sharing, and governance models is generally strong among citizen energy initiatives, NGOs, and grid operators, though some private sector and local actors report limited knowledge.

Motivations are highly aligned across stakeholder categories. The most frequently cited drivers include:

- Energy independence
- Cost reduction
- Local economic development
- Climate and environmental objectives
- Social inclusion

Romania demonstrates clear strategic alignment between municipal, cooperative, and civil society actors regarding the relevance of energy communities for local development and decarbonisation pathways.

2. Legal and regulatory framework

Despite relatively advanced awareness and active engagement, legislative uncertainty remains the dominant structural barrier. Stakeholders consistently emphasise that while policy transposition has progressed, the operational framework is incomplete and fragmented.

Key regulatory gaps identified include:

- Absence of a coherent and operational energy sharing mechanism
- Lack of a functional national registry for energy communities
- Unclear licensing and taxation requirements
- Ambiguous settlement rules between community members
- Insufficient clarification of distribution operator obligations
- Inadequate alignment between prosumer legislation and collective models

Several actors stress that current legislation favours individual prosumer solutions over collective community-based arrangements. Without secondary legislation detailing operational rules, particularly regarding measurement data, settlement mechanisms across voltage levels, and internal governance, energy communities remain legally possible but practically difficult to implement.

The need for legal clarity is consistently rated as critical across almost all respondents, including municipalities, citizen energy initiatives, and grid operators.

3. Financial environment

Financial constraints are equally critical. High upfront investment costs are widely identified as a primary obstacle. Stakeholders request diversified and predictable funding instruments, including:

- Grants
- Soft loans
- Guarantee schemes
- Risk-sharing mechanisms
- Targeted financial support for vulnerable households

Additional needs include funding for storage systems, feasibility studies, pilot projects, and digital infrastructure. Several respondents underline that without structured financial de-risking mechanisms, initiatives struggle to move beyond the conceptual or preparatory stage.

Access to tailored financing instruments is therefore perceived not only as supportive but as a precondition for scaling.

4. Administrative and grid-related conditions

Administrative complexity is perceived as excessive and discouraging. Respondents frequently cite:

- Lengthy permitting procedures
- Complex registration requirements
- Burdensome reporting and compliance obligations
- Prolonged grid connection timelines

The absence of a single institutional contact point significantly complicates implementation, particularly for municipalities and citizen-led initiatives. Distribution operators highlight the need for clear standard technical requirements and harmonised procedures to reduce uncertainty and accelerate project development.

Grid connection, flexibility integration, storage deployment, and digitalisation are key technical domains requiring expert support. Stakeholders also emphasise the need for software tools capable of managing internal energy allocation and financial flows within communities.

5. Social inclusion and vulnerable consumers

Vulnerable households are widely recognised as a relevant target group, particularly by NGOs, citizen energy initiatives, and regional agencies. However, inclusion remains constrained by:

- High upfront investment costs
- Legal complexity
- Digital exclusion
- Lack of information and trust

Stakeholders propose simplified governance models, targeted awareness campaigns, dedicated business models, and direct subsidies as essential enabling mechanisms. While the commitment to social inclusion is evident, practical implementation pathways remain underdeveloped.

6. Expectations toward the National Energy Community Gateway

The National Energy Community Gateway is generally perceived as highly valuable. Most respondents rate legal Q&A tools, financial databases, business model instruments, decision-support tools, and case studies as very useful.

Stakeholders explicitly request:

- Practical templates for statutes and governance models
- Clear explanations of legislative updates
- Calculators for optimal system sizing
- Feasibility study support
- Structured technical assistance
- Up-to-date information on funding sources

There is strong willingness to engage further through workshops, testing activities, knowledge exchange, and participation in national forums. This indicates high institutional readiness, provided that the Gateway delivers implementation-oriented and regularly updated content.

Overall assessment

Romania demonstrates strong stakeholder engagement, conceptual maturity, and strategic alignment regarding energy communities. However, scaling remains constrained by incomplete legislative operationalisation, administrative burdens, and limited access to tailored financial instruments.

Three structural priorities clearly emerge:

- **Finalisation and clarification of secondary legislation governing energy sharing and community operation**
- **Simplification of administrative and grid procedures through standardisation and one-stop-shop approaches**

- **Deployment of diversified, accessible, and de-risked financial support instruments**

With these enabling conditions in place, Romania has significant potential to move from pilot experimentation to broader structural deployment of citizen-led energy communities.

Bulgaria

The Bulgarian consultation reflects a policy-aware but structurally incomplete ecosystem for energy communities. Input was collected through in-depth discussions with representatives of Greenpeace Bulgaria and the national public authority Sustainable Energy Development Agency (SEDA). Together, these stakeholders provide complementary perspectives from civil society advocacy and national-level technical and regulatory expertise.

1. **Awareness and strategic positioning**

Awareness of energy community concepts in Bulgaria is high among national-level actors. Both organisations demonstrate strong familiarity with energy communities, collective self-consumption, and energy sharing models. Greenpeace Bulgaria shows particular engagement in advocacy, public awareness, and citizen mobilisation, while SEDA approaches the topic from a monitoring, analytical, and legislative implementation perspective.

Energy communities are considered highly relevant to ongoing work, particularly in relation to:

- Climate and environmental objectives
- Energy independence
- Social inclusion
- Regulatory compliance and innovation

However, despite conceptual maturity at the national level, practical deployment remains limited. Energy communities are still emerging, and institutional responsibilities for their long-term governance and monitoring are not fully consolidated.

2. **Legal and regulatory framework**

Legal clarity is rated as critically needed by both stakeholders. Although recent amendments adopted by the Energy and Water Regulatory Commission in January 2026 introduced normative conditions for citizen energy communities and self-consumption groups—including registration rules, electricity accounting procedures, and data exchange obligations—important structural gaps remain.

The most pressing regulatory issues include:

- Incomplete legal definitions and licensing requirements
- Taxation and fiscal treatment uncertainties

- Market access rules
- Protection and inclusion mechanisms for vulnerable consumers
- Regulatory barriers for energy communities for heating

Heating-related energy communities are identified as particularly constrained. Once a production threshold is exceeded, they are treated as small heating plants and become subject to licensing requirements and regulated pricing mechanisms designed for conventional district heating operators. This regulatory misalignment creates a structural obstacle for community-based heating initiatives and discourages pilot development.

Moreover, no centralized national registry of energy communities exists. While distribution system operators track certain metering points following recent amendments, heating communities and other formats are not systematically recorded. Responsibility for maintaining such a registry remains unclear.

3. Financial environment

The financial environment represents a critical bottleneck. Currently, Bulgaria lacks dedicated public financial instruments or commercial banking products specifically tailored to energy communities. An open procedure under the Regions in Growth Programme 2021–2027 supports pilot initiatives in coal-affected regions (Stara Zagora, Pernik, and Kyustendil), but this support is limited to public buildings and does not address broader community development needs.

As a result, most energy communities rely on crowdfunding and member contributions, collecting initial participation fees and offering long-term returns. This financing structure poses a significant barrier to inclusion, particularly for vulnerable households and smaller actors.

There is strong consensus on the need for diversified financial instruments, including:

- Grants and soft loans
- Guarantee schemes
- Risk-sharing mechanisms
- Targeted support for vulnerable households
- Public-private incentive schemes

Without structured de-risking mechanisms and tariff relief measures, scaling potential remains constrained.

4. Administrative and grid-related conditions

Administrative simplification is considered essential. Both stakeholders rate the need for a one-stop-shop model as critical. Registration procedures, permitting processes, and contracting arrangements are perceived as complex and burdensome.

Grid connection procedures also require simplification, despite recent regulatory amendments. While the Electricity Trading Rules now provide clearer normative

conditions for registration and participation, technical bottlenecks remain. Stakeholders emphasise the need for:

- Standardised technical requirements
- Streamlined grid connection processes
- A single point of contact
- Clear data exchange and settlement mechanisms

Expert support is particularly needed in grid connection, flexibility and storage integration, and digital tools and platforms.

5. Social inclusion and vulnerable consumers

The inclusion of vulnerable households is hindered by high upfront investment costs, legal complexity, and limited access to subsidies as primary barriers. Dedicated business models and targeted financial instruments are seen as necessary to enable equitable participation. In the absence of dedicated public financial products, inclusion remains structurally limited. Current crowdfunding-based models inherently disadvantage low-income households.

Overall, while social inclusion is recognised as a policy priority, practical instruments remain underdeveloped.

6. Expectations towards the National Energy Community Gateway

Both stakeholders are aware of the existing Bulgarian National Energy Community Gateway and actively reference it in their work. However, they identify several functional gaps.

Key requested improvements include:

- An interactive map visualising all existing energy communities, serving as a substitute for a national registry

No centralized registry currently exists in Bulgaria. Only metering points registered in the DSOs will be tracked following EWRC amendments from the beginning of 2026, while other energy community types (e.g., heating) are not included. Moreover, responsibility for maintaining such a registry is unclear. As an interim solution, the portal could host profiles of existing energy communities, describing their business models and sharing key documents (e.g., partnership agreements, supplier contracts), provided the communities agree. This information would benefit a wide range of users, including not only future community initiators, who could follow proven models step by step, but also institutions like SEDA, which need to monitor the number of energy communities and their contributions to renewable energy and energy efficiency.

- Updated legal guidance reflecting upcoming amendments to the Renewable Energy Act & ractical explanations of market participation and sharing mechanisms

The legal procedures section should be updated to reflect the expected amendments to the Bulgarian Renewable Energy Act, which will be subject to public consultation in the coming months. These changes should be clearly explained in practical terms,

highlighting implications for energy communities, market participation, and sharing mechanisms.

- Tools and guidance for heating-related energy communities

Energy communities currently face significant challenges in developing pilot projects related to heating. National-scale information on heating-related community energy projects is insufficient, making planning and implementation difficult.

- Support instruments and calculators for municipalities

The portal currently lacks simple calculators to estimate energy savings for municipal authorities preparing project proposals. Municipalities are currently the initiators of energy communities, and such tools will support them in calculating their energy efficiency KPIs and project evaluation, while applying for programme- or project-based funding.

- Tools for micro-enterprises and free-market participants

Tools and guidance to encourage micro-enterprises, including family-run businesses currently operating on the free electricity market, to join energy communities could also be covered as a topic.

- Guidance on regulatory frameworks for non-households

Clear, updated explanations are needed for professionals (municipal engineers, project developers) who are not energy specialists. While SEDA has developed a handbook for the procedures for the construction or reconstruction of energy facilities and facilities for production of energy from renewable sources, it does not cover market participation, electricity sharing, or interactions between the free and regulated markets.

The Gateway is perceived as a potentially central coordination platform that could partially compensate for institutional fragmentation, especially in the absence of a formal registry.

Overall assessment

Bulgaria demonstrates high policy awareness and active advocacy engagement but remains structurally constrained by regulatory gaps, lack of dedicated financing, and incomplete administrative simplification.

Three strategic priorities emerge:

- **Regulatory refinement, particularly for heating-related energy communities and market participation rules**
- **Deployment of structured financial instruments to enable inclusive and scalable models**
- **Strengthening the National Gateway as a functional coordination, transparency, and practical implementation platform**

With recent regulatory amendments providing a foundational framework, Bulgaria is positioned to move from policy-level readiness toward structured pilot deployment.

However, without financial de-risking and administrative streamlining, large-scale replication will remain limited.

Ukraine

The stakeholder consultation in Ukraine confirms that energy communities are perceived as a strategically important instrument for strengthening energy independence, supporting climate objectives, and fostering local economic development. Respondents represent national policy makers, a central energy agency, local authorities, and civil society organisations actively engaged in community energy initiatives. This multi-level participation provides a comprehensive picture of both systemic and operational challenges.

1. Awareness and strategic positioning

Overall awareness of energy community concepts is high across all stakeholder categories. Most respondents demonstrate strong familiarity with energy communities, collective self-consumption, and energy sharing. Knowledge of RES-based thermal energy communities is slightly less developed at local level but remains relatively strong. Concepts related to vulnerable consumers are well recognised, particularly among national authorities and NGOs.

Energy communities are considered highly relevant to professional activities (rated at the maximum level by almost all respondents). Motivations for engagement combine energy security considerations, regulatory compliance, climate objectives, and local development priorities. In the Ukrainian context, decentralised renewable energy solutions are closely linked to resilience, recovery, and long-term energy autonomy.

2. Legal and regulatory framework

The need for improved legal clarity is one of the most consistent findings of the consultation. National-level stakeholders emphasise that the regulatory framework requires clearer definitions, structured guidance, and alignment with EU-inspired models. Local actors underline that legal uncertainty discourages municipalities and citizens from initiating projects.

Priority areas include legal definitions of energy communities, licensing requirements, market access rules, and clarification of the formal role of municipalities. Protection mechanisms for vulnerable consumers are also considered insufficiently structured.

Overall, stakeholders highlight that simplified legal models, standardised documentation, and accessible explanatory materials would significantly reduce entry barriers and accelerate project development.

3. Financial environment

Financial barriers are identified as one of the most critical constraints. All respondents indicate a strong need for additional financial support instruments. The high upfront costs of renewable energy systems, combined with limited access to capital, are perceived as major obstacles, particularly for smaller municipalities and vulnerable households.

Stakeholders call for a diversified mix of financial instruments, including grants, soft loans, guarantee schemes, and risk-sharing mechanisms. Targeted support schemes for vulnerable consumers are considered essential to ensure inclusive participation. Local authorities specifically request practical funding templates and structured investment guidance tailored to municipal realities.

Financial support is therefore not viewed as a complementary measure, but as a prerequisite for scaling citizen-led energy initiatives.

4. Administrative and grid-related conditions

Administrative complexity is another systemic barrier. Respondents consistently stress the importance of political support at national level and administrative facilitation at local level. Registration, permitting, contracting, and reporting procedures are perceived as burdensome and time-consuming.

There is unanimous demand for a one-stop-shop model to streamline administrative processes. A single point of contact, shorter timelines, and clearer procedural guidance are considered to have the greatest impact on accelerating implementation.

Improving administrative coordination is therefore seen as equally important as financial and legal reform.

Technical barriers, particularly in relation to grid connection, are rated as highly significant. Simplified and transparent grid connection procedures are strongly requested by all stakeholder groups. Uncertainty regarding technical requirements increases project risk and discourages smaller actors.

Key areas where expert support is needed include system design, grid connection procedures, flexibility and storage solutions, and digital tools for energy management. Stakeholders also emphasise the need for standardised technical requirements to ensure predictability and reduce procedural delays.

5. Social inclusion and vulnerable consumers

Social aspects are clearly integrated into the Ukrainian stakeholder perspective. All respondents confirm the relevance of energy-vulnerable households. The main barriers affecting vulnerable consumers include high upfront costs, lack of information, legal complexity, limited access to subsidies, and low trust.

Support mechanisms should therefore combine simplified legal models, targeted subsidies, awareness campaigns, and intermediary support structures. National actors underline the importance of embedding protection measures directly within the regulatory framework, while local actors stress the need for practical engagement tools and communication strategies.

Social inclusion is regarded as a structural dimension of energy community development rather than an optional add-on.

6. Expectations toward the National Energy Community Gateway

Stakeholders express very high expectations regarding the future development of the National Energy Community Gateway. All proposed features are assessed as highly useful. Particular priority is given to legal Q&A tools, business model guidance, financial

options databases, decision-support instruments, training materials, and case studies – especially examples from Ukrainian practice.

Local authorities request step-by-step implementation guides and templates adapted to municipal use. National stakeholders highlight the importance of clear legal interpretation tools and structured policy guidance.

The Gateway is therefore expected to function as both a practical implementation tool and a strategic coordination platform.

When identifying the most critical needs for energy community development in Ukraine, stakeholders consistently highlight:

- Legal clarity and regulatory stability
- Access to financing and investment instruments
- Technical and procedural guidance

In addition, several respondents underline the importance of broader societal transformation, including awareness raising, youth education, and a shift in mentality toward collective action.

Overall assessment

The Ukrainian consultation demonstrates strong institutional engagement and readiness to advance citizen-led energy initiatives. The main barriers are structural rather than motivational. There is clear demand for regulatory clarification, financial de-risking mechanisms, administrative simplification, and inclusive support models.

At the same time, stakeholders show high willingness to engage further in workshops, testing activities, and expert contributions. This creates favourable conditions for the structured development of the National Gateway and for scaling energy communities in Ukraine in a coherent and resilient manner.

Cyprus

The stakeholder consultation in Cyprus reflects input primarily from experts and representatives closely linked to the national energy and electricity sector. The responses demonstrate a technically informed perspective, with particular emphasis on regulatory refinement, financial instruments, and inclusion of vulnerable consumers. While the level of institutional maturity differs from countries with emerging frameworks, stakeholders identify several structural and operational gaps that require targeted intervention.

1. Awareness and strategic positioning

Stakeholders in Cyprus demonstrate a generally high level of understanding of energy community concepts. Most respondents are well-acquainted with the principles of energy communities, collective self-consumption, and peer-to-peer energy sharing. This familiarity reflects both technical knowledge and practical awareness of emerging opportunities within the national energy landscape.

The motivations driving engagement in energy communities are diverse. Key factors include supporting vulnerable consumers, lowering energy costs for participants, and strengthening energy independence. Together, these drivers illustrate a strategic approach where energy communities are seen not only as a tool for technical innovation but also as a mechanism for social inclusion, financial efficiency, and resilience in the energy sector.

2. Legal and regulatory framework

Stakeholders in Cyprus indicate a clear need for additional legal clarity and regulatory guidance. The areas most frequently highlighted include legal definitions and scope of energy communities, taxation and fiscal treatment, licensing requirements, market access rules, and protection of vulnerable consumers.

The responses suggest that although elements of the framework are in place, fragmentation and complexity create uncertainty. Legal complexity is also directly linked to barriers faced by vulnerable consumers. There is a strong call for simplified legal models and clearer guidance to reduce administrative burden and facilitate participation.

Overall, the consultation indicates that legal refinement rather than full structural redesign is required, with emphasis on clarification, simplification, and better accessibility of regulatory information.

3. Financial environment

Financial support is considered highly necessary by all respondents. The need for additional financial tools is consistently rated at the highest level. Grants are identified as the most critical instrument, followed by soft loans, guarantee schemes, and risk-sharing mechanisms.

High initial investment costs are perceived as the primary financial barrier, particularly for vulnerable households and smaller participants. Several respondents explicitly prioritise grants and subsidies as immediate enablers, while others emphasise blended approaches combining guarantees and structured financial tools.

Notably, there is no indication that financial instruments are unnecessary, rather, stakeholders stress that accessible and well-structured financial schemes are indispensable for scaling community energy projects.

4. Administrative and grid-related conditions

Technical support needs are clearly defined and focus primarily on system design, grid connection procedures, and flexibility and storage solutions. These areas are consistently mentioned across responses, indicating that technical optimisation and grid integration remain important challenges.

The emphasis on flexibility and storage reflects Cyprus' specific energy system characteristics, including high renewable penetration potential and grid constraints. Expert guidance in these areas is therefore considered critical for ensuring system stability and project viability.

Stakeholders generally recognise the value of one-stop-shop services, with most ratings indicating moderate to high necessity. While not uniformly rated at the maximum level, the majority of respondents consider coordinated administrative support an important facilitating factor.

This suggests that procedural simplification and centralised information access would enhance efficiency.

5. Social inclusion and vulnerable consumers

Stakeholders consistently identify high upfront costs, legal complexity, digital exclusion, lack of information, and lack of trust as key barriers.

Digital exclusion is particularly notable in the Cypriot context, suggesting that the digitalisation of procedures or platforms must be accompanied by inclusive design and support mechanisms.

The most requested support mechanisms include:

- Subsidies and guarantees
- Simplified legal models
- Dedicated business models tailored to vulnerable consumers
- Targeted awareness campaigns
- Intermediary organisations to facilitate engagement

There is need for structured protection mechanisms and specialised models that actively integrate vulnerable groups rather than treating them as secondary beneficiaries.

6. Expectations toward the National Energy Community Gateway

The proposed functionalities of a National Energy Community Gateway are assessed as highly useful. Legal Q&A catalogues, business model tools, financial options databases, decision-support tools, training materials, case studies, and dedicated sections for vulnerable consumers all receive strong evaluations.

Priority is given to:

- Grants and financial support information
- Legal guidance and simplified regulatory explanations
- Business model development tools
- Dedicated tools for vulnerable consumers

Stakeholders also emphasise the importance of specialised business models and simplified legal guidance within the Gateway, indicating that the platform should not merely provide information but actively structure practical implementation pathways.

Overall assessment

The Cypriot stakeholder consultation reflects a technically advanced but structurally cautious environment. The main challenges are not related to awareness or motivation but to regulatory clarity, financial feasibility, and inclusive implementation.

There is clear demand for a National Gateway that integrates legal, financial, and technical guidance in a coherent manner, with particular attention to vulnerable consumers and digital accessibility. If designed as an integrated support platform combining simplified legal models, structured financial information, and technical guidance, the Gateway could significantly accelerate the development of energy communities in Cyprus while ensuring social inclusiveness and system stability.

Quantitative overview of responses

Although the number of responses differs across participating countries, the consultation results reflect the actual structure of stakeholder engagement and the maturity of energy community ecosystems in each national context. The figures below correspond to the validated submissions provided during the SHAREs+ consultation process.

Country	Number of responses	Ecosystem stage
North Macedonia	5	Early-stage implementation
Romania	11	Expanding regulatory framework with implementation bottlenecks
Bulgaria	2 (institutional)	Structurally constrained: conceptually advanced but facing operational bottlenecks
Ukraine	6	Reform-driven development under war-related constraints
Cyprus	4	Formally transposed framework with limited operational uptake

Across all responses, the following barriers ranked highest (based on frequency and criticality ratings):

- Legal and regulatory uncertainty
- High upfront investment costs
- Grid connection and administrative complexity
- Lack of targeted instruments for vulnerable consumers

Even in more mature contexts, financial and procedural barriers remain consistently high.

Overall comparative insight

Across all five countries, three common structural priorities emerge:

- Legal clarity and operational regulatory frameworks
- Accessible financial de-risking mechanisms
- Simplified administrative and grid procedures

However, maturity levels differ significantly. Romania and Bulgaria show higher conceptual maturity but face legislative and structural bottlenecks. Ukraine demonstrates strong political alignment and urgency, with readiness for rapid scaling if enabling conditions are clarified. Cyprus reflects technical preparedness constrained by regulatory complexity. North Macedonia remains at an earlier developmental stage, requiring foundational regulatory and financial support.

These findings confirm that National Energy Community Gateways must function as practical implementation platforms - combining legal clarity, financial navigation, administrative simplification, and locally relevant tools - tailored to national structural realities rather than relying solely on generic EU-level guidance.

5 | Functional Implications for National Gateways

The comparative stakeholder assessment clearly demonstrates that National Energy Community Gateways cannot function as purely informational portals. Across all five countries, stakeholders consistently expect implementation-oriented, problem-solving, and decision-support platforms capable of reducing legal uncertainty, financial risk, and administrative complexity.

While the structural barriers are similar (legal clarity, financing, grid access, and social inclusion), the nature and intensity of these barriers differ significantly depending on ecosystem maturity, institutional readiness, and market structure.

Therefore, Gateway replication cannot follow a uniform model. It requires a structured but adaptable blueprint, grounded in a shared European architecture yet responsive to national regulatory, socioeconomic, and institutional realities.

5.1 Blueprint adaptation principles

From Information Portal to Implementation Platform

Across all countries, stakeholders expect the Gateway to provide operational tools rather than general explanations. Legal Q&A catalogues, business model templates, financial navigation tools, procedural roadmaps, and case studies are consistently prioritised.

The Gateway must therefore function as:

- A structured legal interpretation and guidance hub
- A financial instrument navigation tool
- A procedural roadmap generator
- A capacity-building and training platform
- A coordination interface (where relevant)

Static content alone will not meet stakeholder expectations. Interactive tools, templates, decision-support modules, and step-by-step implementation guidance are essential.

The assessment clearly shows that stakeholders request instruments that directly support implementation decisions. In North Macedonia and Ukraine, municipalities and civil society actors require step-by-step roadmaps because legal complexity prevents initiation. In Romania, stakeholders request clarification of energy sharing rules and settlement mechanisms, indicating that scaling is blocked by operational ambiguity rather than conceptual gaps. In Bulgaria, heating-related communities are constrained

by regulatory misclassification, which requires interpretative guidance rather than awareness-raising. In Cyprus, the need is for structured financial and technical optimisation support.

This diversity confirms that the Gateway blueprint must be modular. A common European-level logic should define core components—legal guidance, financial tools, administrative navigation, technical modules, and inclusion mechanisms—while allowing national partners to emphasise and expand specific modules according to ecosystem maturity.

A second principle concerns legal architecture. Legal uncertainty ranks as the most critical barrier in all countries, but its nature varies. In early-stage ecosystems such as North Macedonia, stakeholders lack clarity on definitions, governance models, and electricity allocation rules. In Romania, the challenge lies in incomplete secondary legislation and unclear settlement mechanisms between community members. In Bulgaria, the regulatory framework has recently evolved, yet interpretation gaps remain, particularly regarding heating communities and licensing thresholds. In Ukraine, alignment with EU-inspired models is ongoing, and local authorities require simplified legal models to initiate projects under conditions of regulatory transformation. In Cyprus, the framework is largely transposed, but stakeholders still report complexity and fragmentation.

The Gateway must therefore function as a structured legal interpretation interface. This includes simplified explanations, model statutes, governance templates, procedural checklists, and interactive Q&A tools. Importantly, the legal module must be dynamic and regularly updated, reflecting legislative amendments and regulatory clarifications. Without such a mechanism, the platform risks becoming obsolete and losing credibility among institutional users.

Financial integration constitutes the third core principle. Across all countries, high upfront investment costs represent a central deterrent. Stakeholders consistently demand grants, soft loans, guarantees, and risk-sharing mechanisms. However, they also indicate confusion about eligibility, sequencing, and procedural requirements. The Gateway should therefore not only list funding opportunities but provide structured financial navigation pathways. For example, municipalities in Ukraine and Romania require guidance on combining EU funds, national schemes, and local budgets. In Bulgaria, coal-transition regions require targeted information on available instruments under regional programmes. In Cyprus, grants and subsidies are considered immediate enablers, and stakeholders expect clear eligibility guidance. In North Macedonia, early-stage actors need simplified explanations of basic financing models.

This implies that the Gateway's financial module must integrate eligibility filters, sequencing logic, and examples of blended financing structures. Where possible,

simplified cost-estimation and feasibility tools should accompany financial information to support early-stage decision-making.

Administrative simplification represents another cross-cutting principle. Stakeholders across countries identify fragmented procedures, lengthy permitting timelines, and unclear institutional responsibilities as major barriers. Even in more mature contexts, such as Romania, the absence of harmonised procedures discourages replication. In emerging contexts, administrative complexity creates psychological and practical deterrence for initiators.

While the Gateway cannot directly reform national administrative systems, it can significantly reduce perceived complexity. This can be achieved through procedural mapping, downloadable templates, identification of responsible authorities, indicative timelines, and guidance on grid connection requirements. The integration of a digital one-stop-shop logic—where users can follow a clear procedural pathway—would substantially enhance usability and implementation capacity.

A further structural principle concerns social inclusion. The assessment confirms that vulnerable consumers are recognised as relevant stakeholders in all countries. However, inclusion mechanisms remain underdeveloped, and current financing models often favour actors with capital and technical capacity. In Bulgaria, crowdfunding-based models exclude low-income households. In Romania and Cyprus, digital exclusion and legal complexity create additional barriers. In Ukraine, social inclusion is strongly linked to energy security and recovery considerations. In North Macedonia, awareness among end-users remains limited.

The Gateway must therefore integrate dedicated modules addressing vulnerable consumers. This includes simplified participation explanations, targeted subsidy information, inclusive business model examples, and communication materials adapted for non-technical audiences. Social inclusion should not be treated as a secondary feature but as a structural dimension of energy community development.

Finally, the Gateway should function as a trust-building and ecosystem activation instrument. The consultations demonstrate high willingness among stakeholders to engage in workshops, testing activities, and knowledge exchange. The inclusion of interactive maps, case study databases, and community directories can enhance transparency and replication. In countries without formal registries, such as Bulgaria, this function becomes particularly valuable. By visualising existing initiatives, the Gateway can normalise the concept of citizen energy and reduce perceived risk.

Legal Clarity as a Foundational Layer

Across all five assessed countries, legal uncertainty emerges either as the primary structural barrier or as a decisive enabling factor for the development of energy communities. Even where transposition of the Renewable Energy Directive (RED II/III)

has formally occurred, stakeholders consistently report gaps between legislative text and practical implementation. This gap creates regulatory hesitation, discourages municipal leadership, and significantly increases perceived investment risks.

For this reason, the legal module of the National Gateway must function as a foundational layer rather than a supplementary information resource. Its role is not limited to reproducing legal texts, instead, it must translate national legislation into operational, user-oriented guidance. This includes clear explanations of licensing requirements, taxation rules, market participation conditions, grid access rights, and energy sharing mechanisms.

Importantly, the Gateway should provide model statutes, governance templates, shareholder agreements, and contractual examples that can be directly adapted by municipalities, citizen groups, or cooperatives. Such templates significantly reduce transaction costs and prevent inconsistent legal interpretations across regions.

Furthermore, the Gateway must clarify the formal and practical roles of municipalities. In several countries, local authorities remain uncertain whether they may initiate, co-own, or financially support energy communities. Clear guidance is essential to unlock municipal participation, which is particularly relevant in decentralised energy systems contexts.

Legal content must be regularly updated to reflect secondary legislation, regulatory decisions, and court interpretations. Additionally, where national frameworks differentiate between electricity and heating communities (notably in Bulgaria), the Gateway must clearly distinguish between these models to avoid regulatory confusion.

Therefore, the legal section of the Gateway must:

- Translate national legislation into operational guidance
- Clarify licensing, taxation, market access, and energy sharing rules
- Provide model statutes, governance templates, and contractual examples
- Explain roles of municipalities and protection mechanisms for vulnerable consumers

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Financial de-risking navigation

High upfront capital costs are the most frequently cited barrier across all national contexts. Even where the regulatory framework is relatively clear, limited access to affordable financing significantly constrains implementation. This is particularly pronounced in emerging or economically constrained contexts, where commercial banks perceive community energy projects as high-risk.

The National Gateway must therefore serve as a financial de-risking instrument. This requires the establishment of a structured, searchable database of funding opportunities at both national and EU levels. Such a database should not merely list instruments but include explanatory notes on eligibility criteria, application procedures, co-financing requirements, and timelines.

To address capacity gaps, especially at the municipal level, the Gateway should provide standardised templates for funding applications, financial projections, and business plans. These tools can substantially increase the bankability of projects and reduce rejection rates.

Additionally, the Gateway should include guidance on blended finance models, demonstrating how grants, loans, guarantees, and private investment can be combined. In countries with limited domestic financial instruments, navigation of EU-level mechanisms becomes particularly critical.

A dedicated subsection must address financing models for vulnerable households. Without tailored financial solutions, such as collective ownership models, revolving funds, or social tariffs, energy communities risk reinforcing existing inequalities rather than alleviating energy poverty.

The financial module should be dynamic and searchable, allowing users to filter instruments by project size, technology type, beneficiary profile (municipality, cooperative, SME), and geographical scope.

The Gateway must therefore include:

- A structured financial options database (national and EU-level instruments)
- Explanatory notes on eligibility and application procedures
- Templates for funding applications (especially for municipalities)
- Guidance on combining grants, loans, and guarantees
- Specific sections on financing models for vulnerable households

Administrative simplification and one-stop-shop logic

Stakeholders across all five countries express strong support for a one-stop-shop approach. Even where institutional one-stop-shops are not formally established, the National Gateway should digitally simulate this function by integrating administrative procedures into a coherent and navigable structure.

The administrative module should map procedural steps chronologically from initial concept to project commissioning. It should identify responsible authorities at each stage, specify required documentation, clarify deadlines, and explain compliance obligations.

Clear guidance on grid connection procedures is especially important, as delays and unclear requirements frequently stall projects. Reporting obligations, metering rules, and post-installation compliance requirements must also be transparently presented.

This function is particularly relevant in North Macedonia, Romania, Ukraine, and Cyprus, where administrative fragmentation and overlapping competencies create additional burdens for project initiators. By structuring procedures into an accessible sequence, the Gateway reduces bureaucratic uncertainty and lowers non-financial barriers to entry.

The Gateway must therefore include:

- Mapping administrative steps chronologically
- Identifying responsible authorities
- Providing checklists and document templates
- Clarifying grid connection procedures
- Explaining reporting and compliance requirements

Technical and grid integration support

Technical bottlenecks, especially related to grid connection capacity, system sizing, and flexibility solutions, constitute recurrent challenges across all national contexts. Even well-designed projects may fail at the implementation stage due to inadequate technical preparation or unclear technical standards.

The Gateway should therefore provide accessible explanations of standardised technical requirements, grid connection procedures, and minimum compliance standards. Where possible, simplified pre-feasibility tools or calculators can support early-stage project design, particularly for municipalities or citizen-led initiatives lacking engineering expertise.

Given the increasing importance of storage and flexibility solutions, the Gateway should include guidance on battery integration, demand response options, and digital management systems. References to certified software tools and energy management platforms can enhance technical robustness.

In countries where heating energy communities face distinct technical barriers the Gateway must incorporate dedicated sections addressing thermal system design, district heating integration, and heat storage technologies.

By strengthening technical preparedness at early stages, the Gateway reduces project failure rates and improves long-term system integration.

The Gateway should therefore include:

- Standardised technical requirement explanations
- Grid connection procedure guidance
- References to digital management tools
- Storage integration guidance

Social inclusion and vulnerable consumers

Inclusion challenges are consistently highlighted across all countries. Without deliberate design, energy communities may unintentionally exclude low-income households due to upfront capital requirements, complex governance structures, or limited information accessibility.

The Gateway must therefore embed inclusion as a cross-cutting principle rather than treating it as a secondary module. Simplified legal participation models for low-income members, clear information on targeted subsidies, and accessible-language materials are essential.

Furthermore, the Gateway should provide guidance on intermediary support structures, such as municipal facilitators or NGOs, which can assist vulnerable households in navigating administrative and financial processes.

Dedicated sections addressing vulnerable consumers must clarify protection mechanisms, potential social tariff models, and collective participation schemes that reduce individual financial exposure.

Integrating inclusion tools across legal, financial, and governance sections ensures that social objectives remain structurally embedded in the development of energy communities.

The Gateway must incorporate:

- Simplified legal models for low-income participation
- Targeted subsidy information
- Awareness materials in accessible language
- Intermediary support guidance

Contextualised case studies

Stakeholders repeatedly emphasise the need for national and local case studies rather than generic European examples. While EU-level best practices provide inspiration, demonstration effects are strongest when projects are embedded in familiar regulatory, economic, and social contexts.

The National Gateway should therefore prioritise country-specific success stories, municipal pilot projects, and citizen-led initiatives. Where possible, these case studies should include transparent economic data such as investment volumes, payback periods, cost savings, and social benefits.

Such contextualised examples are especially critical in Ukraine and North Macedonia, where trust-building and practical demonstration are essential for scaling community energy initiatives. Demonstration projects help shift perception from theoretical feasibility to tangible opportunity.

Beyond inspiration, case studies serve a pedagogical function: they illustrate governance structures, financial arrangements, technical configurations, and stakeholder coordination models that can be replicated or adapted.

The Gateway must prioritise:

- Country-specific success stories
- Municipal pilot examples
- Citizen-led initiatives
- Transparent economic data where possible

Taken together, these functional domains demonstrate that a National Gateway must operate as an integrated governance infrastructure rather than a static information portal. Its effectiveness depends on the coherence between legal clarity, financial

navigation, administrative simplification, technical guidance, and social inclusion mechanisms.

By structuring these components systematically, the Gateway can reduce systemic barriers, improve investment confidence, and accelerate the deployment of energy communities across diverse national contexts.

5.2 Country-Specific Adaptation Priorities

While the core architecture of the Gateway should remain harmonised across countries, functional emphasis must reflect national realities.

North Macedonia

In North Macedonia, the primary challenge lies in foundational ecosystem development. The regulatory and institutional environment for energy communities remains relatively nascent, and stakeholder awareness is still limited. As a result, the Gateway must prioritise awareness-building and basic system structuring.

A comprehensive legal clarification module is essential. This includes not only explanation of existing legislation but also procedural roadmaps that guide potential initiators step by step through registration, licensing, and operational requirements. Given the limited practical experience with energy communities, simplified visual roadmaps and explanatory materials will be critical.

Financial instrument navigation must also be strongly emphasised. Access to financing is constrained, and potential initiators often lack familiarity with EU-level instruments or blended finance options. The Gateway should therefore provide detailed explanations of funding opportunities and offer introductory-level financial planning tools.

Capacity-building materials should be structured progressively starting from basic conceptual explanations and gradually advancing toward governance, technical design, and financial modelling.

Furthermore, the inclusion of local case studies is particularly important in this context. Demonstration effects are necessary to build trust and counter scepticism. Concrete examples from municipalities or citizen initiatives can significantly increase confidence and uptake.

In summary, in North Macedonia the Gateway should combine awareness-building with practical legal and financial orientation, functioning as an ecosystem catalyst.

Adaptation priorities:

- Comprehensive legal clarification and procedural roadmaps
- Strong financial instrument navigation
- Introductory capacity-building materials
- Local case studies to build trust
- Clear administrative step-by-step guidance

Romania

Romania presents a different scenario: the legislative framework is evolving and partially established, yet operationalisation remains incomplete. The central challenge is not absence of legislation but the gap between regulatory provisions and practical implementation.

The Gateway must therefore focus on detailed explanation of energy sharing mechanisms, including allocation models, settlement procedures, and metering requirements. Many stakeholders report uncertainty regarding how energy can be shared within communities under current rules.

Governance templates and settlement models are particularly important. Standardised internal rules, profit allocation models, and compliance checklists can reduce legal ambiguity and administrative hesitation.

Given increasing regulatory scrutiny, tools for compliance and reporting should be clearly structured. These may include templates for regulatory reporting, data submission guidelines, and documentation requirements.

Financing diversification is another priority. Romania requires guidance not only on standard renewable installations but also on integrating storage solutions and pilot-scale innovation projects. The Gateway should therefore include information on diversified funding streams and support for more complex project configurations.

Finally, structured stakeholder dialogue mechanisms such as consultation platforms or periodic feedback loops can improve coordination between regulators, municipalities, and citizen groups. In Romania, the Gateway should operate as a bridge between legislation and implementation, translating evolving legal provisions into operational clarity.

Adaptation priorities:

- Detailed explanation of energy sharing mechanisms
- Governance and settlement templates
- Tools for compliance and reporting
- Financing diversification guidance (including storage and pilot funding)
- Structured stakeholder dialogue mechanisms

Bulgaria

In Bulgaria, structural imbalances are particularly visible in the heating sector. While electricity-focused community models receive increasing attention, thermal energy communities face regulatory fragmentation and tariff-related uncertainties.

The Gateway must therefore include a dedicated section addressing heating communities. This should clarify licensing requirements, tariff implications, and technical standards specific to district heating or decentralised thermal systems.

Given the absence or limited functionality of formal registries, the Gateway may need to partially compensate by providing interim digital registry-like features, for example, voluntary listing mechanisms or tracking tools that increase transparency.

Clarification of tariff structures and licensing obligations is critical to reduce investor hesitation. Without clear understanding of cost implications, many potential initiatives remain inactive.

Financial instrument navigation is equally important, particularly in light of limited targeted support for community models.

Additionally, Bulgaria requires specific tools for micro-enterprises and non-household participants, as many potential energy communities involve small businesses rather than purely residential actors.

In this context, the Gateway plays a partially compensatory role, addressing gaps in institutional infrastructure while improving clarity in structurally complex sectors.

Adaptation priorities:

- Dedicated heating community guidance
- Clarification of tariff and licensing implications
- Interim digital registry functionality
- Financial instrument navigation
- Tools for micro-enterprises and non-household participants

Ukraine

Ukraine demonstrates strong political commitment to decentralised energy development. However, operational clarity remains insufficient, particularly under conditions of war and energy system vulnerability.

Clear legal definitions and explicit clarification of municipal roles are essential. While strategic documents support community energy, municipalities often lack precise understanding of their formal competences and permissible participation models.

Funding templates and financing roadmaps tailored specifically for local authorities are a priority. Given Ukraine's reconstruction context, municipalities require practical tools to integrate community energy into broader green recovery planning.

Grid connection simplification guidance is particularly relevant, as infrastructure damage and capacity constraints create additional procedural complexity. Clear instructions and standardised documentation can significantly reduce delays.

Crisis-resilient and modular project models should also be incorporated. Distributed generation, hybrid systems, and storage solutions aligned with energy security priorities are especially relevant in Ukraine's context.

Finally, Ukrainian case studies and citizen engagement examples are crucial to demonstrate feasibility under crisis conditions. The Gateway should function as an implementation accelerator, aligning energy community development with national energy security and green reconstruction strategies.

Adaptation priorities:

- Clear legal definitions and municipal role clarification
- Funding templates and financing roadmaps for local authorities
- Grid connection simplification guidance
- Crisis-resilient and modular project models
- Ukrainian case studies and citizen engagement examples

Cyprus

In Cyprus, the development of energy communities is not primarily constrained by the absence of legislation, but rather by procedural complexity, fragmented administrative communication, and financial risk perception and lack of financial support. Although legal provisions enabling citizen and community participation in renewable energy projects formally exist, stakeholders frequently report that regulatory texts remain difficult to interpret in practical terms. This creates hesitation among municipalities, citizen groups, and small enterprises, who may lack the technical or legal expertise required to navigate administrative procedures with confidence.

Therefore, the National Gateway in Cyprus must prioritise procedural simplification and financial de-risking as its central functional pillars.

First, simplified legal guidance is essential. Rather than merely summarising legal acts, the Gateway should translate regulatory provisions into accessible, user-oriented explanations. Legal content should clearly define eligibility criteria, participation models, governance requirements, and compliance obligations. Importantly, the language should avoid overly technical terminology and instead provide practical examples illustrating how different actors can participate in an energy community. Flowcharts, decision trees, and frequently asked questions can significantly enhance clarity. In addition, the Gateway could substantially reduce procedural uncertainty by providing practical templates and ready-to-use documents. These may include model statutes for establishing an energy community, business plan templates, governance structure outlines, draft internal regulations, and simplified financial planning tools. The availability of such standardised templates would lower entry barriers for municipalities, citizen groups, and small enterprises by limiting the need for expensive external consultancy and increasing confidence in compliance with national requirements.

Procedural guidance must be structured in a linear and user-friendly format to reduce administrative fatigue. Stakeholders often describe the process as fragmented, requiring interaction with multiple authorities. The Gateway should therefore map administrative steps chronologically from initial concept development to licensing, grid connection, commissioning, and reporting. For each step, responsible institutions,

required documentation, expected timelines, and applicable fees should be clearly identified. By simulating a digital one-stop-shop, the Gateway can reduce uncertainty even if institutional procedures remain formally decentralised.

Financial de-risking constitutes the second major priority. Cyprus has relatively high solar potential, yet investor caution persists due to perceived regulatory and market uncertainties. The Gateway should therefore provide detailed explanations of available financial instruments at national and EU levels, including grants, concessional loans, guarantee schemes, and co-financing mechanisms. Clear guidance on how risk-sharing models operate, particularly for collective investments, can reduce perceived exposure and increase participation.

Dedicated sections should explain how different actors can structure financing: for example, how municipalities can combine public funds with EU support, how citizen cooperatives can access credit, or how mixed-ownership models can distribute financial risk. Transparent presentation of eligibility criteria, evaluation procedures, and application timelines will improve predictability and confidence.

Clear grid and procedural guidance is also critical. Technical bottlenecks, including grid capacity limitations and connection timelines, can significantly delay projects. The Gateway should therefore provide accessible explanations of grid connection requirements, capacity allocation procedures, metering arrangements, and potential constraints. Where possible, indicative timelines and standardised documentation templates should be provided to reduce procedural ambiguity.

In summary, in the Cypriot context, the National Gateway should prioritise operational clarity, administrative simplification, and financial de-risking. Rather than focusing primarily on ecosystem creation or legislative reform, its central role should be to reduce complexity, increase transparency, and enhance social accessibility, thereby transforming formal legal possibility into practical implementation capacity.

Adaptation priorities:

- Simplified legal guidance
- Financial instrument explanation and risk-sharing models
- Clear grid and procedural guidance
- Inclusion-oriented awareness materials

Strategic conclusion

The comparative analysis demonstrates a clear relationship between identified barriers and required Gateway functionalities. The table below synthesises how stakeholder needs translate into operational design requirements.

Barrier identified	Required Gateway function	Expected outcome
Legal uncertainty	Structured legal Q&A, model statutes, governance templates, regularly updated interpretations	Reduced hesitation and increased project initiation
High upfront costs	Financial instrument database, funding templates, blended financing guidance, risk-sharing explanations	Improved financial feasibility and access to capital
Administrative complexity	Step-by-step procedural roadmap, checklist generator, authority mapping, one-stop-shop simulation	Reduced project development timelines
Grid connection bottlenecks	Technical requirement guides, grid connection explanation tools, storage integration guidance	Increased technical readiness
Limited inclusion of vulnerable consumers	Dedicated inclusion section, simplified legal models, targeted subsidy guidance	Broader and socially equitable participation
Lack of trust and visibility	National case studies, pilot examples, transparent economic data	Increased confidence and replication potential

This synthesis confirms that the Gateway must function as a structured implementation support system rather than a passive information repository.

Across all consultations, the relative ranking of barriers (aggregated qualitatively) is as follows:

- Legal and regulatory operationalisation gaps
- Financial de-risking and upfront capital constraints
- Administrative and grid-related procedural delays
- Social inclusion and participation barriers
- Technical system design and flexibility integration

This ranking highlights that the primary bottlenecks are institutional and financial rather than technological. The Gateway's design must therefore prioritise governance clarity and financial navigation before advanced technical tools.

The comparative analysis confirms that while legal clarity, financial de-risking, and administrative simplification are universal priorities, the depth and nature of required support differ substantially across countries.

The National Gateway blueprint must therefore combine:

- A harmonised structural framework

- Modular functional components
- Context-specific prioritisation
- Continuous legal and financial updating mechanisms

If implemented with adaptive flexibility, National Gateways can function not merely as information portals, but as enabling infrastructure for scaling inclusive and resilient energy communities across diverse regulatory and socio-economic environments.

Recommendations

The comparative assessment across North Macedonia, Romania, Bulgaria, Ukraine, and Cyprus shows that, despite differences in national ecosystem maturity, the main barriers to energy community deployment are remarkably consistent. Legal uncertainty, high upfront costs, administrative and grid complexity, and insufficient inclusion mechanisms for vulnerable consumers are the core bottlenecks. At the same time, stakeholder consultations reveal strong institutional interest, alignment with EU decarbonisation objectives, and readiness to engage in structured support. This combination creates a critical opportunity for National Energy Community Gateways to function as active governance instruments rather than passive information platforms.

To maximise impact, Gateways should be formally embedded within national energy transition frameworks, with clearly defined responsibilities for content, legal monitoring, financial tracking, and stakeholder feedback. Regular updates aligned with legislative and regulatory changes are essential to maintain relevance. Across all countries, the key challenge is not the absence of legislation but the gap between law and implementation. Therefore, efforts should prioritise clarifying and operationalising existing frameworks, defining energy sharing, governance, and municipal roles, and ensuring alignment between prosumer and collective models. Simplified legal guidance and model documentation can significantly reduce barriers, even before full legislative maturity is achieved.

Financial constraints remain a consistent obstacle. Blended finance schemes combining grants, soft loans, guarantees, and risk-sharing instruments, along with targeted support for municipalities and vulnerable households, are critical to enabling scalable ecosystems. Administrative fragmentation can be addressed through the integration of one-stop-shop logic within Gateways, including standardised procedures, harmonised documentation, indicative timelines, and transparent authority mapping. Vulnerable consumers must be actively included through accessible awareness materials, simplified participation models, targeted subsidies, and alternative support channels, ensuring energy communities do not reinforce inequality.

Technical and grid-related uncertainties, including connection procedures, flexibility, and storage integration, must be addressed through clear standards, pre-feasibility tools, simplified system sizing, and improved coordination with distribution operators. Demonstration projects and case studies play a key role in building trust, highlighting municipal pilots, inclusive participation, and lessons learned to support replication. Finally, a harmonised yet modular European blueprint can define core Gateway functions while allowing national adaptation according to ecosystem maturity, supported by cross-country knowledge exchange and periodic comparative assessments.

Energy communities are increasingly recognised as instruments for energy security, decarbonisation, social inclusion, and local economic development. If properly institutionalised, regularly updated, and aligned with national policy frameworks, National Gateways can transform from information platforms into structural accelerators of citizen-led energy transitions.

Annex I

Stakeholder Needs Assessment Questionnaire – SHAREs+ (Task 4.1)

Purpose: This questionnaire identifies needs, barriers, and support requirements for the development of energy communities. Results will inform stakeholder mapping, National Gateway development, and capacity-building activities to be developed in implementation of the EU-funded project SHAREs+

Estimated completion time: 10–15 minutes.

Section A. Stakeholder Profile

A1. Country:

- ☐ Dropdown list – partner countries

A2. Stakeholder name (if you represent an organization, please draft its name as well): _____

A3. Organisation type:

- ☐ Local / regional authority
- ☐ Energy agency
- ☐ Citizen energy initiative / cooperative
- ☐ NGO / community organisation
- ☐ Service provider (legal / technical / financial)
- ☐ Grid operator / utility
- ☐ Policy maker / regulator
- ☐ Vulnerable consumer / social service representative
- ☐ Other (please specify): _____

A4. Your main role in relation to energy communities:

- ☐ Decision-maker
- ☐ Technical expert
- ☐ Policy / legal expert
- ☐ Community facilitator
- ☐ Service provider
- ☐ End-user / consumer representative

A5. Level of operation:

- ☐ Local
- ☐ Regional
- ☐ National
- ☐ EU / International

A6. Previous involvement in energy community initiatives:

- ☐ None
- ☐ Aware but not involved
- ☐ Indirect involvement
- ☐ Direct involvement
- ☐ Project leader / developer

Section B. Awareness and Experience

B1. How familiar are you with the following concepts? (1 = Not familiar, 5 = Very familiar)

Energy communities: ☐1 ☐2 ☐3 ☐4 ☐5

Collective self-consumption: ☐1 ☐2 ☐3 ☐4 ☐5

Energy sharing: ☐1 ☐2 ☐3 ☐4 ☐5

RES-based thermal energy communities: ☐1 ☐2 ☐3 ☐4 ☐5

Energy communities for vulnerable consumers: ☐1 ☐2 ☐3 ☐4 ☐5

B2. How relevant are energy communities for your work/professional activities? (1–5)

- ☐ ☐1 ☐2 ☐3 ☐4 ☐5

B3. What are your main motivations to engage? (select up to 3)

- ☐ Cost reduction
- ☐ Energy independence
- ☐ Climate and environmental objectives
- ☐ Social inclusion
- ☐ Local economic development
- ☐ Innovation / pilot testing
- ☐ Regulatory compliance
- ☐ Other…..(please specify)

Section C. Legal and Regulatory Needs

C1. To what extent is additional legal clarity and guidance needed? (1 = Not needed, 5 = Critically needed)

- ☐ ☐1 ☐2 ☐3 ☐4 ☐5

C2. In which areas is legal/regulatory support most needed? (select up to 3)

- ☐ Legal definitions and scope
- ☐ Licensing requirements
- ☐ Taxation and fiscal treatment
- ☐ Market access rules
- ☐ Role of municipalities
- ☐ Protection of vulnerable consumers
- ☐ Other…..(please specify)

Section D. Governance and Local Authorities

D1. What type of support from local authorities is most needed?

- ☐ Political support
- ☐ Administrative facilitation
- ☐ Financial instruments
- ☐ Citizen engagement and communication
- ☐ No specific support needed

Section E. Financial Needs

E1. To what extent is additional financial support needed? (1–5)

- ☐ ☐1 ☐2 ☐3 ☐4 ☐5

E2. Which financial instruments are most needed? (select up to 3)

- ☐ Grants

- ☐ Guarantee schemes
- ☐ Soft loans
- ☐ Risk-sharing mechanisms
- ☐ Support for vulnerable households
- ☐ No need of financial instruments
- ☐ I don't know

Section F. Social Aspects and Vulnerable Consumers

F1. Are energy vulnerable households relevant in your work?

- ☐ Yes
- ☐ No

F2. What are the main barriers for vulnerable consumers? (select up to 3)

- ☐ High upfront investment costs
- ☐ Lack of information
- ☐ Legal complexity
- ☐ Lack of trust
- ☐ Digital exclusion
- ☐ Limited access to subsidies
- ☐ Other…..(please specify)

F3. Which support mechanisms are most needed?

- ☐ Simplified legal models
- ☐ Dedicated business models
- ☐ Subsidies or guarantees
- ☐ Intermediary organisations
- ☐ Targeted awareness campaigns
- ☐ Other…..(please specify)

Section G. Technical and Grid-related Needs

G1. To what extent are simplified grid connection procedures needed? (1–5)

- ☐ ☐1 ☐2 ☐3 ☐4 ☐5

G2. In which technical areas is expert support most needed? (select up to 3)

- ☐ System design
- ☐ Grid connection
- ☐ Flexibility and storage
- ☐ Digital tools and platforms
- ☐ Other…..(please specify)

G3. What type of procedural acceleration would have the greatest impact?

- ☐ Shorter connection timelines
- ☐ Single point of contact
- ☐ Standardised technical requirements
- ☐ Other…..(please specify)

Section H. Administrative Environment

H1. To what extent is a one-stop-shop service needed? (1–5)

- ☐ ☐1 ☐2 ☐3 ☐4 ☐5

H2. Which administrative processes require the most simplification? (select up to 3)

- ☐ Registration procedures
- ☐ Permitting
- ☐ Contracting
- ☐ Reporting and compliance

Section I. National Gateway Expectations

I1. Are you aware of an existing National Energy Community Gateway?

- ☐ Yes, I am a user
- ☐ Yes, aware but not a user
- ☐ No

I2. How useful would the following Gateway features be? (1 = Not useful, 5 = Very useful)

Legal Q&A catalogue: ☐1 ☐2 ☐3 ☐4 ☐5
Business model tools: ☐1 ☐2 ☐3 ☐4 ☐5
Financial options database: ☐1 ☐2 ☐3 ☐4 ☐5
Decision-support tools: ☐1 ☐2 ☐3 ☐4 ☐5
Training materials: ☐1 ☐2 ☐3 ☐4 ☐5
Case studies: ☐1 ☐2 ☐3 ☐4 ☐5
Dedicated section for vulnerable consumers: ☐1 ☐2 ☐3 ☐4 ☐5

I3. What features or content are currently missing? _____

Section J. Priorities and Engagement

J1. Please rank the three most critical needs for energy community development in your country:

1. _____
2. _____
3. _____

J2. Which three support tools should be prioritised in the National Gateway?

1. _____
2. _____
3. _____

J3. Would you be willing to engage further? (select all that apply)

- ☐ Participate in workshops
- ☐ Test the National Gateway
- ☐ Contribute expertise
- ☐ Join the National Citizen Energy Forum
- ☐ No further engagement

Section K. Open Feedback

Please share examples, comments, or suggestions related to barriers and/or support tools for the development of energy communities: _____

Annex II

Stakeholder Needs Assessment - North Macedonia (Aggregated Results)

Category	Key Insights / Aggregated Summary
Country	North Macedonia
Stakeholder Types	Electricity company, NGO/community organisation, local/regional authority, citizen with PV installation, consumer
Roles in Energy Communities	Technical experts (2), Community facilitator (1), End-user/consumer representatives (2)
Level of Operation	National (3), Local (2)
Previous Involvement	Aware but not involved (2), Indirect involvement (1), None (2)
Familiarity with Concepts (1-5)	Energy communities: 3.0; Collective self-consumption: 2.4; Energy sharing: 2.8; RES-based thermal energy communities: 2.0; Communities for vulnerable consumers: 2.0
Relevance for Work (1-5)	Average: 2.2 (Low to moderate relevance)
Main Motivations to Engage	Cost reduction, Energy independence, Innovation/pilot testing, Social inclusion, Local economic development, Climate/environmental objectives
Need for Legal Clarity (1-5)	Average: 3.8 (Moderate to high need)
Key Legal/Regulatory Needs	Legal definitions & scope, Licensing, Market access, Taxation/fiscal treatment
Support from Local Authorities	Administrative facilitation, Political support, Financial instruments
Financial Support Need (1-5)	Average: 4.2 (High need)
Most Needed Financial Instruments	Grants, Guarantee schemes, Soft loans, Risk-sharing, Support for vulnerable households
Relevance of Vulnerable Households	Yes (3), No (2)
Main Barriers for Vulnerable Consumers	High upfront costs, Lack of information, Legal complexity, Digital exclusion, Lack of trust

Category	Key Insights / Aggregated Summary
Needed Support Mechanisms	Simplified legal models, Awareness campaigns, Subsidies/guarantees, Dedicated business models
Need for Simplified Grid Connection (1-5)	Average: 4.0
Technical Support Needs	System design, Grid connection, Digital tools/platforms, Flexibility and storage
Procedural Acceleration Needed	Shorter timelines, Single point of contact
Need for One-Stop-Shop (1-5)	Average: 4.0
Administrative Processes to Simplify	Permitting, Registration, Contracting, Reporting/compliance
Awareness of National Energy Community Gateway	Yes (1), No (4)
Usefulness of Gateway Features (1-5)	Legal Q&A: 3.8; Business models: 4.2; Financial options: 4.6; Decision-support tools: 4.0; Training materials: 4.0; Case studies: 4.2; Dedicated section for vulnerable: 3.8
Missing Features / Content	Local examples, motivational case studies;
Top 3 Critical Needs for EC Development	1. Legal help/clarity; 2. Project design/implementation; 3. Awareness/public engagement
Priority Tools in National Gateway	Business model tools, Financial options database, Training/support, Legal guidance, Procedure management, Funding models
Willingness to Engage Further	Participate in workshops, Test Gateway, Join forums, Involvement of experts

Annex III

Stakeholder Needs Assessment – Romania (Aggregated Results)

Category	Key Insights / Aggregated Summary
Country	Romania
Stakeholder Types	Citizen energy initiatives / cooperatives, Grid operators/utilities, Local/regional authorities, NGOs/community organisations, Private entities
Roles in Energy Communities	Community facilitators (4), Technical experts (3), Policy/legal/decision-makers (2), End-user/consumer representatives (2)
Level of Operation	National (3), Regional (4), Local (5)
Previous Involvement	Direct involvement (6), Indirect involvement (3), No involvement / aware but not involved (3)
Familiarity with Concepts (1-5)	Energy communities: 4.0; Collective self-consumption: 3.3; Energy sharing: 3.4; RES-based thermal communities: 2.7; Communities for vulnerable consumers: 3.6
Relevance for Work (1-5)	Average: 4.3 (Moderate to high relevance)
Main Motivations to Engage	Cost reduction, Energy independence, Climate/environmental goals, Local economic development, Social inclusion, Innovation/pilot testing
Need for Legal Clarity (1-5)	Average: 4.8 (High need)
Key Legal/Regulatory Needs	Legal definitions & scope, Licensing, Market access, Taxation/fiscal treatment, Vulnerable consumer protection, Municipal role clarity
Support from Local Authorities	Administrative facilitation, Citizen engagement, Political support, Financial instruments
Financial Support Need (1-5)	Average: 4.6 (High need)
Most Needed Financial Instruments	Grants, Soft loans, Guarantees, Risk-sharing mechanisms, Support for vulnerable households
Relevance of Vulnerable Households	Yes (7), No (4)

Category	Key Insights / Aggregated Summary
Main Barriers for Vulnerable Consumers	High upfront investment, Lack of information, Legal complexity, Lack of trust, Digital exclusion
Needed Support Mechanisms	Simplified governance/legal models, Dedicated business models, Subsidies/financial support, Targeted awareness campaigns
Need for Simplified Grid Connection (1-5)	Average: 4.5 (Moderate to high relevance)
Technical Support Needs	System design, Grid connection, Digital tools/platforms, Flexibility and storage
Procedural Acceleration Needed	Shorter connection timelines, Single point of contact, Standard technical requirements
Need for One-Stop-Shop (1-5)	Average: 4.4 (Moderate to high relevance)
Administrative Processes to Simplify	Permitting, Registration, Contracting, Reporting & compliance
Awareness of National Energy Community Gateway	Yes, aware but not user (3), No (8)
Usefulness of Gateway Features (1-5)	Legal Q&A: 4.7; Business models: 4.6; Financial options: 4.9; Decision-support tools: 4.3; Training materials: 4.3; Case studies: 4.8; Dedicated section for vulnerable consumers: 4.6
Missing Features / Content	Support for pilot programs, Feasibility studies, Clear legislation, Funding guidance, Community examples, Digitalization access, Energy community operation rules, Information & training
Top 3 Critical Needs for EC Development	1. Legal support / regulatory clarity; 2. Funding access / public awareness; 3. Technical support / project design
Priority Tools in National Gateway	Business model tools, Financial options database, Training/support, Legal guidance, Procedure management, Funding models
Willingness to Engage Further	Participate in workshops, Test Gateway, Contribute expertise, Join Forums

Annex IV

Stakeholder Needs Assessment – Bulgaria (Aggregated Results)

Category	Key Insights / Aggregated Summary
Country	Bulgaria
Stakeholder Types	NGO / community organisation (Greenpeace), National energy agency (SEDA)
Roles in Energy Communities	Policy/legal experts, Technical experts, Community facilitators
Level of Operation	National (2)
Previous Involvement	Indirect involvement (2) - monitoring, policy analysis, public engagement, expert contributions
Familiarity with Concepts (1-5)	Energy communities: 5; Collective self-consumption: 5; Energy sharing: 5; RES-based thermal communities: 4; Communities for vulnerable consumers: 4
Relevance for Work (1-5)	Average: 4.5 (High relevance for advocacy, policy, monitoring)
Main Motivations to Engage	Energy independence, Climate/environmental objectives, Social inclusion, Innovation/pilot testing, Regulatory compliance
Need for Legal Clarity (1-5)	5 - especially for ECs for heating and vulnerable consumers
Key Legal/Regulatory Needs	Legal definitions & scope, Licensing requirements, Protection of vulnerable consumers, Taxation/fiscal treatment, Market access rules, Updated guidance on amendments to Renewable Energy Act
Support from Local Authorities	Administrative facilitation
Financial Support Need (1-5)	5 - Critically needed; ECs rely on crowdfunding, no targeted public or commercial financial products for ECs, especially vulnerable households
Most Needed Financial Instruments	Soft loans, Risk-sharing mechanisms, Grants, Guarantee schemes, Support for vulnerable households

Category	Key Insights / Aggregated Summary
Relevance of Vulnerable Households	Greenpeace: Yes; SEDA: No
Main Barriers for Vulnerable Consumers	High upfront investment, Legal complexity, Limited access to subsidies, Lack of information
Needed Support Mechanisms	Dedicated business models, Subsidies/guarantees, Targeted awareness campaigns, Practical guidance for micro-enterprises and heating ECs
Need for Simplified Grid Connection (1-5)	5 - High need; administrative and technical bottlenecks exist; regulatory updates now facilitate citizen energy communities and self-consumption groups
Technical Support Needs	System design, Grid connection, Digital tools/platforms, Flexibility and storage
Procedural Acceleration Needed	Single point of contact, Standardised technical requirements
Need for One-Stop-Shop (1-5)	5
Administrative Processes to Simplify	Registration procedures, Permitting, Contracting
Awareness of National Energy Community Gateway	Yes – Greenpeace materials included; SEDA published links on website
Usefulness of Gateway Features (1-5)	Legal Q&A: 5; Business models: 5; Financial options: 5; Decision-support tools: 5; Training: 5; Case studies: 5; Dedicated section for vulnerable consumers: 5
Missing Features / Content	Interactive map of ECs, Updated legal guidance, Registry substitution for ECs, Tools for non-households, Tools for heating ECs, Practical calculators for project evaluation, Guidance for local authorities and municipalities
Top 3 Critical Needs for EC Development	1. Shared expertise for business model implementation; 2. Legal/regulatory amendments for heating ECs; 3. Financial incentives (tariff reliefs, inclusion of vulnerable groups)
Priority Tools in National Gateway	1. Registry or listing of existing ECs; 2. Tools for non-households and heating ECs; 3. Legal procedures and savings calculators; Guidance for vulnerable groups

Category	Key Insights / Aggregated Summary
Willingness to Engage Further	Participate in workshops, Test Gateway, Contribute expertise, Join National Citizen Energy Forum
Additional Feedback / Barriers	Lack of centralized registry, limited financial instruments, insufficient practical guidance for heating ECs and micro-enterprises, restricted access to training and good practice examples, need for simplified procedures and monitoring tools

Annex V

Stakeholder Needs Assessment – Ukraine (Aggregated Results)

Category	Key Insights / Aggregated Summary
Country	Ukraine
Stakeholder Types	Energy agency (2), Local authority (2), NGO (1), Policy maker/regulator (1)
Roles in Energy Communities	Technical / policy experts, Community facilitators, Project leaders / developers
Level of Operation	Local (2), Local/Regional (1), National (3)
Previous Involvement	Direct involvement (agencies, NGOs, pilot projects), Indirect involvement (municipalities)
Familiarity with Concepts (1-5)	Energy communities: 4,5; Collective self-consumption: 4,5; Energy sharing: 4,3; RES-based thermal communities: 3,5; Communities for vulnerable consumers: 4,2
Relevance for Work (1-5)	5 - highly relevant across all stakeholders
Main Motivations to Engage	Energy independence, Climate and environmental objectives, Financial support / cost reduction, Social inclusion, Innovation / pilot testing, Regulatory compliance
Need for Legal Clarity (1-5)	4,8 - critically needed;
Key Legal/Regulatory Needs	Legal definitions (4), Licensing requirements (4), Market access rules (3), Protection of vulnerable consumers (2), Role of municipalities (1), Taxation/fiscal treatment (1)
Support from Local Authorities	Political support (3), Administrative facilitation (4), Financial instruments (2), Citizen engagement & communication (2)
Financial Support Need (1-5)	4,3
Most Needed Financial Instruments	Grants, Soft loans, Guarantee schemes, Support for vulnerable households
Relevance of Vulnerable Households	100% Yes
Main Barriers for Vulnerable Consumers	High upfront costs (4), Lack of information (5), Legal complexity (3), Limited access to subsidies (2), Lack of trust (2)
Needed Support Mechanisms	Simplified legal models (4), Subsidies/guarantees (4), Awareness campaigns (3), Intermediary organisations (2), Dedicated business models (1)

Category	Key Insights / Aggregated Summary
Need for Simplified Grid Connection (1-5)	4,7 - critical across stakeholders
Technical Support Needs	Grid connection, System design, Digital tools / platforms, Flexibility and storage
Procedural Acceleration Needed	Single point of contact, Shorter connection timelines, Standardised technical requirements
Need for One-Stop-Shop (1-5)	4,7 - uniformly critical
Administrative Processes to Simplify	Registration, Permitting, Reporting, Contracting
Usefulness of Gateway Features (1-5)	Legal Q&A: 5; Business models: 4,8; Financial options: 4,8; Decision-support tools: 4,5; Training: 5; Case studies: 4,8; Dedicated section for vulnerable consumers: 4,5
Missing Features / Content	Case studies (especially Ukrainian projects), Step-by-step guides for municipalities, Templates for project funding, Practical tools for technical and social aspects, Youth education programs, Guidance on investments and crisis management
Top 3 Critical Needs for EC Development	1. Legal clarity and regulatory improvement, 2.Financing and investment access, 3. Technical guidance and implementation support
Priority Tools in National Gateway	Legal Q&A, Business models, Financial options, Decision-support tools, Training materials, Case studies, Expert guidance, Funding templates, Crisis management tools
Willingness to Engage Further	Participate in workshops, Contribute expertise, Test Gateway, Join National Citizen Energy Forum
Additional Feedback / Barriers	Importance of considering all community members' interests (including businesses), lack of municipal guidance, need for practical tools/templates, lack of case studies and good practice examples, necessity of simplified procedures and intermediary support

Annex VI

Stakeholder Needs Assessment – Cyprus (Aggregated Results)

Category	Key Insights / Aggregated Summary
Country	Cyprus
Stakeholder Types	Employees of Cyprus Energy Agency (NGO Energy Agency)
Roles in Energy Communities	Technical experts
Previous Involvement	Service provider and supporting of the creation of Enercy Communities in Cyprus
Familiarity with Concepts	Stakeholders are familiar with 4 out of 5 concepts
Main Motivations to Engage	Support of vulnerable consumers, Cost reduction, Energy independence
Need for Legal Clarity/ Key Legal/Regulatory Needs	Legal clarity and guidance are critically needed. Most stakeholders highlighted legal definitions, licensing, taxation/fiscal treatment, market access rules, and protection of vulnerable consumers as key areas.
Financial Support Need (1-5)	Strong demand for financial instruments across all responses. Frequency of financial instruments selected: Grants (4,5) Soft loans (3,75) Risk-sharing mechanisms (3,75) Support for vulnerable households (4,75) Guarantee schemes (2,5) “No need” (1,5)
Main Barriers for Vulnerable Consumers	High initial investment cost (3/4) Legal complexity (3/4) Digital exclusion (4/4) Lack of trust (1/4) Lack of information (1/4)
Needed Support Mechanisms	Simplified legal models (4/4) Subsidies or guarantees (4/4) Intermediary organisations (2/4) Dedicated business models (1/4) Targeted awareness campaigns (1/4)
Technical Support Needs	System design (4/4) Grid connection (3/4)

Category	Key Insights / Aggregated Summary
	Flexibility and storage (3/4)
Need for One-Stop-Shop (1-5)	Average: 4.25
Usefulness of Gateway Features (1-5)	Legal Q&A catalogue: 4.25 Business model tools: 4.0 Financial options database: 3.75 Decision-support tools: 4.25 Training materials: 3.25 Case studies: 3.5 Dedicated section for vulnerable consumers: 4.25
Priority Tools in National Gateway	Grants Simplified legal models Business model tools Financial options database Dedicated support for vulnerable consumers

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