

ENER GIZE

SUPPORTING THE CLEAN ENERGY
TRANSITION OF EUROPEAN BUSINESSES

Review of existing energy communities



Authors:

Olga BARRACHINA i SALLERAS (ESTRATS)

Segis VERDAGUER (ESTRATS)

Marta CHAFER (ICAEN)

Josep Maria GRANOLLERS (ICAEN)

Contributors:

Anja GAHLEITNER (EI-JKU), Melanie KNÖBL (EI-JKU), Sebastian GOERS (EI-JKU), Marta ARNIANI (THREE O'CLOCK), Simon MOSER (EI-JKU), Karolina TOMESOVA (EAZK), Tommaso FERRUCCI (ENGREEN), Maria del Mar BLANES (IRIS), Diana PRSANCOVA (FEDARENE), Álvaro SANTANA (SIMBIOSY)

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Executive Summary

The ENERGIZE project, co-funded by the European Commission under the LIFE Clean Energy Transition program, aims to accelerate the clean energy transition in European industrial zones. ENERGIZE seeks to reduce CO₂ emissions, enhance energy efficiency, and create sustainable skills and job opportunities by fostering collaborative energy models.

This report explores the key success factors in the development of Renewable Energy Communities (RECs) and Citizen Energy Communities (CECs) across Europe. Energy communities play an essential role in the energy transition, yet their implementation remains complex due to legal, financial, and governance challenges. While European policies actively promote these models, their success depends on a combination of factors, including **strong stakeholder engagement, well-defined governance structures, and appropriate financing mechanisms**

The research employed a mixed-methods approach, combining a **comprehensive literature review with an analysis of over 60 successful Energy Community (EC) initiatives** and an in-depth examination of ten exemplary RECs. The analysis focused specifically on RECs due to their strong emphasis on community ownership, democratic governance, and renewable energy sources.

Key insights from the research revealed that successful RECs prioritize **active community engagement**, tailoring projects to local needs and fostering a sense of shared ownership. **Collaboration with local authorities** is crucial for accessing resources and navigating legal frameworks, while a strategic approach that **starts with smaller projects** and gradually expands helps build trust and experience. RECs thrive when they embrace **diverse renewable energy technologies** and consider projects beyond just generation, such as energy storage and grid operation. Furthermore, **strong governance with clear rules**, a shared vision, and a **dedicated leadership team** ensures effective decision-making and community empowerment. Finally, financial sustainability relies on **diversifying funding sources**, including crowdfunding, member contributions, and public funding opportunities.

The analysis also highlighted the importance of understanding the community's unique context and needs, minimizing environmental impact, embracing innovation and circularity principles, and providing complementary services that **enhance community well-being**.

In conclusion, establishing successful RECs requires a **holistic approach that considers governance, financing, technical aspects, and, most importantly, community engagement**. By integrating these critical success factors, the ENERGIZE project can effectively promote the development of thriving **Industrial Renewable Energy Communities (IRECs)**, contributing to a sustainable and inclusive energy future.

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Abbreviations and acronyms

ABBREVIATION OR ACRONYM	DESCRIPTION
CO ₂	Carbon Dioxide
CE	Circular Economy
CECs	Citizen Energy Communities
CEP	Clean Energy Package for all Europeans
CHP	Combined Heat and Power
ECs	Energy Communities
EE	Energy Efficiency
EED	Energy Efficiency Directive
e.g.	For Example
EIP	Eco-Industrial Park
EU	European Union
GHG	Greenhouse Gas
ICA	International Cooperative Alliance
RECs	Renewable Energy Communities
RED	Renewable Energy Directive
RES	Renewable Energy Sources
SMEs	Small and Medium-sized Enterprises
WP	Work Package

1 Introduction: objectives and definitions

The European Union has set a firm commitment to achieving net-zero CO₂ emissions by 2050 [1]. In this context, the **ENERGIZE** project is advancing cooperative energy models in industrial zones across Europe, including Catalonia, Italy, the Czech Republic, and Austria. By fostering renewable energy generation, improving energy efficiency (EE), and developing skills within industrial parks, the project aims to significantly reduce CO₂ emissions while also driving job creation and shaping policy. With the support of over 20 industry stakeholders and associations, **ENERGIZE** is actively promoting the emergence of industrial renewable energy communities. To further scale these models globally, a dedicated digital hub will provide tools, training, and resources, leveraging insights gained from the project's pilot initiatives.

As part of its efforts, **ENERGIZE** is conducting a comprehensive benchmarking of past and ongoing initiatives related to energy efficiency (EE), industrial energy cooperation, circularity, and industrial ecology. It also examines the legal and socio-economic requirements necessary for developing sustainable business models in these contexts. This analysis aims to extract key lessons from existing experiences and identify areas for improvement, ultimately defining the technical, regulatory, and socio-economic conditions needed to establish thriving urban eco-industrial energy communities.

Within this framework, Task 2.3: *Review of existing energy community success case studies and specifications for setting up an urban industrial energy community*, focuses on reviewing well-established **Renewable Energy Communities (RECs)** by analysing literature, resources, and databases from leading initiatives such as REScoop and CityInvest, among others. The objective is to identify the critical factors that have contributed to the success and long-term viability of these communities. The insights gained will inform strategies for strengthening EE and renewable energy cooperation in industrial settings, ensuring that **ENERGIZE** builds on proven best practices.

This deliverable presents the outcomes of Task 2.3. It begins with an overview of the concepts and definitions of CECs and RECs as outlined in EU directives. It then defines key analytical parameters before providing a comprehensive review of well-established RECs, highlighting their structures, strategies, and impacts. Key findings from the literature review are discussed, identifying best practices and common challenges. Finally, **the report draws conclusions on the critical success factors** that underpin REC development. The accompanying dataset (available in the Annex) offers a detailed breakdown of the analysed communities, serving as a reference for further research and practical application.

1.1 Definitions and theoretical concepts

Given **ENERGIZE**'s focus on promoting sustainable energy practices in industrial zones, it is crucial to establish a clear foundational framework. This requires precise definitions of energy communities, aligned with EU directives and the energy cooperation models outlined in **ENERGIZE** reports D2.1 *Review of Regional Urban - Industrial Park (Energy Cooperation) Initiatives* and D2.2 - *Review report for ENERGIIZE business models' creation*. A well-defined framework will provide the necessary context for understanding the policies and strategies explored in later sections.

1.1.1 Energy Community (ECs)

Following the definitions provided by the European Commission [2] and the RESCoop initiative [3] Energy Communities (ECs) provide a structured framework for individuals, businesses, and local entities to engage in collaborative energy-related activities, **characterized by open and democratic participation and governance**. Their fundamental objective centers on **delivering services and benefits to their members and the broader local community, rather than prioritizing financial profit maximization**. Recognized as a distinct type of market actor within the Clean Energy Package (CEP), ECs embody a social innovation approach, fostering decentralized, citizen-led energy initiatives that actively contribute to the clean energy transition.

ECs serve as **catalysts for collective and citizen-driven energy actions**, playing a pivotal role in supporting the clean energy transition. They contribute to increased public acceptance of RES projects and facilitate the attraction of private investments essential for driving the transition. Moreover, **ECs empower citizens to assume a leading role in local energy transitions**, enabling them to directly benefit from enhanced energy efficiency, reduced energy expenditures, mitigation of energy poverty, and expanded local green job opportunities.

By operating as a cohesive unit, ECs gain access to a wider range of energy markets, participating on a level playing field with other market actors. This collective strength enhances their ability to effectively compete and leverage economies of scale. Under EU law, ECs enjoy considerable flexibility in their legal constitution, with options encompassing various legal entities such as associations, cooperatives, partnerships, non-profit organizations, and limited liability companies. (source: European Commission) **This adaptability allows ECs to tailor their organizational structure to the specific needs and circumstances of their local context**.

In summary, **ECs represent a significant evolution in energy systems, promoting community-based, participatory models that prioritize social, environmental, and economic well-being alongside energy production and consumption**. By empowering citizens and fostering collaborative action, ECs contribute significantly to the realization of a sustainable, resilient, and inclusive energy future.

1.1.2 Citizen Energy Community (CECs)

Citizen Energy Communities (CECs) are legally defined under the Internal Market for Electricity Directive of the European Commission (IMED) [4]. The IMED establishes common rules for the generation, transmission, distribution, energy storage and supply of electricity, together with consumer protection provisions, with a view to creating truly integrated competitive, consumer-centred, flexible, fair and transparent electricity markets in the Union. Following this definition, a CECs are legal entities that:

- Are based on **voluntary and open participation**, and is **effectively controlled by members or shareholders** that are natural persons, local authorities, including municipalities, or small enterprises;

- Have for its primary purpose to **provide environmental, economic or social community benefits** to its members or shareholders or to the local areas where it operates rather than to generate financial profits;
- And **may engage in generation**, including from RES, distribution, supply, consumption, aggregation, energy storage, energy efficiency services or charging services for electric vehicles or provide other energy services to its members or shareholders.

1.1.3 Renewable Energy Community (RECs)

Renewable Energy Communities (RECs) are legally defined under the Renewable Energy Directive (REDII) of the European Commission [5]. The REDII *promotes the use of energy from renewable sources to facilitate the energy transition*, supporting cooperation between EU countries towards this goal. Following this definition, REC are legal entities that:

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

1.1.4 Key differences between CECs and RECs

While CECs and RECs share a cooperative and community-driven ethos, and prioritize environmental, economic and social benefits over financial profits, they differ in several key ways [6], in particular regarding:

- **Membership and governance:** requirements regarding the autonomy of RECs and the involvement of citizens as decision-makers in RECs are more rigorous compared to CECs.
- **Geographical scope:** RECs will exhibit a **more localized dimension**, with controlling authority delegated to members in proximity to installations, whereas CECs will possibly also operate on a national scale, allowing effective control to occur without the necessity for proximity to installations.
- **Energy Sources:** RECs will **exclusively utilize technology for energy production from renewable sources**, encompassing electricity, gas and heat. In contrast, CECs have the flexibility to employ both fossil-fuel and renewable-based technologies, but solely for electricity production.
- **Regulatory Framework:** RECs, as predominantly non-professional entities, benefit from a comparatively more developed regulatory framework.

For further insights into the implementation of CECs and RECs, the Energy Community Secretariat's *Policy Guidelines on the Concepts of Energy Communities* [7] provides a comprehensive analysis of their similarities and differences.

1.1.5 Cooperatives

A cooperative is defined by the International Cooperative Alliance (ICA) as an “*autonomous association of individuals who voluntarily come together to fulfil shared economic, social, and cultural needs through a jointly owned and democratically controlled enterprise*” [8]. Rooted in principles of collective decision-making and member-driven governance, cooperatives prioritize community benefit over profit maximization.

As **people-centered enterprises**, they are owned, controlled and run by and for their members to realise their common economic, social, and cultural needs and aspirations, and they operate on the principle of *one member, one vote*, ensuring equal participation in decision-making regardless of its financial contribution.

As **value-driven enterprises**, cooperatives prioritize cooperation, fairness and sustainability over profit maximization, and align with [internationally agreed principles](#) established by the ICA in 1995. These principles include [9]:

- **Voluntary and open membership** – Accessible to all who share the cooperative’s goals.
- **Democratic member control** – Managed by members through equal voting rights.
- **Economic participation** – Members contribute equitably and control the financial structure.
- **Autonomy and independence** – Self-governed and free from external control.
- **Education, training, and information** – Committed to continuous learning and skill development.
- **Cooperation among cooperatives** – Encouraging collaboration to strengthen the movement.
- **Concern for the community** – Working towards sustainable social and economic development.

Their legal framework varies across Europe, with different regulatory models depending on the country. Despite these legal differences, **cooperatives remain a prevalent model for citizen-led energy initiatives in Europe**, particularly for energy communities.

As an example of the differences, a study performed in 2012 [10] by EURICSE classified them as follows:

- No specific cooperative law (e.g. Denmark)
- Independent cooperative law (e.g. Austria, Germany);
- Cooperative regulation in the commercial code (e.g. Czech Republic, Slovakia);
- Cooperative regulation in the company law (e.g. Luxembourg) or in the companies’ code (e.g. Belgium);
- Cooperative regulation in the civil code (e.g. Italy, the Netherlands);
- Cooperative regulation in the code of cooperatives (e.g. Portugal)

2 Methodology

2.1 Data collection and procedure for identification of reference initiatives

The European Commission [2] defines the ECs as legal entities that keep money in the local economy, foster social acceptance for renewable energy, keep individual investment affordable, lower energy bills, benefit the local community and take action on energy. This report aims to identify the critical factors that contribute to the success and long-term viability of established ECs. To achieve this, **the research draws upon two complementary analytical approaches**: first, a thorough review and analysis of existing literature, and second, a broad survey of successful ECs across Europe, including both CECs [4] and RECs [5], and an in-depth examination of ten exemplary best practices focusing only in existing REC [5].

A vast body of literature, reports, and guidelines is available on Energy Communities, including best practices and recommendations for successfully establishing RECs and CECs. In the initial phase of this research, an **extensive review of these materials was conducted to extract key insights identified by experts and organisations in the field**. The main findings are summarized in Section 3, while all reference documents are listed in the Bibliography.

In the subsequent phase, more than **60 successful ECs initiatives were identified and compiled** through contributions from project partners and an extensive literature review [11] [12] [13]. These initiatives represent a diverse range of ECs models and contexts and have been documented in a supplementary file to provide a comprehensive overview of the ECs landscape in Europe. This dataset serves as a valuable resource for understanding the variety of ECs approaches and their implementation across different regions. The complete list and details of the 60 successful reference initiatives is available in the Annex.

ENERGIZE		LIST OF COOPERATION INITIATIVES					Web / link
SUPPORTING THE CLEAN ENERGY TRANSITION OF EUROPEAN BUSINESSES		Initiative	Country	Industrial cooperation	Financial model	Cooperative energy interests	Key context
1	Asociación Comunitat Energètica del Polígon Agro-Reus	Spain, Catalonia	Yes	Yes	Yes	Public authority, Energy cooperation, Industrial	https://www.recs.es/ , https://www.youtube.com/watch?v=280WJ_0u080
2	Comunitat Energètica Empresarial Les Cames Genera SCEL	Spain, Catalonia	Yes	Yes	Yes	Energy cooperation, Incentives and subsidies, Industrial	https://www.energies.com/energia-empresarial-cataluna/ , https://www.energies.com/energia-empresarial-cataluna/
3	Vilavert	Spain, Catalonia	Yes	Yes	No	Energy cooperation, Non-energy cooperation, Financial instruments, Incentives and subsidies, Business models, Industrial, Non-industrial, Residential, Public authority, Tertiary	https://www.energies.com/energia-empresarial-cataluna/
4	Energia del Prat	Spain, Catalonia	Yes	Yes	Yes	Energy cooperation, Non-industrial, Financial instruments, Services, Industrial, Residential, Tertiary, Public authority	https://www.energies.com/
5	Comunitat Energètica Industrial MVI Soriano	Spain	Yes	Yes	Yes	Energy cooperation, Financial instruments, Services, Incentives and subsidies, Business models, Industrial, Public authority	https://www.energies.com/
6	La Comunitat Energètica de la Fatella	Spain, Catalonia	No	Yes	Yes	Energy cooperation, Non-industrial, Residential	https://departament.barcelona.cat/ociologia/directoria/energia/financiacio/financiacio-33-procediments-aif , https://recom.com/energia-cooperativa-agricola-de-la-fatella-projeccio-en-el-a-distribucio-de-energia/
7	CEIB - Comunitat Energètica de la Bordeta	Spain, Catalonia	No	Yes	Yes	Non-industrial, Best practice, Energy cooperation, Residential, Cleanliness & industrial ecology	https://www.energies.com/
8	CEPR - La Comunitat Energètica al Polígon de Castell de Rosanes	Spain, Catalonia	Yes	Yes	Yes	Industrial	https://www.energies.com/energia-empresarial-cataluna/
9	Comunitat Energètica del Guaisard	Spain, Catalonia	No	Yes	Yes	Non-industrial, Business models, Energy cooperation, Residential, Non-energy cooperation	https://www.energies.com/
10	Comunitat energètica d'equipaments i habitatges a Cornellà de Terri	Spain, Catalonia	No	Yes	Yes	Energy cooperation, Multiple energy cooperation, Non-industrial, Public authority, Tertiary, Residential, Incentives and subsidies	https://www.energies.com/
11	Comunitat energètica dels veïns de cortis	Spain, Catalonia	No	Yes	Yes	Tertiary, Residential, Best practice, Energy cooperation, Services	https://www.energies.com/
12	Comunitat Energètica del Nou Pastor	Spain, Catalonia	No	Yes	Yes	Energy cooperation, Residential, Best practice	https://www.energies.com/
13	Comunitat Energètica Empresarial de Santa Perpètua	Spain, Catalonia	Yes	Yes	No	Energy cooperation, Industrial symbiosis, Cleanliness & industrial ecology, Financial instruments, Financial bodies, Business models, Services, Industrial	https://www.energies.com/
14	Les comes genera - Associació d'Empreses del Polígon Industrial Les Cames (AEPIC)	Spain, Catalonia	Yes	Yes	Yes	Industrial, Incentives and subsidies, Industrial symbiosis, Energy cooperation	https://www.energies.com/
15	Comunitat energètica del Poble Nou	Spain, Catalonia	No	Yes	Yes	Public authority, Non-industrial, Residential, Energy cooperation	https://www.energies.com/
16	Comunitat de Cas Suredà	Spain, Catalonia	No	Yes	Yes	Energy cooperation, Public authority, Residential, Non-industrial	https://www.energies.com/
17	Regionale Energiegemeinschaft Ennebrunn (REG) - Photovoltaik - regional energy community	Austria	No	Yes	Yes	Public authority, Non-industrial, Residential, Energy cooperation	https://www.energies.com/
18	STEAN E-G (photovoltaic/wind/hydrogen - regional energy community - municipality, cities, small and medium size companies)	Austria	No	Yes	Yes	Energy cooperation, Public authority, Residential, Non-industrial	https://www.energies.com/
19	REG Horn Bad - photovoltaik - regional energy community	Austria	No	Yes	Yes	Energy cooperation, Non-industrial, Residential	https://www.energies.com/
20	REG Horn Süd - photovoltaik - regional energy community	Austria	No	Yes	Yes	Energy cooperation, Non-industrial, Residential	https://www.energies.com/
21	REG Eberding - photovoltaik - regional energy community	Austria	No	Yes	Yes	Energy cooperation, Non-industrial, Residential	https://www.energies.com/
22	Energiebündel Energie Genossenschaft Kremsmünster - photovoltaik, hydrogen regional energy community - 0% emissions	Austria	No	Yes	Yes	Public authority, Residential, Non-industrial, Best practice, Energy cooperation	https://www.energies.com/
23	Strombündel Energiegenossenschaft - regional energy community	Austria	No	Yes	Yes	Public authority, Non-industrial, Energy cooperation	https://www.energies.com/
24	Austrian Coordination Office for Energy Communities (Information platform on the topic of energy communities)	Austria	No	Yes	No	Incentives and subsidies, Services, Public authority	https://www.energies.com/

Figure 2-1 – Extract of the 60 successful initiatives referenced (more details in Annex)

From this initial selection, **ten exemplary RECs cases were carefully chosen for in-depth analysis**. These cases encompass a variety of organizational structures, energy technologies, and socio-economic contexts, providing a comprehensive perspective on REC development. Each case is examined in detail in Section 4, **highlighting**

the specific strategies, challenges, and key success factors that shape different RECs models. The ENERGIZE approach for the identification and selection of these best practices is explained in Section 2.2.

By integrating a broad survey with focused case studies and drawing on insights and findings from previous research, this report offers a detailed and multi-dimensional understanding of RECs development. The quantitative data from the wider sample provides a broad overview of the ECs landscape, while the qualitative analysis of the ten selected cases offers a deeper exploration of the complexities and nuances of successful RECs implementation. **This comprehensive approach ensures a well-rounded and robust analysis of the factors driving the success of RECs.**

2.2 ENERGIZE approach. Requirements and type of energy communities analysed

The in-depth analysis performed within this report is specifically focused on REC initiatives rather than CECs or other types of ECs, as the REC concept **aligns more closely with the project's vision and objectives.** The following sections provide a more detailed definition of RECs and outline the key criteria considered in the selection of best practices.

- A legal entity that, in accordance with the applicable national law, is based on open and voluntary participation, autonomous, **effectively controlled by shareholders or members that are located in the proximity of the RES projects** that are owned and developed by that legal entity; the shareholders or members of which are natural persons, SMEs or local authorities, including municipalities.
- The primary purpose of a REC is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits.
- A REC can engage in activities based on RES, including generation, energy efficiency, supply, aggregation, mobility, energy sharing, self-consumption, and district heating & cooling.

The following table is based on an approach outlined by Goiener in the *“Guide to create RECs using a participatory approach”* [14], where the concept of RECs is clearly defined, along with what it is and what it is not.

Table 2-1 – RECs considerations (source: Guide to create RECs using a participatory approach)

It WILL BE a REC	It WILL NOT be a REC...
When the organisation uses a significantly self-managing approach and is pluralistic.	When effective control is not in the hands of the people participating in it.
When the organisation uses a significantly self-managing approach and is pluralistic.	When diversity is not a value.
When it seeks comprehensive energy adaptation taking into account local RES.	When it is attempting to solve a single energy problem.
	When right from the start it is not inclusive or sustainability is partial – for example, the technology is

<p>When sustainable renewable projects and services are promoted and these are equitable and inclusive.</p> <p>When it seeks comprehensive energy adaptation taking into account local renewable resources.</p>	<p>not "neutral".</p> <p>When priority is given to short-term economic benefits and financial returns, when the sole question is "How much will I save?".</p> <p>When it does not dovetail with other local situations and aspects.</p>
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The **ENERGIZE** team applied also some specific criteria to select best practices for study;

- **Membership:** Ideally, initiatives should have more than 50 members¹. This threshold aimed to identify communities with established organizational structures and a broader base of participation and community-driven actions.
- **Existing Projects:** Selected initiatives should have functioning energy projects already in place. This focus ensured that the research examined real-world implementations and their actual outcomes, rather than theoretical concepts.
- **One Member, One Vote:** The principle of "one member, one vote" should be a key criterion, ensuring democratic governance and equitable participation within the energy community.

The selection process also prioritized geographical diversity, providing an overview of best practices across different European countries and including at least one example from each **ENERGIZE** pilot region (Catalonia, Austria, Italy, and Czechia).

Additionally, this report includes in a dedicated subsection (see Section 4.11) several noteworthy initiatives that, while not fully meeting the initial selection criteria, offer valuable insights into successful energy community implementation.

¹ Few communities do not meet this criterion, however, they have been analyzed given their pioneering spirit in their respective countries.

3 Key insights from literature and previous reports

As previously mentioned, there is extensive literature analysing energy communities, best practices, and key learnings for successfully implementing new initiatives. This chapter summarizes the most relevant findings and highlights the main insights that can be drawn from them.

RESCOOP and Friends of the Earth published in 2020 the *“Community energy: a practical guide to reclaiming power”* [15] This guide outlines the different approaches to engage people to participate that can be done from different parts of Europe. The report states that *“This is because energy ownership is well developed in some Western countries such as Germany and Denmark but it is still in its infancy in many Eastern European countries. Some of the problems come from understandable scepticisms about cooperatives due to how cooperatives were mis-used during communist times. If you find this a problem in your national context don’t focus on the form your project should take but, on the activities, and how the benefits can be shared with everyone”*. And it brings reasons that could convince potential future partners of the energy Community to join the project.

It is also highlighted in several reports, [15] [16] [16] [14] [17] the importance of working with local government, as the most successful energy communities in Europe are those where groups **collaborate with local authorities**, as they facilitate and provide credibility to the initiative at the first stages of it.

Another important tip learned from existing experiences is **to start small and grow big** with the time, as experience shows it’s easier to convince wider members once your first project is up and running, or when members are given the opportunity to use the energy directly. [15] [18]

Many reports showed that exist energy communities that operate around different types of renewable energies [18] [19], and not only in energy generation, also dealing with energy poverty, energy storage, operating distribution grids or dealing with heat supply and mobility. Therefore, on the technical side of the project, the range of potential activities is really wide, what is **important is always to focus on the resources and needs of the community** where it is allocated, also, keep in mind to **minimise the environmental impact of any installation** to get the approval and engagement of the community.

But not everything is about the technical projects to be developed, the energy communities are about building a community as well as energy projects. **“A community energy group needs to reach out to its community.”** [15] [14]

When studying the best practices on a participatory way, all the successful RECs fulfilled three prerequisites: **Identifying and attracting the key stakeholders; determining their willingness to work in the community;** and gauging strengths and anticipating and analysing resources. [14].

It is important to **set the rules that will ensure participation** within the energy community, and will ensure that all the members feel free to participate and engage to the initiative. [20] [21]

It is also interesting to keep in mind that a good energy community cannot succeed with a single leader, **needs a core leader team**. It is important to be prepared to face barriers such as internal group conflicts, lack of finance, planning permission, lack of understanding of what an energy community is and local opposition to renewables. [16] [15]

It is also important to create a **Development Group** [14] composed between 8 and 20 people, that will be the core group starting the energy community and in charge of the different tasks. This development group will define how to operate and responsibilities for each task to its members.

The importance of having a strong and effective community, setting up from the beginning **shared vision and values**, as well as a solid relationship of trust between the people. [14] [16]

And last but not least important is **the drafting of a communication strategy**, that will help engage people and recruit new members. [14]

Following, is a table that summarises the main key insights that were gathered from all the literature review. They were organised in three main areas or domains: 1) Governance and participation, 2) Financing and legal and 3) Energy and technical projects.

Table 3-1 – Key insights based on best practices analysed

Area	Key insight- recommendation
Governance and Participation	<ul style="list-style-type: none"> ➤ A community energy group needs to reach out to its community ➤ Identify and attract the key stakeholders; to determine their willingness to work in the community ➤ Set the rules that will ensure participation ➤ Need of a core leader team ➤ Create a Development Group that will work on the different tasks ➤ Agree upon a shared vision and values ➤ Draft a communication strategy
Financing and legal aspects	<ul style="list-style-type: none"> ➤ Start small and grow big ➤ Collaborate with local authorities ➤ Do not focus on the form the project should take but, on the activities, and how the benefits can be shared with everyone (<i>specially depending on the country singularities where the energy community is being created</i>)
Energy and technical Projects	<ul style="list-style-type: none"> ➤ Focus on the resources and needs of the community ➤ Minimise the environmental negative impact of any installation


4 Best practices on Energy Communities

The following table presents the selected successful initiatives deeply analysed for their valuable insights into effective Energy Community implementation

Table 4-1 – List of selected RECs best practices

RECs initiative		Country
1	Balenyà Sostenible sccl	Catalonia (Spain)
2	BEG Region Amstetten	Lower Austria (Austria)
3	Brixton Solar Community	United Kingdom
4	Bürgerwind Neuenkirchen	Germany
5	Centrales Villageoises du Val d'Eyrieux	France
6	Comunità Energetica di Magliano Alpi	Italy
7	ENERKOM Plzeňsko, z.s.	Czech Republic
8	ESEK - Energy Community of Karditsa	Greece
9	Stern-EEG EGen	Upper Austria (Austria)
10	Thermo Bello	Netherlands
Additional interesting reference cases (no REC)		Country
1	Osona Energia sccl	Catalonia
2	Eigg Electric Ltd	United Kingdom
3	REPOWERING LONDON	United Kingdom
4	SAMSØ	Denmark

4.1 Balenyà Sostenible SCCL

Name	Balenyà Sostenible sccl
Country	Catalonia (Spain)
Local Scope	Located in Balenyà, a town of Catalonia region
Active since	2021
Picture	 <p>Source: https://www.jornal.cat/imatges/noticies/balenyasostenible.jpg</p>
Relevance	<p>Although it is an initiative quite young, only 3 years, it has started strong and grown fast. It has the support of the Local public administration, collaborating as an active facilitator. They have shared the energy transition vision and accompanying the initiative from its start.</p> <p>With an exponential grow, they were able to access public funding when they were just created, and it has help them start and grow in a short amount of time. They are implementing a lot of projects in a short period of time. They were also one of the promoters of the second-degree cooperative, Osona Energia Coop [22].</p> <p>They also give a 10% of the energy production for vulnerable households of the town and collaborate in projects on international cooperation on RES and energy efficiency.</p>
Legal form	Cooperative
Members	175 active members
Stakeholders	Municipality. Local RES technology suppliers, other energy professionals related. Founders and members of the second-degree cooperative OECOop.
Key activities	<ul style="list-style-type: none"> • Solar panels in public and in some industrial buildings (331 kWp PV installed). • A shared electrical car. • 6 electrical vehicle charging points and households energy efficiency. • A fifth generation of District Heating and cooling (5GDHC) for a neighbourhood, with 50 houses.

Financial models	<ul style="list-style-type: none"> • They have obtained several public funding, including National funding (CE Implementa and Singulars), EU public funding (Next Generation and Horizon 2020) • They also have used some crowdfunding and private funding, to gain investment for their projects.
Sources of information	[23]

4.2 BEG Region Amstetten

Name	Bürgerenergiegemeinschaft Region Amstetten eGen
Country	Lower Austria (Austria)
Local Scope	22 municipalities in the KEM region (climate and energy model region) Amstetten (in particular, areas supplied by Netz NÖ or Stadtwerke Amstetten in the district of Amstetten and Waidhofen/Y.)
Active since	September 2023
Picture	 <p>Source: https://gda.gv.at/klima-energie/beg/</p>
Relevance	<p>BEG Amstetten stands out as a model for community-driven RES initiatives, demonstrating how cooperative efforts can lead to sustainable energy solutions and regional empowerment, utilizing locally produced RES thereby retaining economic value within the region.</p> <p>This is a clear example of a RES generation for energy consumption cooperative led by citizens but opened to the participation of local businesses and local authorities. Members collaborate to produce RES and share within the community on the basis of tailored distribution percentages. One of the most relevant aspects of this initiative is the excellent good coordination between different types of stakeholders, such as members of the cooperative, network providers, billing service providers and the citizen community project management.</p> <p>Motivation: better remuneration for regionally produced electricity and local value creation, clean, climate-friendly electricity, relieving pressure on power grids</p>
Legal form	Cooperative

Members	Membership is only possible to Amstetten region citizens, SMEs and municipalities , and for logistic issues only those supplied through some specific network operators. Currently, it accounts with more than 370 members, including 262 private individuals and companies, and 22 municipalities with the majority of their systems and properties.
Stakeholders	Communities, municipalities, SMEs (network providers, technology providers, PV, etc.) and private individuals.
Key activities	<ul style="list-style-type: none"> • Technical integration of energy generation • Distribution and billing. • 100 % of electricity generation comes from photovoltaics and biogas.
Financial models	<ul style="list-style-type: none"> • For administrative community structure costs: <ul style="list-style-type: none"> ○ member contributions ○ savings of reduced network fees. • Few information available related to financial model for PV implementation.
Sources of information	[24], [25], [26]


4.3 Brixton Solar Community

Name	Brixton Energy Solar communities
Country	UK
Local Scope	Brixton area, South of London
Active since	2011
Picture	 <p>Source: https://brixtonenergy.co.uk/</p>
Relevance	<p>The different Brixton Energy Solar cooperatives have been promoted by the Brixton Energy Cooperative. They are unique due to its pioneering urban approach, strong social impact, and replicable community-investment model.</p> <p>For example, Brixton Energy Solar 1 community is recognised as the first Inner-City Community-Owned Solar Project in the UK, proving that RE projects can thrive in dense urban environments, even on social housing rooftops.</p> <p>The initiative also focuses on reinvestment in the community. Profits support energy-saving initiatives and education programs in the local community. Additionally, the social</p>

	<p>impact is enhanced by targeting social housing buildings, ensuring vulnerable communities directly benefit from local renewable energy generation.</p> <p>The community investment model is also very relevant. The initiative offers community share schemes, allowing local residents—many of whom may not typically have access to green investment opportunities—to own a stake in renewable energy and receive returns.</p> <p>As a summary, the Brixton Energy Solar communities exemplify how community-driven renewable energy projects can thrive in urban settings, delivering environmental, economic, and social benefits to local residents.</p> <p>Furthermore, Brixton Energy cooperative (leading all the Brixton Energy Solar communities) trains young people in Brixton and turns them into energy experts. After being trained for several weeks, the young professionals can give high quality energy advice, or develop RES projects. The cooperative then takes additional steps to support the communities in social housing building to create a cooperative, and carry out a photovoltaic production project. The young energy experts are then participating in the construction of the installation.</p>
Legal form	Each project under the Brixton Energy Cooperative is established as a separate Industrial and Provident Society (e.g. Brixton Energy Solar 1, Brixton Energy Solar 2), ensuring that the organization is jointly owned and democratically controlled by its members, adhering to the principle of one member, one vote.
Members	Membership is open to British citizens aged 16 and over, prioritising residents to the project zone. Investors become members by purchasing shares, with investments typically ranging from £250 to £20,000. For instance, the Brixton Energy Solar 1 project attracted 103 local investors.
Stakeholders	The initiative brings together residents and community groups , local government (e.g. Lambeth Council), and technical experts (via Repowering London), securing necessary permissions, fostering community engagement and creating a powerful network for long-term sustainability.
Key activities	<p>The Brixton Energy Solar communities' activities encompass:</p> <ul style="list-style-type: none"> ● Installation of Solar Panels: Deploying photovoltaic systems on rooftops of social housing to generate clean energy. ● Community Engagement: Conducting energy advice sessions, workshops, and internships to educate and involve residents. ● Revenue Generation: Selling generated electricity to the grid and reinvesting profits into community initiatives, directly benefiting residents.
Financial models	<p>The financial framework of Brixton Energy Solar communities includes:</p> <ul style="list-style-type: none"> ● Community Share Offers: raising capital through the sale of shares to local residents and supporters.

	<ul style="list-style-type: none"> ● Smart Export Guarantee (SEG): earning revenue from government schemes that pay for renewable energy generation (replacing former feed-in tariffs). <p>Community Energy Efficiency Fund (CEEF): Allocating a portion of profits to fund local energy efficiency projects, such as home insulation and educational programs.</p>
Sources of information	[27], [28], [29]

4.4 Bürgerwind Neuenkirchen

Name	Bürgerwind Neuenkirchen (Citizen Wind Farm Neuenkirchen)
Country	Germany
Local Scope	Operates in the municipality of Neuenkirchen, located in the Steinfurt district of North Rhine-Westphalia, Germany. The wind farm is situated on the border between Neuenkirchen/St. Arnold and Rheine/Catenhorn.
Active since	2017
Picture	 <p>Source: https://www.buergerwind-neuenkirchen.de/der-bau-des-windparks/</p>
Relevance	The Bürgerwind Neuenkirchen project is a leading example of community-owned renewable energy in Germany. By empowering local citizens, reducing reliance on imported energy, and lowering CO ₂ emissions, it represents a scalable model for regional energy autonomy. The initiative aligns with Germany's broader energy transition (Energiewende) goals and demonstrates how citizen participation can drive sustainable development.
Legal form	Citizen-driven wind energy cooperative .
Members	200 members. The initiative encourages local citizen participation , ensuring that wind energy benefits the residents of Neuenkirchen and surrounding areas.

Stakeholders	Local residents and landowners, municipal authorities of Neuenkirchen and Rheine, Steinfurt District (regional energy planning), Fachhochschule Münster (scientific research support), and Renewable energy cooperatives and project developers.
Key activities	<p>Different activities, including:</p> <ul style="list-style-type: none"> • Wind Energy Production & Distribution: The wind farm consists of four wind turbines with a total capacity of approximately 10 MW. It generates 24,000,000 kWh per year, covering around 50% of Neuenkirchen's electricity demand and 8% of its total energy consumption. • CO₂ Emission Reduction: The wind farm helps save approximately 15,600 tons of CO₂ emissions per year, contributing to climate goals. • Community Involvement & Energy Transition: The project follows the Bürgerwindpark (citizen wind farm) model, allowing local stakeholders to invest, participate in decision-making, and directly benefit from the renewable energy transition.
Financial models	<p>Different financing models, including:</p> <ul style="list-style-type: none"> • Citizen Investment Model. The project follows a cooperative ownership model, allowing local residents to invest in wind energy and receive returns. • Public-Private Partnership. Collaboration with regional authorities and scientific institutions (e.g., Fachhochschule Münster) supports feasibility studies, project planning, and energy transition strategies. • Revenue Generation Through Electricity Sales. The wind farm sells its produced electricity, ensuring financial sustainability and reinvestment in further local energy projects.
Sources of information	[30]

4.5 Centrales Villageoises du Val d'Eyrieux

Name	Centrales Villageoises du Val d'Eyrieux
Country	France
Local Scope	Val d'Eyrieux (Ardeche county, France)
Active since	2019

Picture



Source: <https://www.valdeyreux.centralesvillageoises.fr/>

Relevance

The SCIC Centrales Villageoises du Val d'Eyreux follows the "Centrales Villageoises" (ACV) model, a pioneering initiative defined in 2011 in France designed to engage citizens in local RES companies sharing a common model based on a four-point Charter: 1) **Territorial approach**; 2) **Shared citizen governance**, through general assembly with "1 member = 1 vote"; 3) **Local economic benefits**, with majority **reinvestment of profits obtained**; 4) **The quality approach**.

Currently, the ACV has facilitated the creation of over 70 local energy communities (such as the Centrales Villageoises du Val d'Eyreux) governed by citizens and involving more than 7,250 shareholders, among which 290 local authorities and 165 local businesses, and has expedited the energy transition by establishing over 500 photovoltaic power plants on private and public rooftops (totalling more than 11 MWp installed, equivalent to powering 3.500 homes). **ACV provides a toolkit and support services** covering legal, financial, technical, and organizational aspects.

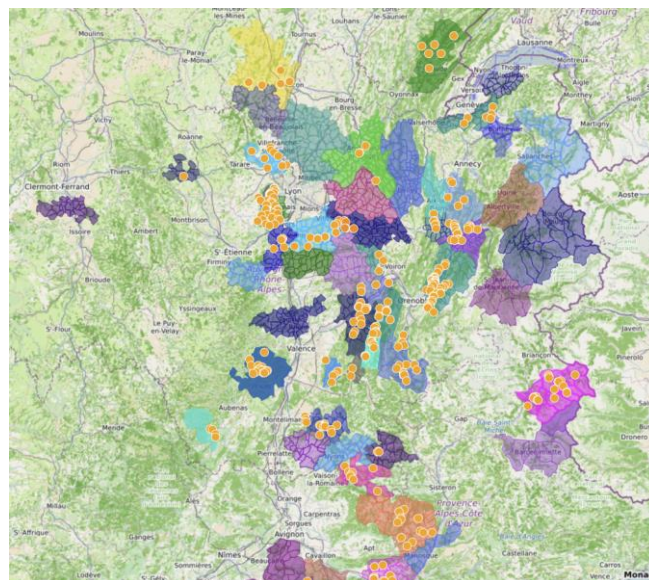



Figure 4-1: Map of implementation of the different RECs following ACV model

Legal form

Cooperative (Société Coopérative d'Intérêt Collectif, SCIC, following French regulation)


Members	Shareholders are mainly citizens (represented by 3 associations), local municipalities (10) and local companies (15). Currently, it has more than 120 active members.
Stakeholders	Currently more than 120 shareholders, including essentially: <ul style="list-style-type: none"> • Businesses • Public entities • Citizens
Key activities	<ul style="list-style-type: none"> • Solar photovoltaic installations (more than 23 different PV installations, accounting 335 kWp for a production of around 278 MWh/year) • Building capacities on energy efficiency especially targeting local citizens and members of the cooperative.
Financial models	Crowdfunding, private funding, public funding.
Sources of information	[31], [32], [33], [34]

4.6 Comunità Energetica di Magliano Alpi


Name	Comunità Energetica di Magliano Alpi
Country	Italy
Local Scope	Located in Magliano Alpi, a municipality in the province of Cuneo, Piedmont region
Active since	December 18, 2020
Picture	 <p>Source: https://economicircolare.com/comunita-energetica-rinnovabile-magliano-alpi/</p>
Relevance	While being a very small REC, the Magliano Alpi energy community is unique as it is the 1 st REC established in Italy, a pioneering model for other municipalities aiming to promote sustainable energy practices and local energy autonomy . Furthermore:

	<ul style="list-style-type: none"> • It represents a significant step toward Italy's compliance with European directives on energy decentralization and sustainability. • It demonstrates the potential of small and medium-sized municipalities to lead the energy transition at the local level. • It offers an innovative governance model that integrates public and private stakeholders in a collaborative framework. <p>It considers plans for future expansion, including increasing renewable energy capacity, integrating storage solutions, and implementing smart grid technologies.</p>
Legal form	Association
Members	Initially composed of 12 members, including both consumers and producers. The number of participants is expected to grow as the project expands, including local citizens, municipal administration, local and regional policymakers, businesses and local enterprises, universities, RES providers, etc.
Stakeholders	The community involves local citizens, the municipal administration, and collaborates with entities such as the Energy Center of the Politecnico di Torino.
Key activities	<p>Different types of main activities, including:</p> <ul style="list-style-type: none"> • Installation of a 20 kW PV system on the roof of the municipal building to produce and share renewable energy among members. • Promotion of self-consumption and energy sharing models. • Awareness campaigns and educational programs to involve citizens in the energy transition. • Support for businesses and private individuals to install solar panels and participate in collective energy management. • Encouraging the adoption of energy-efficient practices and technologies. • Integration with local development policies to create a sustainable and resilient energy model.
Financial models	<p>Different schemes for funding, including:</p> <ul style="list-style-type: none"> • Leverages national incentives such as the Superbonus 110% to encourage participation and investment in renewable energy projects. • Funded through Next Generation EU, aiming to boost post-pandemic recovery through green and digital transitions. • Supported by local and regional government subsidies. • Future financing strategies may include crowdfunding, cooperative investment models, and European grants dedicated to sustainability and energy transition.
Sources of information	[35], [36], [37], [38]

4.7 ENERKOM Plzeňsko, z.s.

Name	ENERKOM Plzeňsko, z.s.
Country	Czech Republic
Local Scope	Energy community in the region of Plzeň (services offered to Zbouch, Nyrany, Plzeň and Stod municipalities).
Active since	2023
Picture	 <p>Source: https://www.enerkom-plzensko.cz/</p>
Relevance	ENERKOM Plzeňsko represents a pioneering step for energy communities in the Czech Republic . It focuses on battery-supported rooftop photovoltaic (PV) installations, creating small, autonomous energy ecosystems for building residents. Leveraging IoT technology , these systems manage energy surplus efficiently. The community benefits from strong local authority support , which actively facilitates their vision for energy transition. Future plans include exploring biogas, wind energy, and gravity-based hydropower generation.
Legal form	Cooperative
Members	Landlord of a building of 12 apartments.
Stakeholders	Local public authorities, local RES technology suppliers and professionals.
Key activities	<ul style="list-style-type: none"> • Installation of PV panels and batteries in private buildings (for example the upgrade of an old building (12 apartments) with PV panels (18,7 kWp) batteries (28,8 kWh)) • 100% electric heating system and sanitary heat water.
Financial models	It has received subsidies from National Funds (New Green Savings Programme)
Sources of information	[39]


4.8 ESEK Energy community of Karditsa

Name	ESEK – Energy Community of Karditsa
Country	Greece
Local Scope	ESEK operates primarily in the Thessaly region, specifically in the Karditsa area. This region is known for its strong agricultural production, which provides a significant amount of residual biomass that can be utilized for energy production.
Active since	<p>2010: ESEK was initially established as an energy cooperative, focusing on collective efforts to produce and manage renewable energy.</p> <p>2019: It transformed into an energy community, a legal entity under Greek law that allows for broader participation and more significant impact in the renewable energy sector.</p>
Picture	 <p>Source: https://www.rescoop.eu/news-and-events/stories/may-success-story-creating-value-and-social-impact-with-residual-biomass</p>
Relevance	<p>ESEK serves as a pioneering model in Greece for community-driven RES projects. By transforming local residual biomass into energy, it addresses environmental concerns, promotes sustainability, and fosters local economic development. Their innovative approach, including the use of recycled coffee grounds for pellet production, exemplifies circular economy principles and community engagement.</p> <p>ESEK's efforts have led to the creation of a local ecosystem where municipalities, citizens, SMEs, and other stakeholders collaborate to utilize local resources efficiently, producing energy that benefits the entire community.</p> <p>Future Plans: ESEK is planning to expand its renewable energy portfolio by building a PV (photovoltaic) park. This project will use virtual net metering to cover the electricity needs of its members. Virtual net metering allows energy produced by the PV park to be distributed among members, reducing their electricity bills and further promoting the use of renewable energy.</p>

Legal form	ESEK operates as a profit citizen energy cooperative . This legal structure allows it to combine the principles of cooperative ownership with the ability to generate profits, which are then reinvested into the community or distributed among members.
Members	<p>More than 380 members including municipalities (1.5%), small and medium-sized enterprises (SMEs, 5.2%), and individual citizens (74.5% men, 18.5% women).</p> <p>Although it is an Energy community participated by 6 municipalities: There is a board of directors (9 persons) and a supervisory board (2 persons). There are 385 members of the community and everyone has one vote regardless of the number of shares they have in the energy community.</p>
Stakeholders	Local citizens, municipal administrations, SMEs, associations, and forest cooperatives.
Key activities	<p>Different activities, such as:</p> <ul style="list-style-type: none"> • operation of a biomass plant producing solid biofuels (pellets) for heating and cooling purposes. • Utilization of residual biomass from forestry, agriculture, municipal pruning, and wood processing industries. • Innovation in Pellet Production: ESEK has introduced an innovative approach to pellet production by incorporating recycled coffee grounds. This not only reduces waste but also enhances the energy efficiency of the pellets. <p>Creation of a local value chain benefiting biomass suppliers, transporters, and citizens.</p>
Financial models	<p>Different forms of funding:</p> <ul style="list-style-type: none"> • Initial funding through member contributions and bank loans. • Collaboration with local authorities and organizations for resource mobilization. • Participation in European projects like BECoop to support innovative initiatives.
Sources of information	[40], [7]

4.9 Stern-EEG EGen

Name	Stern-EEG EGen
Country	Austria
Local Scope	Around Vorderweißenbach town, in the Bad Leonfelden county (Upper Austria).
Active since	2023

Picture	 <p>Erneuerbare-Energie-Gemeinschaft STERN-EEG eGen</p> <p>Source: https://www.stern-eeG.at/</p>
Relevance	<p>STERN-EEG eGen cooperative is the first REC in the town of Vorderweißbach. The cooperative is not primarily intended to generate profits itself, but rather to bring ecological, economic or social benefits to its members and the region. In this way, STERN-EEG eGen functions as a so-called PROSUMER co-operative, where members can both produce and consume. By combining the power of the sun, wind, water and possibly biomass, various renewable energy sources are to be combined, thereby significantly increasing security of supply.</p> <p>The ENERGIZE Upper Austrian pilot INKOKA Sterngartl is part of this REC (INKOKA Sterngartl has 12 businesses -11 SMEs and 1 big company-, the 11 SMEs have decided to become a member of the REC).</p> <p>The declared aim of STERN-EEG is to generate, store, consume and sell RES energy. STERN-EEG eGen pools the production of existing plants for the generation of electricity from RES (more than 600 PV plants, 3 wind power plants, 11 hydropower and biomass, with a total estimated production over 23,000 MWh/y) and thus manages a broad-based supply of energy ensuring a high degree of self-sufficiency to its members.</p> <p>Motivation: low electricity prices and a secure energy supply from renewable sources for members</p>
Legal form	Cooperative
Members	Around 800 members (at least 600 feeders, and 800 consumers). The founding members were the municipality of Vorderweißbach, the Raiffeisenbank Region Bad Leonfelden, bank Vorderweißbach and the initiators Andreas Reichl and Benjamin Reichl.
Stakeholders	Citizens, Businesses (SMEs), municipalities, wind power operators, hydropower operators, bank
Key activities	<p>Mainly focused in the deployment of</p> <ul style="list-style-type: none"> • PV installations <p>but also managing:</p> <ul style="list-style-type: none"> • Wind • Hydro • Biomass power plants.

Financial models	<ul style="list-style-type: none"> • STERN-EEG eGen includes a significant financial incentive for the respective member, in the form of a reduction of the grid fees (from 28% to 64%, depending on the grid level used). • Additionally, both the EAG levy and electricity levy are not charged if a PV system is installed.
Sources of information	[41], [42]

4.10 Thermo Bello

Name	Thermo Bello
Country	Netherlands
Local Scope	Operates in the Eva-Lanxmeer neighborhood of Culemborg
Active since	2008 (established) – 2009 (in operation).

Picture



Source: <https://urbangreenbluegrids.com/projects/thermo-bello-culemborg-the-netherlands/>

Relevance	<p>Thermo Bello, in Culemborg, Netherlands, is a pioneering example of a community-driven energy initiative. It transitioned control of the district heating system from a large utility (Vitens) to local residents, who now heat water using a geothermal heat pump on the drinking water reservoir. Beyond energy supply, residents are actively involved in shaping their community, including the district's development and layout, landscape and public green space maintenance, traffic safety, water management, and local food production.</p>
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	Thermo Bello not only delivers more sustainable and locally accountable energy but also serves as an inspiring and replicable model for other Dutch neighborhoods seeking greater energy autonomy and community engagement.
Legal form	A cooperative model where local residents collectively own, govern, and benefit from the district heating system.
Members	Approximately 190 members, consisting mainly of local residents who actively participate in the management and upkeep of the heating network.
Stakeholders	While the core members are local residents, the initiative also involves municipal authorities, community associations, and local businesses. This multi-stakeholder approach helps ensure both the technical and social sustainability of the project.
Key activities	<ul style="list-style-type: none"> • Heat Production & Distribution: Extracts heat from a drinking water pumping station (formerly managed by a large water company) and supplies low-temperature heating water through an underground network for homes and businesses. • System Upgrades & Maintenance: Regular upgrades financed through diverse funding sources ensure the system remains efficient and sustainable. • Community Engagement: Acts as a model for local self-management, encouraging energy efficiency and collective responsibility.
Financial models	<ul style="list-style-type: none"> • Initial Phase: Secured a bank loan in 2008 using a municipal guarantee after taking over the heating network. • Upgrades: In 2021, financing was achieved with a mix of funding: approximately €350,000 from a bank loan, €100,000 from citizen capital contributions, and €100,000 from reinvested or self-generated funds—resulting in a debt-free status.
Sources of information	[43], [44], [45]

4.11 Additional interesting reference cases (no REC)

This section highlights several initiatives that, **while not fully meeting the RECs criteria**, are **very influential in community engagement, participation and entrepreneurship** in RES, offering valuable insights to understand the process for successful energy communities' implementation.

4.11.1 OECoop

Name	OECoop (Osona Energia Cooperativa, sccl)
Country	Spain
Local Scope	Catalonia, especially in the region of Osona and their direct neighbour regions.



Active since	2022
Picture	 <p>Source: https://www.oecoop.coop/</p>
Relevance	<p>OECOop, a non-profit 2nd degree cooperative, plays a pivotal role in the development of RECs within its county. OECOop doesn't classify itself as a REC, because it is not directly involved in energy production or consumption. However, it acts as an innovative facilitator, driving the creation and growth of local RECs. In close collaboration with local authorities, it champions the energy transition vision, providing comprehensive support from project inception.</p> <p>Several key groups surround OECOop, including local municipalities and public administrations, local energy agencies, other local energy cooperatives, and various other stakeholders. The consultative nature of OECOop's structure makes it the ideal entity for engaging stakeholders and fostering a strong community around its projects.</p> <p>Despite being only two years old, OECOop has experienced rapid growth and established itself as a pioneering model for regional REC development.</p>
Legal form	Second-degree Cooperative (its members are energy cooperatives, not individuals or SMEs)
Members	Starting with just 4 RECs members, OECOop has experienced significant growth, now boasting over 48 member cooperatives and representing nearly 2,500 individual citizens.
Stakeholders	Apart from its members, OECOop engages with municipalities and other public administration, energy consultancies, RES technology providers and financial companies.
Key activities	<ul style="list-style-type: none"> • Technical and management services to affiliated energy communities (including cooperatives, associations, and local entities) aimed at advancing local energy transitions. • OECOop has already established 45 RECs in Catalonia, promoting various RES projects involving local public authorities and private entities. 10 of them already have various PV installations for shared self-consumption (around 1.5 MW). • District cooling and electric shared mobility is also being promoted.
Financial models	<ul style="list-style-type: none"> • OECOop negotiates with financial entities the conditions for loans and other financial systems for its members. • OECOop applies for public funding, at national and European level.
Sources of information	[22]

4.11.2 Eigg Electric Ltd

Name	Eigg Electric
Country	UK
Local Scope	Eigg island (Scotland, UK)
Active since	2008
Picture	 <p data-bbox="450 1081 1361 1133">Source: https://www.sciencealert.com/this-tiny-scottish-island-is-running-almost-entirely-on-renewable-energy</p>
Relevance	<p data-bbox="450 1171 1425 1496">The Island of Eigg (100 inhabitants) is unique because in 2008 it became the world's first standalone energy grid that provided electricity from a combination of three renewable energy sources: wind, solar, and water. Eigg Electric is community-owned and managed by a company that provides electricity from RES to all the islands residents. The islanders changed their energy system from importing fossil fuels to local renewable production, including hydro and wind energy. Also, the Eigg Electric members (local inhabitant and business) have changed their energy consumption behaviour, with the commitment to limit their consumption (5 kW for private inhabitant, 10kW for businesses) to keep the system balanced.</p> <p data-bbox="450 1525 1425 1738">Currently, 11km of underground high voltage cable connects residents to energy generated from three hydroelectric plants (100kW, 5kW and 6kW), four 6kW wind turbines and 50kW solar photovoltaic capacity which produce approximately 95% of electricity needed locally. A battery bank able to provide electricity for up to 24 hours helps smooth out supply and demand and two 80kW diesel generators are used for back-up when necessary.</p> <p data-bbox="450 1767 1425 1906">Eigg Electric does not classify as REC because of the presence of a non-local entity in the management entity (the Scottish Wildlife Trust). Additionally, the principle of "1 member 1 vote" is not fully deployed. However, it represents an outstanding example of how community energy projects can be successfully deployed in specific local contexts.</p>

Legal form	Community-owned company
Members	Local inhabitant and business. The Eigg Electric is a company managed by the Eigg Heritage Trust, which was set up and is managed by the Eigg inhabitants (through 4 representatives from the Residents' Association), public authorities (the Highland Council, with 1 representative) and The Scottish Wildlife Trust (1 representative).
Stakeholders	Local inhabitant and business, public authorities.
Key activities	The key activities of Eigg Electric is the management and maintenance of the different RES generation equipment and distribution power lines.
Financial models	<ul style="list-style-type: none"> • The initial investment was financed largely by EU funds. • Eigg citizens also contributed between 500€ and 1000€ to install the necessary connection to the local grid.
Sources of information	[46], [47]

4.11.3 Repowering London

Name	Repowering London
Country	UK
Local Scope	London area
Active since	Formally established in 2013, after the success of Brixton Energy Solar.
Picture	  <p>Source: https://www.repowering.org.uk/</p>
Relevance	<p>Repowering London is a non-profit organization that facilitates the development of Renewable Energy Communities (RECs) in London. It does not classify itself as REC or CEC, because it does not operate or own RES itself. Its primary role is empowering local communities on RECs creation and deployment, through education, capacity building, and project support, including solar panel installations on public buildings.</p> <p>REPOWERING London has become one of the key actors in the deployment of RECs in London area, establishing up to 10 community energy cooperatives across London, involving more than 650 investors and 60 local volunteers.</p>

The cooperative is running a scheme in **social housing in the London region**. The cooperative volunteers are recruiting and training volunteers (local “Champions”) from the social housing tenants. These Champions are then facilitating the creation of a cooperative with their neighbours in the building. The constituted cooperative is investing in solar panels on the roof of the social housing. Champions are also trained to install the solar installation. The production is shared amongst the members of the cooperative.


Repowering London has also developed a **Youth Training Programme, a paid scheme covering sustainable energy, social enterprise and community development**. The programme is offered to young people (16-25-year olds), who are lacking opportunities and role models and who may feel alienated from greater society, disengaged with education and uncertain of the future. The programme is carried out in parallel to the development of community energy projects in the local area, and includes presentations from industry specialists and knowledge sharing. Upon completion, trainees are awarded UK certified educational certificates and receive careers advice, to boost their employability and confidence. The training serves as one of the front lines to inspire and influence action at the home and beyond to combat fuel poverty, a major concern in these communities.

Repowering London takes pride in building the collective by **hosting community events**, such as a Greener Living Day. An event that welcomed community members to learn more about community energy and to meet more like-minded people who share the same vision. Similarly, Repowering London sends their community champions to schools and local community hubs to host workshops and talks about the exciting benefits of community energy. They also provide a flagship youth training program that is accredited and can be added to young people’s CVs.

Legal form	Cooperative
Members	citizen, public
Stakeholders	citizen, public
Key activities	<p>REPOWERING London activities focus on:</p> <ul style="list-style-type: none"> • Facilitating Community-Owned Solar Projects: empowering social housing residents to form cooperatives for installing solar panels on their buildings, recruiting and training local volunteers to lead the process. • Youth Training and Development: running a paid program for young people, focusing on sustainable energy, social enterprise, and community development and providing training, certifications and career advice. • Community Engagement and Education: organizing community events like "Greener Living Days" to raise awareness about community energy, conducting workshops and talks in schools and community hubs, and educating people about the benefits of community energy.

Financial models	<ul style="list-style-type: none"> • Private funding, Public funding, Crowdfunding. • The organisation wants to make the benefits of their projects as accessible and broad as possible. When holding a community share offer the minimum investment amount is reduced to £50 for those living in the borough and either on benefits or under 25 years old (rather than £100 minimum for anyone else). These amounts are as low as Repowering London can make them when admin and banking costs of the members are considered.
Sources of information	[47] , [48]

4.11.4 Samsø

Name	Samsø Energy Academy
Country	Denmark
Local Scope	Samsø island
Active since	1997 (initial wind turbines deployed)
Picture	 <p>Source: https://www.elektormagazine.com/news/The-case-of-Sams-</p>
Relevance	<p>Samsø is a successful example of a community-driven RES transition, but its dispersed ownership structure means it doesn't fit the strict legal definition of a REC. However, it demonstrates how a community can achieve energy independence through a combination of municipal leadership, local ownership, and diverse participation.</p> <p>Samsø holds a distinctive position as a self-sufficient renewable energy island (unique Denmark's Renewable Energy Island), where all renewable energy assets are entirely owned by its residents:</p> <ul style="list-style-type: none"> • Samsø has achieved energy independence, producing more renewable energy than it consumes through a mix of wind, biogas, and solar. This achievement is a result of a concerted effort led by the Samsø Municipality and the Samsø Energi Akademi. • All RES infrastructure on Samsø is locally owned, fostering a sense of community investment. Different legal entities are operating the different RE facilities, for example: Samsø Havving (operating the offshore wind farm, with 5

	turbines owned by Samsø Municipality, and 5 turbines owned by citizens, business and cooperatives) and Samsø Vindenergi (operating the onshore wind farm, with some wind turbines owned by the municipality, and other by private owners and businesses).
Legal form	Association
Members	Citizens, municipalities, businesses from Samsø island
Stakeholders	Citizens, municipalities, businesses from Samsø island
Key activities	Samsø Energi Akademiet serves as a facilitator and knowledge hub , supporting and promoting RE projects targeting citizens and businesses in Samsø island.
Financial models	The financing model had participation of citizens and stakeholders and local ownership of the renewable energy investments at its core.
Sources of information	[49], [50], [51]

4.12 Key insights and derivations based on best practices examples reviewed

From a legal point of view, most of the best practices analysed have a legal entity that is a **cooperative**. It is typically a good legal form to ensure the governance level of “one member- one vote”, even with the different legal definitions that the cooperative form can have within Europe. It is interesting to see that each country has used different approaches and transpositions for the European directives regarding the RECs and CECs, however, there are main basic principles that remain the same around all the European countries, and there are similar useful best practice recommendations when implementing an energy community.

The installation of solar panels for self-consumption is at the moment the most generalized technical project that most energy communities are implementing, because it is easy and has a short investment return period. However, the best practices analysed showed different technical projects approaches with different renewable energy sources investment all with successful implementations. This is basically due to their **understanding of the singularities, resources and needs of their community**. Good examples are Thermo Bello [43] and ESEK [40] energy communities.

The potential of projects where an energy community can work on are wide, and to ensure their success it is important the **knowledge of the community** where it will be installed. Not all the projects have to be in renewable energy generation and consumption, it could **provide other complementary services** like what Repowering London [48] is doing, with learning programs for PV professionals inside the community. Or even, the approach from Thermo Bello community [43], that engages in district's development and layout, landscape and public green space maintenance, traffic safety, water management, and local food production.

The **technological innovation and introduction of circularity principles** also can make a difference and help see the benefits of the energy community. In communities where the environmental impact of this energy transition projects can be easily seen and experienced by the community and members, the level of

engagement and success is higher. A good example are the islands of Eigg [46] or Samsø [51], where their geographical singularity brings a stronger community and also it is not possible to externalize the energy consumption impact.

When implementing an energy community, it is important always to have the **support or collaboration in some degree of the local authorities**. Local administration act as a facilitator and have more resources to push further the energy communities. There are several examples of different degrees of collaboration for local administrations, they can be part of the energy community, like in Bürgerenergiegemeninschaft Region Amstetten [24] or the Comunità Energetica di Magliano Alpi [35], or just be a supporter and facilitator from the outside, like in Balenyà Sostenible [23], Bürgerwind Neuenkirchen [30] or ENERKOM Plzeňsko [39].

The need of financing is the one of the major challenges for all the energy communities. To have the **capacity to unlock financing mechanisms**, either through crowdfunding or financing from the members, like ESEK did at the beginning [40], or even also look for available public fundings, like CER Magliano Alpi [35] or Balenyà sostenible [23] participating in national or international project, are key to all, and can bring the difference to succeed or fail.

From a social and governance point of view, all the energy communities show a high degree of participation and democracy. They all have in common that they **share the vision** for the energy community between all the members. Another important point is that they focus on more than just an energy project, trying to **empower and bring a value proposition to the community that surpasses the economic benefit**. For example, like Brixton Solar Community [27] with their energy-savings and education programs.

Below, a table that summarises the key insights that the best practices analysed show. They were organised in three main areas or domains: 1) Governance and participation, 2) Financing and legal and 3) Energy and technical projects.:

Table 4-2 – Key insights based on best practices analysed

Area	Key insight- recommendation
Governance and Participation	<ul style="list-style-type: none"> ➤ Share the vision with all the members ➤ Empower and bring a value proposition to the community that surpasses the economic benefit
Financing and legal aspects	<ul style="list-style-type: none"> ➤ Constitute a legal entity ➤ Support or collaboration of the local authorities ➤ Potentiate the capacity to unlock financing mechanisms
Energy and technical Projects	<ul style="list-style-type: none"> ➤ Knowledge of the community, by the understanding of singularities, resources and needs ➤ Provide other complementary services ➤ Technological innovation and introduction of circularity principles

5 Conclusions and review of critical success factors

Energy communities are becoming increasingly important across European countries. However, there is still a long way to go before Renewable Energy Communities (RECs) and Citizen Energy Communities (CECs) are fully implemented. This is why European authorities are actively promoting these models to ensure the success of the energy transition.

Despite their potential, CECs and RECs are complex entities that do not always grow or succeed as expected. A review and analysis of existing literature, along with reference initiatives, provides a broad understanding of the critical success factors in establishing an energy community. While the legislation governing RECs and CECs varies across European countries, and structural and cultural differences exist, many similarities can be observed among emerging and expanding energy communities across Europe.

This report aims to highlight the key elements to consider when creating an energy community, specifically a REC. These elements are categorized into three main areas:

1. **Governance and participation**
2. **Financing and legal frameworks**
3. **Energy and technical projects**

Each area involves different stakeholders and requires specific skills. All three domains are crucial, and focusing solely on one will not guarantee the success of the initiative. At the same time, the main findings of this report apply broadly to the energy communities analysed, particularly across European countries. However, certain communities may need to consider additional key factors that are not explicitly mentioned in the table below.

These critical success factors will help identify the key elements for establishing an industrial renewable energy community (IREC) within the framework of this project.

Table 5-1 – Critical success factors when creating an energy community (REC)

Area	Critical success factor
Governance and Participation	<ul style="list-style-type: none"> ➤ Identify and attract the key stakeholders; to determine their willingness to work in the community ➤ A community energy group needs to reach out to its community: Empower and bring a value proposition to the community that surpasses the economic benefit. ➤ Set the rules that will ensure participation ➤ Need of a core leader team

	<ul style="list-style-type: none"> ➤ Create a Development Group that will work on the different tasks ➤ Shared vision and values ➤ Draft a communication strategy
Financing and legal aspects	<ul style="list-style-type: none"> ➤ Start small and grow big ➤ Collaborate with local authorities ➤ Constitute a legal entity, however, do not focus on the form the project should take but, on the activities, and how the benefits can be shared with everyone (<i>specially depending on the country singularities where the energy community is being created</i>) ➤ Potentiate the capacity to unlock financing mechanisms
Energy and technical Projects	<ul style="list-style-type: none"> ➤ Knowledge of the community. Understanding of the singularities, and to focus on the resources and needs of the community ➤ Minimise the environmental negative impact of any installation ➤ Provide other complementary services ➤ Technological innovation and introduction of circularity principles

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Annex



LIST OF COOPERATION INITIATIVES

Industrial cooperation, Financial models, Consolidated energy communities

Initiative	Country	Industrial Cooperation	Financial model	Consolidated energy community	Key concepts	Web / Link
1 Associació Comunitat Energètica del Polígon Agro-Reus	Catalonia	Yes	Yes	Yes	Public authority, Energy cooperation, Industrial	https://acepareus.es/ https://www.youtube.com/watch?v=1Z6WZ-oHSIO
2 Comunitat Energètica Empresarial Les Comes Genera SCCL	Catalonia	Yes	Yes	Yes	Energy cooperation, Incentives and subsidies, Industrial	https://anoiadiari.cat/empresa/neix-igualada-comes-genera-segona-comunitat-energetica-empresarial-catalunya/ https://www.sostenible.cat/noticia/les-comes-genera-la-futura-
3 Vilawatt	Catalonia	Yes	Yes	No	Energy cooperation, Non-energy cooperation, Financial instruments, Incentives and subsidies, Business models, Industrial, Non-industrial, Residential, Public authority, Tertiary	https://vilawatt.cat/que-som/transicio-energetica/
4 Eenergía del Prat	Catalonia	Yes	Yes	Yes	Energy cooperation, Non-industrial, Financial instruments, Services, Industrial, Residential, Tertiary,	https://www.energiadelprat.cat/
5 Comunidad Energética Industrial SEVI GoroEco	Spain	Yes	Yes	Yes	Energy cooperation, Financial instruments, Services, Incentives and subsidies, Business models, Industrial, Public authority	https://comunidadenergeticasavigoroco.com/
6 La Comunidad Energética de La Fatarella	Catalonia	No	Yes	Yes	Energy cooperation, Non-industrial, Residential	https://ajuntament.barcelona.cat/ecologiaurbana/sites/default/files/IME/IME-S2-PompeuFabra.pdf https://elecsum.com/es/la-cooperativa-agricola-de-la-fatarella-pionera-
7 CELB - Comunitat Energètica de La Bordeta	Catalonia	No	Yes	Yes	Non-industrial, Best practice, Energy cooperation, Residential, Circularity & industrial ecology	https://comunitatbordeta.batec.coop/
8 CEPiR – La Comunitat Energètica al Polígon de Castellví de Rosanes	Catalonia	Yes	Yes	Yes	Industrial	https://poligonrosanes.com/cepir-la-comunitat-energetica-al-poligon-de-castellvi-de-
9 Comunitat Energètica del Guinardó	Catalonia	No	Yes	Yes	Non-industrial, Business models, Energy cooperation, Residential, Non-energy cooperation	https://rocaquinarda.org/comunitat-energetica/
10 Comunitat energètica d'equipaments i habitatges a Cornellà de Terri	Catalonia	No	Yes	Yes	Energy cooperation, Mature energy cooperation, Non-industrial, Public authority, Tertiary, Residential, Incentives and subsidies	https://icaen.gencat.cat/web/content/10_ICAEN/17_publicacions_informes/03_fitxes_Energia_Demo/energia_demo/arxius/148_democat_Acc.pdf
11 Comunitat energètica dels veïns de corts	Catalonia	No	Yes	Yes	Tertiary, Residential, Best practice, Energy cooperation, Services	https://corts.cat/
12 Comunitat Energètica del Bon Pastor	Catalonia	No	Yes	Yes	Energy cooperation, Residential, Best practice	https://batec.coop/project/tepac-ce-bon-pastor/
13 Comunitat Energètica Empresarial de Santa Perpètua	Catalonia	Yes	Yes	No	Energy cooperation, Industrial symbiosis, Circularity & industrial ecology, Financial instruments, Financial bodies, Business models, Services, Industrial	https://www.staperpetua.cat/actualitat/noticies/lalianca-publica-i-privada-per-crear-comunitats-energetiques-empresarials-a-debat-a-santa-perpetua.html
14 Les comes genera - Associació d'Empreses del Polígon Industrial Les Comes (AEPIC)	Catalonia	Yes	Yes	Yes	Industrial, Incentives and subsidies, Industrial symbiosis, Energy cooperation	
15 Comunitat energètica del Poble Nou	Catalonia					
16 Comunitat de Can Batlló	Catalonia					
17 Regionale Energiegemeinschaft Enzenkirchen (Rege) - Photovoltaic - regional energy community (REC)	Austria	No	Yes	Yes	Public authority, Non-industrial, Residential, Energy cooperation	REGE – Regionale Energie-Gemeinschaft Enzenkirchen (rege-enzenkirchen.at)
18 STERN-EEG - photovoltaic/wind/hydrogen - regional energy community - municipality, citizen, Small and Medium size companies	Austria	No	Yes	Yes	Energy cooperation, Public authority, Residential, Non-industrial	STERN-EEG eGen - Wir produzieren und nutzen 100% Ökostrom zum Vorzugspreis!
19 EEG Horst Nord - photovoltaic - regional energy community	Austria	No	Yes	Yes	Energy cooperation, Non-industrial, Residential	HORST Nord – Erneuerbare Energiegemeinschaft Gusenstal (eeg-gusental.org);
20 EEG Horst Süd - photovoltaic - regional energy community	Austria	No	Yes	Yes	Energy cooperation, Non-industrial, Residential	HORST Süd – Erneuerbare Energiegemeinschaft Gusenstal (eeg-gusental.org);
21 EEG Eidenberg - photovoltaic - regional energy community	Austria	No	Yes	Yes	Energy cooperation, Non-industrial, Residential	EEG Eidenberg -100% Ökostrom aus Eidenberg (eeg-eidenberg.at)
22 Eneuerbare Energie Gemeinschaft Kremsmauer - photovoltaic, hydrogen regional energy community - 95 members	Austria	No	Yes	Yes	Public authority, Residential, Non-industrial, Best practice, Energy cooperation	EEG Kremsmauer – Gemeinsam für eine nachhaltige Zukunft ☀️ (eeg-kremsmauer.at)
23 Stromteiler Energiegemeinschaft - regional energy community	Austria	No	Yes	Yes	Public authority, Non-industrial, Energy cooperation	Stromteiler - Die Energiegemeinschaft aus Braunau
24 Austrian Coordination Office for Energy Communities (Information platform on the topic of energy communities)	Austria	No	Yes	No	Incentives and subsidies, Services, Public authority	Energiegemeinschaften
25 EEG SINNhub - hydropower - regional energy community (REC) with 170 Bürgerenergiegemeinschaft Region Amstetten - Photovoltaic - citizen energy community (CEC) with 22 municipalities in the region, 262 private individuals and companies	Austria	No	Yes	Yes	Best practice, Residential	Best_Practice_Beispiels_SINNHUB_23022024_final-3.pdf (energiegemeinschaften.gv.at)
26 EEG Ennstal - wind power, photovoltaics, hydropower - regional energy community (REC) with private individuals, the community and local businesses	Austria	No	Yes	Yes	Energy cooperation, Best practice, Public authority, Non-industrial	https://energiegemeinschaften.gv.at/wp-content/uploads/sites/19/2024/05/Best_Practice_EEG_Ennstal_4_abgestimmt-2-1.pdf
27 EEG Ennstal - wind power, photovoltaics, hydropower - regional energy community (REC) with private individuals, the community and local businesses	Austria	No	Yes	Yes	Energy cooperation, Financial instruments, Incentives and subsidies, Business models, Residential, Best practice, Tertiary	https://www.fondazioneconilsud.it/progetto-sostenuto/comunita-energetica-e-solidale-di-napoli-est/
28 Comunità Energetica e Solidale di Napoli Est	Italy	No	Yes	Yes	Energy cooperation, Financial instruments, Incentives and subsidies, Public authority, Tertiary, Residential	https://cercam.info/
29 CER.CA.MI	Italy	Yes	Yes	No		



30	Comunità Energetica di Magliano Alpi	Italy	No	Yes	Yes	Public authority, Residential, Best practice, Business models, Incentives and subsidies, Financial instruments, Mature energy cooperation	https://cermaglianoalpi.it/
31	CERTO	Italy	Yes	Yes	Yes	Energy cooperation, Financial bodies, Financial instruments, Services, Public authority, Industrial,	https://www.to.camcom.it/progetto-certo
32	Ener.BIT	Italy	Yes	Yes	Yes	Energy cooperation, Financial instruments, Financial bodies, Incentives and subsidies, Business models, Residential, Public authority, Industrial	https://www.enerbit.it/
33	GoCER	Italy	Yes	Yes	Yes	Incentives and subsidies, Services, Best practice, Public authority, Industrial, Mature energy cooperation, Financial bodies	https://www.gocer.it/home/
34	Consorzio San Giulio	Italy, Valsesia region	Yes	Yes	No	Energy cooperation, Business models, Services,	https://www.consorziosangiulio.it/home?cct=1728914838834
35	Unsere Energie Kremsmünster - one of the first regional energy community (REC) in Upper Austria	Austria	No	Yes	Yes	Energy cooperation, Residential, Public authority, Best practice	https://www.kremsmuenster.online/club/8
36	Energiegemeinschaft Gampern - regional energy community in Upper Austria	Austria	No	Yes	Yes	Public authority, Non-industrial, Best practice, Energy cooperation	https://www.energiegemeinschaft-gampern.at/
37	Energiegemeinschaft Badsoß Brunn	Austria	No	Yes	Yes	Public authority, Residential, Non-industrial, Energy cooperation	https://energiegemeinschaften.gv.at/wp-content/uploads/sites/19/2023/08/BadsoßBrunn-Aktuell_V1.pdf
38	Energiegemeinschaft Stanzertal	Austria	No	Yes	Yes	Non-industrial, Residential, Public authority, Best practice, Energy cooperation	https://www.eg-stanzertal.at/
39	Enerkom SKCH, z.s.	Czech Republic	No	Yes	Yes	Energy cooperation, Incentives and subsidies, Business models, Residential, Non-industrial	https://sites.google.com/masskch.eu/enerkom/home
40	ENERKOM Plzeňsko, z.s.	Czech Republic	No	Yes	Yes	Energy cooperation, Business models, Residential, Non-industrial	https://www.enerkom-plzensko.cz/
41	ENERKOM Brána Brněnska z.s.	Czech Republic	No	Yes	Yes	Energy cooperation, Business models, Residential, Non-industrial	https://branabrnenska.cz/clanky/enerkom-brana-brnenska-spolecne-za-obnovitelne-zdroje/
42	Solární asociace	Czech Republic	No		No	Energy cooperation, Incentives and subsidies, Services, Best practice, Tertiary	https://www.solarniasociace.cz/
43	P3 Ostrava Central	Czech Republic	Yes	Yes	No	Industrial symbiosis, Business models, Best practice, Industrial, Residential	https://fajnova.cz/projekt/prumyslove-obchodni-ctvrt-ve-vitkovicke-aglomeraci/
44	German thermal community: Breitenholz	other EU	No	Yes	Yes	Energy cooperation, Financial instruments, Incentives and subsidies, Residential, Public authority, Mature energy cooperation, Tertiary, Financial bodies	https://www.bioenergiebreitenholz.de/
45	RENEWABLE ENERGY COMMUNITY – CONFARTIGIANATO IMPRESE OF PROVINCE OF CUNEO	Italy	No	No	Yes	Public authority, Energy cooperation, Residential	https://www.envipark.com/en/progetti-p/renewable-energy-community-confartigianato-imprese-of-province-of-cuneo/
46	Renewable Energy Communities (CER) for water resource management in agriculture	Italy	Yes	Yes	No	Industrial, Energy cooperation, Circularity & industrial ecology, Incentives and subsidies	http://progettoconcerti.it/en/the-project/
47	CE Zona Industrial de Arinaga	Spain	Yes	No	Yes	Industrial symbiosis, Energy cooperation, Industrial	http://www.zonaindustrialarinaga.com/
48	ECOPOWER	other EU	No	Yes	Yes	Energy cooperation, Mature energy cooperation, Services, Best practice, Residential	https://www.ecopower.be/over-ecopower/cooperant-woorden
49	REPOWERING LONDON	other EU, UK	No	No	Yes	Energy cooperation, Mature energy cooperation, Best practice, Residential, Public authority	https://www.repowering.org.uk/creating-local-energy/
50	Citizen Wind Farm Neuenkirchen	other EU, German	Yes	Yes	Yes	Mature energy cooperation, Tertiary, Public authority, Residential	https://www.buergerwind-neuenkirchen.de/projekt/
51	Balenyà Sostenible sccl	Spain, Catalonia	No	Yes	Yes	Services, Best practice, Residential, Public authority	https://www.balenyasostenible.cat/
52	Osona Energia sccl	Catalonia, Spain	Yes	Yes	Yes	Financial instruments, Business models, Services, Best practice, Industrial, Residential, Tertiary, Public	https://www.oecoop.coop/
53	ENERGY COMMUNITY OF KARDITSA (ESEK)	Greece	No	Yes	Yes	Business models, Best practice, Residential, Tertiary, Public authority	https://www.esek.gr/
54	Centrales Villageoises	France	No	Yes	Yes	Business models, Services, Best practice, Residential, Tertiary, Public authority	https://www.centralesvillageoises.fr/association-centrales-villageoises
55	SCIC SAS Centrales Villageoises du Val d'Eyrieux	France	No	Yes	Yes	Residential, Tertiary	https://www.valdeyrieux.centralesvillageoises.fr/notre%20soci%C3%A9t%C3%A9
56	Elektropionir	other EU	No	No	Yes	Residential	https://elektropionir.rs/
57	Eigg Electric Ltd	other EU, UK	No	Yes	Yes	Services, Best practice, Residential, Public authority, Tertiary	http://isleofeigg.org/eigg-electric/
58	Brixton Solar Community	other EU, UK	No	Yes	Yes	Best practice, Residential, Tertiary	https://brixtonenergy.co.uk/
59	Thermo Bello	other EU, Netherlands	No	Yes	Yes	Best practice, Residential	https://www.thermobello.nl/
60	Samsø	other EU	No	Yes	Yes	Services, Best practice, Residential, Public authority, Tertiary	https://energiakademiet.dk



More information: www.energizcommunity.eu



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