

Position Paper on the Electricity Market Design

Introduction

This is not the first time Europe has been confronted with an energy crisis. In times of crisis, institutional authorities are needed to react. However, in times of crisis the DNA of cooperativism also comes alive and citizens can work together to tackle problems in solidarity. Just as in the 1970s when citizens began creating the first renewable energy cooperatives (REScoops) in response to the oil crisis, citizens are organizing themselves in energy communities to respond to today's crisis.

Local communities, including citizens, local authorities, cooperatives and other small and medium enterprises (SMEs), are uniquely impacted by the ongoing energy crisis. And yet, they also have a large role to play in providing solutions as active participants in the energy transition. Nevertheless, their ability to take ownership and play a meaningful role in removing Europe's reliance on imported fossil energy and building up renewable energy production relies heavily on the design of the internal energy market.

It is, therefore, unfortunate that the Electricity Market Design has been primarily framed around interventions in the wholesale market. Defining the scope of the problem and the potential solutions around centralised exchanges of energy ignores the role that alternative ways of exchanging electricity through local ownership of production and supply can play in hedging consumers against volatility during the crisis, as we move to a 100% renewables future.

The Electricity Market Design may be meant to address the acute impacts of the crisis being felt today. However, it must also put in place the building blocks for creating a more decentralized and democratized energy market of tomorrow. Keeping spirit with the original Energy Union Strategy articulated in 2015, the Market Design must put citizens at its core, where they can take ownership at the local level (individually, through energy communities such as cooperatives, and local authorities), benefit from technology to reduce their bills, participate in the market, and protect vulnerable households.

Recommendations for the Electricity Market Reform

In the context of the upcoming Electricity Market Design reforms, the European Commission (Commission) should take into account the following recommendations:

- 1) Enshrine local ownership of renewable energy production and supply as a foundational principle of the internal electricity market (Art 2 IEMD);
- 2) Strengthen EU rules for the activity of energy sharing through a new article in the Electricity Directive. This should include provisions to:
 - Clarify that energy sharing should be regulated either as a simplified form of supply, or as collective self-consumption;
 - Define energy sharing as an activity and clearly distinguish it from collective self-consumption, and from energy communities as an organizational concept;
 - Give Distribution System Operators (DSOs) clearer duties (i.e. procedures and timelines) that they should have in order to effectively facilitate energy sharing projects;
 - Align financial support and incentives around economic viability and local benefit; and
 - Prevent incumbent suppliers from undermining energy sharing.
- 3) Reinforce grid connection and planning rules so that they support and take into account the specificities of energy communities, including:
 - Ringfencing grid connection capacity for energy communities;
 - Including energy sharing/joint self-consumption projects by energy communities and other commercial market actors in distribution network plans (Art 32); and
 - Rewarding local self-balancing to encourage investment in storage and flexibility.
- 4) Ensure energy communities that act as retail suppliers, such as cooperatives, are not unfairly impacted by government interventions in the energy crisis;
- 5) Make it easier for energy communities to enter into Power Purchase Agreements (PPAs); and
- 6) Align the Citizen Energy Community (CEC) definition with the Renewable Energy Community (REC) definition to simplify implementation and provide legal clarity.¹

¹ The COME RES project has also included policy recommendations on the Electricity Market Design reforms on Deliverable 7.3., which will be published here: <https://come-res.eu/resources>.

1. Acknowledge local ownership of renewable energy production and supply as a principle of the electricity market

The Electricity Market Design cannot create more decentralised, local energy markets overnight. However, the building blocks must be put in place now to make long-term changes easier in the future. The EU's goal to move away from imported fossil fuels and rid the energy market of gas will require a further unprecedented rollout of renewable energy production in the coming years.

The installation of new renewable energy projects and grid infrastructure will most certainly have significant impacts on local communities. If rolled out without participation and chance for local communities to take ownership, trust in the energy transition could falter, and public acceptance will become an even bigger problem than it already is today. On the other hand, if local ownership is prioritised, communities can spend the next few years mobilising capital and resources to prepare for, and influence, more decentralised energy markets of the future.

At the very least, the Electricity Market Design reform should be anchored around the principle of prioritising local ownership of production and supply of renewable energy. Local communities themselves, including citizens, public authorities and SMEs, should be empowered not just to invest but to take ownership in such resources. This will promote distributed production that can be matched as much as possible to local consumption. It will also allow for new valuations of production and supply of energy that are not as reliant on the wholesale market, helping shield households from volatile and unreasonably high wholesale market prices. Ownership will also provide communities with revenue streams to fight against energy poverty, promote outreach and education, and encourage further local investment in renewable energy production and local infrastructure. Local ownership can also contribute to developing a new solidarity between territories and uptake of storage, flexibility, power supply and other technologies that are capable of providing distributed energy resources (DER) to the grid. Finally, prioritising local ownership of renewables production will help contribute to public acceptance and ensure that in allocating space for new development, communities are not left out.

Specifically, Article 2 of Directive (EU) 2019/944 (Internal Electricity Market Directive, or IEMD) should be amended to include the prioritisation of local ownership of renewable energy production and supply. This will serve as a legal basis for developing further legislative and policy measures (e.g. around grid connections, local and regional planning, public procurement, energy sharing and local supply) that ensure citizens, cooperatives, local authorities and SMEs are able to take ownership of the further rollout of renewable energy production. This will impact the implementation of market

rules, and it will also inform the transposition and implementation of the revised Renewable Energy Directive, which is currently undergoing Trilogues.

2. A more robust legal framework for sharing electricity from renewables

Energy sharing poses significant potential to help consumers take collective ownership of local renewable production, allowing them to reduce the amount of metered electricity that they purchase from the wholesale market, thus reducing their energy prices. Some Member States have operationalised the concept of energy sharing. However, this activity is still not possible in most Member States, or is complicated by the lack of legal clarity or overly-burdensome regulation. Even where energy sharing is operationalised, such as in Austria, Portugal, and Spain, government interventions in the wholesale market have undercut the business case for engaging in energy sharing or saving energy as a way to hedge against high prices caused by the energy crisis.²

Currently, many Member States only have minimal rules or regulatory requirements for how energy sharing should be facilitated by DSOs. At the moment, energy sharing is not defined in EU legislation, and the closest thing we have is a description of the activity in recital 46 of the IEMD. Furthermore the IEMD and Directive (EU) 2018/2001 contain minimum obligations for Member States to ensure final consumers are able to share energy.

As such, there are a number of different conceptual, as well as regulatory, approaches to energy sharing at the national level. Furthermore, in many cases duties of specific market actors that have a role in facilitating energy sharing have not yet been articulated in enough detail to provide certainty for energy communities and other local initiatives that want to engage in the activity.

Our member REScoops have identified a number of barriers that prevent them from effectively setting up energy sharing initiatives:

- A lack of clarity between energy sharing as an activity, and energy communities as an organisational concept;
- Overly-burdensome regulatory approach to energy sharing;
- Delays and lack of clear procedures by DSOs in facilitating energy sharing;
- Interference or lack of cooperation from incumbent suppliers;

² See, e.g. Antunes, A.R, and Crispim, J. (2023). Opinião for Expresso, 7 February 2023 – “Porque nos chegamos a casa faturadas negativas de electricidade?” Available (in Portuguese) here : <https://expresso.pt/opiniao/2023-02-07-Porque-nos-chegamos-a-casa-faturadas-negativas-de-eletricidade--cfe1a57e>.

- Lack of awareness and information for individuals and organisations that could potentially be interested in engaging in energy sharing;
- Insufficient rollout of smart meters or upgrades in IT infrastructure;
- Restrictions put in place on energy communities to set up energy sharing (e.g. sharing co-efficients, geographical scope, size of technologies, etc.); and
- Competition from professional service providers that falsely label themselves as energy communities.

Identified barriers in implementing energy sharing at the national level

Portugal - In Portugal there is confusion between energy communities and other concepts such as collective self-consumption and energy sharing. There is a lot more information for collective-self consumption than for RECs. Furthermore, procedures are too bureaucratic. Although there is demand for new smart meters, the roll out is too slow. Finally, there is a lack of expertise along with a lack of an institutional organization that can support energy communities on the matter.

Germany - In Germany there is no legal framework on energy sharing in place. Citizens are confused and impatiently waiting for collective self-consumption and energy sharing to be introduced. Moreover, the smart meter roll out is extremely slow, which raises the question of whether and how energy sharing can be introduced if not all households have adequate meters. Another challenge is connected with the lack of expertise. Most energy communities largely rely on volunteers and very few are paid for their work. While this practical issue must be tackled, if energy communities are required to take on full supplier responsibilities, staff need to be trained (and remunerated), or external service providers will need to be hired. Finally, there is no central supportive authority that can guide energy communities through the process, as is the case in Austria.

Ireland - In Ireland, funding support has primarily encouraged self-consumption. However, collective self-consumption and energy sharing have not progressed in any meaningful way primarily due to the lack of legal framework and regulatory constraints. Moreover, these concepts are not fully understood by energy communities/citizens, particularly in relation to grid stability and technical challenges. The national legislation still forbids the construction of a private wire to allow the sharing of renewable electricity between buildings.

Croatia - In Croatia energy communities are de facto only recognized through the collective self-consumption activity. There is a technical limit to share energy behind low voltage substations, which is part of the definition of CECs. Energy sharing is limited only between members of the energy community located behind low-voltage substations. For energy sharing you need to obtain a license from the regulator for the activity of "organizing energy communities", which is very expensive (€1,000) and

requires the community to navigate a very demanding administrative process. Sharing is only allowed within a 15 minute netting period. Analysis shows that the payback period for energy sharing in multi-apartment buildings is 11-18 years, which is not feasible and represents a major barrier to the development of solar energy in urban areas preventing the majority of citizens from participating. Citizens who live in multi-apartment buildings are discriminated against in relation to citizens who live in houses, who are granted the self-consumption status and have monthly net billing. Although in the long term we should strive to abandon netting (annual or at least monthly calculation), in the initial stages of the development of energy communities and energy sharing, it is necessary to allow these mechanisms to encourage development and create market conditions that will enable economically profitable investment in solar energy in the future. Energy sharing implemented by energy communities is limited to only one part of the distribution grid according to current regulations, but the complete distribution grid fee is charged for shared energy. Grid fees should be proportional to the part of the distribution network that is used for shared energy, which is certainly less than the total fee for using the distribution grid.

Spain - In Spain there is a clear legal framework for energy sharing, commonly described as "autoconsumo compartido" or collective self-consumption (CSC). It allows users within 500m of a collective renewable energy production installation's metering point (increased to 2,000m in the case of rooftop PV) to participate in self-consumption. It is not necessary to form an energy community for this purpose, but certain subsidies are only available to energy communities. Energy that is not self-consumed within the metering period of one hour, is fed into the grid and can be compensated for by the retailer on the monthly bill (limitation: the invoice cannot be negative within a month, so as to avoid oversizing of the installation). There is no grid costs, fees or levies for self-consumed energy, despite the fact that the local low voltage grid is used for distributing shared electricity. The tariff for compensating energy fed into the grid can be either fixed (agreed with the retailer) or linked to the wholesale market price ("indexed").

It is not necessary that all CSC participants source their electricity from the same retailer. In order to centralise the paperwork and represent CSC participants before their respective retailers, it is foreseen that a CSC Administrator (Gestor de autoconsumo colectivo) will be recognised as a legal body in the near future. This opens up a new role for service providers. IDAE (the national energy agency) has already launched 4 calls for projects under the national CE-Implementa support programme open only for already established energy communities, despite the fact that the transposition of the REDII is not finalised, which would regulate RECs. This looks like building a house from the roof down. Many organisations with commercial and for-profit motives, even energy sector incumbents, used the absence of a legal definition to set up organisations in a totally top-down manner, and declare them to be "Energy Communities". These so-called Energy Communities have received large

amounts of subsidies for their RES installation. The first IDAE call for projects under the CE Oficinas programme closed in January 2023 and was geared towards the setting up of 'Community Transformation Offices' that would promote the creation of new energy communities. Once again, it is expected that energy sector incumbents will benefit from the legal void and receive a sizable share of the public funds available.

Greece – The main barrier energy communities are facing in Greece with regards to the development of virtual net metering (VNM) projects is access to the grid (this will be analysed in detail in the relevant section below). On top of that, there are no financing tools available for VNM projects. Usually, members pay the whole amount upfront as no banks provide loans for such projects to energy communities. Moreover, although accessing suitable and affordable land plots for solar installations is not a challenge restricted exclusively to energy communities, it is a burden that builds upon all other challenges energy communities are currently facing. Therefore, local and regional authorities would be expected to provide suitable and affordable land plots to energy communities for developing collective VNM projects. Last but not least, the clearance and billing processes take too long. The energy supplier undertakes both processes. There are occasions when consumers haven't received a discounted bill even two years after the solar installation's commission. The reasons for that are:

- 1) In Greece, there are no smart meters installed by the DSO at the residential level. Therefore, collecting consumption data from low-voltage consumers takes place manually every four months.
- 2) Energy suppliers are also responsible for issuing the bills. Still, they do not currently have a tool (which is pretty simple) to compare the energy consumed at the house or business of each member to the production of the PV (after calculating also the energy sharing per member).

Many of these challenges energy communities experience are the result of the lack of clear EU rules to empower energy communities to engage in energy sharing. In either Article 15 on active customers, in Article 16 on energy communities, or in a new Article, more concrete rules for energy sharing should be elaborated.

2.1 Energy sharing should be defined as an activity and regulated as collective self-consumption or simplified supply

As no definition currently exists, energy sharing should be defined in the IEMD as an activity. Furthermore, energy sharing should be regulated either as a simplified form of supply or as collective self-consumption. Regardless, this activity should not be subject to the same responsibilities that a traditional seller must take on.

The relationship between energy sharing, collective self-consumption, and energy communities (as a separate organisational concept) should also be clarified. This would help speed up the process of transposing existing EU requirements to allow and facilitate energy sharing, make the concepts more clear to stakeholders that want to engage in the activity and avoid instances of corporate capture.

It is important to keep in mind that under the existing definitions of 'renewables self-consumer' and 'jointly acting renewables self-consumer' in Article 2 of the RED II, sharing offsite production is already covered.

Member States should maintain discretion whether to open up energy sharing beyond the building level to other market actors. Some Member States are required to allow sharing through collective self-consumption at the building level, but they have discretion to expand this beyond the building. Sharing beyond the building requires a more formal arrangement between the participants, including a legal entity and other necessary governance arrangements to organise the participants. Member States should not be prohibited from making this distinction. Member States should be allowed to determine whether energy sharing beyond the building level should be done through an energy community, or whether it can be done through more informal arrangements.

2.2 Clearer responsibilities for DSOs in facilitating energy sharing

DSOs have a significant practical role to play in administrative procedures to register energy sharing projects, rollout of smart meters, allocating shared energy to individual participants in the community, developing IT infrastructure and protocols to enable data collection and sharing with other market actors, and providing transparency (including through grid planning) to energy communities. While some Member States have elaborated legal and regulatory frameworks to cover these duties, many Member States have still not elaborated regulatory frameworks for energy sharing.

In many Member States, our members have cited challenges with regard to non-transparent, complicated and delayed registration processes caused by the DSO, without any accountability on the DSO's side for not complying with timelines. Upgrading IT infrastructure and smart meter rollout can significantly delay operationalisation of energy sharing. In addressing technical issues to facilitating energy sharing, it may also be necessary to harmonise all protocols for the creation, management and transmission of data. This is necessary for implementing a decentralised metering system involving the interconnection of multiple generation and consumption metering systems in order to allocate and define cost levels (grid tariffs, taxation, etc). Finally, issues around poor grid planning and an inability to connect to the grid, which is highlighted below, prevent many energy sharing projects from becoming a reality.

There is a need to build better cooperation between project owners, municipalities and DSOs. This means a different view on the non-discriminatory take of DSO's to developing long term relationships with energy communities and municipalities. Today, even in the Netherlands cooperation between these three stakeholders is suboptimal, even though it is further ahead than in other Member States.

The IEMD should build out the existing requirement for DSOs to facilitate energy sharing by elaborating specific duties and obligations of them to do so. Specifically, the IEMD should elaborate upon the existing Article 16 paragraph 3(e) on what duties are implied under a general duty to cooperate with energy communities to facilitate energy sharing. This should include duties around registration, connection, and other relevant administrative procedures. These could provide for specific communication requirements or timeframes for providing an answer or approval, which DSOs would have to respect. DSOs could also be required, within a certain timeframe, to ensure their IT infrastructures are capable of allowing for monitoring, validation and communication of data with other relevant market actors.

DSOs could also be required to include energy community and self-consumption projects in their network planning, and to make this information publicly and easily available to access. DSOs should strategically engage with energy communities and maximally engage in implementing energy sharing and collective self-consumption schemes as these concepts represent clear mutual benefits: lower energy prices, less grid congestion and less CAPEX needs for grid expansion. Network planning obligations in Article 32 could be expanded to require allocation of a specific amount of grid capacity for energy community projects, as well as other individual or collective self-consumption projects. This recommendation is also further elaborated below.

2.3 Duties of incumbent suppliers

Suppliers often have a conflict of interest when it comes to their role in facilitating energy sharing. As a response to the uptake of energy sharing, suppliers in some Member States have either hesitated to cooperate, slowing down the process, or are charging additional fees to consumers who participate in electricity sharing. In Greece, for instance, the national supplier has failed to remunerate consumers for self-consumed renewable electricity under the functional virtual net-metering scheme. In the Flemish and Wallonia Regions of Belgium, suppliers have begun to assess a penalty to consumers who join an energy sharing initiative.

The Electricity Directive should require Member States to ensure that suppliers do not impose extra charges or fees to consumers that share energy. There is already precedent in Article 21 of the RED II for dealing with such issues relating to unfairly imposing taxes and levies on renewables self-consumers. Legislation in the Netherlands already explicitly includes a provision that agreements that penalize

participants in an energy community shall be null and void. The IEMD should require suppliers to cooperate where they have role in implementing energy sharing, or else face penalties. The IEMD should also forbid suppliers from interfering with consumers' rights to participate in energy sharing or exercising their rights as active customers. DSOs should be able to correct this imbalance ex post in suppliers portfolios via ex post calculating energy allocated to a market actor from multiple metering points (including submeters).

2.4 Ensure energy communities can exercise choice when accessing service providers

Small, newly forming energy communities often lack the technical or professional resources to undertake specific responsibilities, such as balancing. In many instances, a service provider exists to facilitate the uptake of responsibilities. For example, in the Netherlands, the Dutch DSO, Alliander, has created an online platform, ENTRNCE,³ an electricity exchange that allows renewable energy cooperatives to supply electricity produced by their production assets to their members. Because of this service, energy communities in the Netherlands do not experience issues balancing responsibility.

In Member States with less developed energy markets, however, finding a service provider can be very difficult - if not impossible - for an energy community. In such instances, we would advocate for a requirement for Member States to designate a service provider that would be required to provide services to energy communities, at a fair cost, overseen by the regulator. In this sense, a supplier of last resort would be a good choice. However, suppliers of last resort do not exist in all Member States.

The Electricity Directive should require all Member States to designate a supplier of last resort. At least for a limited period of time, the supplier of last resort should be required to provide energy community sharing initiatives with balancing responsibility services. Such a requirement need not exist indefinitely. In the spirit of addressing the acute impacts of the ongoing energy crisis, such an obligation could have a sunset clause that matches the conditions on the ground, and the development of the market for the uptake of responsibilities by energy communities directly, or the market for service providers .

³ Alliander. ENTRNCE – An energy exchange solution for decentralized energy markets. Available at: <https://www.entrnce.com/>.

2.5 The benefits of participation in energy sharing should promote decentralized production and consumption

All final consumers should have a right to deduct off-site renewables production from their energy bill. However, this should be grounded in an objective to promote a decentralized energy system that prioritises production close to consumption, to minimise impacts on the grid. While it could be interesting to allow household consumers to, for instance, share electricity produced on a building located on the other side of the country, this would not have any positive impacts for the grid. In reality, this arrangement still requires the transmission and distribution of the electricity, requiring full use of the grid. As such, this should not result in the reduction of grid usage fees. Any reductions in grid use fees should be connected to localized production within a specific geographic proximity. As a complementary point, state aid for investments in distributed energy resources should take an integral view of the energy system and support integration instead of just production.

2.6 Ensuring access to finance and economic viability of energy community sharing initiatives

Due to the way energy communities organize themselves and their non-commercial purpose, obtaining finance for projects is often very difficult. It is often not possible to obtain a loan from a bank until other milestones for the project have been met, such as a successful feasibility study and planning permission. Funding these activities is often very hard for projects, as they rely on capital contributions from members. Furthermore, many projects do not even make it past the feasibility stage, meaning that citizens are often asked to finance sunk costs, which are gone if the project does not go forward. Likewise, projects need to have a reasonable rate of pay back. Otherwise, citizens are getting themselves into long-term payback arrangements that provide little value.

The way national incentives have been designed for energy sharing activities do not always align with these challenges. While countries like Italy have set up grant programmes or zero-interest loan arrangements to support pre-finance works for energy sharing initiatives, most Member States do not provide such assistance. Furthermore, some Member States only allow participants in energy sharing to deduct the energy component of their bill, even though the activity itself results in reduced use of the network. In many cases, production from shared facilities cannot meet all the real-time consumption needs of the members. In Member States like France, excess production is remunerated through a market premium, but other Member States place limitations on the remuneration participants in energy sharing can receive.

While Member States should retain their discretion on how to incentivize energy sharing, the IEMD should require Member States to ensure incentives support economic viability and a reasonable payback period.

2.7 Energy communities need separate recognition from other initiatives that enable consumers to deduct off-sight generation from metered consumption

In addition to all of the above technical and regulatory challenges, the novelty of new concepts such as energy sharing, joint self-consumption of renewables, and energy communities (both RECs and CECs) has created a lot of confusion for stakeholders and decision makers. In transposing RECs and CECs at the national level, a number of Member States have conflated energy communities with energy sharing.

This has resulted in two related problems. First, rules and regulations incorrectly depict energy communities as a technical activity-based concept, even though the RED II and IEMD frame energy communities as an organizational concept that can undertake different potential activities. This then creates confusion for energy communities, because they experience difficulty navigating administrative procedures.

Second, the lack of distinction in legislation/regulation between energy sharing and/or collective self-consumption on the one hand, and energy communities on the other, has resulted in duplication of concepts. This means that commercial market actors that are better resourced are allowed to undertake the same activities as energy communities, while no specific supports have been put in place for energy communities. In some cases, utilities and commercial service providers are claiming that they are setting up energy communities.

If this situation is allowed to continue, it will result in implicit discrimination against energy communities in setting up energy sharing, because supportive policies will be cannibalized by better resourced market actors. This is detailed more in the section below on access to grid connections.

The IEMD needs to prevent commercial market actors from falsely labelling themselves as energy communities. Second, Member States should be required to clearly articulate policies and measures that reflect the difference between energy sharing by community versus non-community market participants. Lastly, Member States should be required to take the specificities of energy communities into account when designing regulations for energy sharing.

3. Addressing the elephant in the room – access to grids

It is clear that the only long-term solution to the energy crisis is to invest in domestic renewable energy production and adopt more sober, flexible consumption patterns. While the Fit for 55 legislative package and the REPowerEU Plan aim to deal with issues such as accelerated permitting and integrated energy planning (particularly the RED II and the Emergency Regulation (on a Framework to Accelerate the Deployment of Renewable Energy)), the biggest challenge in developing further renewables production at the moment is the lack of grid connection capacity. This impacts energy communities and other non-professional and small actors much more than it does larger commercial market actors.

Available grid capacity is usually determined either on a first-come first-served basis (e.g. Spain) or through an auction process (e.g. Portugal). Both methods place smaller actors at an inherent disadvantage, as they are not able to move as fast as others, navigate administrative procedures as easily, or even submit a competitive bid. In Portugal for instance, auctions for grid capacity have been taken up by outside investors that want to monetize rights to a grid connection. If a developer wants to act outside of the tender process, they must shoulder all the reinforcement costs.

Energy communities getting the short end of the grid

France – The relationship between smaller projects and the DSO is complicated. In some cases, because the DSO is slow to respond, projects often experience very significant delays. As such, some projects take too long to produce, even though they could technically do so.

Greece - In Greece the grid is currently congested in most parts of the country, resulting in rejection of many applications of community energy VNM projects (49% of the applications in 2022 were rejected).⁴ There is also a big issue with lack of transparency from the DSO, as there is no data available on whether there is capacity for a VNM project in a region. Therefore, without knowing if there is even capacity, an energy community is required to rent and pay for the land, and follow all the administrative processes for access to the grid. At the end of this process, maybe after more than a year, the project could still receive a rejection. To overcome grid congestion challenges for net-metering and VNM, the Greek government announced in the summer that 10MW in congested HV/MV substations would be reserved exclusively for self-consumption installations as a measure to mitigate high energy

⁴ More data can be found in the Green Tank report: https://thegreentank.gr/wp-content/uploads/2023/01/202301_GreenTank_Brief_EnergyCommunities3_EL.pdf.

prices. The Ministry appointed HEDNO (the Greek DSO) to clarify the details and to provide the guidelines. The DSO announced that the 10MW capacity will be broken down into 10 KW slots that will be available for net-metering and virtual net-metering. Although that decision was beneficial for net-metering residential systems, it practically excluded energy communities. Developing collective 10KW VNM projects (nearly two houses) by energy communities does not make any sense due to economies of scale. By excluding energy communities, thousands of households that don't have access to rooftops (i.e. blocks of flats in urban areas) were also excluded. There needs to be a straightforward and easy-to-deploy method to enable the reservation of grid capacity by genuine community energy virtual net-metering projects.

A second challenge energy communities are facing in Greece due to high energy prices is that big industrial consumers are currently building energy communities, one after another, to utilize the VNM model, adding to the corporate capture issue that is already very evident in Greece, and thus, further reducing the available grid capacity for citizen-led energy communities.

Ireland - In Ireland, the government has supported the growth of RECs through dedicated measures under its Renewable Energy Support Scheme (RESS). In Ireland, grid connections are determined in batches. There are only a limited number of applications that will be determined per batch. The RESS Scheme acknowledges the challenges community projects face in obtaining a grid connection. To allow space for different types of projects, a non-batch process, which allows consideration of 30 applications, is provided. Community projects are eligible to apply through this process. Of the 30 applications, at least 15 are designated for community projects. Community projects also have the added benefit of being able to apply for a grid connection without having planning permission (although such permission is required to obtain the connection). If after an assessment it appears that the grid connection cost will make the project unviable, the community can withdraw its application and get a refund of 75% of the application fees paid. The grid capacity is held for the community project for two years.

While this system allows communities to get into the queue for a connection, a number of significant barriers remain. For instance, community projects report a lack of transparent or timely procedure with the system operator. Estimated costs and timelines are not communicated, meaning that communities are working in the dark, unaware of whether or not connection to the grid will be viable in their area. This places undue risk on a community renewable energy project. There are also a number of examples where the eventual grid connection offer makes the REC project economically unviable. In one case, for a 5 MW solar PV installation, a community was asked to pay €4.5 million. Furthermore, once an offer has been made the community

has very little time to pay for the connection. 10% needs to be paid upfront, after which staged payments must be made, even before the installation is constructed.

- The electricity market design revision should address this issue in three ways: Ringfence grid connection capacity and provide support to community projects
- Reinforce Grid planning to factor in energy communities and collective self-consumption
- Reward local self-balancing and move towards developing more local markets

3.1 Ringfence grid connection capacity and provide support to community projects

First, the market design should create a level playing field for energy community projects that want to obtain a grid connection. Such a process should take into account that large collective self-consumption projects developed by commercial utilities also have a tremendous advantage over energy community or citizen-driven projects.

In particular, the IEMD should create rules that require Member States to ring-fence grid capacity for local energy community production installations. Member States should also be required to ensure that costs of a grid connection for energy community projects, particularly to engage in energy sharing, are proportional to the level of the grid that is used. Moreover, Member States should be required to ensure that assistance is provided to energy community projects, such as technical expertise and assistance, as lack of transparency and clear procedures make it very difficult for non-professional projects to obtain a grid connection.

3.2 Reinforce Grid planning to factor in energy communities and collective self-consumption

Energy communities and collective self-consumption should also be integrated into requirements under Article 32 on distribution network planning. DSOs need to plan forward to project technical and social potential for the development of energy community projects, as well as more commercialized collective self-consumption initiatives. Such plans should be readily accessible (e.g. online) so that potential projects have transparency before they start developing their project.

3.3 Reward local self-balancing and move towards developing more local markets

New incentives to provide services that can help stabilise the grid and limit congestion should be included in the Electricity Market Design. In the long run, we would support the development of more localised price signals through nodal pricing or more

localised price zones. The underlying principle of locational marginal pricing (LMP) is that the energy price varies from one location to another location in the presence of congestion and loss in the system (NPTEL, 2017).⁵ Therefore, in a LMP market there is not a single wholesale energy price, but potentially many different nodal prices. These are established by using an algorithm which takes into account losses and network constraints (Ofgem, 2017k).

Locational pricing would allow for the development of localised energy markets. In particular, it could result in the development of more localised balancing obligations (or services) to be developed that are more proportionate to the size and business models of more decentralized market actors. It would also send price signals and create sources of value that the energy community could provide to the energy system.

In the meantime, we support SmartEn's proposal to introduce district level balancing as a service.⁶ This would be very complementary to the further development of energy sharing, as it would incentivize investment in storage and the uptake of balancing responsibility. Ultimately, this would incentivise energy communities to develop technical and professional capacity to provide additional services to system operators that can result in more benefits for the members. Demonstration of self-balancing capabilities could also be used to help facilitate a quicker grid connection where a traditional grid connection might not be possible due to lack of capacity, or where costs might be too high for a project to shoulder.

4. Reinforcing Community Supply

Energy communities that are able to both produce and supply electricity from renewable sources provide a valuable and unique service to final household, local authority, and SME consumers. In particular, they allow consumers to take ownership over their own production and supply it – via the energy community supplier (most often a cooperative) – back to themselves as a service. This often takes place at the level of the market – usually national or regional. However, there is a strong desire for communities to be able to supply themselves more locally, where production and consumption can be matched as much as possible.

In more detail, the aim of community supply is to self-produce or buy renewable generation collectively from member projects in order to supply renewable electricity back to the members. The objective is to meet consumption needs of the members from as much local production as possible. However, because variable renewables production does not always match consumption, energy community suppliers use the

⁵ NPTEL (2017). Restructured Power Systems: Locational Marginal Prices. Available at: <http://nptel.ac.in/courses/108101005/27>.

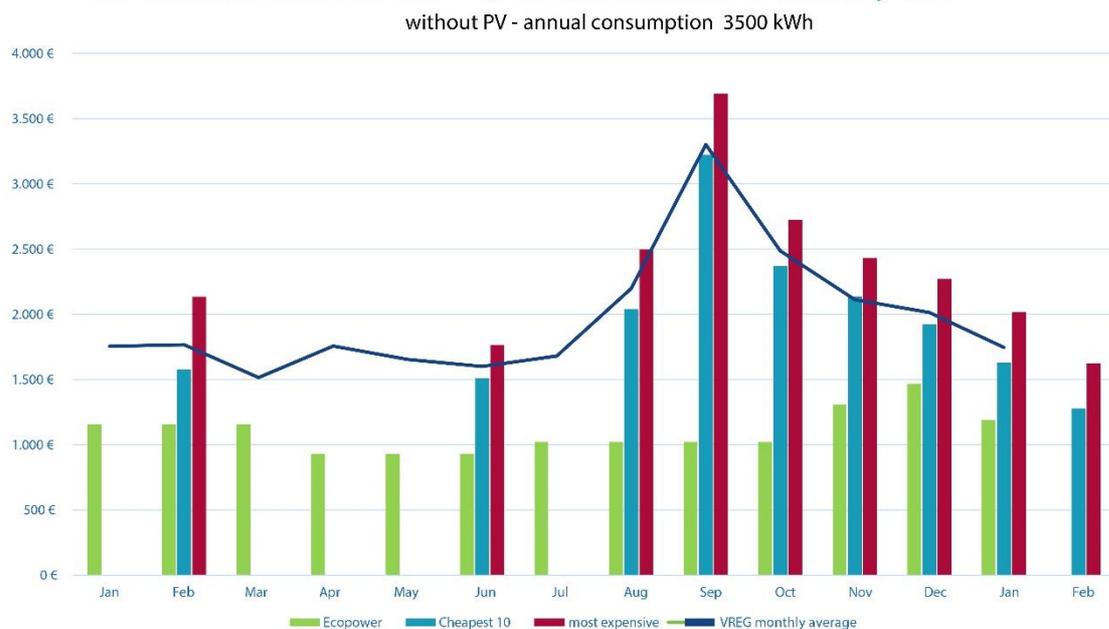
⁶ SmartEn (2022). Position Paper – Recommendations for Electricity Market Design Improvement. Available at: <https://smarten.eu/position-paper-l-recommendations-for-electricity-market-design-improvement/>.

wholesale market to sell surplus production. On the other hand, when the community does not have enough generation to meet consumption, it purchases electricity from the wholesale market. Because the aim is to provide self-owned electricity back to the members at a low, fair cost, investment expectations are not pegged to the wholesale market, as with other suppliers. Some energy communities call this the 'fair cost price' model.⁷

This model of matching local production with supply can result in a number of benefits. First, community supply can give consumers access to local renewable energy closer to the cost of production. This has been most notable during the ongoing crisis, where community suppliers in Flanders and Wallonia, Belgium, and the Netherlands have been able to keep prices relatively low compared to other commercial suppliers.

Flanders, Belgium - Cooperative electricity supply vs commercial electricity supply 2022/23:

Citizen energy versus commercial players evolution 2022/23 – purchase 3500 kWh/year



Source: Ecopower (February 2023)

While some cooperative suppliers have been able to maintain lower prices compared to other incumbents, cooperative retail electricity supply faces a number of threats brought on by the energy crisis. In particular, where cooperatives are operating in Member States that have a poor framework for supporting renewables, they are more

⁷ Agem (2022). Energie tegen eerlijke kostprijs. Available (in Dutch) at : <https://www.youtube.com/watch?v=7509wF6Xvlo&t=1s>.

reliant on the wholesale market. While small, cooperatives have also had to shoulder additional burdens imposed by government interventions in the market, while competing with large utilities that dominate the market and abuse their position. As an example, in Spain incumbents were able to take advantage of an error to avoid the price cap set by the Iberian Mechanism, selling all their production below the limit to their trading companies, thus being able to offer lower prices than those of independent trading companies.

Within this context, in the electricity design revision, the Commission must ensure that its proposals do not explicitly or implicitly discriminate against energy community suppliers.

Specifically, we would like to highlight two particular issues where the Commission needs to account for the unique situation of energy community suppliers: hedging obligations and the imposition of price caps and/or contracts for difference (CfDs).

4.1 Protecting today's community suppliers – why price caps & Contracts for Difference (CfDs) could harm cooperatives

Energy communities face several distinct challenges operating in the retail supply market:

- Liquidity - the cost of trading electricity, due to high guarantee requirements to operate on the market puts a high level of stress on energy community suppliers;
- Hedging - because of their small size and business model aim that revolves around matching production with consumption, community suppliers have different hedging strategies than other traditional retailers. Furthermore, due to their small size, they cannot access hedging product; and
- Administrative - There is a high degree of administrative burden associated with running a supplier, including IT requirements, controls by the regulator, and reporting requirements.

Barriers faced by cooperative suppliers

France - The main barrier is that the existing guarantee is already burdensome for small suppliers, as it forces them to mobilize the cash flow for it without investing it in other activities such as production projects. If the new amount of the guarantee currently in discussion in France is adopted, it would be even more burdensome and lead some small suppliers to bankruptcy. The same barriers appear in Spain, with an addition of complex bureaucratic processes that small suppliers need to navigate.

Italy – In the case of small re-seller/operators there are no particular simplifications; the cost of plain fulfillment is very high, together with the risk of penalties occurring in case of negative result of authority controls. Even small companies are pushed to create a risk fund. In order to have full control of energy dispatching, in particular if a company has production assets too (it's the case of renewable energy cooperatives with renewable generation capacity), you need to become a fully integrated operator. This requires significant financial guarantees, which are a strong constraint for energy cooperatives. Moreover, the Italian commercial regulation denies the possibility to lock domestic customers into a contract (they can exit without penalties wherever they want); this issue blocks the possibility to propose mid/long term PPAs with final clients, which is the basis for creating a sustainable model for new renewable energy capacity. Last but not least, the DSOs' inefficiency, which continues to limit development of renewables capacity and energy supply to the final market, falls back onto operators, in particular small companies without strong budgets.

Ireland - There are two categories of Supply Companies in Ireland. A Small Supplier and a Large Supplier. The Small Supplier can have up to 200 customers whereas the Larger Supplier is utility scale. The small scale supplier was created primarily for renewables producers, so they could enter into PPAs for the direct sale of production. If a community wants to both generate and supply electricity they have no option but to become a fully licensed large scale supplier. The set up and infrastructure costs such as IT and regulatory compliance requirements are prohibitive for communities to absorb and once established the ongoing Reporting Requirements criteria are time consuming and labor intensive. Templederry, a community renewables production project, set up a small supplier company to administer the generation from their windfarm. However, the financial institutions who were financing the build of the wind farm would not agree to using this supply company and instated that we negotiate a PPA with an established (Large Utility Supplier) before they would lend the money.

Cooperative suppliers were already facing these challenges before the energy crisis, but government responses have made them much harder to deal with. In particular, the imposition of higher guarantee requirements and additional administrative burden has made it harder to operate on the market. Cooperatives have had to raise their prices, or raise additional member capital.

Hedging

Because of their small size, community suppliers are often too small to be able to hedge using forward markets. For example, in Ireland, Community Power Ireland, a cooperative supplier, has been trying to develop a vertically integrated supply company model (e.g. matching generation with supply) but has been delayed for almost 18 months with grid connections for 2 x 5 MW solar farms. Therefore, their

volumes on both generation and supply are not sufficient to avail of hedging products. As a result they are totally dependent on Balancing market prices. In Portugal, guarantee requirements in order to participate in secondary wholesale markets are too much for small suppliers. Similarly, in Spain, cooperative suppliers neither have the volume or financial guarantees to hedge on the futures market. They actually have had experience trying to access forward markets and their experience has been negative. In general, many cooperative suppliers cite the high amount of guarantees required to operate on the wholesale market as a significant burden for them. In addition to being hard to finance, the risk of signing these contracts for cooperatives is high, due to the uncertainty of the price.

This is not to say that energy community suppliers do not hedge, or should not have a responsibility to hedge. We acknowledge the need to hedge, because without adequate hedging, the risk of failure becomes higher and the risk of extra costs in the end being put on the backs of consumers becomes greater. The point to make here is simply that energy community suppliers, because of their unique business model, need flexibility when it comes to imposing hedging obligations.

Hedging strategies of cooperative electricity suppliers

Member State	Hedging strategies used before and during the crisis
Germany	They use PPAs and other long term energy agreements
Ireland	Community Power Ireland has been trying to develop a vertically integrated supply company model (e.g. matching generation with supply) but have been delayed for almost 18 months with grid connection for 2 x 5 MW solar farms. Therefore our volumes on both generation and supply are not sufficient to avail of hedging products. As a result we are totally dependent on Balancing market prices.
France	<ul style="list-style-type: none"> • PPA : 5% of our supply sources • ARENH (accès régulé à l'électricité nucléaire historique) : this mechanism only exists in France, it was created in 2010 to enable EDF competitors to enter into the electricity market. They can have access to the electricity produced by historical nuclear power plants at a regulated tariff: 42 euros/MWh. Because of the crisis, in order to be less dependent on the market fluctuations and to maintain our supply and production activities, Enercoop (following a vote of our members during the last AGM in June 2022) will ask from January 2023 for temporary access to this mechanism. We will use these volumes for our hedging activities.
Belgium-Flanders	Ecopower produces on a yearly basis enough green electricity that its members consume, but: nevertheless sells about 30% of its production when it is not needed and buys about the same percentage on the market when needed. With the high and unpredictable electricity prices on the market Ecopower was forced to change its fixed tariff for electricity it supplies. 50% stays fixed on the basis of its own production

	and 50% gets a variable price. This caused a significant raise, but the tariff is still the best on the market.
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Requiring electricity supplies to hedge for a share of their supply could be beneficial to consumers. However, energy community suppliers need more flexibility when it comes to hedging requirements, particularly when it comes to guarantees. As such, if hedging obligations are imposed for suppliers, energy communities should be exempted. If they cannot be exempted, the State should step in to help provide guarantees, at least until the energy crisis recedes.

Price caps

The design of price caps has created a risk that supply cooperatives are unable to realise revenues that are used to keep prices low, invest in new production (which allows for more members), or provide other services to the members or the local community.⁸ This is compounded by the fact that in some Member States, particularly those covered by the Iberian Mechanism, integrated utilities have been able to use their market power to side-step the price cap while at the same time lowering their prices below those of cooperatives. In Italy, the price cap that has been implemented has had an unfair impact on cooperative supplier since, due to their management structure, higher electricity prices did not represent “extra profits”, since the cooperative redistributes benefits to its members by implementing an innovative “prosumer tariffs scheme.”⁹ In the case that the cooperative supplier needs to give money back to the government, this incentive is no longer sustainable, since the overall business model is based on a sensitive financial equilibrium.

We have already argued that supply cooperatives should be exempted from inframarginal price caps. This request is justified based on the non-commercial business model of supply energy communities, which puts the general welfare of the member/consumers first. As already mentioned, community suppliers do not use revenues to distribute profits to the members - it is used for socially innovative purposes. Furthermore, cooperatives hedge themselves by balancing their members' consumption with self-owned production and what they sell/buy in the market over an

⁸ enostra (2022). Open letter to President Mario Draghi: the ax of the on cooperative renewable energy. Available (in Italian) here: <https://www.enostra.it/news-eventi/lettera-aperta-al-presidente-mario-draghi-la-scure-del-decreto-sostegni-ter-sullenergia-rinnovabile-cooperativa/>.

⁹ See Eletticità Futura (2022). The Italian clawback measures against renewables pose serious threats to the energy transition in Italy and Europe. Available (in Italian) at: https://www.eletricitafutura.it/News-/Comunicati-Stampa/The-Italian-clawback-measures-against-renewables-pose-serious-threats-to-the-energy-transition-in-Italy-and-Europe_4050.html.

entire year. Depending on how price caps are designed, they could undermine this model.

CfDs

REScoop.eu is not against CfDs entirely. Many for-profit companies are making windfall profits on the backs of consumers and taxpayers. This is unjust. Member States should be able to take back these profits to help ease the crisis' impact on consumers. However, this must be done in a way that does not undermine the ability for energy communities to invest in local renewables production, or provide services to their members and the local community.

CfDs are not suitable for smaller community suppliers or producers, as it would negatively impact on the business model capping their ability to hedge on behalf of their members and provide other socially innovative services. Furthermore, CfDs are usually issued based on competitive bidding procedures. REScoop.eu has demonstrated that energy communities and smaller market actors are not capable of competing in competitive bidding with other larger more professional market actors.¹⁰ In the UK, for instance, energy community projects have not been able to participate in CfDs due to the level of complexity and market risk.

The RED II acknowledges the risk that imposing competitive bidding on energy communities can have, and requires Member States to take RECs into account when designing support schemes. Furthermore, DG Competition, in its recent State aid guidelines on Climate, Energy and Environmental Protection (CEEAG) allows Member States to exempt RECs and small projects from competitive bidding.

Renewable technologies in the hands of SME producers, like energy cooperatives and other forms of energy communities, should be excluded from CfDs. These market players have been working for decades, partly on a voluntary basis, to ensure the success of the energy transition and reinvest their revenues almost entirely in the development of new renewable energy projects, which would be at risk if revenue caps were set. This would significantly slow down the expansion of renewable energies at the local level. In this context, it is particularly important to ensure that CfDs are not awarded solely on the basis of the lowest price, as this would force small and medium-sized actors out of the market. This also lowers the acceptance for new projects for energy transition. It also sets a fixed price which makes it difficult to introduce new

¹⁰ REScoop.eu (2021). Renewable energy communities; why they deserve support & how the Guidelines on State aid for climate, environmental protection and energy can help. Available at: <https://www.rescoop.eu/toolbox/renewable-energy-communities-why-they-deserve-support-how-the-guidelines-on-state-aid-for-climate-environmental-protection-and-energy-can-help>.

additional market instruments. If CfDs are to be introduced, they must provide a safety net for renewable energy generated by energy communities as a core design principle.

4.2 Making it easier for energy communities to enter into Power Purchase Agreements (PPAs)

A number of our members already use PPAs in a number of ways, particularly in France, Italy and Spain. REScoops typically use PPAs as both sellers/suppliers of electricity, as a purchaser, and as an intermediary or facilitator between small producers and consumers. Most REScoops use PPAs in selling renewable electricity production to SMEs or public authorities, while some use PPAs as the basis for supplying electricity to their members (i.e. households). Energy communities use PPAs to hedge against high electricity prices, and to secure power over the mid-to to long-term. PPAs also provide energy communities that produce renewables with additional revenue streams to supplement or replace support schemes, for instance market premiums or feed-in tariffs. In general, REScoops are interested in using PPAs to guarantee their members with cheaper long-term renewable electricity.

Comparing how REScoops use PPAs

Member State	Actors involved	Explanation of arrangement
Germany	<ul style="list-style-type: none"> • Wind parks that are no longer eligible for subsidies (repowering) and solar parks; • PPAs with parks, we have contracts with SMEs (as customers) • Local companies that want to be supplied with renewable energy 	<p>A contract to purchase a certain quantity of electricity over a certain period of time at a fixed price. Also, the handling of the accounts (bilanzielle Abwicklung) and the penalties in the event of non-compliance with the contract are agreed upon. Because it is a bilateral contract, a PPA can take many forms and be tailored to the contracting parties. Electricity deliveries can be physical as well as on-balance-sheet (bilanziell).</p> <p>PPAs with parks on one side. On the SMEs have contracts with cooperative suppliers and receive energy as customers.</p>
Ireland	We provide PPA's to number of small hydro projects (11kw to 300kw)	These PPA's fall under a government support scheme (REFIT) which guarantees a fixed price to the generator over a 15 year period. We administer the PPA's on behalf of the generators
France	<ul style="list-style-type: none"> • Project developers • Local authorities • B2B Clients of Enercoop the supplier 	Enercoop's role in PPAs: intermediary or aggregator between the consumer and the producer.

		Covered technologies: PV or wind. Specifically, It PPAs are used for projects developed on greenfield (i.e. new projects), or existing projects (no longer eligible for public support).
Belgium-Flanders	<ul style="list-style-type: none"> • Other REScoops • Farmers • Members with PV • Local authorities, schools, enterprises, etc (on which roof or ground we can invest in PV) • PPA onsite with non-members • To obtain lending by the bank for participation in offshore, we need a formal PPA to convince the bank. 	<p>For direct use of electricity from PV, Ecopower uses a fixed price for a long period (up to 20 years). This model is also possible for the direct use of wind energy on an industrial site.</p> <p>The electricity injected in the grid is distributed to members at cost price (without the need of making profits). Balancing costs are integrated in the price to our members.</p> <p>Ecopower does not have any formal PPA with members that are natural persons. If we want to lend by the bank for a participation in the offshore, we need a formal PPA to convince the bank.</p>
Portugal	Not applicable at the moment.	To develop a PPAs, a license to be a producer is required. To negotiate a PPA contract, a trader's license is required. It's difficult for us to get PPA's since we're not able to buy a lot of energy.

However, our members have also stated that there are a number of barriers preventing them from entering into PPAs. First is size. Many RECs are SMEs or have small installations, whereby it might be difficult to provide enough production to make a PPA interesting. Furthermore, because of their small size and non-commercial nature (e.g. registration as a cooperative), it can often be difficult to obtain adequate financing from lending institutions, due to the perceived high risk nature of the project.

With regard to this latter point, one of our members from France highlighted that a cooperative supplier positioning itself as a buyer wishing to enter into PPA contracts faces a major challenge to convince investors and banks of its long-term financial strength, over the duration of contracts ranging from 15 to 30 years. Unaccustomed to small players, especially those in cooperative form, banks demand financial conditions that are inaccessible to small and medium-sized players. Unlike the larger players in the energy sector, energy cooperatives experience more difficulty accessing debt.

Furthermore, a supplier's license is still often required in order to enter into a PPA with a household customer. As such, many energy communities must become a licensed supplier. In Ireland, it is possible to obtain a limited supply license, so that generators can sell directly to consumers. However, a willing supplier is still required, in order to

assume responsibilities as a service. Furthermore, simplified requirements like a limited supply license are not available everywhere.

Reducing supply license obligations for entering into PPAs, or requiring certain market actors such as a supplier of last resort, to provide a reasonably priced service where choice does not exist, should be included among the measures Member States are required take to support the further use of PPAs by energy communities to create more sustainable business models.

Barriers of energy communities experience with PPAs

France - The main barriers that currently prevent the conclusion of PPAs in France are the following:

- Difficulties in accessing debt for small actors.
- Unclear and unsuitable legal framework. Even though a new law on acceleration of the production of RES partially clarified the legal framework, some aspects are still unclear, such as:
 - The definition of a PPA is restrictive, as it doesn't take into account the possibility for a supplier to be the intermediary between the final consumer and the producer;
 - It is still impossible for local authorities to invest in a production project in the long term, which is not supported by the State (feed in tariff).

The French government put in place mechanisms (guarantee funds) to tackle the issue of accessing debt, but only for the biggest consumers (>20GWh per year) without introducing anything for small actors and energy communities (on the demand and production sides). Multiple options exist (extension of the guarantee funds to all categories of consumers, possibility for the producer in PPA to switch to a feed-in-tariff in case the buyer goes bankrupt), but France doesn't seem to be willing to democratise the access to PPAs.

The best way to increase the share of PPAs is to put in place public support mechanisms for the democratisation of PPAs for small actors. A 'game changer' measure would be to provide insurance against the risk of bankruptcy, such as the creation of a mechanism opening the possibility for the producer in a PPA to switch to a feed-in-tariff in case the buyer goes bankrupt. Acting as a sort of State-backed guarantee of last resort, this would facilitate and secure bank financing and could easily be adjusted in volume and price by the regulator. Another option would be for a publicly-funded guarantees system to assume the risk of default.

In particular, a combination of PPAs with public support schemes could lead to an increase in the conclusion of these PPA contracts. However, it is important that the

operators still have the right to choose whether they want to remain only in the public support scheme.

We would also support the pooling of demand in order to give access to smaller final customers. In fact, some Spanish cooperatives do this already with a purchasing centre, which allows for adjusting deviations to the minimum. However, it is important to ensure that pooling is simple and does not entail unfair transaction costs for those who participate. Furthermore, we would support standardization generally, but more importantly the process of entering into PPAs should be simplified.

At the end of the day, energy suppliers should be able to decide themselves how they procure their electricity. Supply cooperatives aim to produce electricity as close in time and space to production, without relying on the spot market. As such, suppliers should not be required to procure a predefined share of their customers' energy through PPAs. The better way is to increase the share of PPAs is to put in place public support mechanisms for the democratization of PPAs. .

Other ways the market design revision should support investment through PPAs include:

- PPAs should be able to be concluded without being subject to price caps or CfDs;
- Maintain a stable regulatory and market environment to promote entry and access. Constant alteration of rules and regulations, such as the introduction of the Gas Mechanism, and alteration of warranties calculation procedures, among others, create obstacles that prevent cooperatives from developing business in a normal manner;

Finally, increasing the update of PPAs could impact a level playing field between undertakings of different sizes, as without mechanisms to support small actors, PPAs will be in practice dedicated to big actors (industrial ones). The European Commission needs to create a framework at the EU level allowing energy communities and small actors to be part of the dynamic use of PPAs, and should provide clear guidelines for Member States to that end. The recent RepowerEU Plan contains some recommendations of that nature (for instance in the communication "Short-Term Energy Market Interventions and Long Term Improvements to the Electricity Market Design – a course for action"), but it is important to include such dispositions directly into the Electricity Market Directive.

4.3 A supportive regulatory framework for local supply

REScoop.eu envisions the development of local markets that incentivise local ownership by energy communities and local authorities. In order for this to become reality, there is a need to revisit the regulation of sale of electricity, to ensure that it is

not overly burdensome for smaller actors that want to operate locally and in tune with production and consumption. We do not advocate for getting rid of licensing requirements, but we do advocate for ensuring that licensing procedures and obligations do not prevent cooperatives and other forms of energy communities from being able to enter in the market and supply locally.

While it may not be possible to address this issue at the moment, the Commission and the Member States should undertake the revision and reform of the regulation of supply so that it is fit to operate and support a decentralised and democratised energy system.

In the short term, the market design reform can make a significant contribution towards allowing growth of local supply. In particular, the Electricity Directive should require Member States to designate a supplier of last resort to enter into a fair contract with community-renewable projects to provide supply services to local energy community renewables production projects. Assuming this would require Member States to designate a supplier of last resort, we would advocate for including this in the Electricity Directive.

In California for instance, legislation (Assembly Bill 2316)¹¹ passed in 2022 requires suppliers to set up subscription services so that any customer can request to 'subscribe' in order to receive renewable electricity from local renewables installations. Compensation for community solar will be pegged to the actual value of electricity at the time it's delivered to the grid. At least 51% of subscribers to a project will have to be low-income, ensuring that such production does not simply end up serving businesses. In the UK, a 'Local Electricity Bill' is currently under consideration in the House of Common that would require large suppliers to provide supply as a service to local community renewables production projects.¹²

Such a requirement in EU legislation could be temporary, in line with other emergency responses to the energy crisis. It would also allow local projects to supply themselves with their own renewables production, until regulation of local supply can be better tackled.

¹¹ California Assembly Bill 2316. Public Utilities Commission: customer renewable energy subscription programs and the community renewable energy program. Available at: <https://openstates.org/ca/bills/20212022/AB2316/>.

¹² For more information on the Local Electricity Bill, see Power for People at: <https://powerforpeople.org.uk/the-local-electricity-bill>.

5. Align the Citizen Energy Community definition with the Renewable Energy Community Definition

It is important that energy communities be acknowledged across the EU's IEM legal framework. However, this must work to help energy communities participate in the energy transition – not hinder their development. If the concept of energy communities is not clear at the national level, citizens are not likely to use them, they may be hijacked by incumbents, or both.

At the moment, there is a lot of confusion regarding the relationship between Recs and CECs. This has resulted in mixed and troubling results in the transposition of REC and CEC concepts so far. In some cases, Member States provide a clear distinction between the REC and CEC definitions, and elaborate the relationship between the two concepts. In others, Member States try to create a single core concept, while respecting the fact that there are two separate definitions.

In many Member States, particularly where energy communities are quite new, there has been no elaboration of the relationship between RECs and CECs and the definitions are not coherent with each other. In such cases, the existence of two definitions actually creates confusion, leading to delays in the further development of national rules and regulations, as well as confusion by stakeholders as to which form of community they should choose. In the worst of cases, incumbent energy companies are using the CEC definition to set up fake energy communities (mainly due to the open nature of participation in CECs and the lack of an autonomy requirement which prevents individual members from exercising control of the community).

Part of this confusion stems from the novelty of the concept of energy communities. However, much of the confusion stems from the EU definitions themselves. In particular, there is a fairly large incoherency between the REC and CEC definitions: an REC may be effectively controlled by an SME as long as it is local, while a CEC may only be effectively controlled by micro or small enterprises (whether local or not). This undermines the narrative that a REC is a subset of CEC. Strictly speaking, graduating from a REC to a CEC would actually require changing the internal governance of the energy community.

At the national level this has created confusion even among regulators. For instance, in the registry of energy communities in the region of Flanders, many community initiatives simply identify themselves as both REC and a CEC. From a consumer protection perspective, this could undermine trust and protection, particularly if citizens end up joining initiatives that in the end are different than what the citizen expected.

The Electricity Market Design is a good opportunity to rationalize or streamline the CEC definition more closely with the REC definitions. Such a streamlining exercise could help provide additional legal clarity, help with the implementation and rollout of energy communities at the national level, and safeguard against corporate capture of energy communities by incumbents.