European Commission

ENERGY **COMMUNITIES** REPOSITORY

A **ROADMAP** TO DEVELOPING A POLICY AND LEGAL FRAMEWORK THAT ENABLES THE DEVELOPMENT OF ENERGY COMMUNITIES

Contents

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Executive Summary

There is no one-size-fits-all approach for how to develop an enabling framework for Renewable Energy Communities (RECs) and Citizen Energy Communities (CECs) where there is little or no experience with energy communities. Every Member State starts from a different place. In some Member States, energy communities have existed for decades. In other Member States, energy communities have only emerged within the last decade, while in others the first energy communities are only starting to develop.

Aim of this Roadmap

This Roadmap addresses potentially all EU Member States, though it is particularly relevant to those where there is little or no experience around energy communities. Without a sector to reference or engage with, it may be difficult to put in place a fully-fledged framework, informed by an in-depth assessment of national potential and existing barriers. Therefore, Member States that are just embarking on the development of a policy, legislative and regulatory framework for energy communities may particularly benefit from this Roadmap. Nevertheless, the national examples presented in this report can also provide inspiration to any national decision makers in Member States with well-established contexts for energy communities, which can look to fine-tune and further develop their own existing frameworks.

This Roadmap follows a **learning-by-doing approach**. Learning-by-doing implies an iterative nature to developing policy, legislation and regulations for energy communities. The creation of an enabling framework for energy communities is not a one-off activity, nor is it a linear process. Through a learning-by-doing approach, a minimum temporary legal framework can be created with the goal of preparing a more finalised legal framework based on learned experience. Such an approach often coincides with a pilots scheme so that experience can be developed. The approach relies on feed-back loops between supporting the development of experience and building out or fine-tuning the framework over time.

This Roadmap supports the learning-by-doing approach through providing different examples of implementation on different aspects of national frameworks for energy communities from across the EU. Furthermore, examples of how different Member States have carried out their own learning-by-doing approach are presented in Annex 1.

How to use this Roadmap

The Roadmap breaks down what Member States are asked to do when building new policy and legal frameworks for energy communities from scratch, using the Clean Energy Package (CEP), particularly the Recast Renewable Energy Directive (REDII) and the Internal Market for Electricity Directive (IMED), as a basis. It is not necessary, or perhaps even realistic, to develop a full-fledged legal and policy framework for energy communities all at once.

This Roadmap proceeds as follows. In chapter 2, it presents **five foundational building blocks** that are the basis for developing a national policy and legal framework for energy communities:

1 | Building Block: A clear energy community definition – Before Pilots can be established, a clear enough definition of a REC and CEC needs to be in place.[1] Supportive elements in other Building Blocks need to have eligibility/validation criteria based on the definition. Furthermore, a registration and monitoring framework need a concrete framing provided by the national definition. The Roadmap provides experience on how Member States have interpreted principles of proximity, effective control, autonomy, social, economic and environmental benefits, and minimum participation requirements for constituting an energy community.

2 | Building Block: Access to information, awareness raising, and expertise – The development of pilot initiatives need to be coupled with raising awareness so that different stakeholders (citizens, businesses and local authorities) understand opportunities, benefits and risks of joining an energy community. Capacity also needs to be built so that stakeholders have access to the information and expertise required for setting up an energy community and setting up different projects and initiatives.

3 | Building Block: Access to financial support – Pilots need to be coupled with financing sources so that communities are able to prepare, develop and invest in their first projects without risk. Their specificities also need to be taken into account in the design of existing renewables support schemes so that they can access any available operational support.

4 | Building Block: Minimal regulatory conditions – Rules need to be in place that allow pilots and other new initiatives to undertake activities that are being supported. For new and emerging activities like energy sharing and provision of flexibility, a temporary experimental regulatory framework or a regulatory sandbox may be necessary. Such rules do not need to be comprehensively elaborated or finalised from the outset, and may be changed to become more permanent over time. For activities that have been regulated for a long time, such as production and supply, basic regulatory conditions should already be in place.

5 | Building Block: A registration and monitoring framework – After the emergence of pilots, a registration and monitoring system can create an important feedback loop to relevant decision makers (regulators and policy-makers) and stakeholders, including system operators. In this way, monitoring experience provided by emerging initiatives can inform the identification of potential barriers and assessed for positive and negative impacts (including abuses), and growth of the sector. Monitoring supports the learning-by-doing approach, because it allows for learning to help fine-tune frameworks over time, including putting in place policy objectives based on an assessment of potential and barriers. In particular, the Roadmap lays out design features for an effective registration and monitoring system.

The individual Building Blocks in this Roadmap are not presented necessarily in a linear fashion. Before any other step, a legal definition is required. However, pilots can be designed simultaneously with informational and financial support. Minimal regulatory conditions also need to be in place to allow activities targeted by pilots or other newly emerging projects (e.g. production, retail supply, energy sharing, heating and cooling, etc.) to start. If such conditions do not exist, experimental regulations or a regulatory sandbox can be used before a more concrete framework is developed. Monitoring and registration can, but do not necessarily need to be developed at the same time as other Building Blocks. By focusing on building out legislation, policy, and minimum regulatory conditions based around these five Building Blocks, Member States can establish a basic foundation for the emergence of energy communities. Examples of national and sub-national approaches are provided for each of the Building Blocks.

In chapter 3, this Roadmap presents actions that Member Stats can take to create a more complete national enabling framework so that the sector can develop. This includes conducting a national assessment of barriers and potential for the development of energy communities, policy objectives for the growth of energy communities, and other enabling conditions so energy communities can develop business models around different activities that are enabled under the CEP.

Similar to the Building Blocks, these other aspects of national frameworks do not need to be pursued in a linear fashion. Some elements, such as enabling conditions and establishment of regulatory sandboxes, can be developed simultaneously with the Building Blocks, for example. Similar to each of the Building Blocks, chapter 3 provides 'good' examples of national and sub-national approaches. Annex 1 also presents several different overall approaches to learning-by-doing followed by different Member States in building out their national frameworks for energy communities. Overall, the examples presented throughout this report can be useful for any national-level decision-maker who is responsible for developing or implementing policy on energy communities.

A roadmap to energy community regulation

Pack your bags...

The creation of an enabling environment for energy communities is not a one-off activity, nor is it a linear process. The introduction of any new element in an established system will require a trial period as well as evaluation and revision cycles, so that one can learn from experiences and adjust the framework to make it most effective for the target group and the system it operates in.

Adopting a '**learning by doing**' approach throughout the process has been observed as a key element, so as to balance efforts with results from the beginning.

There are a number of building blocks you will need to consider at every step of the way:

Pilots

Pilots can be an effective way to getting the first communities off the ground, while also testing your preliminary framework. By supporting a small set of energy communities, governments can gain a better understanding of the challenges and opportunities based on the reality in their national context. Experience from a number of EU countries suggests that both financial and expert/community-building support are conducive to a successful pilot phase.

Step 1: Test run

If you are starting from scratch in your country, there is valuable existing information you can turn to for inspiration, both on options for setting up national definitions and enabling frameworks, and for identifying possible drivers and barriers. This will help you pool elements that may apply to your own national context, and put together a preliminary version of your national definitions, how you will support pilots, etc. This is also the moment to develop a first version of the building blocks.

Step 2: Game time

This is the time to set out your monitoring framework, so that you can track the evolution of energy communities in your country from the outset.

Knowing which elements did or didn't work in your national context after the pilot phase and where adjustments are needed, you are well-placed to build out a more complete national enabling framework and 'final' policy objectives, informed by an assessment of potential and barriers and drivers.

Step 3: Regroup and perfect

As with any emerging framework, building policy, legislation and regulation for energy communities will require a 'learning by doing' mentality. The monitoring you put in place can serve as a feedback mechanism to decision-makers so they can keep improving supportive policies, ensure correct implementation of the concepts, and fine-tune where needed.

INTRODUCTION

The Clean Energy for All Europeans Legislative Package (CEP), and in particular the Directive (EU 2018/2001 (Renewable Energy Directive, or RED II) and Directive (EU) 2019/944 (Electricity Directive, or IMED),[2] introduced a number of new legal concepts acknowledging specific market actors and activities that reflect the evolving role of consumers in the energy system including Renewable Energy Communities (RECs) and Citizen Energy Communities (CECs). These concepts were elaborated in European Union (EU) legislation in order to deliver the objective to empower all consumers across the EU in Europe's energy transition and put them at the centre of the Energy Union.[3] The RED II and IMED acknowledge the added value of RECs and CECs to Europe's energy transition in terms of fostering social acceptance, private capital investment, more choice, greater participation in the energy transition, providing access to affordable energy, and uptake of flexibility.[4]

Over the past two years, the Energy Communities Repository (Repository) has reviewed the legal frameworks that EU Member States have put in place for energy communities.[5] With further input from energy communities, local authorities, regulators, distribution system operators (DSOs), and other market actors throughout the energy system, the Repository has also published a Report on Barriers and Action Drivers for the Development of Different Activities by Renewable and Citizen Energy Communities (Barriers and Action Drivers Report), which looks at factors that may facilitate or hinder the development of different activities by energy communities.

When reflecting on the information gathered across the EU, it is important to acknowledge two things. First, **energy communities and other innovative concepts based on empowering citizens and communities in the energy transition are still very new** in EU energy policy. Very few Member States had frameworks in place with the explicit aim to support and enable energy communities prior to the adoption of the CEP. In many Member States, there were no energy communities until the impulse of the CEP started to motivate actors, in parallel with the development of frameworks at the national level. Second, **there is an inherent complexity when building new policy and legal frameworks for energy communities from scratch.** The EU definitions of RECs and CECs, while principles-based, require further elaboration and details at the national level, including acknowledgment across different sectors and topics (electricity, heating and cooling, gas, energy efficiency, renovations, etc.). Building out a legal framework at the national level requires not only the acknowledgment of certain rights and responsibilities for RECs and CECs, but also the integration of energy communities into existing renewable support schemes, and development of enabling frameworks, which at least for RECs are quite detailed and touch upon the removal of unjustified barriers, promoting awareness, access to information and finance, capacity building for local authorities, and guaranteeing inclusiveness. This necessitates the development of national legislation and regulations, the integration of energy communities into climate and energy plans, and the assignment of different roles and responsibilities to National Regulatory Authorities (NRAs), Executive Agencies and other authorities, from the national to the regional to the local level. In Member States where an energy community sector is still nascent or has yet to emerge, it may be difficult to determine where to start.

CHAPTER 1

A potential Roadmap for developing national enabling frameworks for energy communities using the learning-by-doing approach

01

There is no one-size-fits-all approach for how to start developing an enabling framework for energy communities where there is little or no experience. Every Member State starts from a different place. In some Member States, energy communities have existed for decades. In other Member States, energy communities have only emerged within the last decade, while in others the first energy communities are only starting to develop.

Where there is little or no experience around energy communities, Member States can aim to get concrete initiatives on the ground so they can be observed and provide lessons that will inform a more full-fledged enabling framework. The Roadmap below provides a potential pathway for how this type of learning-by-doing approach can be pursued by Member States according to their national circumstances. It proceeds by identifying the five 'foundational Building Blocks' that can serve as a basis for getting a national energy community sector started. Before elaborating different approaches to putting in place each of these Building Blocks, a process for navigating the development of the foundational Building Blocks through the learning-by-doing approach is presented.

Learning by doing

A noticeable trend among Member States that have been active in developing their national framework for energy communities is learn by doing. The learning-by-doing approach implies an iterative nature to developing legislation and regulations for energy communities, where **the creation of an enabling framework for energy communities is not a one-off activity or a linear process**. Under this approach, a minimum temporary legal framework is created, with the goal of preparing a more finalised legal framework based on experience. The learning-by-doing approach relies on evaluation and revision cycles, so that policy makers can learn from experiences and adjust the framework to make it most effective for the target group and the system it operates in.

Where there is little experience and national decision makers are starting from scratch, there is value in turning to existing examples of energy communities, as well as existing frameworks that exist in similar national contexts and can be used as inspiration. This can be done at any time throughout the process, as many Member States are also revisiting their newly created frameworks for energy communities.

A key feature of the learning-by-doing approach has been to support the development of initial pilot projects and other flagship initiatives. **By supporting a small set of energy communities, governments can gain a better understanding of the challenges and opportunities based on the reality in their national context, while at the same time getting the first communities off the ground.**

A number of Member States with no or little experience around energy communities have sought to get an initial set of projects off the ground. These pilots are usually supported through the provision of financial and technical capacity building support, which is explained in Building Blocks 2 and 3. These frameworks usually provide support for a certain number of projects and can be pursued in a number of different forms. Some Member States have or are developing official pilots schemes under a specific EU fund (e.g. under Recovery and Resilience Plans). Other Member States, such as **Ireland**, have created space in available support schemes for RECs to get projects off the ground. Other Member States, such as **Austria** and **Italy**, have simply put in place Building Blocks to allow new projects to arise through various forms of support, so that experience can develop.

For pilots and other flagship initiatives to be capable of succeeding, a basic framework needs to be in place. Such a framework will include the following Building Blocks:

1 | A clear definition to identify and acknowledge energy communities – a conceptualisation of RECs and CECs with sufficient detail is necessary to provide clarity to stakeholders on the different purposes and opportunities presented by RECs and CECs, and to guard against abuse or corporate capture. Definitions also define eligibility for access to financial, regulatory and other public support, and are necessary in setting validation criteria.

2 | Access to information and awareness raising – raise awareness to all stakeholders, both about what energy communities can do, and how they can take steps to start or join an energy community, and how they can develop various activities. This must also be accompanied by capacity building and access to technical (legal, financial, project development, etc.) support, or facilitating access to external expertise through financial support.

3 | Access to finance and available support schemes – programmes need to be set up or made accessible to provide financing sources for communities to prepare, develop and invest in their first projects (pilots or otherwise), for instance through EU funds or dedicated national funds. Furthermore, due to the challenges energy communities experience in competing with other market actors, their specificities need to be taken into account in the design of existing renewables support schemes. These supportive measures need to be coupled with quality assurance to ensure the development of sustainable business models and to ensure there is not an overreliance on support schemes in perpetuity.

4 | Minimum Regulatory conditions - rules need to be in place that allow pilots and other new initiatives to undertake activities that are being supported. For new and emerging activities like energy sharing and provision of flexibility, a temporary experimental regulatory framework or a regulatory sandbox may be necessary. Such rules do not need to be comprehensively elaborated or finalised from the outset, and may be changed to become more permanent over time. For activities that have been regulated for a long time, such as production and supply, basic regulatory conditions should already be in place.

5) Framework to monitor the types of initiatives that emerge and persistent barriers – a monitoring system can be linked to the identification (i.e. registration) of energy communities relevant support programmes. In this way, potential barriers can be identified and assessed for positive and negative impacts, growth of the sector can be monitored, and abuses can be identified. A feedback loop to relevant stakeholders, including system operators, regulators and policy-makers can help overcome barrier or inform the re-evaluation and design of enabling policies, regulations and measures to further refine and/or build out the enabling framework over time.

Building Blocks to support the learning-by-doing approach to developing legal frameworks for energy communities.

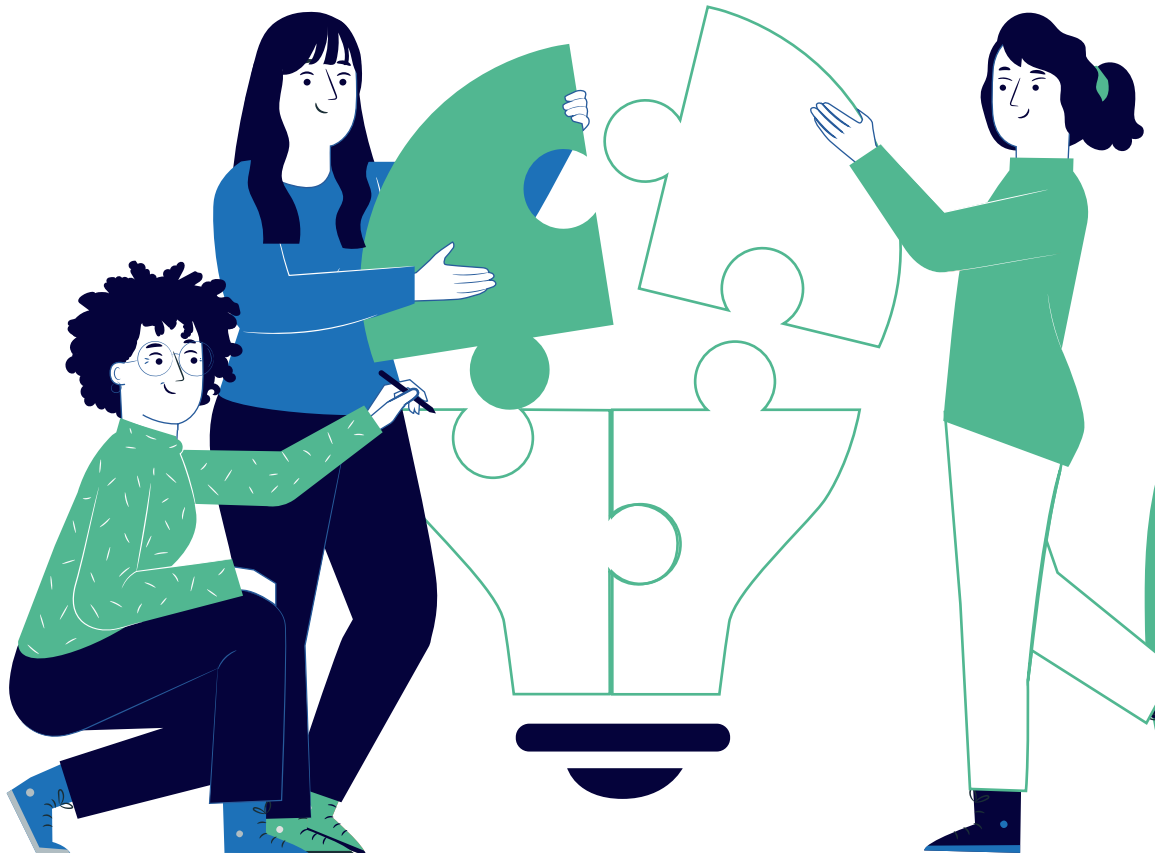
The initiation of pilots cannot come before a clear legal definition is created. However, **pilots often coincide with the development of the basic Building Blocks, which include clear definitions for energy communities, awareness raising, access to information, expertise and finance, and a registration and monitoring system**. Minimal regulatory conditions also need to be in place for these first initiatives to get off the ground. Pilots may be possible through the existing framework, for instance for production of renewables, or if there is an existing framework for collective self-consumption (e.g. virtual net metering). Where a necessary regulatory framework to conduct certain activities is likely, as is often the case with energy sharing or other innovative concepts that do not fit existing regulatory principles, **pilots and/or other initial projects can be allowed to operate under an experimental regulation or through a regulatory sandbox**.

An iterative framework can serve as the basis for a more finalised enabling framework for energy communities. Monitoring and registration can, but do not necessarily need to be developed at the same time as other Building Blocks. Nevertheless, they are important for being able to evaluate the pilot phase, to learn which elements worked well and what didn't, and can lead to necessary adjustments. In this way, pilots can initiate a feedback loop, where lessons learned can be integrated into an evolving framework.

Once experience has been gained with new initiatives, and a sector starts to develop, national authorities have a body of information and data that can feed into a proper assessment of barriers and potential for the development of energy communities at the national level. Likewise, this body of evidence can help inform policy objectives (national or subnational) for growing the sector, as well as more detailed regulations across different sectors (e.g. electricity, heat and renewable gas) to support the participation of energy communities. Wherever the starting point, it is important to have a baseline for measuring the progression of the sector and what emerges, both in terms of policy and real-life practice.

CHAPTER 2

Putting in place foundational Building Blocks to facilitate the emergence of energy communities



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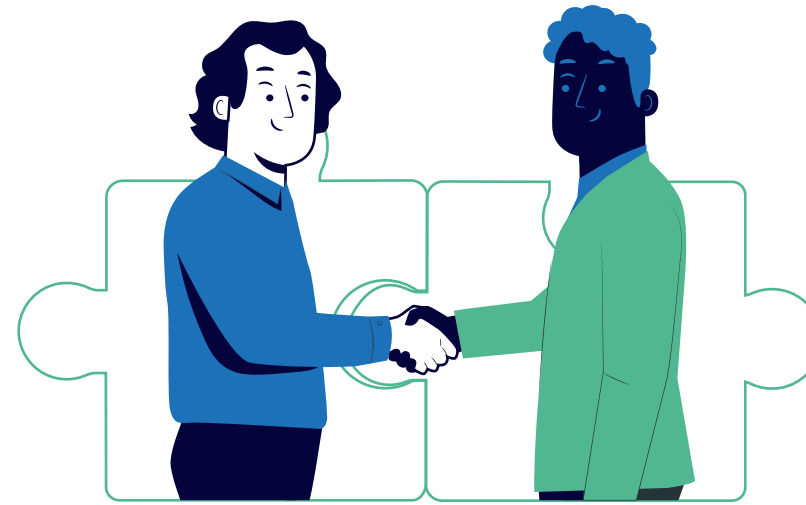
This chapter breaks down the process of building out a foundation for a more full-fledged national enabling framework for RECs/CECs using a learning-by-doing approach. Article 22, paragraph 4 of the RED II lists each of the elements that should be included in enabling frameworks for RECs, while Article 16, paragraphs 1 and 2 of the IMED lists what should be included for CECs.[6] The sections in this chapter dive into the Building Blocks that have been identified above. They also provide concrete examples of how different Member States have approached each Building Block.



Building Block No 1: A clear definition

A clear articulation at the national level of the principles that make up an energy community is central to ensuring the democratic and social character of the concept of energy communities and the consequent justification for the removal of disproportionate barriers and application of a dedicated enabling and supporting framework.

The lack of a clear and uniform legal definition for energy communities was identified by the Repository as a significant barrier to the development of activities by energy communities. Based on the Repository's observations, this barrier has been driven by two challenges. First, **the conceptualisation of energy communities at national level without an existing reference is not an easy endeavour.** Many of the governance and participation principles included in the EU definitions such as proximity, autonomy, and social, economic and environmental benefits have a multi-interpretational character. The principle of effective control is more straightforward, because 'control' is already defined in Article 2 (56) of the IMED.[7] Nevertheless, Member States have taken different approaches in implementing the principle. In Member States that have energy communities, legal entities, such as cooperatives, may already embody some of these principles. However, where such legal forms are not as commonly used, participation and governance principles may need to be more explicitly clarified.

Second, **the novelty of the legal concept of energy communities, and the relationship between RECs and CECs, has been difficult to interpret at the national level without further elaboration and communication** (See Building Block 2). The sectoral nature of national energy legislation and the processes to revise it does not make providing clarity any easier.

ASPECTS WHERE LEVEL OF DETAIL IS PARTICULARLY IMPORTANT:

- **Legal entity** – outline what legal entities and under which conditions they are allowed to be used as an energy community
- **Activities** – elaborate the activities an energy community can undertake across different sectors, including electricity, gas and heating
- **Proximity** – define proximity for a REC taking into account the local context and the technologies the community will use
- **Effective control** – set eligibility requirements for which members may exercise control of the community, and identify relevant standards of what constitutes 'effective control'[8]
- **Autonomy** – define autonomy and identify relevant standards
- **Primary purpose other than to generate profits** – define what it means to have a primary purpose other than to generate profits, and identify relevant standards in this regard
- **Social, economic and environmental benefits** – define what constitutes a social, economic or environmental benefit for the community or local area where it operates

The below sections address how the harder-to-tackle principles included in the REC (i.e. autonomy proximity, and effective control), and REC and CEC definitions (i.e. effective control, and social, economic and environmental benefits) have been elaborated and clarified at the national level in different EU Member States.

Proximity

In the context of RECs, the definition of physical or geographical proximity in relation to the community's activities or renewable energy projects serves an important function. Specifically, it helps ensure local acceptance, participation, decision-making, and benefit and cost sharing related to local sustainable energy projects.[9] This needs to be distinguished from energy sharing, which uses the public grid to allocate local production with participating consumers in close to real time and may integrate a geographical component that is defined around grid topology.[10]

For RECs, the proximity requirement are conducive to social acceptance of renewable energy project. This can be achieved by ensuring that members or shareholder of a community reside locally or within the region that are impacted by technology and/or activities can participate and exercise control. Below are several (non-exhaustive) examples of how different Member States have designed their REC definitions around their respective administrative units, topology or distance at the local and regional level.

MEMBER STATE EXAMPLES

ADMINISTRATIVE UNITS

- **Belgium (Brussels-Capital Region)** – According to guidance provided by Brugel, the regional energy authority, the Region is the starting basis, with the possibility to extend to members in neighbouring municipalities in other Regions.

- **France** – Residence or location in the department or a bordering department where the project is being implemented (there are exceptions for departments that do not have more than two neighbouring departments). There are also standards made for local authorities and for enterprises with majority ownership (direct and indirect) by local authorities.

- **Greece** – For natural persons, permanent residence or ownership/right to use, in a region where the REC is active or the project is being developed. For legal entities, the registration of the legal entity in the region where the REC operates or the project is being developed.

- **Lithuania** – Residence in the municipality where the construction or installation of the energy production facility is planned or in other municipal elderships bordering the municipality.

- **Slovakia** – Permanent residence or headquarters in the territory of the higher territorial unit in which the equipment for the renewable electricity production, or the equipment for the production of biomethane, owned by the community is located. Where there are multiple production installations, the majority of installations should be based in this area. If a higher territorial unit cannot be determined according to the above, it shall be determined according to the seat of the REC.

DISTANCE

- **Germany** – Registration in a postcode that is wholly or partly within a radius of 50 km of the planned installation (for solar PV, the distance is measured from the outer edge of the respective installation, and for wind the distance is measured from the centre of the tower of the respective turbines).

LOCAL CONTEXT

- **Belgium (Flanders Region)** – A REC must simply limit participation on the basis of technical or geographical proximity, taking into account the function of the objectives or activities that the REC intends to achieve. The determination must be communicated to the NRA.

- **Ireland** – The NRA, CRU, has proposed to give RECs autonomy to adopt their own interpretation of “proximity of the renewable project”. This interpretation, and info on which members can be involved in the control, must be included in their founding documents. When setting the requirements, the REC should consider the needs of the community and ›

the activities it intends to primarily engage in. The CRU suggest that in areas with a lower population density, a community may have a wider interpretation of 'local' and may choose to set the proximity requirements broader, extending to the neighbouring town, city, or counties.

GRID TOPOLOGY

- **Austria** – Follows grid-typology that extends regionally.
- **Italy** – The medium-voltage station.

Effective control

As a principle, there is less ambiguity in understanding effective control. For the electricity sector, control is defined by the IMED as:

"Rights, contracts or other means which, either separately in or in combination and having regard to the considerations of fact or law involved, confer the possibility of exercising decisive influence on an undertaking, in particular by:

a) Ownership or the right to use all or part of the assets of the undertaking;

b) Rights or contracts which confer decisive influence on the composition, voting or decisions of the organs of the undertaking."

The IMED has been the starting point for some Member States in defining effective control in energy communities, such as Slovenia. Nevertheless, there are nuances in the REC and CEC definitions that require a tailored approach at the national level. For RECs, eligibility to exercise effective control is linked to the location of participating members or shareholders in the local

area or region where the renewable energy project is located. In contrast, for CECs, eligibility to exercise effective control is linked to the individual members' status as a natural person, local authority or small enterprise.

Some Member States have developed unique thresholds to define effective control in the context of RECs and CECs. Some Member States, including Belgium (Brussels-Capital, Flanders and Wallonia Regions), and Greece require the energy community's statutes to elaborate how control is exercised by the different members of the community.

The definition of RECs and the Recital 71 to the RED II also refers to ownership when mentioning renewable energy projects that are developed by the legal entity that is acting as a REC. While the IMED does not explicitly refer to ownership of assets in the context of CECs, it refer to ownership in the context of energy sharing. Most Member States apply an ownership requirement to the assets that are used by RECs, particularly renewable energy production facilities. However, in a minority of Member States, the energy community only needs to have a 'right of use' around the assets used by the energy community. This has resulted in the rise of arrangements by third parties (e.g. leasing) that give energy communities 'usufruct' rights over the production facilities they use as the basis of their activities.

Article 22, paragraph 1 of the RED II clarifies that Member States may limit or prohibit participation by certain private companies whose participation does constitutes their primary commercial or professional activity in RECs. In France under the Energy Code, private companies with the main commercial or professional activity to participate in an energy community are prohibited from becoming a member. However, under the Draft Application Decree there is an exception for 'citizen intermediation structures', which are defined as RECs or funds that have received authorisation to use the name of eligible social entrepreneurship funds under the Monetary and Financial Code, specialised in capital investment in renewable energies or to a company whose purpose is the development of renewable energies and benefiting from the approval "solidarity utility company".

From Member State experience thus far, several trends can be observed:

- **Parameters for local proximity** of members that are eligible to exercise effective control
- **Eligibility rules for the categories of members that may exercise effective control**, or where (in the case of private enterprises) decision making power or participation may be otherwise limited
- **Safeguards** to ensure effective control stays with certain types of members (mostly citizens), which may include **minimum participation requirements for citizens**.

MEMBER STATE EXAMPLES

PARAMETERS FOR LOCAL PROXIMITY

- **Finland** – Control is exercised by members or shareholders. Hence, eligibility acts as de facto control.

- **Germany** – At least 75% of voting rights must be held by natural persons whose dwelling is registered in a postcode that is wholly or partly within a radius of 50 km of the planned installation. Also, at least 50 natural persons (as voting shareholders) is required.

- **Lithuania** – At least 51% of the votes at the general meeting of shareholders should belong to shareholders who are natural persons living in the proximity of the REC.

ELIGIBILITY RULES

- **Austria** – Large and medium-sized companies, and companies considered 'electricity companies' are excluded from exercising control over a CEC. Producers who supply energy to a grid in the local or regional area may participate in a REC as long as they are not controlled by a supplier, electricity trader or supplier. Legislation does not mention ownership explicitly. It only states that power to operate and dispose of the generation facilities lies with the energy community, which operates as a requirement of effective control. According to Explanatory Notes to the EAG, communities may use a third party for operational management and maintenance. Contract and leasing models are also permitted.

- **Denmark** – For RECs and CECs, members (including natural and legal persons) forbidden from exercising decisive influence in the community are those engaged in extensive commercial activities and where energy sector activities are their main economic activity. For individuals, if they are part of the management of other companies, they are forbidden from taking decisions on behalf of the community.

- **France** – For RECs, to be eligible to exercise effective control, SMEs cannot be 'linked' with, or a 'partner' of, another enterprise under Article 3 of EU Recommendation 2003/361/EC (Recommendation on SMEs). Under an elaborate standard of effective control, an REC or CEC is effectively controlled by its members or shareholders if four conditions are met:

  1 | At least 40% of own and quasi-equity on the one hand, and voting rights on the other, are held (directly and indirectly under two limited situations), separately or jointly:

  a. by at least 20 natural persons; or

  b. one or more local authorities or by one or more groups of local authorities; or

  c. one or more SMEs for RECs / small enterprises for CECs.

  2 | No other partner or shareholder holds directly or indirectly voting rights more than or equal to 40%;

  3 | If members eligible for effective control jointly have less than 50% of the voting rights, then the majority for strategic decisions (i.e. amendment >

› of the statutes, budget management, allocation of results and approval of construction and operating contracts) must be greater than 60%;

4 | Companies with more than 10% of voting rights and 10% of own and quasi-equity of the structure holding the installation, including companies controlling or being controlled directly or indirectly by such a company, cannot hold, directly or indirectly individually, more than 10% of the voting rights and 10% of the own and quasi-equity of the structure holding the installation; or together, more than 33% of own and quasi-equity and voting rights, no more own funds and quasi-equity and voting rights than other natural persons, local authorities or their groupings, collectively combined.

- **Hungary** – For RECs and CECs, natural and legal persons involved in the electricity and gas sectors, and those that have sole or majority ownership in a legal person, or a senior executive or a related undertaking of a legal person that engages primarily in the electricity and gas sector, are forbidden from managing the energy community alone, or from being a majority member. They are also not allowed to participate in the decision-making body of the energy community to the extent that it equates to exercise of the right of management.
- **Italy** – For RECs and CECs, exercise of control is limited to natural persons, SMEs (small in the case of CECs), local authorities, including municipalities, research and training entities, religious entities, third sector and environmental protection associations, and local administrations.

SAFEGUARDS

- **Belgium (Brussels-Capital Region)** – Guidance developed by the NRA, Brugel, references control within the meaning of Article 1:14 of the Companies and Associations Code. The Guidance also states who can exercise effective control of RECs and CECs. Except for separate third definition, which is outside EU legislation, the community must own its production installations.
- **Germany** – At least 75% of voting rights must be held by natural persons whose dwelling is registered in a postcode that is wholly or partly within a radius of 50 km of the planned installation. Also, at least 50 natural persons (as voting shareholders) is required.
- **Lithuania** – At least three shareholders should be natural persons with the right to vote at the general meeting of shareholders.

Autonomy

The principle of autonomy primarily relates to RECs as it is not mentioned in the IMED. Some Member States apply this principle both to RECs and CECs (e.g. Belgium - Flanders and Brussels Capital-Regions, Croatia, Greece, France). While autonomy can be broadly construed, within the REC context it has also been clarified in Recital 77 of the RED II:

"to avoid abuse and to ensure broad participation, renewable energy communities should be capable of remaining autonomous from individual members and other traditional market actors that participate in the community as members or shareholders, or who cooperate through other means such as investment."

Autonomy has both an internal dimension governing the relation of the members, and an external dimension governing its relation with partners to ensure effective control. Internally, to be autonomous the community must be collectively governed rather than controlled by one or a few members. Here, autonomy supports democratic internal governance and decision making so the members as a collective are represented. Externally, the community must be independent from non-members that collaborate with the community through providing financial support or other services.

In some Member States, national company law provides **standards for situations where decision making within a company structure is no longer independent**. Several EU Member States already integrate autonomy by limiting amount of shares per member (Belgium - Flanders and Brussels-Capital Regions, Croatia, Greece, Germany, Greece, Lithuania and Sweden[13])[14] or requiring the one-person-one-vote principle (Ireland).

MEMBER STATE EXAMPLES

- **Belgium (Brussels-Capital Region)** – Brugel, the NRA, states in guidance that the community should be governed in a collective and democratic manner, which implies representation of all members. Brugel will endeavour to ensure that no member of the community has disproportionate decision-making power compared to other members (a member cannot alone have a majority of votes). Brugel also provides a non-exhaustive list of examples of how autonomy might be fulfilled, including by granting one vote to each member, limiting the amount of capital each individual member can invest, limit investment withdrawals, and by limiting investment by external parties that could endanger the community's independence, even if investment does not come with voting rights. The energy community must state in its statutes how this standard is met. Brugel verify that companies participating respect autonomy, and can control ex post or hear complaints from members.

- **Belgium (Wallonia Region)** – The law specifically references Article 1:20 of the Companies and Associations Code. Under the Code, an energy community is autonomous provided that a member or shareholder does not hold (alone or jointly with others) 50% or more of the energy community's voting rights. There is a derogation for energy communities made up of less than three members. The Code also lists three situations in which the energy community, if it is linked to another entity or natural person, is not autonomous. When manifest and repeated

attacks on the autonomy of the energy community are observed, any member or shareholder of the energy community may refer the matter to the Regional Energy Authority, the CWaPE. There are also procedures that should be followed in case a conflict of interest is observed with a member or shareholder of the community. The statutes of the energy community should clarify the provisions guaranteeing autonomy and independence vis-à-vis each participant and other market players who participate in the energy community or cooperate with it.

- **Croatia** – Limits ownership to no more than 40% of the share of the energy community.

- **France** – SMEs (small enterprises for CECs) must be autonomous as a prerequisite to be able to exercise control. Article 3 of the Commission's SME recommendation is the standard that is used. Under a Draft Application Decree, which has been finalised but still needs to be approved before it enters into force, an energy community is autonomous if at least two different categories of eligible members exercise 'effective control' over the REC (the standard is established for CECs) or where it is effectively controlled directly by at least 20 citizens.

- **Germany** – No member or shareholder may hold more than 10% of the voting rights in the Citizen Energy Company.

- **Greece** – Greece applies autonomy to both RECs and CECs. They must be democratically governed by their members and they must be autonomous in decision-making. This is governed through placing limitations on the number of cooperative shares that can be held by each member. Each member may own one or more cooperative shares, with a maximum of 20% of shares. There is an exception for local authorities of first and second degree and enterprises that are 100% owned by those local authorities, which can hold up to 40% of shares. Regardless of the number of shares each member owns (including local authorities), they participate in the general assembly with only one vote.

- **Hungary** – Prohibits natural or legal persons from exercising sole or majority control of both RECs and CECs. This creates an inherent exception for municipalities.

- **Ireland** – To be considered a REC under the Irish Renewable Energy Support Scheme, each shareholder/member is entitled to one vote, regardless of shareholder or membership interest.

- **Lithuania** – for RECs, shareholders may not hold more than 20% of the votes at the general meeting of shareholders of another energy company. This provision does not apply to municipalities.

Social, economic and environmental benefits (non-commercial purpose)

According to the EU level definitions, RECs and CECs have a 'primary purpose' to provide environmental, economic or social community benefits rather than to generate financial profits. This raises a number of questions:

1 | **What is considered an environmental, economic or social community benefit?**

2 | **Which legal forms may be better suited to pursue community benefits?**

3 | **How to guarantee that financial returns from activities are primarily focused on providing community benefits over ensuring a return on investment to members?**

Regarding **benefits** that energy communities are supposed to deliver, a few Member States have expressed precision beyond the language of the Directives. In the Belgium (Wallonia Region), the government may specify notions of environmental, economic or social advantages and financial profits, but it has not yet done so. In Ireland's REC definition, it refers to both social and societal benefits, although it does not provide a separate definition of each of these terms. In Greece, national legislation defines addressing energy poverty as one of the activities that energy communities can undertake:

"the support of vulnerable consumers and tackling of energy poverty of consumers living below the poverty line, regardless of whether they are members of the REC, such as the provision or the offsetting of energy, the energy upgrade of homes or other actions that reduce the consumption of energy in the residences of the above." [15]

A few Member States have also started to concretely address accessibility issues through supportive policies for energy communities at the national level to promote participation of vulnerable and low-income households. The Lithuanian Recovery and Resilience Fund, and the Italian (Region of Sicily) eligibility criteria for accessing these funds includes a requirements that at a minimum of the REC's members should be vulnerable or energy poor (40% and 10%, respectively).

Regarding **legal forms**, two trends are noticeable. Some Member States do not specify any legal form, allowing initiatives to choose as long as they comply with the REC or CEC definitions (participation and governance and objectives criteria). Other Member States choose to refer to a number of legal forms, which are often oriented towards those that promote cooperative, social economy, or non-profit objectives. It is important to note that energy communities still need to be able to establish sustainable business models that are capable of generating a financial surplus so that the community is capable of reinvesting and distributing those benefits for the benefit of their members or the local area in which they operate.

Member States have taken various approaches to ensure that energy communities **prioritise community benefits over profit distribution**, some stricter than others. Several Member States require energy communities to include provisions in their founding statutes or articles of association how profit will either be a subordinate objective or otherwise prohibited.

MEMBER STATE EXAMPLES

APPROACHES TO ENSURE ENERGY COMMUNITIES FOCUS ON GENERATING COMMUNITY BENEFITS OVER PROFITS

- **Austria** – Motive for profit by an energy community is explicitly forbidden. According to Explanatory Notes to the Renewable Energy Expansion Act (EAG), RECs must act in the sense of a non-profit organisation without the primary intention of making a profit (e.g. non-profit limited liability company). Generating profits is permissible in principle (e.g. small marketing revenues from surplus quantities that contain profit components) as long as profits are not made for their own sake, but are passed on to the members or the community. Where non-profit status is not already – quasi automatically – derived from the company form, the 'non-priority orientation towards profit' should be stipulated in the articles of association (e.g. GmbH). CEC's are also not considered an electricity trader.

- **Croatia** – CECs are limited to forming legal entities operating under the law governing financial operations and accounting of non-profit organisations.

- **Belgium** – In the Flanders Region, energy communities should have either no profit motive or a profit motive that is subordinate to its main purpose. In the Wallonia Region, the statutes must state how any income from activities is distributed.

- **Greece** – From the surpluses of each use of the REC, at least 10% is withheld in a regular reserve. Such withholding of the surpluses is not mandatory when the amount of the reserve is at least equal to the amount of the cooperative capital of the REC. Nevertheless, at least 70% of the surpluses of each year should remain in the REC in the form of extraordinary or special reserves. These extraordinary or special reserves are available, by decision of the general assembly, in accordance with activities a REC can undertake and its statutes. Moreover, the REC can distribute to its members the surpluses of the year, after deducting the reserves as mentioned before, if there is a relevant provision in the statutes.

- **Hungary** – The legal entities allowed are cooperatives and non-profit companies to ensure they are not used for generating financial returns.

- **Latvia** – If an energy community assumes the form of a capital company, it must: 1) state its goals in its statutes, which should correspond to the goals of the energy community mentioned in the law; 2) carry out the economic activity mentioned in its statutes, which must correspond to the law; and its articles of association should state that it does not distribute or pay out the profit obtained in dividends, but invests to achieve the goals set out in the articles of association.

- **Lithuania** – RECs are required to be non-for-profit.

- **Slovakia** – Legislation explicitly forbids energy communities from engaging activities to make profit. RECs and CECs can distribute a maximum of 50% of the generated profit among the members.

Minimum participation requirements to constitute a community

The criteria contained in the REC and CEC definitions constitute a minimum harmonisation framework. Additional participation and governance criteria might be useful to adopt, depending on national political objectives that have been articulated through government policy. A number of Member States have applied criteria beyond what is in the EU definitions, particularly around minimum participation requirements to constitute a community. These criteria vary depending on the Member State.

MEMBER STATE EXAMPLES

MINIMUM PARTICIPATION REQUIREMENTS IN ENERGY COMMUNITIES

- **Austria** – Two or more members/partners, which applies to both RECs and CECs.
- **Germany** – At least 50 natural persons (as voting shareholders) is required.
- **Greece** – As a general rule, the minimum number of members of a REC is 30. However, the minimum number of members is allowed to be:

  a) 20, if the REC is based in a municipality of an island region with a population of less than three thousand one hundred (3,100) inhabitants, according to the latest census,

  b) 15, in case at least 15 SMEs participate,

  c) three, if at least one local authority of first or second degree participates, and the other two members are either enterprises that are 100% owned by a local authority of first or second degree, or a local authority of first or second degree.

- **Ireland** – At least one shareholder/member must be registered as a "Sustainable Energy Community" with the Sustainable Energy Authority of Ireland (SEAI).
- **Lithuania** – At least three shareholders with voting power should be natural persons.

Building Block No 2: Access to information, awareness raising, and access to expertise

In order for citizens, local authorities and other market actors to be able to exercise their new rights under the RED II and IMED, they need to be aware of the opportunities that exist. Furthermore, because energy communities start small, often relying on volunteers or part-time employees with little previous experience in the energy sector, they also need access to expertise and capacity building to realise their first activities and initiatives. The RED II acknowledges this issue and national enabling frameworks for RECs under Article 22 include tools to facilitate access to information.[16]

Practically speaking, citizens need information on the following:

Awareness raising – Basic background information on what an energy community is, their potential benefits and risks for different participants (citizens, local authorities, housing associations, charities and NGOs, faith organisations, housing developers, etc.), their contribution to the energy transition, what type of activities (e.g. production, sharing, supply, heating, energy savings and renovations, mobility services, etc.) they can engage in, basic first steps how to start or find an initiative to join, and potential for developing networks.

Capacity building – Practical and technical information that is necessary to pursue different activities, or even to establish an entity. This could include information on how to engage and communicate with citizens and other potentially interested actors, set up a legal entity, register a community, plan a project, obtain financing, receive required licenses and other approvals, and to navigate administrative procedures (e.g. planning, grid connections, registration of energy sharing projects, etc.). It could also include active engagement with projects and information on how to set up or join networks, which in the long run, can help to build a self-sustaining sector.

Access to further expertise – Because energy communities often have limited resources and expertise, they may need assistance from external technical, legal and financial experts (project development, legal issues, financing, planning, etc.). Member States can offer such experts, or provide seed grants so energy communities can procure their own expertise from a third party (these examples are covered in Building Block No 3: Access to finance).

Where no energy communities exist, awareness raising is the first step towards activating citizens and as well as local authorities, farmers and small businesses to start forming initiatives. Active promotion of information by NGOs, civil society, and national authorities (national and local) is critical. **First movers will also likely need more access to practical information and expertise as they discover new steps along their journey of planning, developing and constructing their first projects**. Where pilot projects are envisioned, they also need to be promoted, explained, and appropriately supported.

Two approaches have emerged among the EU Member States to implementing to so-called **"one-stop-shops (OSS)"** to facilitate access to information. Such bodies can provide a range of information from awareness to technical services such as consultation, facilitation, legal advice, finance advice and provision, assessment, and assistance navigating administrative procedures.[17] Many OSS match energy communities with external expertise (or otherwise help provide finance so they can procure their own) or provide their own technical assistance. They can also provide information and guidance on different activities, from developing renewable energy production to home renovations and energy savings initiatives.

The first approach is based on assigning the role to a government-backed entity, either at the national (e.g. Agency or NRA) or the local or regional level. The second approach is based on partnering with or empowering civil society-based or community networks. These two approaches can exist separately or be mutually reinforcing. Regardless, they rely on government support and direction.

Dedicated support can also be provided to local authorities so they can help facilitate the growth of energy communities and participate directly in them.[18] **Local authorities often require support to develop knowledge and skills (e.g. to work on business plans, governance and financing models)**. Furthermore, authorities need to have good in-house legal, technical and financial capacities and resources, for instance on public procurement procedures. **They also need staff who can help disseminate communication, and provide guidance and advice to local citizens**. Many OSS also have targeted information and capacity building for local authorities.

Below are different examples of OSS and technical assistance for energy communities that have been developed in different Member States, including OSS that use a centralised approach, OSS developed by local and regional authorities, and OSS that rely on partnerships with NGOs and networks of energy communities.

MEMBER STATE EXAMPLES

- **Austria** – The Ministry set up the Austrian Coordination Office for Energy Communities (Österreichische Koordinationsstelle für Energiegemeinschaften, or 'Coordination Office'), which provides an online OSS for information on energy communities and setting up projects. It contains a map to identify different energy communities, information on obtaining funding, template contracts and agreements that must be concluded with different actors, brochures and guides on specific topics, and a help desk that links communities to experts at the level of the federal states (Bundesländer). The Coordination Office also coordinates the Ministry of Climate (BMK), NRA (E-Control) and Bundesländer to make administrative procedures more efficient, faster and transparent. DSOs work with the Coordination Office through the working group and information sharing. SHAREs, a Horizon 2020 project, created a template that can replicate an online OSS based the Coordination Office in different countries.[19]

- **Spain** – Information and awareness around energy communities is provided by the Instituto para la Diversificatión y Ahorro de la Energia (IDAE), an Executive Agency under the Ministry for Ecological Transition and Demographic Challenges. The IDAE has a webpage that provides background information on energy communities, a map of existing communities and other data and information. The IDAE has also published several documents to communicate the concept of energy communities to stakeholders.20 It further provides grant funding to organisations and initiatives to publicise the REC concept and its benefits, and to accompany and advise emerging RECs. Individual RECs can also receive funding to conduct public outreach and promotion of projects to possible partners and members. These activities are funded under Spain's Recovery and Resilience Fund.

- **Italy** – Gestore dei Servizi Energetici (the General System Manager, or GSE) provides tools on its website so citizens can learn about energy communities, access FAQs, examples and guides on how to access finance, information and the support schemes, and how to carry out technical-economic simulations. GSE also offers dedicated information guides and tools to support municipalities. Perhaps uniquely, GSE has an online interactive map of all the primary substations to help citizens identify an appropriate geographical area in which to establish a community sharing initiative.[21]

- **France** – In its 10 Measures in Favor of Citizen Renewable Energy, the French Ministry committed to increase the number of advisors for locally-governed projects in the regions by 50%, through its Agence de la Transition Ecologique (ADEME) and a new network of PV and wind advisors for local authorities.

- **Belgium (Brussels-Capital Region)** – Brugel, the NRA, has developed Guidance on the energy community definitions to help stakeholders understand how to comply with the principles when registering an energy community. On its website, Brugal has a map of authorised energy communities, and provides explanations of applicable rules, regulations, and procedures for prospective energy communities.[22] The Ministry also appointed an NGO, Énergie Commune, as a 'facilitator' to provide technical, economic, legal, and administrative expertise, as well as other ›

› tools to promoters of energy communities and energy sharing projects. This includes specific guidance and workshops for local authorities so they can better understand how to support energy communities and participate directly. They have also organised a workshop focused on how to undertake energy sharing in social housing.

- **Belgium (Gent)** – The City provides technical support to specific community projects. Through the provision of funding, Energent, a REC, was able to hire an expert to support the development of a local smart grid project.

- **Denmark** – Under an Executive Order, the Danish Energy Agency provides grants between DKK10 000 and 200 000 (≈ €1 300 and 27 000) for dissemination of information projects that contribute to the development of community renewables projects, and to information campaigns that promote citizen engagement in energy communities. Applications must be made by a project administrator that applies on behalf of the project, which may include established RECs and CECs, groups of citizens or companies that plan to establish an energy community, municipalities, associations, NGOs, universities, and other market actors (aggregators, BRPs, suppliers, traders and heating and cooling).

- **Spain (Catalonia)** – The City of Barcelona provides an online map to the public to help energy communities identify buildings that have PV production potential. Furthermore, Osona Energia, an energy cooperative of cooperatives located in the municipality of Osona, was set up with the help of the local energy agency. Before Osona was established, the Local Energy Agency of Osona supported energy communities and applied to a call for applications by IDAE to set up an energy community office (OSS). The regional agency and local authorities in Osona worked closely with the citizens in co-creating the services with the communities, which they cite as a key success factor.

- **Spain (Valencia)** – An Energy Office was set up by the City to provide support to citizens in different neighbourhoods to set up energy communities.[23] The Energy Office provides trained staff to discuss energy issues, an environmental educator, a social worker, an architect and an engineer. This team runs workshops, and supports starting initiatives.

From the experience that has been gathered by the Repository,[24] there are a number of practical considerations to keep in mind when developing an OSS or technical assistance. First, **concrete and non-discriminatory selection criteria** are necessary to ensure assistance reaches actors that have been identified as needing it. Second, OSS and technical assistance need to help **build capacity of energy communities to continue moving through the project development pipeline.** In some instances, despite receiving support energy communities will not or cannot move forward due to technical, financial, or other capacity constraints. Support provided by OSS can be preceded by a declaration of intent and a feasibility study to ensure the energy community can move forward. Where possible, milestones could be integrated into support programmes to ensure energy communities can move continually along different steps. Third, for OSS and technical assistance that rely on consultants, appropriate expectations need to be developed and understood by experts, it is good to link support to the local level as much as possible, and **experts need sufficient resources**. Fourth, **feedback mechanisms can be put in place to address challenges and hurdles identified during implementation**, both to improve services to energy communities and their success rates.

Building Block No 3: Access to financial support

In Member States where they are emerging, energy communities are likely to face significant market entry barriers. This is influenced by inter alia their small size, value-based business models, limited resources (equity, human, etc.) and small project portfolios, and makes it difficult for them to compete with other commercial market actors.[25] The sections in this chapter identify areas where pilots and other emerging projects are likely to face initial market entry hurdles including accessing finance and available renewables support schemes.

Access to finance

Energy communities finance projects in a number of different ways, including equity financing (raising capital investment from members, issuing share offers), bank loans, and crowd investment. Newer energy communities are not likely to have access to significant finance, particularly during the early stages of project development.[26] This can affect a community's ability to successfully navigate from pre-planning (e.g. conduct feasibility studies, business plan modelling, engagement, etc.) to project development (e.g. obtain licenses, planning approval, grid connections) and project construction. During early stages of a national energy community sector's development, it relies significantly on government sources of financing to help prove the concept and de-risk private investment.

Governments have increasingly set up dedicated public funding to help energy communities overcome financing hurdles they experience during early stages of project planning so they can set up a legal entity, undertake feasibility studies, and obtain legal and other technical expertise. Public funds can also be used to provide guarantees or low/zero-interest loans to energy communities for construction. Such financial assistance can be developed both at the local and national level. Different EU funds can also be used to help jumpstart energy communities, including the Recovery and Resilience Facility, Structural Funds, and Cohesion Funds. Several of these funds have supported capacity building and access to expertise at different stages of project development. Below are some of these examples.

MEMBER STATE EXAMPLES

USING PUBLIC FUNDS TO HELP ENERGY COMMUNITIES OVERCOME DIFFERENT FINANCING BARRIERS

- **Austria** – The government provides €60 million/year for one-off investment grants to RECs for new wind and PV systems/extensions up to 1 MW, small hydropower plants under 2 MW, and storage up to 50 kWh. There are two calls per year. Some Länder and municipalities also provide one-off-investment grants on top of federal grants. RECs and CECs are also eligible for grants of €25 000 for the establishment of a legal entity, which may include staff costs.

- **Spain** – Spain's Recovery, Transformation and Resilience Plan established an incentive program for energy community pilot (small and large) projects. €100 million in grants is earmarked for the deployment renewable energy (electric and thermal) production, energy savings and renovations. €20 million in grants is also available to support Transformation Offices (e.g. OSS) that accompany and advise energy communities, and facilitate access to aid. Funding is available to undertake studies, develop contracts, and to pay for technical assistance and legal advice.

- **Italy** – Under Italy's Recovery and Resilience Plan, €2.2 billion has been earmarked for the establishment of RECs, focusing on small municipalities with less than 5 000 inhabitants. Grants of up to 100% can be provided for developing production and consumption of renewable energy from electric and thermal sources. Eligible expenses include technical assistance for purchasing essential components to realise production, distribution and sharing facilities, storage systems, and legal and administrative assistance for the definition of agreements. Structural Funds (e.g. European Regional Development Fund and the European Social Fund) have also been used by several Regions (e.g. Lombardia, Emilia Romagna, Lazio, Campania, Sicily, and Sardinia) to fund feasibility studies and establishment of RECs.[27]

- **Denmark** – In 2021, the Danish Government issued an Executive Order[28] that provides grants (DKK 20 000 – 750 000) by the Danish Energy Agency for:

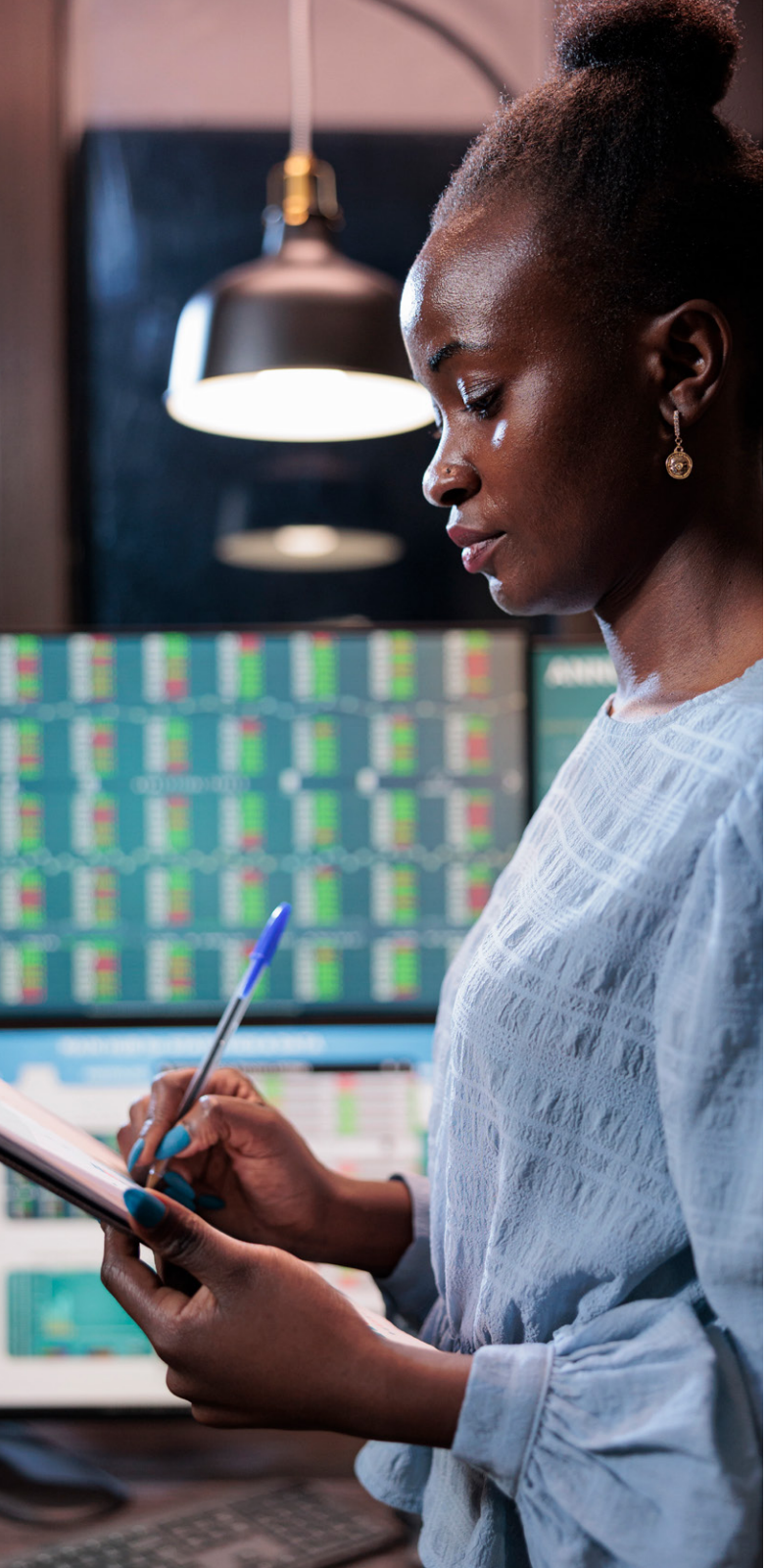
  - Planning, establishment and organisation of inspirational projects on production, delivery, consumption, sharing of electricity, heating or cooling, aggregation, energy storage, flexibility and energy efficiency services; ›

- Energy community projects that focus on provide savings for and relieving electricity, heating or cooling supply networks, or support a conversion from fossil heating or cooling supply to renewables;
- Cooperation projects between an energy community and other actors;
- Aggregation projects around adjusting electricity consumption and/or production and flexibility in delivering electricity heating or cooling;

Eligible costs include staff costs, technical and legal advice, and expenses for instruments and equipment for measurement and control. Costs associated with production facilities, consumption facilities and storage facilities are not eligible.

- **Lithuania** – Energy communities are potential beneficiaries under Lithuania's Recovery and Resilience Plan. The fund is administered by the Lithuanian Energy Agency, and includes €90 million to support community solar and wind projects. Tenders provide bonus scoring to energy communities. The Fund will also provide grants for energy communities that address energy poverty, and €60 million will be provided in subsidised loans for municipalities to promote energy communities.
- **Ireland** – Under the RESS, the SEAI provides grants and other financial support to qualifying RECs. Grants may be used to finance 80% of eligible costs up a maximum of €180 000.[29] Grants cover eligible early-, mid- and late-stage support, which include external service provision, direct costs, external project management costs, and internal staff costs. To be eligible, a REC must successfully complete a feasibility study, which is performed by an SEAI-appointed Trusted Advisor service provider.

Over time and as energy communities evolve and become more professionalised, they can also act as partners to help facilitate access to finance for new energy communities. In this sense, the development of a strong energy community energy sector can also result in more resilient and self-sustaining financing models that do not rely as much on government support.



MEMBER STATE EXAMPLES

DEVELOPMENT OF FUNDING FOR ENERGY COMMUNITIES IN THE NETHERLANDS

Upstart financing for energy communities in the Netherlands has been developed progressively through different mechanisms. An initial fund, Stichting Doen, ran between 2016 and 2019. The fund was capitalised through the national lottery started with €600 000, meaning the funds were not public. The fund provided loans to cover development costs (mostly up to €5 000) to solar and wind projects. If the project failed, there was no payback obligation. It also provided a fund manager which, inter alia, hired project managers to support communities using money received through the loan. Originally, the Stichting Doen was managed by a foundation but it later moved to Energie Samen, a national representative organisation of Dutch energy communities.

In 2021, the Ministry of Economic Affairs set up a revolving Development Fund for energy cooperatives ('Ontwikkelfonds voor energiecoöperaties'). The Development Fund's establishment followed experience gained from a the Stichting Doen. The Development Fund is managed by Energie Samen, in cooperation with regional umbrella organisations and project offices. The Fund focuses on larger wind and solar projects, and offers initial grants covering up to 70% of development costs. It covers staff support from a member project office, costs to conduct feasibility research, to assess the viability of the project's organisation and plans, and to support the process of getting a loan. The Fund is broken up into four different sub-stages of development, with smaller loans (e.g. €10 000) being allocated during the first steps of the project. Milestones must be met before the projects can move forward to the next phase.

The Development Fund is now also complemented by a separate Realisatiefonds, (Realisation Fund), which provides preferential loans between €30 000 and 1 million (up to 75% of the total realisation costs of the project) to help build large-scale PV projects. Unlike the Development Fund, the Realisatiefonds is capitalised by three ethical and cooperative banks.

Access to available renewable support schemes

For non-traditional ownership models such as cooperatives, trusts or foundations, housing associations and other types of social enterprises, the ability to show a lender that the project has access to a fix Feed-in Tariff (FiT) or feed in premium has helped to assure lenders of the predictability of recovering the loan amount.[30] However, as elaborated in the Repository's Barriers and Action Drivers Report, access to renewables support schemes is difficult for energy communities when support is issued through a competitive tender or auction.

Under Article 22, paragraph 7 of the RED II, where Member States have decided to put in place support schemes, they need to take the specificities of energy communities, RECs in particular, into account when they are being designed to ensure they can compete on a level playing field.

Some Member States, in particular, Germany and Ireland, have begun the development of supportive frameworks for RECs by integrating them into their renewables support schemes. Some other Member States, such as Austria and Italy, have developed support schemes in parallel with other aspects of support framework.

MEMBER STATE EXAMPLES

USING ACCESS TO SUPPORT SCHEMES AS A STARTING POINT FOR BUILDING OUT AN ENABLING FRAMEWORK

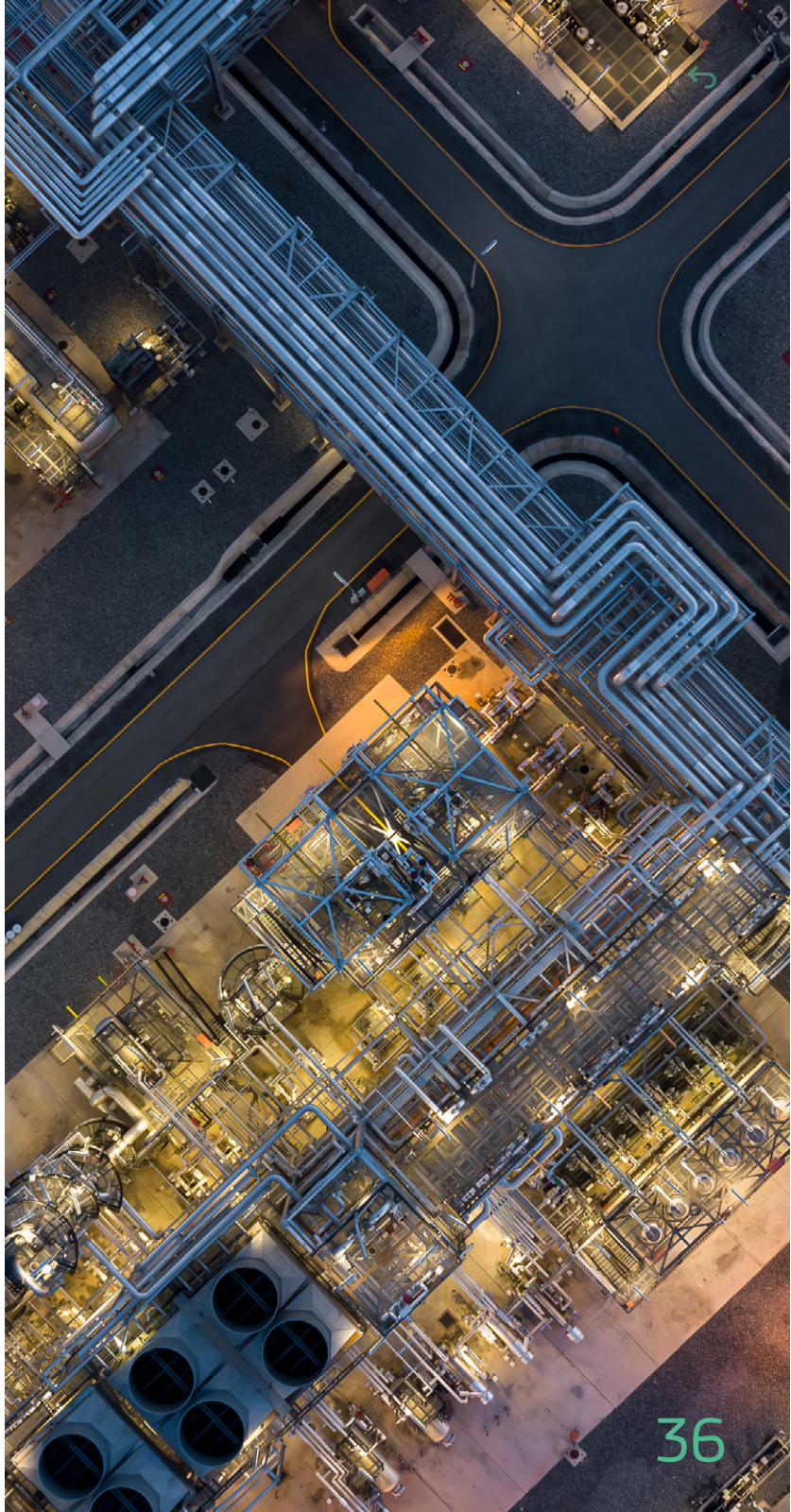
- Germany – The Federal government reversed its requirement for RECs, or citizen energy companies as they are defined in Germany, to participate in auctions and > 6 MW and wind turbines up to 18 MW owned by citizen energy companies are exempt from tenders. To prevent abuse by market participants, citizen energy companies include a high level of citizen involvement, control, and democratic decision-making, which is governed by the definition of citizen energy companies under the EEAG.[31] Since its recent introduction, energy communities have been contemplating how to use the new framework and navigate the administrative procedures.

- Ireland – The Ministry set up a **ring-fenced tender within RESS only for community-led projects between 1MW and 5MW**. To prevent abuse, projects must be 100% owned by a REC either through direct ownership of the project's assets or through direct ownership of the shares in the generator. Furthermore, 100% of the profits, dividends and surpluses from the project must be returned to the REC. Qualifying projects **do not need to submit a reservation fee or security, and do not need to have planning permission to apply for a grid connection**.[32] According to community groups, RESS provided their projects, which had been stalled for years, the ability to start navigating the process towards getting a grid connection. However, now they are facing challenges navigating the grid connection process and getting an affordable grid connection offer. This highlights that there may be multiple market entry barriers that need to be addressed. This is address more fully in chapter 3.

INCLUDING ACCESS TO SUPPORT SCHEME IN PARALLEL WITH OTHER SUPPORTIVE POLICIES AND MEASURES

- Austria – A support scheme was designed so that competitive bidding only applies to a limited extent to energy communities and wind projects under 20 MW. Furthermore, there is a **special support scheme available for energy sharing projects**. For all the shared production that is not consumed by the members of the energy sharing initiative, **up to 50% of that production can be supported through the issuance of a market premium (feed-in premium)**. The aim of this incentive is to improve the business case while also encouraging optimisation of production with consumption, for instance through storage.

- Italy – A support scheme was developed to encourage the uptake of energy sharing through RECs. An incentive tariff (in €/kWh) has been developed to remunerate renewables production from power plants included in the sharing. Energy volumes consumed and produced simultaneously on lower voltage parts of the grid are registered by GSE. At present, the consumers receive the full bill from their energy suppliers while receiving the benefits of sharing via a separate cash-back process. Each member of the REC pays their traditional electricity bill for electricity withdrawn from the public grid and then receives monthly cash-backs for the shared electricity. These cash-backs are computed by the GSE and then paid to the contact person nominated by the REC, who is responsible for the allocation of the cash back to the participants in the sharing configuration. The allocation of the cash-back among participants is made according to a private agreement, in accordance with the sharing coefficient.



Building Block No 4: Minimal regulatory conditions to carry out initial activities of pilot and other emerging initiatives

For informational, financial and other assistance to be effective, regulations need to be in place to allow energy communities to engage in activities, particularly where those activities are a focus for pilot projects. For many activities, the regulatory framework will already exist. For example regulatory frameworks for renewables production and retail supply have long been established. While energy communities may face barriers associated with the regulatory framework, basic conditions for being able to engage in the activity will be in place. In countries like Greece, France and Spain, collective self-consumption has been the subject of regulation since before the CEP was finalised. In these cases, energy communities can make use of the regulatory framework that exists for other actors.

However, many Member States do not yet have regulatory framework in place for new or emerging activities like energy sharing, collective self-consumption, or provision of flexibility. In this case, minimal regulatory conditions need to be put in place along with other supports so these first initiatives can get off the ground. This includes rules around the allowed parameters for energy sharing projects, and the assignment of roles and responsibilities between different actors (e.g. system operators, participating consumers, the energy community itself, the residual supplier, and any potential third party service providers) for inter alia registration and connection, communication, processing, and sharing of metering data, allocation of shared energy, billing, rules for residual supply and balancing responsibility.

Thus far, Member States have taken two approaches to putting in place minimal regulatory conditions to allow for the emergence of energy communities around energy sharing. First, some Member States have put in place experimental regulations that are intended to apply temporarily. In Italy, initial legislation, which also included a basic REC definition, called for a 'Pilot Regulation' by the NRA, ARERA, along with the development of a support scheme. ARERA then adopted experimental regulation to facilitate smaller sized collective self-consumption projects and RECs between 2020-2022 until more permanent regulation could be developed.

Under a second approach, a **regulatory sandbox can be used** to allow testing of new concepts without changing the existing regulatory framework. According to the German Federal Ministry for Economic Affairs and Climate Action, regulatory sandboxes enable testing of innovative technologies, products, services or approaches in a real-life environment, which are not fully compliant with the existing legal and regulatory framework. They are operated for a limited time and in a limited part of a sector or area. The purpose of a regulatory sandbox is to learn

about opportunities and risks that a particular innovation carries and to develop the right regulatory environment to accommodate it. Experimentation clauses are often the legal basis for regulatory sandboxes.[33] According to the Florence School of Regulation (FSR), a regulatory sandbox "allow[s] innovators to test new technologies and business models that are only partially compatible with the existing legal and regulatory framework. Second, [it] allows regulators to learn about particular innovations. As such, regulators can develop the right regulatory environment to accommodate them."[34]

Regulatory sandboxes are useful for testing novel or innovative contract arrangements between energy communities and their members (as final customers), or where pilots focus on tailoring supply obligations (e.g. exemptions or simplification), distribution network management rules, or special network tariffs, to energy communities. Regulatory sandboxes have been used by both Member States with and without existing energy community sectors. The EU Commission recently published guidance on regulatory sandboxes in the energy sector.[35]

Experimental regulations and regulatory sandboxes are not a replacement for a broader foundational framework to allow for the emergence of energy communities. In this way, they are a complementary tool that provides a path towards a more stable regulatory framework that fits with the innovative activities energy communities are starting to undertake. This topic is covered more in chapter 3 on completing the enabling framework for energy communities.

MEMBER STATE EXAMPLES

REGULATORY SANDBOXES THAT ARE ACCESSIBLE TO ENERGY COMMUNITIES

- **Netherlands** – Under an Executive Order (Experiments decentralized, sustainable electricity production), a sandbox was set to allow cooperatives to operate without a supply permit and with derogations from rules around transparency and liquidity of the energy market. The Executive Order ran for four years, and influenced the subsequent draft Energy Act that proposed to exempt 'smaller energy communities' from having to obtain a supplier license.

- **Spain** – In 2022, the Spanish government established a general framework for a regulatory sandbox to promote research and innovation in the electricity sector.[36] This was passed in conjunction with Spain's Recovery, Transformation and Resilience Plan, which has objectives to:

1 | develop a more flexible, decentralised and dynamic energy system capable of efficiently and safely absorbing new renewable generation;

2 | develop new, innovative business models; and

3 | develop participation of new actors (producers, suppliers and consumers, storage operators, and aggregators) and a more agile and adaptable regulatory framework. >

> The regulatory sandbox provides a two-way dialogue between the Ministry and the NRA that will accelerate and facilitate the review of current regulations and adapt them to the entry of new market actors. The Ministry for the Ecological Transition and the Demographic Challenge is responsible for opening calls to develop pilot projects. Chosen pilots can access funds under the Recovery Plan. In May of 2023, the Ministry opened a call to award at least eighteen projects promoting new business models in the energy transition, including smart meters, storage, demand response, flexibility and data services.[37] The call is open to RECs and other market actors.

- **Ireland** – The system operator is currently experiencing issues around accommodating new connections without making projects economically non-viable. To address this issue, the Irish NRA recently published a decision to pilot five 'Renewable Hubs' aimed at facilitating increased volumes of grid connections.[38] Under the pilot, locations nearing capacity or over-capacity when the expected pipeline is taken into account can be uprated to the transformer level to accommodate further connections. Under a new charging methodology, pilot participants will be charged for the per-MW share of any shared costs to upgrade the grid. The pilot will cover shortfalls that would have been charged to the connecting generator if the charging methodology was not in place. REC-led projects can benefit from the pilot, and system operators will be required to investigate beneficial opportunities for communities in relation to an enduring Renewable Hub regime. Two existing projects already in the RESS pipeline will participate in the first pilot. This pilot should feed into a new connection policy that facilitates community-led projects, which is currently under development.

- **Italy** – The NRA, ARERA, has set up a regulatory toolbox for testing regulatory innovation. Within this toolbox, ARERA uses a regulatory sandbox to undertake regulatory experiments for suppliers and third parties, through pilot projects on self-balancing, enhancing the benefits of self-consumption for ancillary services, and allowing them to provide "joined" flexibility services to support grid stability.[39]

Building Block No 5: A registration and monitoring framework to track the initiatives that emerge and their potential impacts and barriers

The development of an institutional framework to support and track the development of energy communities at the national level is an essential component of creating a sustainable enabling environment for energy communities. Article 22, paragraph 5 of the RED II requires Member States to include the main elements of their enabling frameworks for RECs in their NECP progress reports pursuant to the Governance Regulation. Furthermore, Article 59, paragraph 1(z) of the IMED requires NRAs to monitor the removal of unjustified obstacles to and restrictions on the development of CECs.

A national registration and monitoring system contributes to a learning-by-doing approach, underlying other support measures (access to information and finance, integration of energy communities in the design of renewables support schemes) and initial legislation or regulations. Many initial frameworks that were established for energy communities have already undergone revision and this will likely continue. Furthermore, where pilots are developed, monitoring facilitates a feedback mechanism to decision-makers so they can identify challenges and barriers, monitor impacts of energy communities and related supportive policies, and respond to abuse and other deficiencies through fine tuning. Registration procedures also allow energy communities to be acknowledged so they can qualify to access certain supports and privileges.

There are several design features that are important for an effective registration and monitoring system:

- **Registration** – Registering as an energy community with a public authority to **validate** an initiative's status as an REC or CEC. This includes a **procedure to submit required identifying information, as well as founding documents** (statutes, articles of association, etc.) as required by national law. If designed with a long-term view, a registration system also provides a basis for **logging and tracking** information from registrants communities over time.

- **Monitoring and Oversight** – At its most basic level, a monitoring allows **for tracking growth in the number of energy communities** over time. Monitoring can also track useful information, such as characteristics of the emerging sector, their impacts, removal of identified barriers, and other issues. Procedures for periodic reporting and evaluation/ assessments are needed to create a positive feedback loop between regulators and decision makers to promote reflection and evolution of policy and enabling frameworks. Monitoring may also include traditional regulatory oversight to ensure accountability.

A summary of detailed approaches for how each Member State has set up its national registration and monitoring systems for energy communities is included in the Annex to this Report. Below, we provide further practical considerations for different observed approaches for developing national registration and monitoring mechanisms for energy communities.

Registration

In Member States that have designed a system to register energy communities, three general approaches can be observed:

1 | **Some Member States appoint an authority (NRA or Agency) to set up a register of energy communities.** From a holistic perspective, such a system is ideal because it allows for clear identification of an energy community that can be used regardless of the activity being pursued. It also connects more easily to long-term monitoring over time.

2 | **Some Member States have set up prequalification criteria market that actors must meet in order to access specific support schemes for RECs**. Integrating prequalification criteria for energy communities under different support mechanisms or procedures can be complementary to setting up a general registration process. In the absence of a registration framework, using prequalification criteria can be helpful first step in jumpstarting energy communities while a more holistic national framework is being put in place.

3 | **A few Member States combine registration of an energy community with a more formal licensing procedure to engage in particular activities within the energy sector (e.g. energy sharing)**. This could help streamline the registration process, because many energy communities are also trying to establish an energy sharing project. However, when using this approach, there are potential drawbacks that may need to be avoided. In Member States where such an approach has been utilised, it has coincided with a conflation between regulation of specific activities, such as energy sharing, and energy communities, which are an organisational concept. This can result in a misperception of the socio-economic added value of energy communities. It can also result in overly technical requirements being imposed on new energy communities, for instance capital requirements, demonstrable technical capacity, or an existing project. Such requirements overlook the fact that most new energy communities form before a concrete project has been realised, they usually start out with little capacity, and they may have broader goals spanning beyond one activity.

Regardless of the approach, demonstration of evidentiary requirements for registration or prequalification needs to be easy and simple for energy communities. Without conflating concepts, procedures to register as an energy community can be streamlined with other applicable procedures. In many Member States, setting up a legal entity already requires becoming registered, for instance in a commercial companies registry. This is important to keep in mind, as this may imply coordination between different national authorities. Registration and prequalification requirements need be as light-touch as possible in order not to over-burden an energy community. Where energy communities have already established a legal entity that could comply with the national definitions, procedures can allow them to easily show proof that their set-up complies with the criteria.

MEMBER STATE EXAMPLES

SEPARATE PROCESS TO REGISTER ENERGY COMMUNITIES WITH AN AUTHORITY

- Austria – After concluding an organisational form and preparing the founding documents or articles of association, energy communities register themselves online, which can be accessed through the Coordination Office website. Once registered, they are depicted on an online map, which shows both RECs and CECs by region.[40]

- Belgium (Brussels-Capital Region), registration is performed through the website of Brugel, the NRA.[41] Brugel responds to authorisation requests within 60 days. To be successfully registered, the energy community must submit:

  - the statutes of the energy community,

  - the list of members (excluding individuals), according to the BRUGEL framework included in the appendix in step 4 of the form,

  - the (draft) agreement(s) governing the activity(ies) of the community, including at least the draft agreement for the first activity envisaged. If the activity concerns electricity sharing, proof of ownership or right of use (in the case of a local energy community) of the installation must also be provided. Brugel has published guidance on how to interpret the different requisite criteria for qualifying as an energy community, as well as on the procedure to submit, withdraw and renew a registration.[42]

PREQUALIFICATION CRITERIA FOR RECS IN ORDER TO ACCESS RENEWABLES SUPPORT SCHEMES

- Germany – To be exempted from participating in tenders for solar PV projects under 6 MW installed capacity and wind projects under 18 MW installed capacity developed that qualify are, the DSO must verify that citizen energy companies comply with the definition.

- Ireland – In order to be eligible to energy participate in 'community-led projects' category of RESS, RECs must prove to the Ministry that they meet all of the criteria.

COMBINATION OF ENERGY COMMUNITY REGISTRATION AND LICENSING TO UNDERTAKE DIFFERENT ACTIVITIES

- Lithuania – Before commencing activities, a REC must obtain a permit to produce electricity by the State Energy Regulatory Council. The Law on Public Bodies applies to the Renewable Energy Community. A public body acquires the status of a renewable energy community at the time of the issuance of a permit to produce electricity by the State Energy Regulatory Council. There are different requirements that apply to the founding documents of CECs and RECs.

Monitoring and Oversight

Registries can also be set up so that they can contribute to effective monitoring over time. There are a number of aspects around energy communities that need to be monitored at the national level. First, it is useful to monitor the development of energy communities over time, in numerical terms. Some Member States have established a high-level policy target or objective for the growth of energy communities. If so, setting up a monitoring system is a good way to track progress. To track other important information and data Member States can set up a data collection framework, which can track information and data on:

- installed capacity from renewables production facilities owned by energy communities (e.g. in terms of kW/MW);
- geographical concentration (where registries are connected to a map);
- number of members, including their make-up and distribution between different categories (natural persons, local authorities, and SMEs);
- legal forms utilised;
- investments made;
- technologies deployed;
- objectives pursued by energy communities; and
- social, economic and environmental impacts.

This list is not exhaustive. The Repository has also published a set of impact indicators that Member States can consider when designing a data collection framework that can be used to support monitoring.[43] Member States may want to track different figures for energy communities, depending on the desired policy objectives that energy communities are meant to pursue. In this way, monitoring can help direct support, for instance towards energy communities that want to pursue certain social objectives.

Where EU and other public funds are being used to develop pilot energy community projects, monitoring is important for understanding how the sector is beginning to emerge. In several Member States that have set up brand new frameworks and support schemes, there have been reports of significant participation of commercial market actors. In the long run, this could lead to concentration or domination of the sector by such actors. Monitoring can help identify whether commercial objectives or actors are becoming more prevalent in the sector. Having such information can help support decisions to refine criteria or incentives and ensure that support is received by actors that really need it.

Some Member States are also starting to track the impacts of supportive policies on the growth of the sector. **Ireland**, for instance, integrated an ex post evaluation mechanism into its community-led category under RESS. Specifically, an evaluation plan was developed to look at measures under RESS, as well as other supportive measures. According to the plan, measures are meant to be evaluated after five years in order to assess

the overall impact and effects of the RESS scheme, including specific elements such as the community preference category in the auctions. The central focus of the evaluation is to assess what would have happened in the absence of the RESS scheme. Where State aid is concerned, the development of an evaluation plan for support measures can also help to get a scheme approved by the European Commission's DG Competition. In May 2022, SEAI published a report on the methods and results of an initial survey.[44] In **Austria**, in its update to its NECP, which is due by 30 June 2024, the Government committed to publishing an evaluation report to provide a sound basis for decisions on any necessary adjustments to the support system and the legal framework. In the case of RECs, the obstacles and development potential outside the electricity sector (e.g. heating sector, renewable gas) and regarding the operation of grids will be examined.

Pursuant to IMED, NRAs have a duty to monitor the removal of unjustified barriers to the development of CECs.[45] The RED II calls for Member States to put in place an enabling framework that ensures that unjustified administrative and regulatory barriers are removed. Many Member States have also provided the NRA with the duty to assess the national potential and barriers to the development of energy communities.[46] Where this is the case, it is important to provide NRAs with the appropriate resources so that they can carry out this role effectively. Monitoring also helps facilitate regulatory oversight. Some Member States have assigned an authority (typically a NRA) with the power to monitor compliance with the energy community definitions, including conducting ad hoc checks requiring notifications related to changes made in the energy community's statutes.

CHAPTER 3

Completing a national enabling framework for energy communities

CHAPTER 3

The Building Blocks presented in this Roadmap serve as a foundation for building out an enabling framework for RECs/CECs. Article 22, paragraph 4 of the RED II and Article 16, paragraph 1 of the IMED lists each of the elements that should be included in enabling frameworks for RECs and CECs, respectively. **This chapter highlights the steps that Member States can take in finalising their enabling frameworks, once the Building Blocks have been put in place.**

The RED II requires Member States to create an enabling framework to promote and facilitate the development of RECs. This means that Member States must put in place an effective legal and administrative framework that creates a favourable environment for the creation and the functioning of RECs. The purpose is not only to promote a level playing field, but also to promote and facilitate the development of RECs by mitigating the practical and regulatory challenges they face in trying to access the market.

Any market actor may be eligible (both in terms of sector and size) to participate in a CEC, whereas membership in RECs is much more restrictive towards large enterprises and public bodies such as universities, municipal companies, etc. RECs are also supposed to operate autonomously (see Building Block 1). As such, CECs may have access to more resources compared to RECs. Enabling policies and measures for CECs should not put RECs at an unfair disadvantage.

The policy aim of providing an enabling framework for CECs is different than for RECs. For CECs, an enabling framework aims simply to create a level playing field so they can participate across the market. While enabling frameworks may need to contain special measures to correct for inherent disadvantages CECs experience in gaining market access, they are not entitled to receive special privileges in the same way as RECs.

National Assessments of barriers & potential for development of energy communities

An assessment of barriers and potential for the development of energy communities needs to be conducted before a Member State finalises its enabling framework.[47] In the long run, conducting an assessment of barriers and potential for development of energy communities will provide the best analytical baseline for developing policies and regulations for the sector, and for measuring progress in the growth of energy communities and any policy objectives that are developed.

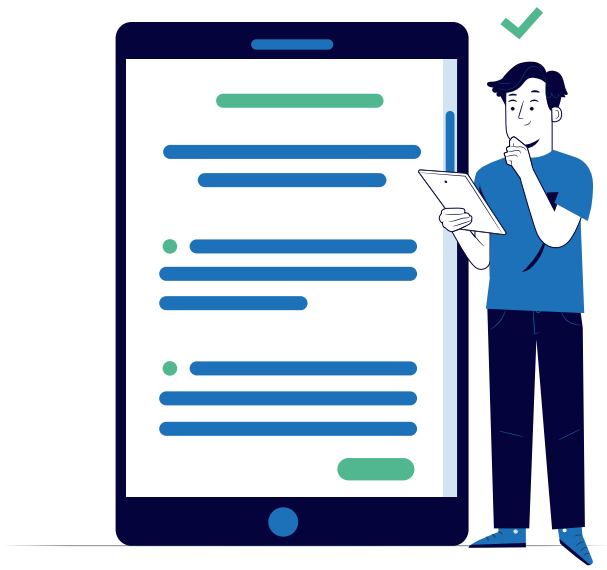
It is important for an assessment to link up technical potential around renewable energy production, energy savings in households, provision of flexibility, and the rollout of different services to the community (members or local area) and the energy system with socio-political potential. Different barriers need to be identified and contextualised within a national market and system-perspective to determine whether they are unjustified or disproportionate. Likewise, potential supportive policies and measures need to be assessed for their potential impacts, both positive and negative.

The assessment process can also link up to monitoring, including by the NRA, which is assigned to track the removal of identified barriers, as well as relevant feedback loops for decision making. From the Repository's Report on Barriers and Action Drivers, the following are among significant barriers that may need to be monitored and assessed:

- accessibility issues (grid, finance, information, national renewables support schemes, power purchases agreements, sites for production);
- administrative procedures and other processes (grid connections, planning, public procurement, tenders);
- energy sharing regulations; and
- supply licensing regulations.

This list is not exhaustive. Consulting different stakeholders (existing or planned energy communities, civil society, local and regional authorities, and other sector stakeholders and potential interest groups) is very important for identifying, clarifying, and validating different barriers and potential policy responses. In several Member States, civil society organisations or local/regional authorities have already conducted a barriers assessment.[48] While such studies can help provide a basis for dialogue on different barriers, drivers and potential policies and measures, they are not a replacement for an assessment carried out by a public authority at the national level.

So far, most Member States have assigned the responsibility to undertake a national assessment of barriers and potential either to a Ministry, NRA, or another national authority such as an Environment or Energy Agency. To date, however, few final assessments have been carried out.



In the Netherlands, the Ministry of Economic Affairs and Climate published a study in 2019 called "*Exploring future potential citizen energy movement 2030: Energy owned of the local community*".[49] The study looks specifically at the future potential of energy communities with a primary focus on cooperatives and their contribution to onshore wind and solar power generation, as well as in the heat transition. There is also an example of energy communities being considered as part of overarching potential for the development of renewable energy. Spain's Autonomous Region of Navarrra produced a potentials study for the entire region around building out renewable energy production, along with the development of RECs and self-consumption. It found a potential to develop 650 MW of renewables production, and to create an energy community in 252 municipalities by 2030.[50]

A MODEL ASSESSMENT TOOL FOR UNDERTAKING A NATIONAL ASSESSMENT OF POTENTIAL AND BARRIERS TO THE DEVELOPMENT OF ENERGY COMMUNITIES

In 2022, the ECOLOG Institute developed a Model Assessment Tool, which provides a template that Members States can use to carrying out their own national assessments of potential and barriers to the development of energy communities. It contains five different modules and a navigation manual[51] that cover different aspects of preparation, implementation, and follow up:

1 I **Preparation** – how to take initial steps in designing the assessment, including deciding on a process, desired objectives and outcomes, developing a methodology, and conducting public outreach;[52]

2 I **Barriers & Drivers** – how to identify different motivations for why different actors (e.g. citizens, NGOs, SMEs and local authorities) might want to develop energy communities. It also provides guidance on creating a typology of different barriers, and on how to survey stakeholders;[53]

3 I **Potential** – different approaches to modelling national scenarios for development of energy communities based technical potential, using identified drivers and barriers as inputs;[54]

4 I **Costs & Benefits** – how to identify and assess different types of costs and benefits (i.e. environmental, energy system, economic social impacts) of RECs at individual, community, and societal level;[55]

5 I **Policy Measures** – a list of potential barriers and measures or strategies, and guidance on how to identify and settle on policy measures in order to help develop energy communities in line with an evaluation of objectives, drivers, and potential impacts.[56]

Policy objectives for energy communities

Targets or policy objectives for developing energy communities can be understood as commitments provided to promote community ownership in renewable energy production or other activities. Setting policy objectives for energy communities has several benefits. First, they serve as a policy basis for developing national and sub-national support measures for energy communities, (e.g. separate treatment in renewables support schemes, and public tendering procedures). Second, they help anchor strategic thinking inside different government departments, demonstrate on-going commitment and aspiration, and create political pressure to provide provide continuing support.[57] Third, targets help promote investor confidence by providing a framework to support the development of different business models.

Policy objectives have been set at national, regional and local levels. They may be framed around the growth of community-owned renewable energy projects, requirements for all new renewable energy projects to allow for citizen buy-in, or around growth of energy communities in general. These objectives are supported by EU policy. In its Solar Strategy, the EU Commission set a political objective that the EU and Member States work together to set up at least one renewables-based energy community in every municipality with a population higher than 10 000 by 2025.

There are a growing number of examples of high-level objectives that have been developed at different levels of decision making.[58]

NATIONAL, REGIONAL & LOCAL EXAMPLES

HIGH LEVEL OBJECTIVES FOR ENERGY COMMUNITIES EXPRESSED AT DIFFERENT POLITICAL LEVELS

NATIONAL LEVEL

- **France** – In 2021, the Ministry published a Roadmap for the development of energy communities, which sets an objective of 1 000 locally-governed renewable energy projects involving communities and citizens by 2028.[59]
- **Italy** - Italy aims to have 2 GW of renewable energy production capacity installed by RECs by 2026 in municipalities below 5 000 inhabitants.
- **Netherlands** - Its National Climate Pact (Klimaatakkoord) contains a non-binding policy objective of including 50% ownership in all new onshore wind and PV projects. The objective has been given to the municipalities to interpret and implement, providing them with the basis for integrating criteria in planning permitting to include citizen participation in the process with project developers that want to build a project in the municipality.
- **Lithuania** – As a national policy objective, one out of three Lithuanian consumers should generate their own electricity by 2030. The government has proposed to reserve 2 GW of production potential for energy communities and individual prosumers through the grid connection process.

REGIONAL LEVEL

- **Italy (Region of Basilicata)** – The Basilicata Region, in southern Italy, has established a target of at least one REC in each of its 131 municipalities by 2030.
- **Belgium (Wallonia Region)** - The Regional Government recently adopted a Wind Agreement that will require new wind projects to be open for at least 24.999%, respectively, between citizens and municipalities.[60]
- **Spain (Autonomous Region of Navarra)** – Based on a region-wide assessment of potential to reach 100% renewables in the region by 2030, which found a potential for 650 MW to be developed by energy communities across 272 municipalities, objectives for development of RECs were adopted along with other objectives associated with an increased installed capacity of renewables by 2030.[61] A target of reducing energy poverty 30% annually until 2030 is included in these objectives.

LOCAL LEVEL

- **France (Strasbourg)** – The Metropolis of Strasbourg (including surrounding municipalities), adopted a target of installing 1 MWp through citizen governed PV projects by 2030.[62]
- **Spain (Valencia)** – In May, 2021, the Valencia Climate and Energy Foundation announced a goal of establishing 100 energy communities within the city by 2030. The aim is to establish energy communities in each neighbourhood.

Enabling conditions for the development of business models:

The Building Blocks presented in this Roadmap help make up the basic elements in a national enabling framework. However, there are other important aspects of the enabling framework that also need to be addressed through policies and measures. Energy communities need to be able to access different markets and undertake different activities, including renewable energy production, sharing, supply, provision of flexibility, and other services to members (e.g. mobility, energy efficiency and renovations, etc.). Furthermore, even though CECs operate only in the electricity sector, RECs can work across different sectors including electricity, heating and cooling, and renewable gas.

To facilitate access of energy communities to different markets under reasonable circumstances, depending on where barriers are identified, national decision makers will need to adopt or adapt regulations, including procedural and administrative requirements so they are proportionate . In the Report on Barriers and Key Action Drivers, several areas where existing regulations may bar energy communities from entering the market were identified, including around obtaining grid connections, as well as acquiring and operating under supply and other licenses. Several examples of Member States that have tackled these issues are presented below.

Facilitate community production

Member States can enable community-owned production of renewable energy through a number of different measures that have been identified in the Barriers and Action Drivers Report of the Repository. Some of these approaches are highlighted below, including on facilitating a grid connection, and helping energy communities navigate licensing and permitting.

FACILITATING A GRID CONNECTION

In Ireland, the grid connection process operates under a first-come-first-served approach. RECs are unable to navigate this process. Acknowledging this issue, the Ministry of Environment, Climate and Communications (DECC) created a separate 'non-batch' process to allow 30 applications only eligible to energy community and self-consumption projects. The non-batch process is part of the Government's strategy to get community projects from conception to construction. 15 spots are reserved for communities with projects between 500 kW and 5 MW, while the other 15 are reserved for self-consumption projects under 500 kW. These numbers align with the size of projects that are eligible for the energy community preference category under the RESS auctions scheme. Here, the grid connection process is a coordinated part of making sure RECsreceive support throughout the project development process. RECs can also apply for a grid connection without first obtaining planning permission, although to obtain a final grid connection, permission must still be granted. If an assessment determines that the grid connection cost will make the project unviable, the REC is eligible to receive a refund of 75% of the initial application fee that has been paid. Furthermore, the grid capacity can be held by the REC for up to two years.

Energy communities currently face challenges finalising a connection agreement with the DSO due to costs triggered by necessary upgrades to the transmission network, which make RESS-eligible projects non-viable. To address this issue, the Irish NRA, CRU, recently published a decision to pilot five Renewable Hubs that are aimed at facilitating increased volumes of grid connections.[63] Projects under the pilot, which include REC-led projects, will be charged for the per-MW share of any shared costs to upgrade the grid. Furthermore, system operators will be required to investigate beneficial opportunities for communities in relation to an enduring Renewable Hub regime.

OBTAINING PLANNING PERMISSION AND RELEVANT LICENSES

Member States can also ease the burden of obtaining relevant permits, including planning permission and production licenses. In some cases, planning permission is a precondition for applying for a grid connection or participation in a tender (e.g. to receive operational support, or to build production facilities on publicly controlled spaces).

Some Member States have alleviated certain burdens of applying for relevant permits, for instance by providing them with more time, reducing applications costs, or simplifying the process. In Ireland, energy communities undergo simplified authorisation procedure and do not need to have planning permission before submitting their grid application, although this is required before a final connection offer. Alternatively, Member States can exempt smaller projects from going through a full approval process. For example, the Austrian Region of Carinthia provides for a simplified procedure for production facilities with a peak load capacity of up to 500 kWp.

In Portugal, production facilities under 30 kW are subject to prior communication, and the fees for receiving a production license are waived. In Greece, under its previous 2018 law, energy communities could receive priority treatment when applying for production licenses and approval of environmental permits, while they were also exempted from having to pay annual fees for maintaining a production license.

Some Member States require commercial projects to offer a certain amount of ownership to the members of the local community (i.e. citizens and the local municipality), which is implemented through the permitting process. In the Netherlands, a non-binding objective of including 50 percent ownership in all new onshore wind and PV projects is implemented at the municipal level. This has provided municipalities with the basis for integrating criteria in planning policies to include citizen participation in the permitting process with project developers that want to build a project in the municipality. Local city and regional governments in Belgium have also adopted such standards. For instance, in Belgium's Wallonia Region, the Regional Government recently adopted a Wind Agreement (Pax Olienica) that will require new wind projects to be open for at least 24.999 percent, respectively, between citizens and municipalities.[64]

Other Member States such as Austria, Belgium and France have tried to streamline planning and other required licenses for energy communities along with other market actors.[65] In Austria, developers can apply for multiple permits (electricity production license, approval under the nature conservation law procedure, aviation law procedure, forestry law permit, water law permit, occupational health and safety law permit, building permit) in parallel. Site selection and the grid connection application can also be done in parallel. Furthermore, the Austrian Coordination Office for Energy Communities is given the responsibility to coordinate vis-à-vis the Ministry of Climate (BMK), the NRA (E-Control), and regional governments ("Bundesländer") to make administrative procedures more efficient, faster and transparent. In Lithuania, the process to obtain a production license is streamlined with the registration process for RECs. An initiative acquires the status of a REC at the time of the issuance of a permit to produce electricity by the State Energy Regulatory Council.

Simplification of regulation for supply by energy communities

In Belgium (Brussels-Capital Region), recent legislative changes to the Electricity Market law allow for suppliers to obtain a limited supply license. Under Article 21 of the law, suppliers may obtain a limited supply license under three alternative conditions:

- to supply a capped amount of electricity (this may limit the financial guarantee they need to provide);
- to supply certain categories of customers; or
- to supply themselves or their subsidiaries.

The limited supply license allows an energy community combine energy sharing activities with supply of production that cannot be shared within the netting period (e.g. 15 minutes) while reducing the amount of guarantee that is required. The community also does not need to be responsible for security of supply, because the residual supply that is not provided by the energy community itself is already guaranteed by the classical supplier.

To be eligible for a limited license, the energy community must not supply beyond its own members/customers, the supply must come from renewable electricity, and the community must demonstrate that it applies the requisite criteria stated in the legislative definition of energy communities for the Brussels-Capital Region. For example, the applicant must show that the activity of supply furthers an objective to provide environmental, social or economic benefits to members and the local community rather than financial profits. Applicants are also expected to meet certain criteria to demonstrate a good reputation and professional capacity, knowledge of the Brussels market, and technical and financial capacities. The applicant must demonstrate that it is capable of maintaining a minimum quality of supply, and that it has the technical capacity (i.e. IT infrastructure and operations) to interact with the distribution network (i.e. the DSO). The applicant must also be capable of invoicing and managing its member/consumers, for instance through communications, transparency and a complaints mechanism.

These criteria are currently under review by the Regional Government and should provide more specificity around the categories of limited license and the requirements under the adapted regime by the end of 2023. In the meantime, the Regional Authority, Brugel, oversees ad-hoc applications to become a limited supplier, as well as operations under the limited license. To help applicants understand the new rules, in May 2023 Brugel published advice on obtaining a limited supply license.[66]

Enabling energy sharing

In order for energy sharing to be enabled for energy communities and other market actors, a regulatory framework, including clear roles and responsibilities for different actors, is necessary. A comparison of Member State approaches to developing regulation on these topics is covered in an Energy Sharing Guidance Document that has been produced by the Repository.[67]

There are a number of roles or functions that different energy market actors play in enabling energy sharing that need to be covered by regulation:

- **Registration and connection:** The registration process allowing for the validation of the initiative and the connection of production to the grid. In some Member States, this process may be the same as the one for establishing an energy community.
- **Information:** Provision of information to raise awareness around energy sharing and practical technical elements needed to set up initiatives.
- **Processing of metering data:** Data collection from the installations and meters of the participants to ensure that sharing activities can be validated or affirmed. This duty often includes sharing data with other market actors such as the residual supplier, the community, and the members, for billing and other purposes.
- **Allocation of shared energy:** The administrative task of assigning production that has been shared to the meters/bills of the participants.
- **Billing:** Issuing the final energy bill to members/customers and ensuring that self-consumed energy from the community is accurately reflected in the bill.

- **Residual supply:** The responsibility for meeting participating consumers' needs that are not met through energy sharing.
- **Balancing responsibility:** The responsibility to ensure that the production installation(s) do not result in an imbalance in the energy system.

To enable energy sharing to take place, the system operator needs to have the proper **smart meters rolled out and information technology (IT) infrastructure in place** to enable it to collect, monitor, validate and communicate metering data from the community's production installationsand its members' consumption points with the energy community itself, its members, and the incumbent supplier responsible for residual consumption . Ideally, the system operator will be capabile of communicating this information in a clear, transparent, and timely (as close to real-time as possible) manner.

The regulatory framework also needs to set **clearly understood parameters for individual projects** so energy communities understand how they can design their initiatives. This includes parameters for:

- The **size of renewables production facilities** that may be used for energy sharing;
- **Geographical scope** within which final consumers are allowed to participate in an energy sharing initiative;
- The **deduction/matching period** for sharing energy among members of the energy community; and
- Allowing the energy community to determine **the sharing coefficient** (e.g. static or dynamic), which will determine how shared production is allocated to each member.

The regulatory framework can also support the development of sustainable business models that citizens, businesses and local authorities can be confident investing in. As a way to encourage investment in this activity, when energy is shared locally within an energy community, the reduced use of higher voltage lines and network losses may justify lowering the volumetric tariff component. When considering **network charges for energy sharing, NRAs are responsible undertake a cost-benefit analysis (CBA) to ensure network fees related to energy sharing ensure adequate, fair and balance cost sharing of the system.**[68] Such exercises can help feed into overseeing growth of energy communities and determining whether supportive policies outweigh other costs to broader society or non-participating consumers.

Regional Authorities from the **Belgium (Brussels-Capital and Flanders Regions)** have both undertaken CBAs to underly their consideration of calculating network tariffs for energy sharing. In the Brussels, Brugel conducted a CBA using scenarios based on a 20-year period (2023-2042).[69] In Flanders, the VREG conducted a CBA using scenarios based on a 10-year period (2025-2035).[70] It may be worth looking at these CBAs, which are both publicly available, to see how NRAs can set appropriate parameters and assumptions to assess the impacts of network charges for energy sharing over time.

ANNEX 1

The learning by-doing approach in practice

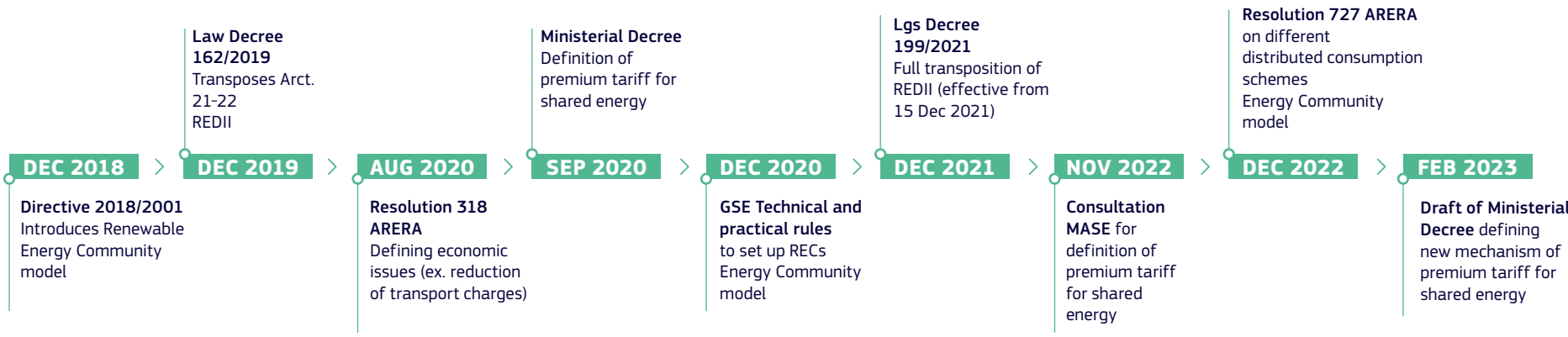
The learning-by-doing approach has been adopted by a number of Member States. Annex 1 details how these Member States have pursued this approach to roll out national frameworks for energy communities.

In Italy, the Government first adopted a transitional law on RECs in 2020.[71] The projects that would arise during this time would have experimental nature, would be monitored in order to acquire useful elements to complete the legislative compliance and implementation of the EU Directives. Thus, the regime had a transitional and experimental nature with the aim of full implementation. The legislation put a basic REC definition in place, as well as parameters for sharing energy. It also created a FiT scheme to reward self-consumption and called for immediate development of regulations by the NRA, ARERA around DSO cooperation, tariff components, and modalities to encourage direct participation by municipalities, and a system of continuous monitoring.

In 2021, legislation on RECs was updated to increase technical parameters, and legislation on CECs was adopted. Finalised legislation, which was about to be published after the publication of this report, will increase the space limitation, which currently resides beyond the same low-voltage station, to the medium-voltage station, and a new tariff premium to reward energy sharing.

From the below figures, it is possible to see the evolution of Italy's legal framework on energy communities, and how different technical criteria around energy sharing and other activities for energy communities have evolved.

RENEWABLE ENERGY COMMUNITIES: OVERVIEW OF THE REGULATORY PROCESS IN ITALY



Source: Ènostra (2023). Presentation given during the Community Energy Spring Gathering (8-10 May 2023, Athens Greece)

ANNEX 1

RENEWABLE ENERGY COMMUNITIES: OVERVIEW OF THE REGULATORY PROCESS IN ITALY

	Law Decree 162/2019	DLgs 199/2021
REC perimeter	Secondary substation LV/MV	Primary substation HV/MV
Plant size	200kWp	1.000 kWp
Plants admitted	RES connected after 1/3/2020	RES connected after 15/12/2021; existing up to 30% nominal power
Subjects admitted	Families, SME, Local public authorities	Families, SME, Local authorities, NGO, research and religious entities
Services delivered	Production, consumption, storage, sale and sharing of energy	Added: domotics, efficiency, EV charge, flexibility
Benefits	110 €/MWh hourly shared + reduction of transport tariff	60-130 €/MWh hourly shared + reduction of transport tarif

Source: Ènostra (2023). Presentation given during the Community Energy Spring Gathering (8-10 May 2023, Athens Greece)

Other Member States such as Portugal and Belgium (Wallonia Region), have already updated their legislation and regulations to replace initial rules. Portugal adopted its first legislation for RECs in 2019, while publishing updates in 2022, along with a legal framework for CECs.

In Austria, legislation was adopted for both RECs and CECs in the summer of 2021, which covered the framework for energy sharing, regulations for DSOs, a network tariff reduction for volumetric components, and a FiT scheme for selling excess production (i.e. energy production that is not self-consumed by the members). This legislation coincided with the establishment of the Coordination Office for Energy Communities. The government also provided financing for the establishment of a legal entity. Even while this approach seems comprehensive, there is also acknowledgment that this first framework of support is about testing out the new concept, and that learning and experience will inform eventual updates, which will be communicated through Austria's update NEC, which is due by 30 June 2024.

In Ireland, the Ministry has taken a very targeted approach to developing energy communities, starting with the activity of renewable energy production. It has done so primarily through specially acknowledging RECs and creating a 'community-led' category in its renewables support scheme (RESS). Because Ireland's framework included State aid, it needed to get approval from DG Competition. Under the resulting framework, which was finalised in 2021, qualifying REC-led projects were able to:

- access financing to help pre-plan and develop projects;
- access expertise and informational support through SEAI;
- benefit from a separate grid access regime than larger commercial developers;
- benefit from a community-only auction procedure to receive support under RESS; and
- benefit from reduced procedural requirements in competing for support under RESS;

Starting from this basis, the Ministry has been working to address issues that arise within the framework, along with energy community groups and SEAI. For instance, it is still a challenge to get community projects successfully through the grid connection process. In the meantime, the NRA, CRU has been consulting stakeholders on the development of the rest of the framework for energy communities. Furthermore, the government is working on an assessment of barriers and potential for energy communities at the national level.

Recently, DECC announced that it would be removing the REC-led category within RESS and replacing it with dedicated support for RECs under a Small-Scale Renewable Electricity Support Scheme. Terms and conditions should be published at the end of 2023.[72]

ANNEX 2

Registration and monitoring of energy communities at national level

ANNEX 2

I. REGISTRATION OF ENERGY COMMUNITIES

MEMBER STATE	ENTITY/ENTITIES IN CHARGE	DESCRIPTION OF REGISTRATION
Austria	E-Control (NRA) Austrian Coordination Office for Energy Communities Ministry of Energy	Österreichische Koordinationsstelle für Energiegemeinschaften (Austrian Coordination Office) – An Online One-Stop-Shop where energy communities can register themselves and get all relevant technical information on the steps for registering. It also includes an Online Map. Energy communities register online with ebUtilities. On their website, they have a checklist for realising an energy community. To share energy, the energy community must register separately with the network operator through the conclusion of a contract. The energy community must also register metering points with a data exchange.
Belgium (Brussels-Capital Region)	Brugel (NRA)	Registration is performed through the Brugel website. Brugel contains an Online Map of existing energy communities and energy sharing initiatives on its website. Brugel responds to authorisation requests within 60 days. To be successfully registered, the energy community must submit: 1 I the statutes of the energy community; 2 I the list of members (excluding individuals), according to the Brugel framework included in the appendix in step 4 of the form; and 3 I the (draft) agreement(s) governing the activity(ies) of the community, including at least the draft agreement for the first activity envisaged. If the activity concerns electricity sharing, proof of ownership or right of use (in the case of a local energy community) of the installation must also be provided. The energy community must state its intended proximity to Brugel when registering, providing addresses of residence and registration as proof.
Belgium (Flanders Region)	VREG (NRA)	RECs and CECs must notify the Flemish regulator (VREG) via its Website of the following: 1 I the activities it carries out and any change in those activities; 2 I the way in which it is composed and, if applicable, the way in which it interprets the concept of technical or geographical proximity. There is no regulated procedure for registering with the NRA. Instead, the NRA provides an online form that acts as a self-declaration by an entity that wants to acknowledge itself as an energy community. Subsequently, the entity gets added to an excel document that is publicly available on the NRA's Website.

ANNEX 2

Belgium (Wallonia Region)	CWaPE (NRA)	Only the energy communities notified to the CWaPE are authorized to include the mention "energy community" on their documents, publications or communications. Any creation of an energy community whose purpose is one or more activities on the electricity market is notified to the CWaPE before the start of its activities. Registration is available with CWaPE Online. CwaPE has 10 working days to respond to an application. The notification is accompanied in particular by the following documents and information: 1 I the statutes of the energy community; 2 I the agreement between the energy community and its participants; 3 I the characteristics and power of the electricity production facility/ies owned or used by the community that may confer on it the status of producer, as well as the date of their current or estimated commissioning; and 4 I the list of participants. Any energy sharing activity within an energy community is subject to the prior granting of an authorisation issued by the CWaPE. Article 25 of the draft order of the Walloon government explains the process that the CWaPE will follow in case it finds that an energy community does not comply with the conditions and obligations prescribed in the law for energy sharing.
Bulgaria	AUER	Not provided for. Bylaws are envisioned for the first half of 2024.

Croatia	Croatian Energy Regulatory Agency (NRA)	CECs must be registered in the register of energy communities of citizens maintained by the Agency. The register must contain, as a minimum, data on owners of shares or members in the CEC, the spatial scope of the CEC, and other data. Data on the CEC from the register are to be published on the Agency's website. Organising a CEC is considered an energy activity regulated by the Law on the Electricity Market. The issuance of a permit is governed by a rulebook on permits for the performance of energy activities and keeping a register of issued and revoked permits for the performance of energy activities. In order to be issued a license, or permit, the CEC needs to complete and sign an application form for the issuance of a permit for the performance of energy activities. The following documentation is required: 1 I An extract from the appropriate register by which the applicant proves that it is registered for the performance of energy activities, if the Agency is unable to determine whether the legal entity is registered for the performance of energy activities by inspecting the appropriate public register. 2 I The founding act on the basis of which the legal entity is registered, as well as other documentation from which it is evident that the CEC meets the requirements from the law regulating the Electricity Market. 3 I A list of all shareholders and members in the CEC, from which for each shareholder or member there will be information about: o the type of legal or natural person (trading company, association, foundation, etc.), whereby for entrepreneurs it is necessary to indicate the category according to accounting regulations (micro entrepreneur, small entrepreneur, medium entrepreneur or large entrepreneur); o the place of residence, business establishment or business premises in the area of the local self-government unit where the headquarters of the CEC are located; o the percentage share in the ownership and effective control of the CEC (according to the principles of the organization of the CEC); o the actual percentage share in the ownership or effective control of the CEC (includes shares of ownership derived from the ownership or actual control in a legal entity that is another shareholder or member of the same CEC. 4 I Statement by the responsible person that medium-sized companies and large companies do not have real control over the shareholders and members of the CEC, meaning that medium-sized companies and large companies do not have ownership, rights, contracts or other means that, either separately or combined and taking into account factual or legal circumstances, give the possibility of exercising a decisive influence on the CEC, certified by a notary.

ANNEX 2

Croatia	Croatian Energy Regulatory Agency (NRA)	5 I An extract from the appropriate register by which the applicant proves that the CEC operates on the basis of the law governing the financial operations and accounting of non-profit organizations, if the Agency cannot determine by looking at the appropriate public register whether the legal entity is registered to carry out energy activities. 6 I Evidence of technical qualification and more specifically: a) Proof of ownership or the right to use business premises based on a lease agreement or other agreement concluded with the owner of the business premises; b) Description of the information, communication and other systems for performing energy activities of the organization of the CEC; c) Valid contracts with other legal entities that have an impact on the applicant's technical qualifications; d) Three-year development and investment plan for performing energy activities, signed by the responsible person in the legal entity; e) Conditions for participation in the CEC, which are adopted by the CEC. 7 I Evidence of professional qualifications and more specifically: a) Organisational chart or part of the applicant's organisational chart related to the energy activity; b) List of employed workers and/or members of the CEC and/or shareholders in the CEC who perform work in the energy sector of the organisation of the CEC, with an indication of the level of education, position and job description according to the systematisation of jobs and positions signed by foreign responsible persons in the legal entity; c) Valid contracts with other legal entities that have an impact on the applicant's professional qualifications. 8 I Evidence of financial qualification. 9 I Statement by the responsible person that the members of the management board or other persons responsible for them in the legal entity have not been legally convicted of a criminal offense against the economy in the last five years, certified by a notary. The Rulebook also states that the financial resources of the legal entity (average balance of funds in the last 30 days in the accounts of the legal entity's commercial banks) required for the performance of energy activities. Specifically for organising a CEC, it is mentioned that 20.000 kuna are needed.
Cyprus	CERA (NRA)	No procedure exists yet. However, according to national law CERA should make sure that membership in a CEC is open and voluntary. CERA should also draft regulations setting an enabling framework for RECs.
Czech Republic		No legislation available at the time of publication.

ANNEX 2

Denmark		No process yet exists. The Danish Energy Agency publishes the projects that are approved under its Grant Scheme for energy communities on its Website. Information is available from 2022.
Estonia		Duty not yet allocated
Finland	DSO	The DSO must register the LEC after receiving the relevant information. The DSO must then notify the Data Hub no later than 7 days and no earlier than 90 days before the start of the credit calculation. The energy sharing operation must start within 14 days of receiving the full notification from the LEC.
France	Énergie Partagée	No official authority exists to register or monitor energy communities. On its Website, Énergie Partagée tracks the number of energy communities and other key figures for the French territory.
Germany	Federal Network Agency (NRA) DGRV	Entities must notify the Federal Network Agency no later than three weeks after they have been given approval as a citizen energy company. The Federal Network Agency shall publish the registration numbers of the wind and solar installations for which a notification has been submitted. The German Cooperative and Raiffeissesn Confederation (DGRV) is an auditing organisation that also tracks numbers of energy cooperatives in operation in Germany.
Greece	General Commercial Registry (GEMI) Green Tank	RECs and CECs are legally established following procedural rules for the establishment of civic cooperatives under Law 1667/1986. Statutes must be drawn up according to the national law, and must include the following information: a) the name and headquarters of the energy community. The name includes the term "Renewable Energy Community" or the abbreviation "REC" (or “Citizen Energy Community” or the abbreviation “CEC) and the extent of liability of its members. Names of natural persons or names of legal entities are not included in the name of the energy community, b) the full name, name of the father, address and tax registration number of the members that are natural persons, as well as the name, registered office, tax registration number and, if there is an obligation to register in the General Commercial Register (GEMI), the GEMI number of the members that are legal entities, c) the activities of the energy community, d) the region of activity of the energy community or the region of development of the renewable projects, e) the conditions for entry, withdrawal, and deletion of members, as well as the rights, obligations and consequences of not fulfilling their obligations to the energy community, f) the amount of the cooperative share, the manner and time of its payment, as well as the procedure for its payment,

Greece	General Commercial Registry (GEMI) Green Tank	g) the extent of the responsibility of its members, h) its duration, i) the number of members of the board of directors, which are not less than three, j) the fate of the cooperative share in the event of death of a member, k) the appointment of a temporary administrative committee, which takes care of the approval of the statutes and the convening of the first general assembly for the nomination of the board of directors, l) the method of disposing of surpluses, m) the end of the management year, n) the control rights, the terms, conditions and procedures for exercising them by its members and in particular the percentage of the total number of votes, the commitment of the members to maintain a certain number of cooperative shares and to fulfil certain obligations, the duration of validity and the reasons for the loss of the right, in order to maintain the essential control of the REC by members in the proximity, as defined above. The energy community must submit the following supporting documents: a) the statutes of the REC, b) for those members where proximity is required to be proven, as defined above: ba) notarial documents or declarations of property data for members that are natural persons, which prove the full or bare ownership or usufruct in property located within the region of activity or development of the REC's renewable energy project, or bb) family status certificates of members that are natural person who are citizens of the municipality of the region, within which the REC operates or develops the renewable energy project, c) the statutes of the legal entities that are members in the REC, if such legal entities exist, d) other data for legal entities, in order to check that they are small and medium enterprises. Once successful, the energy community acquires legal personality and commercial status and is registered in the general commercial registry (GEMI) which is governed by provisions that regulate the REC and CEC Registry. The registration of an energy community may be legally challenged via a lawsuit, but only within 2 months from the time the plaintiff becomes aware of the registration, and in any case no longer than 6 months after the registration.

ANNEX 2

Hungary	Hungarian Energy and Public Utility Regulatory Office	A public registry of energy communities and aggregators is established and managed by the Hungarian Energy and Public Utility Regulatory Office. Energy communities must apply to the Office for registration at least 75 days before the start of the activity. The declaration must contain statutes, a list of activities, and a declaration that it complies with the effective control limitations as well as a list of the substations impacted by its creation. Any change should be notified to the Office within 30 days of the change. The Office will run compliance checks on the registry and will publish a list of energy communities on its website.
Ireland	CRU (NRA) Ministry	In the Community Energy Resource Toolkit of its Community Enabling Framework, the Sustainable Energy Authority of Ireland (SEAI) provides Guidance that includes information on how to register a cooperative or another legal entity. Applicants to Ireland's Renewable Energy Support Scheme (RESS) within the Community Preference Category are required to provide a director's declaration that the project meets the requirements of a Community-led project (the criteria are defined in the terms of reference for the auctions). The form of this declaration will be issued by the TSO. They must be submitted to the Ministry. An Application for Qualification for a Community-Led Project must be made in conjunction with a Sustainable Energy Community. The Sustainable Energy Community must be identified in the Declaration of Community-Led Project, together with a description of the relationship between the Applicant and the Sustainable Energy Community. The Community-led category has been left out of the latest round of auctions under RESS, which will convert into the newly established Small-Scale Renewable Electricity Support Scheme. Terms of and Conditions will be published at the end of 2023.
Italy	GSE (General System Manager)	GSE (Energy System Manager) is in charge of managing the implementation of Online Registry for CECs and RECs and energy sharing projects generally, defining the management rules (standards, parameters, protocols) to measure the shared energy and acknowledging the incentives provided by the legal framework, monitoring the evolution of the RECs system and the overall economic impact on the energy system. It has established a portal in order to register initiatives.

ANNEX 2

Latvia	State Construction Control Board	The State Construction Control Bureau is responsible for both the establishment, maintenance, administration and management of the Register of Energy Communities (register), making records and updates in the register as well as ensuring public availability of the register. The status of an energy community is only acquired after registration . The Cabinet of Ministers will determine the information to be included in the register of energy communities, registration requirements and procedures, the information to be included in the application for registration or termination of operation, among other things. Regulations for procedures and requirements are still being drafted. The Cabinet of Ministers will provide clarity on what the requirement of proximity means and will specify the mandatory requirements in the energy community's statutes, as well as the rules on the relations between the energy community's members and shareholders, its representative and other energy users, and energy suppliers, including the system operator and heat supply system operator. By the 30th of June 2023 the Ministry of Economics, in co-operation with the Ministry of Environmental Protection and Regional Development, should have elaborated and published Guidelines for the Formation of Energy Communities, including the recommendations for public persons (public authorities) regarding the provision of support for energy communities and their participation in energy communities.
Lithuania	State Energy Regulatory Council	Before commencing activities, a REC must obtain a permit to produce electricity by the State Energy Regulatory Council. The Law on Public Bodies applies to the Renewable Energy Community. A public body acquires the status of a renewable energy community at the time of the issuance of a permit to produce electricity by the State Energy Regulatory Council. The law adds that the founding documents of a non-profit legal entity seeking to acquire the status of a REC, on top of the requirements set forth in the laws regulating the activities of a non-profit legal entity, they should also indicate the procedure: 1 I by which decisions are made regarding the realization of the produced energy; 2 I of the administration and maintenance of energy production facilities; 3 I of the distribution of income received from the performance of energy production activities. In order to obtain CEC status, the legal entity submits to the Council an application in the prescribed form and the founding agreement and/or statutes or other founding documents of a legal entity. CEC status is granted within 30 calendar days from the date of submission of all appropriate documents to the Council. After the Council has assessed the documents submitted by the legal entity and determines that the application contains inaccurate, incomplete information, wrong data and/or not all or inappropriate documents have been submitted, no later than within 10 working days from the date of registration of the application with the Council, it shall inform the legal entity and give a deadline of 10 working days to clarify the documents.

ANNEX 2

Lithuania	State Energy Regulatory Council	The Resolution adds that if the legal entity does not submit all the necessary documents or does not submit them within the stipulated time, or if it is established that the application and/or documents contain known false data and/or if it is determined that the legal entity does not meet the requirements on membership and governance of a CEC, as regulated in the Law on Electricity, the Council shall, by resolution, decide not to grant the legal entity CEC status. The Council publishes information on the CEC status granted or cancelled to the legal entity on its website within 5 working days from the decision on granting or cancelling the CEC status. The distribution network operator is informed in writing about the CEC status granted or cancelled to the legal entity no later than within 3 working days from the adoption of the relevant decision. The community has the right to appeal the decision made by the Council regarding the cancellation of CEC status within one month from the date of adoption of the decision by the court in accordance with the procedure established by the Law on Administrative Cases of the Republic of Lithuania.
Luxembourg	Luxembourg Regulatory Institute (NRA)	The establishment and dissolution of an energy community must be notified to the NRA by means of a notification form, which the NRA makes available for this purpose. An electrical energy sharing activity that an energy community intends to organize between its members or shareholders and the definitive cessation of such sharing activity, as well as any change in the composition of the members or shareholders who participate in the of the Community, are to be reported to the NRA as well as to the Grid Operator and the suppliers concerned at the latest at the event. The statutes of energy community must define clearly the modalities of functioning, of entry and exit for the members.
Malta	Unassigned	No procedure has been established.
Netherlands		No legislation available at the time of publication.
Poland		No legislation available at the time of publication.

ANNEX 2

Portugal	Directorate-General for Energy and Geology (DGEG) DSO Energy Agency (ADENE)	There is no official registration process for energy communities. The rules that have been elaborated for registration pertain only to energy sharing initiatives, which covers but is not limited to energy communities. This registration process is done through the Online Portal of the Directorate-General for Energy and Geology (DGEG). DGEG also contains relevant information on its Website. This includes a licensing guide, a guide on registration procedures, the legal framework, FAQs, and other technical information. Self-consumers participating in collective self-consumption have an internal regulation that is communicated to DGEG, within a maximum period of three months after the production unit for self-consumption comes into operation, and which defines, at least, the requirements for access of new members and exit of existing participants, the required deliberative majorities, the mode of sharing the electricity produced for self-consumption and the payment of due tariffs, as well as the destination of surplus self-consumption and the commercial relationship policy to be adopted. The management entity must communicate to the network operator, through the electronic platform provided for in legislation, which sharing method is intended for the distribution of the production unit for self-consumption production by the self-consumers participating in the collective self-consumption and its alterations. ADENE has published a Legislative Guide on Energy Communities and how to set up an initiative.
Romania	Unassigned	No procedure has been established.
Slovakia	Office for the Regulation of Network Industries	The Office for the Regulation of Network Industries (URSO) issues and cancels certificates for establishing ECs and CPERSs. In addition, URSO performs control over the compliance with obligations related to the licensing of an EC, balancing responsibilities, and operation and management of a local distribution system (LDS) by the EC. A specific license applies to ECs. URSO registers the certificates and publishes a list of the EC and CPERS on its website. By law, URSO must issue a certificate for establishing an EC (or a CPERS) within 30 days on the basis of a written request. The certificate includes the designation of the office, the name or business name of the EC, the address of the registered office and the identification number of the legal entity, a declaration that the applicant is an EC or a CPERS, date of issuance of the certificate, as well as a signature indicating the name, surname and function of the authorised person and an official stamp.
Slovenia		CECs should be established as a cooperative according to the law governing cooperatives.
Spain		No procedure has been established.
Sweden		No legislation available at the time of publication.

ANNEX 2

II. MONITORING OF ENERGY COMMUNITIES

MEMBER STATE	ENTITIES INVOLVED	COMPLIANCE (Y/N)	DESCRIPTION OF MONITORING RESPONSIBILITIES
Austria	E-Control (NRA) Austrian Coordination Office for Energy Communities Ministry of Energy	Y (ad-hoc or targeted checks)	Ministry of Energy – must evaluate support schemes for renewable energy production by December 2024, and every five years. Network operators, the NRA, operators and communities are asked to cooperate and transmit the data necessary for this evaluation. NRA - The NRA must publish an annual report on energy communities established in Austria focusing on the number and regional distribution of energy communities. Network operators, RECs and CECs are obliged to transmit the required data for this purpose to the NRA. In particular, DSOs are required to report on a quarterly basis to the NRA. Upon request and/or through targeted compliance checks by the NRA, energy communities must provide the NRA with requested data and information.
Belgium (Brussels-Capital Region)	Brugel (NRA)	Y (enforcement powers, and will check statutes)	The NRA is in charge of registration, monitoring and compliance of energy communities in Brussels. Contribution towards development of enabling framework: Brugel must be consulted by Brussels Environment when the latter is conducting its study on the potential, development and operation of energy communities, including any unjustified obstacles and restrictions to their development. Changes to statutes must also be communicated to Brugel.
Belgium (Flanders Region)	VREG (NRA) REScoop Vlaanderen	N	VREG has also developed a tracker for the number of energy sharing initiatives operating in Flanders, including those organised as an energy community. It published a report on the development of energy communities and energy sharing in 2022. However, it acknowledges on its website that, "for various reasons", it cannot currently check whether every organisation that has registered and is included in the list of registered energy communities is actually an energy community. REScoop Vlaandereen also keeps an online map of energy communities within its membership throughout the Flemish Region.

Belgium (Wallonia Region)	CWAPE (NRA) RESCOOP WALLONIE	Y	The Walloon regulator of the electricity and gas markets (CWaPE) is assigned as the responsible authority to monitor the development of the energy communities and to supervise their compliance with the legislation. The CWaPE may use data provided by registered energy communities: 1) to monitor the development of the energy communities and to check their compliance with the obligations imposed on them by or under this decree; and 2) to fulfill any legal or regulatory mission assigned to it. The CWaPE will subsequently carry out compliance checks on the energy communities notified to it, examining the compliance of energy communities, and in particular their statutes. However, CWaPE has indicated that it does not have the resources to perform this function. RESCoop Wallonie also keeps an online map of energy communities within its membership throughout the Wallonian Region.
Bulgaria	Sustainable Energy Development Agency (AUER)	N	Nothing has been articulated regarding the monitoring of energy communities. AUER is required to prepare an assessment of the existing obstacles and the potential for the development of renewable energy communities.
Croatia	Croatian Energy Regulatory Agency		The CEC is obliged to notify the Agency of any change in the data from the register referred to in Paragraph 2 of this Article within eight days of the data change.
Cyprus	CERA (NRA)		NCERA is mentioned in the law as the responsible body to conduct the assessment for barriers and potential for RECs in Cyprus. CERA is responsible for monitoring the removal of unreasonable obstacles and constraints on the development of consumption of self-generated electricity of RECs and CECs.
Czech Republic			No legislation available at the time of publication.
Denmark	Danish Supply Authority (NRA)	N	The Danish Supply Authority must identify and monitor the removal of unjustified obstacles and restrictions for the development of renewable energy communities and citizen energy communities.
Estonia	Competition Authority (NRA)		The Competition Authority is in charge of overseeing and ensuring that no obstacles or limitations are established by market participants regarding consumption of self-generated electricity and the development of energy communities.
Finland	Energy Agency (NRA)	N	The Energy Agency, as the energy sector regulator, is responsible for monitoring the obstacles and barriers to the development of CECs since 2023.

France	Informal working group coordinated by the Ministry	N	The Ministry has established a working group with relevant stakeholders (e.g. public entities, professional associations, banks) to assess obstacles, potential and removal of unjustified barriers. The first roadmap was presented in November 2021 (see section 5 on access to financing and support). According to the Ministry, the working group was supposed to continue meeting to process other needs for legislative and regulatory adaptations. The principles of the governance of energy communities must ensure, from the time of the filing of the statutes and throughout the life of the community, that the members eligible for effective control are able to hold the voting rights necessary for the control and implementation of strategic decisions, including the amendment of the statutes, budget management, allocation of results and approval of construction and operating contracts.
Germany	Federal Network Agency (NRA) DGRV		The Federal Network Agency must report to the Federal Government by December 31, 2024, and then annually, on the experience with support schemes to secure the participation of citizen energy.
Greece	General Commercial Registry Centre for Renewable Sources and Energy Savings (CRES) The Green Tank	Y	The Green Tank, a NGO, has started publishing an annual Community Energy Watch. The national law establishes a National Register for RECs and CECs, which is a public book kept in electronic form. The competent authority for its observance and the registration of the statutes and details of RECs and CECs is the General Commercial Register (GEMI). Without prejudice to the mandatory data and acts that should register in GEMI, in accordance with Law 4919/2022 and its delegated acts, the REC and CEC Register contains: a) the name and activities of the REC or CEC; b) the category of the REC or CEC, in relation to the liability of its members; c) the names of the legal representatives of the REC or CEC; and d) the region where the REC or CEC carry out its activities. Within an exclusive period of three months from the registration in the relevant Register, minutes of the temporary administrative committee or the board of directors that certify the payment of the cooperative capital are presented to the competent service of the GEMI, as defined in the statutes of the REC or CEC. If the above documentation is not submitted within three months, GEMI deletes the REC or CEC from the relevant Register. In case of partial payment or non-payment of the cooperative capital by a member or members, the temporary administrative committee or the board of directors shall also submit a codified text of the current statutes, which include a corresponding reduction of the cooperative capital and cooperative shares.

Greece	General Commercial Registry Centre for Renewable Sources and Energy Savings (CRES) The Green Tank	Y	Furthermore, the legislation mentions that the minutes of the general assembly for the election of the board of directors and the minutes of the board of directors for its formation in a body and the distribution of representation powers should be submitted within 20 days from their signature for registration in GEMI. In addition, the balance sheet and the profit and loss account, together with the report of the board of directors and the auditors are published in GEMI within 20 days of their approval by the annual regular general meeting. Finally, the law states that by joint decision of the Ministers of Development and Investments, Environment and Energy, and Digital Governance, the technical specifications of the REC and CEC Registry may be determined, as well as any other necessary detail for the implementation of the relevant provisions in the law. The law specifies that when elements change that make it impossible to fulfil the conditions of the law with regards to the membership of a REC or CEC or the disposition of the surpluses, it is the responsibility of the board of directors to inform GEMI. In case a REC or CEC is dissolved and put into liquidation, GEMI deletes it from the relevant Register, after the completion of the liquidation, for which the liquidator or in the case of several liquidators, each of them separately informs GEMI. The Centre for Renewable Sources and Energy Savings (CRES) should carry out an annual evaluation of the barriers and development possibilities of CECs and after this, if deemed necessary, it recommends to the Minister of Environment and Energy ways and incentives for their promotion and development. They also track statistics on the growth of energy communities, based on what is compiled by GEMI.
Hungary	Hungarian Energy and Public Utility Regulatory Office (NRA) Consumer Protection Authority	Y	The Office must monitor the evolution of the amount of electricity produced and consumed by active users, active users acting together, the self-consumer, the self-consumers acting together, the REC or the EC, the establishment of an energy community. It is asked to identify the factors hindering their development and formulate proposals for the Ministry in order to eradicate them. The Office should also ensure competition and monitors the development of contracts for the trade and sharing of electricity, and every two years, make proposals to the Ministry to eliminate regulatory and administrative obstacles that unreasonably hinder the creation of such contracts. The Office has to evaluate every 5 years the most important effects of changes in regulation on the support schemes on different consumer groups and investments.

ANNEX 2

Hungary	Hungarian Energy and Public Utility Regulatory Office (NRA) Consumer Protection Authority	Y	The Office also has to propose to the Ministry every 2 years the elimination of regulatory and administrative obstacles that unreasonably hinder the creation of contracts for the trade and sharing of RES electricity. The deadline for the first report was the end of 2022. Complaints from a member against the energy community they participate in should be taken care of by the consumer protection authority in the case of residential users, and by the NRA if the person is not a residential user.
Ireland	CRU (NRA) Ministry SEAI	Y	If successful under the community category of RESS, community-led projects must comply with an Implementation Agreement, including: (a) at all relevant times be 100% owned by a REC either by way of (i) a direct ownership of the RESS Project's assets, or (ii) a direct ownership of the shares in the Generator; and (b) at all relevant times, 100% of all profits, dividends and surpluses derived from the RESS Project are returned to the relevant REC. Furthermore, as a milestone, For Community-Led Projects, the Generator shall submit evidence, satisfactory to the Minister, that the Generator has established a company structure that complies with the definition of Community-Led Projects. If not completed by a certain date, any Letter of Offer that has been provided by the Minister to successful applicants, will be revoked. A research project funded by SEAI, will measure the effect of community benefit funds and household payments on the attitudes of people who live close to new wind and solar projects. It employs a difference-in-difference approach to achieve this. In 2022, Indecon Economic Consultants and Ipsos MRBI designed and conducted the 'baseline' national survey of households close to 50 new wind and solar power generation projects. In 2024 or 2025 (depending on progress with implementing the RESS policy), SEAI will commission a 'second wave' survey and analysis of the longitudinal study.

ANNEX 2

Italy	GSE (General System Manager) ARERA (NRA)	N	TARERA is in charge of conducting the national assessment of obstacles and potential for development of RECs and CECs. ARERA also monitors the elimination of obstacles and unjustified restrictions to the development of self-consumption of electricity by RECs and CECs. The transitory legislation on RECs included provisions directing ARERA to implement a system of continuous monitoring of the configurations implemented and to provide for the evolution of energy subject to payment of charges and of the various tariff components, taking into account the possible growth trajectories of the self-consumption configurations, detectable by the monitoring activity, and the evolution of the overall needs of the various components. For these purposes, ARERA could coordinate with the companies of GSE Spa group. GSE is in charge of managing the implementation of the RECs registry, defining the management rules (standards, parameters, protocols) to measure the shared energy and acknowledging the incentives provided by the legal framework, monitoring the evolution of the RECs system and the overall economic impact on the energy system. In particular, GSE will monitor the development of CECs and active consumption schemes. In particular, GSE should predict the evolution of electricity for which tariffs and levies are applicable according to the development of this trends and the overall need of financing the energy system. GSE also collects the day-to-day data for energy sharing. Specifically, GSE handles the data and the support schemes granted to the initiatives. GSE will quantify the shared electricity on an hourly and monthly basis; where necessary, GSE will distribute the shared electricity for each production plant relating to the configuration for diffused self-consumption; determine the valorisation of shared electricity and, finally, establish the additional incentive where applicable (i.e. for RECs).
Latvia	State Construction Control Board (NRA)	Y	he State Construction Control Bureau of Latvia is responsible for tasks such as the supervision and control of electricity mandatory procurement (FIT) procedures as well as for organising the electricity trading service to protected users. Legislation states that the Cabinet of Ministers determines, inter alia, the information to be provided in the annual reports of the energy community, as well as the procedure by which the energy community is excluded from the register of energy communities or re-registered.

Lithuania	State Energy Regulatory Council (NRA)	Y	the State Energy Regulatory Council inspects, supervises and controls whether RECs comply with the provisions of the law that regulate the membership, governance, main purpose and content of the REC's statutes. If the REC violates such provisions, a decision is made on the suspension or cancellation of the permit to produce electricity in accordance with the procedure established in the Law on Electricity. Similarly for CECs, the Council checks, supervises and controls whether CECs meet the requirements set forth in the law and the operational goals set forth in the founding agreement and/or statutes. The Council determines the procedure and conditions for submitting applications for the status of an energy community and the granting of this status, as well as the scope of information provided to the Council by the distribution network operator about energy communiities and active users and the procedure for providing this information. In accordance with the procedure established by the Council, the operator of distribution networks provides the Council with data on the activities of energy communities. The Council uses the data provided to perform the functions defined in the legal acts. If a REC violates the provisions of the Law, the suspension or revocation of the permit to produce electricity shall be decided in accordance with the procedure established in Article 17 of the Law on Electricity. The Council adopts a decision on granting or revoking CEC status by a Council resolution. The legal entity should inform the Council in writing about the change of contact data within 10 working days. After the Council has established that the legal entity has violated the requirements of the Law on Electricity and/or the operational goals set in the founding agreement and/or the articles of association, it shall adopt a resolution stating the established violation and informing the legal entity of the established violation. The latter, having received the Council's resolution, must eliminate the violation within the deadline set in the Council's resolution and inform the Council about it. The Council decides on the cancellation of CEC status, when within 12 months from the date of adoption of the Council's decision stating that the legal entity has violated the requirements set out in the Law on Electricity and the operational goals set out in the founding agreement and/or statutes, such legal entity repeatedly violates the requirements set out in the Law on Electricity and the established operational goals set in the contract and/or articles of association. The Resolution also highlights that the Council checks, supervises and controls whether the Community meets the requirements set forth in this law and the operational goals set forth in the founding agreement and/or statutes.

Luxembourg	Luxembourg Regulatory Institute (NRA)	N	The energy community also needs to notify yearly the DSO, NRA and its members' suppliers the list of production units, and the energy report.
Malta	Unassigned	N	The Regulator shall have the duty to monitor the removal of unjustified obstacles to and restrictions on the development of consumption of self-generated electricity and CECs. No entity has been assigned.
Netherlands	Lokale Energie Monitor	N	An official institution has not been assigned to monitor energy communities in the Netherlands. Lokale Energie Monitor, a collaboration between Energie Samen (the representative organization or energy communities and Hier.nu (a foundation that promotes climate awareness), has been monitoring local energy initiatives in the Netherlands for eight years. They produce an annual report on the numbers of initiatives including collectives, cooperatives, associations and foundations.
Poland			No legislation available at the time of publication.
Portugal	Unassigned	N	No official monitoring duties have been elaborated for energy communities.
Romania	Unassigned	N	
Slovenia	Unassigned	N	An official institution has not been assigned to monitor energy communities in the Netherlands, and there are no powers given to a regulatory authority to oversee the definition of RECs. Trajnostna Energija contains an online atlas of energy production facilities in Slovenia, but at the moment this does not track energy communities specifically.
Spain	Instituto para la Diversificación y Ahorro de la Energía (IDAE) Unión Renovables Coop Energía Común	N	here are no powers given to a regulatory authority to oversee the definition of RECs. Nevertheless, IDEA has begun to track energy communities with an Online Map. Unión Renovables Coop, a representative federation of energy cooperatives/energy communities in Spain, also tracks its members via an Online Map. Energía Común, an initiative of Ecodes, a NGO, has a growing Online Map of energy communities and their impacts throughout Spain.
Sweden			No legislation available at the time of publication.

References

[1] Article 2(16) of 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 (recast), OJ L 328, 21.12.2018, p 82 (RED II); and Article 2(11) of 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 (recast), OJ L158, 14.6.2019, p 125 (IMED).

[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 (recast), OJ L 328, 21.12.2018, p 82 (RED II); and 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 (recast), OJ L158, 14.6.2019, p 125 (IMED).

[3] "Most importantly, our vision is of an Energy Union with citizens at its core, where citizens take ownership of the energy transition, benefit from new technologies to reduce their bills, participate actively in the market, and where vulnerable consumers are protected'. EU Commission (2015). A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy. COM(2015)80 final.

[4] REDII, Recital 70; and IMED, Recital 43.

[5] These summaries are all published in the Energy Communities Repository's Policy Database.

[6] Article 18 and Article 16 of the RED II also touch upon information and training and providing guidance and clarity around administrative procedures to RECs, respectively.

[7] The recitals and existing definitions provide some guidance to Member States. For example, **control** is defined in Article 2 (56) of the IMED, and **autonomy** is clarified in Recital 71 of the RED.

[8] Article 2, paragraph 56 of the IMED defines 'control' for the purposes of enterprises operating in the electricity sector.

[9] RED II, Recital 71.

[10] See Energy Communities Repository (2023). Barriers and Action Drivers for the Development of Different Activities by Renewable and Citizen Energy Communities, pp 56-57 Barrier No 1 to energy sharing by energy communities: lack of distinction between energy communities, active customers and energy sharing.

[11] IMED, Article 2 (56).

[12] Commission Recommendation on the definition of micro, small and medium-sized enterprises. OJ L 124, 20.05.2003, p 36-41.

[13] Sweden does not have a national framework for energy communities. However, the Swedish Energy Market Inspectorate (Ei) in 2020, has recommended that civil cooperatives be the legal form to be used for implementing energy communities.

[14] See also International Cooperative Alliance (2017). Guidance Notes to the Co-operative Principles. Principle 4 (Autonomy).

[15] Article 6E of the Law 3468/2006, which was added with article 49 of the Law 5037/2023, point i).

[16] RED II, Article 22, paragraph 4(g).

[17] See Guidance that the Repository has developed on Setting Up Community Energy One-Stop-Shops.

[18] See Energy Cities (2022). Human Capacity in Local Governments: The bottleneck of the building stock transition.

[19] See SHAREs Blueprint (available for translation into six languages).

[20] Available at: https://www.idae.es/ayudas-y-financiacion/comunidades-energeticas

[21] See GSE. Interactive Map of the Prirmary Cabins.

[22] See Brugel. Energy Communities.

[23] mPOWER (2022). Building Energy Communities: A guide to inspiring democratically owned and financed energy projects.

[24] This includes technical assistance that the Repository has facilitated.

[25] See, e.g. RED II, Recital 71; and IMED, Recitals 44 & 46, which distinguish RECs and CECs from other market actors.

[26] Ofgem. Community Energy Grid Connections Working Group report to the Secretary of State (July 2014), p. 4.

[27] REScoop.eu Finance Tracker.

[28] BEK nr 1069 af 30/05/2021 (Order on RE communities and citizen energy communities and the relationship between RE communities and citizen energy communities and electricity trading companies and collective electricity supply companies); and BEK nr 642 af 30/05/2023 (Order on subsidies for local energy communities and local anchoring of climate change).

[29] SEAI (2023). Financing Renewable Energy Community Generation Projects.

[30] Tisdale, M, Grau, T and Neuhoff, K (2014). "Impact of Renewable Energy Act Reform on Wind Project Finance," Deutsche Institut für Wirtschaftsforschung (DIW Berlin), Discussion Papers 1387, p 12.

[31] EEG 2023 (Law on emergency measures for an accelerated expansion of renewable energies and other measures in the electricity sector), Article 2, paragraph 3(f).

[32] This will soon be replaced by the Small-Scale Renewable Electricity Support Scheme. See Department of Environment, Climate and Communications (DECC) (2023). Small-Scale Renewable Electricity Support Scheme (SRESS) – High-level Design.

[33] German Federal Ministry for Economic Affairs and Climate Action (2022). Regulatory Sandboxes – Testing Environments for Innovation and Regulation.

[34] Schittekatte, T (2020). Regulatory sandboxes in the energy sector – the what, the who and the how.

[35] EU Commission. Staff Working Document on Regulatory learning in the EU: Guidance on regulatory sandboxes, testbeds, and living labs in the EU, with a focus on energy. SWD(2023) 277/2 final.

[36] Royal Decree 568/2022 of July 11, Article 7.

[37] Ministry (for the Ecological Transition and the Demographic Challenge) 13525 Order TED/567/2023, of May 31, which calls for access to the regulatory test bank for the promotion of research and innovation in the electricity sector, provided for in Royal Decree 568/2022, of 11 of July.

[38] Commission for Regulation of Utilities (CRU) (2023). Renewable Hubs Pilot – Decision Paper.

[39] ARERA (2021).Presentation – "The Regulatory Toolbox for Supporting Innovation – Experience of the Italian Regulatory Authority: Regulatory Experiments and Pilot Regulations.

[40] Austrian Coordination Office for Energy Communities. Online Map.

[41] https://energysharing.brugel.brussels/energysharing/formulaire-535.

[42] See Brugel. Guide d'interprétation relatif aux autorisations délivrées aux communatés d'énergie.

[43] Energy Communities Repository. EU Energy Communities – Impact Indicators.

[44] SEAI (2023).Irish National Survey of Households Near New Commercial Wind and Solar Farms – Survey Method and Selected Results. Available at: https://www.seai.ie/community-energy/enabling-framework/impacts-research/index.xml.

[45] IMED, Article 59, paragraph 1(z).

[46] More information on national assessments of potential and barriers to development below in Section 3.

[47] Under Article 22, paragraph 3 of the RED II, All Member States must assess existing barriers and potential of development of RECs.

[48] Such studies have been carried out in Hungary and Bulgaria. See MTVSZ-SZGK (2021), Megújulóenergia-közösségek akadályai és lehetőségei Magyarországon: Értékelő tanulmányp (Barriers and opportunities for renewable energy communities in Hungary: Evaluation study) in Hungarian; and Couture, T, et al (2021). Scaling-up Energy Communities in Bulgaria (E3 Analytics: Berlin).

[49] Schwencke, A.S. (2019) Verkenning toekomstpotentieel burger-energiebeweging 2030 - Energie in eigendom van de lokale gemeenschap (AS I-SEARCH).

[50] Gobierno de Navarra (2023). Plan Energético de Navarra Horizonte 2030, p 54.

[51] Holstenkamp, L, and Kriel, C (2022). *Model Assessment Manual*, Model Assessment of Potential and Barriers to the Development of Renewable Energy Communities at the National Level. (ECOLOG-Institut für sozial-ökologische Forschung und Bildung - Lüneburg, DE).

[52] Model Assessment of Potential and Barriers to the Development of Renewable Energy Communities at the National Level - *Model Assessment Structure Proposal*.

[53] Model Assessment of Potential and Barriers to the Development of Renewable Energy Communities at the National Level -*Assessment of Barriers and Drivers for Energy Communities: Literature Review*.

[54] Model Assessment of Potential and Barriers to the Development of Renewable Energy Communities at the National Level -*Assessing the Potential of Energy Communities: A Comparison of Methodologies*.

[55] Model Assessment of Potential and Barriers to the Development of Renewable Energy Communities at the National Level -*Assessing the Impacts of Energy Communities: An Overview of (Potential) Costs and Benefits*.

[56] Model Assessment of Potential and Barriers to the Development of Renewable Energy Communities at the National Level - *Policy Database: Collection of Public Policies for Energy Communities*.

[57] ClientEarth (2015). Promoting citizen participation in the energy transition: recommendations for an EU legal framework to support community energy – D2.3 – *Community Power Project*, p 12.

[58] EU Commission (2022). Communication on the EU Solar Strategy. COM(2022) 221 final.

[59] Ministere de la Transition Ecologique (2021). 10 Mesures en faveur des energies renouvelables citoyennes – Measure 1.

[60] Gouvernement de Wallonie (2002). Pax Eolienica.

[61] Gobierno de Navarra (2023). Plan Energético de Navarra Horizonte 2030.

[62] Eurometripole of Strasbourg (2021). Ville de Strasbourg - Appel à Manifestation d'Interets Portant sur l'octroi d'une convention d'occupation du domaine public relative à la pose et l'exploitation de panneaux photovoltaïques par une communauté énergétique citoyenne sur la toiture de l'école élémentaire Louvois (16 Juin 2021), p 4.

[63] Commission for Regulation of Utilities (CRU) (2023). Renewable Hubs Pilot – Decision Paper.

[64] Gouvernement de Wallonie (2022). Pax Eolienica (Wind Agreement).

[65] See EU Commission (2022). Staff Working Document: Guidance to Member States on good practices to speed up permit-granting procedures for renewable energy projects and facilitating Power Purchase Agreements. SWD/2022/0149 final.

[66] Brugel. Avis realatif au régime de licence de fourniture et de flexibilité.

[67] See Energy Communities Repository (2023). Energy Sharing Guidance.

[68] IEMD, Article 16, paragraph 4(b); and RED II, Article 22, paragraph 4(d).

[69] Brugel ((2023). Coûts-avantages relative aux communautés d'énergie et au partage d'électricité.

[70] Energy Ville (2023). Kosten-batenanalyse betreffende de bijdragen aan de ontlasting van het Vlaamse elektriciteitsdistributienet van hernieuwbareenergiegemeenschappen, energiegemeenschappen van burgers, betrokken personen van de verkoop van groene stroom conform artikel 7.2.3 Energiedecreet of de actieve afnemers in een gebouw, en analyse van de resulterende relevante vergoedingen.

[71] According to a translation of the legislation, the provisions introduced by the law n.8/2020 early transposes art.21 and 22 of the EU Directive 2001/2018, pending full transposition of the Directive [RED II].

[72] DECC) (2023). Small-Scale Renewable Electricity Support Scheme (SRESS) – High-level Design.

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