



POLICY GUIDELINES

by the Energy Community Secretariat

on the concepts of energy communities

PG 01/2024 / 12 March 2024



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I INTRODUCTION

Across the European Union (EU), there are over several thousand citizen-led energy initiatives engaging in diverse energy activities, such as electricity and heat generation, microgrid operation, and supply. These initiatives predate the EU's regulation of energy communities in the "Clean Energy for all Europeans" package (CEP).

However, the CEP underscored the significance of citizen and local stakeholder empowerment in energy markets, either through individual efforts or collective organizational activities. The legal frameworks for citizen energy communities (CECs) and renewable energy communities (RECs) were established by the Internal Market for Electricity Directive (EU) 2019/944 (IMED)¹ and Renewable Energy Directive (EU) 2018/2001 (RED II)², respectively. These frameworks were incorporated into the Energy Community legal framework in November 2021.³

Energy communities, established as legal entities, are required to comply with specific participation and governance conditions, adhering to democratic principles while delivering environmental, social, and economic benefits to both members and the broader community, which goes beyond mere profit-making. Despite sharing similar definitions, CECs and RECs display significant distinct features. It is also crucial to distinguish these communities from various self-consumption models, such as renewables self-consumers, jointly acting renewables self-consumers, and active customers, operating individually or collaboratively. In all cases, however, the incorporation of these concepts into the EU's energy legal framework aims to empower citizens, enabling them to actively engage in energy markets and make informed decisions regarding their consumption patterns.

The purpose of these guidelines is to assist national authorities in developing compliant concepts within their jurisdictions by interpreting the definitions of energy communities and the legal framework outlined in the directives. Additionally, the guidelines offer instructions for establishing an effective framework for implementing these concepts, which will unlock the full potential of these communities. They are based on previously published materials that analyze how these concepts are transposed and implemented in Member States, in consultation with relevant stakeholders involved in community establishment.

¹ Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU, Article 16.

² Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources, Article 22.

³ Decisions of the Ministerial Council of the Energy Community No 2021/13/MC-EnC of 30 November 2021 and No 2022/03/MC-EnC of 15 December 2022.

II DEFINITIONS

Article 2 paragraph 11 of IMED defines "**Citizen energy community**" as a legal entity that:

- a) is based on voluntary and open participation, and is effectively controlled by members or shareholders that are natural persons, local authorities, including municipalities, or small enterprises;
- b) has for its primary purpose to provide environmental, economic or social community benefits to its members or shareholders or to the local areas where it operates rather than to generate financial profits;
- c) and may engage in generation, including from renewable sources, distribution, supply, consumption, aggregation, energy storage, energy efficiency services or charging services for electric vehicles or provide other energy services to its members or shareholders.⁴

Article 2 paragraph 8 of IMED defines "**Active customer**" as a final customer, or a group of jointly acting final customers, who consumes or stores electricity generated within its premises located within confined boundaries or, where permitted by a Contracting Party, within other premises, or who sells self-generated electricity or participates in flexibility or energy efficiency schemes, provided that those activities do not constitute its primary commercial or professional activity.⁵

Article 2 paragraph 16 of RED II defines "**Renewable energy community**" as a legal entity:

- a) which, in accordance with the applicable national law, is based on open and voluntary participation, is autonomous, and is effectively controlled by shareholders or members that are located in the proximity of the renewable energy projects that are owned and developed by that legal entity;
- b) the shareholders or members of which are natural persons, SMEs or local authorities, including municipalities;
- c) the primary purpose of which is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits.⁶

Article 2 paragraph 14 of RED II defines "**Renewables self-consumer**" as a final customer operating within its premises located within confined boundaries or, where permitted by a Contracting Party, within other premises, who generates renewable electricity for its own consumption, and who may store or sell self-generated renewable electricity, provided that, for a non-household renewables self-consumer, those activities do not constitute its primary commercial or professional activity.⁷

⁴ See more Article 16, Recitals 43-47 IMED.

⁵ See more Article 15, Recital 37-42 IMED.

⁶ See more Article 22, Recitals 70 – 72 RED II.

⁷ See more Article 21, Recitals 65 – 69 RED II.

Article 2 paragraph 15 of RED II defines "**Jointly acting renewables self-consumers**" as a group of at least two jointly acting renewables self-consumers in accordance with the definition of "renewables self-consumer" who are located in the same building or multi-apartment block.⁸

III WHAT ARE THE ENERGY COMMUNITIES?

The concepts of CECs and RECs are very similar, and they overlap to a certain extent; however, crucial differences exist.

Both types of energy communities must be established as legal entities,⁹ and the organizational forms falling under the term "legal entity" depend on the forms recognized in each country's national legislation. While neither RED II nor IMED prohibits specific forms, IMED explicitly mentions certain examples of legal forms for CECs, including an association, a cooperative, a partnership, a non-profit organization, or a small or medium-sized enterprise.¹⁰ In Member States, collective citizen energy initiatives commonly take the form of cooperatives. Therefore, it is likely that the preferable option for energy communities is to be established in forms that do not prioritize profit generation, such as cooperatives or non-profit associations.

The most important common element of energy communities is their purpose: both types should be established to yield environmental, social, and economic benefits to the community, rather than solely financial profit. Ultimately, both types of communities can engage in various energy activities, including production, sale, supply, and the sharing of electricity from renewable energy sources.

Distinguishing factors between these two concepts encompass organizational aspects such as eligibility for membership, governance structures, the technologies they employ and the scope of activities. Specifically, membership and governance requirements regarding the autonomy of RECs and the involvement of citizens as decision-makers in RECs are more rigorous compared to CECs. RECs will exhibit a more localized dimension, with controlling authority delegated to members in close proximity to installations, whereas CECs will possibly also operate on a national scale, allowing effective control to occur without the necessity for proximity to installations. Additionally, RECs will exclusively utilize technology for energy production from renewable sources, encompassing electricity, gas and heat. In contrast, CECs have the flexibility to employ both fossil-fuel and renewable-based technologies, but solely for electricity production. Additionally, RECs, as predominantly non-professional entities, benefit from a comparatively more developed regulatory framework. Lastly, the range of activities CECs can undertake is broader, including energy distribution, provision of energy efficiency services, and electric vehicle charging.

Entities seeking to attain the status of either RECs or CECs, thereby accessing the benefits outlined in national legislation (such as, for example, shorter procedures, priority grid connections,

⁸ See more Article 21, Recitals 65 – 69 RED II

⁹ This is the main difference between active customers and renewable self-consumers, which do not have to be established in the form of a legal entity.

¹⁰ Recital 44 IMED.

less rigorous requirements for auction participation, financial advantages etc.), must adhere to all criteria and requirements specified in the respective directives. Detailed guidance on these criteria and requirements will be further provided below. Additionally, they are obligated to conform to national regulations applicable to their chosen legal form. Communities are subject to the same rights and responsibilities as other market participants, such as obtaining licenses and registering in the relevant registry as mandated by the law. Nevertheless, as elaborated in Chapter V, both Directives emphasize that communities are subject to proportionate and transparent procedures and charges, including with respect to registration and licensing.

Many existing citizen energy initiatives in Contracting Parties may not align with the legal frameworks outlined in the Directives. For instance, some are established with the primary goal of generating profit through limited liability companies rather than focusing on creating environmental, social, and economic benefits for the community. Therefore, comprehensive guidance and monitoring are essential from the outset of the establishment, to assist citizens and small entities in overcoming challenges associated with meeting all requirements.

To facilitate a better understanding of the transposition and implementation of both types of communities, the following text offers clarification on the requirements that communities have to meet.

Legal form	CECs	RECs
	<p>Both types of energy communities must be established as legal entities.</p> <p>National authorities have the option to define the legal form of a community in two ways within national legislation:</p> <p>I) National legislation may specify that energy communities can be established in any form recognized under national legislation, without mandating a specific legal form. This approach offers flexibility but comes with drawbacks, as certain profit-oriented forms (such as joint-stock companies or limited liability companies) may not align with the community's intended purpose. Additionally, regulating and monitoring numerous diverse legal entities may be complex.</p> <p>II) Alternatively, authorities can choose to restrict the establishment of communities to specific forms more suitable for achieving the community's purpose, such as cooperatives, non-profit associations, partnerships, etc., explicitly excluding commercially oriented forms. Choosing this alternative might mitigate the risk of witnessing the creation of energy communities solely established to exploit the benefits associated with being recognized as energy communities. Greece went one step further and established in the legislation a new type of cooperative specifically for the energy sector.</p> <p>It is crucial that at least one legal form is available to potential founders of communities that allows for incorporating all the essential elements outlined in the definitions of communities.</p>	

<p>Participation</p>	<p>In communities, involvement can take the form of membership or shareholding, contingent upon the type of legal entity underpinning the community.</p> <p>Regardless of the community type, membership in communities should not be subject to unjustified or discriminatory conditions and it should adhere to principles of openness and voluntarism. Individuals and entities entitled to participate should have the opportunity to join (openness) or withdraw (voluntarism) from the community without facing unjustified or discriminatory conditions. If communities opt for a legal structure allowing shareholding, participants are regarded as shareholders, and those wishing to depart the community should have the option to trade or transfer their shares. The establishment of a standard participation fee for all members or the requirement to purchase a specific number of shares does not violate the principles of open participation.</p> <p>Requiring members to maintain their membership for a specified duration could jeopardize voluntary participation. If a community deems this limitation necessary to ensure the success of investment flow or prevent the capital reduction, a reasonable period could be instituted to maintain the balance between interests of the community and members willing to leave.</p>	
	<p>CECs</p>	<p>RECs</p>
	<p>There are no restrictions on participation in CECs; any individual, private or public legal entity, is eligible to become a member of CECs.¹¹</p>	<p>The potential membership in RECs is provided to natural persons, local authorities, including municipalities and SMEs¹², as explicitly mentioned in RED II, with a specific emphasis on accessibility for low-income and vulnerable households.¹³</p> <p>Regarding private enterprises, only those businesses for which participation in the community does not constitute their primary commercial or professional activity are eligible to be members of RECs.¹⁴ This ensures that private entities engaged in existing energy activities do not join RECs to misuse membership for their own commercial interests. Therefore, the establishment of RECs by large entities, energy companies or</p>

¹¹ Recital 44 IMED.

¹² According to Article 2 of the Annex to Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (OJ L 124, 20.5.2003, p. 36) the category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million.

¹³ Article 22(4)(f) RED II.

¹⁴ Article 22(1) RED II

		<p>individuals with direct affiliations to energy companies ought to be ruled out.</p> <p>However, collaboration between energy companies and RECs is permissible, allowing for private agreements such as the provision of specific commercial services or knowledge sharing.</p> <p>Participation in RECs should be open to all potential local members based on objective, transparent, and non-discriminatory criteria.¹⁵ Objective criteria may be linked to the activities and purpose of the community. For instance, if the community's purpose is self-consumption, members may agree to accept new entrants until the installation's capacity is fully utilized by members.</p>				
<p>Effective control</p>	<p>Control implies having the capability to exert decisive influence over a community, including its composition, voting, or decisions, through ownership or contractual rights. Effective control will also depend on the type of legal entity that is chosen. Typically, laws governing cooperatives, corporations, associations, and similar entities outline provisions regarding the exercise of control.</p> <p>As elaborated further below, in the case of CECs, members who are affiliated with large energy companies should not effectively control CECs, while in the case of RECs, members situated in the proximity of the installation should exert control over RECs.</p>	<table border="1"> <thead> <tr> <th data-bbox="943 1308 1268 1352">CECs</th> <th data-bbox="1268 1308 1453 1352">RECs</th> </tr> </thead> <tbody> <tr> <td data-bbox="943 1352 1268 1757"> <p>Effective control within CECs can be exercised by natural persons, local authorities or small enterprises. Those members who are engaged in large-scale commercial activity and for which the energy sector constitutes a primary area should not exercise effective control in CECs.¹⁶</p> </td> <td data-bbox="1268 1352 1453 1757"> <p>Effective control over RECs should be performed by those members who are located in the proximity of the project developed by the community.¹⁷ This way members who are most affected by the installations are empowered to adopt decisions.</p> <p>Moreover, RED II emphasises that RECs should remain <i>autonomous entities</i> from individual members, as well as external partners.</p> </td> </tr> </tbody> </table>	CECs	RECs	<p>Effective control within CECs can be exercised by natural persons, local authorities or small enterprises. Those members who are engaged in large-scale commercial activity and for which the energy sector constitutes a primary area should not exercise effective control in CECs.¹⁶</p>	<p>Effective control over RECs should be performed by those members who are located in the proximity of the project developed by the community.¹⁷ This way members who are most affected by the installations are empowered to adopt decisions.</p> <p>Moreover, RED II emphasises that RECs should remain <i>autonomous entities</i> from individual members, as well as external partners.</p>
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¹⁵ Recital 71 RED II.

¹⁶ Recital 44 IMED.

¹⁷ Article 2(16) RED II.

<p>Location members¹⁸ of</p>	<p>CECs</p> <p>Members of CECs could also be those not located in the proximity of the installations, and the control over the community could be performed by members not located in the proximity of the installations.</p>	<p>RECs</p> <p>Members of RECs could also be those not located in the proximity of the installations; however, RED II requires that members who exercise effective control need to be located <i>in the proximity</i> of the renewable energy projects, including generating and/or storage units of RECs.¹⁹</p>
<p>Purpose</p>	<p>Both types should be established with the aim of generating environmental, social, and economic advantages for the community, rather than focusing solely on financial gains.</p> <p>The utilization of renewable technology by RECs or CECs yields environmental benefits, notably in terms of reducing air pollutants and greenhouse gas emissions. This contributes to fostering energy transition, achieving carbon neutrality, and meeting renewable energy targets. However, it is crucial not to overlook the significance of aligning projects with environmental protection and nature conservation regulations, as well as ensuring public acceptance. Public acceptance can be cultivated by maintaining a high level of transparency and engaging in early and thorough information and consultation with the local community, preferably during the planning stage.</p> <p>Social benefits emerge through the empowerment of local communities to collaboratively develop projects of local significance, enhancing community cohesion and fostering awareness of climate change and energy transition issues. Community activities can address the needs of vulnerable consumers and those facing energy poverty. The development of local energy projects can also foster trust in local political institutions and the system, promoting energy democracy.</p> <p>Economic benefits generated by communities can be allocated to members/shareholders and/or the local community. These benefits may encompass reduced and predictable energy bills, energy savings through the implementation of energy efficiency measures, employment opportunities for local citizens, and economic development at the local level. Economic gains may also include returns on investment or equitable distribution of profit, but only as secondary objectives after pursuing goals that primarily benefit communities. Therefore, the generated profit should primarily be</p>	

¹⁸ The location of members is an important factor in the concept of jointly-acting self-consumers, where consumption occurs within the proximity of generating units, usually within apartments of multi-apartment buildings or blocks. The difference from RECs is that jointly-acting self-consumers are not established as legal entities and relationships among them are regulated through private agreements.

¹⁹ Article 2(16) RED II.

	reinvested in the community's activities, such as new installations, , educational and promotional initiatives, and awareness campaigns, or can be directed to households in need (i.e. for improving energy efficiency of buildings).	
Activities	CECs	RECs
	National legislation shall allow CECs to perform any of the following activities: generation of electricity, consumption, storage, supply/sell, ²⁰ sharing of electricity, ²¹ distribution, aggregation, provision of energy efficiency services, charging services for electric vehicles, other energy services. ²²	National legislation shall allow RECs to perform any of the following activities ²³ : generation of renewable energy, consumption, storage, supply/sell, sharing of energy, distribution, ²⁴ aggregation, ²⁵
Technology and project size	CECs	RECs
	CECs can use any type of technology for electricity generation, including technology for renewable electricity.	RECs can use only technology for renewable energy, including electricity, gas and heat production.
	Directives do not set limitations on the capacity of community projects. However, some Member States have set the limit of the capacity of individual plants to a certain threshold. ²⁶	
Registration and monitoring	Communities are typically mandated to adopt a legal entity structure, necessitating registration in a national business registry for companies or an appropriate registry. This registration may or may not encompass the criteria outlined in the national legislation governing CECs and	

²⁰ Sell of electricity may occur via renewable power purchase agreements, P2P trading or regular supply. If performing supply, communities need to obtain a license.

²¹ See Chapter VII for energy sharing.

²² Even though the provision of energy efficiency, charging and other energy services is listed only for CECs in the IMED, allowing RECs to perform such activities would not be contrary to the purpose of RECs as long as the performance of such services is locally provided and for the benefit of the community.

²³ ²³ RED II lists only these activities. Nevertheless, allowing RECs to perform other activities, such as provision of energy efficiency, charging and other services would not be contrary to the purpose of RECs as long as the performance of such services is locally provided and for the benefit of the community.

²⁴ See Article 22 (4) (b) RED II

²⁵ See Article 22 (4) (e) RED II

²⁶ In Italy, the threshold for individual plants is set at 1 MW, In Portugal - 1 MW in Greece - 1 MW, In Ireland - 5 MW, France - 3 MW, Spain - 100 kW and Poland - 10 MW.

	<p>RECs. If the criteria are not covered, a separate procedure will be required to verify the criteria and confer the status of RECs or CECs. For instance, the establishment of a dedicated registry for energy communities could be considered. The registration and subsequent monitoring processes play a vital role in ensuring adherence, transparency, and predictability.</p> <p>Entities granting the status of RECs and CECs should possess the authority to request the submission of any necessary document for verifying compliance with the criteria defined in the national legislation, including internal acts, particularly to assess how decisions regarding profit distribution are made. Subsequent changes in the internal acts should be notified to the respective monitoring authority. Authorization could be revoked if a community fails to adhere to national legislation and its internal acts. For transparency reasons, internal acts should be easily accessible to both members and monitoring authorities.</p>
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Recommendations to national authorities:

1. To align with the objectives of communities, the legal, administrative, and regulatory framework should be structured to encourage and prioritize non-profit organizational forms of legal entities over profit-oriented alternatives.
2. When determining the suitable form for establishing communities, it is essential to evaluate national regulations governing various legal entities. This assessment aims to identify the form that best aligns with the concept of energy communities, preventing conflicts in norms and ensuring that communities comply with all the criteria outlined in their definitions. Among others, evaluate existing provisions regarding control mechanisms across various legal entity structures, including considerations on establishment eligibility, profit distribution methods, and other relevant factors.
3. National legislation can extend a list of potential members in RECs to non-profit organisations and/or associations even though they are not explicitly listed in RED II definition of RECs. Participation in renewable energy projects should be open to all potential local members based on objective, transparent and non-discriminatory criteria.
4. Internal acts of communities should define clear and non-discriminatory entry and exit requirements, participation fees (if any), number of members, purpose of establishment, how the profit will be used, etc.
5. To bolster the active involvement of citizens and local communities in energy markets and safeguard community autonomy in the case of RECs, consider implementing one of the following rules to ensure democratic governance:
 - apply the principle "1 member 1 vote" rather than "1 share 1 vote";
 - set the shareholder cap that would define how many shares each type of member can hold (to cap shares of "large players");
 - set the minimum number of citizens that need to participate in the community (a minimum participation quota);

- set the minimum number of voting rights to belong to citizens living nearby, etc.
6. Define the term proximity in the national legislation. It could be linked to locational boundaries, i.e. municipality or region, or a certain distance from installations; technical considerations, i.e. connection to low or medium voltage stations.
 7. Create a dedicated national registry for energy communities and assign an authority responsible for conferring the status of RECs and CECs, as well as overseeing ongoing compliance with the stipulated requirements. This role could be assumed by existing institutions such as national regulatory authorities, which are already responsible for issuing licenses for energy-related activities. This consolidation streamlines the process, ensuring it is managed within a single entity. This approach has been implemented in various Member States, including Belgium and Lithuania.

IV OVERVIEW OF THE POLICY FRAMEWORK

At the Ministerial Council meetings in November 2021 and December 2022, the Decarbonisation Roadmap for the Energy Community's Contracting Parties, along with the 2030 targets for renewable energy, energy efficiency, and greenhouse gas emissions, were adopted. Additionally, the legislative acts comprising the Clean Energy Package were integrated into the legal framework of the Energy Community.²⁷

The legislative acts that are the most relevant for energy communities in the Energy Community acquis include:

1. Governance Regulation (EU) 2018/1999²⁸, with a transposition deadline of 31 December 2022
2. Internal Market for Electricity Directive (EU) 2019/944 (IMED), with a transposition deadline of 31 December 2023
3. Renewable Energy Directive (EU) 2018/2001 (RED II), with a transposition deadline of 31 December 2022

The Governance Regulation establishes the foundation for the adoption of integrated National Energy and Climate Plans (NECPs). The NECPs outline policies, objectives, and measures for a country's climate and energy trajectory from 2025 to 2030. These plans encompass five dimensions: decarbonization (addressing greenhouse gas emissions and renewable energy), energy efficiency, security of supply, the internal energy market, and research and innovation. While energy communities can be relevant in all these dimensions, two are particularly pertinent to them: decarbonization and the internal energy market. Specifically, RECs primarily contribute to the deployment of renewable energy, and hence fall under the decarbonization dimension. Both

²⁷ Decisions of the Ministerial Council of the Energy Community No 2021/13/MC-EnC of 30 November 2021 and No 2022/03/MC-EnC of 15 December 2022.

²⁸ Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action.

RECs and CECs are entities participating in the internal electricity market. RECs are regulated by RED II, while CECs are addressed in the IMED.

While the current legal framework in the Energy Community encompasses legislative acts from the Clean Energy Package, the new Energy Efficiency Directive (EU) 2023/1791²⁹ and Renewable Energy Directive (EU) 2023/2413³⁰ adopted within the Fit for 55 package in the EU enhance even more the role of energy communities in achieving energy savings and renewable energy targets, as well as educating and increasing citizens' awareness of the need for the energy transition. As they have not been yet incorporated in the Energy Community, these guidelines aim to only analyse the concepts contained in the Clean Energy Package.

Regarding the incorporation of communities in policy documents and monitoring the progress of development, it is suggested to consider the following:

<p>NECPs</p>	<p>Concerning RECs, NECPs should provide a concise overview of the policies and measures established within the enabling framework³¹ to promote and facilitate REC development.³² Additionally, NECPs must outline policies and measures supporting the role of RECs in contributing to the implementation of energy efficiency and renovation policies.³³ National objectives and trajectories for REC development may also be specified in NECPs.³⁴</p> <p>With regards to CECs, NECPs should contain national objectives, policies and measures related to distributed generation, as well as for aggregation, demand response and storages.³⁵</p> <p>NECPs may delve into specific goals that communities aim to achieve, such as addressing energy poverty, fostering public acceptance, involving citizens in energy markets, and deploying renewable energy projects.</p> <p>Finally, in drafting NECPs, it is crucial for national authorities to engage in consultations with local and regional authorities³⁶. Additionally, it is recommended to seek the input of existing communities to gather their perspectives on setting objectives, especially concerning distributed energy.</p>
<p>Collaboration with and involvement of local authorities</p>	<p>The involvement of local authorities is crucial in the establishment of communities because, on the one hand, they can be members or facilitators of these communities, and on the other hand, they bear the responsibility for local planning and development.</p>

²⁹ Directive (EU) 2023/1791 of the European Parliament and of the Council of 13 September 2023 on energy efficiency and amending Regulation (EU) 2023/955 (recast).

³⁰ Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652.

³¹ The content of the enabling framework is prescribed in Article 22(4) RED II and will be analysed in the Chapter V.

³² Article 22(5) RED II.

³³ Annex I of Governance Regulation, part 1, section 3.2.

³⁴ Annex I of Governance Regulation, part 2, section 2.7.3.

³⁵ Article 4 Governance Regulation.

³⁶ Annex I, point 1.3 Governance Regulation.

	<p>Specifically, RED II identifies local authorities, including municipalities, as potential members of RECs.³⁷ Furthermore, RED II explicitly emphasizes that authorities, not only at the national level but also at the regional and local levels, should incorporate provisions for the integration and deployment of renewable energy, including for RECs, when planning urban infrastructure, industrial, commercial, or residential areas and energy infrastructure.³⁸</p> <p>Ultimately, local authorities play a significant role in contributing to community development. They can achieve this by adopting local energy and climate plans, establishing local renewable and climate targets, devising support schemes, appointing local energy and climate managers to oversee and promote the development of local community projects, and educating and empowering citizens to actively participate in energy communities.</p>
Reporting	<p>The inaugural adoption of integrated national energy and climate progress reports, scheduled for March 2025 and subsequently every two years thereafter, is expected to include details about the implementation of policies and measures within the enabling framework aimed at encouraging and facilitating the growth of RECs.³⁹ Additionally, these reports may encompass data pertaining to the proportion of renewable energy within RECs. This indicates that the reports are intended to mirror the achievements and progress in the development of these communities.</p>

Recommendations to national and local authorities:

1. Go beyond the mandatory content in NECPs to explicitly define objectives and trajectories for development of renewable energy communities, taking into account the potential of energy communities to tackle issues such as energy poverty and public acceptance of the energy transition.
2. Local authorities need to evaluate the feasibility of implementing renewable energy projects within communities and align local spatial plans accordingly.
3. Establish local offices or one-stop shops dedicated to furnishing information and assistance to citizens and other potential stakeholders in the establishment of communities.

³⁷ Article 2 (16) RED II.

³⁸ Article 15(3) RED II.

³⁹ Article 20(1)(b) of the Governance Regulation.

V ENABLING LEGAL AND REGULATORY FRAMEWORKS

Numerous factors can be critical enablers for scaling up communities: supportive regulatory regime, financial incentives, strong local connection and leadership and promotion of social values, transparency in decision-making, access to capacity building and know-how, etc.

To promote and facilitate the development of communities, both Directives require that enabling frameworks for RECs and CECs to be adopted.⁴⁰ The frameworks should provide a favourable environment for the development and operation of communities and the removal of administrative and regulatory barriers, as well as support the purposes of energy communities.

An overview of requirements that such frameworks should address and, subsequently, a set of recommendations on defining compliant enabling frameworks is provided in the table below.

Some of the requirements that relate only to RECs will be analysed in this chapter (marked with *), while the remaining are addressed in other chapters indicated in brackets.

Overview of the requirements for enabling frameworks for CECs and RECs

Elements of enabling framework for CECs	Elements of enabling framework for RECs
Open and voluntary participation (Chapter IV)	Open and voluntary participation (Chapter IV)
Leaving the community and switching the supplier (Chapter IV)	Unjustified regulatory and administrative barriers to be removed *
Relation with DSO (Chapter VI)	RECs are subject to provisions relevant for chosen commercial activity *
Non-discriminatory procedures (for connection and access to the network) & non-discriminatory and cost-reflective network charges (Chapter VI)	Relation with DSO (Chapter VI)
Ownership and operation of the distribution network (optional) (Chapter VI)	Non-discriminatory procedures for connection & non-discriminatory and cost-reflective network charges (Chapter VI)
Closed DSO exemptions (optional) (Chapter VI)	Non-discriminatory treatment of communities *
Openness to cross-border participation (optional)	The participation of low-income and vulnerable households *
	Tools for access to finance and information * (Chapter VIII)
	Capacity building support for public authorities *

⁴⁰ Enabling frameworks are defined in Article 16 IMED for CECs, and Article 22 RED II for RECs. There is an obligation only in the case of RECs that the main elements of the enabling framework, and of its implementation, be a part of the updates of NECPs and progress reports.

	Non-discriminatory treatment of consumers that participate in communities *
	Openness to cross-border participation (optional)

<p>Assessment of the barriers and potential</p>	<p>A preliminary step to create an enabling framework is assessing the existing regulatory and administrative barriers that should be removed. While this requirement is explicitly mentioned for RECs, it would also be beneficial to perform the assessment for CECs.</p> <p>The assessment should involve a consultation with a wide range of stakeholders (existing communities, citizens, national and local authorities, regulators, suppliers, distribution operators, etc.), which could provide valuable insights into barriers and the means for their removal. The national regulatory authorities' role in creating an enabling framework is to monitor the removal of unjustified obstacles and restrictions.⁴¹</p> <p>One of the barriers to installing renewable energy technologies (rooftop PVs, heat pumps) in multi-apartment buildings is the tenants' lack of right to decide on construction work in a rented facility. Moreover, if the length of the renting period is too short, tenants do not have an incentive to invest in the improvement of buildings.</p> <p>Another barrier relates to a lack of legal and regulatory framework for energy sharing.⁴² Absence of clear regulations creates uncertainty about the rights, responsibilities, and liabilities of parties to be engaged in energy sharing agreements.</p>
<p>Treatment of communities</p>	<p>Both directives stipulate that communities must be treated in a non-discriminatory and proportionate manner with respect to the activities they opt to undertake and the rights and obligations of their members as final customers.⁴³</p> <p>The principle of non-discriminatory treatment entails that national legislation should not impose additional conditions on communities beyond those applied to other participants in the market. This also implies that communities must adhere to the same requirements, such as registration in the relevant national register and obtaining a license for their chosen activities. For instance, if a community is designated as an electricity distribution system operator, it must conform to established rules on unbundling; similarly, if engaged in</p>

⁴¹ Article 59(1)(z) IMED.

⁴² Chapter VII provides explanation of the notion energy sharing.

⁴³ Article 22(4)(e) RED II; Article 16(3)(b) IMED.

	<p>generation, it must comply with balancing regulations in accordance with existing norms.</p> <p>On the other hand, the principle of proportionate treatment dictates that national procedures should account for the unique characteristics of communities. The registration and licensing conditions applicable to larger market players may not be suitable for the objectives and scale of energy communities. For instance, requirements related to the minimum capital necessary to obtain a specific license may be less stringent in comparison to those imposed on larger entities.</p>
Low-income and vulnerable households; addressing energy poverty	National legislation should create an enabling framework to make vulnerable and energy-poor customers' access to communities as easy as possible.
Consumers' treatment	<p>National legislation needs to contain rules for ensuring that members of communities keep all their rights and obligations and get equal and non-discriminatory treatment as other consumers.⁴⁴ This means, among others, that a customer can be at the same time member of a community, and receive the energy from the community's installations, but also be additionally supplied by a regular supplier if the community's production is not sufficient. If a member is supplied by the community, its own delivery/metering point and a contractual relation with a public/commercial supplier remain effective. It also means that when a member is leaving the community, the right to switch supplier and respective rules on switching supplier apply.⁴⁵ Customers connected to the electricity network run by the community that holds a DSO license are not obliged to be members of the community.⁴⁶</p> <p>Moreover, a member of the community should keep the right to be an active customer or a renewable self-consumer. It means that it can, in parallel and independently of being a member of a community, develop and be the owner of generation installations for self-consumption.</p> <p>The role of national energy regulators is to ensure that the rights of members of communities as final customers are respected.</p>
Capacity building	Communities are new complex concepts that have many legal, regulatory and technical implications, which should be carefully analysed and addressed. RED II explicitly stipulates that regulatory and capacity-building support should be provided to public authorities in enabling and setting up RECs. ⁴⁷

⁴⁴ Article 16(1)(c) IMED.

⁴⁵ Article 16(1)(b) IMED; Recital 43 IMED.

⁴⁶ A community that acts as DSO has to provide access to all potential consumers.

⁴⁷ Article 22(4)(a) RED II.

Tools to facilitate access to information	The complexity of setting up communities requires easy access to comprehensive information concerning legal, regulatory, and financing matters by interested parties.
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Recommendations to national, local and regulatory authorities:

1. Ensure that the regulatory authorities are given the rights and capacities to monitor the removal of unjustified obstacles to and restrictions on the development of energy communities.
2. While evaluating obstacles, review housing legislation related to decision-making in multi-apartment buildings. Eliminate high thresholds, such as mandating unanimous consent from all apartment owners for the installation of renewable-based systems (e.g., PV rooftops and heat pumps) and energy efficiency measures (building renovations). Instead, introduce a more attainable threshold, such as a qualified majority or a simple majority.
3. The rights and obligations of tenants and landlords concerning the development of sustainable projects could be regulated in national legislation to some extent. For example, a law could regulate minimum terms and conditions of the rental agreement related to investments in such projects, and allocation of costs and benefits associated with the projects.
4. Simplify and streamline administrative procedures (i.e. for registration, licensing, connection to the grid) for communities, considering the guidelines outlined in the Commission Recommendation aimed at speeding up permit-granting procedures for renewable energy projects and facilitating Power Purchase Agreements.⁴⁸
5. One-stop shops should be established to guide citizens and interested parties in setting up the communities, through the entire administrative permit process and a manual of procedures with step-by-step instructions and needed templates. An electronic procedure could be established to accelerate permitting procedures. DSOs could develop guidance on connecting communities' installations, communication of energy sharing patterns, etc.
6. National legislation may encourage energy communities to introduce in their internal acts provisions on support to vulnerable and energy-poor consumers, such as exceptions from the obligation of paying the participation fee, allocation of a certain percentage of profit to these customers, and provision of energy efficiency measures with renewable energy technologies for self-consumption, such as rooftop PVs and heat pumps.
7. National regulatory or customer protection authorities will have to monitor that the treatment of communities' members as active customers and self-consumers is ensured.

⁴⁸ Commission Staff Working Document Guidance to Member States on good practices to speed up permit-granting procedures for renewable energy projects and on facilitating Power Purchase Agreements Accompanying the document Commission Recommendation on speeding up permit-granting procedures for renewable energy projects and facilitating Power Purchase Agreements SWD/2022/0149 final

8. Create programs to educate and train all stakeholders involved in the establishment and implementation of communities, including national regulatory authorities, local authorities, distribution system operators, energy managers, buildings managers, etc.

VI ENERGY COMMUNITIES AND ACCESS TO THE NETWORK

Optimizing the consumption of energy from community-owned assets to minimize the impact on the public grid is crucial for effectively addressing the challenges posed by the decentralization of electricity production. The pivotal role of the Distribution System Operator (DSO) is indispensable for facilitating seamless energy transfers within communities.⁴⁹

Priority of connection for renewable energy projects is identified as one of the main opportunities for energy communities. On the other side, the access to the electricity grid is also identified as a notable challenge, with significant connection costs, technical requirements and lengthy connection permitting process. So far, these requirements were tailored for large-scale utilities and often overlook the specific needs of smaller producers.

In certain scenarios, communities may establish their independent networks, potentially unconnected to the public grid—a phenomenon more likely to occur in rural areas or on isolated islands. The emergence of self-isolated microgrids offers distinct advantages, including enhanced resilience against blackouts and increased efficiency due to minimized energy losses, stemming from the proximity of the generation source to consumers. However, it is not ideal from an overall system perspective.

Moreover, IMED introduces an avenue for national policymakers to empower CECs to become a DSO, which may also apply to RECs. This empowerment grants CECs the authority to own, establish, purchase, lease, and autonomously manage distribution networks.⁵⁰ If such activities are allowed for CECs, they have the potential to evolve into DSOs, assuming roles either under the general regime as public DSOs or within a closed DSO framework.⁵¹ This transformative possibility underscores the evolving landscape of energy management, offering a nuanced approach to decentralized energy systems.

In the following table, explanations and recommendations will be provided concerning access to the network.

Connection to the grid	Contracting Parties are encouraged to streamline the community installation connection process to the grid. This may involve contemplating the provision of priority treatment for community grid connection applications, similar to the
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⁴⁹ Article 16(4)(a) IMED.

⁵⁰ Article 16(4) IMED.

⁵¹ A closed distribution system is a system that distributes electricity within a geographically confined industrial, commercial or shared services site. Closed DSO should not, as a rule, supply households (Article 38(1) IMED), which could be conflicting with the concept of energy communities. However, IMED clearly states in Article 16(2)(c) that CECs may be subject to exemptions that apply to closed DSO prescribed in Article 38(2) IMED.

	practice observed in Greece. ⁵² Moreover, available grid capacities should be publicly accessible.
Network charges	<p>If a community uses public grid infrastructure to inject or transfer energy, it should be subject to transparent, non-discriminatory and cost-reflective network charges, and should contribute in an adequate and balanced way to the overall cost-sharing in the system.⁵³ This way, other customers who do not participate in the community are not discriminated. Full exemption from relevant charges for the community is contingent upon exclusive reliance on an isolated grid unconnected to the public grid, with no utilization of the public grid for energy transfer.</p> <p>National legislation can design network charges that reflect the value that communities bring to the network, in terms of limited use of the transmission grid and distribution grid, reduced losses, and increased efficiency due to demand-side response and local energy sharing.</p> <p>Network charges need to be based on a cost-benefit analysis of distributed energy resources. The analysis is supposed to determine what benefits energy communities bring to the distribution network, and according to the results, network charges should be set. This analysis is supposed to be developed by the competent authority.⁵⁴</p> <p>If a community consumes self-generated electricity, IMED requires that CECs should be treated like active customers in accordance with Article 15(2)(e) of IMED.⁵⁵ This provision means that network charges for communities that consume and share electricity produced in their installations will have to account separately for the electricity fed into the grid and the electricity consumed from the grid.⁵⁶ Such net billing scheme should be mandatory as of 31 December 2026.⁵⁷</p>
CEC as a distribution system operator	Where it has a status of a DSO, a CEC is subject to the same obligations ⁵⁸ as other DSOs of the same size, including licensing, providing third-party access on non-discriminatory, fair and cost-reflective terms ⁵⁹ , etc. Regular exemptions that typically apply to DSOs are applicable for CECs, i.e. in case

⁵² Commission Staff Working Document Guidance to Member States on good practices to speed up permit-granting procedures for renewable energy projects and on facilitating Power Purchase Agreements Accompanying the document Commission Recommendation on speeding up permit-granting procedures for renewable energy projects and facilitating Power Purchase Agreements SWD/2022/0149 final.

⁵³ Article 16(1)(e) IMED; Article 22(4)(d) RED II.

⁵⁴ Article 22(4)(d) RED II.

⁵⁵ Article 16(3)(d) IMED. Even though not explicitly stated in RED II, this rule also applies to RECs that produce electricity.

⁵⁶ By interpreting Article 16(3)(d) IMED, communities that consume and share electricity produced in their installations can also feed the excess electricity into the network, like active customers.

⁵⁷ According to Article 15(4) of IMED, as adopted and adapted in the Energy Community legal framework, national authorities should not create new net metering mechanisms after 31 December 2026, while consumers who participate in the existing net metering programs should be allowed at any time to switch to net billing. For net metering and net billing, see more Policy guidelines of the Energy Community Secretariat on Integration of Renewables Self-Consumers https://www.energy-community.org/dam/jcr:7e4760a1-3890-4a7a-a067-d9e16c80ddeb/PG_2020_03_RES.pdf.

⁵⁸ These obligations are prescribed in Chapter IV of IMED.

⁵⁹ Article 6(3) IMED.

	of obtaining the status of a closed DSO ⁶⁰ , or in a case of supplying less than 100.000 customers. ⁶¹
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Recommendations to national authorities:

1. When determining the eligibility of CECs for DSO status, consider the possibility of permitting licensing within a closed DSO framework, especially in isolated regions like islands or rural areas. It is imperative that CECs adhere to the same licensing rules and requirements as any other grid operator.
2. Assess the possibility to allow RECs to operate not only district heating production facilities but also networks. Building new consumer-owned district heating systems can be a suitable heating solution for rural areas.

Recommendations to regulatory authorities:

3. Network charges for RECs and CECs established as a DSO shall correspond to the tariffs for the network users at the respective voltage level and the pattern of network use. Network tariffs for the community members and other customers connected to the closed DSO shall be non-discriminatory, transparent and set in accordance with the methodology subject to the regulatory review.
4. To avoid cross-subsidization between active customers, including members of CEC and REC, and other customers, network tariffs for the members of the CEC and REC connected to the public network should be designed to reflect the specific costs and benefits, if any, they cause to the network operator.
5. Network tariffs should be designed in such a way as to incentivize community members to adapt their pattern of production and consumption to minimize the system costs.

Recommendations to distribution system operators:

6. Ensure that available grid capacities are accessible to communities and other potential developers of renewable energy projects.

VII ENERGY COMMUNITIES AND ACCESS TO THE MARKET

Both directives stipulate that communities should be able to access all relevant markets on a non-discriminatory basis⁶², i.e. wholesale and retail markets, including ancillary services and balancing markets. This access empowers energy communities to actively trade their self-generated electricity and flexibility. Communities have the option to directly access energy markets or utilize third-party intermediaries, a significant avenue considering the complexities and barriers faced by

⁶⁰ Exemptions from Article 38(2) IMED that apply to such systems can be optionally granted to CECs.

⁶¹ Article 32(5) and 35(4) IMED.

⁶² Article 16(3) IMED, Article 22(2)(c).

inexperienced and smaller participants. Additionally, communities may delegate the operation and management of their assets to third parties for enhanced efficiency.

In scenarios where a community does not fully consume the electricity generated by its assets, surpluses can be traded or sold through various contractual arrangements such as power purchase agreements or peer-to-peer (P2P) trading. Conversely, if a community's generation assets fall short of meeting member demands through energy sharing, alternative supplies must be explored. The community can procure additional energy on the market, distributing it among its members. Simultaneously, community members may have their own generating installations, such as rooftop PVs, allowing them to fulfill their energy needs independently. Alternatively, members can directly purchase electricity from other peers or external suppliers in their own name. This multifaceted approach underscores the flexibility and adaptability inherent in community energy management models.

<p>Market access through aggregation</p>	<p>Aggregators are intermediaries between communities and the market, <i>who combine multiple customer loads or generated electricity for sale, purchase, or auction in any electricity market</i>.⁶³ Aggregators may participate in flexibility mechanisms, including balancing and ancillary services markets, following price signals and thus generating income for their customers.</p> <p>If access to the market is provided through an aggregator, an aggregation contract should be concluded, upon communities are informed of the terms and conditions of the contract. Moreover, aggregators are obliged to provide communities with data related to demand response, supply and sell electricity, at least once every billing period, free of charge.⁶⁴</p> <p>A community can also take the role of an aggregator, and for example, coordinate self-consumers and other communities, providing that it complies with all requirements that apply to this activity.</p>
<p>Balance responsibility</p>	<p>In general, communities that generate electricity are obliged to take over balance responsibility in line with the existing legal framework and the market rules. However, communities have the option to delegate this balance responsibility to other entities. Given that communities often manage small-scale installations, it is common practice to transfer this responsibility to a third party, often an aggregator.</p> <p>If the installed capacity of facilities using renewable energy sources is less than 400 kW, it may be exempted from balance responsibility, under the condition that financial responsibility for the imbalances is fulfilled by another market participant.⁶⁵</p>
<p>Flexibility services</p>	<p>DSOs are obliged to procure flexibility services through market-based procedures⁶⁶ in which communities should be able to participate. When drafting national legislation, including grid codes on wholesale or balancing markets, it is important to include communities and aggregators as potential participants of these markets and to formulate preconditions allowing them to participate.</p>

⁶³ Article 2(18) IMED.

⁶⁴ Article 13 IMED.

⁶⁵ Article 5(2)(b) of the Electricity Regulation (EU) 2019/943.

⁶⁶ Article 32 IMED.

<p>Peer to Peer trading</p>	<p>P2P trading is defined as the <i>sale of renewable energy between market participants on a bilateral basis by means of a contract with pre-determined conditions governing the automated execution and settlement of the transaction.</i>⁶⁷</p> <p>Despite P2P trading is not explicitly envisaged for communities in the directives, but only for self-consumers, it can occur between all market participants and thus communities could use these digital forms to conduct transactions with other market participants on pre-agreed conditions.</p> <p>P2P trading can be conducted either directly between market participants, in which case two parties agree on the volume and price of energy, or indirectly through a certified third-party market participant, such as an aggregator who coordinates the trading.</p> <p>The full potential of P2P can be utilised only by using digital platforms or so-called virtual power plants (VPPs)⁶⁸.</p>
<p>Renewable power purchase agreements</p>	<p>RED II specifically states that <i>RECs can sell renewable electricity directly to natural or legal persons through power purchase agreements (PPAs).</i>⁶⁹</p> <p>PPAs can vary across several dimensions, including duration (ranging from short to long term), pricing structure (fixed, floating, or indexed), and revenue certainty (such as through take-or-pay arrangements).</p> <p>One type of PPA is "private wire or behind-the-meter PPA" in which a business located near generation installations agrees to buy electricity from RECs for a specific price, having direct supply from the plant. In this case, parties to these contracts may benefit from not paying the network charges due to bypassing the public grid, if the total volume of electricity is bought. While this type of PPA involves the actual delivery of electricity from the generator to the buyer, financial PPAs, on the other hand, are settled financially without the physical delivery of electricity. This allows for the generation installations to be located in a market/location different from that of a buyer, resulting in more flexibility and extended possibility for energy communities to participate in the market.</p>
<p>Energy Sharing</p>	<p>The IMED explains electricity sharing in a way that <i>CECs are supplied with electricity from generating installations within the community despite not being in direct physical proximity to the generating installation and not being behind a single metering point,</i>⁷⁰ while RED II says that <i>RECs should be able to share within themselves energy that is produced by their community-owned installations.</i>⁷¹ Both directives stipulate that <i>relevant distribution system operators cooperate with communities to facilitate electricity transfers within</i></p>

⁶⁷ Article 2(18) RED II.

⁶⁸ See below for the explanation.

⁶⁹ Article 2(17) and Article 22(4) RED II.

⁷⁰ Recital 46 IMED; Energy sharing is not explicitly defined in the directives.

⁷¹ Recital 71 RED II.

	<p><i>communities.⁷² Energy sharing should occur in accordance with the obligations and correct timeframes for balancing, metering and settlement.⁷³</i></p> <p>Therefore, the term energy sharing concerns a transaction between a community, as a legal entity, and its members, including those who are not located close to the generating installation. The emphasis is on the fact that electricity shared among members is generated by a community's assets, not procured from a supplier or elsewhere. The community will, therefore, be <i>de facto</i> supplier.</p> <p>It is important to note that members of the community can have a supply agreement with a supplier in addition to energy sharing. Depending on the energy volume that is provided by energy sharing and/or supplier, balancing responsibility can be arranged in a way that is shared between a supplier and an energy community.</p> <p>Members of a community freely decide on the allocation of generated energy among themselves according to a pattern they create. The allocation pattern can be dynamic and static, where the energy generated is agreed according to the consumption behaviour or a pre-agreed fixed share, respectively.</p> <p>The implementation of the sharing arrangement could be conducted by a third party, such as DSO, a licensed supplier, or an aggregator. Anyway, for the reason of securing proper functioning of the grid, the community is supposed to inform a DSO and suppliers, if members are supplied additionally by suppliers, on the allocation model, generation units, expected transactions, etc. DSOs will typically need to invest in IT solutions that enable such energy sharing models.</p> <p>The collection of network charges, tariffs and levies related to electricity flows applies if the community uses the public grid.⁷⁴A cost-benefit analysis of distributed energy sources that is described in the previous chapter should include the analysis of the impact of energy sharing on the distribution grid. If energy sharing has a positive impact on the distribution grid, network charges should be defined in such a way to incentivise energy sharing.</p>
<p>Virtual Power Plants</p>	<p>VPP is a term used to describe a digital platform that enables its users to share and trade electricity and other energy resources, i.e. flexibility, which is usually operated by an aggregator. A platform provides its users with data on available energy, energy prices, weather conditions, etc., and thus enables them to participate in markets, sell the excess or buy needed electricity, or share the energy with other members of a community. For example, a platform user can set that electricity is sold at a certain price, or to a specific peer.</p>

⁷² Article 16(1)(d) IMED; Article 22(4)(c).

⁷³ Recital 46 of IMED.

⁷⁴ Recital 46 of IMED.

	An energy community can develop its own platform or can use an already developed application.
Guarantees of Origin	As outlined in RED II, guarantees of origin (GO) have the function to show a final customer that a given share or quantity of energy is produced from renewable sources. RECs have the opportunity to leverage GOs to appeal to corporations ⁷⁵ or other entities seeking to procure electricity exclusively from renewable sources. Furthermore, RECs have the option to independently sell GOs separate from the electricity itself, thereby generating additional income.

Recommendations to national and regulatory authorities:

1. Enabling access of energy communities to the markets requires facilitating the involvement of aggregators. It is crucial to establish a regulatory framework that addresses key aspects, including the registration of aggregators, licensing of independent aggregators, the extent of control over their operations, dispute resolution mechanisms, and related considerations.
2. A robust legal framework for P2P trading is essential, outlining responsibilities for balancing, establishing a dispute resolution mechanism in instances where contractual obligations are not met, and addressing other pertinent considerations.
3. Educate participants to adapt their consumption or production behaviors in accordance with system requirements to positively impact the network and its associated costs.
4. Contracting Parties should empower RECs and CECs to acquire GOs for renewable electricity, gas, and heat produced by their facilities, thereby facilitating their participation in trading activities involving these certificates.

Recommendations to energy communities:

5. In the context of energy sharing, it is advisable to employ a dynamic sharing formula that adjusts to fluctuations in the number of members and production capacities. Instead of a fixed formula (e.g., allocating 10% of total electricity produced to each member), the dynamic sharing formula should be based on consumption patterns to accurately reflect changes in these parameters.

VIII SUPPORT SCHEMES, INCENTIVES AND FINANCING MODELS

One of the main challenges in building renewable-based installations by energy communities is a lack of finances, especially at the early stage of development. Obtaining loans from banks in a traditional manner could be challenging for communities due to a lack of credit capability.

⁷⁵ RE100 is a global corporate leadership initiative bringing together the world’s most influential businesses committed to 100% renewable electricity by 2050: <https://www.there100.org/> .

However, innovative private and public financing mechanisms have emerged and are means for obtaining capital for developing projects. Combining these diverse financing methods can effectively support local communities in their pursuit of social and environmental objectives.

Some practical models for financing energy communities' projects are described below, as well as guidance for creating support schemes.

<p>Support schemes</p>	<p>A general rule is that support for electricity from renewable sources should be granted in open and competitive tender procedures.⁷⁶ However, RECs may encounter challenges in meeting the requirements for participating in these auctions, as citizen-led initiatives of this nature often face limitations in financial and human resources.</p> <p>Therefore, to enable RECs to compete for financial support on an equal footing with big players, RED II requires that the specificities of RECs should be taken into account when designing support schemes.⁷⁷ Moreover, small-scale installations and demonstration projects can be exempted from this rule of competitive tendering.⁷⁸ For example, projects 100% owned by SMEs or by renewable energy communities are exempted from the requirement to participate in the competitive bidding process if the installed capacity is equal to or below 6 MW or for wind generation only 18 MW.⁷⁹</p>
<p>Incentives</p>	<p>To promote citizens' initiatives, Contracting Parties may consider different types of financial and non-financial incentives. For example, in Belgium dividends (capped at 6%) paid to members are regarded as a community's cost before taxes.</p>
<p>Crowdfunding</p>	<p>Crowdfunding is a general term used to describe the financing of a project by a large number of people via online platforms. The projects are presented on crowdfunding platforms, and interested parties are invited to support the development of the project.</p> <p>There are different types of crowdfunding: donation, equity or peer-to-peer lending (crowdlending).</p> <p>In the case of donations, a donator provides a certain amount of money expecting no return. In the case of equity investment, an investor becomes a member, obtaining a right to participate in decision-making and receive dividends. Finally, investors can lend money, expecting the loans to be repaid, with certain interest.</p>
<p>Loans and grants</p>	<p>Germany developed a grant-to-loan scheme that enables communities to receive the grant for preparatory activities before the construction of the plant which will be converted into a loan if the community continues with the project.</p>
<p>Green bonds</p>	<p>Green bonds are fixed-income securities whose profit is allocated to support sustainable projects. Bonds can be issued not only by national governments or banks but also by city governments, companies, etc. Funds raised by one city can be distributed to local communities for the development of projects.</p>

⁷⁶ Article 4 RED II.

⁷⁷ Article 22(7) of RED II.

⁷⁸ Article 4(4) of RED II.

⁷⁹ Guidelines on State aid for climate, environmental protection and energy 2022, para. 107(b)(iv)(v).

<p>EU funding opportunities</p>	<p>National and local authorities as well as energy communities from Contracting Parties are eligible to apply to several EU funding opportunities, including:</p> <ol style="list-style-type: none"> 1) INTERREG program was expended in 2023 to 7 Contracting Parties: Albania, Bosnia and Herzegovina, Moldova, Montenegro, North Macedonia, Serbia and Ukraine. The programme's purpose is to support interregional cooperation projects and knowledge sharing in six areas: smart, green, connected, social, citizens and governance. Potential beneficiaries are national authorities, business, environmental and educational organisations. 2) The Scalable Cities Action Grant is a financial tool to support the replication of measures already successfully tested in Smart Cities and Communities projects, including projects concerning energy communities. Ukraine is eligible to apply. 3) The EU Climate-neutral and Smart Cities Mission (Cities Mission) aims to involve local authorities, citizens, businesses, investors as well as regional and national authorities to deliver 100 climate-neutral and smart cities by 2030. Ukraine is eligible to apply.
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Recommendations to national, local and regulatory authorities:

1. To address the specificities of communities, national authorities can design separate auctions only for communities or provide support without competitive procedure. In such auctions, bidding criteria can include social considerations, such as opportunities for public participation, employment or public acceptance.
2. If communities are to participate in auctions with other project developers, consider introducing fewer demanding requirements. For example, allow certain permits or financial guarantees to be submitted at a later stage of the process.
3. Consider regulation of different types of crowdfunding, including peer-to-peer lending that would set conditions under which persons and entities other than banks can provide loans. By regulating such activities, private capital could be utilised for renewable energy projects in a secure framework mitigating lenders’ risk of non-repayment.
4. Municipalities or other supporting institutions could provide guarantees to energy communities for obtaining loans or could get loans from national governments or financial institutions and further distribute such funds to the communities.

IX ENERGY COMMUNITIES: ADDRESSING ENERGY POVERTY

Within the Energy Community Contracting Parties, energy poverty persists as a significant challenge, impacting a considerable segment of the population due to economic hardships and

deficiencies in infrastructure. Recent data indicates that approximately 23%-27% of households in the Energy Community Contracting Parties struggle with severe energy poverty.⁸⁰ Energy communities represent a promising avenue to tackle the root causes of energy poverty, offering potential solutions to reduce the prevalence of energy-poor households over the long term.

By fostering collective investment in solar, wind, or biomass projects, energy communities play a crucial role in transitioning to renewable energy, diversifying energy sources, and reducing reliance on costly imports. This, in turn, lowers overall costs for participants and enhances local community resilience to energy price fluctuations and supply disruptions. Improved energy efficiency in participating households leads to decreased energy needs and costs. Additionally, job creation in renewable energy sectors contributes to local economic growth, generating income for community welfare and infrastructure development, directly impacting poverty alleviation efforts. Collaborating with authorities, energy communities advocate for policies supporting decentralized renewable initiatives, potentially driving regulations for fair grid access, subsidies, and financial incentives for energy-efficient practices.

Despite these positive aspects, current structural approaches and the political environment risk neglecting energy-poor households. Financial constraints often hinder their participation in renewable projects, and limited technology access affects vulnerable groups like the elderly. Policies must prioritize the inclusion of vulnerable households through subsidies or support for low-income families. Proactive measures are essential to ensure that energy communities not only promote renewable energy but actively include and benefit energy-poor households, fostering a more sustainable and inclusive energy landscape.

Recommendations to national and local authorities:

1. Design policies that offer incentives or grants specifically designed to encourage and facilitate the inclusion of energy-poor households in energy communities. This could involve subsidies for renewable energy projects, grants for energy-efficient appliances, or funding for community-led initiatives that focus on energy poverty alleviation.
2. Implement direct financial help or subsidies targeted at energy-poor households to offset the initial costs associated with joining or participating in energy communities (e.g. membership fees, installation costs, energy efficiency upgrades). Governmental support programs for energy communities could introduce mandating a certain percentage or quota of participants representing energy-poor households.
3. Develop comprehensive and targeted educational campaigns or programs to raise awareness among energy-poor households about the benefits and opportunities offered by energy communities.
4. Establish platforms for dialogue between energy communities, local authorities, and representatives of energy-poor households. These platforms should ensure that the needs of vulnerable groups are integrated into decision-making processes regarding community initiatives.
5. Develop initiatives that provide access to technology and resources, particularly for vulnerable groups like the elderly, to enable their active participation in energy communities. This could

⁸⁰ Energy Community Study on Addressing Energy Poverty in the Energy Community Contracting Parties by DOOR, EIHP (2021). Data for Kosovo, Bosnia and Herzegovina and Moldova missing.

involve providing training, assistance in utilizing renewable energy technologies, or creating user-friendly interfaces for community engagement.

X EXAMPLES OF COLLECTIVE INITIATIVES ACROSS EUROPE

X. 1 Initiatives similar to Citizen Energy Communities

Name/Country	Ecopower, Belgium
Year of the establishment	1992
Activities	Production and supply of renewable electricity, wood pellets production, energy efficiency measures
Technology	Wind, solar and hydro
Legal Form	Cooperative
Participation	Number of members: 55.000 natural persons, few legal persons
	Eligibility: Natural or legal persons, regardless of location
	Participation fee: buying one share. One share is EUR 250; the number of shares is limited to 20 per person.
	Exit: no earlier than three years after registration
Governance	Voting principle: one member, one vote
Purpose	Investing in renewable energy Promoting rational use of energy Low energy bills
Profit	Payment of dividends is capped at 6% (according to Belgian law). The management board decides every year on payment.
Financing mechanism	Subsidies for initial investment, profit from selling electricity is reinvested, green certificates
Website	https://www.ecopower.be/

Name/Country	Som Mobilitat, Spain
Year of the establishment	2016
Activities	Mobility products and services
Technology	Electric vehicles sharing
Legal Form	Non-profit consumer and user cooperative society
Participation	Number of members: 1350
	Eligibility: Natural or legal persons, regardless of location
	Participation fee: buying one share. One share is EUR 10
	Exit: no earlier than two months after registration, one month notice period
Effective control	Voting principle: one member, one vote

Purpose	Sustainable mobility
Profit	Non-profit; Board of directors - unpaid voluntary positions
Financing mechanism	Prepayments and sponsorships
Website	https://www.sommobilitat.coop/

X.2 Initiatives similar to Renewable Energy Communities

Name/Country	Hyperion, Greece
Year of the establishment	2020
Activities	Production and consumption/virtual sharing of renewable electricity
Technology	Solar
Legal Form	Non-profit cooperative
Participation	Number of members: 70, up to 120
	Eligibility: natural persons, municipalities, NGOs, SMEs from Attica region
	Participation fee: one share of EUR 100
	Exit: three-month notice period
Effective control	Voting principle: one member, one vote principle. One member can have up to five shares. At least 50% plus one of members must be located at the place where the seat is (proximity requirement). (Greece Law).
Purpose	Investing in renewable energy Ensuring energy security Alleviate energy poverty Education and promotion
Profit	Non-profit; lower electricity bills
Financing mechanism	Crowdfunding
Website	https://hyperioncommunity.com/

Name/Country	Marstal Fjernvarme, Denmark, Island of Ærø
Year of the establishment	1962
Activities	Production, distribution, supply and storage of renewable district heat
Technology	Solar thermal collectors (50%), wood chips (40%), heat pump (2-3%), bio-oil CHP, pit thermal energy storage; power to heat
Legal Form	Non-profit customer-owned enterprise
Participation	Number of members: around 2000
	Eligibility: inhabitants of the town of Marstal whose houses are connected to the network
	Participation fee: costs of the connection to the network
	Exit: Denmark law requires the connection to DH network

Governance	Voting principle: one member, one vote
Purpose	Security of supply, sustainable heat, lower energy bills
Profit	No profit sharing; benefits in terms of low tariffs
Financing mechanism	Initial oil-based installations were financed by members. The transition to renewables was financed by the EU and Danish funds
Website/source	https://co2mmunity.eu/wp-content/uploads/2019/03/Factsheet-Aer%C3%B6-Marstal.pdf

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