



ConnectHeat Community engagement for clean heat



## ENABLING FRAMEWORKS FOR ENERGY COMMUNITIES: A STATE OF PLAY

A JOINT POLICY REPORT

**JUNE 2025** 

## Abbreviations

CEC	Citizen Energy Community
CEEAG	Climate, Energy and Environmental Aid Guidelines
CRES	Centre for Renewable Energy Sources and Saving
EC	Energy community
EED	Energy Efficiency Directive
ETS	Emissions Trading Scheme
Н&С	Heating & Cooling
DSOs	Distribution Systems Operators
IEMD	Internal Electricity Market Design directive
JTF	Just Transition Fund
PV	Photovoltaic
REC	Renewable Energy Community
RED	Renewable Energy Directive
RES	Renewable Energy Sources
RRF	Recovery and Resilience Fund
SCF	Social Climate Fund
SME	Small and Medium Entreprise
TEAH	Technical Assistance Hubs
VNM	Virtual Net Metering

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# Introduction

On 26 February 2025, in a context of heightened geopolitical tensions, political instability, ongoing cost-of-living crises and mounting energy poverty, the European Commission unveiled its €100 billion Clean Industrial Deal and Action Plan for Affordable Energy, which includes a commitment to propose a Citizens Energy Package.

These actions come amidst the Commission's pledge to prioritise the implementation of existing legislation, including energy community provisions adopted under the Citizen Energy Package, supplemented by legislation adopted under the Green Deal and REPower EU. Taken together, these efforts present Europe with the opportunity to boost competitiveness while also ensuring that citizens and their energy communities are the direct beneficiaries of this transition.

As the EU aims to revitalise Europe's industry, decarbonise our energy system, improve energy affordability and enhance security of supply, it is well worth underlining that supporting energy communities equates to supporting the direct ownership of the EU's transition by citizens. Europe can boost its competitiveness while also showcasing the benefits of its social welfare system to the world if it continues to empower a growing movement for community-led renewables, bringing together citizens, SMEs and municipalities.

The movement for energy democracy is growing every day, counting at least 2 million energy citizens, as national laws make headway in transposing EU law and creating enabling frameworks. Europeans are taking ownership of the energy transition, seizing new opportunities to install renewable energy, renovate buildings, and develop clean heating systems and shared electric transport. This strengthens their local economies, reduces their energy bills, and cuts their greenhouse gas emissions – all while revitalising local participatory democracy.

**However, challenges remain.** Energy communities still constitute a relatively new concept at EU and national level, and thus transposition processes continue to present difficulties. In particular, a lack of clarity persists between energy communities as an organisational concept and the activities they can engage in, such as energy sharing and collective self-consumption. Gaps and barriers remain, such as access to funding, long permitting processes, and challenges for local authorities in providing space for energy communities in their concessions and public procurement procedures. Lastly, we note a worrying trend: new national laws are beginning to attract large incumbents, leading to corporate capture of the concept by for-profit actors.

This report, written collaboratively by four LIFE ENERCOM sister projects, LIFE LOOP, COMANAGE, Tandems and ConnectHeat, totaling 44 partners, aims to take stock of legislative progress in 11 EU countries. Where do we stand in the implementation of EU legislation relating to energy communities? What remaining challenges and barriers remain at national level? What policy change is needed?

Our joint report concludes with EU recommendations to address these obstacles, based on lessons learned on the ground, offering practical pathways to continue to empower energy communities in the EU energy market.

## **EU-level legislative framework**

The EU's legal framework for energy has been built progressively over the last decade to include provisions acknowledging and supporting energy communities.

An initial legal framework was put in place with the adoption of the Clean Energy for all Europeans legislative package, namely through the Recast Renewable Energy Directive (RED II) and the Recast Internal Electricity Market Design Directive (IEMD). This legal framework was then supplemented by the Green Deal by the Fit-for-55 legislative package, which amended the Renewable Energy Directive, and included new provisions on energy communities under the Energy Efficiency Directive. The link between energy communities and tackling energy poverty was further solidified with the Social Climate Fund Regulation.

Finally, this framework was supplemented under REPower EU with further amendments to the IEMD and the Electricity Market Design Regulation, which put in place more concrete rules for the development of national frameworks to allow energy sharing.

#### The Clean Energy Legislative Package

The RED II is at the heart of the EU legal framework for community energy, putting in place new definitions on Renewable Energy Communities (RECs) and defining the activity of renewable self-consumption.

Article 22 of the RED II also put in place a set of rights and obligations for RECs and citizens, allowing them to produce, share, sell, self-consume, and supply energy produced from renewable energy sources, including electricity, heating and cooling, and gas. Article 22 also establishes requirements for member states to assess the **potential and barriers** to the development of RECs at the national level, and put in place enabling frameworks to enable RECs, including policies and measures to remove unjustified regulatory and administrative barriers, provide tools to help RECs access finance and information, and build capacity of local authorities including cities and municipalities.

Member states are also required to tailor **national renewables support schemes** for RECs. To help countries implement this, the Commission developed new Climate, Energy and Environmental Aid Guidelines (CEEAG) containing specific provisions, including exemptions from tendering procedures, to allow them to access renewables support schemes. The CEEAG provide clear and positive options allowing member states to innovate in designing renewables support schemes and help jump-start local community ownership of renewables.

The IEMD supplements the RED II, defining Citizen Energy Communities (CECs). Article 16 of the IEMD provides CECs and citizens with rights and obligations to enable their participation across the electricity market through different activities, including production, distribution, supply, consumption, aggregation, storage, energy efficiency services, charging services for electric vehicles, as well as other energy services to its members or shareholders. Article 16 also requires member states to set up enabling frameworks to establish a **level playing field for CECs**.

Both the RED II and the IEMD acknowledge the **added benefits of energy communities to the energy transition, as well as the unique challenges they face** compared to other actors in accessing opportunities in the energy market. As such, both the RED II and the IEMD require RECs and CECs to be subject to **fair, and proportionate regulatory treatment.** This implies that energy communities have a right to proportionate regulatory treatment to ensure they do not always have to abide by the same rights and obligations as other larger market actors, especially if these are arbitrary and burdensome. This could include being able to benefit from priority grid-access for smaller installations. Several members of REScoop.eu reported the latter as a real struggle for their operations.

#### The Green Deal and the Fit-for-55 Legislative Package

These core legal concepts that support energy citizenship have been further developed under the European Green Deal. The Fit-for-55 legislative package resulted in several updates that added further opportunities for energy communities to help deliver the energy transition.

Importantly, Directive (EU) 2023/2413 (RED III) encourages member states to **support collaboration between local authorities and RECs** in building out solar PV on buildings, particularly through public procurement. Furthermore, it expands support for RECs around district heating. In particular, amendments to Article 23 require member states to "endeavour" to "promote renewables based **district heating** and cooling networks, in particular by RECs, including through regulatory measures, financing arrangements and support." Furthermore, coordination between system operators of heating and cooling must ensure dialogue regarding the use of waste heat and cold that can be produced or used by RECs involved in heating and cooling. Lastly, the revisions require member states to **ensure direct and indirect public participation** by citizens in renewables acceleration areas to ensure public acceptance.

Directive (EU) 2023/1791 (Revised Energy Efficiency Directive) defines **energy poverty** while acknowledging energy communities as a way to address energy poverty through energy efficiency. In particular, in their energy efficiency obligation schemes, member states must prioritise individuals affected by energy poverty, vulnerable customers, people in low-income households and people living in social housing. For the purpose of achieving these energy savings, member states must consider and promote the role of RECs and CECs.

The EED revisions further supplement the RED III by acknowledging energy communities in **district heating**. In particular, as part of the development of their heating and cooling plans, local authorities should assess the role of energy communities and consumer-led initiatives in contributing to the implementation of local heating and cooling projects.

Finally, the Social Climate Fund (SCF) Regulation was adopted as a way to mitigate the social impacts of imposing the European Emissions Trading Scheme to buildings and road transport under ETS 2. Interestingly, under Article 8 of the SCF Regulation, **energy communities are acknowledged as eligible beneficiaries of funds under the SCF**. This recognises and provides opportunities for energy communities to be vehicles for empowerment and a just transition, in particular providing them with potential financial resources to pursue objectives of inclusiveness and combating energy poverty.

#### **REPower EU**

Under REPowerEU, revisions to the IEMD included new provisions on **energy sharing**. These legislative amendments were important for two primary reasons. First, this constituted an acknowledgment by the EU institutions of widespread confusion amongst stakeholders and decision-makers between the concepts of energy sharing as an activity-based concept and energy communities as an organisational concept. As such, the revised IEMD created a new separate article (Article 15a) on energy sharing, **clarifying that this activity** is **open to all active customers**, either through a legal entity (i.e. an energy community), or jointly through a third party service provider or other contractual arrangement.

Second, the Clean Energy Package, while introducing the concept of energy sharing, did not define the concept concretely, and there were no concrete rules for member states to develop national frameworks to enable the activity. This led to **delays and uncertainty** around transposition and implementation of energy sharing at the national level. As such, Article 15a established more **concrete rights and obligations** for active customers engaged in energy sharing, as well as more concrete duties for distribution system operators to enable the activity. Member states have until 17 July 2026 to transpose these new requirements.

BELGIUM

## BELGIUM

Contributors: Tandems, ConnectHeat



- At the federal level, **support schemes for offshore renewable energy projects** now include provisions that enable energy communities to participate in the financing and ownership of offshore wind developments.
- The concept of Citizen Energy Communities and Renewable Energy Communities as established in the European Renewable Energy Directive 2018/2001 and the Electricity Market Directive 2019/944 was transposed into the Flemish Energy Decree in 2021 (by an amendment of the Energy Decree of 8 May 2009). Renewable energy communities can be established fairly easily and energy sharing is enabled.
- The Flemish government has put in place **Technical Assistance Hubs** (TEAH) to support local actors through coaching, tools, templates and other support in setting up RECs, including H&C supply.
- **Policy roadmap for H&C RECs**: The region of South-West Flanders, through its interlocal association for regional development (Leiedal), is developing a regional policy roadmap proposing actions for increasing the development of H&C RECs.
- **Energy Houses Initiative**: Operating at the municipal level, Energy Houses offer information, financial aid, and other support to citizens and collectives. Their services encompass energy consumption reduction, facilitation of renovations, and initiation of community solar photovoltaic (PV) projects.



- Legally, energy can be shared and administrated, but **energy sharing has high administrative and financial entry barriers**, limiting accessibility for small actors. Energy suppliers impose additional costs or requirements on energy sharing participants, rendering energy sharing financially unviable.
- **Current laws do not fully support collective investments in energy infrastructure** (e.g., shared solar panels). No incentives or support exist, although they would facilitate energy sharing within one building and could support vulnerable households.
- Weak policy framework for H&C RECs: There is currently no established framework that mandates provisions or obligations derived from these strategies to catalyse the advancement of district heating. For instance, the integration of spatial planning with energy planning faces obstacles, hindering the development of district heating initiatives.
- **Business and financial models for H&C RECs**: The prevailing market model for district heating, rooted in the electricity market, does not seamlessly align with the energy community concept, especially in the context of 5th generation district heating.
- **Engagement of consumers for H&C RECs**: District heating could be especially relevant in new settlements, however there are no programmes to engage these potential new consumers.
- Lack of knowledge and experience for H&C RECs: In particular with local authorities and social housing organisations, about the wide range of small, medium and large thermal heating systems, low and high temperatures, the roles of different operators and stakeholders, the relation to citizens and customers, etc.

### Policy recommendations

- **Simplify the legal framework** for micro- and small-scale shared energy systems, in particular those operated by thermal energy communities. Micro- and small scale energy systems require a different approach in terms of obligations, operational responsibilities and risks, etc.
- Support energy communities with **risk-absorbing instruments**, ensuring vulnerable households can participate in energy communities without financial burdens. Regulations should enable risk-free experimental environments.
- **Prevent excessive charges for shared energy**, especially for social tariff consumers and within buildings. Streamline administrative processes by assigning balancing responsibility to DSOs and automating tax collection to reduce costs.
- Create mechanisms to include vulnerable citizens in energy communities. Support the inclusion of citizens affected by energy poverty via financial mechanisms such as interest-free loans, third party investments, social inclusion funds, etc.
- **Provide a supportive framework for H&C** at the local level to support the operations of thermal energy systems, such as shared borehole thermal energy systems (in which the heat is extracted from the ground through shallow wells) and riothermia (a process allowing to recover heat from sewage water systems). This could take the form of a publicly directed local energy company supporting the operational management of the district heating system, and standardising operations to reduce operational costs and secure its long-term operation.

ENABLING FRAMEWORKS FOR ENERGY COMMUNITIES: A STATE OF PLAY

## BULGARIA

Contributors: Tandems, ConnectHeat, LIFE LOOP

### Positive policy developments

- Amendments to the Renewable Energy Act and the Energy Act in 2023 introduced a **legal definition for energy communities**: a necessary first step for compliance with EU legislation.
- **Pilot project of a H&C community**: This project, implemented in the city of Plovdiv, foresees a thermal energy community formed by the residents of 6 passive houses. Geothermal and solar energy will be utilised for heating and cooling of the houses as well as for domestic hot water. The community members shall be entitled to an equal share of the produced energy.
- The cities of Gabrovo and Burgas have launched pilot projects establishing the first two energy communities in Bulgaria, based on public-private partnerships. Both initiatives were driven by municipal authorities, showcasing their proactive role in supporting the energy transition.



- Lack of political support for promoting energy communities, posing a significant barrier to their development and wider adoption.
- No specific legal form for energy communities in national legislation: existing legal forms are used, complicating the process of establishing energy communities.

- Lack of framework for H&C communities: Absence of a clear legal and regulatory framework, coupled with a lack of locally tailored strategies and plans, and a low motivation in the civil society to actively participate in energy communities.
- Lack of capacity to share energy with community members, as reforms to liberalise the energy market are still pending.



- **Define a legal form** for energy communities to simplify their registration and operation in alignment with EU directives and best practices in community energy initiatives.
- Support the phased introduction of **virtual net metering and market liberalisation**, through the establishment of a clear regulatory framework allowing energy communities to share and trade electricity seamlessly.
- Simplify bureaucratic procedures for licensing, permits, and grid connection.
- **Develop comprehensive guidelines** outlining the steps and best practices for establishing energy communities.
- Developing contractual and legal models for cooperation.
- **Develop financial instruments** supporting pre-feasibility assessments, covering costs associated with preparatory activities to assess the viability of establishing an energy community.
- Provide tax incentives or reduced grid fees for energy communities to encourage their growth.
- **Technical assistance**: Offer technical support to energy communities, including in the H&C sector.
- **Strategic planning**: Require municipalities to prepare comprehensive H&C plans, integrating energy efficiency and renewable energy solutions, to guide local energy transitions.

CROATIA

# CROATIA

Contributors: LIFE LOOP, ConnectHeat

### Positive policy developments

- **Definitions and licensing**: Renewable Energy Community (REC) is not defined as an energy activity anymore, meaning RECs do not need to apply for a licence from the Croatian energy regulator. Instead of a licensing procedure, the law introduces a REC register, but does not define criteria for registering.
- A variant of **individual energy sharing** has been introduced by allowing individual users to share energy from remote connection points, which must be owned by the same person, but without providing details regarding the practical implementation of this option.

### Barriers to community energy

- **Current legislative changes are insufficient** to enable a sustainable development of energy communities. The lack of a clear legal framework for community energy projects has resulted in uncertainty, limiting investments and project development. Permits require lengthy administrative procedures, and legal definitions and responsibilities are often unclear or misaligned.
- Energy sharing is still not possible in practice in Croatia, although the law allows it in theory. The DSO has not adapted their technical systems to enable energy sharing accounting, and the network fee calculation methodology was not adjusted to include specifics of the energy sharing.
- Lack of supporting mechanisms for energy communities: There are no existing official supporting mechanisms (technical, legal or financial) which would encourage the development of energy initiatives and community energy projects.

 Unfavourable framework for collective self-consumption: Details providing guidance and defining rights to apply the collective self-consumption model for members of RECs and tenants in multiapartment buildings were removed, and replaced with a generic definition of self-consumption. It is now implied that when energy is produced and consumed by multiple end users (metering points) located within the same multiapartment building, the full amount of grid fees and levies will be charged for the shared energy.



- **Regulatory change**: Further adjustments in Croatia's legislation are necessary to ensure that the legal framework is flexible, clear, and barriers are removed. By the end of 2025, the new Energy market act and Renewable energy act are expected, and new changes in the legislative framework for energy communities are expected.
- **Supporting mechanisms**: Targeted subsidies, loan guarantees, crowdfunding, revolving funds, and green bonds should be developed to support community-led energy initiatives.
- **Urban planning regulations** should be amended to mandate connections to district heating networks owned by local citizens through energy communities, and simplify administrative processes for establishing community energy projects such as citizen-led renovations and energy sharing.
- Awareness-raising & training: Education and outreach campaigns aimed at informing citizens about the economic and environmental advantages of RECs should be carried out. Training programmes should be implemented to build technical capacity among key stakeholders, including citizens, municipal authorities, and community organisations, ensuring a well-coordinated approach to implementation.
- **Recognising the national coalition of energy communities**: Include the Forum of Energy Communities as a key consultative body in legislative and strategic processes.
- **Grid access**: Reserve grid capacity, simplify procedures, and incentivise collective self-consumption and community projects.

CYPRUS

# CYPRUS

Contributors: LIFE LOOP

### Positive policy developments

- Regulatory framework on energy communities: in October 2021, the House of Representatives enacted the Law Regulating the Electricity Market of 2021, transposing provisions from Directive (EU) 2019/944. This law includes definitions for Renewable Energy Communities (RECs) and Citizen Energy Communities (CECs) and outlines the responsibilities of the Cyprus Energy Regulatory Authority (CERA) to draft an enabling framework for these communities, ensuring their non-discriminatory participation in the energy market.
- In 2022, Cyprus partially transposed Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources through the Law on the Promotion and Encouragement of the Use of Renewable Energy Sources (Law 107(I)/2022). This law includes definitions for RECs and mandates CERA to draft regulations establishing an enabling framework for these communities. Additionally, CERA is tasked with assessing barriers and potential for RECs in Cyprus and considering their specificities when developing support schemes.



#### Barriers to community energy

- Entity constraints in the regulatory framework: The current regulatory framework in Cyprus does not explicitly recognise energy communities as distinct legal entities, but allows energy communities to be formed as companies, cooperatives or non-governmental organisations. This restriction creates significant barriers for the formation and operation of energy communities, since these legal entities do not cover the full spectrum of their operations.
- **Development of support mechanisms for ECs**: There are no policy initiatives focused on establishing energy communities supported by public authorities, facilitating local and regional energy policy objectives through active citizen engagement.
- **Absence of support services**, such as One-Stop-Shops, to provide technical assistance and simplify decision-making processes.
- **Grid capacity and infrastructure**: Cyprus faces infrastructural challenges in becoming a regional energy hub due to a lack of infrastructure to transport and export energy.
- **Energy communities and storage**: Energy communities are not being promoted in energy policies regarding storage.
- **Public awareness and engagement**: There is a general lack of public awareness and understanding of the benefits and functioning of energy communities. This results in limited citizen ownership, participation, and support, which are crucial for the success of such initiatives.



- **Define a tailored legal status to clarify the governance structures of energy communities**, enabling them to enter into contracts, and own and manage energy assets effectively. This would facilitate the participation of ECs in the energy market, their access to finance, and their capacity to benefit from support schemes designed for renewable energy initiatives.
- **Protect energy communities from corporate capture**, by clarifying and controlling the bottom-up, citizen-led nature of these initiatives.
- Invest in grid infrastructure to adapt it to decentralised renewable energy generation, to enable energy communities to connect to the national grid.
- **Develop support mechanisms**, financial and technical, aiming to develop energy communities in Cyprus.

GERMANY

# GERMANY

Contributor: ConnectHeat

### Positive policy developments

- Acceleration of planning and approval procedures in the coalition agreement (plan to implement EU-REDIII in German law). The coalition agreement of 10 April 2025 says: "Reducing bureaucracy and faster and better planning and approval procedures are crucial to the success of the energy transition. To this end, we are resolutely continuing the federal-state process to implement the Pact for Accelerating Planning, Implementation and Authorization, developing it further and swiftly implementing the EU-Renewable Energy Directive III" (translated).
- The National Heat Planning Act (2024) will make municipal heat planning mandatory from 2026/2028, recognising energy communities as stakeholders that can and should be included in the planning process in accordance with §7 and §21 of the Heat Planning Act.



- Lack of availability in land: There is a lack of suitable land in densely built-up areas, and in rural regions, as local heating projects compete with agriculture, nature conservation or housing development.
- Lack of legal equality between electricity and H&C communities: Although the EU defines Renewable Energy Communities in RED II, the legal situation for the shared use of heat, e.g. through local heating networks, is not specifically regulated in Germany.

• Long approval procedures for planning permission for renewable energy systems and heat **storage**: For solar thermal systems, heat storage or heating networks, it often takes years from the idea to implementation.



- Recognise ground-mounted solar thermal / PV systems as a positive ecological contribution to the land. Amend the building code to guarantee consistent recognition and consideration by local building authorities. Ground-mounted systems, especially large-scale solar thermal systems, should be legally categorised as 'ecologically advantageous'. This would facilitate authorisation processes.
- Stronger legal integration of H&C communities in municipal heat planning via legally anchored participation procedures (not yet legally binding for municipalities). Extension of the Energy Industry Act (EnWG) or the Buildings Energy Act (GEG), to regulate joint heat generation and distribution and the introduction of a legal form or special regulation for heat energy communities.
- Adapt funding programmes specifically for shared heating projects: The funding scheme for district heating (BEW), promotional bank KfW and other state programmes should create explicit funding lines for H&C communities, with simplified access (simpler applications, grant instead of loan, with less requirements than for professionally driven large-scale projects).

GREECE

Contributor: LIFE LOOP



- **The revision of the institutional framework** with Law 5037/2023. This law introduced provisions for two new definitions, Renewable Energy Communities (RECs) and Citizen Energy Communities (CECs), transposing the relevant EU provisions.
- **The reservation of 2 GW of grid capacity** for self-production projects, energy communities composed of citizens and small to medium-sized enterprises (SMEs).
- The introduction of a legal framework for virtual net-billing for self-production by energy communities, after a one-year legal vacuum.
- National Social Climate Plan: In the two public consultations that were held for the Plan, there were many references to the EC model as an optimal way to support energy-vulnerable households and to make the energy transition more just, inclusive, and sustainable. The draft Plan should be published within May 2025 for public comments.
- New financing programmes for self-production: in September 2023, the first call for selfproduction projects by ECs in transition areas was launched under the Just Development Transition Program 2021–2027, with a total budget of €41.795 million.
- Broader political support for energy communities.

GREECE



- **Restrictive virtual net metering changes** have significantly impacted local ECs. Recent legislation has removed the option of virtual net-metering from Greek law, although EC's virtual net-metering plants correspond to only 0.3% of total PV power in Greece. This particularly affects citizen-led energy communities, municipalities and vulnerable households.
- **Insufficient details for virtual net-billing**: many implementation questions remain unresolved, as the amendment to the ministerial decision defining the self-production framework is still pending.
- **Grid capacity limitations in Crete** have led to their monopolisation by large-scale investors. Electrical and geographical space for new renewable energy projects on the island has been largely occupied by wind park applications and licenses owned by a small number of major investors. Many applications have remained under evaluation since 2011, exceeding legal time limits, while existing licenses have been extended through questionable regulatory changes (Law 4821/2021, Article 100 and Law 5151/2024, Article 29) that removed obligations for these investors to contribute to critical grid infrastructure development. Beyond violating principles of fair competition, these large-scale developments threaten to negatively impact the natural environment and local communities on the island.
- Limited access to funding and subsidies: citizen and SME-based energy communities are often excluded from eligible beneficiaries to existing programmes, limiting their ability to implement renewable energy projects and contribute to the energy transition.
- A lack of an updated spatial planning framework for the siting of renewable projects and difficulties in the licensing procedures for projects.
- Failing to connect municipalities and citizens under the umbrella of energy communities. The Greek Ministry of Energy and Environment has introduced a programme named Apollon, aimed at mitigating energy poverty and reducing energy costs for municipalities. The ministry should facilitate the creation of CECs across regions for the benefit of municipalities and energy-vulnerable citizens, through solar self-production plants, developed by private energy companies, under the new virtual net-billing model or through PPAs. However, Apollon does not enhance collaboration between stakeholders due to its closed nature. Using the CEC model in this top-down way could seriously damage the integrity of energy communities by violating several of the seven cooperative principles. National and EU legislation stipulate CECs must provide for free, open, and equal participation in the community and its projects: Apollon's provision for effectively closed communities contradicts these principles.<sup>1</sup> The model's reliance on external financing and management, while the ministry itself retains the full control over the communities' project implementation and financing, also undermines the principles of autonomy and independence, as well as member economic participation. Finally, the above-mentioned programme will be funded with €100 million, which, according to the Greek National Recovery and Resilience Plan, was originally intended to support energy communities in Greece-thereby depriving one of the few available funding opportunities for energy communities in the country.

<sup>&</sup>lt;sup>1</sup> These include Voluntary and open membership, Democratic member control, Economic participation through direct ownership, Autonomy and independence, Education, training and information, Cooperation among cooperatives, Concern for community.



- **Implement a comprehensive enabling institutional framework** in favour of ECs. This should include setting an overarching target for capacity of community-led renewables by 2030, 2040, and 2050, which should guide subsequent policy for renewables development.
- **Recognise DESMI, the new found national coalition of energy communities**, as a key actor in the growth of the community energy movement. Ensure that Desmi is properly included and consulted on all future strategic and policy decisions regarding the community energy movement in Greece.
- **Reject applications for large wind farm licenses** that have remained under evaluation for over 12 years.
- Simplify and stabilise the legal framework: Uncertainty surrounding the transition from the old legal framework to the new one (Law 5037/2023) creates issues. A clear and simplified process is needed for existing ECs to adapt, along with a stable policy environment to ensure operating rules do not change constantly.
- Enable the installation of PV plants for virtual energy net metering for vulnerable citizens, local authorities and energy communities.
- **Create a platform dedicated to project licensing**, including all relevant legislation and providing guidance to investors. This would avoid the siting of projects in unsuitable areas, accelerate licensing procedures and benefit researchers and licensing authorities.
- **Guaranteed access to the grid and the electricity network**: a specific percentage of grid capacity should be reserved for ECs to ensure equal access to the network. Connection procedures should be accelerated, with special incentives for self-production and energy storage projects.
- **Development of targeted financial tools**: specific subsidy programmes and low-interest loans for citizen and SME-based energy communities should be created to facilitate the implementation of renewable energy and self-consumption projects. Special incentives could be offered to communities operating in energy-vulnerable areas.
- Annual Assessment of Barriers and Opportunities: Pursuant to Articles 59 and 102 of Law 5037/2023, the Centre for Renewable Energy Sources and Saving (CRES) conducts an annual assessment of the barriers and development potential for RECs and CECs. This assessment of barriers is a legal obligation of the Greek government, as stipulated in Article 22(3) of the Renewable Energy Directive (EU) 2018/2001. Based on its findings, and if deemed necessary, CRES submits recommendations to the Minister of Environment and Energy regarding measures and incentives to promote and support their development. This assessment process must be initiated without delay, with the meaningful and active involvement of DESMI, through the establishment of a transparent and structured dialogue among DESMI, CRES, and the Ministry of Environment and Energy, to jointly identify solutions to the existing barriers.





Contributors: Comanage, ConnectHeat, LIFE LOOP

### Positive policy developments

- Legal recognition of energy communities: Italy formally adopted the EU Renewable Energy Directive (RED II), allowing the creation of Renewable Energy Communities (Legislative Decree 199/2021).
- **Incentive mechanisms**: Ministerial Decree No. 414/2023 introduced financial support and incentives for shared energy within RECs, aligning with the PNRR (National Recovery and Resilience Plan) funding for start-up investments (feasibility studies, plants installation).
- **Expansion of participation criteria and geographical constraints**: The national framework now allows medium-sized businesses and municipalities to join RECs, enhancing local engagement in energy transition efforts. The geographical boundaries are now broad enough to create RECs of different sizes and across different territories (primary station areas for energy sharing, up to national territory for juridical entities domain).
- **Regional policy roadmap for Friuli-Venezia Giulia**: Through the regional energy agency APE FVG, a specific policy roadmap for H&C communities is under development.



- **Grid infrastructure limitations**: The capacity of the distribution network is often insufficient to support energy sharing models, and the concept of energy sharing remains primarily virtual.
- **Regulatory complexity**: Administrative procedures to establish and activate RECs remain bureaucratic and slow for bottom-up initiatives.

ITALY

- **Difficulties to access data and to interact with distributors**: Consumers experience difficulties and delays to access their own real-time consumption data, even where buildings are equipped with new/smart meters. The interaction with distributors is often challenging and unbalanced, including for procedures for grid connections of new power plants.
- **Uncertainty in economic returns**: The complex incentive scheme introduced by Decree MASE No. 414/2023 creates financial uncertainties for investors. Incentives are uncertain in their implementation and of low intensity, limiting the economic attractiveness of RECs.
- Local authority engagement: Municipalities often have the financial resources to support RECs but lack the necessary technical expertise, whereas civil society groups possess the knowledge and motivation but lack funding. The direct participation of local authorities provides guarantees, but adds complexity to all procedures (e.g. public procurement procedures).
- Limited awareness and participation: Citizens and businesses often have limited knowledge about how to set up, participate and benefit from a REC. If people perceive REC participation solely as a means for economic return or savings, they could be disappointed and demotivated.
- Incomplete regulatory framework: Lack of reference to the possibility of including H&C supply in RECs.



- **Streamline administrative processes**: Simplify bureaucratic requirements and administrative procedures for REC creation and activation, making it easier for civil society groups to self-organise independently.
- **Enhance grid modernisation**: Invest in upgrading the electricity distribution grid to better accommodate distributed energy generation.
- **Increase and stabilise incentives** to improve the intensity and reliability of financial incentives to make RECs economically viable in the long term.
- Secure dedicated funding for REC development: Ensure financial support not only for energy installations and other activities by energy communities but also for the startup phase of REC initiatives, particularly for grassroots groups and informal organisations.
- **Increase local government support**: Allocate funds and technical assistance to municipalities and federations of energy communities to encourage REC development and help bridge the expertise gap.
- **Promote awareness campaigns**: Educate citizens, local authorities and SMEs on the benefits of RECs through public information programmes and training.
- **Specific actions for H&C RECs**: Explicit inclusion of community-led heating and cooling and citizenled renovations in the RECs legislation, promotion of good practices, support to the developers.
- **Targeted measures to engage vulnerable consumers** by fostering collaboration with social services and third sector associations dealing with vulnerable groups.

THE NETHERLANDS

## THE NETHERLANDS

Contributor: Tandems



- A new energy law (2024) defines energy communities, allowing them to operate more flexibly.
- **Energy sharing inclusion**: The new law recognises energy sharing as an activity, with proposed amendments to allow free supplier choice, in better alignment with EU directives.
- **Support for energy cooperatives**: Thanks to a strong history of cooperatives in the Netherlands, a variety of local, regional, and national support programmes support energy communities' development.



- **Energy sharing restrictions**: Current regulations require participants to share the same energy supplier, limiting consumer freedom and contradicting EU directives.
- **Grid and supplier barriers**: Energy sharing implementation requires system adjustments for grid operators and suppliers, leading to high costs and long delays.
- **Slow implementation**: The new energy law will only take effect in 2026, impacting regulatory clarity and delaying the benefits for energy communities.
- **Local ownership uncertainty**: A lack of clear communication, transparency, and guidelines for community-led wind projects causes delays and resistance from landowners.

• The end of net metering (2027) could create financial issues for solar energy owners before energy sharing mechanisms are fully in place.



- **Facilitate free supplier choice**: Implement the proposed energy law amendments ensuring energy communities can share electricity without supplier restrictions.
- **Reduce administrative burdens**: Simplify energy-sharing processes by integrating shared volumes into grid allocation and automating settlements to lower costs.
- **Enhance local ownership frameworks**: Clearly define participation rules, communicate benefits transparently, and engage landowners early to promote wind energy initiatives.
- **Support energy communities with funding and tools**: Provide subsidies for technical support, data management, and virtual feed-in options to enhance accessibility and participation.
- Accelerate implementation of energy sharing policies: Expedite the timeline for energy-sharing regulations to ensure a smooth transition post-net metering phase-out.

## POLAND

Contributor: Comanage

### Positive policy developments

• **Planned removal of restrictions**: The Ministry of Climate and Environment has published a draft amendment to the law, which provides for the possibility of establishing energy cooperatives in urban municipalities. Previous regulations blocked this possibility, which limited the development of energy cooperatives in cities. This could help increase the number of energy cooperatives in Poland.



- **Regulatory complexity**: The Polish legal framework recognises seven different forms of energy communities, which can create confusion for stakeholders, leading to difficulties in understanding the distinctions, benefits, and requirements of each form. This complexity could deter potential participants due to perceived administrative burden and lack of clarity.
- **Municipalities often lack the knowledge** to establish and manage energy communities effectively: this can hinder the development and implementation of energy communities.
- **Current regulations exclude cities**, restricting the formation of energy cooperatives to rural and urban-rural municipalities, which prevents urban areas from benefiting from the cooperative model that has proven successful in rural settings.



- Introduce preferential credits, grants, and VAT exemptions for energy cooperatives. Currently, access to financing is limited, which hinders the development of new initiatives.
- **Simplify processes**: Shorten delays to register a cooperative and simplify the procedures for connecting to the electricity grid. Paperwork and long timelines for connection decisions discourage the establishment of new cooperatives.
- Enable cooperatives to sell energy surpluses to the grid on market terms, instead of a limited billing system. Cooperatives could become more self-sufficient and profitable if they had more freedom to sell energy.
- Launch local education and counseling programmes for communities interested in starting energy cooperatives. Many people do not know how to start a cooperative or understand their benefits. Local support would increase interest in this model.

ROMANIA

# ROMANIA

Contributor: LIFE LOOP



- **Updated Energy Law**: Romania's draft law transposing RED III into national legislation is currently under interministerial review. The draft includes several provisions beneficial to energy communities, such as the regulation of energy sharing.
- In an official discussion with the Ministry of Energy, officials expressed interest in creating a **pilot** energy community to assess its functioning and explore legislative support measures. This initiative
   could take inspiration from pilot projects installing PV systems on municipal rooftops of the cities of
   Bistrița and Tulcea.

## Barriers to community energy

- Although the legislative proposal mentioned above is in progress, **secondary legislation will still be needed** after its adoption. The draft clearly states that ANRE (the national regulator) is responsible for developing regulations and establishing a registry for energy communities. Based on past experience, this process could take considerable time.
- Lack of funding for energy communities: Currently, energy communities are not eligible for any funding programmes or contracts for schemes and subsidies.

• **Absence of microgrid legislation**: This gap is particularly concerning for new urban developments. Housing developers seek the ability to manage microgrids and have a single point of interaction with the distribution operator. A virtual net metering system could provide a solution.



- Amend the Energy Law to facilitate the establishment of ECs, for example by increasing the 50 kW threshold below which communities are exempt from certain taxes.
- **Develop secondary legislation to enable the development of energy communities** as well as their energy sharing activities among its members.
- Exempt members of RECs from the balancing responsibility and imbalance costs associated with the production and consumption of energy from installations below 400 kW, the balancing responsibility and imbalance costs associated with the production, storage, and consumption of energy shared among the members of an energy community within a 15-minute interval, the purchase of green certificates for energy produced from renewable sources, and taxes on energy produced by energy communities. Calculations for imbalances are currently untransparent and unpredictable, raising significant challenges in terms of price volatility. Modernising these rules and increasing transparency on how imbalances are calculated is needed: a single invoice must not push an energy community into insolvency.
- Set clear deadlines for grid operators to register energy communities and install smart meters for those without them.
- **Revise funding guidelines** (e.g., Environmental Fund Administration, REPowerEU, Modernisation Fund, JTF) through broad stakeholder consultations to unlock investments for energy communities and their national and EU federations.



Contributors: Comanage, ConnectHeat

### Positive policy developments

- A pilot case for H&C communities is being developed in the area of Playa del Inglés, in the municipality of San Bartolomé de Tirajana, in the Gran Canaria island (Canary Island). This project aims at pioneering solutions for thermal renewable energy communities within tourist areas which are characterised by the coexistence of residential buildings and tourist SMEs and, therefore, act as an example to drive legislation change with a bottom up-approach.
- **Policy roadmap**: A regional roadmap for the tourist areas in Canary Islands will be ready in summer 2025, highlighting the key actions planned for fostering the creation of H&C communities in the area.
- Pilot case Barcelona Metropolitan Area (AMB): AMB is promoting the transition towards sustainable energy models, with a focus on decentralised renewable energy production and self-consumption. The emergence of energy communities (ECs) presents an opportunity to strengthen local energy resilience, reduce energy poverty, and engage citizens in the energy transition. However, the implementation of ECs faces regulatory, technical, and social barriers. La Teulada, as an advisory service, has already provided guidance and technical support to individuals and collectives interested in photovoltaic self-consumption. Expanding its role to support the creation and management of energy communities can accelerate their deployment and ensure their long-term sustainability.



#### Barriers to community energy

- Arbitrary range restrictions to shared self-consumption: Spain has a clear legal framework for shared self-consumption, limiting it to a 2 km radius, without providing technical justifications for this limit. Countries like France and Portugal allow larger distances (5, 10 or 20 km depending on tension levels), enabling more flexible and scalable energy communities.
- **Technical barriers in grid connection**: DSOs face difficulties and delays in processing shared selfconsumption connections. The lack of standardised procedures, slow administrative processes, and grid capacity limitations hinder the seamless integration of local energy communities. In some cases, DSOs impose additional technical requirements that increase costs and complexity for participants.
- **Rigid economic balancing mechanism**: The mechanism to distribute energy among participants is currently based on fixed hourly coefficients, rather than a dynamic system adjusting in real-time to actual production and consumption. This system is less efficient, leading to limited economic savings by the users, making it harder to integrate storage systems and demand-side management solutions.
- **Regulatory gap for H&C**: The absence of a clear policy or incentive frameworks for H&C communities hinders the development of projects.
- Lack of know-how for H&C: Technical actors and final users lack information on H&C communities and their benefits.
- **Business model gap**: Lack of standardised business models for the exploitation of community district heating systems.



- **Expand the maximum radius for shared self-consumption** from the current 2 km limit to at least 5 km, in line with neighboring countries like France and Portugal. This change would allow for a greater number of participants, facilitating the inclusion of more residential, municipal, and commercial consumers in energy communities. The regulation should introduce flexibility based on grid capacity, ensuring that shared self-consumption is optimised without compromising network stability. Additionally, the law should establish clear technical guidelines for DSOs to simplify and standardise the connection process, reducing delays and administrative burdens.
- Accelerate the development and implementation of local H&C planning as a link to H&C communities.
- **Improve knowledge about district heating** as a key element for decarbonising tourist areas and make local authorities the driving force behind new networks.

- Implement a dynamic balancing mechanism to replace the current rigid economic balancing mechanism based on fixed hourly coefficients with a dynamic allocation system. The existing model does not reflect real-time consumption and production patterns, leading to inefficiencies and economic losses for participants. By allowing real-time adjustments through smart metering and digital platforms, energy could be distributed more effectively among community members. This change would also incentivise energy storage integration, enabling surplus energy to be redistributed according to actual demand, improving self-sufficiency and reducing grid congestion.
- **Regulatory measures to incentivise DSOs to enable smoother grid connections**: Standardised and simplified grid connection procedures should be established at the national level. This regulation would define clear technical criteria, maximum response times, and transparent administrative steps for processing shared self-consumption connections. Additionally, financial incentives or penalties should be introduced to encourage DSOs to prioritise and expedite the integration of energy communities.
- **Waste heat**: Promote the recovery of waste heat providing incentives for the discharge of surplus heat to district heating systems.

## EU RECOMMENDATIONS

Policy processes at the EU level are key to support the development of energy communities across Europe. After six years of transposition and implementation, **many conclusions can be drawn from barriers encountered on the ground to improve and refine EU legislation**.

To ensure an inclusive, socially popular energy transition, the EU must continue to advance its social economy by upholding the principles of the Clean Energy Package and the Fit for 55 Package, and centre community-led approaches in the upcoming Clean Industrial Deal, the Affordable Action Plan, and the Citizen Energy Package. **The transition will either be just, or there just won't be a transition**.

## Transposition and implementation of existing EU legislation on energy communities

Our overview of national community energy legislation in Europe underlines the persisting challenges of regulatory and technical barriers hindering the development of energy communities. European institutions have a key role to play to improve the implementation of enabling frameworks and support mechanisms in member states.

- Work with national regulators and ministries to ensure proper oversight of registration and compliance with EU definitions of RECs and CECs to protect energy communities from corporate capture, particularly when it comes to providing incentives and finance.
- Provide further technical support to member states in achieving a full and effective transposition and implementation of Article 22 of the **Renewables Directive** and Article 16 of the **Electricity Directive**, in particular the development of enabling frameworks at national level for energy communities.

- Ensure proper and timely transposition of the new **Fit for 55** provisions on energy communities, in particular the EED, EPBD and RED III provisions that acknowledge RECs in district heating, including in the development of local heating plans.
- Ensure proper and timely transposition of the new Electricity Market Design Directive's provisions on **energy sharing** so that energy communities and other market actors have clear rules for how they can engage and benefit from energy sharing.

#### New EU legislation

Alongside implementation of existing measures, much can be done at the European level to continue to support the development of energy communities.

- Set an EU level policy objective for community ownership of renewable energy projects.
- Ensure the **Citizens Energy Package** includes energy communities as one of its main pillars, including the creation of a EU-level strategy to coordinate and support the development of energy communities, along with guidance to member states on how they should build out their enabling frameworks for energy communities.
- As part of the **Affordable Energy Action Plan** and the **Affordable Housing Action Plan**, support community efforts to improve the quality of housing, including citizen-led renovations and community-led heating and cooling, through district heating or individual solutions like heat pumps.
- Revise the **Public Procurement Directives** to bring them in line with the EU's climate and energy objectives, including the need for collaboration between local authorities and energy communities in rolling out renewables production at the local level.
- Guarantee **fair access to grids** for energy communities by revising EU rules that require DSOs to take into account the specificity of renewable energy communities in their grid connection procedures, queue regulations, and financing of grid connections.

#### EU funding

Financing is often a key challenge for new actors in the energy market. The EU can play an important role in providing energy communities with the funds needed to start their renewable initiatives and strengthen local economies.

• **Commit EU funds** for the development of energy communities, including Cohesion funding, through robust criteria accounting for inclusiveness and citizen participation. Ensure public calls for funding have robust social criteria to tackle corporate capture, and reward openness to different types of stakeholders in an energy community, including citizens, municipalities, and SMEs.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> CEE Bankwatch. Selection criteria for energy communities: a practical checklist. Available at: <u>https://bankwatch.org/publication/selection-crite-ria-for-energy-communities-a-practical-checklist</u>

- Leverage the Social Climate Fund to promote community energy projects that involve citizens and local authorities and whose primary purpose is to tackle energy poverty.<sup>3</sup>
- Encourage cooperation between municipalities and energy communities by **supporting local authorities in funding**, sharing of best practices, and administrative support.
- Leverage public finance to de-risk energy community projects, including by **simplifying State Aid rules**, as well as decreasing the interest rates of bank loans for energy community projects.
- **Simplify access to funds for community energy projects**, by setting up Single Contact Points (One Stop Shops) for energy communities to apply.
- Support community energy secondary structures (such as federations). These provide crucial technical assistance to emerging energy communities on the ground, including for projects that involve local authorities.<sup>4</sup> Mature community energy secondary structures also tend to create revolving funds (or 'Community Energy Financing Schemes') that crowd-in additional private capital, with a leverage factor of >40.<sup>5</sup>
- Leverage the negotiations around the next EU budget to support energy communities. The EU budget should be larger, greener and more social,<sup>6</sup> to respond to the emerging needs of the current political landscape. Key research and innovation programmes for climate and energy, such as LIFE (CET) and Horizon, must be maintained and enhanced allowing for local actors to take up an active role in tomorrow's energy system.

- LIFE LOOP <u>https://energy-cities.eu/project/lifeloop/</u>
- ConnectHeat <a href="https://connectheat.ambienteitalia.it/">https://connectheat.ambienteitalia.it/</a>
- COMANAGE <u>https://comanage.spindoxlabs.com/home</u>
- TANDEMS https://lifetandems.eu/

<sup>&</sup>lt;sup>3</sup> The Commission guidance for the drafting of National Social Climate Plans emphasises energy communities as eligible investments to promote local energy sharing, clean heating, energy efficiency and storage. Available at: <u>https://commission.europa.eu/publications/guidance-social-clima-te-plans\_en</u>

 <sup>&</sup>lt;sup>4</sup> Through the LIFE ACCE project the Spanish community energy organisation Goiener is setting up a CEFS that connects energy communities with local municipalities. The former fund, maintain and manage collective solar rooftop projects installed on municipal buildings. The local authority then pays a service fee to the community, while the produced energy is shared between all stakeholders.
 <sup>5</sup> https://acce.rescoop.eu/resources/enabling-framework-report

<sup>&</sup>lt;sup>6</sup> Public Statement: A Social and Green Investment Plan for a prosperous and just transition. Available at: <u>https://caneurope.org/public-statement-a-social-and-green-investment-plan-for-a-prosperous-and-just-transition/</u>













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