



  
**BEUC** The European  
Consumer  
Organisation

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# Energy communities in the EU

Fulfilling consumer rights and  
protections

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## About this report

This report has been commissioned by the European Consumer Organisation (BEUC) with the aim of researching the extent to which energy communities are currently fulfilling obligations towards consumer rights and protections, including towards energy poor and vulnerable consumers.

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## Authorship

This report was researched and written by Jasmine Arnould and Diana Quiroz. Correct citation of this document: Arnould, J. and D. Quiroz (2022, December), *Energy Communities in the EU: Fulfilling consumer rights and protections*, Amsterdam, The Netherlands: Profundo.

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Note that the findings in this report do not necessarily reflect the views of our informants, and they are exempted from any accountability in this regard.

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## Summary

In 2019, the Clean Energy for All Package (CEP) formalised the right of all EU citizens to produce and consume their own energy as individuals, groups and more formalised legal entities called 'energy communities' (ECs). Under this EU framework, all customers of ECs are granted the same rights as any other energy consumer on the market. Yet there are several important differences between ECs and traditional energy market actors: ECs are usually smaller, have less administrative capacity and crucially, are formed by groups of individuals who participate in the decision-making and governance of the legal entity. In some cases, participants of ECs are even producers of the energy supplied themselves.

Despite the significant implications that this raises for ECs abilities to fulfil their obligations and protections towards consumers, not much has been written on the topic. Moreover, while several research and programmes are being developed to understand the potential of ECs in addressing energy poverty and vulnerability, the considerations in terms of consumer rights of these groups are not well-understood.

The research in this report has been carried out on behalf of the European Consumer Organisation (BEUC) in order to fill some of these initial knowledge gaps. Through research using secondary resources online, responses from a survey distributed in September-October 2022, and interviews with key informants, this report summarises the main risks being discussed with regards to upholding consumer obligations among ECs, as well as the advantages that may be brought forward by the model of the EC.

Our key findings with regards to this are as follows:

- **Do consumers have access to full consumer rights and protections in energy communities?** This report found no evidence of systemic malpractice among energy communities regarding their obligations to provide consumer rights. This is likely due to a combination of reasons:
  - Consumer rights and protections are not yet widely researched and written about with regards to energy communities. The development of ECs is only recently being formalised in European and national laws, and as a result, the EC movement has been more focused on operationalising these laws to support increased development (e.g., operational, financial). This is especially true in Central and Eastern Europe, where the movement is still young, and basic transposition of the EU framework for energy communities has yet to be put in place;
  - Energy community members may not be prone to talk negatively about their projects to outsiders, given they are non-profit and mission-driven and are usually personally invested in their projects. Where such issues relating to consumer rights do arise, they are likely handled internally due to the often democratic decision-making powers of ECs, the resulting negotiating powers of most EC members, as well as the inherent goals of providing benefits for their membership and to the wider community.
- **Are energy communities exposed to more risks in this regard? Are some types of energy communities more or less consumer-friendly than others?** There are models of supplier-customer relationships, governance arrangements and services which appear to undermine certain consumer rights, putting collective interests above those of individual rights and protections. This is true especially where customers become financially and/or technologically linked to the EC in order to benefit from services and ensure long-term advantages.

In this sense, practices which theoretically put certain consumer rights at risk include:

- Governance arrangements which require significant financial participation or supplier agreement (e.g. Power Purchase Agreement) in order to become a member. This can compromise the right to switch supplier;

- Certain types of services which make individuals reliant on the supply of the EC-produced energy, for example projects involving heat grids. This can compromise the right to switch supplier and the right to connection.

On the other hand, these governance arrangements and services also provide long-term advantages to participating individuals such as decision-making rights and influence over consumer protections, wider community benefits, lower prices for energy, lower emissions footprints, etc. Upholding individual consumer rights should not preclude the ability to enjoy these benefits.

Thus, there is also a risk where ECs can be formed into legal entities which do not guarantee democratic decision-making power as a result of participation, especially in countries where the legislation defining ECs allows this.

- **Are consumers in vulnerable situations suitable candidates for energy communities, or are communities better suited to more active and/or tech-savvy consumers?** The results of the survey suggest that members of energy communities do not necessarily fulfil the conditions that render people vulnerable to energy poverty. In this context, among the survey respondents:
  - Most were homeowners.
  - Most had at least 10% of discretionary income after paying for their necessary expenses.
  - All of those who were either single parents or pensioners or lived in remote locations (30% of the total), had a discretionary income of 10-30% or more.
  - 50% of the survey respondents lived in a home with high energy efficiency
  - 30% did not have the feeling to be spending too much money on energy.

Given the small size of the sample and the fact that energy poverty indicators depend more than anything on the local context, these results can be considered neither conclusive nor representative. Thus, it cannot be inferred from the ownership status, disposable income, or other such indicators whether or not energy community members are vulnerable or live in energy poverty.

Nonetheless, the key informants interviewed for this project corroborated that energy vulnerable groups are very unlikely to become members of an energy community as they cannot afford the upfront fees that usually come with membership (i.e., yearly fees, shares, and/or start-up investments).

- **How can energy communities be designed to bring benefits to all consumers, and be made more accessible and more attractive to vulnerable consumers?** There was consensus amongst key informants that the number of ECs that are specifically developed to address energy poverty is almost non-existent, and the ECs that try to focus on energy poverty alleviation face a lot of challenges. One of those challenges is the lack of governmental support for the work they do on energy poverty alleviation. Without this type of support, it becomes very hard for them to survive, because even their basic tasks come at a great cost in a market that is not designed for small players.

In making ECs work for vulnerable consumers, dedicated staff with the right background need to be deployed to engage potential members who live in energy vulnerability or poverty. This type of engagement entails conducting a diagnose to identify the degree of vulnerability and the causes that lead to that situation. But again, this set of skills is rarely available amongst the volunteers who largely make up ECs and so governmental support, either in the form of funding or expertise, is crucial.

It is thus clear that while there is not much written information on the practice of applying consumer law to ECs in the EU, there are risks which undermine individual consumer rights in the ways that ECs are being set up. If these legal issues and discrepancies are not addressed, they will present a barrier to the growth of the EC movement in the EU.

A recent survey of around 13,500 households in nine different European countries found that the vast majority (>80%) consider renewable, community-owned energy systems to be an important or even very important element in the transition to a more sustainable energy system.<sup>1</sup> Given increasing public interest in alternative energy systems, the urgency driven by the current energy crises, and the momentum of social innovations happening in this space, it seems all the more crucial to ensure that these developing systems can provide collective benefits without compromising the necessary protections and rights of individual consumers.

In light of these findings, our key recommendations to the BEUC and its members are as follows:

- Conduct further research on the intersection of ECs and consumer law, especially at national level. This may include analysing discrepancies between national consumer rights and rights governing organisations relevant to REC/CEC definitions, in order to advocate for the resolution of these discrepancies; understand the specific services (e.g., heat grids) which put individual customers, especially vulnerable or energy poor customers at risk, in order to ensure safeguards in these situations that do not forsake the benefits of membership.
- Understand the extent to which legal disputes are being made among members of energy communities, and what these disputes constitute. Some supporting collaborators might include existing EC networks, national ombudsman organisations as well as the National Energy Ombudsman Network (NEON).
- Engage country-level supportive networks for ECs. This differs considerably from country to country, but where they exist formally (e.g., Netherlands, Germany, Ireland)<sup>2</sup> they can provide insight into the context-specific needs of those ECs, as well as a channel to communicate important findings on consumer rights and obligations.
- Create basic guidelines for ECs on fulfilling consumer rights. This could include, for example, an overview of the key consumer rights (to clear information, to connection, etc) which must be fulfilled, a briefing on supporting vulnerable and/or energy poor customers, as well as tools to support ECs in fulfilling these rights and protections, e.g., templates for clear contracts and terms and conditions.
- In Central and Eastern Europe, EC movements are still young, and where transposition of the national law is still not finalised, there may be an opportunity to advocate for improved considerations of consumer rights and protections from the outset. Important advocates to engage in this space are CAN-Europe, Bankwatch CEE and partners of the Community Energy for Energy Solidarity (CEES) project.
- Advocate for increased institutional support for ECs that are addressing or wish to address the issue of energy poverty. Support could be in the form of dedicated budget in the plethora of public financing mechanisms available to ECs, but also creating incentives for banks and other private financiers to finance ECs focusing on energy poverty. Likewise, advocate for increased institutional support for vulnerable consumers so that they can overcome the financial barriers of joining an EC and to address the causes of their energy poverty (such as living in energy inefficient homes and high energy prices, as well as electricity dependency).

## Abbreviations

<b>CEP</b>	Clean Energy for All Package
<b>BEUC</b>	The European Consumer Organisation
<b>EC</b>	Energy community
<b>REC</b>	Renewable energy community
<b>CEC</b>	Citizen energy community



## Introduction

The energy system is changing at a rapid pace. Technologies invented in the last decade have remodelled energy infrastructures throughout the continent, including new ways of producing, distributing, storing and even marketing energy products. Innovations have also occurred in the social systems governing energy. Instead of the one-way supplier-customer transactions which used to govern energy, new forms of self-consumption and energy-sharing models are emerging throughout the EU.

Community-owned energy systems have developed organically on their own since at least the 1970s, and are increasingly being encouraged and supported by EU legislation. In particular, the 2019 Clean Energy for All Package (CEP) formalised the right of all EU citizens to produce and consume their own energy as individuals, groups and more formalised legal entities called 'energy communities' (ECs). The CEP also explicitly provides that all participants of energy communities should enjoy the same rights as any other energy consumer.

Yet there are several important differences between ECs and traditional energy market actors: ECs are usually smaller, have less administrative capacity and crucially, are formed by groups of individuals who participate in the decision-making and governance of the legal entity. In some cases, participants of ECs are even producers of the energy supplied themselves.

Despite the significant implications that this raises for ECs abilities to fulfil their obligations and protections towards their customers, not much has been written on the topic. Moreover, while several research and programmes are being developed to understand the potential of ECs in addressing energy poverty and vulnerability, the considerations in terms of consumer rights of these groups are not well-understood.

The research in this report attempts to fill some of these initial knowledge gaps. Through research using secondary online resources, responses from a survey distributed in September-October 2022, and interviews with key informants, this report summarises the main risks being discussed with regards to upholding consumer obligations among ECs, as well as the advantages that may be brought forward by the model of the EC.

In Chapter 1, we provide an overview of key concepts – namely how we define 'energy communities' in this report - and the methodology used to conduct the research for this report. This is based chiefly on secondary online Anglophone sources, responses from a survey conducted between September-October 2022, and interviews carried out with key informants with expertise on the intersection of consumer law and energy communities.

In Chapter 2, we provide first an overview of the consumer rights and obligations with regards to ECs in the EU legislation, before delving into the details of the evidence gathered on the specific consumer rights afforded to energy users in the EU today. We then elaborate specifically on the implications of these relationships for customers who experience energy poverty or vulnerability, and how they currently fit into the landscape of ECs today in Chapter 3.

Finally, in Chapter 4, we provide summary conclusions and direct answers to our initial research questions. We finish with recommendations to the BEUC and it's members for how to move forward and continue advocating for individual consumer rights among the collective mission of ECs.

# 1

## Overview of key concepts and methodology

### Key points

- The term 'energy communities' is broad, encompassing a diverse range of actors, energy activities, and legal organisations in the EU.
- 'Energy communities' (EC) in this report refers to those entities complying with the legal definitions of Renewable Energy Communities (RECs) and Citizen Energy Communities (CECs) as set out in the RED and IEMD, and therefore in relevant national laws.
- This report was written using secondary information from online Anglophonic literature, as well as primary research from a survey and informant interviews
- Literature, and expertise generally, on the intersection of these topics is sparse, and despite a widespread distribution strategy involving the collaboration of key EC networks in the EU, the survey only garnered 12 usable responses from EC members, all from Western European countries. This illuminates the difficulty in reaching ECs generally, but especially those in regions with a younger EC movement, e.g. Central and Eastern Europe.

### 1.1 What is an energy community?

The concept of community-owned energy is not new. The term has been used since at least the 1970s to mean, very generally, a group of people creating and governing an alternative energy system which aims to bring social, environmental and economic benefits to their community. Energy communities bring together a diverse cohort of actors – small and medium-sized enterprises, local authorities, communities and cooperatives, but also households and individuals – who are engaged in the act of producing and consuming their own energy with the explicit task of providing wider, social benefits.

Today, the term energy communities is being increasingly formalised due to changes in the EU legislature. Since 2019, certain types of energy communities have been established in CEP policies. The Renewable Energy Directive (EU) 2018/2001<sup>3</sup> (hereon, RED II) in the Internal Market for Electricity Directive (EU) 2019/944<sup>4</sup> (hereon, IEMD) established definitions for Renewable Energy Communities (RECs) and Citizen Energy Communities (CECs), respectively.

The requirements for defining these entities in national laws can be summarised as follows:

- An REC is defined in the REDII as a legal entity based on open and voluntary participation, and is controlled by shareholders or members that are located in the proximity of the renewable energy projects. The primary purpose of the REC is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits.<sup>5</sup>
- A CEC is defined in the IMED as a legal entity based on voluntary and open participation, and is controlled by members or shareholders not defined by geographical proximity to the energy projects owned by the CEC. The primary purpose of the CEC is to provide environmental, economic or social community benefits to its members or shareholders or to the local areas where it operates rather than to generate financial profits.<sup>6</sup>

Thus, both RECs and CECs are intended to reflect a legalised form of collective ownership around different energy-related activities that follows ownership and governance principles and has a non-commercial purpose. And yet, there are some key differences between the two forms. CECs operate only in the electricity sector and do not have a technology-specific focus, while RECs engage specifically on renewable energy. Most importantly, RECs are defined by their geographic proximity to their energy assets, and thus require effective control at local level.<sup>7</sup>

Moreover, the REDII and IMED directives are being transposed into national law, where the definitions are further refined and differentiated.<sup>8</sup> Indeed, the EU has left a relatively large degree of freedom for Member States to determine the organisational forms that RECs/CECs must follow (within the limits of the definitions provided in the legislation).

### 1.1.1 The use of the term energy community in this report

Because this report outlines a discussion on energy communities' abilities to fulfil consumer law, the term 'energy community' will refer to those legal entities currently following definitions according to their national law on RECs and CECs, and where these are yet absent, the relevant EU definitions.

This report thus precludes consideration of individual self-consumers and jointly-acting or collective self-consumers that do not fall under CEC/REC criteria. This report also does not tackle the specific activity of energy-sharing among energy communities, and the implications this has on consumer rights and protections, though noted are discussions happening in this space<sup>9</sup> given the complex task of redefining rights for the diverse types of prosumers emerging throughout the EU.

## 1.2 Methodology for answering research questions

This report was written using as sources of information:

- Available online Anglophonic literature;
- Responses from a survey distributed between September-October 2022 (more in 1.2.1); and
- Interviews with key informants with expertise on the intersection between energy communities and consumer rights and protections, and/or energy poverty.

Though there has been an explosion of literature on the topic of energy communities in the EU since even before the provisions of the Clean Energy Package were adopted in 2019, only a handful of these are dedicated to the topic of consumer rights and protections among these entities.

### 1.2.1 Survey

The survey was developed in collaboration with the BEUC and attempted to glean the following from potential respondents:

- General profile (location, gender, income, education)
- Energy community profile (activities, legal form, nature)
- Exercise of consumer rights and protections within energy community
- Proneness to energy poverty and vulnerability
- Perceptions of user-friendliness and consumer protections under the energy community as compared to past traditional suppliers
- Perceptions of the advantages of being part of an energy community from a consumer standpoint

The survey included 47 mandatory questions and 21 additional questions which were triggered following certain responses to mandatory questions. After a first round of distribution in English, the survey was translated into French, Dutch, Italian, Spanish, German and Portuguese to encourage further submissions. The survey was open for a total of seven weeks.

Distribution of the survey followed a two-prong strategy:

1. Distribute via existing energy community networks. This was achieved with the collaboration of REScoop.eu, Friends of the Earth and Energy Cities EU.
2. Distribute to targeted energy communities in Central and Eastern Europe. This was conducted with the awareness that the energy community movement and laws supporting it are not as well-developed in these regions, and the hope that a targeted strategy would lead to getting some responses from this cohort. We received only one response from this region (Estonia), and it was from a community that does not supply energy to its members.

- **Response rate**

Despite this widespread distribution strategy, the survey only garnered 12 responses, 10 of which are complete and 2 of which are partially complete (i.e., more than 60% of questions are answered and have been considered in the analysis). A further 16 respondents started but did not complete the survey, and another 2 responses were disqualified as they were from communities that either were not operational yet, or did not supply energy to its members (i.e., did not have final customers).

Note also that 2 responses came from members of energy communities that were not yet legally formed.

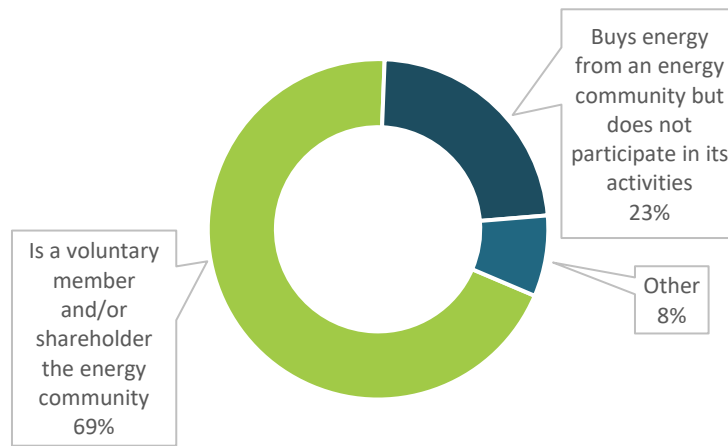
- **Profile of survey respondents**

The 13 respondents represented six European countries. The majority of them were from six southern Europe, while less than a quarter was based in western Europe. There were no responses from the northern or eastern regions of Europe. Over half of the respondents identified as women and the majority of the respondents has obtained university education (Table 1). From the 13 informants who answered the survey, two-thirds were active members of the EC. One of the informants (“other”) reported being an employee of an EC (Figure 1). Almost half of the respondents reported living in or near the area where the energy was produced, while almost a quarter of them did not know where their energy was produced (Figure 2).

**Table 1 Profile of survey respondents**

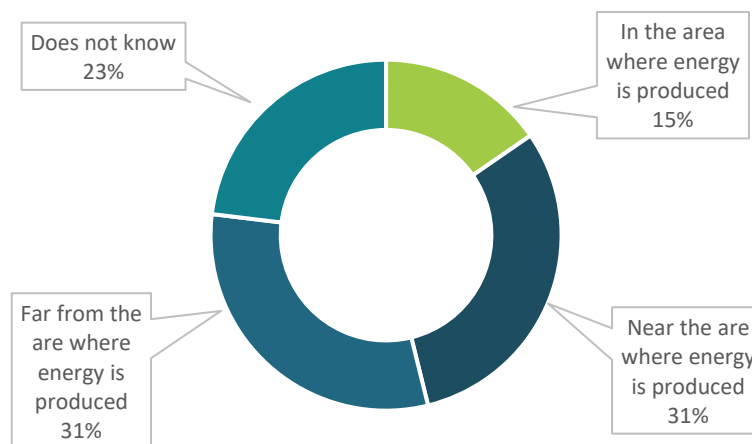
Country	Gender		Education	
	Male	Female	University	Technical school
Germany		1	1	
Greece	1	1	2	
Italy	1	1	2	
Netherlands		2	2	
Portugal		1	1	
Spain	4	1	3	2
<b>Total</b>	<b>6</b>	<b>7</b>	<b>11</b>	<b>2</b>

**Figure 1** Type of EC membership of survey respondents



Question: Choose one of the following:

**Figure 2** Respondents' location with respect to energy source



Question: You live:

- **Limitations of the survey**

To the authors' knowledge, this is the first type of survey capturing information on energy consumers and consumer rights. While there is merit in such an endeavour, the data are not representative of the European Union nor of the range of energy communities operating today. Firstly, the sample size is very small compared to the number of European citizens active in energy communities, which is estimated to be at least 1.25 million.<sup>10</sup> Nonetheless, the data are helpful in which they give an indication of trends which, together with secondary data collected from the literature, served as the basis to elaborate questions for key informants.

# 2

## Energy communities and consumer rights

### Key points

- The REDII and IEMD explicitly provide that final customers, household customers and active customers who are supplied energy by their respective REC/CECs are entitled to the same rights and protections as all other consumers in the energy market.
- Still, much of the legal underpinning for these rights depend on national laws, which can differ significantly between Member States, some of which are still being transposed.
- There are also discrepancies between laws on consumer rights – applying to final and household customers – and laws on organisational responsibilities – applying to active customers who by definition have an investor relationship with their EC. This is the discrepancy where the most risks lie for consumer-investors going forward and which requires the most clarity.
- In practice, however, there is not as of yet any concrete evidence that consumer rights are being violated in a systemic or widespread way, especially considering that energy consumers in the traditional market also face issues every day.
- Interviews and survey responses seem to indicate that high value is placed among most ECs on reliable technology, and good communication.

### 2.1 ECs and consumer rights in theory

#### 2.1.1 Overview of obligations and rights according to EU legislation

What are ECs obligations and protections afforded under current consumer law? The REDII and the IMED both provide explicit provisions for the rights and protections offered consumers under energy communities, and conversely, the obligations of energy communities towards their members and consumers.

In the case of the REDII, it is stated that: *“Member States shall ensure that final customers, in particular household customers, are entitled to participate in a renewable energy community **while maintaining their rights or obligations as final customers**, and without being subject to unjustified or discriminatory conditions or procedures that would prevent their participation in a renewable energy community, provided that for private undertakings, their participation does not constitute their primary commercial or professional activity.”*<sup>11</sup>

The REDII further outlines Member States’ obligations to provide an enabling framework for the development of RECs, one which ensures that “[...] rules to secure the equal and non-discriminatory treatment of consumers that participate in the renewable energy community are in place.”<sup>12</sup>

Similarly, the IEMD requires that Member States provide an enabling regulatory framework for CECs which ensures that “[...] members or shareholders of a citizen energy community are entitled to leave the community, in which case Article 12 applies; [...] members or shareholders of a citizen energy community do not lose their rights and obligations as household customers or active customer.”<sup>13</sup>

Member States shall also ensure that these entities “[.] are entitled to arrange within the citizen energy community the sharing of electricity that is produced by the production units owned by the community, subject to other requirements laid down in this Article and subject to the community members retaining their rights and obligations as final customers.”<sup>14</sup>

Together, these provisions in the REDII and IEMD explicitly provide that final customers, household customers and active customers who are supplied energy by their respective REC/CECs are entitled to the same rights and protections as all other consumers in the energy market. Still, much of the legal underpinning for these rights depends on national law.

The overarching rights of consumers in energy markets are guaranteed at the EU level, but the rules governing these rights are defined in each country after transposition of the relevant directives. Everything from the definition of an EC to the nature of ‘effective control’ of its members are determined at a national level. Further complicating this is the fact that some Member States have yet to transpose the REDII and IEMD, though the two year deadline has passed. This means that in some places ECs are governed by pre-CEP laws on self-consumption, or do not yet have national legislation to refer to.

There is also no clarity on the application of consumer obligations to those consumers who fall under both ‘final customer’ and ‘active consumer’ status. In other words, those that buy energy from their EC, but also participate in their EC as members and/or shareholders, do not yet have fully differentiated rights. This is exacerbated by the first point on national transposition. These elements will be further unpacked in section 2.2.2.

## 2.2 ECs and consumer rights in practice

How do ECs apply their obligations regarding consumer law and protections? The explosion of existing research funded by the EU illuminates the nature of member participation, and the application of technology and communications throughout the diverse movement of ECs. Survey results and informant interviews compounds this secondary research, and give us a glimpse into the reality of how consumer rights and obligations are currently being thought of and applied among energy communities in the EU.

### 2.2.1 Right to connection

Arguably the most fundamental of energy consumer rights is the right to connection to an electricity network, a basic obligation throughout the EU to ensure that citizens have access to these essential goods. No evidence of this right being abused among ECs was found during the course of this research. The survey respondents all stated that they had never been disconnected from their energy supply.

There is a theoretical risk for EC customers in the case where one or multiple members are no longer fulfilling their obligations towards the community’s needs. In such a case, to ensure the ongoing operational and/or financial sustainability of the EC, it may be necessary to exclude these members. Indeed, this may then require disconnecting energy for the implicated members, thus denying their right to connection.

### 2.2.2 Right to switch supplier

National legislation must guarantee the right to change your electricity and/or gas supplier in an easy and quick way, without extra charges. The network operator in the area must make the change within 3 weeks, provided the original terms of the contract have been respected by both parties.<sup>15</sup> In some countries, the terms around this depend on the nature of your contract. In the Netherlands for example, an open-ended contract will guarantee the above rights, but a fixed-term contract may incur a longer notice period and termination fees if the switch is initiated before the contract end.<sup>16</sup>



In the secondary research, survey responses and interviews conducted, no concrete examples were found which demonstrated this right being compromised among ECs. Only one survey respondent stated that they tried to switch from an EC supplier to another energy supplier. This respondent stated that the switch happened in 2022 and although they reported feeling uncomfortable having to leave the EC, they did not feel pressure from other members, they did not pay a fee to change supplier and the switch took less than 3 weeks overall.

However, there are clear theoretical risks that are present where members of energy communities unassumingly and unintentionally become 'locked-in' to arrangements with their ECs in ways which effectively disable their right to switch supplier.

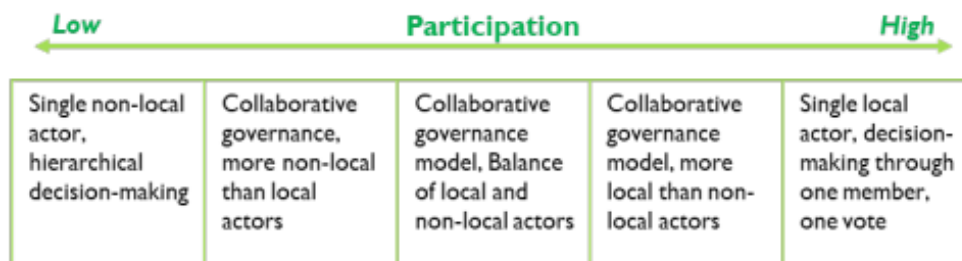
- **Implications of voluntary participation**

In a first instance, the definitions for both CECs and RECs require that participation in the entities are voluntary. This is understood as meaning that members and/or shareholders should have the right to leave the REC or CEC, just as any customer has the right to switch energy supplier with undue complications. However, this dimension of CEC/REC participation is complicated by the fact that individuals have two different, but often overlapping relationships with their CEC/REC:

- The supplier-customer relationship: the law is clear that in these cases, consumers maintain their rights, including the right to switch suppliers. Therefore, no one can be forced to join or to stay in an energy community, and normal rules regarding consumers' rights to switch suppliers or service provider (e.g. aggregator) must be respected.
- The member/investor relationship: such relations are governed by existing laws on the process of joining or leaving companies, associations, or cooperatives, in other words laws on company structure and corporate governance.<sup>17</sup> It is in these types of relationship that the application of the right to switch supplier becomes complicated.

This duality oversimplifies the picture a bit, as *"Energy community members can increasingly take a variety of roles, at various points in time and to varying degrees."*<sup>18</sup> EC member participate to various degrees depending on multiple contextual factors like national laws, locality, and size (Figure 3). It is clear though that in the former case, final customers have the enshrined right to switch suppliers according to the details of their national laws. Usually, these are larger network-type cooperatives, like Energie VanOns in the Netherlands, who take on final customers without further need to invest in shares or utilities.

**Figure 3** Degrees of citizen participation in the governance arrangements of ECs



Source: Hansen, P., Barnes, J. and S. Darby (2022, February 15) *Final report on clean energy community business models: emergence, operation and prospects of European case studies*, New Clean Energy Communities in a Changing European Energy System (NEWCOMERS), p.28.

However, in many ECs, members need to invest in some form, for example buy at least one share of the legal entity, in order to participate in decision-making and benefit from services. This has two related implications for consumer rights. On the one hand, consumers are making up-front investments into their energy supplier which can act as a practical "lock-in" and reduce the incentives for consumers to exercise their choice to switch supplier.<sup>19</sup> On the other hand, if members are able to withdraw shares with as short a notice period as is common for switching energy suppliers, usually 30 days or less, it could jeopardise the continuation of an EC.



The benefit of this high participation governance model, from a consumer perspective, is that participants have significant decision-making and negotiating power when it comes to decisions which impact their consumer rights.

For this reason, REScoop.eu and ClientEarth recommend that national legislation provide RECs and CECs the discretion to impose reasonable limitations on members' ability to dissolve their investment, in order to ensure the long-term financial sustainability of the energy community.<sup>20</sup> Most national legislation sets minimum delays for exiting an investment, which currently impacts an EC member's ability to exit their supplier relationship. In some places, like Luxembourg, there are specific provisions detailing an EC member's rights and obligations with regards to withdrawing shares from an EC.<sup>21</sup>

There are also alternative models to the customer-investor model. Some cooperatives offer the possibility to buy a share over a long period through the regular energy bills and other cooperatives are studying the possibility to create "social funds" through contributions from members.<sup>22</sup> This may provide limited liabilities for members who are vulnerable or are otherwise not in the position to commit financially to the EC. Such models could be further explored to ensure that customers, especially those who are vulnerable or experiencing energy poverty, have their consumer rights and protections provided for.

- **Grid infrastructure**

Another "lock-in" situation may arise if a consumer becomes a member of an EC and as a result decides to no longer maintain a connection to the grid. In particular, if there is no appointed default or backstop provider, such as in the installation of heat grids, then there is a risk that the consumer is effectively locked-in to this new supply arrangement indefinitely. According to the Council of European Energy Regulators, this situation is already evident in some places where companies require that tenants in an apartment block who wish to benefit from the supply of energy from the building's solar panels can no longer be supplied from an alternative traditional supplier.<sup>23</sup>

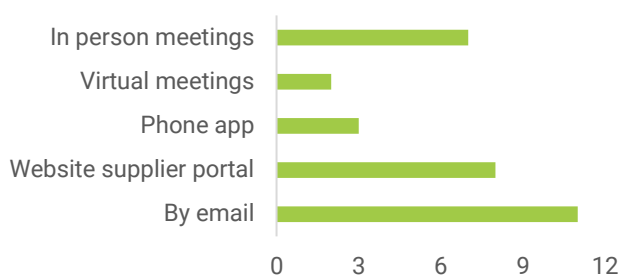
- **Termination fees**

Only one survey respondent shared that they left their energy community, and they stated that they were not charged to leave. In the secondary research, survey responses and interviews conducted, no concrete examples were found indicating that energy community members are being charged to terminate their contracts. However, there are other ways that members might be "paying" to leave, for example, they may not recover membership fees.

### **2.2.3 Information and communication**

Access to clear and accurate information about your energy contract, consumption and methods to improve efficiency are core to the efforts of the EU to establish protections for energy consumers. From the survey responses and informant interviews, it seems clear that ECs have differing capacities to offer "advanced" technologies (e.g., phone applications), but in all cases place high value on the importance of basic communication skills with their members and participants.

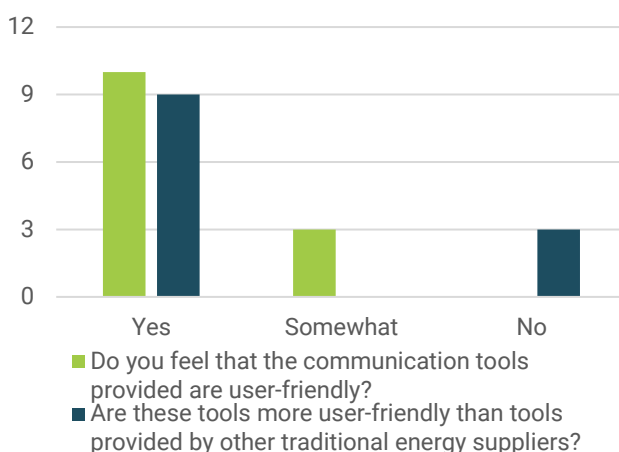
**Figure 4 How does your EC communicate with you?**



Source: Survey responses

Survey responses show that the most used form of communication is email, followed by a website supplier portal and in-person meetings. Less used forms of communication are phone applications (which can be expensive to create and maintain) and virtual meetings. Other forms of communication mentioned were social media, a newsletter, and webinars to explain changes to the market and/or contracts. This is consistent with the finding in the NEWCOMERS project that most communications technology used by clean energy communities are rather basic, in order to minimise complications for both administration and members (see 2.2.6 on Technology).

**Figure 5 User-friendliness of EC communication tools, versus traditional energy supplier**



Source: Survey responses.

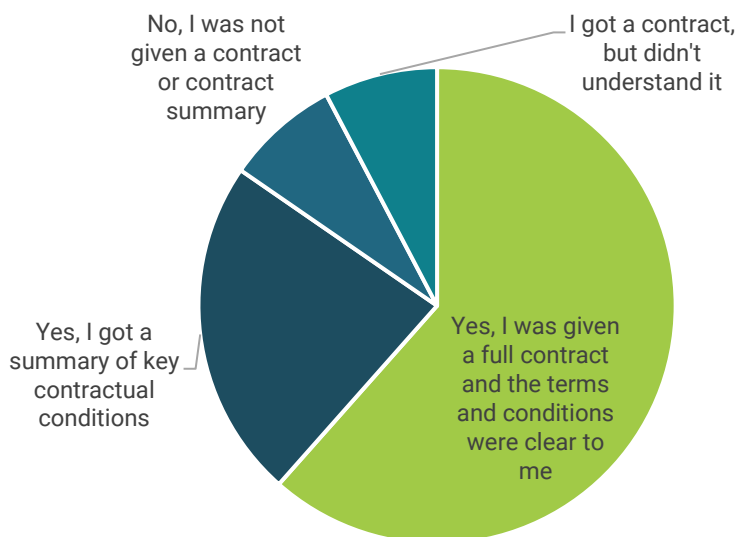
It is worth acknowledging that user-friendliness is a rather arbitrary term. For example, an elder person might consider emails and in-person meetings more user-friendly than a phone application or website supplier portal. Thus, without more details about the types of ECs or the types of traditional energy suppliers considered, or meanings around the term ‘user-friendliness,’ it is not possible to draw more conclusions about the survey responses. Overall however, the survey does show that there are some EC members who are finding that communication tools could be more user-friendly – in the sense that they could be easier to use for the cohort in question.

- **Clear contract information and the right of withdrawal**

National legislation must guarantee the right to receive clear information on your energy contract before signing, and advance notice of any changes are made to the contract. There should also be a clear and communicated right to withdraw from a new contract within 14 days.<sup>24</sup>

Overall, the vast majority – 11 out of 13 survey respondents – answered that they received a contract with either full terms or a summary of terms and conditions. Another respondent stated they received a contract but did not understand it due to language barriers (English-speaking in a Dutch EC). The last respondent answered that they did not receive a contract or contract summary. Additionally, almost all survey respondents answered that they have the option to cancel their contract with their EC. One respondent didn't know whether or not they had the option to cancel, and was the same person who did not receive a contract from their EC.

**Figure 6** Did you have a clear idea of your contract terms and conditions before you signed on with your current energy community?



Source: Survey responses.

In the case of the respondent who claims not to have received a contract for their services, this would represent a serious breach in their basic consumer rights, especially since their EC is legally formed as a cooperative. This may however be up to national legislation, and the fact that in a lot of Member States, the REDII and IEMD have not yet been transposed. For example in France, the pre-CEP legal framework for collective self-consumption states that the “organising legal entity” is not subject to the specific pre-contractual information obligations regarding electricity supply contracts. In particular, the provisions of annex VII regarding the minimum requirements for billing and billing information based on actual consumption of the Directive 2012/27/EU on energy efficiency do not apply to the “organising legal entities.”<sup>25</sup>

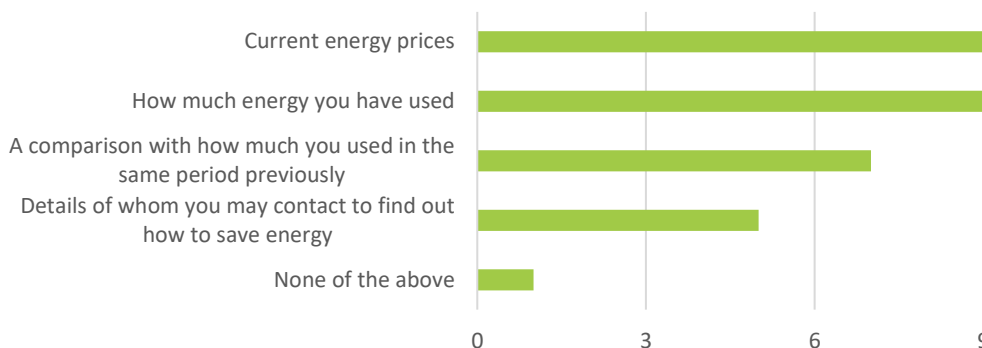
Another risk among EC members is one faced by all energy consumers – that consumers cannot, or do not, effectively exercise choice because they are not familiar enough with the technical, legal or financial content to make an informed decision.<sup>26</sup> This risk is potentially heightened among EC customers who are confronted with unfamiliar products (e.g., renewable sources, smart meters, etc) and bundled offers (e.g., software and hardware installation), and the complex and wide range of rules and regulations which apply to these.<sup>27</sup>

- **Accurate information on consumption and billing**

National legislation must guarantee you the right to have access to accurate information on your consumption of electricity and/or gas in order to regulate your energy consumption, and be billed based on actual consumption.<sup>28</sup> Yet, in the energy sector at large, billing issues make up by far the largest percentage of customer complaints in the UK<sup>29</sup> and Ireland<sup>30</sup> in recent years, but even going back as far as 2018.<sup>31</sup>

Considering this context, it doesn't seem that complaints on information regarding consumption and billing are more prevalent for those in ECs than those with traditional suppliers. Survey respondents all said without exception that they had access to information about their consumption and billing either anytime they want via their supplier portal or app, or periodically via email. None of the respondents have ever had to pay for information about their billing nor have ever had issues with their meter.

**Figure 7** What does your energy bill show you?



Source: Survey responses.

Moreover, out of 11 respondents who answered the question on the content of their energy bill (Figure 7), 9 said they had the basic information on current energy prices and how much energy was used, 7 more said they also got a comparison of usage in the same period from the previous year. Five respondents also stated they had details of who to contact to find out how to save energy going forward.

One respondent stated that they received none of the stated information pieces in their energy bills, which would represent a serious breach of their consumer right to accurate information on consumption and billing. This respondent also however stated that they received information about their consumption and billing anytime they wanted via their supplier portal, and were also part of one of the ECs which had not yet formed a legal entity. Therefore the answer may simply not be consistent, or it may be influenced by the fact that the EC they have joined are not yet aware of legal obligations for legally formed ECs.

- **How to use energy more efficiently and on the benefits of using energy from renewable sources**

All survey respondents reported that their ECs provide them with information on its energy sources, the costs, energy efficiency and environmental impact of these sources (or are somewhat informed of these issues).

#### 2.2.4 Complaints and dispute settlement

National legislation must guarantee you the right to file a complaint with your gas or electricity supplier and, in the event your complaint is not managed to your satisfaction, send your complaint to an independent body for an inexpensive, prompt and fair out-of-court settlement.<sup>32</sup>

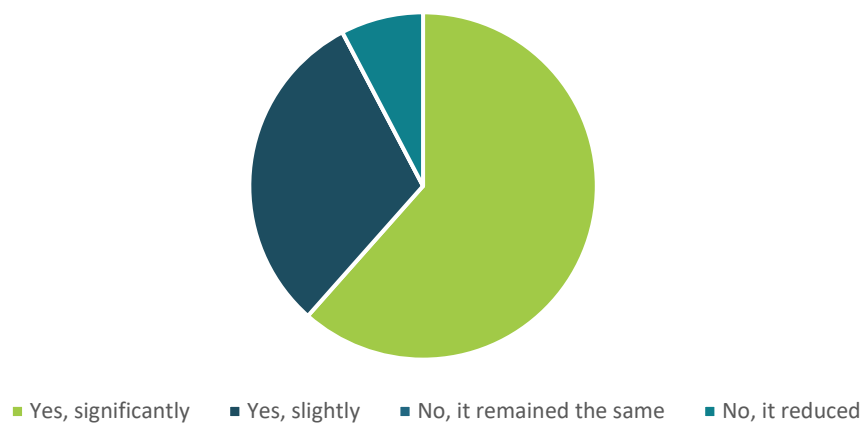
All survey respondents except one stated that they had not filed a complaint with their EC. The respondent who had filed a complaint also reported that the complaint was handled promptly and properly. More concerning is the result that 3 of 11 respondents stated that they didn't know how to file a complaint with their EC, though it is not clear whether this is due to the lack of information provided by the EC.

No further information was found on the practice of dispute resolution among ECs, though it is a topic with important implications for consumer rights given the basic protection extended to all energy consumers of having a fair mechanism for complaints and dispute settlement. It could also have important implications for the operations of ECs given that externally handled dispute settlements can be long-term, expensive and negatively impact the well-being of an EC.

### 2.2.5 Price competitiveness

Though there is no specific consumer right on protection against price shocks, a lot of recent discussion has been brought forward in terms of ECs potential in providing protections to consumers in the context of the current energy price crisis.<sup>33</sup> The European Economic and Social Committee in June 2022 recommended as part of the short-term energy market interventions that policymakers: “[...] encourage, support and enable people to become energy prosumers and build up local energy communities, thus helping them to be more independent of common market prices.”<sup>34</sup>

**Figure 8** Did the price you pay for energy increase in the past year?



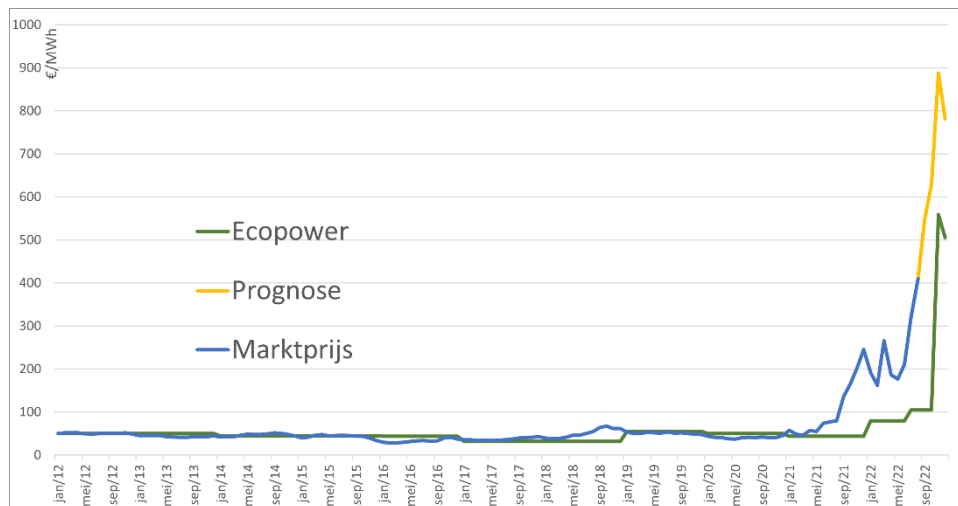
Source: Survey responses.

Indeed, while there is no analysis which systematically reviews the evidence of this potential, it is undeniable that most EC models are more independent of market price variability due to the simple fact that they generate their own production. Still, many ECs must also buy from the market to supplant excess demand, and for this reason are bound to price shocks from the market. Ecopower, for example, buys from the market about 30% of the time.<sup>35</sup>

Our survey respondents predominantly belonged to larger cooperative communities, and 12 out of 13 of these responded that their prices had increased in the past year, for 8 of these having increased significantly (Figure 8). The final respondent stated that their energy price had reduced.

It is of course worth putting these answers in perspective given the shock of the energy price crisis on the market at large. Ecopower, for example, have claimed that despite rises in their prices, they are still managing to stay below the current high prices of the market (Figure 9), and state that: “Because Ecopower does not have to derive any additional profit from the supplier activities, we always offer a fair and average favorable price. Incidentally, our target group is not the customers who always want the cheapest electricity and who frequently change suppliers. Citizens who enter into a long-term relationship with their cooperative and consciously opt for local, renewable and cooperative citizen power at a fair and transparent price.”<sup>36</sup>

**Figure 9 Ecopower forecast of market price versus their price (2012-2022)**



Source: Ecopower (2022) "FAQ: Why and when does the price at Ecopower change?" online: <https://www.ecopower.be/hulp-nodig/veelgestelde-vragen>, viewed November 2022.

Note: *Prognose* indicates the forecast of electricity prices, *Marktprijs* indicates the market price.

Again, the decision-making power of members can also play a key role in issues such as pricing. At Somenergia, members participation in the definition of the rates, which are ratified in assembly.<sup>37</sup>

Some ECs can guarantee a demand-supply balance, and will thus fix prices for a long period of time. The energy cooperative in the municipality of Aalten fix their energy prices for a minimum of 5, and a maximum of 15 years. They do so by focusing on energy efficiency initiatives with their members.<sup>38</sup> It is likely this model is only possible at very small and localised scales.

### 2.2.6 Technology

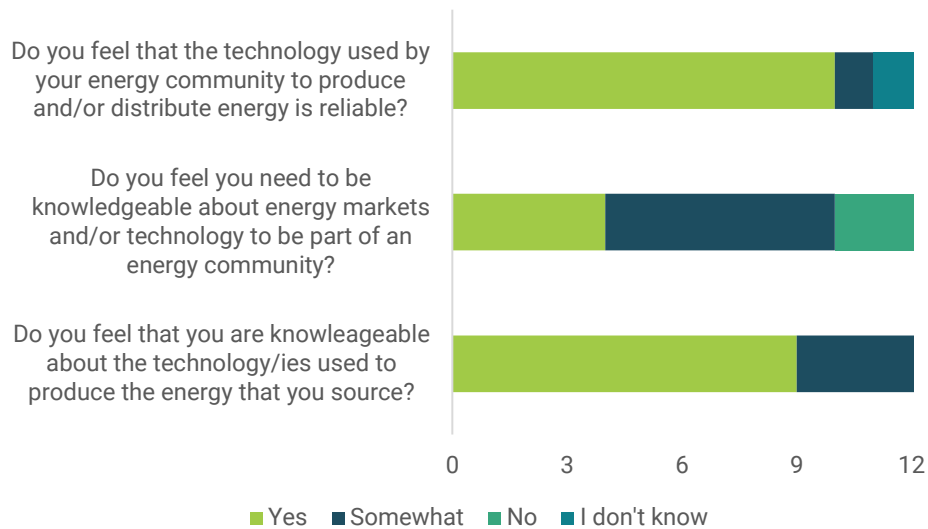
Research points to the fact that generally, in ECs examined in Western and Southern Europe, ECs take a prudent approach to implementing technologies. The NEWCOMERS project explored how decisions regarding technology are made in 'clean energy communities'<sup>i</sup>, looking at which technologies are most used and why. What they found was that different technologies bear different levels of risk, and that clean energy communities often choose well-established technologies to minimise the risk of equipment not working as planned, and/or causing further financial risk to the EC and its members. More advanced technologies involve more risk and require more expertise in their implementation. Communities with more sophisticated technologies therefore tend to involve more third party and commercial actors.<sup>39</sup>

This is consistent with the survey results that most respondents consider the technology used to be reliable or somewhat reliable (though 1 respondent answered that they didn't know). All respondents also said that they felt knowledgeable or somewhat knowledgeable about the technology/ies used to produce the energy from the EC. Respondents were more divided about whether one needs to be knowledgeable about energy markets and/or technology to be part of an EC: 10 respondents answered 'Yes' or 'Somewhat,' and 2 responded 'No.'

<sup>i</sup> Defined as: "associations of actors engaged in energy system transformation through collective, participatory, and engaging processes, seeking collective outcomes." This definition is deliberately wider than that offered by the REDII or IMED definitions of ECs, as it explicitly recognises different actors involved in contemporary activity, including for-profit enterprises.

The answer to this can also very well be influenced by the participation of the individual at hand – there is a difference between being a customer only, and participating in the decision-making, governance and technical decisions of an EC. Overall, however, it does indicate that for at least some types of participation in ECs, one must have a basic understanding of the technology used to produce and distribute the technology, or at the very least technology in general (including perhaps communications technology).

**Figure 10** Perceptions of tech-savviness and EC needs



Source: Survey responses.

Despite this, there have been reports of faulty technology in EC projects. One incident was pointed out in Slovenia in the context of a joint project with the energy company Petrol. A customer has alleged that solar technology was installed at their home without due diligence to ensure the proper functioning of the technology, and as result the installation currently is not able to produce enough electricity for self-sufficiency, and other general faultiness with the operation of the technology. This allegation could not be verified.

A UK Citizen Advice report from 2018 which surveyed members of community projects and perceptions of consumer protections had also found examples of problems relating to reliability of technology (such as faults with solar panels), metering issues (e.g., not being able to view real time data, meters not being accessible) and issues with installation (e.g., minor damage to the home such as water leaks). Crucially, the report states that *“Encouragingly, we did not find any examples of major detriment, and the examples we did find should not be taken as systemic issues with the community energy sector.”*<sup>40</sup>

No further examples of technology faults could be found in recent Anglophonic media sources. However, if such situations are indeed unfolding, it raises a number of questions around the ability of participants, especially those with little involvement in the upstart of the operation of an EC project, to voice concerns and opinions regarding crucial matters, those in which they may not be well-versed (i.e., technological, legal, financial).



## 2.3 Differentiating consumer obligations for ECs: A modulated approach

Survey results showed that respondents were, on the whole, enjoying consumer rights and protections afforded to all other energy consumers on the market. However, these respondents were all from ECs based in Western European countries, with more established legislation on ECs in general and more supportive EC movements and networks. They were also from higher income populations with the financial reserves to embark on the journey of forming or taking part in alternative, local energy systems.

Moreover, at least 4 of the respondents were part of larger cooperatives who seem to be the most effective at applying consumer obligations in the formal, legal sense. Of these types of ECs examined, all had clear information on their websites, offered prices and contractual terms and conditions upfront, and provided easy entry-points for becoming part of the EC.

Informant interviews corroborated the views that because the EC movements is still on the whole a young one, the discussion around consumer obligations is not yet central given other basic pressures of development (e.g., transposition of the REDII and IMED, establishing supportive definitions, obtaining financial support, overcoming cultural norms which go against community energy movements). This is especially true in places with EC development is not established, namely in Eastern and Central European countries.<sup>41</sup>

All ECs are however, by nature, concerned with the well-being of their member/shareholders and the continuity of their projects. For that reason, elements like good communication, adequate and clear information, proper technological roll-out and general risk-aversiveness have come up as strong points for most cases reviewed (through the survey and the interviews).

Thus, it is clear that consumer rights and obligations are not being applied consistently among ECs, for the plain fact that this group of legal entities is extremely diverse in size, activity and legal environment. The main dimensions currently differentiating ECs abilities to fulfil consumer rights and obligations as per the CEP requirements are:

- National legislation: especially regions where the EC movement is young and/or the transposition of EU laws are not yet well established;
- Activity: especially those which require participants be technologically dependent on the EC, such as heat grid projects;
- Ownership and governance models: especially where these have an impact on participant roles and/or where the customer of an EC is also invested in some form; and
- Size: this refers to the amount of members that part of the energy community, and related to this the financial and operational sustainability of the EC.

All of these dimensions interact with each other. For example, the smaller an energy community, the more likely all members are shareholders and involved in governance of the structure. The different laws in each Member State dictate how ECs may develop, the legal forms they are likely to take, and the support they receive (financial, information, etc) in order to thrive in their particular context.<sup>42</sup>

In light of these differences, and the apparent tensions between individual consumer rights and collective well-being of an EC, there are discussions around the options of a 'modulated approach' to the issue. In the passionate words of one informant, "*You have to protect the collective, if you don't it will corrode, crumble, and every individual will suffer.*" Thus, the question becomes: should there be a separate system of consumer rights and obligations that apply to different ECs and types of members? Where would the lines be drawn to compromising individual consumer rights?

Such a 'modulated' approach to consumer rights among ECs has not been put down on paper, but it is a topic that came up regularly and organically in informant interviews. A few key points emerged from these discussions (viewpoints from 3 different informants):



- Some consumer protections are already built into the legally-determined governance systems of ECs. For example, cooperatives formalise statutes which state the rights and obligations of its members, with very clear rules on elements like decision-making power, the right to leave and dispute resolution. These may already be different to regular energy consumer laws, and it should be explored where reasonable modifications can be made to ensure the sustainability of EC models in the long-term.
- There are protections that cannot be compromised, especially those relating to vulnerable customers.
- Another key right is to be an informed consumer, and if a consumer can be adequately informed of their rights, obligations and advantages with regards to their role as members, shareholders and producers in ECs, there may be room to waive other rights with regards to their role as individual consumers.
- One informant raised the possibility of developing solidarity mechanisms in ECs where certain customers (vulnerable, energy poor) have enshrined rights or additional support to be able to participate in the EC without compromising the rights that protect them as consumers.
- Despite the apparent advantages, even necessities, in a modulated approach, a key risk might be the signal sent to the rest of the energy market that these rights and protections are not important, at least not for everyone. There was concern that it could open the doors to revisiting individual rights and protections in the future.

Overall, it is beyond the scope of this report to determine whether a modulated approach can and/or should be deployed in the case of energy communities. What can be concluded from this research is that such discussions are already happening, and members of the EC movement are grappling with the practicalities of implementing broad, individually-focused consumer rights to very diverse, and context-specific situations of ECs.

# 3

## Energy communities, energy poverty and vulnerability

### Key points

- Assessing a household's vulnerability is a complex undertaking, as energy poverty indicators depend more than anything on the local context.
- Some energy communities are trying to address the problem of energy poverty together with other social and environmental sustainability goals. Yet, their efforts are restricted by the limited capacities of their members.
- Energy vulnerable groups are very unlikely to become members of an energy community as they cannot afford the upfront fees that usually come with membership.

### 3.1 What is energy poverty?

Energy poverty occurs when energy bills represent a high percentage of consumers' income, impairing their capacity to pay for other expenses. As the energy crisis hits, more European households become vulnerable to energy poverty. By shielding their members and customers from the volatility currently experienced in traditional energy markets, ECs can play a pivotal role overcoming the energy crisis. But are ECs created as a response to energy poverty or do their members also experience energy poverty?

In 2020, about 8% of the EU population (ca. 35 million people) reported being unable to keep their home adequately warm,<sup>43</sup> and 6.3% (ca. 28 million) were in arrears on utility bills, including energy bills.<sup>44</sup> It is likely that in the past two years, the impact of the COVID-19 pandemic, the surge in energy prices in the context of the Russian invasion of Ukraine, and the resulting cost-of-living crises, may have worsened this situation. However, not all European countries are affected in the same way. For example, over 12% of the population in Portugal, Lithuania, Bulgaria, and Greece have difficulties keeping their homes warm. By contrast, in countries such as Norway, Finland, and Austria, less than 2% of the population face this problem.<sup>45</sup>

A central concept in understanding these differences and ultimately addressing this situation is that of energy poverty. Energy poverty is understood as a situation in which a household is unable to access essential energy services at an affordable price to secure the energy needed for a decent life in the home and for full participation in society.<sup>46</sup> As an issue with multiple dimensions, that share of the population that should be considered energy poor is difficult to ascertain. As such, there is not one type or cause of energy poverty. Rather, its nature depends on the context in which it occurs. Against this background, energy poverty can be shown as a situation with long periods of power outages creating the inability to access energy, but also as a set of conditions where individuals or households are unable to provide required energy services in their homes at an affordable price.<sup>47</sup>

### 3.1.1 What is energy vulnerability?

Energy vulnerability is a term used to include both the segment of population identified as living in energy poverty and those people at risk of becoming energy poor in the future.<sup>48</sup>

### 3.1.2 Causes and effects of energy poverty

Energy poverty results from the interplay of structural factors, namely income poverty and inequality, unfair energy prices, and poor quality and inefficient housing leading to a high energy need.<sup>49</sup> As energy poverty occurs at the domestic level, it is difficult to identify and quantify its magnitude. Energy poverty cannot be captured with a single indicator. To increase its understanding, other causal factors need to be considered, including personal, regional, structural, economic, and social specificities, such as climatic variation, dwelling type, available heating/cooling equipment, gender (see box 1), age, health status or household composition and other socio-economic elements.<sup>50</sup>

#### Box 1. Gendered causes of energy poverty

**Economic:** Women are much more prone to energy poverty than men. For example, women with low incomes are more often heads of households (either as single parent families or, due to their greater longevity than men, living alone at pensionable age) than any other group.

**Biological and/or physiological:** Age is a significant factor in dealing with heat and cold stress, with young children and older people being particularly vulnerable. Women are also considered to be more sensitive to ambient temperature than men. As such, their energy needs are arguably higher.

**Socio-cultural:** Women's energy needs and consumption patterns are different to men's. But also, among women, factors like marital status and employment influence energy consumption. For example, gender roles have women spend more of their personal time conducting unpaid care work which requires the substantial use of appliances. Also, women in lower income households are more likely to use old appliances that are less energy efficient.

Source: Feenstra, M. H., Clancy, J. S. (2020), A View from the North: Gender and Energy Poverty in the European Union, In Clancy, J., Özerol, G., Mohlakoana, N., Feenstra, M, Sol Cueva, L. (Eds.), *Engendering the Energy Transition*, pp. 163-187.

Against this background, the observable and measurable characteristics needed to deem a household vulnerable or energy poor can differ greatly from case to case. According to one of the key informants consulted for this research: *"it's very difficult to have a definition [of energy poverty] that rings true for all 27 EU member states, because it's such a context specific, localised problem. It's so different, for example, in Eastern Europe, compared to Western Europe, where you see that energy poverty in the West is very prevalent among people that are renting a house, while in an Eastern Europe, it's mostly homeowners who are vulnerable to energy poverty. You don't have that many people [in Eastern Europe] that are renting a house and living in energy poverty, and not that many people that are renting a house overall."*

But not only are the causes of energy poverty different, its effects are diverse too. Energy poverty has consequences on health and wellbeing. For example, indoor low temperature and inadequate lighting, can lead to health respiratory and cardiovascular illnesses as well as developmental problems linked to ill health that can result in absenteeism from school and negatively impact educational opportunities.<sup>51</sup> By the same token, high indoor temperatures can lead to heat stroke or death. Moreover, energy poverty is also interconnected with climate change as it impacts energy consumption and availability, and at the same time, climate impacts are essentially rooted in how energy is produced and consumed.<sup>52</sup>

## 3.2 Energy communities and energy poverty

Throughout some of the policy frameworks that form the Clean energy for all Europeans package (notably, the Directive on Energy Efficiency and the Energy Performance of Buildings Directive), the European Commission has underlined energy poverty as a serious social problem that needs to be addressed with utmost urgency.<sup>53</sup> Despite this recognition, some authors have stressed that the conversation around energy poverty is mostly focused on three of its main drivers, namely income poverty, housing with low energy efficiency, and high costs of living, including high energy prices.<sup>54</sup> In this context, little attention is given to the lack of citizen engagement and ownership in Europe's energy system, which hides the struggles of the energy-vulnerable and the need for a just energy transition.<sup>55</sup>

This in itself is a paradox, because the Clean energy for all Europeans package, through the Renewable Energy Directive (RED) and the Electricity Market Directive, also acknowledges citizens as participants of the energy system. In this regard, the Commission has not only made it obligatory for Member States to create an enabling framework to support community energy in their country, but the latest iteration of the RED stresses the importance of participation of vulnerable and low-income households.<sup>56</sup>

### 3.2.1 Participation of energy vulnerable consumers in energy communities

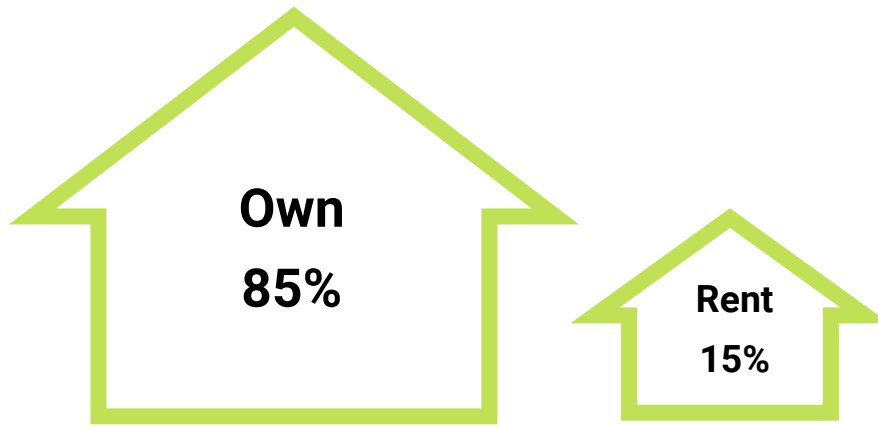
This research set out to sketch the general types of consumers that are most involved in energy communities. The purpose was to ascertain whether consumers in vulnerable situation were suitable candidates for energy communities. The results of the survey suggest that members of energy communities do not necessarily fulfil the conditions that render people vulnerable to energy poverty. For example, most of the survey respondents reported having at least 10% of discretionary income and the majority also owned their home. All the respondents who were either single parents, pensioners, or lived in remote locations, had a discretionary income of 10-30% or more. And over 50% of respondents lived in a home with high energy efficiency (Figure 11). By contrast, only 30% did not have the feeling to be spending too much money on energy.

Given the small size of the sample and the fact that energy poverty indicators depend more than anything on the local context, these results can be considered neither conclusive nor representative. Thus, it cannot be inferred from the ownership status, disposable income, or any of the indicators used in the survey whether the respondents are vulnerable or live in energy poverty. For example, it could be assumed that generally survey respondents tend to be well off, as suggested by their status as homeowners. However, these owners could be paying a large mortgage or a mortgage with a variable interest rate. Likewise, respondents with a sizable discretionary income could be workers on a temporary employment contract or living in a context of insufficient unemployment protection.

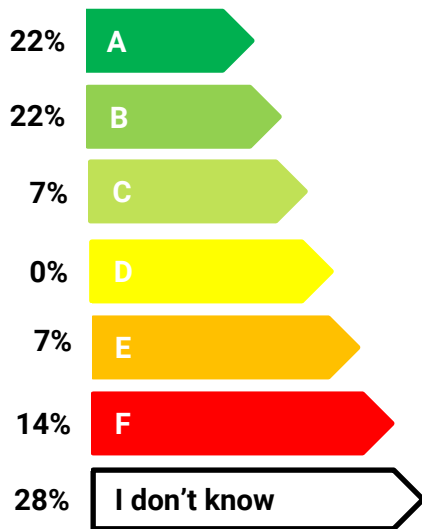
Similarly, one of the experts who informed this research proposed shrewdness and the lack of financial literacy as factors for vulnerability. In this context, even when an EC member might not be considered an energy vulnerable person by the indicators that would apply to other people in their community, the lack of information or interest to become informed can be a risk factor in the long term. In the informant's words: *"vulnerability in some circumstances is things like, low levels of financial literacy, and low levels of understanding of these sorts of things. You may have the means to enter a community and make the necessary investments, but not take into account that when you sell your home you have this liability that could bring you in financial difficulties down the road"*. This are, of course, considerations that cannot be captured in a survey like the one used for this study.

Nonetheless, there was consensus among the key informants interviewed for this research that energy community members are generally homeowners and people with a substantial share of discretionary income that allows them to afford the upfront EC membership fees and home investments for energy efficiency. Moreover, according to the key informants, the typical EC member is someone with a level of financial stability.

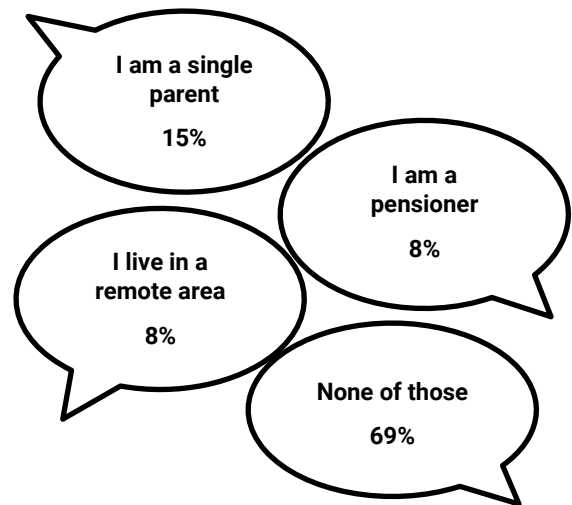
**Figure 11** Indicators of energy poverty and energy vulnerability in survey respondents



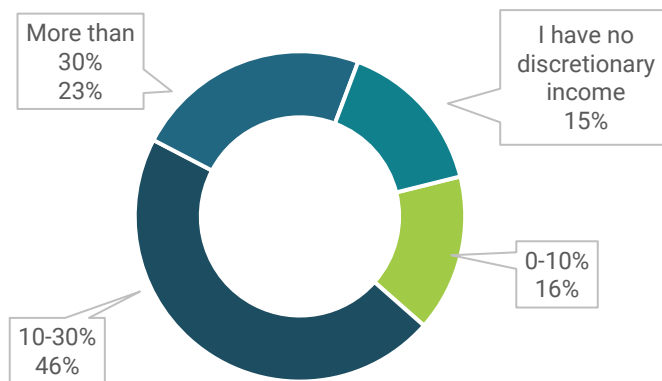
Question: Do you rent or own your home?



Question: Do you know your home's energy efficiency rating?



Question: Do any of the following apply to you?



Question: After taking care of all necessary expenses, how much discretionary income do you have?

### 3.2.2 Energy communities as a response to energy poverty

This project also set out to investigate whether there are energy communities created in response to energy poverty. According to our key informants, energy poverty is an issue that is often addressed by energy communities, but rarely the reason why energy communities are created. In the words of one of the informants: *“The number of energy communities that are specifically developed for energy poverty alleviation is almost non-existent. But it can be a purpose of the EC, alongside other activities, or services that they provide [...] So we see that the primary purpose of the ECs that are out there is not profit making, but the creation of social and community benefits. And through those things, some of them translate into energy poverty alleviation.”*

But despite the potential, addressing energy poverty and vulnerability is not an easy feat for energy communities. According to a key informant, the energy communities that are trying to address energy poverty and vulnerability as part of their social benefits objectives face many challenges: *“We see that a lot of energy communities, which are trying to focus on energy poverty alleviation, are struggling to implement this, because working with vulnerable populations comes with a lot of challenges. One of those challenges is the lack of recognition for the work they do on energy poverty alleviation [...] by recognition, I mean specific types of support by governments. It becomes very hard for them to survive, because even just doing their basic tasks in a market that is not designed for small players already comes at a great cost.”*

In making ECs work for vulnerable consumers, dedicated staff with the right background need to be deployed to engage potential members who live in energy vulnerability or poverty. In the opinion of one of the key informants: *“I think that there's a need for more technical guidance, just basic guidance into what energy poverty is, how it can be approached, how it could be solved. Because these are all things that even so, some Member States are not even recognising energy poverty as something different from regular poverty. And those are also not recognising that it should be met with different types of solutions.”* While resources to address energy poverty are becoming more widely available, the set of skills required to properly address this issue is rarely available amongst the volunteers who largely make up ECs.

This situation highlights the importance governmental involvement. As experience shows with a recently created energy community in the Netherlands (see box 2), the type of support that governmental actors could provide to energy communities addressing energy poverty entails conducting a diagnose to identify the degree of vulnerability and whenever possible addressing the causes that lead to that situation, as well as facilitating financing backing to make investments as needed. It goes without saying that the case of the Dutch energy community presented here is rather exceptional, as many ECs are still facing a lot of barriers to access public funding,<sup>57</sup> more often than not, upfront fees are required from prospective members.

Upfront fees vary greatly according to the type of energy community, the type of member (e.g., corporate, lower income, etc.), and on whether the member has voting rights. Most commonly, people who want to join an EC pay a yearly fee (ranging from €10-100), and often they are expected to bring in their own equity to finance the project upstart investments (i.e., buying the necessary infrastructure to generate, transport and store energy, in addition to investing in renovations in their home to be able to accommodate new energy sources). In light of the difficulties to access public finance, for some EC members, paying for upstart investments implies acquiring debt through private financing. Moreover, not unlike public financing, accessing private financing remains difficult for ECs and can jeopardise the principles of ownership and democratic governance that characterises energy communities.<sup>58</sup>

Yet, experiences from Hungary and Spain show that partnering with other civil society actors, the government or socially minded businesses harbour promising prospects to realise the full potential of energy communities alleviating energy poverty.<sup>59</sup>

### **Box 2. WOW: lower income households can also get onboard in a joint EC-municipality venture**

The WOW Coop (Coöperatie WOW) is a heating grid community born in 2016 in the Benedenbuurt neighbourhood, in Wageningen, the Netherlands. The idea of forming an energy community emerged when a few neighbours learned that the municipality was planning to replace the sewage system. With the streets dug into trenches, the neighbours would take opportunity to rethink alternatives to the energy system (e.g., moving away from gas boilers).

Using EU funds, the WOW Coop commissioned a feasibility study in 2017, which was presented to about 60 households open to the idea of a communal heating grid. In 2018, the WOW Coop obtained a € 5.7 million grant from the Dutch government to make the transition from gas to thermal energy (via a heat pump). This grant would cover the costs of installing a primary grid in the neighbourhood to a secondary grid in each of the member households. Other than a yearly fee of €10 per household, the coop members were not required to pay upfront costs. However, some cost could emerge from redrawing the pipes in each house and to switch gas hobs for electrical cooktops, and those costs were expected to be covered by each coop member individually.

The Benedenbuurt is composed by both owner-occupied homes and rented homes supplied by a local housing corporation (a social enterprise offering price-controlled homes for people with lower incomes), the latter making up for a third of all households in the neighbourhood. As a counterpart to WOW, the municipality lends support to households that cannot make the investments needed to redraw pipes or to redo the power circuit needed to install an electric cooktop. There, they get an income check and the financial backing to make this transition.

The coop is ruled by a set of principles, including: 1. Everybody should be able to become a member and a customer; 2. People should not have to pay more for energy; 3. Members should not have to invest beyond basic changes (e.g., change stove); 4. The project to contribute to lower CO2 emissions; 5. Use local workforce; 6. Transparency; 7. Ownership and decision-making power for its members.

The WOW Coop will operationalise its heat grid in 2023 with the participation of 143 out of 400 households in the neighbourhood. Forming a joint venture between the coop, the municipality and the local housing corporation has been crucial to assure the inclusion of households in all income brackets.

Source: Lelieveld, W. (2022, November 11), Interview with Diana Quiroz and Jasmine Arnould.



# 4

## Conclusions and recommendations

**How can energy communities be designed to bring benefits to all consumers, and be made more accessible and more attractive to vulnerable consumers? What is needed going forward in order to ensure that consumer protections are adequately implemented throughout ECs in the EU?**

### 4.1 Conclusions

This report summarises the main risks being discussed with regards to upholding consumer obligations among ECs, as well as the advantages that may be brought forward by the model of the EC. Despite the complexity of the topic, this research concludes with some key findings:

- **Do consumers have access to full consumer rights and protections in energy communities?** This report found no evidence of systemic malpractice among energy communities regarding their obligations to provide consumer rights. This is likely due to a combination of reasons:
  - Consumer rights and protections are not yet widely researched and written about with regards to energy communities. The development of ECs is only recently being formalised in European and national laws, and as a result, the EC movement has been more focused on operationalising these laws to support increased development (e.g., operational, financial). This is especially true in Central and Eastern Europe, where the movement is still young, and basic transposition of the EU framework for energy communities has yet to be put in place;
  - Energy community members may not be prone to talk negatively about their projects to outsiders, given they are non-profit and mission-driven and are usually personally invested in their projects. Where such issues relating to consumer rights do arise, they are likely handled internally due to the often democratic decision-making powers of ECs, the resulting negotiating powers of most EC members, as well as the inherent goals of providing benefits for their membership and to the wider community.
- **Are energy communities exposed to more risks in this regard? Are some types of energy communities more or less consumer-friendly than others?** There are models of supplier-customer relationships, governance arrangements and services which appear to undermine certain consumer rights, putting collective interests above those of individual rights and protections. This is true especially where customers become financially and/or technologically linked to the EC in order to benefit from services and ensure long-term advantages.

In this sense, practices which theoretically put certain consumer rights at risk include:

- Governance arrangements which require significant financial participation or supplier agreement (e.g. Power Purchase Agreement) in order to become a member. This can compromise the right to switch supplier;
- Certain types of services which make individuals reliant on the supply of the EC-produced energy, for example projects involving heat grids. This can compromise the right to switch supplier and the right to connection.



On the other hand, these governance arrangements and services also provide long-term advantages to participating individuals such as decision-making rights and influence over consumer protections, wider community benefits, lower prices for energy, lower emissions footprints, etc. Upholding individual consumer rights should not preclude the ability to enjoy these benefits.

Thus, there is also a risk where ECs can be formed into legal entities which do not guarantee democratic decision-making power as a result of participation, especially in countries where the legislation defining ECs allows this.

- **Are consumers in vulnerable situations suitable candidates for energy communities, or are communities better suited to more active and/or tech-savvy consumers?** The results of the survey suggest that members of energy communities do not necessarily fulfil the conditions that render people vulnerable to energy poverty. In this context, among the survey respondents:
  - Most were homeowners.
  - Most had at least 10% of discretionary income after paying for their necessary expenses.
  - All of those who were either single parents or pensioners or lived in remote locations (30% of the total), had a discretionary income of 10-30% or more.
  - 50% of the survey respondents lived in a home with high energy efficiency
  - 30% did not have the feeling to be spending too much money on energy.

Given the small size of the sample and the fact that energy poverty indicators depend more than anything on the local context, these results can be considered neither conclusive nor representative. Thus, it cannot be inferred from the ownership status, disposable income, or other such indicators whether or not energy community members are vulnerable or live in energy poverty.

Nonetheless, the key informants interviewed for this project corroborated that energy vulnerable groups are very unlikely to become members of an energy community as they cannot afford the upfront fees that usually come with membership (i.e., yearly fees, shares, and/or start-up investments).

- **How can energy communities be designed to bring benefits to all consumers, and be made more accessible and more attractive to vulnerable consumers?** There was consensus amongst key informants that the number of ECs that are specifically developed to address energy poverty is almost non-existent, and the ECs that try to focus on energy poverty alleviation face a lot of challenges. One of those challenges is the lack of governmental support for the work they do on energy poverty alleviation. Without this type of support, it becomes very hard for them to survive, because even their basic tasks come at a great cost in a market that is not designed for small players.

In making ECs work for vulnerable consumers, dedicated staff with the right background need to be deployed to engage potential members who live in energy vulnerability or poverty. This type of engagement entails conducting a diagnose to identify the degree of vulnerability and the causes that lead to that situation. But again, this set of skills is rarely available amongst the volunteers who largely make up ECs and so governmental support, either in the form of funding or expertise, is crucial.

It is thus clear that while there is not much written information on the practice of applying consumer law to ECs in the EU, there are risks which undermine individual consumer rights in the ways that ECs are being set up. If these legal issues and discrepancies are not addressed, they will present a barrier to the growth of the EC movement in the EU.

## 4.2 Recommendations

A recent survey of around 13,500 households in nine different European countries found that the vast majority (>80%) consider renewable, community-owned energy systems to be an important or even very important element in the transition to a more sustainable energy system.<sup>60</sup> Given increasing public interest in alternative energy systems, the urgency driven by the current energy crises, and the momentum of social innovations happening in this space, it seems all the more crucial to ensure that these developing systems can provide collective benefits without compromising the necessary protections and rights of individual consumers.

In light of these findings, our key recommendations to the BEUC and its members are as follows:

- Conduct further research on the intersection of ECs and consumer law, especially at national level. This may include analysing discrepancies between national consumer rights and rights governing organisations relevant to REC/CEC definitions, in order to advocate for the resolution of these discrepancies; understand the specific services (e.g., heat grids) which put individual customers, especially vulnerable or energy poor customers at risk, in order to ensure safeguards in these situations that do not forsake the benefits of membership.
- Understand the extent to which legal disputes are being made among members of energy communities, and what these disputes constitute. Some supporting collaborators might include existing EC networks, national ombudsman organisations as well as the National Energy Ombudsman Network (NEON).
- Engage country-level supportive networks for ECs. This differs considerably from country to country, but where they exist formally (e.g., Netherlands, Germany, Ireland)<sup>61</sup> they can provide insight into the context-specific needs of those ECs, as well as a channel to communicate important findings on consumer rights and obligations.
- Create basic guidelines for ECs on fulfilling consumer rights. This could include, for example, an overview of the key consumer rights (to clear information, to connection, etc) which must be fulfilled, a briefing on supporting vulnerable and/or energy poor customers, as well as tools to support ECs in fulfilling these rights and protections, e.g., templates for clear contracts and terms and conditions.
- In Central and Eastern Europe, EC movements are still young, and where transposition of the national law is still not finalised, there may be an opportunity to advocate for improved considerations of consumer rights and protections from the outset. Important advocates to engage in this space are CAN-Europe, Bankwatch CEE and partners of the Community Energy for Energy Solidarity (CEES) project.
- Advocate for increased institutional support for ECs that are addressing or wish to address the issue of energy poverty. Support could be in the form of dedicated budget in the plethora of public financing mechanisms available to ECs, but also creating incentives for banks and other private financiers to finance ECs focusing on energy poverty. Likewise, advocate for increased institutional support for vulnerable consumers so that they can overcome the financial barriers of joining an EC and to address the causes of their energy poverty (such as living in energy inefficient homes and high energy prices, as well as electricity dependency).

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