



Empowering
Renewable and
Citizen Energy
Communities

Deliverable D7.2

Policy paper

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Preface

POWER-E-COM Deliverable 7.2, the “Policy paper” informs in brief about the relevant aspects that foster or hinder the emergence of considerably more energy communities in Europe (REC, CEC, and TEC). The countries addressed within this report (Austria, Bulgaria, Germany, Ireland, Slovenia, and Spain) have different frameworks for energy communities (for more information about these, please check the project’s “Landscape analysis report” D2.1) which have different consequences for citizens and local authorities who plan to start a local energy community.



Acronyms

Acronym	Meaning
CEC	Citizen Energy Community
CHP	Combined Heat & Power
CVPP	Community Virtual Power Plants
DSO	Distribution System Operator
EC	Energy Community
EEG	Erneuerbare Energien Gesetz (Energy Transition Law)
EnWG	Energiewirtschaftsgesetz (German Energy Act)
EU	European Union
EV	Electric Vehicle
LEC	Local Energy Community
OSS	One Stop Shop
PPA	Power Purchase Agreement
REC	Renewable Energy Community
RED	Renewable Energy Directive
RES	Renewable Energy Sources
SEC	Sustainable Energy Community
SME	Small & Medium Enterprises
TEC	Thermal Energy Community
VPP	Virtual Power Plant



Executive Summary

This report informs about the current state of existing energy communities (renewable energy communities, citizen energy communities, and thermal energy communities) in the partner countries of the POWER-E-COM project, which are Austria (region Upper Austria), Bulgaria, Germany, Ireland, Slovenia, and Spain. It informs about existing challenges and barriers for energy communities, and identifies immediate needs, but also shows what already works out to foster the set-up of new energy communities. A short assessment as of September 2025 is given per POWER-E-COM partner country.

Austria is a leader in energy community development in the EU, with a robust legal framework, strong training and support services, and a national information platform that facilitates easy entry into the sector. However, continued support for the integration of energy storage, stronger networking between communities, and ongoing policy development are crucial for maintaining Austria's position as a leader in the field. These improvements will help further optimise the operation of RECs, making them even more effective in contributing to Austria's renewable energy goals.

The recommendations for **Bulgaria** focus on simplifying regulatory processes, improving financial access, and ensuring that energy communities are fully integrated into national and EU-wide strategies. By addressing the current barriers and building on existing successes, Bulgaria can foster a vibrant energy community sector that contributes to national energy security, social equity, and sustainability goals.

Germany's energy community framework, while advanced, faces numerous challenges, particularly around regulatory complexity, grid bottlenecks, and financial barriers. By simplifying the legal framework, improving grid infrastructure, and expanding financial support, Germany can foster a more vibrant and scalable energy community sector. Additionally, prioritising municipal involvement and digitalisation will ensure that energy communities are not only sustainable but also resilient in the face of future energy transitions.

Ireland has significant potential to grow its energy community sector, but several barriers need to be addressed, particularly in relation to grid access, legal uncertainty, and financial support. By simplifying the regulatory framework, improving grid access, and providing dedicated financial support for community projects, Ireland can foster a vibrant, decentralised energy future. The adoption of digital tools and innovative financial mechanisms will further enable communities to take an active role in the energy transition.

Slovenia is on the right track with a solid legal foundation and clear administrative procedures for energy communities, but further steps are required to enhance their operational capacity and financial viability. By addressing key barriers like data exchange, energy independence, and the subsidy restrictions, Slovenia can foster a more dynamic and resilient energy community sector. These improvements will contribute to both the national energy transition and the broader European renewable energy objectives.

Spain has the potential to become a leader in energy communities, but several barriers need to be addressed, particularly in terms of administrative complexity, financing, and public awareness. By streamlining the establishment process, providing tailored financial support, and raising public awareness, Spain can accelerate the development of energy communities. Fostering innovation and integrating these communities into national and EU-wide strategies will help secure their place in the future energy landscape.



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1. Austria (region Upper Austria)

1.1. Overview about relevant aspects to foster or hinder new REC/CEC/TEC

Market challenges / Barriers

- Integration of electricity storage systems in RECs.
- Lack of exchange and networking among RECs.
- New legislation under development which will bring changes for RECs.

Immediate needs

- Austria has most probably the best framework conditions for REC/CEC in the European Union. However, there are still barriers that hamper better flexibility solutions and integration of storage.

What works out

- General information on RECs is available and regional contact point (OSS) is established for constant information services.
- Training and information services for existing and new ECs have been established.
- There is a national information platform available (in German: <https://energiegemeinschaften.gv.at/>) where all nine Austrian regions work together to develop common support and information tools.

Policy needs

- Policy adaptations for ECs are already under development in Austria (e.g. a new peer-to-peer model).

Recommendable market/technology side improvements

- Support integration of energy storage systems (regulatory and technical aspects)..
- Support RECs to increase their flexibility and grid-friendliness.
- Establishing networking and exchange among existing ECs.

1.2. Recommendations for Austria

Enhance the Integration of Energy Storage Systems

Action: Develop and implement clear regulatory guidelines and technical standards for integrating energy storage systems within RECs. This could include incentives for investing in storage technologies and reduction of grid tariffs.



Rationale: Energy storage is a crucial component for ensuring the reliability and flexibility of renewable energy communities. By enhancing storage integration, Austria can help RECs better manage intermittent renewable generation and improve energy resilience and grid-friendliness.

Foster Greater Networking and Exchange Among RECs

Action: Facilitate more structured and widespread networking opportunities for RECs across the country. This can include creating platforms for experience-sharing, joint projects, and collaborative initiatives.

Rationale: Fostering stronger connections between communities can lead to a more efficient sharing of knowledge, resources, and best practices, enhancing the overall success and scalability of energy communities in Austria.

Support Ongoing Policy Adaptations

Action: Ensure that policy adaptations under development are implemented in a timely and effective manner, addressing any gaps or barriers to the growth of RECs and Citizen Energy Communities (CECs).

Rationale: Ongoing policy adjustments are essential to keep pace with technological advancements, market changes, and evolving EU regulations. Timely and well-designed adaptations will ensure that Austria's energy communities remain competitive and aligned with broader energy transition goals.

2. Bulgaria

2.1. Overview about relevant aspects to foster or hinder new REC/CEC/TEC

Market challenges / Barriers

- **Regulatory gaps:** The regulatory framework for energy communities remains underdeveloped, particularly regarding virtual net metering, data collection and management, proximity rules, and energy sharing. Current legislation also restricts communities to urban areas, which in practice limits technology deployment to solar power only.
- **Bureaucratic hurdles:** Grid connection procedures are often complex and slow, creating delays and uncertainty for new initiatives.
- **Financing constraints:** Access to tailored financing options is limited. There are no specialised financial products or dedicated public or private incentives designed to support energy communities.
- **Lack of recognition and monitoring:** The absence of a national registry hinders the systematic tracking of energy communities and limits the development of potential benefits such as financial support or facilitated grid access.
- **Low household participation:** Incentives for households are insufficient. Regulated tariffs and low awareness of energy consumption limit consumer motivation to initiate energy communities.
- **Lack of recognition as entrepreneurial initiatives:** Energy communities are not sufficiently acknowledged as drivers of innovation, regional prosperity, and competitiveness. This restricts opportunities to develop sustainable business models, attract investment, achieve equality, and foster local economic growth.

Immediate needs

- **Diversification of community models:** Several pilot energy communities (e.g. in the municipalities of Gabrovo and Burgas) have paved the way for recognition of community energy. These pilots follow a single model in which the local authority acts as initiator by providing the location and main consumption, while members benefit from early dividends. While this model has been replicated and proven feasible, there is now a need to test alternative models that diversify approaches, empower citizens and SMEs, and enable them to act as initiators rather than passive members.
- **Smart infrastructure:** Deployment of smart metering systems and digital platforms is needed to facilitate energy sharing, enhance transparency, and optimize consumption.
- **Technical standards:** Clear and harmonized standards for community system management and balancing are required to ensure interoperability, reliability, and scalability.
- **Access to finance:** Improved access to finance and tailored credit lines is essential to unlock private capital, de-risk projects, and stimulate wider participation.



What works out

- Several pilot energy communities (e.g. in Gabrovo) already prove the model is feasible.
- Strong local engagement and citizen participation, where municipalities take an active role.
- The use of Power Purchase Agreements (PPAs) is recognised as an effective instrument for securing long-term energy sales from surplus community-generated electricity, providing financial stability and predictability for energy communities. EU policies and funds (Horizon, LIFE, Just Transition Fund) provide a solid basis.

Policy needs

- Harmonisation of national legislation with the latest EU directives on energy communities, while also integrating the assessment prepared by the Sustainable Energy Development Agency on the amendments made two years ago.
- Establishment of a national register for energy communities to enable systematic monitoring, formal recognition, and the allocation of targeted benefits.
- Establishment of a national-based “one-stop-shop” for advocacy, consultation and technical assistance. Such entity will lower entry barriers, simplify administrative procedures, and support local actors in developing and managing energy communities.
- Integration of energy communities into national strategies for energy security and energy poverty reduction.

Recommendable market/technology side improvements

- As identified already in “Immediate needs”, the deployment of smart metering systems and digital platforms for energy sharing is highly recommended.
- Furthermore, the development of energy storage solutions (batteries, local storage systems) would be a big improvement for energy balancing, flexibility, and pricing optimization.
- Technical standards for community system management and balancing.
- Feasible and cost-effective software solutions for monitoring energy production, consumption, and flow are critical, as data management often remains one of the most expensive and challenging aspects of establishing energy communities.
- Improved availability of financial products and credit lines adapted to each stage of an energy community’s development.
- Expert consulting services needed to guide energy communities on tax compliance, financial management, and profit-and-loss accounting.

Remarks

- Bulgaria has strong potential for scaling the model for energy communities and expanding renewable energy deployment, but regulatory and administrative barriers are the main bottleneck.
- The pioneering examples show that with the right expert support, real social and environmental benefits can be achieved. With expert guidance in technical, financial, and legal areas, these communities can become models of sustainable local development and innovation.
- Equal access to participation, especially for vulnerable groups, must be ensured.



2.2. Recommendations for Bulgaria

Establish a Clear Regulatory Framework for Energy Communities

Action: Develop and implement comprehensive regulations for energy communities, including clear guidelines for virtual net metering, energy sharing models, data collection and monitoring, and system management. Ensure alignment with the latest EU directives (e.g., RED III) and integrate lessons from national assessments and pilot initiatives.

Rationale: The absence of a regulatory framework is a major barrier. Without clear rules, communities face operational uncertainty, limited access to financial incentives, and restricted participation. A harmonized framework will provide legal certainty, enable innovative business models, facilitate grid integration, and encourage citizen and SME engagement.

Streamline Connection Procedures

Action: Simplify and accelerate grid connection process for energy communities by introducing standardised procedures, fast-track approvals, and reduced administrative burdens.

Rationale: Slow and complex connection procedures hinder the development of energy communities, causing delays and uncertainty. Clear, streamlined pathways will facilitate faster deployment, lower costs, and increase participation, enabling communities to contribute more effectively to local energy generation and flexibility.

Provide Financial Support and Access to Green Finance

Action: Facilitate access to financing for citizen-led communities through green finance programmes, low-interest loans, and credit lines. Complement this with advisory services to support financial planning and compliance.

Rationale: Establishing an energy community involves complex, multi-step processes, including permissions, taxes, feasibility studies, and administrative tasks, which significantly increase upfront costs beyond the technology itself. Tailored financing mechanisms and advisory support are essential to help smaller, grassroots projects overcome these barriers.

Incentivise Participation of Households and SMEs

Action: Introduce specific incentives (e.g., tax relief, subsidies, or lower grid fees) for households and SMEs to encourage their participation in energy communities.

Rationale: The lack of incentives is a significant obstacle to engaging end-users. Financial incentives will increase participation, drive market growth, and enhance the overall impact of energy communities.

Support the Scaling of Proven Pilot Models

Action: Facilitate the replication of successful municipal energy community models (such as in Gabrovo) across other Bulgarian municipalities by providing municipal experts with training, guidance, and strong connections to external technical, financial, and legal specialists who can support them throughout the entire process.



Rationale: The municipal model has demonstrated clear feasibility and benefits, but its replication is limited by the lack of ambitious, well-supported municipal champions and insufficient access to expert guidance.

Establish a national-based “One-Stop-Shop” for Energy Community Support

Action: Create a centralised point of contact that offers consultation, technical assistance, and regulatory guidance for energy community projects.

Rationale: Navigating the regulatory and administrative landscape is challenging. A one-stop-shop would simplify the process for local municipalities, SMEs and citizens, reducing delays and promoting faster implementation.

Integrate Energy Communities into National Energy Security and Poverty Reduction Strategies

Action: Incorporate energy communities into national strategies that address energy security, decentralised energy generation, and energy poverty reduction.

Rationale: By including energy communities in broader policy frameworks, Bulgaria can create synergies between climate goals, energy independence, and social equity, ensuring that vulnerable communities benefit from these initiatives. While current national strategies recognize energy communities primarily as tools for accelerating renewable energy adoption, their potential extends to enhancing local resilience, supporting vulnerable populations, and fostering inclusive economic development. Formal integration ensures these benefits are systematically realized across the country.

Encourage Collective Investments and Long-Term Energy Agreements

Action: Introduce policies that support collective investments, such as joint purchasing agreements, and incentivise long-term energy contracts between energy communities and energy suppliers.

Rationale: Collective investments and long-term agreements help reduce upfront costs and enhance financial viability for energy communities. Clear policy support in this area would enable sustainable operations and reduce financial risk.

Develop and Deploy Smart Metering Systems and Digital Platforms

Action: Invest in the rollout of smart metering systems and energy-sharing platforms to enable effective monitoring and sharing of energy among community members.

Rationale: Smart metering is key to the operation of energy communities. It allows for real-time monitoring and accurate billing, ensuring fair distribution of energy. Digital platforms can also enhance transparency and ease of management for community members.

Develop Energy Storage Solutions for Community Resilience

Action: Support the development and deployment of local energy storage solutions, such as batteries, to enhance the stability and resilience of energy communities.

Rationale: Energy storage is critical for managing the intermittent nature of renewable energy. By investing in local storage systems, energy communities can ensure reliable power supply, even when generation fluctuates.



Create Technical Standards for Community System Management and Balancing

Action: Develop and implement clear technical standards for community system management, including energy balancing, grid interaction, and demand response strategies.

Rationale: Establishing uniform technical standards ensures that energy communities can operate efficiently and interact seamlessly with the grid. It also ensures that technical issues, such as balancing, are managed in a cost-effective manner.

Leverage EU Funding and Policy Instruments

Action: Actively leverage available EU funding opportunities (e.g., Horizon, LIFE, Just Transition Fund) to support the development and scaling of energy communities.

Rationale: EU funds provide a strong financial basis for energy communities. Ensuring that Bulgarian energy communities have access to these funding streams will enable them to overcome financial barriers and implement innovative projects.

3. Germany

3.1. Overview about relevant aspects to foster or hinder new REC/CEC/TEC

Market challenges / Barriers

- Lack of RED II–compliant legal framework for electricity sharing; current regulations are overly complex and bureaucratic.
- Contradictory political decisions, e.g., in Solarpaket 1, create uncertainty: Solarpaket 1 introduced simplifications and support schemes, yet complex EnWG rules (tax and regulatory rules) still treat energy communities like commercial suppliers creating uncertainty and slowing citizen-led expansion.
- Major uncertainty following the recent Energy Transition Monitoring Report after which Federal Minister for Economic Affairs Katherina Reiche proposed ten ‘key measures’ which are viewed critically by energy experts.
- Excessive, uncoordinated legislation and lengthy permitting processes (building law, procurement law, multiple authorities involved).
- High initial investment costs and dependence on bank loans, with limited creditworthiness for new entities.
- Grid bottlenecks and uncooperative DSOs hinder connection of new plants.
- Tenant electricity models face annual cancellation rights, complex bureaucracy, and insufficient subsidies to ensure competitiveness.
- Lack of infrastructure and administrative resources at municipal level.
- Slow roll-out of smart meters delays flexibility and integration.
- Legal uncertainty for tenant electricity customer facilities (Kundenanlage) (no definition of house distribution systems, unclear district concepts).

Immediate needs

- Clear, simplified regulatory framework for energy sharing (electricity and heat) and energy communities (Bürgerenergiegesellschaften).
- Independent legal and tax advice for new energy communities.
- Reliable information channels on EEG rules, planning requirements, and roles of stakeholders (municipalities, energy agencies, existing ECs).
- Practical guidance (“toolbox”) on setting up and managing energy communities (digital membership, accounting, web presence) is needed and would be welcome by citizens and authorities.
- Acceleration of the smart meter roll-out.

What works out

- The national Municipal Heat Planning Act opens opportunities for district heating and heat sharing projects.



- Existing feed-in tariffs, citizen energy funding programs, and KfW financing schemes support renewable energy generation.
- Positive examples (“neighbourhood effect”) encourage replication.
- Existing local energy working groups often act as nuclei for community foundations.
- There is a draft law on energy sharing (§ 42c EnWG). This should be pursued further.

Policy needs

- Full transposition of RED II into German law, enabling legal energy sharing via the grid. As of September 2025, the legislative process to enable energy sharing is in progress.
- Reform of the EEG to prioritize renewable energy and better support RECs/CECs.
- Faster expansion of electricity grids and improved cooperation from DSOs.
- Simplification of bureaucratic processes and permitting (streamlined procedures, fewer authorities involved).
- Stronger municipal support, including planning resources and active participation.
- Stable and long-term funding programs; avoid frequent changes.
- Maintain EEG feed-in tariff for surplus electricity.
- Differentiated grid charges for Energy Sharing (reduced/no transmission grid charges).
- Smart meter roll-out: Energy Sharing users to be prioritised as mandatory cases.
- Explicitly allow citizen energy cooperatives and exempt them from certain obligations (e.g. electricity supply obligation).

Recommendable market/technology side improvements

- Develop sector coupling: link electricity generation with EV charging and renewable heat (heat pumps, CHP).
- Encourage digitalisation: smart meters, digital cooperative management tools.
- Strengthen cooperation platforms for ECs to share best practices and mentorship (“sponsorship” models with established cooperatives).
- Increase availability of independent expert advice (legal, financial, technical).

Remarks

- Heat sharing appears more immediately feasible than electricity sharing due to existing legal and technical conditions.
- While framework conditions in Germany are more complex than in Austria or other neighbours, strong political commitment and social will can be leveraged if barriers are reduced.
- Energy Sharing increases acceptance of the energy transition through local participation.
- Tenant electricity is crucial for the urban energy transition and must not be blocked by legal uncertainties.



3.2. Recommendations for Germany

Simplify the Regulatory Framework

Action: Develop a clear, simplified regulatory framework for electricity and heat sharing that aligns with EU directives, specifically RED II. Provide clear guidelines on tenant electricity models, clarifying legal uncertainties surrounding customer facilities and district concepts.

Rationale: The existing framework is complex and bureaucratic, which hinders the establishment and growth of energy communities. Clear regulations will reduce legal uncertainty and encourage participation.

Reform and Streamline Permitting Processes

Action: Reduce bureaucratic complexity by streamlining the permitting processes and minimizing the number of authorities involved. Ensure that municipalities are better supported with planning resources and that energy community projects are prioritised.

Rationale: Lengthy and fragmented permitting processes delay projects and increase administrative burden. Simplifying procedures will accelerate the deployment of energy communities.

Support Energy Communities with Financial Incentives

Action: Maintain and expand feed-in tariffs for surplus electricity generated by energy communities. Introduce differentiated grid charges for energy-sharing schemes to make them financially viable. Ensure that financial support programs for energy communities are stable, long-term, and accessible.

Rationale: Financial barriers and frequent changes in funding undermine the economic viability of energy communities. Stable and targeted financial incentives will increase participation and project sustainability.

Promote Smart Meter Roll-Out and Digital Tools

Action: Prioritise the deployment of smart meters for energy-sharing users, ensuring that they have the necessary infrastructure for grid flexibility and integration. Encourage the development of digital tools for managing energy communities, including membership management, accounting, and web presence tools.

Rationale: Smart meters and digital tools enable real-time monitoring, efficient energy management, and improved integration into the grid, enhancing operational efficiency of energy communities.

Encourage Sector Coupling and Digitalisation

Action: Promote the coupling of electricity generation with other renewable energy sectors, such as EV charging and heat pumps, to enhance overall system efficiency. Invest in digitalisation efforts to support cooperative management and optimise the operations of energy communities.

Rationale: Sector coupling increases system efficiency and flexibility, while digital tools streamline operations and enhance the scalability of energy communities.



Strengthen Municipal Involvement

Action: Provide municipalities with more resources and clear mandates to actively participate in energy community planning and implementation.

Rationale: Municipal support is crucial for overcoming local barriers, coordinating infrastructure, and providing guidance to communities.

Provide Independent Expert Advice

Action: Ensure that energy communities have access to independent, expert legal, financial, and technical advice to navigate the regulatory and operational challenges they face.

Rationale: Expert guidance reduces uncertainty and risk, enabling energy communities to develop and operate effectively.

Ensure Political Stability and Long-Term Support

Action: Ensure political stability and a consistent, long-term commitment to supporting energy communities, avoiding frequent changes to critical regulations.

Rationale: Stability in policy and funding builds investor confidence, encourages participation, and ensures long-term viability of energy community initiatives.

4. Ireland

4.1. Overview about relevant aspects to foster or hinder new REC/CEC/TEC

Market challenges / Barriers

- Grid Access and timeframe for Grid connection is a major challenge (can take up to 9 years).
- Grid connection Costs. Grid costs can range from 0.5million to 2million euros. These up-front costs can impede the commercial viability of Community led RE Projects.
- There is not yet a legal transposition of the EU RED.

Immediate needs

- Accelerate Grid Access for communities to a reasonable timeframe and a remodelling of the 'Grid Connection Cost' architecture is required.
- The Private Wire Legislation, which is currently under review, needs to be pushed forward.
- More tailored financial instruments to help de-risk community led renewable energy initiatives.

What works out

- The 'Sustainable Energy Community' Model (SEC) introduced by SEAI is hugely successful but mainly focuses on Retrofits of existing housing stock and Community Buildings.
- Government backed 'Microgen Support Scheme' has resulted in a huge uptake of Solar PV installs.

Policy needs

- The DSO (ESB Networks) should make grid maps including transformer maps, and other information, publicly available which will allow community projects to understand how their project will interact with other demand and supply on the grid.
- Planning policy should be reviewed and revised to lower the barriers for community energy projects including renewable generation and energy storage.
- Enact legislation explicitly transposing EU Clean Energy Package's requirement for RECs and CECs.

Recommendable market/technology side improvements

- All upgrades to the existing grid infrastructure by the DSO should include a 10% 'ringfenced' capacity allocation for Communities.
- Small- scale Community pilot projects should be encouraged and supported, e.g. Community Virtual Power Plants (CVPP's).
- Tax incentives should be made available for individuals to invest in community led, renewable energy and energy storage projects in their local area.



Remarks

- On 15 July 2025, the government adopted a Strategy Statement on Private Wires. This is a significant reform of the rules on electricity infrastructure¹.
- No legal transposition of EU RED

4.2. Recommendations for Ireland

Accelerate Grid Access and Reform Connection Costs

Action: Reduce grid connection timelines for community projects and implement a reformed, more affordable grid connection cost structure.

Rationale: Long connection times and high costs present major barriers to the development of community energy projects. Reducing these barriers will make projects more financially viable and timely.

Support the Private Wire Legislation

Action: Expedite the review and implementation of the Private Wire Legislation to enable private electricity networks for community energy projects.

Rationale: This legislation is critical for reducing reliance on the grid and allowing communities to manage their energy more independently. Its swift adoption will foster the growth of local energy solutions.

Create Tailored Financial Instruments

Action: Develop financial products, such as low-interest loans or grants, specifically tailored to community-led renewable energy initiatives.

Rationale: Financial barriers, especially for small or citizen-led projects, need to be addressed. Tailored financial instruments will help de-risk these ventures and make them more attractive to investors.

Make Grid Data Publicly Available

Action: Ensure that the DSO (ESB Networks) makes grid maps, transformer data, and other key information publicly accessible to community projects.

Rationale: Transparency in grid data will help community projects plan effectively and ensure that their initiatives integrate smoothly with the existing infrastructure.

Revise Planning Policy

Action: Review and streamline planning regulations for community energy projects to make it easier to deploy renewable generation and energy storage.

¹ <https://www.gov.ie/en/department-of-climate-energy-and-the-environment/publications/private-wires-policy-statement/>



Rationale: Removing bureaucratic hurdles will speed up the development of community energy projects, encouraging more participation and investment.

Enact Legislation for Renewable Energy Communities

Action: Enact the necessary legislation to fully transpose the EU Clean Energy Package into Irish law, enabling the establishment of Renewable Energy Communities (RECs) and Citizen Energy Communities (CECs).

Rationale: This will provide a legal foundation for energy communities to operate within a clear and supportive regulatory framework.

Ringfence Capacity for Community Projects

Action: Ensure that 10% of grid capacity in grid upgrades is reserved (ringfenced) for community-led renewable energy projects.

Rationale: A reserved capacity allocation will give energy communities guaranteed access to the grid, removing uncertainty around grid integration.

Encourage Small-Scale Community Projects

Action: Provide support and incentives for small-scale community energy projects, such as Community Virtual Power Plants (CVPPs), to pilot innovative community-based energy systems.

Rationale: Pilot projects are critical for demonstrating the potential of energy communities and creating replicable models that can be scaled.

Introduce Tax Incentives for Local Investments

Action: Provide tax incentives for individuals to invest in local renewable energy and energy storage projects.

Rationale: Tax incentives will increase private investment, build local support for community projects, and help accelerate the transition to renewable energy.

Support the Adoption of Smart Meters and Digital Tools

Action: Prioritise the roll-out of smart meters and digital tools for community energy management.

Rationale: These tools will facilitate better integration, monitoring, and management of community energy systems, improving their efficiency and flexibility.

5. Slovenia

5.1. Overview about relevant aspects to foster or hinder new REC/CEC/TEC

Market challenges / Barriers

- There is no clear framework for running ECs in the Slovenian electricity market.

Immediate needs

- A data exchange platform for ECs by electricity DSO should be soonest established.

What works out

- The legal framework is set, and the administrative procedures are clear.

Policy needs

- To set the methodology for data exchange to be able to run EC without electricity supply company.

Recommendable market/technology side improvements

- The legislation in Slovenia is not allowing to combine national subsidies for green electricity production and cooperating in EC for electricity. The subsidy scheme is more favourable than cooperating in EC. This self-block should be worked on to overcome it.

Remarks

- As of September 2025, only energy sharing is legally, administratively and data defined.

5.2. Recommendations for Slovenia

Develop a Clear Framework for Energy Communities

Action: Establish a comprehensive legal and regulatory framework for energy communities (including guidelines and methodologies) within the electricity market, ensuring clarity and certainty for potential participants.

Rationale: A clear and specific framework is essential to support energy communities and encourage active participation. Legal clarity will also attract more investments into the sector.

Implement a Data Exchange Platform

Action: Prioritise the establishment of a data exchange platform between energy communities and the DSO, ensuring transparent, secure, and efficient data flows.

Rationale: Efficient data exchange is crucial for operational success, especially for managing the grid, tracking generation, and ensuring fair compensation for energy communities.



Allow Energy Communities to Operate Independently from Traditional Suppliers

Action: Develop and implement a methodology for energy communities to operate independently of electricity suppliers while maintaining grid balance and legal compliance.

Rationale: Allowing energy communities to function without dependency on traditional electricity suppliers would increase their autonomy, efficiency, and sustainability.

Address the Subsidy Self-Blocking Issue

Action: Modify the legislation to allow energy communities to combine national subsidies for green electricity production with their participation in energy community schemes.

Rationale: The current self-block on subsidies limits the financial viability and scalability of energy communities. Removing this restriction will make it easier for energy communities to operate and grow and align with broader renewable energy goals.

Encourage Innovation in Energy Sharing Models

Action: Promote further innovation and pilot programs for energy community models (focus on energy sharing), ensuring that these programs can be scaled up once the regulatory and data exchange platforms are fully established.

Rationale: Innovation in energy communities can lead to more efficient, decentralised, and sustainable energy models, benefiting both local communities and the broader energy system.

6. Spain

6.1. Overview about relevant aspects to foster or hinder new REC/CEC/TEC

Market challenges / Barriers

- The time for constituting energy communities and start producing RES electricity is long.
- Financing support and public subsidies for energy communities are scarce and difficult to manage.
- There is still lack of knowledge about energy communities, their benefits and how to participate in them by the citizens.

Immediate needs

- Clearer and direct public support for energy communities.
- Narratives and communication to the general public on energy community objectives and benefits.
- Remove administrative burdens for energy community constitution and financing.

What works out

- Improved regulation for collective self-consumption which is applicable to energy communities.
- Some case studies show how energy communities have been constituted and operated in real life.
- The role of local authorities and local citizens grouping supporting the setting-up of energy communities.

Policy needs

- Ensure access to the electricity grid and provide with more capabilities to energy communities.
- Specific long-term financial schemes and economic support from public and private sources.
- Exchange of experiences with countries with more advanced policies supporting energy communities.

Recommendable market/technology side improvements

- Distributed renewable energy integration in the grid, including storage, grid flexibility and demand side response mechanisms. Also to develop easy-to-use and low cost (or free) digital platform or platforms to design, operate and manage the energy community and its renewable or energy efficiency projects.
- Innovative business models supporting for energy communities.
- Training to public bodies, citizens and SMEs, and community engagement and education.



Remarks

- Promote and give visibility to local leaders and citizens supporting energy communities.
- Improve or increase offices and services supporting energy communities for their long-term viability.
- Include energy communities as core target in EU, national and local plans.

6.2. Recommendations for Spain

Streamline the Process for Constituting Energy Communities

Action: Simplify and expedite the administrative process for establishing energy communities, including removing bureaucratic barriers related to constitution and financing.

Rationale: Lengthy processes and administrative hurdles delay the development of energy communities. Streamlining these processes will accelerate the rollout of renewable energy projects.

Increase and simplify the process for Public and Private Financial Support

Action: Develop specific, long-term financial schemes to support energy communities, with a focus on accessibility for small and community-led initiatives.

Rationale: Energy communities often face challenges in securing the financing they need. Creating dedicated financial instruments and public-private partnerships will ease the financial barriers and provide stable funding sources.

Improve Public Awareness and Communication

Action: Launch targeted campaigns to raise awareness about energy communities, their benefits, and how citizens can participate. This could include public information drives and clear, accessible resources.

Rationale: Public awareness and understanding are crucial for engaging citizens. Informing the public will increase participation and support for energy community projects.

Ensure Better Grid Access for Energy Communities

Action: Guarantee energy communities better access to the electricity grid, ensuring that they can connect to and integrate with the wider energy network without undue delays or restrictions.

Rationale: Grid access remains a critical barrier for many energy communities. Ensuring that communities can connect with the grid in a timely and cost-effective manner will help unlock their full potential.

Support the Development of Innovative Business Models

Action: Encourage the creation and testing of new business models for energy communities, including virtual power plants (VPPs), energy storage, and facilitate the peer-to-peer energy trading.



Rationale: Innovative business models can unlock new revenue streams for energy communities and ensure their financial sustainability. These models will also increase flexibility and efficiency in energy systems.

Develop and Expand Education and Training Programs

Action: Provide training and capacity-building initiatives for public bodies, SMEs, and citizens to support energy community engagement and participation. Promote education since primary school for community energy.

Rationale: Education and training will empower communities and local authorities to set up and operate successful energy communities, boosting local participation and knowledge.

Facilitate Exchange of Best Practices with frontrunners at EU level

Action: Organise forums, workshops, and exchanges with countries that have more advanced energy community policies to share knowledge and best practices.

Rationale: Learning from countries with more mature policies will help Spain develop a more robust framework and accelerate the growth of its energy communities.

Promote the Role of Local Leaders

Action: Give visibility to local leaders and champions of energy communities, showcasing their successes to inspire others.

Rationale: Local leaders can act as ambassadors for energy communities, helping to build trust, encourage participation, and galvanise public interest.

Increase Support Services for Energy Communities

Action: Expand and enhance local services, including advisory offices and support structures, to ensure the long-term viability of energy communities.

Rationale: Energy communities need ongoing support to navigate technical, legal, and financial challenges. Strengthening support services will ensure that communities thrive in the long term.

Incorporate Energy Communities into National and EU Plans

Action: Ensure that energy communities are included as a key element in national and EU energy transition strategies and action plans.

Rationale: Integrating energy communities into broader energy policy will provide the institutional backing needed for their widespread adoption and integration into national grids.



7. Conclusion

Summarising, the following can be stated as of September 2025:

- **Austria** stands out for its **strong regulatory framework, stable financial support, and effective public engagement**. However, **energy storage integration** remains an area for improvement.
- **Bulgaria** faces the most **regulatory and financial challenges**, but there is potential for growth through **EU-funded pilot projects** and lessons learned from **successful local initiatives**.
- **Germany** offers **advanced financial mechanisms** but faces **complex regulatory challenges** and **grid bottlenecks**, requiring ongoing reform.
- **Ireland** and **Spain** both have **promising models** (like **Sustainable Energy Communities** and the **Microgen Support Scheme**) but **need clearer policies** and **more financial incentives** to scale up energy communities.
- **Slovenia** has made strides with **legal clarity** but needs further development in **grid integration** and **financial support**.

Policy deciders should not stop working on realising the best framework conditions for the citizens, which they represent, to enable the uncomplicated foundation of energy communities. The more energy communities we will see in the EU, the better the attitudes of citizens towards renewable energies will be.