

AUCTIONS FOR ENERGY COMMUNITIES



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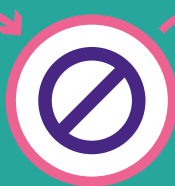
WHY ARE ENERGY COMMUNITIES CENTRAL TO ACHIEVING THE EU'S CLIMATE AMBITIONS?



The EU needs to rapidly accelerate its decarbonisation efforts



Renewable energy projects are a central part of these efforts



And yet, citizen opposition to renewable energy exists and risks derailing the EU's efforts



Energy communities and citizen engagement are therefore necessary to achieving the EU's climate ambitions

CURRENTLY THERE ARE OVER 3.500 ACTIVE ENERGY COMMUNITIES IN EUROPE.

- JRC Report, "Energy communities: An overview of energy and social innovation," 2020

INTRODUCTION

The EU Renewable Energy Directive (RED-II) lays out a vision of a more “citizen-centric” energy paradigm in Europe, and includes a number of guidelines for encouraging bottom-up, citizen-driven renewable energy development, including energy communities. There is a growing realization across Europe that citizen and community engagement will be critical to achieving the profound transformation of the EU’s energy supply infrastructure required to meet climate and energy security objectives. Meanwhile opposition to renewable energy projects exists in many parts of the EU, underscoring the urgency and importance of developing a more citizen- and community-centred energy transition.

While some Member States such as Germany and Denmark have a long tradition of citizen and community-based renewable energy development, other such as Greece and Croatia are just starting to build momentum. Moreover, others such as Bulgaria and Romania only feature a few scattered examples that could be considered energy communities, largely based around the leadership of municipalities.

While there is no universally accepted definition of an energy community, energy communities typically share 7 principles and 4 key characteristics:

THE 7 PRINCIPLES

- ✓ **VOLUNTARY AND OPEN MEMBERSHIP**
- ✓ **DEMOCRATIC MEMBER CONTROL**
- ✓ **MEMBER ECONOMIC PARTICIPATION**
- ✓ **AUTONOMY AND INDEPENDENCE**
- ✓ **EDUCATION, TRAINING AND INFORMATION**
- ✓ **CO-OPERATION AMONG CO-OPERATIVES**
- ✓ **CONCERN FOR COMMUNITY**

4 KEY CHARACTERISTICS

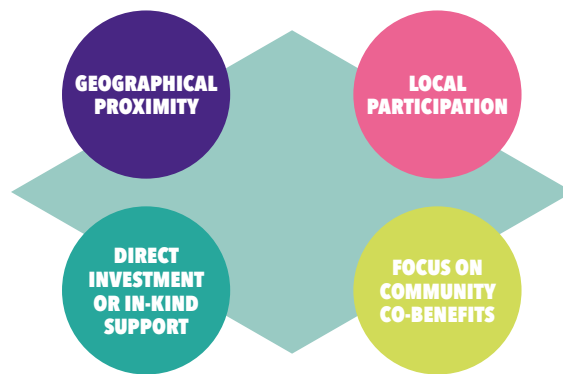


FIGURE 1: SEVEN PRINCIPLES & FOUR KEY CHARACTERISTICS OF ENERGY COMMUNITIES

Source: based on Amazo et al. (2020). http://aures2project.eu/wpcontent/uploads/2020/02/AURES_IL_D4_2_energy_communities.pdf



FOEE'S APPROACH

Community ownership is about creating jobs, boosting local investment, providing services such as education, encouraging citizens to save energy, and fighting against energy poverty. We believe that a decentralised and 100% renewable energy system is both possible and necessary – while our energy demand must decrease.

All citizens must have a fair opportunity to take ownership and benefit from participating in the energy transition.

Energy communities can be a powerful tool in the transition to a more participatory and just energy transition. The vision of Friends of the Earth Europe is an energy transition where nobody is left behind, and where the energy transition becomes a vehicle for tackling other urgent social issues such as energy poverty, all while fostering greater solidarity across society.

In recent years, there has been a trend toward the use of competitive bidding procedures (auctions) in order both to set the level of compensation that project proponents receive and to determine who ultimately obtains the permission to build a project. Energy communities have been affected by this change with the result that many have had difficulties realizing projects, hindering the shift to a more citizen- and community-centric energy system in Europe.

In this short brief, we provide a critical analysis of the use of auctions for energy communities as well as our recommendations for policymakers about how energy communities can become a more central part of Member States' national energy transitions.

ENERGY COMMUNITIES - THEIR IMPORTANCE TO THE TRANSITION

Historically, energy communities have focused mostly on local renewable energy projects such as wind farms, biogas or biomass projects, or solar PV, as well as community initiatives such as district heating projects. However, new activities supported by new business models and the greater use of smart and digital technologies are re-defining the range of activities and services that energy communities can provide in the near future.

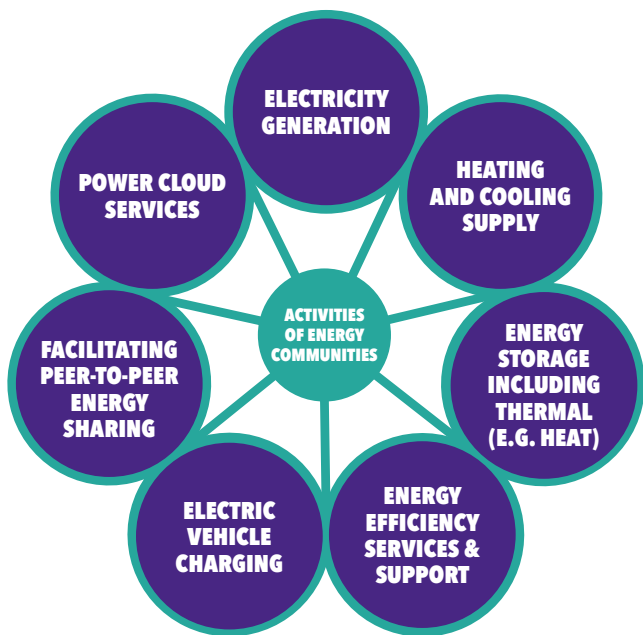


FIGURE 2: EXISTING AND POTENTIAL ACTIVITIES FOR THE ENERGY COMMUNITIES



Although the rules in place in most EU Member States are still focused primarily on power generation, **significant changes are afoot**: energy communities in Belgium and Austria have begun offering electric vehicle charging services, while in Portugal, the government has recently passed new regulations to facilitate peer-to-peer energy sharing, which can make it easier for members of an energy community to share electricity amongst themselves rather than exporting their surplus to the grid. Allowing the sharing of electricity within a group of members to an energy community can provide significant energy savings for consumers, helping mitigate energy poverty while encouraging more participation and engagement by turning consumers into prosumers.

Many energy communities across the U.S. as well as Europe have also been developed in recent years specifically to help tackle energy poverty and to reduce energy and heating costs for low-income and other underprivileged groups.¹ For instance, over a dozen U.S. states have already included low-income provisions in their community solar policies as part of efforts to make it easier for low-income households to benefit from the stable and affordable electricity prices that solar power offers. Among the options implemented in the U.S. is allowing citizens to reduce their energy bill on a one-to-one basis for every kWh produced by the energy community project, special bonuses or premiums to encourage participation from low-income residents, as well as requirements that a certain share of community-owned projects be dedicated to supporting low-income citizens.²

In a related approach, **collective self-consumption** (using electricity generated at a larger facility to power a number of homes and businesses whether “virtually”, or on-site, such as in multi-unit residential buildings), is now possible in several energy communities throughout Europe, including Denmark, Sweden, Greece, Italy, Spain, Austria, Luxembourg, Slovakia, Slovenia and Germany.³ The recently adopted RED-II envisions a role for all of these different models, and more.

SO FAR, MOST MEMBER STATES ARE STILL AT THE BEGINNING OF DEVELOPING EFFECTIVE AND TARGETED POLICIES TO SUPPORT THE TRANSITION TO A MORE BOTTOM-UP AND CITIZEN-CENTRIC ENERGY SYSTEM.



AUCTIONS HAVE SO FAR FAILED TO ENABLE ENERGY COMMUNITIES TO FLOURISH

Much of the attention among policymakers in the EU continues to focus on how auctions can be improved or adapted in order to enable energy communities to flourish. And yet, most stakeholder and observers agree that the experiences gathered thus far using auctions to encourage citizen- and community-financed renewable energy projects have been disappointing.

Energy communities that have tried to participate within auctions in the EU in countries ranging from Germany, France, Spain, the Netherlands and beyond have all faced major challenges, including, among others the following:

The **auction procedures often create higher administrative costs and barriers** for energy communities compared to traditional feed-in tariffs that provided predictable revenue streams for projects.

Auctions often include detailed financial and technical pre-qualification requirements that are difficult for many aspiring energy communities to meet.

Although there are some exceptions, such as Greece, Germany or France, **auctions have frequently applied a size-neutral approach**: the lowest bidders are often the ones developing larger-scale projects. By contrast, most energy community projects tend to be small or medium in size, making it difficult for them to compete on an even playing field with the larger projects. According to the new Climate, Environment and Aid Guidelines adopted in December 2021, energy communities projects using solar PV up to 6MW in size will be exempt from needing to participate in auctions, while for wind projects, the threshold is now 18MW.

The move away from the predictable remuneration offered previously under feed-in tariffs has entailed **higher financial and revenue risks**, while the direct competition on price between larger and smaller-scale projects has tended to reduce margins, making community energy projects difficult to realize on a cost-covering basis. This, in turn, has made it difficult for projects to obtain financing, especially from traditional lenders such as banks, while increasing the risks for local community members who are often investing a portion of their hard-earned savings in the project.

Auction procedures often include fixed procurement and development timelines, requiring projects to be completed by a certain date. Such deadlines discriminate against energy community projects as it often takes longer to mount such projects than projects backed by commercial developers.

Unlike commercial developers, **community energy projects participants are typically unable to spread the risks of investing in a renewable energy project across multiple projects**.



Taken together, it is becoming increasingly clear that it is exceptionally difficult for energy communities to compete with commercial, for-profit companies and renewable energy developers.

In short, experiences gathered at the EU-level to date indicate that despite the considerable lengths to which some Member States have gone to adjust auction design to foster energy communities, some of the downsides persist and have proved difficult to overcome, even when energy communities are provided with preferential treatment.⁴ As a result, interest has grown in alternative policies, while remaining aligned with the State Aid Guidelines and other EU requirements (see Table below).

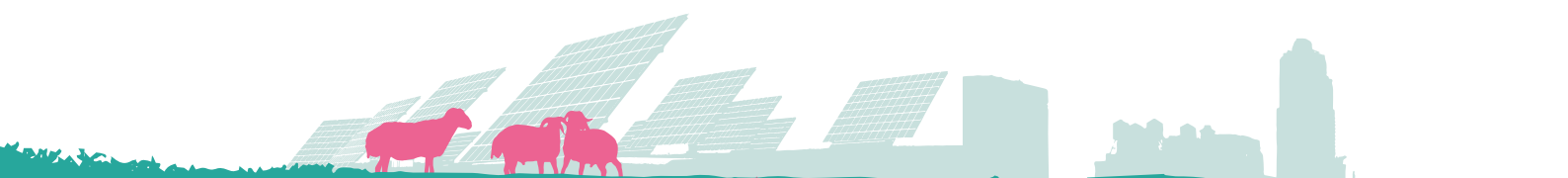
1 SEEK TO MAKE AUCTIONS BETTER

- + **Creating dedicated auctions** strictly for energy community projects
- + **Creating different size bands** within auctions, enabling projects to compete with other projects of the same size category.
- + **Providing lower pre-qualification requirements** for energy community projects (such as waiving the requirement to post bid bonds).
- + **Allowing for longer lead times and longer construction periods** for energy community projects, recognizing that such projects often take longer to build.
- + **Introducing a top-up, or premium, for energy communities** that is paid on top of the winning (or average) bid price.
- + Providing a “**participation bonus**” to incentivise professional developers to finance the projects through crowdfunding-platforms (variations on this have been adopted in France, as well as in Denmark).⁵
- + **Introducing a preference within the auction for “community-led projects”** (such as being at least 51% owned by an energy community, as adopted in Ireland).⁶
- + Adopting grants and loans specifically targeted at energy communities to make it easier for them to obtain financing;
- + Adopt safeguards within the auction design to protect against abuse and gaming of the definition of energy communities, including introducing oversight by a regulatory body.

2 EXPLORE ALTERNATIVES TO AUCTIONS

- ↻ **Retaining feed-in tariffs or feed-in premiums** specifically for energy communities, namely up to the thresholds envisioned in the Guidelines on State Aid for Climate, Environmental protection and Energy (CEEAG) for solar PV and 18MW for wind power.⁷
- ↻ **Strengthen or retain net metering provisions that allow customers to offset their electricity bill via self-consumption** (whether the RE project is onsite, or elsewhere in the country)
- ↻ **Facilitating the rise of peer-to-peer energy sharing** by passing new laws and regulations.
- ↻ **Adopting policy frameworks for collective self-consumption** (or virtual net metering)
- ↻ **Implementing stronger rules governing crowd-funding** of renewable energy projects.
- ↻ **Open access approach:** Energy communities are not required to participate in the auctions, but they are given the right to obtain the average auction price, potentially with a premium on top (e.g. 5-10% premium). This option provides the advantage of the remuneration price being linked to the auctions, without the risk of overcompensations to producers in terms of remuneration, following the cost curve of the auctions. Moreover, it acknowledges the increased complexity of the energy communities, while the auction procedure remains simplified.

TABLE 1: POLICY PATHWAYS FOR FOSTERING ENERGY COMMUNITIES



LOOKING AHEAD, MEMBER STATES NEED TO ENSURE CLEAR, HOLISTIC FRAMEWORKS FOR ENERGY COMMUNITIES

Developing a thriving ecosystem of energy communities throughout the EU will require overcoming the many related barriers to energy communities. In this regard, Ireland provides a promising case, in that grants are being provided to support energy communities in getting their projects off the ground, including specifically to cover the costs of obtaining professional advice, including legal, financial, technical, and regulatory.⁸ It is therefore possible to create an adequate holistic framework, should there be political will and understanding of the importance of adopting it, for the energy transition.

MUNICIPALITIES CAN BE CATALYSTS FOR FOSTERING AND CO-FINANCING ENERGY COMMUNITY PROJECTS ACROSS THE EU.



RECOMMENDATIONS

- ◇ Address risks of auctioning policies to community energy projects and look at alternatives to auctioning.
- ◇ Governments should, **set out to develop holistic policy packages to support energy communities**, along the lines of the regulations recently adopted in Ireland. Measures need to be carefully combined together to **make energy communities flourish in an individual country context**
- ◇ **In practice, Member States need to establish clear policy and regulatory frameworks, provide targeted funding and support, including information hubs and other forms of direct technical and legal assistance, as well as simple and easy-to-understand procedures.**
- ◇ A further important aspect is the critical role that **municipalities** can play.⁹ Municipalities could be provided with the funds as well as with expertise to co-develop projects jointly with citizens and local actors. Doing so could help municipalities to become vital enablers and accelerators of the transition to a more democratic and citizen-centric energy paradigm.
- ◇ **Support the emergence of hubs and platforms that facilitate citizen engagement and participation** in energy communities.
- ◇ **Encourage energy communities' efforts to expand their services beyond electricity generation and into other services such as electric vehicle charging, energy efficiency, or the establishment of peer-to-peer energy sharing.**

ENDNOTES

- 1 See : Couture, T., Stoyanova, T., Pavlov, T. (2021). Scaling-up Energy Communities in Bulgaria, Available at: https://www.e3analytics.eu/wp-content/uploads/2021/06/E3A_Bulgaria_Analysis_of_Energy_Communities_EN_FINAL.pdf and NREL (2021). Low- and Moderate-Income Solar Policy Basics, Available at: <https://www.nrel.gov/state-local-tribal/lmi-solar.html>
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- 3 RESCOOP, 2020. *Collective self-consumption and energy communities: Trends and challenges in the transposition of the EU Framework*. <https://www.rescoop.eu/uploads/rescoop/downloads/Collective-self-consumption-and-energy-communities.-Trends-and-challenges-in-the-transposition-of-the-EU-framework.pdf>
- 4 (Weiler et al., 2021. Entwicklung und Umsetzung eines Monitoringsystems zur Analyse der Akteursstruktur bei Freiflächen-Photovoltaik und der Windenergie an Land. In *Climate Change 49/2021*. https://www.umweltbundesamt.de/sites/default/files/medien/5750/publikationen/2021-06-28_cc_49-2021_monitoringsystem_akteursstruktur_wind_pv.pdf)
- 5 (Rescoop, 2021. *What Member States should know when designing support schemes for energy communities: the example of Ireland* <https://www.rescoop.eu/uploads/rescoop/downloads/Irish-case-summary.pdf>)
- 6 Rescoop, 2021. *What Member States should know when designing support schemes for energy communities: the example of Ireland*. <https://www.rescoop.eu/uploads/rescoop/downloads/Irish-case-summary.pdf>
- 7 European Commission, December 17th 2021
- 8 Rescoop, 2021. *What Member States should know when designing support schemes for energy communities: the example of Ireland*. <https://www.rescoop.eu/uploads/rescoop/downloads/Irish-case-summary.pdf>
- 9 Haf & Robison, April 2020. *How Local Authorities can encourage citizen participation in energy transitions*. <https://energy-cities.eu/publication/how-local-authorities-can-encourage-citizen-participation-in-energy-transitions/>

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