

Beyond individual active customers: citizens and renewable energy communities in the EU

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The engagement of energy customers has been considered as an important pillar of the European Union (EU) strategy to reach net-zero greenhouse gas (GHG) emissions by 2050, while preserving a competitive and secure energy system. The legislative package ‘Clean Energy for all Europeans’ (CEP), adopted by the EU in 2019, confirms the relevance of removing the existing barriers for end users not only to choose their energy supplier but also to invest in distributed generation and storage, and participate in all energy markets. Interestingly, the new European legal framework goes beyond the recognition of the rights and duties of individual active customers, the so-called prosumers, and introduces for the first time an explicit reference to energy communities, which take two specific definitions: the one on citizen energy communities (CECs) and that on renewable energy communities (RECs).

This article discusses why European policymakers decided to foster the emergence of this type of actor in the energy system, illustrating some of the critical issues that have emerged and the opportunity that the current energy crisis in Europe may represent.

1. Collective actors to support the energy transition

A change of paradigm

The CEP targets imply that renewable and other low-carbon energy sources will have to replace fossil fuels in the next three decades. This means not only huge investments in the capital stock but also a new organization of the energy system, capable of efficiently integrating energy sources that are characterized by a more dispersed geographical distribution and intermittency. It also means new business models able to recover those upfront investments and satisfy the needs and preferences of an increasingly differentiated customer base. Eventually, it means the shift to a more decentralized paradigm in energy, where local solutions are trialled and adopted in response to specific conditions, and where the active involvement of consumers is an essential factor.

Consumers, be they households, businesses, public bodies or other organizations, must engage in the transformation of the energy system and support it. After all, climate neutrality will not be achieved in an efficient and effective manner by simply changing the supply of energy: the way that energy is consumed will have to adjust as well. Consumer engagement in energy can obviously take the form of individual actions, just think of an industrial firm that produces the heat and electricity it needs on-site via a gas turbine or a household that covers its rooftop with solar panels. However, it can also take the form of collective action, where a plurality of consumers chooses to act together. This is the concept of energy community to which we now turn.

A heterogeneous phenomenon

Energy communities represent a heterogeneous socio-technical phenomenon, for which it is difficult to provide a precise definition. Broadly speaking, the expression ‘energy community’ refers to energy-related initiatives led by a group of households, businesses (typically small and medium-sized), public authorities and non-governmental organizations. These initiatives are often but not necessarily local and typically focus on the distribution and supply of energy or on joint investment in energy production, frequently based on renewables. Energy communities may also target energy

efficiency and, more rarely, the provision of other services, such as the recharging of electric vehicles or the management of distributed energy resources (DERs), including those on the demand side. Participation in an energy community is usually open and voluntary, while decision-making is based on democratic principles (e.g., one member, one vote). Energy communities typically do not have a commercial nature, that is they do not pursue primarily financial profits for their members. On the contrary, mutualistic purposes and/or social and environmental motivations play a key role. In the first case, energy communities aim to provide an economic service to their members, such as electricity supply, while in the second they aim, for instance, at fostering local development, fighting energy poverty or accelerating the decarbonization of the energy system. Although it is difficult to generalize, it is quite safe to say that most of the community-based initiatives try to combine both the mutualistic and the socio-environmental goals, as the majority of consumers is not ready to bear a significant extra-cost for participation. On the contrary, the possibility to achieve some economic savings is an important driver to expand membership beyond relatively few environmental or social activists.

Energy communities are not an entirely new phenomenon in Europe. Between the end of the 19th and the first half of the 20th century, several cooperatives were established in the Alps and elsewhere to ensure the production and distribution of electricity to their members. At that time, access to modern energy was often a challenge and neither private nor publicly-owned enterprises were much interested or able to address it in remote and sparsely populated areas. Therefore, in some cases, as for instance in different locations in the Alps, local communities decided to take the lead and benefit from the availability of abundant local resources, such as hydropower. In Europe, this first wave of energy communities, mostly focused on electrification, lost momentum in the second half of the 20th century, after the Second World War, when the creation of large public enterprises in charge of the electricity service at the regional or national level confined energy communities to small niches.

A second wave of energy communities started in the final years of the 20th century, especially in countries such as Denmark and Germany, and is in full swing today. Again, people and small businesses take the lead in the field of energy, sometimes with the support of local public authorities. Their focus is different, though. Rather than looking after access to modern energy, an issue solved basically everywhere in Europe, they mostly aim at the creation of a more sustainable energy system and a decreased reliance on the traditional, profit-driven, players of the sector. The use of energy as an opportunity for social innovation and local development is an important motivation behind some of these initiatives too. The factors supporting this second wave of communities are multiple. Some of them are technological, such as the development of the technologies for distributed generation and storage or for the monitoring and control of loads. Others relate to the policy and regulatory framework, such as the liberalization of the energy sector and the promotion of renewables. Social factors are at play as well, such as the increasing environmental awareness of citizens and the appeal of the sharing economy principles.

Strengths and weaknesses

Energy communities are today a minor actor in the European energy system, but the statistics that we have available, although limited and often hard to compare, confirm their role is growing (see table 1).

Country or region	Year	Number of energy communities	Number of individuals involved	Source
Europe	2022	1,900 energy cooperatives who are members of REScoop	1,25 million citizens	REScoop (https://www.rescoop.eu/about-us)
France	2021	41 collective self-consumption projects	607 participants	Enedis (ACC(flux50.com))
Germany	2021	847 energy cooperatives	220,000 members	DGRV (Energiegenossenschaften 2020 (dgrv.de))
Great Britain	2021	495 community energy organisations	58,000 members	Community Energy England (Community Energy State of the Sector Community Energy England)
Greece	2021	1036 energy communities	Not available	The GreekTank (https://thegreentank.gr/en/2021/11/22/brief-encom-en/)
Ireland	2022	677 sustainable energy communities	Not available	Sustainable Energy Authority of Ireland (Sustainable Energy Communities SEAI)
Italy	2021	3 renewable energy communities; 73 historical energy cooperatives	18 final customers who are members of renewable energy communities; 80,000 clients of historical cooperatives	GSE (GSE Rapporto Attività 2021.pdf); Confcooperative (I SETTORI > Elettrico">CONFCOOPERATIVE CONSUMO E UTENZA > I SETTORI > Elettrico)
Netherlands	2021	676 energy cooperatives	112,000 members	Hieropgewekt (https://www.hieropgewekt.nl/local-energy-monitor-2021)

Table 1: Quantification of energy communities in a sample of European countries (source: author's elaboration on different sources).

This heterogeneous situation reflects the strengths and weaknesses that characterize collective action in the energy sector. In terms of strengths, energy communities can take advantage of the larger scale at which they operate vis-à-vis individual consumers. While a single family or a small business can invest in a photovoltaic unit of a few (tens of) kW, a group of families or small businesses may easily install a plant of some hundred kW or more. Energy communities can also benefit from the possibility of investing in more than one project or combining multiple activities, such as generation and supply. They can also profit from the complementary needs of different

members, thereby improving the capacity factor of their assets. In all these cases, average costs tend to diminish, increasing the competitiveness of collective action compared to the individual one.

However, the search for mere economic efficiency is not the only strong point of energy communities. Community-based initiatives can also deal better with the lack of social acceptability of new infrastructures. Today this issue represents a major obstacle to the construction of new power plants, including those running on renewables, and electricity grids. People located around a wind or a biomass project developed by some external firms are likely to oppose it, contributing to the lengthy permitting and authorization processes, which are currently an important reason for the slow uptake of renewables and the cost escalation of some projects. By building on the trust that exists among community members, by involving all the stakeholders in the decision-making process and by actively pursuing a positive return for the local economy and society, an energy community may defeat the resistance to the construction of new infrastructures and reduce substantially the time required to obtain permits and authorizations.

Despite the advantages just mentioned, energy communities may still suffer from an enduring cost gap with the traditional actors of the sector. This can be the result of the intermediate scale at which communities operate. While a community can invest in larger assets than individuals, those assets are usually smaller than those operated by classical energy firms. In case of technologies that exhibit important economies of scale, such as offshore wind, community-driven initiatives will face a disadvantage and be less attractive for those consumers that attribute an important role to the economic benefits of participation. The expansion of existing energy communities and the establishment of new ones is likely to be affected.

The lack of specific skills and the technical expertise necessary to develop and manage complex projects or interact with the rest of the energy system and the various energy markets can equally hinder the development of energy communities and call for the support of professional partners. Similarly, limits in the financial resources that can be mobilized may imply a slower implementation of community projects or even the surrender of more ambitious initiatives. The same democratic and participatory governance, which can promote members' engagement and the identification of consensus solutions, may turn into a drawback when it slows down the decision-making process and the subsequent implementation phase. In this context, the presence of members or promoting actors endowed with specific competences and a sense of initiative and leadership represents a fundamental ingredient of a successful energy community.

From this brief overview, it is clear that energy communities have the potential to play an important role in facilitating the energy transition and making it more sustainable, also from the social point of view. However, there is no certainty that such potential will materialize, especially at the scale required for the EU to reach net-zero GHG emissions by 2050. In order to make that happen, it is necessary that the policy and regulatory framework properly considers the specific characteristics of energy communities, such as the intermediate working scale and the non-commercial nature. It is equally necessary that public authorities, in particular those responsible at the local level, put in place concrete support measures that address the most important weaknesses, such as insufficient funding and the limited ability to deal with complex procedures.

2. The European legal framework

A new deal for consumers

Until 2018, there was no specific reference to the concept of energy community in the European legal framework. The numerous directives and regulations issued since the 1990s and aiming at the liberalization, integration and decarbonization of the energy sector within the EU mentioned energy undertakings, national regulatory authorities and final customers, but did not foresee a particular role for those collective actions put in place by end users. Community-driven initiatives that were already developing, especially in the Northern part of the continent, could then not benefit, at least at the European level, from dedicated norms that recognized their intrinsic difference from the traditional, profit-driven actors and their potentially positive impact on consumers, the environment and the society at large.

However, in 2015 the European Commission (EC) acknowledged the size of the challenges posed by the energy transition and the increase in energy costs borne by European citizens and firms. It then decided to offer a new deal for consumers. The deal, included in the broader political initiative on the Energy Union, committed the EU to reform its energy markets and the policies on the promotion of renewable energy sources, while putting consumers at the centre. According to this new deal, consumers, either individual or collective, had to have the necessary tools and rights to play an active role in energy and directly benefit from competition in energy markets and the development of renewables. By means of consumer empowerment, the EC sought to promote a better use of energy resources, in particular those at the distribution level, to mobilize private capital for investment in the long-lived physical assets required by the energy transition, and to address the growing problem of local opposition to the construction of new plants, in particular those based on renewable energy sources.

Building on the pledges contained in the new deal, the EC proposed a comprehensive legislative package in November 2016, the already mentioned 'Clean Energy for All Europeans' Package (CEP). After a long and hard-fought legislative process, the CEP was eventually adopted between 2018 and early 2019. Among the several pieces of new legislation, two are particularly relevant in this context: the Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources, also known as the RED II, and the Directive (EU) 2019/944 on common rules for the internal market for electricity, also known as the IEMD. These two directives represent together a watershed in European energy policy, as they formally recognize for the first time the right for consumers to play an active role in the electricity markets and the transition to a decarbonized energy system. Four new legal concepts are introduced: active customers, (jointly acting) renewables self-consumers, citizen energy communities (CECs) and renewable energy communities (RECs). For each of them a set of rights and duties is specified (see figure 1).

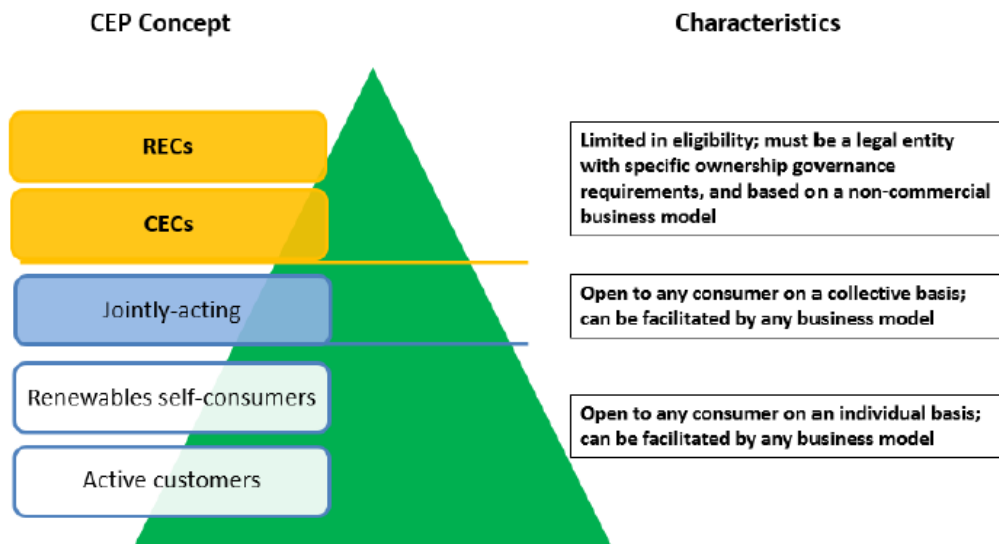


Figure 1: Different levels of citizen and consumer empowerment in the CEP (source: REScoop and ClientEarth, 2020).

Without any intention to be comprehensive, it is here sufficient to say that based on the new provisions, final customers have: 1) the right to access all energy markets without being discriminated and subject to disproportionate treatment or to network charges that are not cost reflective and transparent; 2) the right to consume, store and sell the energy produced within their premises or within other premises, and to participate, either individually or collectively, in flexibility or energy efficiency schemes; 3) the right to delegate to a third party the management of the installations required for their activities, including installation, operation, data handling and maintenance; 4) the right to share, within a group of renewables self-consumers located in the same building or multi-apartment block, the energy produced from renewable sources on their site or sites, without prejudice to the network charges and the other relevant charges and levies applicable to each renewables self-consumer; and 5) the right to become a member, under certain conditions, of a CEC or a REC.

CECs and RECs are new collective actors of the energy sector that enjoy a set of rights and must satisfy specific requisites. These requisites, which overlap each other to a significant extent, relate to: 1) the type of subjects that can become members of the community (see figure 2); 2) the participation and governance models that can be adopted; and 3) the nature of the community's primary purpose which cannot be the production of financial profits, but rather the provision of economic, environmental and social benefits for the members and stakeholders or the areas where the community operates. Consistent with the different goals of the two directives that introduce them, CECs and RECs present some differences, though. This is the topic we now consider more in detail.

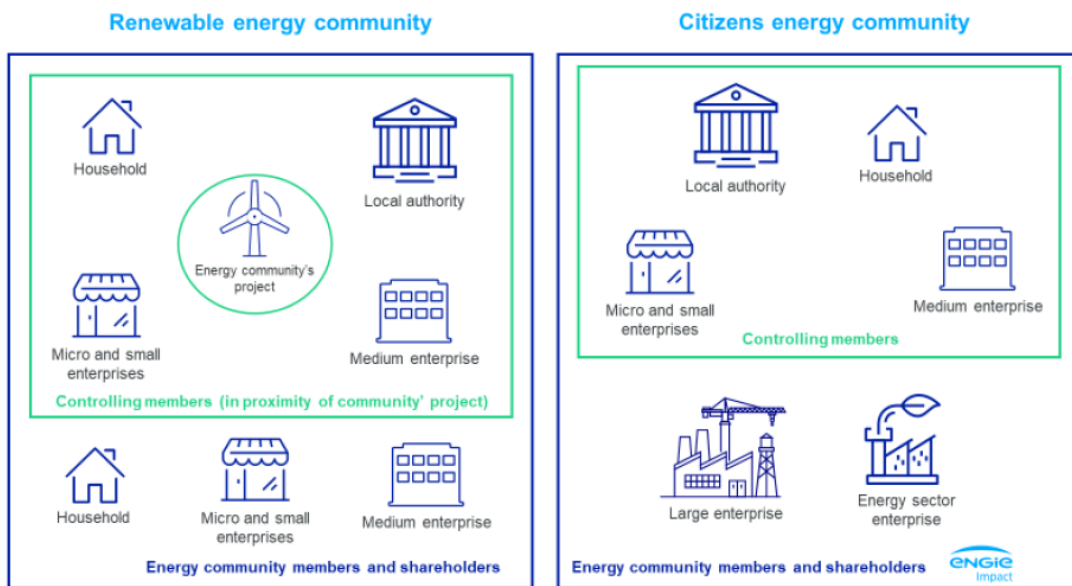


Figure 2: Membership and effective control criteria of RECs and CECs (source: Alaton and Tounquet, 2020).

Citizen energy communities

A CEC is a legal entity introduced by the IEMD with the purpose of enabling individuals, local authorities, such as municipalities, and (small) firms to take the initiative in the electricity sector and directly benefit from it. Such initiative can be very broad, as the Directive states that citizen energy communities may engage with electricity generation, supply, storage, distribution and consumption. They can share the energy they produce over the public network and be involved in aggregation or the supply of other services such as energy efficiency and the recharging of electric vehicles to their members and stakeholders.

CECs are not limited to a specific geographical area or to a specific type of energy source: they can indifferently use fossil fuels and renewables. However, participation must be open and voluntary, while control can be exerted only by individuals, local authorities and small enterprises. Any large enterprise, including those involved in the energy business, that is part of a CEC cannot exercise such control. Members of a CEC preserve their rights as final customers (e.g., they retain the possibility to choose their own electricity supplier) and can leave the community if they wish so.

The Directive states that EU Member States must adopt an enabling regulatory framework that ensures a level playing field for citizens energy communities in existing and new electricity markets. The cooperation by distribution system operators (DSOs) must be equally guaranteed. At the same time, however, CECs are responsible for their imbalances and must contribute their fair share of the electricity system costs.

Renewable energy communities

A REC is a legal entity introduced by the RED II with the purpose of enabling individuals, small and medium-sized enterprises, and local authorities to directly participate in the development of renewable energy sources and benefit from it. No explicit list of admissible activities is provided in the Directive and no exclusive reference to electricity applies (i.e., a REC can deal with heat or transport fuels as well).

On the other hand, the Directive sets a series of requisites for renewable energy communities that are somehow stricter than those that apply to CECs (see figures 1 and 2). Large enterprises and those that operate in the energy sector cannot be members of a REC, while effective control must be exercised by members that are located in the proximity of the renewable projects which belong or are developed by the community. Additionally, a REC must be autonomous of its individual members. The satisfaction of these requirements is perceived as necessary to preserve the spontaneous and democratic nature of the community, and its ability to fulfil the public goal assigned to it, that is to accelerate the development of renewables by implementing distributed solutions, mobilizing private capital and addressing social resistance to new infrastructures at the local level.

However, these eligibility criteria are matched by a series of rights. First, RECs have the possibility to produce, consume, store and sell the renewable energy they produce, including through power purchase agreements. They can also share, within the community, the energy produced from plants owned by the community, and access all suitable energy markets, both directly and through aggregation, in a non-discriminatory manner. In addition to these rights, that are similar to those of CECs, renewable energy communities are entitled to an enabling framework that promotes and facilitates their development. This framework has to ensure, among other things, the removal of all unjustified regulatory and administrative barriers; the cooperation of DSOs to facilitate energy transfers within the communities; the possibility for all consumers, including those in low-income and vulnerable households, to participate; the availability of tools that facilitate access to finance and information; and the provision of regulatory and capacity-building support to public authorities that want to participate in a REC or support their establishment. Beyond this enabling framework, EU Member States must consider the specificities of renewable energy communities when designing renewable support schemes to allow them to compete for support on an equal footing with other market actors.

3. Critical issues and future opportunities

The devil is in the details

With the CEP, the EU amended its legal framework in a way that it is more favourable to consumer engagement. By addressing several of the weaknesses that characterise both individual and collective initiatives, the set of rights and duties introduced at the European level provides the basis for the empowerment and a more active participation by consumers in the electricity sector and the energy transition. However, as it is often the case in the EU, the current legislative framework only sets the direction that national laws and regulations must follow. Member States have now to transpose that framework to the national level, potentially adapting it to their particular conditions and policy preferences.

In the transposition process, Member States benefit from a significant degree of freedom. First, they have the right (but also the duty) to specify the numerous elements of the two directives that were voluntarily left general or even vague. For instance, Member States are called to clarify what legal forms a CEC and a REC can assume and what proximity to a renewable project means. Second, Member States must concretely set charges and procedures that are transparent, non-discriminatory and cost-reflective in the context of their specific legal and regulatory framework. Third, Member States can choose the level of effort they devote to enabling the uptake of energy

communities. It is up to them, for example, to define the financial and human resources that are allocated to support public authorities willing to participate in community-driven initiatives or to simply facilitate their establishment by third parties. Finally, Member States are free to preserve already existing forms of energy communities and to create additional types as well, as long as the minimum level of rights and duties prescribed for CECs and RECs in the two directives is observed. Alternative implementation scenarios are possible in this regard (see figure 3).

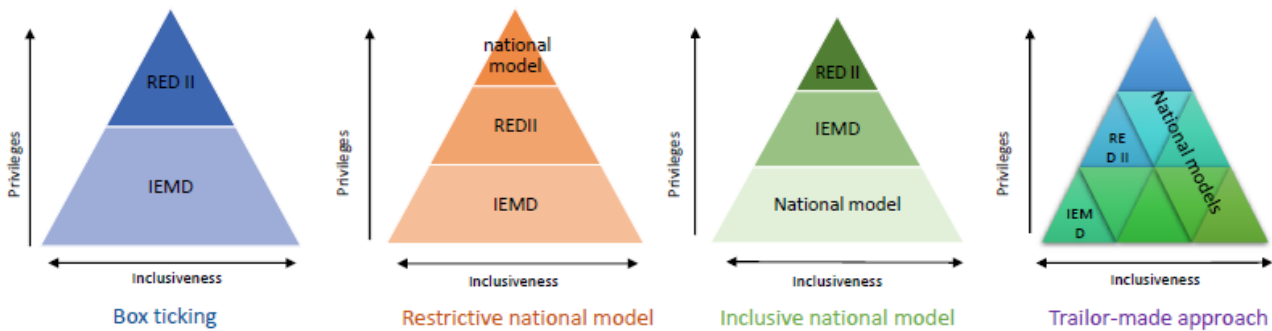


Figure 3: Different implementation scenarios by Member States (source: adapted from Jasiak, 2020)

Depending on the actual choices by Member States, the development path of energy communities is likely to differ in the various countries, extending the heterogeneous situation that is currently visible in Europe (see table 1). Nonetheless, this period of experimentation that follows the adoption of the CEP may allow, over time, the identification of best practices and most convenient solutions. In turn, this may lead in the future to more detailed and harmonised rules being adopted at the EU level. Convergence in the evolution of energy communities may then follow across the continent.

How to support the uptake of energy communities?

Energy communities can potentially provide several benefits to the energy system and to society more in general. However, due to the limits of collective action we saw earlier and the difficulties of operating in a sector, the energy one, whose rules were developed with large, profit-driven organisations in mind, it makes sense that governments put in place an enabling framework to let energy communities flourish.

How to enable or support the uptake of energy communities is a debated topic, though. It is so for at least two reasons. First, energy communities are multifaceted, they can take several forms and be involved in many different activities. Depending on the form assumed or the activities they focus upon, energy communities are likely to face different barriers and generate different benefits to society. In turn, this calls for different support schemes. Second, introducing forms of dedicated support is likely to generate costs for other market parties and stakeholders or the society at large. A balanced approach that ensures efficiency and fairness must be then identified when developing any support measure.

An example that illustrates this trade-off is provided by the case of network charges for energy communities involved in energy sharing at the local level, also known as collective self-consumption. By using electricity locally, a community can reduce energy losses and minimise the need for network expansion. In some cases, it may also reduce balancing costs. These undoubtedly represent a benefit for the system and may justify a discount on the standard network charges applied to the

electricity shared, in particular for the part relating to transmission. However, the benefits of local energy sharing are usually far from justifying a complete rebate of those charges. First, because the members of such a type of community normally continue to rely on the local grid to share the electricity they self-consume, and on the main grid to receive electricity when community generation does not produce. Second, because the reduction in network peak demand, the main cost-driver for networks, may be much more limited than the reduction in the amount of the electricity consumed locally and coming from the main grid; the savings for the system associated with local energy sharing would then be rather small. Third, because exempting community members from contributing to the recovery of network costs could simply shift those costs onto consumers that are not part of a community and may be unable to join one; an issue of equity is immediately visible in this regard.

For these and similar reasons, the emerging view among regulators and policymakers is that energy communities should be enabled by the introduction of explicit subsidies rather than by implicit subsidies hidden in non-cost-reflective network tariffs. Subsidies should incentivise communities to decrease system costs and be potentially linked to the deployment of new renewable generation capacity. In addition, great attention should be paid to the removal of those regulatory barriers and elements of the electricity market design that are a legacy of the past and may not be justified anymore (e.g., certain constraints on the participation of small assets to wholesale electricity markets and balancing mechanisms). More in general, public authorities should play an important role in raising awareness and provide technical and financial assistance to those consumers that want to set up an energy community. This type of support is particularly important to activate specific categories of consumers, such as the vulnerable ones or those living in social houses.

The energy crisis as an opportunity

The EU is currently facing a severe energy crisis. On the one hand, there are the skyrocketing prices caused by the Russian invasion of Ukraine, which are reducing the welfare of European citizens and firms. On the other hand, there is the need to deeply transform the energy system to mitigate climate change over the coming decades. This gloomy situation can turn into an opportunity, though.

As mentioned earlier, the wave of new energy communities observed in the last two or three decades in Europe was mostly related to the activism of a relatively small number of people and organisations that wanted a greener and more local supply of energy. Those people and organisations were ready to commit time and money to set up collective initiatives and contribute, by this way, to environmental sustainability and a reduced reliance on traditional energy companies.

The situation is very different today. First, because energy is a topic of significant interest for a large part of the population, either because of the increasing bills or for the growing awareness of the threat posed by climate change. Second, because community investments in renewable-based plants are now a source of energy with relatively stable and competitive costs. Communities that procure energy from those plants, either by directly owning them or via long-term power purchase agreements with independent producers, are shielded, at least partially, from the vagaries of wholesale prices and the increasing cost of fossil fuels. Third, because digital technologies allow the active and coordinated management of DERs, included those on the demand side, and the

exploitation of the benefits associated with the integration of different energy sectors at the local level (e.g., electricity and heating).

For all these reasons, there is today the opportunity for energy communities to play a larger role than in the past and help the EU dealing with the current energy crisis. However, to seize this opportunity, the right policy and regulatory choices must be implemented by policymakers and regulators. This means, first of all, the full transposition of the two European directives and the adoption of the related enabling frameworks for energy communities at the national level, something that not all EU Member States have already done. Second, it means that the policy reaction to the explosion in energy prices should not 'mute' the incentives for consumers to get engaged, either individually or collectively. Unfortunately, the opposite seems to be the case. In some countries, governments have frozen retail prices below costs for all consumers and not just for those in poverty or more vulnerable. Network and policy costs have been often moved to the State budget, while in some cases new taxes targeting windfall profits or additional obligations on energy companies have been introduced. Energy cooperatives were usually not spared from these penalising measures.

This reaction of governments to the surge in energy prices is understandable, given the political pressure exerted by consumers. However, trying to protect consumers by isolating them from price dynamics may weaken the motivations for a growing number of them to become active and more directly engage, individually or collectively, with electricity markets and the energy transition more in general. If that is the case, the current crisis may turn into a missed opportunity for the EU and its energy communities.

4. Conclusions

The decarbonisation of the energy system requires a shift from a centralised paradigm that relies on the exploitation of fossil fuels to a more decentralised paradigm that relies on the development of local solutions to integrate and exploit renewable energy sources. The engagement of consumers is an important element of this shift. Consumers can engage in energy both individually and collectively. In the latter case, they can form an energy community, a collective actor which is typically characterised by a democratic governance and a non-commercial nature. Energy communities are not a new phenomenon, but their growth in size and number has been noticeable in recent years. By mobilising the resources of multiple consumers and building on the trust existing between members, energy communities can achieve a certain level of economic efficiency and solve issues related to the social acceptance of new infrastructures. For this reason, they have the potential to be an important player in the energy transition. However, this potential can fail to become reality due to some weaknesses typical of collective action, such as the difficulty in dealing with complex and uncertain procedures.

Conscious of the challenges posed by the rapid transition to a low-carbon energy system and the need to have consumers on board, the EU has proposed a new deal, recognising the right for consumers to actively participate in all electricity markets and contribute to the development of renewables. This right can be exercised as individual active customers and individual renewables self-consumers or collectively by joining a citizen energy community or a renewable energy community. A CEC is a new actor of the electricity markets that allows consumers to participate on a level playing field with traditional players. This actor is not bounded to a specific place nor to the

exclusive use of renewables. On the contrary, a REC is a social organisation that allows consumers to deal with renewables, also beyond electricity generation, and directly benefit from it, without the need to rely on the support of traditional actors. Given their potential role in decarbonisation, RECs are entitled to an enabling framework that promotes and facilitates their development.

The new European legal framework set the scene for the offtake of energy communities but is not sufficient by itself. Its actual transposition at the national level will be essential to the successful development of energy communities over the coming years. EU Member States have significant leeway in how to implement the obligations imposed on them by the EU legislator, in particular with regard to the definition of the enabling framework for energy communities. Depending on their choices, the development of energy communities may follow different paths. However, to avoid inefficient and unfair results, Member States should adopt a balanced approach and try to incentivise only those initiatives that are able to enhance social welfare and not just the welfare of community members, to the detriment of the rest of the energy system and society. The severe crisis that Europe is facing in energy can represent an opportunity for consumers to fruitfully raise their level of participation in the energy sector. Nevertheless, the delays in the transposition and proper implementation of the new legal framework, combined with some of the measures adopted by governments to shield consumers from the consequences of high and volatile energy prices, are deterring the creation and growth of energy communities, with the possible result that the EU will miss an opportunity to advance towards a more sustainable, not only from an environmental point of view, energy system.

About the author

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For further reading

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