

A black and white photograph of a diverse group of people smiling and interacting. A teal-colored geometric overlay is present on the left side of the image, partially covering the people. The background shows a person's hands holding a small white wind turbine model on a table.

# Recommendations for inclusive and empowered energy communities

*How policy makers and initiative takers can foster public support for and involvement in energy communities*

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This is the sixth in a series of policy briefs for the EC² project, and it provides an overview of whether and how the set-up of ECs (Energy Communities) fosters or hinders people's acceptance of and involvement in energy communities. It explores actionable recommendations to facilitate and accelerate a just and sustainable energy transition.





## The insights contained herein are based on interdisciplinary empirical research conducted as part of the EC<sup>2</sup> project.

Our approach incorporates economic, legal and psychological elements and perspectives. These scientific insights capture and synthesise the knowledge derived from various psychological experiments as conducted in the EC<sup>2</sup> project within Spain, Poland, Italy, Germany, Austria and the Netherlands.<sup>1</sup> The energy community set-ups considered were based on the key legal and economic set-ups identified in deliverable D3.3<sup>2</sup>, and derived from D2.1<sup>3</sup>, as being relevant from a social and environmental psychological viewpoint.



## KEY CONCLUSIONS

- 1.** Energy community set-ups influence the public's support and willingness to be involved. Such set-ups may range from bottom-up to top-down, from homogeneous to diverse, and from focused on the energy community to being invested in the wider local community.
- 2.** Energy communities formed fully from the bottom-up or in collaboration with municipalities get more public support and increase people's willingness to join than ones formed by a municipality alone.
- 3.** There is an imbalance with regard to socio-demographics in energy communities. Especially women and low-income groups seem to remain underrepresented. Supporting these groups is key when designing effective strategies for engagement in energy communities.

<sup>1</sup> For more insights about the theoretical background, data used and the experiments conducted, and their results see forthcoming publications: D4.1 *Report on experimental studies on energy communities*; D4.2 *Report on experimental lab studies on energy citizenship*; & D4.3 *Longitudinal study report on the EC<sup>2</sup> website* [here](#).

<sup>2</sup> See EC<sup>2</sup> project Deliverable 3.3: *Catalogue of potential legal and economic barriers or facilitators of energy citizenship* (2022). (Hereafter, 'D 3.3'). Available [here](#).

<sup>3</sup> See EC<sup>2</sup> project Deliverable 2.1: *Interdisciplinary understanding of energy citizenship* (2022). (Hereafter 'D2.1'). Available [here](#).

## Introduction

For a sustainable energy transition, we need not only technological advancement, but societal change and the support and involvement of citizens. Energy communities are increasingly recognised by policymakers as a way to actively involve citizens and foster sustainable and just energy transitions. Importantly, **for a just energy transition, different groups of people from society need to participate. Yet so far, only a marginal number of people are aware of and involved in energy communities in Europe**, and they tend to be led by resourceful, well-educated and older men.

Thus, involving active and diverse citizens in the energy transition is key. To do so, we need to know which factors increase the likelihood of citizens supporting energy communities and becoming active energy citizens.

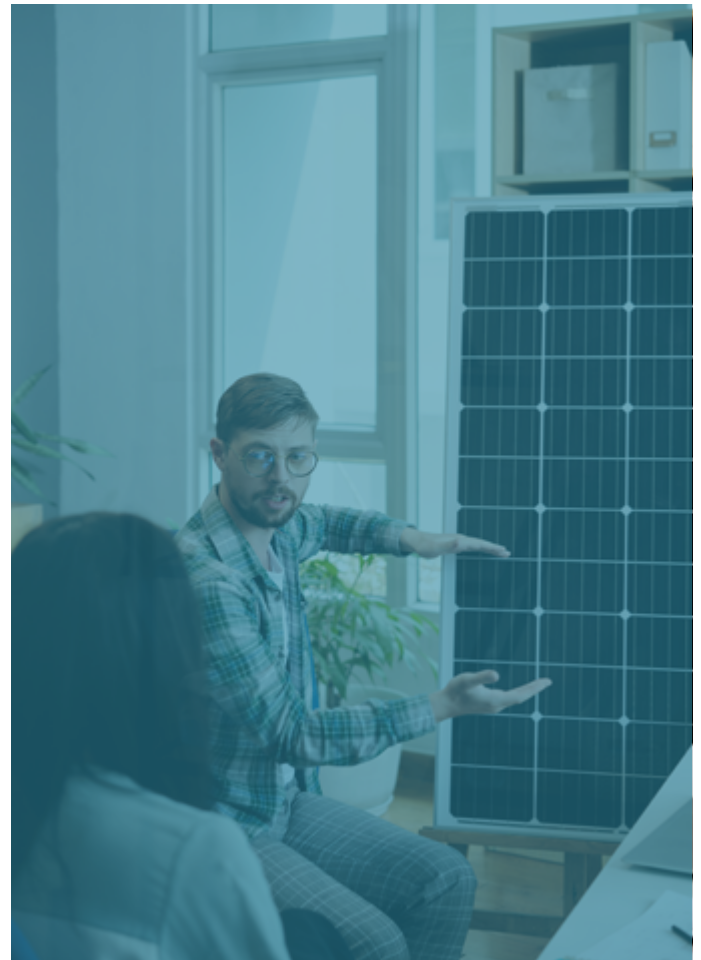


*Environmental psychology studies the interplay between individuals and their environment. It examines the influence of the environment on human experiences, behaviour and well-being, as well as factors influencing how people affect the environment (e.g., pro-environmental behaviour<sup>4</sup>). Psychological theories aim to explain how people's perceptions, emotions, and behaviour form, by taking individual, group processes, and contextual factors into account.*

## What facilitates and hampers citizens' support of, and involvement in, energy communities?

How to overcome psychological and contextual barriers that hinder people from actively engaging in the energy transition? Without careful consideration of what motivates different people to participate in energy communities, there is the risk that the sustainable energy transition further increases inequalities in society. From a psychological perspective, the extent to which people support and want to join energy communities depends on different factors, such as:

- 1) personal motivation,
- 2) collective group processes and
- 3) the contextual set-ups of energy communities.<sup>1</sup>



<sup>4</sup> De Groot, J. I., *Environmental psychology: An introduction* (2019).

## Factors influencing citizen involvement in energy communities

**Personal motivations** (e.g., environmental values, self-identity) have been important for understanding sustainable energy behaviours, including involvement in energy communities. Yet, citizens' involvement entails more than just a specific pro-environmental behaviour, as energy communities provide the opportunity for collective action and collaboration towards achieving a common goal. Previous research suggests that people do not only want to get involved because of their pro-environmental motives (wanting to protect the environment), but also because they are, or want to be, part of their community (communal motives), whereas financial motives do not seem to be related to initiative involvement.<sup>1</sup>



**Collective group processes** are important for increasing the motivation to participate in the energy transition and in energy communities. Relevant collective group processes are: 1) social identity, 2) collective agency, and 3) social norms<sup>1,2</sup>.

**Social identity** can strengthen environmental behaviour: if an individual identifies with a collective advocating pro-environmental behaviour, this can in turn foster the individuals' own pro-environmental behaviour. Moreover, if an energy community is perceived as representing and benefiting "us" as a local community beyond the energy community (identity leadership), this increases people's willingness to join it. **Collective agency** is a concept that includes three relevant indicators for people's motivation to act collectively in a group. These three indicators describe whether a group is perceived to 1) have collective aims that they determined themselves (self-determined collective aims), 2) act jointly and in a coordinated fashion (collective goal-directed action), 3) be effective in achieving their aims (collective efficacy beliefs). These indicators can be fostered by specific practices or characteristics of energy communities. For example, engaging people in envisioning a sustainable future can increase efficacy beliefs and intentions to become collectively involved in the energy transition. **Social norms** signal which behaviours are most common and which behaviours other people approve or disapprove. Therefore, if the above mentioned collective processes are successful in increasing environmental behaviour, this could additionally lead to a positive ripple effect: the more people are perceived to act jointly towards the goal of a just energy transition (i.e. increasing pro-environmental social norms), the more people will be motivated to contribute to this transition.

**How energy communities are set-up and organised** is central to people's motivation to support them, and their willingness to get involved. We define *energy community set-ups* as a combination of different features or characteristics of energy communities, for example the legal framework, economic characteristics, its social embeddedness or locality of an energy community. These set ups vary substantially across the EU. Accordingly, our studies focused on several characteristics and examined how they foster or hinder support for and participation in energy communities via the above mentioned psychological processes.



## Key set-ups of energy communities (barriers and enablers)

Based on the EC<sup>2</sup> research<sup>1,2</sup>, we identified the following set-ups that are effective in increasing support for and willingness to join in energy communities.



### Financial support:

People are more willing to support state-funded energy communities and communities in which new members are not required to make substantial financial investments. Energy communities that are funded by the state are likely to have more tangible (financial) resources, which may serve as a motivational factor and additionally it signals societal approval by the state.



### Legal frameworks:

Energy communities are more attractive if they are situated in countries with clear legal frameworks and if they offer legally binding contracts between members. This is because clear legal bases signal encouraging social norms that emphasise appropriate behaviour. Moreover, a contract may foster people's own and perceived commitment of other members.



### Involvement of citizens and municipalities:

Although bottom-up involvement of citizens in energy communities is one of the key features of energy communities, they are often initiated in cooperation with external institutions such as a local government. Municipality involvement may help energy communities to reach their sustainability goals. Yet, support is higher for communities that are owned and led by citizens alone or in cooperation with the government compared to energy communities that are solely owned and run by the (local) government. When community members are involved, this increases the perception that the energy initiative was able to advance a sustainable energy transition (collective efficacy) and that the initiative represents the local community as a whole (identity leadership).



### The community's pro-environmental and social justice values:

Energy communities gain more support - when they focus on collective self-determined aims, such as environmental protection and social justice, as opposed to external aims, such as financial benefits or energy security [D 4.2]. Yet an overemphasis on environmental morals of the energy community might create an exclusive social identity, which separates those involved from those not involved. By additionally emphasising the energy community's investment in the overarching local community and not only in the energy community, the perception of two different groups changes from an "us. vs. them" to a "we" [D 4.1].





## Social embeddedness of the energy community:

Energy communities are more attractive if members are interacting and spending time together – as long as there is no obligation to do so. Motivation to join was higher when energy communities were non-anonymous and strongly connected, for example through a shared identity. Moreover, people preferred locally-based energy communities, ensuring that members are not dispersed across the country, and fostering active networks with other energy communities.



## Diversity and inclusion in energy communities:

Establishing inclusivity of energy communities by increasing awareness of how socioeconomic, gender, sociocultural, and socio-political factors impact involvement in energy communities is a key aspect of the EC<sup>2</sup> project. Ideally, citizens from different social groups – such as different genders, income levels, and educational attainment – are equally likely to get involved in energy communities. Yet men seem to be more aware of and involved in energy communities compared to women, and low-income individuals remain underrepresented in energy communities. Interestingly, and different from what is often assumed, we found higher pro-environmental motivation among women compared to men, but women seem to feel less able to join. Merely including a message stating that diversity is valued by the energy community, nor the representation of women per se, effectively changed these perceptions. Yet, we found that generally people were more willing to support more diverse energy communities.



### MAIN CHALLENGES:

To achieve a just and sustainable energy transition the following challenges stand out for policy makers and leaders of energy communities:

- 1** Lack of awareness of and involvement in energy communities.
- 2** Limited inclusion and representation of citizens from various social groups in energy communities.
- 3** The need to set up energy communities in ways that create favourable conditions for people to get involved.

The following recommendations address these challenges.



## RECOMMENDATIONS FOR POLICY MAKERS:

### ✔ Provide energy communities with financial support

People are more willing to support an energy community if it receives financial support from the state – meaning it could benefit from public funding and reduced tax rates, access cheaper loans, and enjoy lower fees for using the electricity grid. These efforts not only help the energy community from a financial standpoint but also from a motivational one.

Moreover, more people support an energy community if they don't have to make significant financial investments to become a member. Thus, it is important to create financially inclusive energy communities without high entry barriers.

### ✔ Create clear legal frameworks for energy communities

People are more inclined to support energy communities if they are situated in a country with clear regulations and transparent legal frameworks.

Furthermore, people prefer energy communities that are official and formal associations based on legally binding contracts, to which all members agree - instead of unofficial organisations with only informal agreements <sup>5</sup>.

Clear frameworks and guidance are important both from a legal and a psychological point of view.

### ✔ Strengthen citizens' involvement in setting up and organising energy communities

Energy communities that are owned and led by community members either with or without the cooperation of the government are more likely to gain people's support. In comparison, energy communities that are solely owned by the government or an enterprise have lower support. They increase the perception that the energy community is able to help advance both a sustainable energy transition and the community. Thus, citizens' agency in organising and managing their own energy communities, or in cooperation with the government, is essential.


### ✔ Recruitment strategies need to address barriers experienced by underrepresented groups

Policies are needed to support the membership of underrepresented groups, such as women and people with a low income.

For example, as women feel less able to join, they seem to encounter barriers that hinder their involvement in energy communities. Thus, comprehensive strategies and programs are needed to address these specific barriers rather than merely adjusting the message portrayed within already existing energy communities.

<sup>5</sup> See for example the recommendation on one-stop-shops in the forthcoming Policy Brief #5 *Localised support for establishing & joining energy communities*, on the EC<sup>2</sup> website [here](#).



 **Prioritise locally based energy communities that are integrated in larger networks**

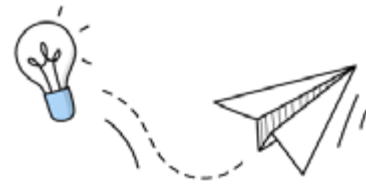
Locally-based energy communities that are integrated in larger networks with other energy communities could be promoted due to their ability to motivate new members.


In fact, people are more willing to support locally based energy communities instead of energy communities whose members are spread all over the country or Europe.

Active networks of energy communities can be fostered through networking platforms or funded conferences.

 **Create opportunities for citizen's participation in envisioning energy futures**

Envisioning positive energy futures can increase people's intention to collectively engage in the energy transition, at least for people who enjoy such visioning tasks. Therefore, it may be useful if policymakers sketch large visions of the energy transition and let people who are interested in it, think about and contribute with their own visionary ideas. Citizen councils and co-creation processes may be suitable means for such visioning interventions. This can motivate people to collectively engage in the energy transition.



 **Communicate positive norms and trends about the engagement of citizens in the energy transition**

Policymakers may benefit from identifying positive behaviour trends of sustainable energy production and communicating these to the public. Such trends could be about the number of Europeans engaging in behaviour that promotes carbon trading, energy efficiency and energy communities, and about Europeans sharing the goal of the energy transition. When individuals read texts about such positive trends, they reported increased collective energy citizenship. Additionally, reading about many Europeans approving the energy transition, rather than debates and conflicts about whether the energy transition was an appropriate goal, also strengthened collective energy citizenship. Collective energy citizenship is people's belief that they as collectives have rights and responsibilities for a just and sustainable energy transition, and their motivation to act upon those rights and responsibilities. Energy citizenship may be an essential step for getting people involved in energy communities.







## RECOMMENDATIONS FOR ENERGY COMMUNITIES LEADERS/MEMBERS:

### ✔ Transform energy communities into social communities

People are more willing to support an energy community if members are interacting and spending a lot of time together. Understanding themselves as social communities makes energy communities more attractive. Thus, they might benefit from offering social events that allow members to get to know each other and form friendships.

However, spending a lot of time together shouldn't be an obligation as people are less willing to support an energy community if they have to invest a lot of time. Ideally, members are free to decide whether they want to participate regularly in meetings and activities or not. And tasks that arise can, but do not have to, be taken on.

Moreover, the interaction between different energy communities also has a positive impact on people's support: Large and active networks increase the attractiveness for potential new members.

### ✔ Create positive visions with members and interested parties

Envisioning a fair and successful energy transition in Europe can motivate people to collectively engage in the energy transition. This seems to be especially true for those people who are already acquainted with visionary thinking.

For energy communities, this finding suggests that they may benefit from giving potentially new members the time to develop their own visions and, if possible, integrate these in the existing visions of the energy community.

<sup>6</sup> For more tools on how to improve the diversity and inclusion of an energy community, see forthcoming Toolkit: D6.1 *Energy Citizenship Empowerment Kit* on the EC<sup>2</sup> website [here](#)

### ✔ Communicate the focus on environmental sustainability and social justice

To motivate new members, an energy community's communication can focus on self-determined values of environmental sustainability and social justice. People are less likely to support an energy community if it emphasises financial benefits or energy security.

Thus, when presenting themselves in public (e.g. on their website, on flyers or in talks), energy communities can gain more support if they communicate their focus on environmental sustainability and social justice.

Importantly, energy communities can combine such pro-environmental motivation with a clear connection to the wider local community in order to avoid being seen as morally superior to non-members. They can do so either in terms of their identification with, or in terms of benefits provided for the wider local community.

### ✔ Recruit new members via social activities in the community to attract more diverse members

It is important that energy communities are aware of and understand potential (existing) inequalities among members and non-members, in order to become more accessible to people with less privilege and resource-bound commitments.<sup>6</sup>

Initiators run the risk of primarily attracting similar community members as people generally associate with others with whom they share similar characteristics. To avoid this, they could focus on recruiting new members via various social (and potentially non-energy related) activities in the local community. In addition, initiators could actively look for representatives and new members with diverse social connections in the community and with different socio-demographic backgrounds.

This is the sixth in a series of Policy Briefs aimed at examining support for and involvement in energy communities. The series shares key insights on how different set-ups of energy communities can be used as an effective tool for accelerating the renewable energy transition, together with citizens. The EC<sup>2</sup> project aims to support policy and decision makers through a series of actionable recommendations, targeted primarily at policy makers - from the European through to the local level.



## IMPRINT:

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