



newcomers
EXPLORING NEW ENERGY COMMUNITIES



POLICY BRIEF

NEWCOMERS

Final policy
recommendations



Prepared by the H2020 project NEWCOMERS



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1 EXECUTIVE SUMMARY

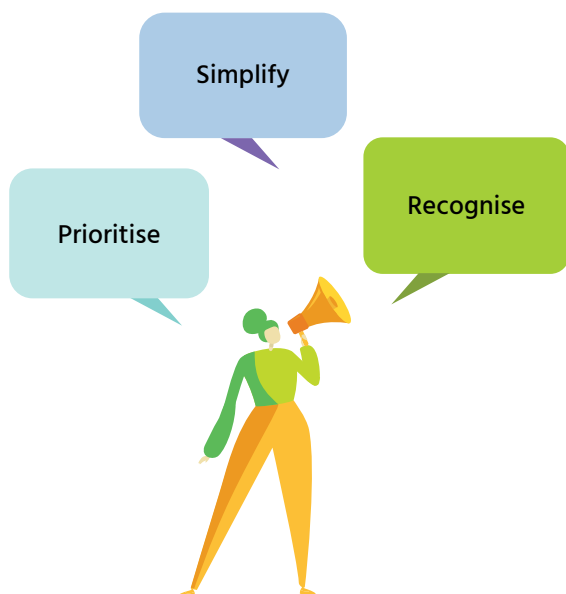
Recent developments on global energy markets, including increasing energy prices and an increased political will to foster independence from imported fossil fuels, strengthened the ambitions of the European Union to increase the share of energy from renewable sources. Energy communities (ECs) as forms of social innovation that engage citizens and/or other actors like companies or municipalities in energy transitions can play an ever more important role in achieving a rapid decarbonisation of European energy systems.

The **NEWCOMERS project (2019-2022)** explored how new types of clean energy communities operate, in what regulatory, institutional and social conditions they emergence and thrive and which benefits they offer to their members and society.

These and other aspects of new clean energy communities were studied in a multi-method approach including qualitative interviews with energy community managers and energy community members, online surveys among energy community members, a field experiment, a large citizen survey in 9 European countries (DE, ES, FR, IT, NL, PL, SE, SI, UK), business model analysis and an analysis of socio-technical systems in 6 European countries (DE, IT, NL, SE, SI, UK).



This deliverable summarises the **final key policy recommendations from the NEWCOMERS project** that have been developed in a **co-creation process with the project's stakeholders**, in particular with the representatives of 10 core case study communities from 6 European countries, but also with a wider group of energy community stakeholders, such as representatives of energy providers, grid operators, umbrella organizations and municipalities.



We first recognise that **3 key principles** should guide policy makers in developing energy community sectors across Europe and which can be seen as preconditions for effective EC development: **Recognise, Prioritise and Simplify**. This includes recognising the multiple benefits ECs offer to their members and to local communities, to prioritise them through offering clear definitions and dedicated policy support, and to simplify existing legislation as complex regulations and bureaucracy are among the greatest barriers for EC development across Europe.

We then formulate concrete policy recommendations along **5 main categories of recommendations** which cluster multiple recommendations:

- 1 Recognising the value and strengthening the role of energy communities:** This includes the provision of clear and nationally adapted definitions of the term energy community to provide legal clarity; it also includes to develop the concept of ‘collective self-consumption’ to allow for multiple users to be considered as a single entity for settlement. The importance of energy communities should be demonstrated through preferential regulatory treatment in European legislation. In addition, consistent, unambiguous and lasting support to energy communities is required at all government levels to strengthen their position in European energy systems.
- 2 Informing about energy communities:** This includes launching awareness raising campaigns at the EU level that are tailored to national specifics such that citizens become aware of the opportunities ECs offer. As our research showed that the benefits of ECs are often not known to the public, member states should increase their efforts to communicate about energy communities to inform citizens about ways to engage and what benefits to expect. One new source of information for European citizens created by NEWCOMERS is the Our-Energy.eu awareness raising platform: <https://our-energy.eu/>.
- 3 Creating incentives for energy communities:** We recommend setting national targets related to the development of the EC sector to be met by 2050, with interim targets for 2030. Targets have the potential to spur EC development especially in the countries in which ECs have only recently emerged. Further, this includes creating routes to market for ECs, for example through dedicated financing schemes (tax incentives or exemptions from levies specifically tailored to ECs). Furthermore, DSOs should be incentivised to connect small operators to the grid, microgrids, and to facilitate P2P markets. Such incentives would create a pull effect for ECs, which currently are often poorly incentivised to provide electricity system services such as flexibility /demand-side management. Collaboration and innovation between energy communities and licensed suppliers should be more strongly encouraged.
- 4 Creating a supportive regulatory environment:** This involves going beyond the creation of level playing fields and instead actively encouraging the emergence of energy communities in legislation. Further, it requires to simplify procedures and regulations as bureaucracy is a major barrier to the development of ECs. And it means allowing space for new alliances between professional expertise and volunteer-based citizen-led ECs to emerge.
- 5 Creating supportive networks for energy communities:** This includes setting up advisory services, umbrella organisations and other intermediaries across EU countries. It further involves the creation of nationally appointed official project management support services (creation of national agencies with project managers) to provide legal, financial and technical advice to those interested in setting up and operating ECs.

Finally, we see potential for **future research** to evaluate the changes in citizen perceptions of ECs and willingness to engage in ECs in the light of the war in Ukraine and the related developments in global energy markets (increasing energy prices, need for energy independence). We further see potential in assessing the process of the transposition of the EU directives into national regulations and its outcomes, to see how the regulations adapt to local conditions, and what consequences arise from these adaptations. This will be essential research for future evidence-based policy making.





2 INTRODUCTION



- What characterises new types of clean energy communities?
- What are regulatory, institutional and social conditions which support their emergence and operation?
- How do new clean energy communities meet their members' needs better than more traditional energy services business models?
- Do they have the potential to increase the affordability of energy, their members' energy literacy and efficiency in the use of energy?
- What is their potential for scaling and attracting a wider group of EU citizens for participation?

These were the guiding questions for the NEWCOMERS project (2019-2022), funded as Research and Innovation Action (RIA) under the European Union's Horizon 2020 programme under grant agreement No 837752. The project aimed to explore and evaluate different types of new clean energy communities as social innovations that perform along dimensions, such as citizen engagement, value creation, and learning, while being based on sustainable business models that are attractive and accessible for a broader group of EU citizens and have the potential to be scaled-up.

Based on the NEWCOMERS project's research findings, we intended to give practical recommendations to policy makers at all levels (local, regional, national, EU level) on how to create a favourable environment for new clean energy communities in a changing European energy system. In particular, our aim was to deliver practical recommendations, co-created in a dialogue with energy community stakeholders, on how the EU as well as national and local governments can support new clean energy communities to make them flourish and unfold their benefits in the best possible way.

This policy brief summarises the final key policy recommendations from the NEWCOMERS project that have been developed in a co-creation process with the project's stakeholders, in particular with the representatives of our 10 core case study communities, but also with a wider group of energy community stakeholders, such as representatives of energy providers, grid operators, umbrella organizations and municipalities.

This policy brief is one of several final deliverables of the project, alongside the synthesis of insights gained from 3 years of **NEWCOMERS research, published as NEWCOMERS synthesis of project findings (Deliverable D7.1)**. Further, we connected our findings to the underlying theoretical framework of the project, by **evaluating the applicability of polycentric governance thinking in the energy community sector (Deliverable D7.2)**. In addition, our findings have been merged with insights of 3 sister projects funded under the same Horizon 2020 call (COMETS, SocialRES, SONNET) in a **joint policy brief "Putting people at the heart of energy transitions"**.

2.1 Approach

Over the 3 years of NEWCOMERS' research and stakeholder engagement, the consortium conducted research alongside 10 energy community case studies in 6 European countries. This analysis took a multi-method approach and included qualitative interviews with energy community managers and energy community members, online surveys among energy community members and a large citizen survey among the general population in 9 European countries (DE, ES, FR, IT, NL, PL, SE, SI, UK). It further included an in-depth business model analysis for the 10 case studies, an analysis of socio-technical systems in 6 European countries and a field experiment (randomised controlled trial) with a newly created virtual energy community in Slovenia.

Eventually, in the last months of the project (in early 2022), the project's condensed findings were summarised as [NEWCOMERS synthesis of project findings \(Deliverable D7.1\)](#) and were fed into local co-creation workshops in the 6 NEWCOMERS countries (DE, IT, NL, SE, SI, UK). They were presented to the case study representatives as well as to a group of wider energy community stakeholders in the respective countries. The aim was to share the NEWCOMERS findings and to use them as a starting point for discussing whether NEWCOMERS findings reflect the experiences of the energy community stakeholders in the different local contexts. It was further discussed more broadly what are the most urgent problems and barriers for energy community development and how they should be addressed by policies.

As a result of the discussions in the co-creation workshops, the consortium formulated the policy recommendations to national and EU-level policy makers summarised in this document.

2.2 Structure of the document

The document is structured as follows. Section 3 presents the NEWCOMERS final policy recommendations. In section 3.1, we first formulate 3 general principles for policy making that should guide the development of energy communities at all policy levels. These general principles emerged from our research and from the discussions with stakeholders in the 6 NEWCOMERS countries. They are followed by concrete policy recommendations in section 3.2, which are clustered into 5 categories of recommendations: 1) Recognising the value and strengthening the role of energy communities, 2) Informing about energy communities, 3) Creating incentives for energy communities, 4) Creating a supportive regulatory environment, 5) Creating supportive networks for energy communities. Section 4 presents concluding remarks and offers recommendations for future research.



3 NEWCOMERS FINAL POLICY RECOMMENDATIONS

3.1 General principles for energy community development

Our research across 6 European countries (DE, IT, NL, SE, SI, UK) and 10 new clean energy communities in these countries revealed that ECs' biggest barriers lie in the lack of support of their local and regional administration, the lack of dedicated measures or rules for ECs in existing energy market regulation and in the complexity of the existing rules and regulations. In our discussions with stakeholders it was widely agreed that 3 general policy principles should guide policy makers at all levels when dealing with ECs.

1. Recognise

the social, economic, environmental and system operational benefits of ECs and consider them as a contribution to your jurisdiction that deserves policy support. Beside the economic and environmental value of engagement with ECs, citizens highly value the social benefits of engagement with ECs (e.g. community spirit, social recognition and social approval, connecting and acting with like-minded people), the political aspects (e.g. self-sufficiency and energy independence), and also the aspects of personal development (e.g. acquiring specific skills and knowledge) (see [Deliverable 6.1](#)). Acknowledging the variety of values created by ECs is an important precondition for effective policy support.

2. Prioritise energy communities in formal legislation, e.g. by means of

- **clear definitions for energy communities:** A clear definition contributes to achieving a systematic operationalisation, makes it easier to communicate the idea of energy communities, to attract new energy community members among European citizens and to encourage the creation of new ECs. It further is a prerequisite for targeting energy communities with specific policy measures.
- **specific targets for energy communities:** Tailored policies for energy communities and specific targets for energy communities are the most often mentioned driver or facilitator for ECs to emerge and scale.
- **preferential treatment of and dedicated incentives for energy communities:** It is important that ECs have easier access to finances, e.g. through public funding mechanisms and dedicated support programs for energy communities. Securing financing for energy communities and their installations is often seen as one of the biggest barriers to overcome, in particular in the early stages of creating an energy community. In addition, subsidy mechanisms are needed to make the operation of ECs attractive.

3. Simplify

legislation to reduce barriers for new and existing energy community practitioners, which are often volunteers with limited finances and capacities to seek legal advice. Bureaucracy, legislative and administrative burdens are recurrently experienced barriers. There is a strong need to simplify administrative and regulatory requirements.

3.2 NEWCOMERS Policy recommendations

Our research findings and the co-creation process with stakeholders pointed to 5 key prerequisites that a conducive environment for energy communities (ECs) requires:

- A recognition and strengthening of the role of energy communities,
- Spreading of information about energy communities,
- Incentives tailored to energy communities,
- A supportive legislative environment, and
- A supportive network at national and EU levels



The following policy recommendations target national decision making, depending on the **level of maturity of the energy community sector** in a given jurisdiction (**more** vs. **less** developed). We therefore also suggest which recommendations to focus on as a policy maker in a jurisdiction that has a more developed energy community sector (such as e.g. Germany, the Netherlands or the UK), as compared to jurisdictions that only start to develop an energy community sector (such as Sweden, Italy and Slovenia). We indicate in parentheses after each recommendation whether it applies mainly to more developed (**md**) or to less developed (**ld**) energy community sectors, or to both. Several of the following recommendation also target the EU level (**eu**).





3.2.1 RECOGNISE THE VALUE AND STRENGTHEN THE ROLE OF ENERGY COMMUNITIES

- Provide clear and nationally adapted definitions to ensure legal clarity and an appropriate basis for funding eligibility** An important first step will be the complete transposition of the *Renewable Energy Community* (REC) and *Citizen Energy Community* (CEC) definitions established in the EU's **Renewable Energy Directive** (RED II) and **Internal Electricity Market Directive** (IEMD) in all EU member states. We see, however, the need for member states to develop national definitions of energy communities (ECs) tailored to their national context, instead of merely copying the definitions offered in the RED II and IEMD. First, the need for ECs to choose if they are a renewable energy community or a citizen energy community will hinder rather than stimulate expansion of the EC sector. Second, existing ECs were mostly established without the definitions offered in RED II and IEMD in mind and the national definitions need to consider these already developed variations of ECs. We recommend formulating national definitions sufficiently broad to subsume a wide variety of EC business models allowing for dynamics in EC business model development. **(md,ld)**
- Develop the concept of 'collective self-consumption'** to allow for multiple users to be considered as a single entity for settlement. Currently, RED II allows for 'jointly acting renewable self-consumers' located in the same apartment block to access onsite generation and the IEMD allows for 'jointly acting customers', which explicitly includes activities beyond generation. This allows groups of energy users to participate in energy systems in new ways, to reap the benefits of participation (currently only available to prosumers, where some do not have access to south-facing roofs, batteries etc.). It also has the potential to deliver benefits to local system operators, such as shifting demand to make better use of self-generation, where a direct link between generation and consumption is made. In practice, this means developing the concept of collective self-consumption beyond net metering, to the real time metering of supply and demand (e.g. half hourly) and allowing for multiple users to be considered as single entities in settlement. Expanding the geographic scope, beyond single buildings to individuals on the same substations, would subsequently extend access to benefits more widely and would open up business model innovation. **(md,eu)**
- Demonstrate the importance of energy communities** through preferential regulatory treatment. **The Internal Electricity Market Directive** (IEMD) recognises Citizen Energy Communities as a new actor in energy markets and proposes the creation of level playing fields vis-à-vis incumbent actors. **The Renewable Energy Directive** (RED II) recognises Renewable Energy Communities and foresees member states to provide an enabling framework for their activities. As market rules were largely designed for large players and large generation assets, there is an in-built bias against smaller players. To facilitate the emergence, growth and replication of energy communities their active promotion via preferential regulatory treatment, building on the approach taken in RED II, is needed. **(md,ld,eu)**
- Give consistent, unambiguous and lasting support to energy communities at all government levels.** Given that ECs often lack the support of their local and regional administrations or face resistance by the local population, we recommend that the responsible ministers and policy makers at all levels express their full support to energy communities, recognising the potential of the sector to accelerate energy transitions while engaging citizens in the processes on the ground. Such commitment to EC support and development should also be reflected in a longer-term continuity within EC-related policies to create planning security for citizens. **(md,ld,eu)**



3.2.2 SPREAD INFORMATION ABOUT ENERGY COMMUNITIES

- **Undertake an awareness raising campaign at the EU level, but tailored to national specifics.** Our international citizen survey conducted in 9 countries among more than 13,000 European citizens revealed that there is a lot of (so far) untapped interest and willingness to participate in ECs. The major obstacle is that most Europeans do not know about ECs, yet are interested when they are given information about energy communities (see **Deliverable 6.3**). An awareness raising campaign has thus a lot of potential to stimulate the scaling of energy communities. Finding the right timing for a large-scale information campaign seems crucial. Raising the awareness might backfire when the “circumstances” are suboptimal for ECs. In addition, the information should be delivered in forms and via channels tailored to key audiences, using simple language and accessibly explained technical concepts. The aim should be to introduce the topic of ECs to all layers of the population, especially younger generations, to broaden the group of citizens that engage in ECs. **(eu)**
- **Invest in better informing citizens about the benefits of energy communities.** In particular in countries in which the EC sector is hardly developed, effort should be put in communicating the benefits of energy communities to citizens, highlighting relevant aspects for different groups of citizens. While citizens generally perceive ECs as important for addressing large-scale challenges such as the transition towards a sustainable energy system, the benefits at the individual level remain rather unclear to most (see Deliverable 6.3). Engagement with energy communities might receive much more interest from citizens if they have a clear idea of the energy community concept and its benefits for individuals, communities and societies across Europe. Well-coordinated and tailored awareness-building campaigns and better media coverage of the national energy transformation plan and the role of energy communities in it would be, thus, one of the important strategies for better EC diffusion across Europe. One new source of information for citizens created by NEWCOMERS is the Our-Energy.eu awareness raising platform: <https://our-energy.eu/>. **(md,ld)**

3.2.3 CREATE TAILORED INCENTIVES FOR ENERGY COMMUNITIES

- **Set national targets related to the development of the EC sector to be met by 2050 - with interim targets for 2030.** Targets may refer to the minimum desired number of ECs within a country or the minimum percentage of electricity generation from ECs. They might be among the most effective tools to increase renewable energy capacity installed by energy communities. The target planned for the **EU Solar Energy Strategy**, to set up at least one renewables-based EC in every municipality with a population higher than 10 000 by 2025, is a first valuable step in this direction. Targets support the continuity of legislation and can create trust in government commitment among founders and managers of ECs **(md,ld)**
- **Energise energy communities by creating routes to market.** ECs struggle under dynamic policy and regulatory conditions that hamper their efforts to make sound business cases. Long-term revenue certainty linked to the generation of renewable power under feed-in tariffs (FiTs) for example, was a driver for the rapid growth of renewable energy communities in the past. In the absence of FiTs, alternative mechanisms are needed that reduce the financial risks and make ECs financially viable. This could include easier access to finance, tax incentives and exemptions from levies specifically tailored to ECs. **(md,ld)**
- **Incentivise DSOs to connect small operators to the grid, microgrids, and to facilitate P2P markets.** Such incentives would create a pull effect for ECs, which currently are often poorly incentivised to provide electricity system services such as flexibility /demand-side management, for which they offer potential (see **Deliverable 4.6**). Also more indirect services that ECs provide to energy systems (including reducing grid demand, reduced use of transmission and distribution networks, and reduced curtailment of renewable supply) are currently hardly valued by market arrangements and could be harnessed in the presence of dedicated incentives. **(md)**

- **Encourage collaboration and innovation between energy communities and licensed suppliers.** Moving beyond the collective generation of renewable energy, to trade, sell or self-consume energy, typically involves new activities (e.g. customer billing) and responsibilities (e.g. balancing) that require specialist expertise, knowledge and skills. Partnering with licensed suppliers who have experience of and capacity to take on these responsibilities has subsequently become one means for ECs to develop these new activities. Nonetheless, identifying willing licensed suppliers is hard. New approaches that facilitate, even mandate, collaboration and innovation between ECs and licensed suppliers is required to foster new value propositions. **(md)**

3.2.4 CREATE A SUPPORTIVE LEGISLATIVE ENVIRONMENT

- **Go beyond the creation of level playing fields and actively encourage the emergence of energy communities.** EU directives stipulate 'non-discriminatory access to all relevant markets for ECs. The idea holds that similar actors performing similar activities should have similar rights and obligations in the marketplace. However, existing rules were designed for large players and have in-built bias towards their participation. Supporting market participation of ECs requires active and preferential treatment. Besides easier access to finance, one means to 'tilt' playing fields in favour of energy communities is to facilitate delegation of responsibilities, such as balancing or billing, to other parties. **(md,ld,eu)**
- **Simplify procedures and regulations and make them more transparent** as bureaucracy and intransparent procedures are a major barrier to the development of ECs. It is important to make it easy to register a new energy community and have simple and transparent procedures where the EC for example does not need to define if they are a renewable or citizen energy community. Support schemes often come with administrative costs and time to understand the procedures and to prepare application forms. We recommend making support schemes easily accessible while avoiding narrow restrictions on the different types of EC business models that are covered by the regulations. **(md,ld)**
- **Allow space for new alliances to emerge.** Energy systems are becoming increasingly complex, which will increase the need for ECs to receive support from professionals. The regulations therefore need to allow for new alliances between professional expertise and volunteer-based citizen-led ECs to emerge. **(md,ld,eu)**

3.2.5 CREATE SUPPORTIVE NETWORKS AT NATIONAL AND EU LEVEL

- **Stimulate the setting up of advisory services, umbrella organisations and other intermediaries,** ECs may need to draw on expert knowledge in the fields of project management and administration, finance, technology, legal affairs, and communication. Further, tools and skills to dialogue with the poorest and most vulnerable are required to adequately address their situation. This is especially relevant in countries where energy community development is still in an early stage. In countries in a more advanced stage, a dynamic seems to emerge leading to a higher level of self-organising activity within the sector, for example through creating opportunities to exchange experiences and lessons learned. This may even take the form of institutionalised regional or city-based cooperation. **(ld)**
- **Create nationally appointed official project management support services** (creation of national agencies with project managers) to provide legal, financial and technical advice to those interested in setting up and operating ECs. This should include training programmes for staff of local authorities dedicated to ECs, as adequate expertise on technical and bureaucratic aspects of setting up and running ECs is often not available in local authorities. **(md,ld)**





4 CONCLUDING REMARKS

Our research and the discussions with EC representatives and stakeholders revealed that the success of many ECs in the past relied on the visions and efforts of a small group of highly motivated and engaged individuals and the goodwill and support of the local and regional governments or DSOs. Thus, to a certain extent, EC development in the past can be partly attributed to coincidences where engaged individuals found support by local and regional governments and other stakeholders. Of course, in many countries also dedicated policy support has stimulated the creation of new ECs (see **Deliverable 3.3**), yet there are large differences between European countries. A stable and prospering EC sector can only develop based on clear definitions and guidelines for citizens and local actors as well as stable and lasting (financial) support to follow through with the often tedious process of setting up a new EC. We hope that our policy recommendations can give impulses for the further development of targeted policies for ECs at the European and national level, to tap the potentials of more mature energy community sectors across Europe.

We are convinced that the importance of ECs in a decentralised European energy system has only increased since the beginning of the military conflict in Ukraine in February 2022, and we believe it will further increase with the ongoing changes in the global energy markets, such as the continued rise in energy prices, and strengthened political will for greater independence from imported fossil fuels. The EU and its member states should tap the opportunities of strengthening of the energy community sectors across Europe, to increase energy independence and to secure a reliable and affordable energy supply for European citizens. The **REPowerEU plan** and in particular the plans for the **EU Solar Energy Strategy** show promising steps in this direction by formulating explicit targets related to the development of ECs: to set up at least one renewables-based energy community in every municipality with a population higher than 10 000 by 2025 and to ensure that energy poor and vulnerable consumers have access to solar energy, e.g. through social housing installations, energy communities, or financing support for individual installations. Our recommendations can give guidance how future EU legislation and national policies can create the necessary incentives and supportive environments for such targets to be reached.

Finally, we would like to reflect on pathways for future research related to EC development. It is worth noting that all our data collections and analyses were completed before the war in Ukraine started. We already observe that this conflict had, has and will have a massive impact on European politics in general, and in particular on the energy transition(s) in Europe. The EU and also many European countries have already decided to change their existing energy policies dramatically. Furthermore, it is very likely that the developments since February 2022 have fundamentally changed perceptions amongst citizens, policymakers as well as share- and stakeholders. In particular, a highly increased awareness of energy-related problems, even beyond economic and environmental aspects, is to be expected. This suggests that certain analyses conducted in this project, such as the citizen survey across 9 European countries (**Deliverable D6.3**), should be repeated to understand how citizens' perceptions of energy communities and their willingness to engage in ECs has changed due to the recent developments. In general, the implementation of the international citizen survey revealed many valuable insights, such that a continued surveying of citizen preferences therefore seems advised.

Further, our research findings suggest that ECs are seeking cooperation and are mutually adjusting and that this helps to make the sector function more effectively and accelerate its development. Therefore, we recommend for future research to adopt a systematic approach to unravel the choices that ECs make about with whom they cooperate, how they cooperate, and what are the focus and impacts of the cooperation.

Regarding the analysis of the effects of energy communities on energy conservation and load shifting (**Deliverables D5.1** and **D5.2**), we see our findings as the beginning of a research stream that, on the one hand, explores the potential for initiating scalable energy communities by, for example, utilities or authorities, and, on the other hand, properly assesses the causal impact of community membership on energy conservation, demand response and, in addition, investment in renewable energies.

Lastly, the ongoing process of transposition of the EU directives into national regulations will set the course for the future of energy communities in the different member states. It is important to follow these national processes, to see how the regulations adapt to local conditions, what consequences arise from these adaptations. This will be essential research for future evidence-based policy making.



