



SOCIALNRG



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D4.1 Report on models for the development of REC to tackle energy poverty

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Neither the European Union nor the granting authority can be held responsible for them

Executive summary

As the energy transition accelerates amid growing geopolitical and climate challenges, energy communities are emerging as key drivers of a just, clean, and democratic energy system. However, while citizen-led renewable energy communities (RECs) are gaining attention, there is still limited knowledge about their social impact—particularly their ability to include and support vulnerable households facing energy poverty.

This report highlights existing and emerging models of community-led initiatives that address energy poverty and promote social justice, both within a social housing context and beyond. By showcasing these initiatives, the report aims to provide a foundation for replicable, impactful approaches that can be scaled across Europe. The findings and lessons learned from over 50 initiatives included in this report, serve as a resource for policymakers, stakeholders, and community energy organisations, offering valuable insights to drive action and advocate for policies that enhance the role of community energy in tackling energy poverty.

1 Introduction

1.1 About SOCIALNRG

Energy poverty remains a critical issue across Europe, with many existing solutions offering only short-term financial relief rather than long-lasting change and security against a highly volatile energy market. The SOCIALNRG project addresses this challenge by piloting adaptable, community-driven models in social housing communities in Slovenia, Italy, and Belgium. Through a co-creation approach, vulnerable households actively imagine, shape and manage their own energy future, ultimately establishing their own energy community. By focusing on peer exchange, governance integration, and trust-building, SOCIALNRG aims to create lasting energy communities for 460 families, delivering solutions that not only lower energy costs, but also empower residents, foster community resilience and strengthen social ties.

By directly involving vulnerable households, SOCIALNRG adapts the community energy model to the complexities and particular realities of working with households living in social, cooperative, or public housing. The project accounts for challenges such as integration in local governance structures, irregular work and family schedules, and initial scepticism toward new initiatives that have the potential to disrupt well established day-



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to-day norms with regard to managing their household. By ensuring that vulnerable households play an active role, SOCIALNRG aims to demonstrate that climate action and social equity can go hand in hand, offering a scalable model for a just energy transition. At a time when social and environmental policies risk being sidelined for competitiveness, SOCIALNRG stands as a blueprint for an inclusive and democratic energy future.

1.2 About this report

With the energy transition reaching a critical point in an increasingly tense climate and geopolitical context, there is a growing interest in real-life examples of energy communities and collective, citizen-led approaches leading the way towards a just, clean and democratic energy system. This report seeks to highlight existing and emerging methodologies of community-led energy poverty alleviation and social justice projects mapped through an Open Call organised in February and March 2025. By showcasing these initiatives it aims to inspire others and provide a basis for creating blueprints for impactful collaborative approaches that can be replicated across Europe. We hope it will help policymakers, stakeholders, and energy communities better understand the sector, drive action, and advocate for supportive policies to help energy communities become effective tools to tackle energy poverty.

The structure of this report is organised around the main building blocks of community energy business models that emerged from the Open Call questionnaires and interviews. These are:

- ✦ **Under 5.1: Stakeholders** – Successful energy poverty alleviation requires bringing together a wide range of actors, from citizens and local authorities to housing associations, NGOs, and technical partners. Identifying who needs to be engaged, and how to build trust and shared ownership, is crucial for creating long-lasting impact.
- ✦ **Under 5.2: Governance and organisational structures** – Energy communities vary in how they integrate vulnerable households, either as full members with voting rights or as beneficiaries of specific services. The chosen structure directly shapes inclusivity, decision-making, and how responsibilities are distributed within the community. They also vary in terms of workforce, with many initiatives relying on volunteers. This also impacts the extent to which resources are available to address complex issues such as energy poverty and vulnerability.
- ✦ **Under 5.3: Core activities** – To tackle energy poverty, communities typically focus on practical measures such as local renewable energy production, collective self-consumption and supply, heating and cooling solutions, energy efficiency upgrades, and awareness-raising initiatives. To a greater or lesser extent, these activities reduce costs, strengthen resilience and empower residents to take an active role in the energy transition.



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✦ **Under 5.4: Financing** – The ability to fund energy poverty alleviation schemes depends on a mix of resources, including member contributions, grants, public support schemes, and innovative solidarity-based models. The chosen financing approach often determines the scale, sustainability, and social impact of the initiative.

The cases presented are categorised according to where they are most relevant. For clarity, each case is described in full in a single section, even though many could have been included under multiple headings. Readers are therefore encouraged to explore several chapters to see how different models can be applied.

Finally, **chapter 6** highlights the importance of supportive **policies and legislative frameworks**. Frequently cited as both barriers and enablers by participants, this section brings together the most common reflections on how the regulatory context can shape and support the work of energy communities in addressing energy poverty.

1.3 Key concepts

✦ **Energy communities**

Energy communities are the only form of collective governance of the energy system, enabling the active participation of citizens, formalised by the EU. Incorporating stringent non-commercial, governance and control requirements they are unique players in the energy market. They can operate across the energy sector and can take up activities such as collective self-consumption, energy sharing, heating and cooling, citizen-led renovation services, e-mobility and so on. Driven by social, ecological and economic value over profit, energy communities generate a wide array of benefits, not only for their members but also for the wider community: they mobilise private capital, while keeping individual investments affordable; they provide access to clean and affordable energy; foster social acceptance of the energy transition; empower households through education, awareness raising and democratic decision-making; and generate energy savings. Such benefits, when accessible to those most vulnerable, can alleviate the burden of energy poverty and create more resilient communities.

✦ **Energy poverty and vulnerability**

The revised Energy Efficiency Directive (EU/2023/1791) for the first time establishes a Union wide definition for energy poverty. According to this definition a household experiences energy poverty when it can't afford or access essential energy services for a decent and healthy life – like heating or cooling the home, having hot water, keeping the lights on or running essential appliances. It recognises that energy poverty is a complex issue, linked to a combination of factors such as low income, high energy costs and poor



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housing conditions. This means that the exact conditions can vary depending on the local context and each country's social and energy policies.¹

The Energy Poverty Advisory Hub (EPAH) further explains that energy poverty results from a mix of contextual factors — such as climate, housing type, and geopolitical influences on energy prices — and personal factors, like age, household composition, or health conditions. This also means that households and individual citizens are vulnerable to energy poverty in different ways. EPAH identified five, non-exhaustive factors which may increase someone's vulnerability to energy poverty: sociodemographic factors (e.g. low educational level, social aid beneficiary, ethnic minority), household composition, health, the degree of energy literacy and cultural factors.² As many households move in and out of different circumstances over time, it can make them more or less exposed to energy-related hardship, making energy poverty a dynamic and evolving issue.

Because its causes are so varied, the impacts of energy poverty are equally wide-ranging. These can include worsening health problems, developmental issues among children, reduced social and emotional well-being, and even an increase in premature deaths.³

Inclusivity

Inclusion means creating an environment where all people are valued, respected, and able to participate fully, without discrimination based on gender, sexual orientation, social class, political beliefs, race, ethnicity, nationality, religion, age, or disability. It involves actively welcoming and using diverse knowledge, perspectives, experiences, and ideas. Inclusion also requires cultivating the structures, systems, processes, culture, behaviours, and mindsets that support and embrace people in all their diversity, ensuring that everyone can contribute meaningfully and equitably.⁴

Inclusion is crucial for a just energy transition. It ensures that everyone can participate, while promoting equal access to clean and affordable energy as a basic human right. Research shows that including diverse perspectives—across gender, sexual identity, ethnicity, and other backgrounds—improves decision-making and outcomes.⁵ However, many voices remain unheard, particularly those of low-income households, women, and socially discriminated communities, who are disproportionately affected by

¹ Directive (EU) 2023/1791, Article 2 (52)

² [Energy Poverty Advisory Hub \(2022\). Introduction to the Energy Poverty Advisory Hub \(EPAH\) Handbooks: A Guide to Understanding and Addressing Energy Poverty.](#)

³ [Energy Poverty Advisory Hub \(2022\). Introduction to the Energy Poverty Advisory Hub \(EPAH\) Handbooks: A Guide to Understanding and Addressing Energy Poverty.](#)

⁴ [Kepinski L. and Nielsen T.C. – Definitions Matter – Just Don't Talk About Them. Diversity, Equity, Belonging and Inclusion.](#)

⁵ [Cloverpop – Hacking Diversity With Inclusive Decision-Making.](#)



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energy poverty. Systemic discrimination reinforces vulnerabilities, undermining gender, ethnic, and social equality, as well as health, education, and social cohesion. Current energy crises highlight these inequities, emphasising the need for inclusion to ensure a fair and effective energy transition.⁶

Inclusivity in energy communities

In the context of energy communities, inclusivity refers to the ongoing effort to ensure that all people can meaningfully participate in, influence, and benefit from citizen-led energy initiatives. It goes beyond simply opening membership or access — inclusivity involves actively identifying and addressing barriers (financial, technical, social, or institutional) that may prevent individuals or groups from engaging with or benefiting from community energy activities. It also means recognising different forms of knowledge, capacity, and experience as valuable contributions to shaping community priorities and practices. Inclusivity in energy communities is therefore a process of continual reflection and adaptation, aimed at creating fairer and more representative forms of participation. It acknowledges that participation and benefit are not evenly distributed and that building inclusive energy communities requires attention to power relations, trust, and local context. Ultimately, inclusivity ensures that the transition to sustainable energy is socially just and collectively owned.

1.4 Main findings

A large-scale survey by the ESPON TANDEM project, presenting qualitative data on inclusiveness in energy communities, found that while energy communities are not inherently inclusive and their current impact on vulnerable households is modest, “with the right financial incentives, multilevel governance, and contextual alignment, they can become powerful instruments of social equity and territorial resilience.”⁷ These findings are echoed by the SOCIALNRG mapping, which offers concrete qualitative insights into how energy communities address social inclusion and energy poverty—highlighting common models and key success factors.

1

Open Call results show that it’s indeed the rootedness in a wide local network that holds the potential for energy communities to successfully address energy poverty. Energy communities thrive when they collaborate with diverse local stakeholders—public institutions, NGOs, businesses, and others—to combine resources, expertise, and access to vulnerable groups. Though, **balancing different interests** is crucial to maintain legitimacy, stability, and community trust.

⁶ SCCALE 203050 (January 2024) – Inclusivity Guide

⁷ ESPON TANDEM (2025). Final Report - Policy Brief.



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Although some respondents are looking into **formally including vulnerable households as full members**, this remains quite rare in practice and is often **limited to piloting inclusive membership options among a small number of households**. Respondents noted several challenges: on the side of the energy communities, it can be difficult to create an attractive model for vulnerable households, which apart from long-term gains could also offer immediate short-term (mainly economic) benefits; on the households' side, barriers include limited resources, lack of trust, and low capacity to actively and meaningfully participate in these initiatives.

3

Respondents described a broad array of activities and services designed to address energy poverty. **Most take a holistic approach, combining several measures—such as providing energy, offering energy efficiency guidance, running educational and awareness campaigns, and delivering financial support—to offer well-rounded and effective assistance**. By using multiple strategies together, these energy communities not only help reduce energy costs but also empower residents to manage their energy use, foster stronger community connections, and build long-term resilience.

4

Respondents identify **funding as a major challenge**. A central issue is that social value is rarely recognised in today's energy markets, making it difficult to sustainably integrate such activities into business plans and portfolios. When funding is available, it does not always reach those who need it. targeted technical support and capacity building are essential to help citizens and local communities access and effectively use available resources.

5

Supportive national and local policies are identified as key enablers for energy communities to tackle energy poverty, as seen in Greece and Italy where tailored incentives have fostered projects benefitting vulnerable households. Yet, **across Europe, progress remains uneven and is hindered by restrictive laws, complex procedures, limited funding access, and weak monitoring**. Many communities face commercial-level bureaucracy despite their social focus, while fragmented energy, social, and climate policies reduce impact. Formal recognition alone is insufficient—practical tools, financing, and clear procedures are needed to empower energy communities as engines of social equity and a just energy transition.



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2 Mapping existing and emerging practices

Energy communities are a unique, EU-recognised form of collective energy governance that allows citizens to actively participate in the energy system. Driven by social, ecological and economic value over profit, energy communities generate a wide array of benefits, not only for their members but also for the wider community: they mobilise private capital, while keeping individual investments affordable; they provide access to clean and affordable energy; foster social acceptance of the energy transition; empower households through education, awareness raising and democratic decision-making; and generate energy savings (it is found that joining a renewable energy cooperative can lead to more than 20% reduction in electricity consumption (Coenen & Hoppe, 2022)). Such benefits, when accessible to those most vulnerable, can alleviate the burden of energy poverty and create more resilient communities.

2.1 Mapping methodology

This report maps out innovative projects identified through an open call questionnaire distributed among members of REScoop.eu, Housing Europe, and other relevant organisations in January and February 2025. Most information was gathered through direct engagement with energy communities and their key partners, capturing a variety of perspectives on how energy communities address energy poverty, their business models, and the challenges they face.

2.1.1 Outreach campaign

A targeted outreach campaign was carried out through the networks of SOCIALNRG project partners, particularly leveraging REScoop.eu's extensive network of energy communities. The campaign aimed to engage both established and emerging energy communities actively working on energy poverty, as well as their key partners, such as municipalities, housing providers, NGOs, and so on. The strategy included:

- ✎ **Targeted outreach** to initiatives and stakeholders already known to be working on energy poverty through community energy.
- ✎ **Snowball sampling:** to amplify reach and ensure diverse participation, known initiatives were asked to share the open call with their key partners and broader networks.
- ✎ **Broad Social Media Publicity:** General promotion of the open call across relevant platforms to increase visibility.



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2.1.2 Data Collection

Primary data was gathered through a mix of written questionnaire responses and semi-structured interviews with energy communities and their partners. Although participants were initially encouraged to complete the survey themselves, we also offered to assist them through conversational interviews. These interviews were mainly conducted online and transcribed for analysis. To complement the insights gained from interviews and written submissions, we also reviewed relevant online sources such as project websites, leaflets, guides, and webinars, both to deepen our understanding of participating initiatives and a number of additional ones.

The collected data is primarily qualitative and anecdotal, highlighting the potential of energy communities across Europe to address energy poverty. Although more comprehensive quantitative data on the social impact of energy communities is needed, such information is not yet systematically collected across different initiatives or at the EU level. This complicates any attempt at identifying general trends or impacts. Collecting this type of data was beyond the scope of this mapping effort.

2.1.3 Data Analysis

The open call gathered insights into how energy communities address energy poverty and promote social justice, focusing on their actions, target beneficiaries, and engagement approaches. It also examined the legal and regulatory environments they operate in, their governance structures (particularly the involvement of vulnerable households in decision-making), key partnerships, funding mechanisms, impacts, and future plans.

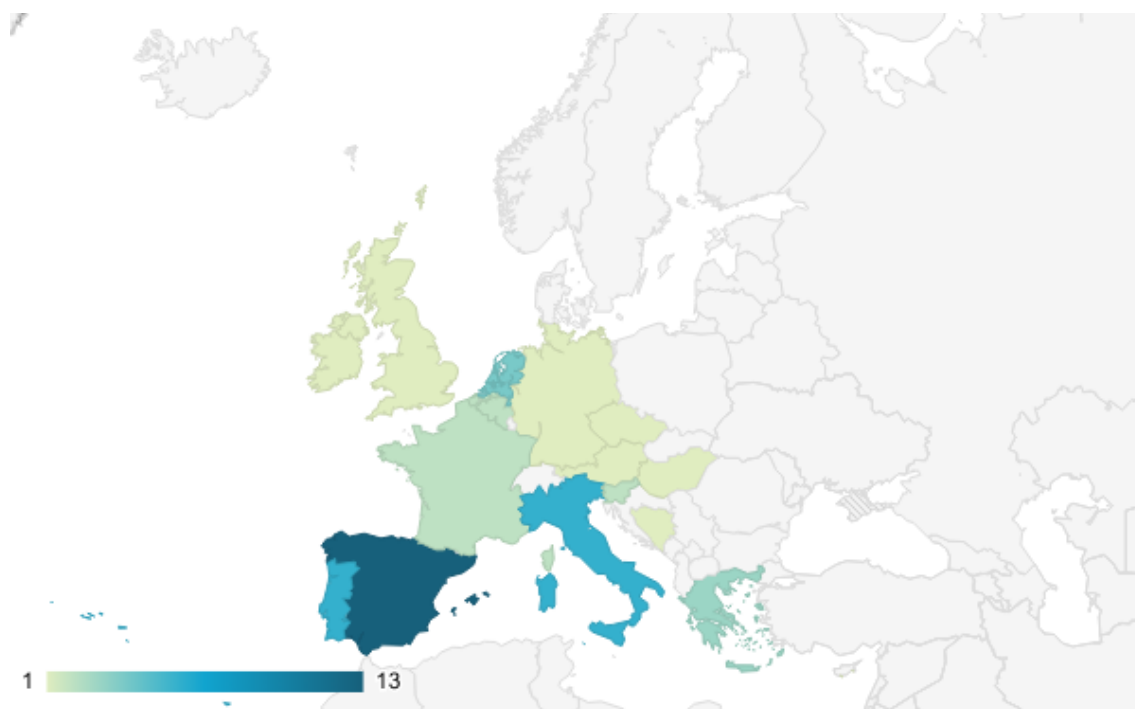
The collected data was analysed through thematic analysis to identify common themes, practices, and challenges faced by energy communities in tackling energy poverty.

2.1.4 General overview

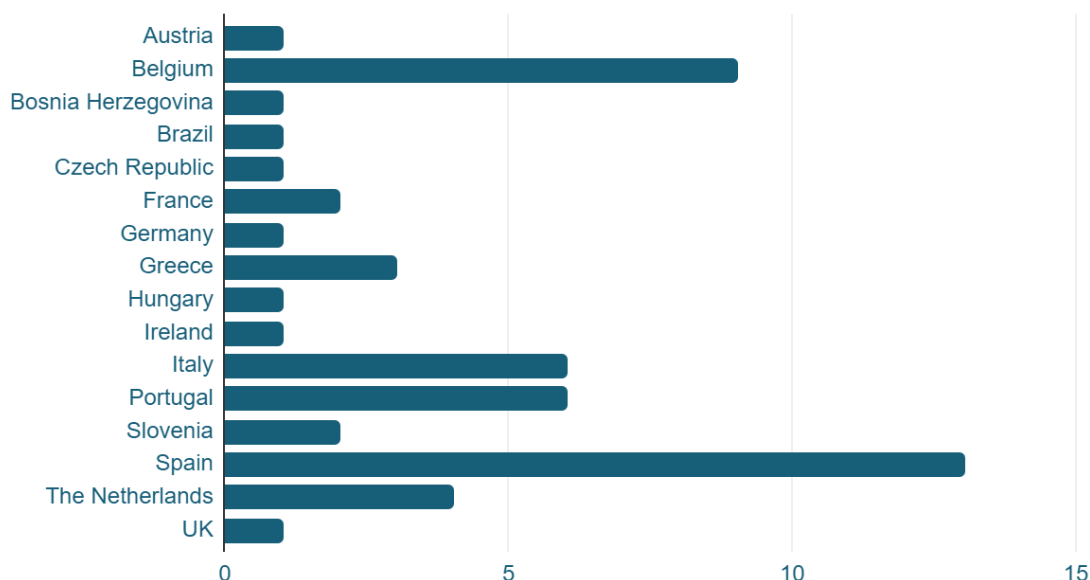
In total, 57 responses were submitted to the Open Call: 33 through written contributions and through 24 interviews. 48 were assessed as relevant for inclusion in the analysis. With 13 respondents, Spain is the highest represented country. Eastern Europe and Scandinavia, on the other hand, remain under/non represented in the data collection. Although we engaged with several organisations from Eastern Europe, they flagged that the topic of energy poverty remains underexplored as the community energy movement itself is generally in its early development stages. Attempts to combat energy poverty, given the challenges and resources involved, are considered to be too complex at this stage, although being definitely on the radar.



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Covered countries



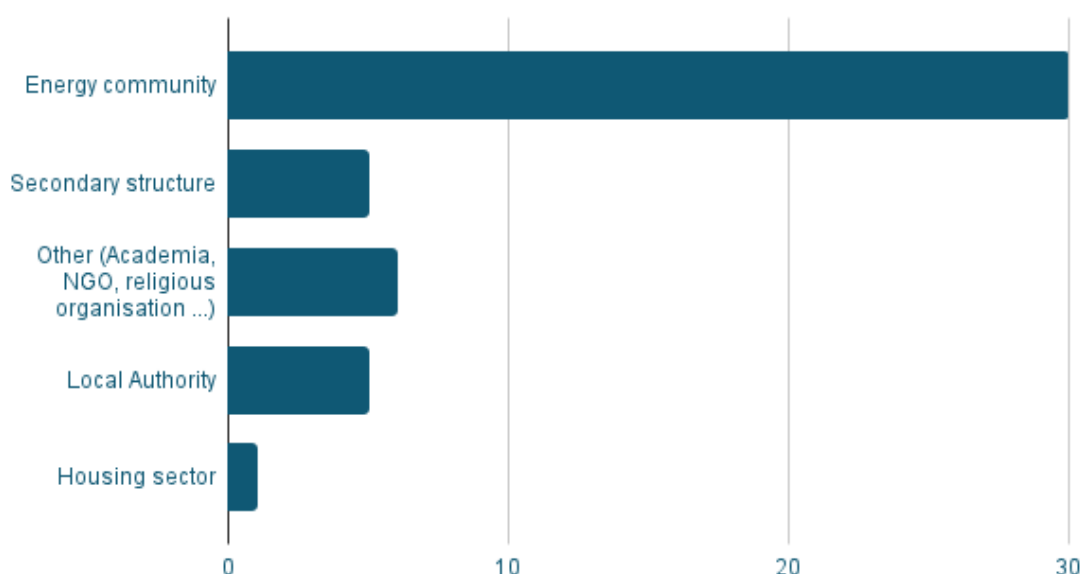
Although the Open Call sought to capture diverse perspectives from various stakeholders involved in energy community projects addressing energy poverty, the majority of responses came from energy communities themselves. The SOCIALNRG project also aimed to engage social housing providers; however, only one cooperative participated. Insights



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from the housing sector were nonetheless captured through responses from local authorities, energy communities and secondary structures (ex. network organisations spanning several sectors).

Engaged Stakeholders



2.1.5 Overview of Open Call respondents included in the report

Organisation name	Country	Entity
Agro Do Amial	Portugal	Energy Community
Argiola	Spain	Energy Community
BBEEn	Germany	Secondary structure
Brupower	Belgium	Energy Community
Caritas Ambrosiana	Italy	Religious organisation
Caritas Incontro	Italy	Religious organisation
CENSE, NOVA FCT	Portugal	Academia
Mirafiori REC	Italy	Energy Community
City of Liège	Belgium	Local Authority
City of Mostar	Bosnia and Herzegovina	Local Authority



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Collective Energy (COEN)	Greece	Energy Community
Comune di Silvi	Italy	Local Authority
Comunidad Energética Getafe Potencia	Spain	Energy Community
Comunitat Energetica de la Bordeta	Spain	Energy Community
Cooperativa Castello	Italy	Housing provider
Coopérnico	Portugal	Energy Community
ECLAIRS	France	Energy Community
Ecopower	Belgium	Energy Community
EcoVision	Ireland	Energy Community
Enercoop	France	Energy Community
Energent	Belgium	Energy Community
Energetska Zadruga Zeleni Hrastnik	Slovenia	Energy Community
Energía Bonita	Spain	Energy Community
Energie Samen	The Netherlands	Secondary Structure
EWS Schönaau	Germany	Energy Community
FOCUS	Slovenia	NGO
Getafe Local Land and Housing Public Agency	Spain	Local Authority
Goiener	Spain	Energy Community
Hyperion	Greece	Energy Community
Innovacoop	Italy	Cooperative network
Lightbringers Foundation	Hungary	Energy Community
Llobregat Energètica	Spain	Energy Community
Lumiar Civil Parish	Portugal	Local Authority
Minoan Energy Community	Greece	Energy Community
Oliver CE	Spain	Energy Community
OurPower	Austria	Energy Community
Repowering London	UK	Secondary structure
REScoop Vlaanderen	Belgium	Secondary structure



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REScoop Wallonie	Belgium	Secondary structure
Sociedad Cooperativa Eléctrica La Corriente	Spain	Energy Community
Som Energia	Spain	Energy Community
Stockelsun	Belgium	Energy Community
Telheiras/Lumiar REC	Portugal	Energy Community
UKEN	Czech Republic	Secondary structure
Wattnu	The Netherlands	Energy Community
WET – Women for Energy Transition	Spain	NGO
WOW Wageningen	The Netherlands	Energy Community
ZuidtrAnt	Belgium	Energy Community

2.1.6 Additional cases included in the report

Organisation name	Country	Entity
ALLenergy	UK	Energy Community
Allons en Vent	Belgium	Energy Community
Brixton Energy Solar Projects	UK	Energy Community
Bürger-Energie-Genossenschaft Neuburg-Schrobenhausen-Aichach-Eichstätt eG (BEG)	Germany	Energy Community
Buxia Énergies	France	Energy Community
ECoOB	Belgium	Energy Community
Karditsa Energy Community (ESEK)	Greece	Energy Community
Klimaan	Belgium	Energy Community
Stanovanjsko Podjetje d.o.o.	Slovenia	Housing provider
Westmill Sustainable Energy Trust	UK	NGO
Woonland	Belgium	Housing provider



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3 Community pathways to address energy poverty

3.1 Stakeholders involved

*Working together with trusted local partners allows energy communities to better understand the specific needs of target groups and improve access to their services
– ZuidtrAnt (Open Call submission)*

Energy communities are emerging as collaborative spaces where a range of different stakeholders join forces to address pressing social and environmental challenges such as energy poverty. While citizens form the backbone of these initiatives, they can strengthen impact, gain legitimacy and resilience by engaging the wider community and leveraging the strengths of diverse partners. Collaborations with public institutions, social welfare agencies, housing associations, advocacy groups, charities, research bodies, healthcare providers, and businesses bring in technical expertise, financial support, and access to vulnerable groups. This supports energy communities to maximise their social impact and advance a just energy transition.

A key takeaway from the Open Call is that it's indeed the rootedness in a wide local network that holds the potential for successful alleviation measures. At the same time, engaging different stakeholders can become an exercise in balancing different interests, maintaining the democratic nature and stability of the project and the social acceptance of the initiative.

Below, we highlight a number of key collaborations identified through the Open Call.

3.1.1 Citizens

Involving people experiencing financial or social hardship in energy communities helps bridge social divides and build resilience by ensuring those most affected by energy poverty have both a voice and a role in the energy transition. The Open Call explored how communities engage vulnerable households—whether as beneficiaries, members, decision-makers, or participants in planning and governance—and examined the challenges they face as well as the successes they have achieved along the way.



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The central role of trust, knowledge and awareness

Several respondents highlighted the lack of knowledge and awareness about energy community initiatives and energy poverty solutions as a significant barrier to engaging vulnerable households in energy communities. **ZuidtrAnt (BE)**, **Ecovision (IE)** and **Telheiras/Lumiar REC (PT)** for example, note that many households experiencing energy poverty are unfamiliar with the concept of energy communities, their potential benefits, and the ways they can participate.

General distrust of new initiatives and scepticism about the intentions behind these initiatives can prevent engagement. Cultural and historical factors also play a role, with some communities being sceptical of cooperative models due to past associations, particularly in Eastern Europe, where cooperatives are linked to the Soviet era.⁸

Overcoming this barrier requires time, clear communication, and showing tangible benefits to the community through educational efforts and raising awareness within local communities about the impact and advantages of energy transition projects.
- ZuidtrAnt (Open Call submission)

For Basque energy community **Argiola (ES)**, building trust has been a major challenge. Many people are unfamiliar with energy communities and often assume they operate for profit. Past abuses by large energy companies have left citizens wary of making changes to their energy bills, and even when savings are possible, the requirement to make an initial contribution raises doubts (read more about how Argiola tackled this issue with the help of the regional government in the section on financing).

Respondents emphasised that trust is a crucial foundation for energy community projects seeking to address energy poverty and meaningfully involve vulnerable households throughout the process. Building trust takes time and requires strong partnerships with local organisations, social services, and municipalities (read more about such partnerships below), to ensure that vulnerable households feel informed, supported, understood and included in the energy transition. Without trust, citizens may hesitate to engage, invest, or participate, especially in new and unfamiliar projects such as energy communities. Clear, accessible information about opportunities, benefits as well as potential risks of joining an energy community is essential to fostering citizen participation and long-term engagement.

⁸ [RESPIRA \(21 October 2025\). Ecco come possiamo far crescere le Comunità energetiche rinnovabili.](#)

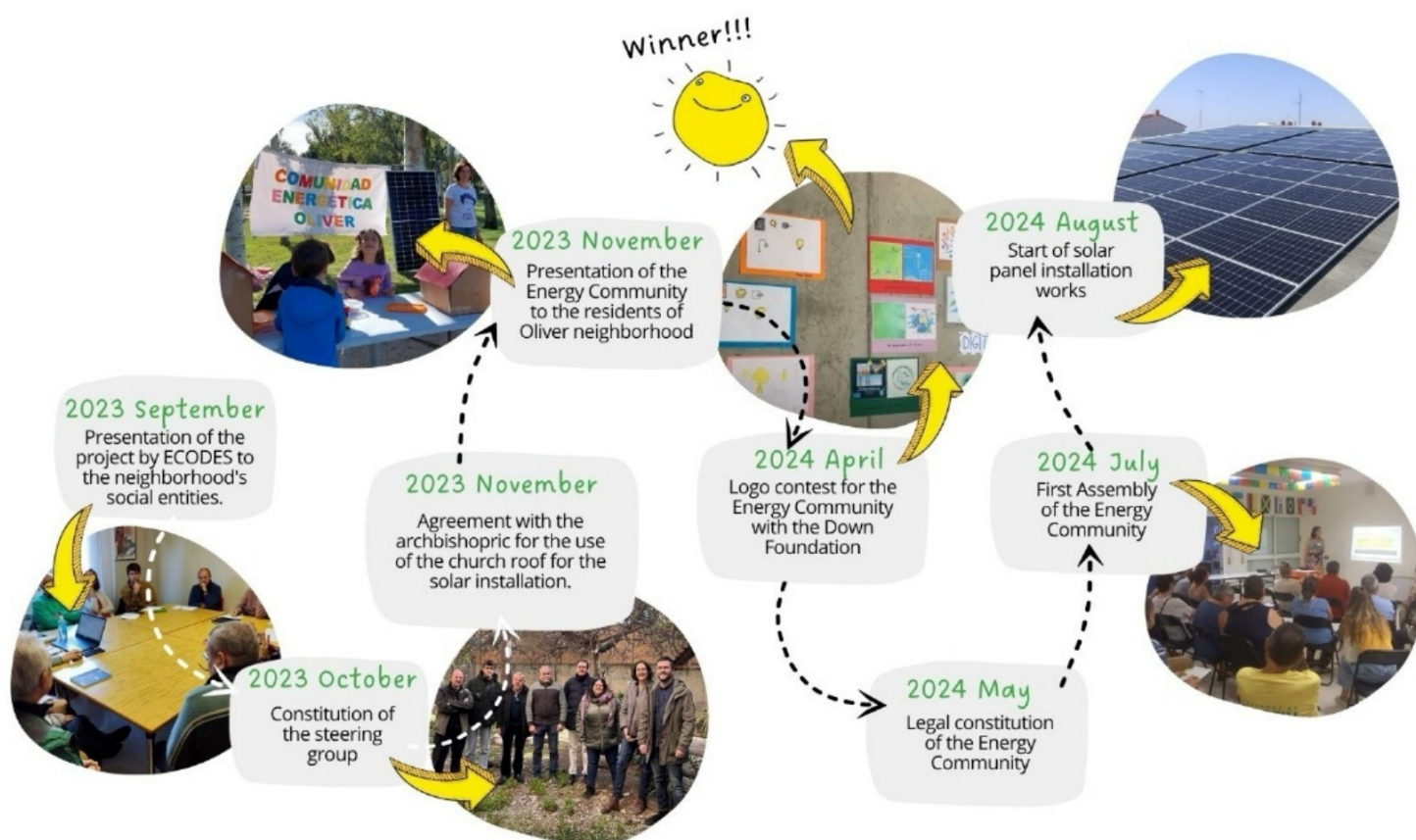


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In this context, the training, education, and awareness-raising services that energy communities provide as part of their energy poverty initiatives are vital for fostering transparency, knowledge and trust in the community (see chapter 3.3.4).

Community Case in Focus | For **Oliver Comunidad Energética (ES)**, collective challenges require collective responses. People should feel comfortable relying on each other for help and support. Oliver CE operates in one of the most stigmatised neighbourhoods with the highest rate of people at risk of social exclusion in Zaragoza. Despite significant challenges, Oliver CE has successfully fostered community involvement through social events, community projects, and initiatives that promote interaction and collaboration. Given that many residents are not accustomed to participating in collective initiatives due to trust issues or language barriers, building a strong sense of belonging was key :

bringing people together was maybe the most challenging aspect for us, but it's also one of the most rewarding outcomes.⁹



© OliverCE

⁹ REScoop.eu (20 February 2025). Success story – The pride of the neighbourhood: the transformative power of community energy.



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In addition to offering accessible membership options (see below), partnerships with local organisations have played a key role in building trust and ensuring the project's success. The Parish contributed rooftop space for solar panels, while ECODES, local cooperatives, and neighbourhood associations provided technical expertise and outreach support. These partners remain structurally engaged through the advisory board and governance roles, creating a strong and diverse coalition of support.

Community Case in Focus | Brupower (BE), a cooperative energy initiative in Brussels, has encountered significant barriers in ensuring households trust and engage with cooperative solutions. As Brupower expands beyond its existing energy sharing activities to establish an electricity supply service, they aim to ensure it meets local needs. To achieve this, they are actively co-designing the service with Brussels residents, prioritising direct outreach and collaborative planning, with a special focus on engaging and supporting vulnerable households. Through four focus groups representing the city's diversity, Brupower explored fair and inclusive pricing models, tailored service offerings, and potential solidarity initiatives to finance such services and support low income households. Participants were recruited through a collaboration with the municipalities' social services and community organisations.

A key takeaway from these engagement efforts is that accessibility goes beyond communication—it requires inclusive service design and engagement, ensuring that human support remains central, especially as many energy providers have become less reachable. One focus group held at a local service centre in Etterbeek drew overwhelming interest, leading to a follow-up initiative for neighbourhood-based energy actions. Participants were most motivated by collective, tangible neighbourhood projects rather than abstract discussions on technical topics or the climate, demonstrating the importance of localised, action-oriented engagement. These insights will shape the final service model, with further details outlined in an upcoming report (end of 2025).

Multiple vulnerabilities and communication gaps

Respondents also note that, **vulnerable households often face a combination of multiple challenges**, including financial struggles, health issues, and digital exclusion, which further limit their ability to access relevant information and services. Some beneficiaries, such as the elderly or those with physical disabilities, may, for example, face challenges in participating in energy efficiency programs, making it harder to implement certain solutions like home renovations or the installation of renewable energy technologies. Tailored outreach is essential to ensure that vulnerable groups are informed and able to participate and/or benefit. **Wattnu (NL)**, for example, applies a relationship-



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centred strategy in which local residents reach out directly to their neighbours, gradually building long-term trust. This also allows them to understand what measures will be most effective and sustainable for each household's specific circumstances, instead of developing one-size-fits-all solutions.¹⁰

Language barriers, whether due to different native languages or overly technical terminology and acronyms, create additional obstacles. Effective communication requires outreach in multiple languages to ensure full inclusion. Without clear, accessible communication and proactive outreach, many vulnerable households may remain excluded from the benefits that energy communities can offer. In this regard, **Ecopower's (BE)** experience also highlights the issue of **digital exclusion**. They warn that despite assumptions that digital tools are universally accessible, still not everyone has access to a computer or internet at all times, neither does everyone feel comfortable operating a computer. This makes it complicated for them to access online information or participate in digital communication.

Community Case in Focus | It can also be the other way around. One of Dutch energy cooperative **Wattnu's (NL)** biggest challenges is reaching certain groups, such as people in their 30s and 40s with young children. This demographic tends to get its information online or via social media and is less likely to attend traditional information sessions. To bridge this gap, Wattnu developed a creative educational programme with a travelling exposition for primary and secondary schools, which (in)directly engages parents and grandparents.

Through the story of a young girl named Sola and a boy called Seb, the exposition takes visitors on a journey through time, showing how homes were heated in 1880 and how they might be heated in 2050. By making the history and future of energy systems tangible, the programme raises awareness about energy use, past transitions, and the challenges of the future. In doing so, Wattnu manages to reach children while indirectly engaging their families. Another group they struggled to engage are non-native speakers, so Wattnu collaborates with the municipality, the Alliance for an Inclusive Energy Transition, and social organisations to improve outreach to these communities.

Leveraging familiar faces and places

Leveraging familiar faces and places is a powerful way to engage vulnerable citizens in energy communities, as trusted community figures, local organisations, and everyday meeting spaces help create a sense of safety and belonging. This approach lowers barriers

¹⁰ LEA (3 June 2024). [Samen Sterk: Wattnu en gemeente Gooise Meren verenigen krachten tegen energiearmoede.](#)



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of mistrust or unfamiliarity and fosters meaningful participation, yet it can also be time and resource intensive.



One of Repowering London's Community Leads © Joe Burrows

Community Case in Focus | Repowering London (UK)

works closely with local representatives and grassroots groups—such as food banks, community kitchens, and gardening initiatives—to reach those most in need.

Acknowledging that those who could benefit most are often the hardest to engage, they recruit local residents as Community Leads who help expand the cooperatives while ensuring community voices, needs, and aspirations are genuinely reflected. Many people in

precarious situations tend to self-isolate, but Community Leads are able to build trust and reduce barriers to participation by drawing on their local knowledge and existing personal networks. Their presence makes support feel more accessible and less intimidating, turning abstract initiatives into tangible, neighbour-to-neighbour support. In doing so, Repowering London not only builds more inclusive and representative energy cooperatives but also nurtures stronger, more resilient communities.

Community Case in Focus | in Turin's Mirafiori district (Italy), a fragile neighbourhood with strong post-industrial characteristics, **Mirafiori REC (IT)** incorporates the ambition to provide a collective response to the needs of vulnerable households in the area (about 900 families identified so far). While currently still in its early days, the project has already identified a "priority barrier" among vulnerable groups: participation in the REC or its activities is not seen as an urgent priority for vulnerable groups. It hopes to overcome the challenge of community engagement by setting up collaborations with social workers and adapting the successful community garden model of **Orti Generali** to energy production. By leveraging this existing, tangible community space, the project seeks to broaden community development from "self-production of vegetables to self-production of energy." This approach is intended to overcome the non-



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material nature of an energy community – often creating the perception among citizens as energy being too distant, abstract and too complex.

Community Case in Focus | While many energy communities rely on local partners to bridge the gap with vulnerable households, **WOW Wageningen's (NL)** experience also highlights that working with associations or organisations that act as representatives of certain vulnerable groups may not lead to more direct engagement from those groups in the energy community. For example, to foster community engagement in the establishment of a community district heating project in the Benedenbuurt neighbourhood, residents were invited to working groups on technology, communication, governance, and finance, and broader meetings welcomed even non-members. Unique initiatives, such as a neighbourhood theatre tour, helped raise awareness in an engaging way. Despite strong outreach efforts, social housing tenants were less engaged in decision-making, mainly relying on the housing provider, Woningstichting's, endorsement, highlighting the need for ongoing efforts to strengthen their involvement. In this regard, **Telheiras/Lumiar REC (PT)** additionally emphasises that the lack of time, human resources, knowledge and funds in the local government and social support organisations can make it challenging to recruit their beneficiaries into energy communities.



Benedenbuurt in Wageningen © WOW Wageningen



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3.1.2 Social housing providers

Across the EU, rising housing and energy costs place a heavy burden on low-income families, young people, people with disabilities, migrants, refugees, and single-parent households—groups disproportionately exposed to inadequate housing conditions and high energy bills. With a third of European citizens living in rental housing and social housing representing about 8% of Europe’s housing stock¹¹, its accessibility, affordability, and sustainability are key to preventing social exclusion and homelessness.

Yet much of the affordable housing stock remains outdated and poorly insulated, leaving residents exposed to soaring energy costs. Housing providers are therefore at the forefront of initiatives to improve energy efficiency, renovate buildings, and increasingly engage in energy communities.¹² These collaborations offer opportunities to reduce costs, mobilise holistic solutions, strengthen community-building, and empower tenants through greater involvement in democratic decision-making. For instance, Wattnu (NL) in the Netherlands is installing PV installations on three social housing associations by 2025, with all benefits flowing directly to tenants, Repowering London (UK), after several successful community power projects on social housing estates, recently collaborated with the Greater London Authority and Future Climate, to develop a toolkit to support the energy retrofit of blocks of flats—an area often overlooked compared to single-family homes. They have gone on to develop and pilot a service to support whole-block retrofit, filling a critical gap.

Nevertheless, challenges such as underinvestment in social housing, legal barriers, and a lack of knowledge and skills related to energy generation among social housing providers currently remain and hinder broad roll-out of such initiatives.

Community Case in Focus | **Klimaan (BE)**, an energy cooperative and SOCIALNRG partner from Belgium, leveraged citizen investments from financially well-off individuals to fund solar panel installations on 197 social housing units of **Woonland (BE)** (a social housing provider and also partner in SOCIALNRG). The initiative prioritises social impact

¹¹ Including different forms of housing support, with considerable cross-national differences in terms of tenure, size and type of providers. In this report by the OECD, Social Rental Housing refers to residential rental accommodation provided at sub-market prices and allocated according to specific rules rather than market mechanisms (Salvi del Pero et al. 2016).
<https://www.oecd.org/content/dam/oecd/en/data/datasets/affordable-housing-database/ph4-2-social-rental-housing-stock.pdf>

¹² [Housing Europe - The State of Housing in Europe 2023](#).



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over profit, aiming to provide low-income tenants with stable, affordable energy prices that shield them from market fluctuations, such as those experienced during the recent energy price crisis. While they hope to share surplus energy with social housing residents without solar panels, current costs associated with energy sharing make this challenging. In addition to this, Klimaan is renovating 71 vacant homes to be leased as social housing through a collaboration with Woonland and Pandschap Rivierenland. They are also conducting a feasibility study to set up a district heating network in a social housing neighbourhood as part of the SOCIALNRG project.

In addition Klimaan promotes sustainable mobility and accessibility within social housing neighbourhoods. They have electric car-sharing services ready to be deployed and already provide four electric bikes for volunteers, completing around 200 rides monthly to help less mobile residents reach their destinations. Finally, Klimaan collaborates closely with [SAAMO](#), including on the [Papillon project](#), offering sustainable household appliances for rent, ensuring that social tenants can access energy-efficient devices. This partnership is crucial for fostering dialogue, co-creation, and trust with the communities they aim to support.

Community Case in Focus | The Castello Housing Cooperative, founded in the 1970s to provide affordable and permanent housing, established Ferrara's first energy community, **Castello Green House (IT)**, in 2024. Bringing together 43 founding members, including the cooperative itself, its first project focuses on managing a photovoltaic system across cooperative-owned buildings in Ferrara, Copparo, and Comacchio. Revenues from self-consumption incentives and surplus energy sales will be reinvested into social initiatives, awareness and education programmes, and energy efficiency measures, with a strong focus on supporting vulnerable households. Selected as a pilot in the EU's Citizen-Led Renovation (CLR) Initiative and supported by Innovacoop, the cooperative plans to upgrade more than 500 housing units, aiming for a 33% reduction in energy consumption. A key takeaway for Castello Green House: the housing cooperative created and maintained a strong sense of community, providing a solid foundation for the establishment of an energy community, particularly one with a strong social focus.

Community Case in Focus | In Slovenia, SOCIALNRG is piloting the creation of an energy community in a multi-apartment building in Ravne na Koroškem, locally known as the "Singles' Home." The building, managed by **Stanovanjsko podjetje d.o.o. (SI)**, consists of 71 small units (68 households), primarily occupied by vulnerable groups such as pensioners, workers, young couples, and immigrant families. The building is currently undergoing a full renovation, including thermal insulation and the installation of an 84kW solar power plant, which is expected to cover around 50% of its electricity demand. By



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integrating renewable energy sources, the project aims to reduce residents' energy vulnerability and ease financial burdens.

Beyond technical improvements, the pilot also focuses on social aspects and generating broader (energy transition) benefits through the creation of an energy community, with the support of **FOCUS (SI)**. However, current readiness for an energy community is low. Apart from legal and technical barriers the building's resident community is characterised by weak community ties, high turnover, and limited collective organisation. So early efforts emphasize community-building, trust, and democratic participation. Planned steps include creating opportunities for residents to engage with the housing provider (STAN), establishing a first representative body, and running awareness-raising activities on energy use and production. These measures aim to prepare the ground for future self-management, the creation of a legal entity, and stronger resident participation in the governance of their homes.

3.1.3 Local authorities

Partnering with local municipalities or government bodies is often a decisive factor for energy communities aiming to address energy poverty and enhance their social impact. Municipalities can provide essential resources such as land, funding opportunities, and regulatory or administrative support, which help boost project development and implementation. They also help bridge the gap to vulnerable households by taking on a key role in community outreach. Beyond practical support, municipal collaboration can strengthen the legitimacy of energy communities, fostering wider participation and enabling long-term sustainability. Examples across Europe highlight the important potential municipalities see in such partnerships to advance social, climate, and democratic goals together. In Bosnia and Herzegovina, the local government of the city of Mostar sees forming an energy community as a promising way to boost renewable energy, cut emissions, and bring down costs. With a focus on supporting vulnerable households, schools, and local institutions, the initiative hopes to set an example for others in the country.

Community Case in Focus | Another example can be found in **Comune di Silvi (IT)**, a town of 15,000 residents in Italy. With the support of an energy community facilitator and a cooperative association through the EU's *Community for Climate (C4C)* project, the municipality is working to establish an energy community designed to be fully citizen-led, with the local government deliberately taking only a facilitative role. From the outset, citizens are being engaged through public events to shape the project and ensure genuine ownership. The revenues generated will be directed towards supporting low-income households—potentially by offsetting local taxes—with beneficiaries identified in



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cooperation with social services. By embedding democratic practices into the initiative, the municipality aims not only to alleviate energy poverty but also to strengthen overall citizen participation and rebuild trust. Having experienced a relationship with citizens that was increasingly characterized by criticism and distance, Comune di Silvi now sees the energy community as a vehicle for fostering more active engagement, shared responsibility, and stronger democratic ties.



The energy community's first municipal installation on the Civic Centre Las Margaritas (40 kWp) © Getafe

Community Case in Focus |

While Spain's self-consumption regulations allow municipalities to distribute renewable energy without forming an official energy community through collective self-consumption, Getafe, near Madrid is taking a more structured approach by supporting the creation of an energy community through the Community Transition Office of the Land and Housing Municipal Company. The **Comunidad Energética Getafe Potencia (ES)** – established initially as an association with the intention to transition toward a cooperative model - will ensure long-term community participation and

governance. The support from the Municipality to the energy community will materialise through four photovoltaic systems on public rooftops in Las Margaritas, La Alhóndiga, Juan de la Cierva, and Los Molinos districts, amounting to 160 kWp, and generating solar energy to be shared with vulnerable households.

Still in its early stages, the initiative was founded by a group of 15 members. It currently counts 31 members, including individuals and representatives of five neighbourhood associations, the Local Federation of Associations, the Getafe Norte Neighbourhood Association and the Land and Housing Municipal Company. Efforts are underway to map and recruit additional potential participants, aiming for at least 40 members to share energy from the first PV installation, including vulnerable households and citizen-driven organisations. The energy community is committed to full inclusion, ensuring vulnerable households participate as equal members rather than passive beneficiaries. A welcome



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committee helps integrate new members, and plans are in place for educational activities and collaborations with Social Services to develop financial support mechanisms covering membership fees through a solidarity fund. With the latter they hope to develop a more sustainable and empowering alternative to current municipal aid programs such as direct energy bill support. While partnerships with municipalities can be transformative, public procurement rules and administrative constraints must be carefully navigated to maximise impact. By aligning efforts between the Municipality, Social Services, and the Land and Housing Municipal Company, Getafe aims to establish a replicable, community-driven approach to energy solidarity.



Founding members of the energy community during the founding act December 2024 © Getafe

Community Case in Focus | In Belgium, the city of Liège (BE), supports local energy initiatives by funding and coordinating actions against energy poverty, such as the RenoVan—a pilot project under the INTERREG project SCEPA. This initiative helps existing organisations raise awareness, provide first diagnostics, and carry out small home repairs, serving as a first step toward deeper renovations or joining energy communities. Run in partnership with a social economy organisation, RenoVan also supports job reintegration through skills training.



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CEEL (Ceinture Energ'Ethique Liégeoise), launched in October 2024, aims to function as an inclusive energy community and solidarity platform to combat energy poverty, integrating renovation support, energy sharing, and renewable energy production, prioritising vulnerable households. Still in development, the project seeks to define how the city can best facilitate its success while ensuring strong community involvement. For local authorities such as the City of Liège, energy communities can offer a real boost for reaching social and climate objectives. For cities, working with an energy community enables their actions to be rooted in the reality of the citizen, facilitates acceptance of public intervention and ensures presence on the ground.

Community Case in Focus | To fight energy poverty on its territory, the **Lumiar Parish Council (PT)** became an important driving force in the **Telheiras/Lumiar REC (PT)**. The parish is characterised by high socio-economic diversity, with energy poverty affecting a significant share of households. Participation in an energy community is seen as a way to mitigate this challenge, improving living conditions not only through lower energy costs but also through wider benefits such as better health, empowerment, knowledge-sharing, and stronger community ties. These social outcomes were a key motivation for the Council's decision to join the project.

Furthermore, promoting sustainability and the environment has been an important focus for the Lumiar Parish Council. This is a thematic area in which vulnerable populations are very often excluded from projects and programs, and their involvement is crucial, both for the importance of gaining more knowledge and adopting good practices, and as beneficiaries of the positive impacts these types of projects have.
- Lumiar Parish Council (Open Call Submission)

The Lumiar Parish Council has been actively involved in every phase of the project – from planning to implementation and ongoing management. Its support includes providing space for solar PV installations, covering entry fees for a share of the vulnerable households, and co-promoting monthly energy advice initiatives for citizens, including vulnerable groups. Beyond these contributions, the Council has taken on a wide range of responsibilities, including participating in the REC coordination group, liaising with public and private entities for licensing, promoting the project through communication channels, participating in conferences and technical meetings, and pursuing funding and international collaboration opportunities.

While local authorities are often identified as an important partner in the transition to a just, democratic and clean energy system, their role can sometimes overshadow the participatory potential of energy communities.



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Community Case in Focus | **Agro Do Amial (PT)** in Porto is a collective self-consumption project managed by the municipality with support from Coopérnico, featuring PV installations on schools and multi-family social housing buildings. Since May 2024, 180 households have benefited from monthly energy savings of €30-40. Originally intended as a democratically governed energy community with ambitious objectives for citizen engagement and capacity building, delays in licensing and challenges integrating storage and electric mobility led to a more municipality-driven model. As the financial coordinator and social housing provider, the municipality now operates the initiative primarily as an energy-sharing scheme with limited resident participation in governance and decision-making. While families benefit economically, they miss out on the broader social and economic advantages that come with fully participatory energy communities.

The municipality plans to expand this model to other social housing estates and is considering mechanism where electricity is free for the first five years, followed by a fee-based system, to keep these projects financially sustainable over time. Coopérnico's key takeaway is that when municipalities take the lead, shifting from a top-down to a bottom-up approach can be challenging, making it harder for individual households and citizens to access the full array of benefits associated with democratically governed and controlled energy communities.

3.1.4 Frontline workers

Frontline workers such as social workers, housing officers, and community organisers are trusted points of contact for vulnerable households, making them essential allies in identifying needs and building trust. Their close relationships with communities allow energy initiatives to reach those who might otherwise remain excluded, ensuring that support is both accessible and effective.

Community Case in Focus | Based in northwest Scotland, where energy poverty rates are particularly high, **ALlenergy (UK)** collaborates with frontline workers such as housing associations, debt advisors, food banks, health and social care providers, and local charities to better identify and address energy poverty. Through tailored training, these workers learn how to recognise early warning signs during home visits, phone calls, or video meetings, and how to open conversations about energy struggles in a sensitive, non-intrusive way. By building on their established trust and deep local knowledge, ALlenergy enables frontline workers to spot potential issues and connect households with the right support—whether through ALlenergy's own energy advice services or referrals to other organisations. This approach makes frontline workers essential allies in reaching households that might otherwise remain hidden or hesitant to seek help.



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Community Case in Focus | In the Czech Republic, energy communities are still in the early stages of development, with most projects focused on navigating new legislation around energy sharing and setting up viable business models. Despite these challenges, there is a clear ambition among several initiatives to address energy poverty in the future. A key opportunity is found in building on the experience of *energy coordinators*, who have already been working with vulnerable households to implement energy renovations measures subsidised by the state. These coordinators enjoy established trust in their regions, which can serve as a bridge to involve low-income households in emerging energy communities.

UKEN (CZ), the national network, plays a central role in supporting this transition by lobbying for better legislation, facilitating knowledge-sharing among communities, and helping municipalities and cooperatives access subsidies for feasibility studies and project development. While most current projects are municipality-led and still technically focused, there is growing recognition that linking energy communities with the expertise of energy coordinators could make them powerful tools for tackling energy poverty. The ambition exists, even if implementation will take more time.

Community Case in Focus | In France, cooperative supplier **Enercoop (FR)** offers direct support to vulnerable customers through phone and email assistance, solidarity tariffs, and accessing government-issued energy vouchers. However, identifying and assisting vulnerable households remains challenging due to limited social expertise, difficulties in assessing energy poverty under official criteria which are deemed insufficient (see chapter 4), and customer distrust towards a private company requesting personal information. To improve outreach, Enercoop collaborates with social partners and engages in programs like SLIME. The SLIME programme (Service Local d'Intervention pour la Maîtrise de l'Énergie) identifies and supports households facing energy poverty through proactive outreach, home assessments, and tailored interventions. Coordinated by CLER – Réseau pour la transition énergétique, it operates in collaboration with local authorities and social organisations, leveraging funding from the French Energy Savings Certificates (CEE) system to improve living conditions and reduce energy costs for vulnerable households. Enercoop leverages its role as an energy supplier to mutually help them catalogue cases of energy poverty.

3.1.5 Religious organisations

In Italy, the Catholic Church – Particularly through Caritas – has played a key role in motivating local communities to establish energy communities with a strong social purpose. These initiatives are inspired and motivated by the principles of Laudato Si' and Laudate Deum, which emphasise ecological responsibility and social justice



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through community involvement and participatory action. Despite the many regulatory and financial challenges, the Church's involvement provides legitimacy and a strong ethical foundation for these initiatives.

Italy's right wing government places a lot of emphasis on profitability of energy communities, while the support of the Church allows us to emphasise the social and environmental benefits of community energy. – Lorenzo Caseri, Caritas Incontro



Refettorio Ambrosiano © Marco Garofalo

Community Case in Focus |

Milan-based CERs SOLEdarietà (IT), for example, manages and self-consumes local photovoltaic systems on the Church and Parish house of S.M. Goretti and Caritas Ambrosiana's Refectory in the city's Greco District. The CER is currently composed of five members (all religious entities or similar). The PV installations were funded by a donation from Edison (for CSR purposes) through Banco dell'energia, a Foundation supporting the realisation and funding of projects on the issue of energy poverty and CER by energy providers. Through self-consumption of locally produced

energy, the CER manages to generate energy savings for their members. These energy savings, along with incentives from the state for self-consumption and revenues from selling excess energy to the grid, generate additional funding available for supporting social initiatives. This includes supporting the payment of bills of people helped by the Parishes, providing energy efficient appliances to vulnerable households, educational workshops on energy savings and strengthening Caritas' services for those most in need.

Caritas Ambrosiana has played a key role in promoting the initiative, inspired by the Papal Encyclical *Laudato Si'* to advance environmental protection, social support, and community education. They offer an example for other parishes to establish energy communities, though financial barriers remain a significant challenge for most. Caritas



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sees energy communities as vital tools for social inclusion, community resilience and peace.

Community Case in Focus | In San Severo, Puglia, **Caritas Incontro (IT)** has created an energy community to support individuals and families facing economic hardship in a socially challenging environment. Partnering with Hivergy, Agape, and backed by a €150,000 grant from Fondazione Con Il Sud, the initiative installed a 30 kWh photovoltaic system on Caritas premises. This system powers essential community services like a canteen and dormitory while cutting energy costs by €4,000 annually. A portion of the generated energy is redistributed to local families, prioritizing those in need.

Beyond energy savings and supply, the project fosters social inclusion and empowerment. Caritas, with the support of social assistance cooperative Agape, runs sustainability awareness programs and a Fab Lab offering digital training and reintegration support for young people from local detention centres. While financial relief initially drove participation, members have since built a sense of ownership and solidarity. With a one-member, one-vote governance structure, the community ensures that vulnerable households have a say, reinforcing its mission to create a resilient and inclusive local energy model. At the moment, the energy community is still in its starting phase, with 10 members and its first PV installation operational since 2024. It is emphasised that the main goal is to build resilient communities, with the energy community seen as just one instrument to achieve this goal.

3.1.6 Networks or federations

Peer-to-peer exchange and collaboration between energy communities play a crucial role in enhancing their social impact. Many energy communities operate with limited resources and rely on volunteers or small teams to develop and manage their initiatives. Given the complexity of energy poverty alleviation initiatives—requiring a combination of technical, legal, financial, and social skills—learning from the experiences of other communities can significantly accelerate progress. Through knowledge-sharing, capacity-building initiatives and participation in common projects, energy communities can help each other refine their approaches, explore new possibilities and avoid common pitfalls.

Secondary structures, such as national federations and coalitions, can play a crucial role facilitating peer-to-peer support. They provide regulatory guidance, advocacy for supportive policies, and access to funding while bridging local initiatives with policymakers. By fostering collaboration, they help scale successful models and



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enable energy communities to contribute to systemic change in the energy transition.

Community Case in Focus | **Energie Samen (NL)** represents more than 400 energy communities across the Netherlands, many of which carry out a wide range of activities to alleviate energy poverty. These include energy coaching, renovation support, educational campaigns, renewable energy projects, and assistance with accessing government subsidies. While most of these activities were initiated by the community members themselves, as they saw or experienced a need to do so within their local community, Energie Samen aims to empower its members and enhance their impact by offering capacity building, knowledge exchange and advocacy support. In its Energie Samen Academie communities can find an entire workstream on energy poverty alleviation, including a step-by-step approach to kick-start their own energy poverty alleviation project.

Community Case in Focus | In the wake of the EU-wide energy crisis, **REScoop Vlaanderen (BE)** — the Flemish Federation of Citizen Energy Cooperatives — observed a rising commitment among its members to strengthen their social impact. To channel this momentum, the Federation established a Social Impact Working Group in 2023. The group meets regularly, offering a platform for cooperatives to exchange experiences, present projects tackling energy poverty, and explore how community energy can actively contribute to a socially just energy transition. These sessions also invite external experts to provide fresh perspectives on specific themes. By building alliances between cooperatives, governments, and civil society, the Federation positions itself as a driving force for a fairer, more inclusive energy system in Flanders.

Community Case in Focus | **Repowering London (UK)** is a non-profit organisation founded in 2013 that helps communities across London take ownership of their energy future. Building on early successes like the Brixton Energy Solar cooperatives, it develops and supports community-owned solar projects on social housing estates, schools, and community centres. Beyond clean energy generation, Repowering London focuses on education, training, and mentoring, giving local residents—especially young people and those from underrepresented groups—the skills and confidence to engage in the energy transition.

The organisation places inclusivity and social justice at the core of its mission. It works to tackle energy poverty by helping households lower energy bills and improve housing conditions, while ensuring that the financial benefits of community-owned projects flow back into local areas. Repowering London has launched over 10 community energy co-



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operatives, installed more than 1 MWp of rooftop solar, and created toolkits to make participation more accessible and diverse. With ambitions to deliver 5 MW of community energy by 2030, its model demonstrates how grassroots, community-led action can drive impactful change across disadvantaged communities. In 2024 Repowering London published a toolkit to help energy communities increase diversity.



Community-owned solar panels on East Ham Library ©Joe Burrows

Community Case in Focus | Coopérnico (PT), a Portuguese energy cooperative and non-profit electricity supplier/retailer with 6,300 members—including citizens, SMEs, and local entities—plays a key role in supporting communities to establish energy communities which aren't just technically viable, but also socially inclusive and community-driven. A great example and success story has been their involvement in the planning phase of the Telheiras/Lumiar REC in collaboration with the Centre for Environmental and Sustainability Research of the NOVA School of Science and Technology of NOVA University Lisbon (CENSE NOVA-FCT) under the EU Energy Poverty Advisory



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Hub's technical assistance programme. Acting as a facilitator and one-stop-shop under the Recovery and Resilience Fund, Coopérnico has helped secure funding and provided essential guidance, from raising awareness on energy community benefits to project setup and licensing. Beyond technical and legal assistance, Coopérnico provides counselling and advocacy for fairer energy policies and a more democratic energy system. However, long-term financial support is crucial to sustain these efforts.



Community Case in Focus |

Innovacoop (IT) -, company of Legacoop Emilia Romagna, the regional cooperative network of Legacoop, and partner in the SOCIALNRG project, plays a key role in fostering energy communities by promoting their creation, securing funding, and providing long-term support. For Innovacoop, energy communities are a powerful tool for driving citizen engagement in the energy and ecological transition, fostering solidarity, and ensuring democratic resource management.

Through initiatives like

RESPIRA, a crowd-investing and service platform aiming to support the establishment of energy communities, they offer technical and financial assistance to citizen groups, businesses, and public entities. Innovacoop also strengthens energy community networks by organising awareness-raising events, advocating for favourable policies at the national level and promoting partnerships with key stakeholders including service operators, trade unions and other types of cooperatives, such as housing cooperatives. Operating as a network organisation spanning multiple sectors, Innovacoop brings together different types of expertise.

In 2024 they supported the citizen-led renovation pilot of Castello Green House. And as part of the SOCIALNRG project, they are partnering with Ènostra to address energy poverty in a social housing neighbourhood in Cinisello Balsamo (Milan).

© Innovacoop



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Community Case in Focus | **Ènostra (IT)** is Italy's first national cooperative energy producer and supplier, bringing together more than 12,000 members. Established in 2014, it began offering energy supply services nationwide in 2016, including dedicated tariffs for non-profit organisations. In addition to generating and supplying renewable electricity, Ènostra provides households and SMEs with services for energy efficiency and self-production, as well as information and training initiatives designed to raise awareness and combat energy poverty.

Since 2019, Ènostra has operated an internal multidisciplinary team supporting municipalities and local actors in establishing renewable energy communities and collective self-consumption projects, with a focus on inclusivity and addressing local vulnerabilities. Within the SOCIALNRG pilot, the cooperative will assist residents of three cooperative housing buildings in Cinisello Balsamo—covering around 120 apartments and six commercial units—in creating an energy community tailored to local needs and challenges.

Community Case in Focus | In Spain, **Sociedad Cooperativa Eléctrica La Corriente (ES)**, a cooperative renewable energy retailer from Madrid with over 1000 members, actively supports the development of energy communities in the area through awareness-raising initiatives and advocacy for supportive policies. To promote inclusivity in energy communities, La Corriente launched the **InclusivEC Awards** with European funding from the Accting project. The Awards recognise and promote energy communities in Spain that actively include vulnerable groups and address energy poverty through innovative projects and social justice initiatives. In its first edition, nine initiatives from diverse regions—ranging from urban neighbourhoods under development pressure to depopulated rural towns and an island in Galicia—demonstrated that energy communities can adapt to different local needs while promoting sustainability and citizen empowerment in the energy transition. The first edition of the Award (2024) was won by CE Arroyo Alumbra, a cooperative dedicated to tackling rural depopulation while integrating gender perspectives and fostering community education. The €2,500 prize will fund materials for energy efficiency courses at local schools and support specialised training for cooperative members, reinforcing their commitment to sustainability and education.¹³

¹³ [InclusivEC - Comunidades Energéticas Premiadas 2024.](#)



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Collaborating in projects

Energy communities often come together with other stakeholders—such as local authorities, housing providers, and support organisations—through (European) projects to co-create solutions, share expertise, and explore innovative approaches to tackling energy poverty. These collaborations foster learning, experimentation, and the development of new models that might not emerge in isolation. While such projects provide valuable opportunities for building partnerships and driving collective impact, they also have limitations, including time-bound funding and the often demanding process of preparing grant applications (see chapter 3.4) Several European projects were mentioned in the Open Call submissions as an important factor for the development of community-led energy poverty alleviation mechanisms:

Within the **RENPOWER** project, **Ecovision (IE)** and **GoiEner (ES)** are joining forces to create replicable models that streamline home energy renovations while tackling energy poverty and supporting a just energy transition. In the Basque Country, GoiEner—long active in combating energy poverty and promoting community-owned renewables—is entering the home renovation sector for the first time, bringing valuable expertise in identifying and addressing hidden energy poverty without stigma. Ecovision, with over a decade of experience in citizen-led renovation, will expand its impact through this collaboration, focusing on behaviour change and large-scale interventions to tackle energy poverty. Together, the two organisations aim to integrate energy poverty alleviation into a “one-stop shop” renovation model that can be scaled across Europe.

In the **GENDER4Power** project, energy communities such as **La Bordeta (ES)** and **Electra (EL)** collaborate with support organisations like **FOCUS (SI)** and **BBeN (DE)**, alongside other partners from Austria, Germany, Greece, Lithuania, Slovenia, and Spain, to enhance the living conditions of people experiencing energy poverty through renewable energy solutions. The project develops gender-just models for alleviating energy poverty—covering financing, energy communities, and renovation approaches—while also implementing an ambassador programme to build trust and increase participation among vulnerable groups. In parallel, tailored capacity-building programmes target citizens, authorities, and intermediaries, and co-created renewable energy solutions are tested directly with residents.

The Horizon 2020 project **CEES**, running from 2021 until 2024, brought together six energy communities from across Europe to analyse, validate and pilot energy solidarity mechanisms. A central output is the “Energy Solidarity Toolkit” for replication of successful approaches.



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3.2 Governance and organisational structure

Energy communities in Europe take on diverse legal forms, governance models, and organisational structures, reflecting local dynamics, traditions, member needs, and national legal contexts. They range from small, volunteer-led neighbourhood initiatives to large, professional cooperatives that manage multiple renewable energy projects. However, at their core, all energy communities adhere to principles such as voluntary and open membership, democratic control, and the pursuit of social, environmental and economic value for its members and the wider community.

3.2.1 Membership structures and decision-making

Membership structures are a defining feature of energy communities, shaping both participation, inclusivity and decision-making processes. Members often play multiple roles simultaneously—owners, investors, and consumers—depending on the organisation. While it is still the norm among most energy communities to require financial contributions as a precondition to access certain services and obtain voting rights, many Open Call respondents are exploring more flexible models – for instance, offering free electricity or educational services. Klimaan (BE), for example, leveraged investments from financially well-off members to install solar panels on social housing, broadening accessibility of renewable electricity and ensuring lower energy costs for vulnerable residents. Residents benefit from the scheme, without being an owner or investor – and, in this case, without being a member. Such flexible approaches are particularly important for low-income households, as they expand access to renewable energy and related services even for those unable to contribute financially. However, this often comes with limitations in terms of decision-making.

To promote inclusivity and diversity, some respondents are exploring solidarity-based models that expand membership and decision-making opportunities, such as pooling grants, creating dedicated funds, financing solidarity shares or even moving beyond monetary models altogether (see Repowering London).

Community Case in Focus | **Comunitat Energètica La Bordeta (ES)** in Barcelona is an energy cooperative which incorporates energy poverty alleviation and inclusivity as one of its core ambitions. The cooperative was founded in 2021 and currently has around 60 members, 12 of which are civic and social associations active in the neighbourhood. The cooperative operates solar installations on the La Borda and La Diversa housing cooperatives, as well as on industrial buildings.



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Through its dedicated Energy Rights Working Group, the community has created a solidarity fund that removes financial barriers for vulnerable households by covering membership fees, capital contributions, and energy-sharing costs. This ensures that those with fewer resources can join on equal terms, with full voting rights, and even access free electricity without being required to contribute anything in return. The initiative is designed to avoid stigmatisation and provide genuine inclusion, supported by training from the Alliance Against Energy Poverty. The initiative is currently being piloted among five households.

La Bordeta also collaborates with local housing cooperatives, social organisations, and the Alliances Against Energy Poverty to expand its reach and impact. By conducting neighborhood-wide surveys and context assessments, it seeks to better understand vulnerability and tailor its support accordingly. Any surplus is reinvested into social projects in the neighbourhood, reinforcing the principle that the energy transition must benefit everyone, not just those who can afford it.

Community Case in Focus | In a similar way **Energía Bonita (ES)**, on the Canary Island of La Palma, operates a Solidarity Fund to cover the initial mandatory share capital of €100 for vulnerable households to join the cooperative. It is also partnering with the Government of the Canary Islands to turn the rooftops of seven educational centres into solar power plants that will supply clean energy to around 700 families.¹⁴ While the installations are already operational, the next step is to ensure that vulnerable households directly benefit.

Community Case in Focus | **Telheiras/Lumiar REC (PT)** is an energy community in Lisbon's Lumiar Civil Parish, one of the most populous civil parishes in Lisbon municipality, with 47,000 inhabitants and with persisting and deep-seated socio-economic inequalities in its territory. Telheiras/Lumiar REC was established to promote local renewable energy generation, democratic energy management, and energy poverty alleviation. The initiative is led by the Lumiar Parish Council and the Local Partnership of Telheiras. This community network, created in 2013, consists of 24 members, including local authorities, social support institutions, and various associations representing parents, cultural groups, retirees, disabled individuals, and residents. It also includes organisations such as scouts, religious groups, local businesses, and informal community groups. Together, these members collaborate to share resources and organise events that strengthen community engagement and sustainability.

¹⁴ European Commission, Clean energy for EU islands (25 June 2024). [Government of Canary Islands Partners with Energía Bonita for Solar Panel Installation on Educational Center Rooftops.](#)



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Members of the Telheiras/Lumiar REC © Associação Viver Telheiras

Currently composed of 16 members, Telheiras/Lumiar REC operates a 7.15 kWp solar PV system installed on a public building, with electricity shared among its members, including three energy-poor households (currently mostly elderly with low-income/pension). These households, identified and engaged by the local government and social support organisations, benefit from waived entry fees and reduced annual costs while maintaining equal voting and participation rights within the community. A second solar PV system of 25.74 kWp is already installed, with licencing underway to expand participation to 60 additional households, small businesses, and condominiums, including 6-10 more families experiencing energy poverty. The energy community follows a **solidarity-based financing model where the local government and other members contribute to**



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covering the costs for vulnerable participants, ensuring inclusivity without compromising financial sustainability.



Telheiras/Lumiar REC was established through close collaboration with local NGOs (mostly under the Local Partnership of Telheiras), the Lumiar Parish Council, and technical support from the EU Energy Poverty Advisory Hub, Coopérnico, and CENSE NOVA-FCT. Upfront PV installation costs were covered by funding from the DUT Urban Doers Grant and the Sun4All project, with REC membership fees providing a reimbursement of the investment. The local government, alongside NGO partners, played a crucial role in securing public rooftops, facilitating licensing, and

actively identifying and engaging vulnerable households in the initiative. Portugal faces severe energy poverty challenges, with a high percentage of the population unable to heat their homes adequately. By integrating social support mechanisms into its governance, Telheiras/Lumiar REC seeks to combat these inequalities by ensuring nearly 20% of its generated solar energy directly benefits vulnerable families. The project is also dedicated to raising awareness about energy efficiency, reducing social exclusion, and strengthening community participation, making it a model for inclusive and citizen-driven energy transitions. In 2024, the energy community published its *[Practical guide: Development of renewable energy communities by citizens, associations, and local governments - The example of the Telheiras/Lumiar REC](#)*, leading the way for other energy communities to follow its inclusive model.

Community Case in Focus | Belgian cooperative **Allons en Vent (BE)** offers the possibility to make an investment for the next generation and built a wind turbine called “L’éolienne des enfants”, which means the “children’s wind turbine”. With shares only costing 100 euros over 1200 grandparents and parents were able to give their (grand)

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children access to renewable energy. The turbine was installed in 2006 and inaugurated by a children's orchestra. Today, the children have grown up and are running the cooperative.

Community Case in Focus | Repowering London (UK) has created a **Participatory Toolkit for Inclusive Community Energy Co-operatives** to address the underrepresentation of many communities in Britain's community energy sector. It offers practical methods and resources to engage a wide range of people with energy cooperatives, ensuring that under-represented groups can access the benefits of local energy projects and play an active role in driving a just energy transition.

The toolkit is based on participatory research and co-design conducted in North Kensington and Newham, which informed the development of new membership pathways adapted to local contexts. Repowering London also explored alternative forms of engagement—such as nominal fees, time contributions, or other commitments—encouraging a deeper consideration of value beyond monetary exchange: “we had to think deeply about types of value exchange that go beyond the monetary”¹⁵. Repowering London is now using these insights to inform upcoming community share offers and membership campaigns, with some co-designers already joining their local co-operatives. In this way, Repowering London aims to embed inclusive membership structures at the heart of its work, ensuring that community energy grows as a grassroots, diverse, and socially impactful movement.

Community Case in Focus | A central goal for **Oliver CE (ES)** is to build an inclusive and accessible energy community that encourages participation from all households and individuals, regardless of income. Membership involves a one-time €20 fee, which provides equal rights and voting power, while an optional €42 annual fee grants access to energy from the community's photovoltaic panels, reducing average energy bills by around 30—equivalent to savings of €130–180 per year. Social bonus recipients are given priority access to the community's self-consumption scheme. Additionally, Oliver CE supports engagement through social events, workshops, and information points on energy savings and financial aid, promoting broad and inclusive participation.

¹⁵ Repowering London - **Participatory Toolkit for Inclusive Community Energy Co-operatives**, p. 9.



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Community Case in Focus | Argiola (ES), a Basque energy cooperative in a small town of 4,000 residents, is preparing to enable broad participation — including by vulnerable households — through regional government funding for the installation of two PV systems. It's a case in point of how capital contributions by supportive partners, in this case the regional government, can make an important difference for energy communities to pursue impactful social objectives. Thanks to the grant, vulnerable households can join without making an initial payment, becoming full members on equal terms. They will contribute a fixed yearly amount to the cooperative, calculated from the estimations of savings generated through self-consumption. To ensure the cooperative's economic sustainability, half of these savings will be reinvested into the cooperative to cover maintenance and other expenses. Social services are helping identify eligible households within a 2 km radius of the installation, which is expected to be operational by the end of 2025.



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3.2.2 Workforce

We need capital, social capital, but above all human capital!
- Goiener (Open Call submission)

Often energy communities operate with small staff teams and rely heavily on volunteers, whose time, skills and networks form a crucial part of the social capital sustaining these initiatives. While volunteer contributions are invaluable, a number of respondents, such as **Telheiras/Lumiar REC (PT)**, **Goiener (ES)** and **Argiola (ES)** point out the challenges and stress that come with relying on volunteers, especially when it comes to their involvement in energy poverty alleviation schemes. Telheiras/Lumiar REC explains that maintaining volunteer engagement has been an arduous task since the planning of the project was long and motivation levels varied during the process. To mitigate this Telheiras/Lumiar REC stresses the importance of participatory approaches, celebrating small successes, strong leadership to sustain volunteer involvement, and, above all, the availability of technical support schemes to support citizens develop and manage such projects.

Community Case in Focus | Experience from **ALLenergy (UK)**, **Coopérnico (PT)**, **ZEZ (HR)**, **Repowering London (UK)**, and **Les 7 Vents (FR)** in the Horizon 2020 CEES project emphasises that the involvement of volunteers in energy poverty initiatives requires careful planning and support. Targeted training in soft skills—such as empathy, active listening, and non-judgemental communication—is essential, alongside robust safeguarding measures, including background checks, paired home visits, and clear identification. Supporting volunteers' psychological well-being through debriefing and self-care is also crucial. Although volunteers contribute their time freely, communities must plan and budget for staff involvement, administrative support, training, coordination, and expense reimbursement to ensure the sustainability and effectiveness of these initiatives.



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3.3 Core activities

Energy communities operate across the energy sector, offering members and the wider community a broad range of services – from energy production, supply and self-consumption to aggregation, storage, heating, cooling, efficiency and renovation services and e-mobility. Although each energy community's business model is eventually shaped by local context and capacities, collectively they share the core objectives of expanding renewable energy use, reducing consumption, cutting household energy costs, and empowering citizens to take part in the energy transition.

By engaging in these activities, they address local social, ecological, and economic needs. Profits are distributed among members, reinvested in the community and/or used to develop new projects and services, ensuring that benefits reach both members and the wider community.

The section below presents a range of existing and emerging approaches, identified through the Open Call, that demonstrate how common activities can be leveraged to support and/or include households in vulnerable situations. Although each initiative has been categorised under one activity or model, it is important to note that many of these projects adopt a holistic approach, combining multiple activities—such as energy supply services, energy efficiency advice, education and awareness campaigns, and financial support—to provide comprehensive and impactful support. By integrating various approaches, these energy communities not only help lower energy bills but also empower residents to take control of their energy use, strengthen community ties, and promote long-term resilience.

3.3.1 Local energy production, self-consumption and supply

Today, the most common business models adopted by energy communities in the EU include collective self-consumption (enabling members to jointly produce and consume renewable energy), energy supply (selling electricity to members and sometimes to the wider market) and community-based investment in renewable energy projects (producing energy to sell on the market).¹⁶ In practice, these models and their social impact will vary according to local needs, possibilities and the availability of supportive policies. EU directives provide the overarching

¹⁶ European Commission, DG ENER (13 December 2022). In Focus: Energy Communities to Transform the EU's Energy System.



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framework, but national and local regulations determine how energy communities can concretely generate, share, or sell energy.

Community-based investment in renewable energy projects (production)

Many energy communities are formed with the goal of jointly producing renewable energy, which not only increases clean energy in the system but can also generate income once initial investments are recovered. Early support schemes such as feed-in tariffs and premiums, which guaranteed fixed prices for energy sold to the grid, enabled communities to build viable business models and contributed to the growth of renewables. However, these schemes have largely been replaced by competitive auctions and tenders, which often disadvantage smaller actors like energy communities due to complex rules, procedures and price-driven competition by larger actors. Alternatively, energy communities may also sell their energy to external suppliers, which then sell it on the wholesale market. Some energy communities use revenues from this activity to provide support services - such as energy efficiency advice, renovations, educational activities and free membership options - for vulnerable households. However, this has become more complex to achieve:

Energy communities need to compete with commercial organisations. This should change.

Energy communities should have a preferred position and should not have to compete in tenders for taking care of their fellow citizens in their local community

- Wattnu (Open Call submission)

Community Case in Focus | The **Brixton Energy Solar projects (UK)** demonstrate how community-owned renewable energy production can benefit vulnerable communities. Cooperatively owned PV installations were placed on housing estate rooftops in Brixton, a particularly deprived area in London, with funds raised through community share offers that gave residents partial ownership. Residents were strongly involved in the development of the installation and cooperative and have benefited from training and work experience opportunities. Revenues are shared among investors and channelled into a community fund to organise additional local RE projects, events, trainings and programmes. Communal spaces and residents benefit from lower energy costs. However, without a supply licence a core challenge is getting the locally produced renewable electricity directly to the residents. This is now arranged through a favourable collaboration with a licensed supplier. But the complexity and limited profit for the supplier compromise the scheme's long-term viability.

Self-consumption

Self-consumption differs from the collective investment approach in that the energy produced is consumed directly by the members of the energy community



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themselves and/or other beneficiaries. The Renewable Energy Directive distinguishes between two forms of self-consumption. The first form is defined as a renewables self-consumer, meaning individual final consumers who generate renewable electricity for their own use, with the option to store or sell surplus energy.¹⁷ The second form is defined as jointly acting renewables self-consumers, where at least two individuals collaborate to generate renewable energy within the same building or multiapartment block.¹⁸

EU Member States have implemented these concepts in different ways, leading to variations in rules around self-consumption. Given this dynamic energy communities have adopted diverse business models that reflect these categories while adapting to local and regional contexts. While recent developments around energy sharing (see below) allows individual producers to aggregate and share their production with each other under an energy community, energy communities commonly focus towards collective self-consumption

Projects under this model typically range from small-scale rooftop PV installations on schools or apartment blocks to larger renewable power plants. A key objective is to maximise self-consumption and reduce reliance on volatile energy markets to lower energy costs for the participants, strengthen local energy security and relieve stress on the grid. It also increases accessibility and uptake of renewable energy as the energy community typically handles technical, operational and administrative tasks, making participation more convenient for individual households and stakeholders.

Energy communities can use energy sharing to provide electricity free of charge to vulnerable households, ensuring social inclusion.

Community Case in Focus | An example of an energy community facilitating such a self-consumption scheme to the benefit of vulnerable households is the Flemish energy cooperative **Energiecoöperatie OostBrabant (ECoOB) (BE)** which installed small solar PV systems on the roofs of individual houses, matching the size to the family's energy needs. ECoOB's Zonnebouwer+ project (Sun Builders) focuses on tackling energy poverty by installing solar panels on the rooftops of low-income households, including emergency buyers. In particular, the latter are households who, unable to find affordable rental housing, have purchased inexpensive, often poorly maintained homes. Households benefit from lower energy costs from day one without needing to invest, paying only an €8

¹⁷ Directive (EU) 2018/2001, article 2 (14)

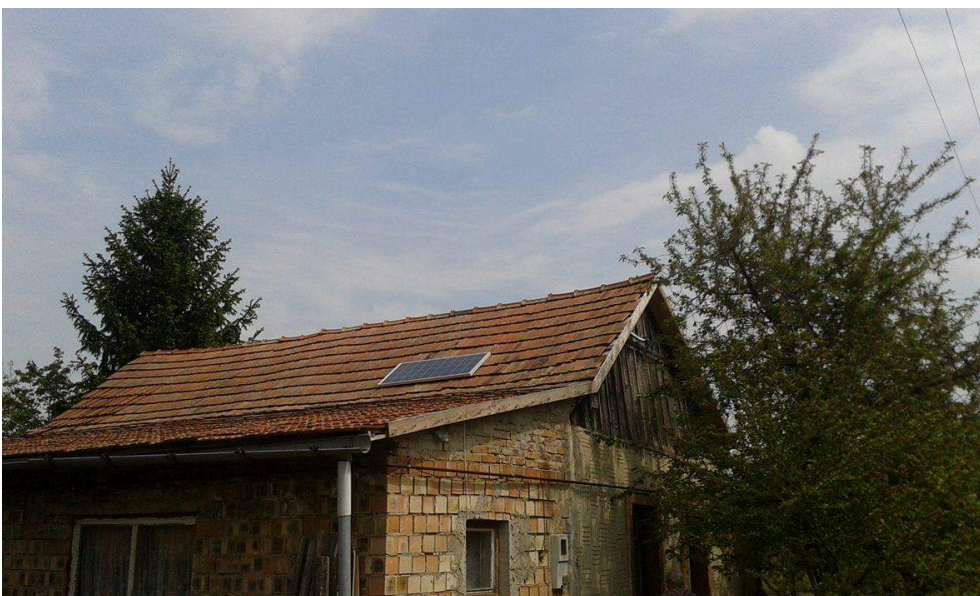
¹⁸ Directive (EU) 2018/2001, article 2 (15)



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monthly fee for solar energy use. Over 25 years, they can save between €4,000 and €10,000, depending on energy prices. ECoOB, in collaboration with six municipalities and social services (who identify beneficiaries), funds the installations while ensuring all financial benefits go to the households. This means a lower return on investment for ECoOB shareholders, but a higher social impact for the cooperative. A private guarantee fund safeguards ECoOB against losses while protecting participants. Leo D'Haese, board member of ECoOB, highlights that the project supports local government goals by integrating vulnerable households into the energy transition. This approach is more sustainable than reliance on social tariffs, as it not only reduces household energy costs but also lowers government spending on subsidised energy prices, which often indirectly support fossil fuels.

Community Case in Focus | In Portugal, **Coopérnico (PT)** installs rooftop solar PV systems on charitable institutions and SMEs to enable self-consumption, providing energy at fair prices and freeing up financial resources for delivering services to citizens. Coopérnico's members lend capital to fund these installations, earning a yearly return of 2.5–4% over 10–15 years, while the cooperative maintains and monitors the systems. Electricity produced is consumed by the partner institutions, typically reducing bills by 10–20%. Ownership of the PV system is eventually transferred to them, creating a long-term asset.



Community Case in Focus | **The Lightbringers Foundation (HU)** in Hungary demonstrates how marginalised communities, cut off from the grid and abandoned by the state and commercial energy players, can take charge of their energy needs through a community-driven model.



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The project addresses energy poverty among impoverished Roma families, installing affordable solar units. The project brought immediate energy relief to 14 of the most disadvantaged households in Mária Telep by providing solar-powered systems, financed through crowdfunding and donations, that restored access to electricity. Each unit, costing between €5,000–€10,000, includes a solar panel, battery, control unit, and LED lighting, and supports up to 300 watts of essential electrical use, meeting the basic needs of families. By training local volunteers, particularly women and girls, to maintain the systems, the initiative builds technical skills and long-term resilience. So far, it has supported 40 families, sparked national discussion on energy poverty and Roma inclusion, and serves as a model for grassroots, inclusive energy solutions.¹⁹



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¹⁹ [FEDARENE \(16 April 2025\). Solar Panels for the residents of Mária Telep settlement in Baks.](#)



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A significant recent development is the introduction of energy sharing under the European Electricity Market Directive. This mechanism broadens the scope of the right to self-consume renewable energy production collectively beyond the building level in near real-time. Energy sharing allows consumers to jointly use locally produced energy without relying on a traditional supplier, through collective investments, service contracts, or purchase agreements, reducing both administrative complexity and costs.²⁰

While promising, developing sustainable business models around energy sharing still faces challenges, including regulatory complexity, grid access limitations, lack of digital infrastructure, and low public awareness. This can make developing activities around energy sharing and focusing on vulnerable households even more difficult. In the case of ECoOB, for example, the ambition is to expand the project's scope and impact through energy sharing, but high associated costs currently make it unfeasible for roll out among vulnerable households.

Despite these challenges, energy sharing holds strong potential in the energy transition by empowering citizens, businesses, and local authorities to co-invest in renewable generation and share the benefits. National legislation remains decisive in shaping the operating models, but energy sharing is emerging as a key driver for collective self-consumption and more democratic access to renewable energy.²¹ Multiple communities across Europe are exploring possibilities to develop energy sharing projects to increase social impact.

Community Case in Focus | An example of community-owned centralised production for self-consumption, as a form of energy sharing, is **Energetska Zadruga Zeleni Hrastnik (SI)**. This energy community was Slovenia's first citizen energy cooperative, established in 2022 and currently counts 30 members. The cooperative is located in Hrastnik, an ex-mining town which saw its social position significantly degraded after the closing of the mine. To ensure that the benefits of the energy transition stay within the community and to lessen exposure to energy market fluctuations, the cooperative took proactive steps. They installed a solar power plant on the roof of the local primary school. The plant supplies electricity to the school, 16 homes, the town hall, a swimming pool, a grocery store, and two local companies. Collectively owned by these consumers, the

²⁰ For more detailed information about energy sharing see [Energy Communities Repository \(10 June 2024\) Energy Sharing for Energy Communities – a Reference Guide](#).

²¹ More information on energy sharing for energy communities, see [Energy Communities Repository \(10 June 2024\) Energy Sharing for Energy Communities – a Reference Guide](#).



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initiative is expected to reduce electricity bills by approximately 30% during the initial loan repayment period, with potential savings doubling thereafter.

The project's success is driven by a dedicated core group, including the green NGO Focus and Hrastnik's supportive local government. While these key actors continue to play a leading role in the cooperative's governance, citizen involvement has been growing since the beginning. A bottom-up approach has been used throughout, actively engaging residents through workshops and regular communication, strengthening both trust and a sense of community. This inclusive strategy has not only helped address financial concerns, but it has also ensured that lower-income households can participate. In particular by cooperatively covering their initial contributions (including the €100 membership fee and initial compensation for power supply at €150 per kw of power). Although these mechanisms made the project more complex, social equity was a core value for the cooperative: like many other initiatives, they see community energy as a long term solution to energy poverty.

The initiative's popularity led to plans for a second solar plant on the local health centre, which will provide electricity to the health centre and six households. The project has attracted widespread interest and is inspiring other municipalities to consider similar models.

Community Case in Focus | In Greece, **Collective Energy (COEN) (EL)** is making clean local energy more accessible to vulnerable households through a virtual net-metering scheme. Currently, two low-income single-parent households, including one with a migrant background, benefit from free electricity through the initiative. To ensure a fair and transparent selection process, COEN works closely with the municipality to identify and support these households. Despite its potential for lowering vulnerable households' electricity bills, the initiative faces significant challenges, including grid access constraints and a lack of funding support for including vulnerable groups in energy sharing schemes. COEN remains committed to developing a more equitable and sustainable energy model and empowering vulnerable households in the area by expanding education programs, workshops, and training on energy efficient practices. By integrating community-driven solutions and proactive engagement, COEN aims to break down barriers to clean energy access and empower vulnerable consumers to participate in the energy transition.

Community Case in Focus | **Hyperion (EL)**, a Greek energy community with 128 members, primarily focuses on renewable energy generation for collective self-consumption, as well as educational and community activities. They currently operate a 500 kWp solar project. To combat energy poverty, Hyperion provides free energy to



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vulnerable individuals through a virtual net-metering scheme, as allowed by Greek law. They have also developed an energy poverty toolkit, which includes materials like insulation tape and an energy efficiency advice pamphlet, and have established a working group to create further initiatives. Currently, the beneficiaries of these efforts include 9 energy-vulnerable households (referred through the social services of two municipalities), one social kitchen, and a migrant cultural centre. While these beneficiaries are not formal members, they are aware of the community and can engage with members if they choose. The energy poverty alleviation activities are funded through a solidarity levy, contributed by the members themselves (one-time fee which members paid as a top up to their regular shares in the collective solar park). A challenge faced by the community is that all members, including the vulnerable households who are not official members, must be clients of the same energy supplier. Requiring vulnerable households to change supplier could be seen as a risky move.

Community Case in Focus | Minoan (EL) Energy Community, based in Crete, has developed a solidarity-driven model to tackle energy poverty through virtual net metering. With funding from its members and the regional authority, it built a 405 kWp photovoltaic plant that provides free electricity to over 100 households and businesses for 25 years. Among these beneficiaries are about 33 low-income families, including earthquake victims and large households, who pay nothing to participate yet see direct drops in their energy bills. While these households do not become full cooperative members, they benefit from a dedicated support scheme designed by the community. Plans are underway to extend support to at least 15 more families through a second PV project.

Since its founding, Minoan has grown to around 1,300 members, including citizens, municipalities, associations, and SMEs. Its Articles of Association place solidarity and the fight against energy poverty at the heart of its mission, making equal access to renewable energy a priority. However, despite Crete's rich renewable potential, Minoan faces regulatory barriers: grid space is scarce and dominated by large corporate players, while licensing procedures lack transparency. The community continues to advocate for fairer rules, priority for local initiatives, and stronger collaboration with municipalities, chambers, and social services to ensure both resilience and inclusivity in Crete's energy transition.

Community Case in Focus | In Austria, energy cooperative **OurPower (AT)** connects renewable energy producers and consumers through an online peer-to-peer marketplace. Producers, after joining with a €100 share, can easily register their installations and sell electricity directly, while consumers are matched to suitable producers based on location



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and household size, ensuring a 100% renewable Austrian energy mix at competitive rates. The model ensures stable pricing for producers and affordable rates for consumers. Recently, a “family and friends tariff” was introduced, enabling producers to offer electricity at reduced prices. Although not designed specifically for vulnerable households, these lower rates could be especially beneficial for them and, over time, help the cooperative expand its social impact.

Community Case in Focus | Women in Energy Transition (WET) (ES), a Spain-based network of women working across the energy sector, has placed energy poverty at the core of its mission. WET, in collaboration with the *Fundación de Energía Responsable* (Responsible Energy Foundation), a non-profit organisation specialising in the fight against energy poverty, has developed and scaled the Energy Bank project, an initiative inspired by food banks, that aims to facilitate energy access for vulnerable groups. The project allows companies/energy players to donate unused kilowatt-hours or savings certificates as part of their corporate social responsibility commitments. This initiative has already implemented several pilot projects in Spain.





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Looking ahead, WET plans to integrate and promote energy communities into this system, also allowing them to contribute excess generation to the Energy Bank. Donations are managed through a foundation (replicable methodology), so that donating companies can benefit from tax relief. This would allow energy communities that do not yet have vulnerable households among their members to provide support to families in need —a feature not yet implemented but central to the model's future vision.

Supply

Instead of selling renewable electricity to the grid or relying solely on self-consumption and energy sharing, energy communities can choose to supply energy directly to their members by becoming licensed suppliers. This allows them to protect members from market price volatility, especially when production aligns with demand. For example, the Flemish cooperative Ecopower (BE), a Belgian renewable energy cooperative with 70,000 shareholders and 60,000 clients and licensed as both producer and supplier, was able to shield its members from soaring prices during the 2021–2022 energy crisis by offering electricity at cost.

Community Case in Focus | As part of the PowerUp project, **Ecopower (BE)** and the city of Eeklo launched an initiative to help vulnerable households access cooperative green energy. The city **prefinances a social share** (€250) for participants, which is **repaid through a savings plan** (at about €3/month). This allows households to immediately benefit from at-cost renewable energy while also making them full cooperative members. To assist participants, an Ecopower staff member and a representative from the municipality are available every Monday at the Eeklo city office, providing step-by-step guidance on joining the project. In the first year, they managed to generate a **reduction of about 300 euros for participants**.

The pilot project, starting with 20 participants and now expanding to 100, initially targeted those dropped by their suppliers and placed on expensive emergency tariffs with a supplier of last resort. However, since 2024 the DSO converted these customers to smart meters with prepayment, limiting access to cooperative suppliers. As a result, the project is now expanding to include former social tariff recipients. To ensure broader access, Ecopower collaborates with SAAMO and other local partners to identify and engage participants, recognising that personalised outreach is crucial.

Challenges include automating the savings plan, addressing late or non-payments with a soft approach to prevent debt accumulation, and overcoming digital exclusion. The cooperative's long-term goal is to integrate hard-to-reach groups into the energy



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transition through sustainable, community-driven solutions. While Ecopower, seen over the long term, has been one of the cheapest suppliers, its energy prices are not always the cheapest. This may pose issues for people living in vulnerable situations. This is why, in addition to providing access to cooperative energy prices, eligible participants can receive "social solar panels" installed on their rooftops, financed by Ecopower through third-party funding and a social cooperative fund, further reducing energy costs. For renters, Ecopower has developed an addendum to the rental contract (an agreement between tenant and landlord).

However, becoming a supplier remains challenging due to high financial requirements, complex licensing procedures, and the need for substantial bank guarantees to operate on wholesale markets.

3.3.2 Heating and cooling

Heating and cooling account for around half of the EU's total energy consumption, making it a key area where energy communities can make a difference. Renewable heating and cooling can draw on solar, bioenergy, geothermal, aquathermal, renewable electricity, and ambient heat, with thermal energy used directly, indirectly, or stored to balance peaks. Community-led heating and cooling projects (CH&C) show how collective systems such as district heating networks or joint purchases of heat pumps can lower costs, cut emissions, and improve energy resilience. However, across the EU, energy communities potential in heating and cooling remains unevenly supported and recognised. For vulnerable households, expanding community-led heating and cooling offers a path to fairer access, reduced energy bills, and greater protection from energy crises.²²

Community Case in Focus In Voiron, France, in the Isère department, a group of co-owners have built a shared housing complex: the Préau des Colibris. Already constructed using eco-friendly materials, the project leaders wanted to take the building's ecological credentials even further by installing solar thermal panels. A 6 kW system was installed on the roof of the residence with financial support from **Buxia Énergies (FR)**, a local renewable energy cooperative. It is France's first community-owned solar thermal power plant. The energy is leased to residents at a fixed price for 10 years, after which, once the investment has been recuperated, ownership of the installation will be transferred to them. Thanks to this project, tenants have halved their heating bills.

²² [REScoop.eu](https://rescoop.eu) (3 July 2023). Community heating and cooling: The road to energy democracy.



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Community Case in Focus | ZuidtrAnt (BE) is a cooperative society with a social purpose based in Antwerp, Belgium. With 1,300 members, a team of volunteers, and paid staff, they finance and manage initiatives such as solar energy generation, home renovations, and educational workshops on energy savings using citizen investments. Prioritising inclusivity, they actively collaborate with social welfare organisations, social housing providers, and non-profit organisations committed to a just, sustainable and climate-neutral society. Part of their annual profits from solar projects, green certificates and energy injections, for example, fund social or climate-impact projects, selected by the members at the General Assembly. In 2021, ZuidtrAnt allocated €2,500 to De Woongenoten, a citizen-led initiative addressing the shortage of affordable rental housing for low-income individuals in the southern region of Antwerp. De Woongenoten raises capital to purchase and renovate homes, which are then rented out in collaboration with social welfare organisations to those struggling to find housing. ZuidtrAnt supports them with renovation advice, guidance, and funding for energy-saving measures to improve efficiency in these homes.





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In 2019, ZuidtrAnt launched ZuidtrAnt-W to expand its impact through district heating projects like Warmte Verzilverd, an initiative in collaboration with Ecopower and Kelvin Solutions. The district heating networks repurpose excess industrial heat to provide stable, affordable heating and hot water to buildings in the neighbourhood, including social housing initiatives.

Community Case in Focus | In the Netherlands, residents of the Benedenbuurt in Wageningen came up with the idea for a local district heating network during a neighbourhood climate event in 2016. This resulted in the establishment of **WOW Wageningen Cooperative and Warmtebedrijf Oost-Wageningen B.V. (WOW) (NL)**. The heating company is jointly owned by the WOW cooperative and the Municipality of Wageningen (two-thirds ownership), and energy provider Kelvin B.V. (one-third ownership). This set up allows heat supply (through Kelvin's supplier license) while ensuring local influence and resident participation, as every connected household (whether home-owner or tenant) will automatically become a cooperative member and will thus hold decision-making rights in the organisation. Others can also join the cooperative and actively participate in the decision-making by paying a €10 annual fee.

From the outset, Woningstichting Wageningen, the local housing corporation, played a key role in supporting the project with financial and technical assistance. As a provider of affordable and sustainable housing for those facing financial or social challenges, it aims to transition its social housing units away from natural gas while keeping costs manageable for tenants. To encourage participation, Woningstichting Wageningen will cover connection fees, offer discounts on fixed heating costs, and will make necessary home modifications for electric cooking without increasing rent. With this approach they hope to create a net financial benefit. Tenants were personally visited to ensure they had all the necessary information before deciding, leading to a 83% approval rate among social housing residents. The district heating network is still under development and will eventually supply 90% of all households in the neighbourhood, including 83% of private homeowners and all social housing units.

Community Case in Focus | **Bürger-Energie-Genossenschaft Neuburg-Schrobenhausen-Aichach-Eichstätt eG (BEG) (DE)**, is an energy cooperative operating in Bavaria, counting more than 900 members. It was set up in 2013 to initiate, finance and operate new renewable energy installations, including energy generation, storage and distribution in the region. BEG's first cold heating and cooling project was initiated in 2022 in collaboration with the local council of Königsmoos, a town of 5,000 inhabitants. The municipality wanted to implement a sustainable energy supply for a new housing



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development without relying on fossil fuels, due to rising gas prices and the need to reduce greenhouse gas emissions. The new system now provides renewable heating and cooling for 40 homes and 160 residents. Since, the same system has been set up for 65 homes in the city of Schrobenhausen.

Community Case in Focus | In Greece, the **Karditsa Energy Community (ESEK) (EL)** in a collaborative effort with the municipality and a local school, launched a CH&C initiative with an action to address energy poverty. Under the slogan “Don’t throw away your fuel”, teachers and students from the school collected residual coffee, which was then transformed into pellets by ESEK and donated to the municipal service to support vulnerable families. They use the revenues to expand their heating and cooling initiative, and organise local awareness-raising activities such as the organisation of renewable energy festivals.

3.3.3 Energy efficiency and home renovations

Energy communities have long been engaged in providing energy efficiency advice and distributing materials to help households reduce energy consumption. This often involves home visits and direct engagement with residents to equip them with practical knowledge and tools for implementing energy-saving measures. Support can range from offering short-term solutions like LED bulbs, insulation strips, and slow cookers to guiding households on energy bills, public support schemes, and supplier comparisons. While such practices can be time- and resource-intensive, these efforts are highly scalable and adaptable to different contexts.

In contrast, retrofitting measures for vulnerable households remain less common due to the significant financial, technical, and administrative challenges involved. For low-income households, large-scale renovations can be daunting and disruptive, making trust-building and tailored support essential. Successfully implementing such initiatives requires a mix of technical expertise, community engagement, and long-term investment, highlighting the need for well-coordinated support structures to make deep energy renovations more accessible and feasible for energy communities to perform.

Community Case in Focus | **EcoVision (IE)**, based in County Tipperary, Ireland, is a not-for-profit, community-led organisation supporting citizen-led renovation and energy upgrades. EcoVision provides a One-Stop-Shop service, leveraging SEAI grants and coordinating contractors to simplify home and business retrofits. Comprising 15 energy communities across Tipperary, Clare, and Limerick, it has retrofitted over 900 homes, securing over €18 million in investments. Their activities are funded through a



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combination of revenue streams, including EU and national grants, as well as income generated from various social enterprise initiatives they operate.

EcoVision actively tackles energy poverty through initiatives like [EU LIFE RENPOWER](#), the new [Retrofit Ready project](#) in the EUJTF territories and the Sláintecare and [Engage in Energy](#) projects in collaboration with the Tipperary County Council. With these projects they aim to expand their energy advice and retrofitting services towards vulnerable populations and deprived areas, including through household visits, community and school workshops, energy clinics, and assistance with grant applications. In 2020 Ecovision secured €995,000 from the Just Transition Fund to lead the [‘Community Led Just Transition North Tipperary’ project](#), aimed at improving energy efficiency in communities affected by peat plant closures. Through this initiative, they have been retrofitting homes, implementing energy-saving behaviour change programs, and installing community-owned solar PV systems to promote sustainable energy solutions.

While vulnerable households are not directly involved in its governance, the organisation is working to enhance diversity and stakeholder participation, furthering its mission to integrate citizen-led energy efficiency and retrofitting services with social impact.

Community Case in Focus | **Coopérnico (PT)** fosters community engagement and knowledge-sharing through informal gatherings like Energy Cafés. These sessions create a welcoming environment where participants can learn about energy savings, billing, and low-cost measures to improve thermal comfort. They are set up in a way in which participants feel comfortable (often by offering lots of food) to share their lived-experiences and feel valued for the expertise they bring. Through partnerships with municipalities, senior academies, and local parishes, Coopérnico has hosted 18 workshops, reaching over 350 people, 20 of which received personalised energy advice through a home visit, with more planned.

In addition, through their Supporters & Mentors Network, they engage members to provide capacity-building and energy poverty alleviation initiatives, helping households apply for public financing for energy-efficient upgrades. Unfortunately, due to the absence of legal recognition and support, they have been unable to establish a sustainable business model for these activities and continue to rely on grant funding (such as EU projects) to sustain them.

Community Case in Focus | Through its *energiebuddy and klusser* program of trained coaches and volunteers, **Wattnu (NL)**, the energy cooperative of Gooise Meren in the Netherlands, visits low-income households in poorly insulated homes to apply free



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energy-saving measures—such as draft strips, radiator fans, and appliance replacements—while also offering tailored advice. By working closely with the municipality through the National Insulation Program and the Local Insulation Approach, they support low-income homeowners in taking insulation measures, ensuring that they can also lower their energy bills and live in more comfortable, energy-efficient homes. Their work goes beyond one-off visits, with follow-ups and referrals to social services to ensure structural support. Wattnu highlights the importance of a tailored and needs-driven approach to effectively tackle energy poverty.²³

With over 100 volunteers and nearly 2,000 members, Wattnu also partners with housing corporations to explore collective solar projects for social housing complexes, aiming to reduce bills without raising service costs. Their integrated approach—combining technical fixes, personal trust-building, and local partnerships—makes Wattnu a strong example of how energy cooperatives can tackle energy poverty while promoting an inclusive energy transition.

Community Case in Focus | Noticing that most advice on energy efficiency and environmental upgrades focuses on people in houses, yet half of all London households live in flats, **Repowering London (UK)** has developed a [toolkit and service](#) to help landlords, leaseholders, building managers and retrofit professionals upgrade blocks of flats. In 2023-24, Repowering London partnered with the Confederation of Cooperative Housing and Future Climate to pilot the service at six blocks of flats across London. It has since gone on to work with several other blocks of flats and service development is ongoing.

3.3.4 Education and awareness-raising

Another strand of actions which regularly came up in the Open Call is education, awareness-raising, and personalised guidance to both members and the broader community. Energy communities organise workshops, seminars, and outreach programs to inform participants about available support schemes, the benefits of sustainable energy practices, and renewable technologies. These initiatives help build trust, encourage active participation in the energy transition, and increase community acceptance of renewable energy projects. In addition, information sessions organised by energy communities are often designed to encourage informal networking and dialogue, creating a friendly setting that brings people together and strengthens social cohesion.

²³ [LEA \(3 June 2024\). Samen Sterk: Wattnu en gemeente Gooise Meren verenigen krachten tegen energiearmoede.](#)



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Community Case in Focus | In the UK, Westmill Solar together with Westmill Wind fund an independent charity called Westmill Sustainable Energy Trust (WeSET) (UK), which promotes the deployment of sustainable energy through arts, education and energy projects. The fund is financed through surpluses generated through running community energy services and activities. After covering operating costs and providing for the development of the cooperative, surpluses are shared between interest payments to members (80%) and funding community activities (20%). Westmill Solar also runs a grant scheme to fund projects and activities around climate change and in line with the cooperative principles. Last year they offered a total of £40,000 to 10 different projects, all of them in Oxfordshire or within 25 miles of the Westmill site, as this is one of the requirements to apply. For example, Oxfordshire-based mental health charity Restore received £5,000 to install rooftop solar PV on two of their working sites; West Oxfordshire Community Transport Limited, a charitable society that operates daily bus services in the area, received £2,495 to research the impact of purchasing and using non-fossil fuel vehicles; and Oxford Children's Book Group was granted with £1,000 to organise school visits with authors whose books focus on tackling climate change.

Community Case in Focus | **Llobregat Energètica (ES)**, an energy cooperative in Sallent, Barcelona, has made tackling energy poverty a core objective. Still in its early stages, the cooperative has launched the Social Area to drive its social goals forward. This initiative creates open communication spaces to engage with diverse groups, providing tailored advice on reducing energy bills, implementing energy efficiency measures, and accessing government aid. At the same time, the Social Area helps Llobregat Energètica better understand the specific needs of vulnerable communities and develop appropriate responses. So far, they have collaborated with women's associations and organisations supporting people with disabilities and are reaching out to youth organisations and neighbourhood associations:

We contacted each of them personally to get to know them and offer them a personalised presentation of the cooperative. Some of the topics we addressed in the presentation include energy transition, collective self-consumption communities, and the tangible and intangible benefits of participation. In all of them, we emphasise the importance of building a diverse, inclusive, equitable and empowered community. – Sandra Bassallo Puig, Llobregat Energètica



Beyond direct support, Goiener plays a key role in capacity building across society: it trains citizens, social entities, and other energy communities on energy efficiency, collective self-consumption, and inclusive governance, helping them replicate social programmes and even set up local energy poverty offices. Collaboration with partners such as the social services, local associations, and food banks further extends its reach to the most vulnerable groups. Goiener stresses that addressing energy poverty requires not only financial resources but also “human capital” — motivated, trained people capable of activating and supporting their communities.



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Community Case in Focus | With the theme, Gastar Bem a Energia (Spend Energy Well), **Coopérnico (PT)** hosted 18 Energy Cafés, directly reaching more than 350 people. The events were organised in partnership with senior academies, municipalities, local parishes and an energy agency. At the Energy Cafés, Coopérnico presented how energy billing works, ways to save energy and reduce costs, and tips to increase thermal comfort through simple, low-cost measures.



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3.4 Financing

Energy communities' typically rely on a mix of financial resources to fund their projects, such as capital contributions made by their members and supportive partners, grants, cooperative revolving funds, bank loans etc. By pooling resources, energy communities reduce individual financial burdens while ensuring that the benefits of clean energy are distributed broadly across all members. The revenues generated are reinvested into new projects or directed back into the community, rather than being extracted for private profit. This reinvestment approach strengthens local economies and creates opportunities to enhance inclusiveness and fairness in the energy transition.

Community Case in Focus | An example of such a reinvestment scheme is **Som Energia's (ES)** Flux Solar. Flux Solar is a service that allows members with solar panels to make the most of their surplus electricity. When panels generate more than is compensated under Spanish law, the excess is converted into virtual credits called *Sols* (1 € of surplus = 0.8 Sols). These Sols can then be used to reduce almost every part of the electricity bill—consumption, fixed charges, taxes, and more—allowing bills to be reduced to zero, with unused Sols rolling over for up to five years. The remaining 20% of surplus value goes to Som Energia to cover management costs, but a portion is also dedicated to financing solidarity projects, ensuring that the system not only benefits solar producers but also supports wider social initiatives.

In addition to its Flux Solar service, Som Energia funds energy poverty initiatives through small voluntary contributions added to members' energy bills. The resulting solidarity fund is partially (about 5-15%) used to support organisations working to combat energy poverty.

Community Case in Focus | A similar scheme is run by French cooperative supplier **Enercoop (FR)**, a network of 11 energy communities across France with over 65.000 members and 108.000 clients. Enercoop established the endowment fund *Énergie Solidaire* to support energy poverty alleviation. As an energy supplier with a large client base, Enercoop enables customers to contribute through micro-donations, either by rounding up their energy bills or making direct donations via its website. These funds are distributed to local NGOs working on energy retrofit projects for vulnerable households through open calls for project financing. To provide tax benefits to individual donors, *Énergie Solidaire* was set up as a separate legal entity.



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Community Case in Focus | Another example from the Open Call illustrates how energy communities provide financial support to each other in order to achieve wider social impact. **Sociedad Cooperativa Eléctrica La Corriente (ES)** a cooperative renewable energy retailer from Madrid with over 1000 members actively supports the development of energy communities in the area through awareness-raising initiatives and advocacy for supportive policies. To promote inclusivity in energy communities, La Corriente launched the InclusivEC Awards with European funding from the Accting project. The Awards recognise and promote energy communities in Spain that actively include vulnerable groups and address energy poverty through innovative projects and social justice initiatives. In its first edition, nine initiatives from diverse regions—ranging from urban neighbourhoods under development pressure to depopulated rural towns and an island in Galicia—demonstrated that energy communities can adapt to different local needs while promoting sustainability and citizen empowerment in the energy transition. The first edition of the Award (2024) was won by CE Arroyo Alumbra, a cooperative dedicated to tackling rural depopulation while integrating gender perspectives and fostering community education. The €2,500 prize will fund materials for energy efficiency courses at local schools and support specialized training for cooperative members, reinforcing their commitment to sustainability and education.²⁴

However, energy communities aiming to address energy poverty often face costs that are not matched by revenues. This can strain their other activities and, in some cases, threaten the viability of their overall business model. Because social value is still rarely recognised in today's energy markets, many communities find it difficult to integrate such activities sustainably into their business plans or portfolios.

3.4.1 Challenges in accessing (structural) funding and subsidies

Balancing market participation with social impact remains a complex challenge for many energy communities across Europe. **Coopérnico (PT) and Telheiras/Lumiar REC (PT)** emphasise that integrating vulnerable households into energy communities or establishing energy poverty alleviation initiatives requires specialised expertise and can be **highly resource-intensive**. Without adequate support, such as grant funding or mechanisms to offset implementation and operational costs, these efforts risk undermining the economic viability of energy communities.

This was also highlighted by **Energent (BE)**. A couple of years ago they ran a project called Buurzame Stroom. This Ghent-based project helped low-income households and social housing tenants access solar energy by exploring tailored support, public loans, and

²⁴ InclusivEC - Comunidades Energéticas Premiadas 2024.



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innovative financing models such as third-party financing, rental models and solidarity funds. By combining solar panels with roof renovations and creating fair rent schemes, the project ensured that vulnerable families could benefit from lower energy costs, and greater energy justice.²⁵ However, apart from other barriers related to engaging vulnerable households, the project encountered quite some barriers. A key barrier being the lack of financial resources:

“People often assume that energy cooperatives take on projects that aren’t economically viable. But we are still a company and need to run profitable initiatives. To address energy poverty, an energy community must either grow large enough to generate surplus profits for such projects (after 10 years, we’re still not there) or secure additional funding and support.”

- Energent (from submission Open Call)

Many energy communities that want to strengthen their support towards vulnerable households thus often rely on EU subsidies, grants, donations, or CSR funding. Some successful cases highlight the importance and effectiveness of initial financial support, such as **Oliver CE (ES)**, a Spanish energy community which was established with a €100,000 private-sector grant. This funding allowed for the development of the legal and social structures necessary to create the energy community, as well as the installation of solar panels. The project was initially conceived by Ecodes, a Spanish organisation focused on the intersection of social and environmental justice. Seeking to leverage community solar projects as a tool to combat energy poverty, Ecodes was able to bring this idea to life after securing an award in 2023.

The ESPON TANDEM project, one of the largest EU-level mapping exercises for energy communities, showed that there is a strong correlation between the availability of funding instruments, and an energy community implementing actions to tackle energy poverty and promote social inclusiveness. The provision of grants for development/start-up costs of energy communities can therefore provide an additional financial incentive for such groups to undertake projects that alleviate energy poverty. Over the next 2 years, the LIFE Enercom Facility project will help fund 146 energy communities across the European Union. Lump sum grants of 45,000 euros will help de-risk the initial stages of project development. When the projects under the Enercom Facility reach a mature Development Stage, they are expected to trigger 121 million euros in private investment for 108Gwh of citizen-owned renewable energy production. This critical mass of community energy projects creates an attractive opportunity for private funders (in particular, citizens) and lenders (e.g. banks). As of September 2025, the results of the Facility’s first call show a significant oversubscription in terms of total applications compared to the eligibility of

²⁵ [Energent \(January 2020\). Buurzame Stroom. Eindrapport.](#)



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funds (7:1 ratio). This shows the effectiveness of EU-level de-risking tools to trigger citizen capital.

While support to kick start an energy community can be a game changer, many energy communities to some extent **remain reliant on such external funding for energy poverty activities**, creating uncertainty about their long-term financial sustainability. For **Wattnu (NL)**, securing structural funding is essential to maintain and expand the integrated, community-based approach they have built with the municipality and local organisations since 2022. The trust and collaboration that enabled their success so far were made possible by initial project-based funding which is coming to an end in 2025. Without long-term financial stability the social and structural support systems they developed to tackle energy poverty cannot be sustained or scaled up.²⁶

Telheiras/Lumiar REC notes that even if energy communities manage to integrate vulnerable households in their membership with solidarity based financing, it would be beneficial if more public funds were to become available to structurally support the participation of households in vulnerable situations in energy communities.

This would also require more transparency, simpler application processes and placing higher value on social impact generated. The current lack thereof creates **accessibility issues** in funding opportunities and poses a major barrier, both for energy communities and households which struggle to navigate support systems. This can lead to ineffective allocation of resources and undermine social innovation. Different respondents of the SOCIALNRG Open Call pointed out that energy poverty alleviation measures were ill-targeted and failed to structurally reach and help people in need. To address this, Member States should ensure that funding application processes are clear, user-friendly, and accompanied by proper guidance for all parties involved. Concentrating all available EU and national funds under a single national contact point (with regional branches where relevant) would help simplify the process. This is in line with REScoop.eu's Vision for the next EU budget.

In the Netherlands, for example, **Energie Samen (NL)** notes that government funding intended for local energy communities is often funnelled through municipalities, creating a bottleneck for distribution as they struggle with state-aid and procurement concerns :

Research in the Netherlands is continuously proving that activities for reducing energy poverty are more effective when they are performed by a locally embedded and participatory party, yet they refuse to make a specific budget for these or make goals/targets for

²⁶ [LEA \(3 June 2024\). Samen Sterk: Wattnu en gemeente Gooise Meren verenigen krachten tegen energiearmoede.](#)



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*municipalities to collaborate with local initiatives.
– Energie Samen (Open Call Submission)*

While availability of funding is in itself important, targeted technical assistance and capacity building is needed for citizens and local communities to take advantage of available funding opportunities. National federations or community energy expert organisations, often offer One Stop Shop services, assisting members of the local community to access funding opportunities (e.g., grants for home renovations or rooftop PV), and can guide stakeholders on how to create or join an energy community.

Member States can provide structural funding to federations of energy communities (e.g., EU funds). There is precedent for this from France: Three French regions already support the regional community energy networks of Energie Partagée (the national federation of energy communities) through the European Regional Development Fund (ERDF). In Region Centre-Val de Loire, ERDF funding amounts to 253k€ for the 2023-2025 period, co-financing part of staff costs as well as direct charges. In Grand-Est, it amounts to 107k for 3 years as well, co-financing some staff costs. Region Pays-de-la-Loire recently (2024) decided to co-finance the regional network's action plan for 4 years through a 460k ERDF funding. More information is available through this link.

In turn, Wallonia (Belgium) has allocated a 3 year grant of 300.000 euros to the regional federation of energy communities (REScoop Wallonie). The money will be used for capacity building and networking activities related to the social economy.

This call for dedicated funding and transparent application processes is further emphasised by the risk of corporate capture, which was identified by cooperatives **Goiener (ES)** and **Argiola (ES)** as a major barrier in Spain. **Clear legal definitions and funding criteria are essential to prevent corporate capture**, ensuring that resources meant for energy communities are not absorbed by large commercial entities. The lack of distinction between energy communities as an organisational model and energy-sharing activities increases this risk.

In conclusion, Member States should create a strong business case for inclusivity and energy poverty reduction by supporting energy communities through financial and technical assistance while implementing clear safeguards against corporate capture. Innovative financing tools, such as community or green bonds, can enhance participation and reinforce the long-term sustainability of these initiatives.



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3.4.2 Challenges to offer a compelling model for vulnerable households

While energy communities offer more than just financial benefits, economic factors often remain a key driver for participation. And especially for households struggling with financial hardship, cost savings can be a decisive factor. In that regard, organisations such as **Stockelsun (BE)** and **Telheiras/Lumiar REC (PT)** highlighted the challenges energy communities face in attracting vulnerable households, as many already receive social energy tariffs that provide equal or greater on-bill savings with which energy communities can't compete or that make the economic benefits of participation marginal. Financial barriers, such as the inability to invest in PV systems or pay membership fees, further limit access and possibilities to actively participate and benefit from the energy transition. Additionally, low energy consumption reduces financial incentives, and the higher risk of payment delays adds to the economic uncertainty for energy communities.²⁷

For Spanish cooperative supplier **Som Energia (ES)**, the ability to provide the social bonus would be a crucial step in attracting vulnerable households. While some of their clients are identified by social services as experiencing energy poverty, they risk losing their contracts if they cannot pay their bills and are subsequently transferred to a supplier of last resort. Since Som Energia is not recognised as a Provider of Last Resort, they are unable to offer regulated market tariffs, limiting their ability to support and engage these households.

Community Case in Focus | Since 2023, **ECLAIRS (FR)** operates a collective self-consumption scheme that provides reduced electricity rates for vulnerable households. All beneficiaries become member of the association and participate in its governance (though engaging vulnerable members remains difficult). The project is supported by FEDER funding and technical expertise from grid operator ENEDIS and the local government.

The scheme uses three tariffs:

- BASIC tariff: a fair price for all, covering operating costs.
- SUPPORT tariff: about 10% higher than BASIC, helping subsidise solidarity.
- ECO tariff: about 30% lower than BASIC, reserved for vulnerable households; in 2023, about 50% cheaper than the regulated EDF tariff.²⁸

The solidarity model thus works by balancing costs between tariffs. However, through the Open Call, ECLAIRS notes that fixed costs and taxes on the electricity bill reduce the

²⁷ [Sun4All project \(September, 2024\). Sun4All Sustainable Implementation Plans for nine Community of Practice Observers.](#)

²⁸ [Energies du Pays de Rennes. ECLAIRS: Autoconsommation collective Rennes Sud.](#)



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benefits of the scheme for (vulnerable) households. Reducing these taxes for vulnerable households would increase the project's impact.

An upcoming opportunity that should be leveraged to improve the financial models of community energy poverty alleviation actions, is the Social Climate Fund. Research by REScoop.eu ([Social Climate Fund Tracker](#)) shows that several Member States, including Poland and Bulgaria, will use their Social Climate Plans to channel direct investments into energy communities.

- ✎ **Poland:** Civil society organisations have proposed a pilot program for energy communities. This proposal has been accepted by the Ministry, and its final shape and scale are under negotiation. A specific allocation of 300 million PLN has been designated for the Pilot Program – Energy Communities. The support will be directed towards energy community projects in 80 local governments. The term "80 local governments" suggests support at the level of territorial units, rather than the number of "energy communities." The Plan presents the investment as: "The implementation of the proposed pilot program would significantly contribute to achieving the objectives of the National Energy and Climate Plan, the draft National Building Renovation Plan, and the promotion of the idea of citizen energy in Poland."
- ✎ **Bulgaria:** The Plan features a dedicated measure, specific budget allocation (250 million euros), and structural support for the development of energy communities. It prioritises both physical infrastructure (PV systems) and the inclusion of vulnerable groups, with clear potential for scaling beyond the pilot phase. Initial implementation will take place in two municipalities – Gabrovo and Burgas – and, starting in 2027, further funding will be available to expand to other locations where capacity and interest have been developed in recent years, provided the pilots demonstrate successful outcomes. The plan provides for technical assistance through the municipalities and a one-stop shop for administrative support.

Member States have also leveraged the Just Transition Fund to support community energy projects across Ireland, Greece, and Czechia. Absorption of this fund, and implementation of actions, have been slow to date. Member States should fully leverage this opportunity to:

- ✎ Promote energy sharing schemes with the participation of municipalities, vulnerable microenterprises, and (vulnerable) households
- ✎ Promote citizen led renovations (as is the case with **Ecovision** Ireland, which funds part of its OSS activities through the Just Transition Fund see above)
- ✎ Leverage national federations of energy communities to provide technical assistance and peer to peer support to households to take advantage of funding opportunities in Just Transition Areas (build on the successful example of **Energie Partagee** outlined above)



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The European Parliament's resolution of 10 September 2025 on the role of cohesion policy in supporting the just transition, specifically calls for the support of energy communities in just transition areas as a means to tackle energy poverty.



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4 The importance of supportive policies and legislative frameworks

Supportive policies at national and municipal levels can be powerful enablers for energy communities, helping them maximise support towards vulnerable households and address energy poverty. In Greece, for instance, the regulatory framework allows energy communities to include vulnerable households in collective self-consumption projects at no cost, with other members covering the related expenses. **Hyperion (EL)**, a Greek energy community, took advantage of this framework to establish a 500 kWp solar park, dedicating part of its output to energy-poor households free of charge. The project demonstrates how well-designed policies can help unlock inclusive and equitable energy solutions. In Italy, the regulatory framework has encouraged at least two respondents to pursue energy poverty alleviation measures. Support includes a 20-year incentive tariff for energy produced from renewable sources and self-consumed by REC members, administered by GSE, with rates between €60/MWh and €120/MWh depending on system size and market value, plus location-based bonuses of up to €10/MWh. ARERA also provides a compensation fee of about €8/MWh for self-consumed energy, while national and regional grants can cover up to 40% of renewable system costs. Despite these incentives, young or low-capitalised RECs often struggle to access the necessary funds, as subsidies only reimburse a portion of the investment after project completion.

However, in general energy communities' efforts to alleviate energy poverty are still constrained by a range of structural challenges. These include complex administrative procedures, such as lengthy licensing processes, the absence of supportive legal frameworks, limited data and policy attention to energy poverty, and weak monitoring and evaluation systems. Ongoing uncertainty in policy and regulation further discourage investment and undermines long-term planning, making it harder to scale inclusive solutions. In addition, energy, climate, and social policies often function in isolation, reducing the effectiveness of initiatives designed to tackle crosscutting issues. In Germany, for example, **EWS Schönaue (DE)** emphasises the lack of recognition or supportive frameworks for energy communities to address energy poverty. A major barrier is the country's rigid separation between social and energy policies, which fails to acknowledge energy poverty as a distinct issue. This lack of institutional backing makes it difficult to implement effective measures against energy poverty.



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4.1 Restrictive legal frameworks for energy communities

Energy communities often struggle due to incomplete or patchwork laws and regulations that prevent them from operating effectively at a level playing field with other actors in the energy market. This limits their ability to develop renewable energy projects and undermines opportunities to address energy poverty and offer tailored support to vulnerable households. **Enercoop (FR)**, for example, emphasises that while specific recognition of energy communities as a vehicle for energy poverty alleviation would be helpful, the existing French legislative framework poses barriers to the development of RECs and CECs in general, complicating overall business development. In Flanders, **Ecopower (BE)**, **Klimaan (BE)** and **ZuidtrAnt (BE)** note that structural support mechanisms for energy communities, tailored licensing procedures and clear and flexible rules around collective self-consumption or sharing renewable energy within communities are not yet available, undermining opportunities for social innovation in the energy system.

In Portugal, **Lumiar Civil Parish (PT)** which promoted the establishment of **Telheiras/Lumiar REC (PT)**, explains that the current legislative and regulatory environment in Portugal creates significant barriers to the implementation of energy communities, with slow licensing processes, a lack of transparency and guidance from the Directorate-General for Energy and Geology and an unwillingness to facilitate locally produced electricity distribution and to share data in accessible formats by E-Redes (DSO). To foster the development of energy communities

(...) the public and private entities involved in the licensing, regulatory and management processes should support and help those wishing to create energy communities, for example with the creation of specific help desks, instead of putting up barriers without, in most cases, providing justification for them or providing any advantage.

- Lumiar Civil Parish (Open Call submission)

While the Portuguese government formally recognises energy communities in key strategies such as the National Energy and Climate Plan for 2030 and the Energy Poverty Action Plan, there are no concrete mechanisms to help them play an active role in alleviating energy poverty. Formal recognition alone is thus not enough—effective support requires practical tools like financing mechanisms, technical guidance, and clear procedures to ensure energy communities can deliver long-term, sustainable solutions.

Argiola (ES) points out that from an administrative perspective, energy communities are often treated in the same way as private, profit-driven companies, which complicates their acceptance and institutional support. Public administrations frequently fail to recognise



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the non-profit and socially oriented nature of these initiatives, placing them under the same regulatory and bureaucratic frameworks as commercial actors. As a result, energy communities must compete on equal terms with companies that have far greater financial and organisational resources. This lack of differentiation undermines their potential to deliver community-oriented benefits and, in some contexts such as Spain, this is further aggravated by corporate capture, where established market players influence regulations and decision-making to reinforce their dominance.

In the Netherlands, Energie Samen advocates for local authorities to be obliged to collaborate with community-led initiatives rather than defaulting to commercial providers.

4.2 Insufficient monitoring and enforcement

The lack of comprehensive data on energy poverty makes it difficult to target interventions, while the absence of standardised monitoring tools hinders the ability to measure progress and impact.

In Spain, for example, **Getafe (ES)** and **La Corriente (ES)** noted that the Bono Social (social bond) as an instrument helps identify vulnerable households, such as low-income families, victims of gender violence, and large families, but that it is far from perfect. The indicator fails to reach everyone, particularly undocumented migrants, and has flaws, such as granting the social bond to families with three or more children, regardless of their actual economic situation. Additionally, some families are unaware of how to apply for the bond. However, authorities also insist on the use of these indicators as a precondition for offering support to energy communities. This often creates gaps in reaching those who need critical assistance and, since the social tariff already subsidises a portion of household electricity consumption (in practice, around 1,400 kWh per year), it may result in limited effective use of shared self-consumption or even wasted energy through surplus generation, without delivering a significant reduction in energy bills for these families.

Similarly, in France, the legal frameworks governing energy poverty are insufficient, mainly looking at economic criteria as a means to identify the issue. Energy communities like **Enercoop (FR)**, who aim to go beyond such criteria to identify clients who may benefit from solidarity tariffs or bill support, often struggle and have to rely on case-by-case decisions. They face difficulties in gathering social expertise and managing customer relationships to correctly identify energy poverty without stigmatising or raising suspicion among clients.



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In Croatia, **ZEZ (HR)** faced challenges due to the absence of a formal definition of energy poverty, which hindered the development of concrete actions and securing institutional support.

Without clearer and more inclusive definitions and tools, including tools that incorporate qualitative data, these communities continue to struggle to accurately assess and assist those in energy poverty, leaving many vulnerable individuals unaddressed.

A positive development can be found in Flanders, where the Flemish federation of energy communities, **REScoop Vlaanderen (BE)**, is tasked by the Flemish Energy and Climate Agency to report on the status of work around energy poverty and solidarity within Flemish energy communities, taking steps to address the current lack of data and monitoring in this regard.



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