

Community Energy Municipal Guide



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The energy transition must be a just and social transition that benefits all citizens, local communities, and the local economy in the first place.

CONTEXT

Just and social energy transition

To make the energy transition to a carbon free economy and society by 2050 succeed and counter climate change, the European Commission, Parliament, and Council of the Member States have been revising European energy legislation - setting more ambitious targets and defining new roles, rights and duties, in particular for citizens and other local stakeholders.

In 2019 the Clean Energy For All Europeans Package¹ intended to put citizens in the centre of the energy transition and give them the right to produce, store, share, sell and consume energy. It also provided thousands of existing citizen energy initiatives with definitions and provisions for: "renewable energy communities" in the Renewable Energy Directive II² and "citizen energy communities" in the revised Internal Market for Electricity Directive ³.

The war Russia waged on Ukraine in 2022 resulted in an energy crisis that drove many more EU citizens into energy poverty. It made the transition even more urgent and subsequently targets, tools and timelines have been revised by the EU (REPowerEU⁴).

In the aftermath of the Covid crisis, the fragility of a system, where strategic supplies and services are outsourced to remote places, has been laid bare. On the contrary, community energy projects contribute to local resilience and the opportunity to create short supply chains not only for food but also for energy. It has also demonstrated the importance of understanding that the climate emergency is just one of the many emergencies' cities must face simultaneously Now confronted with the current energy crisis, it has been clear that cities were and remain at the forefront of the immediate crisis management and that good local governance is an asset in uncertain times. It can be considered as a turning point in how cities are seen by the EU institutions. It is becoming clear to policy makers at all levels that the energy transition will only succeed if the EU citizens support it or even better: demand it. That's why the energy transition must not only enhance self-reliance, but it must be a just and social transition that benefits all citizens, local communities, and the local economy in the first place rather than big commercial players ⁵.

ENERGY TRANSITION STRENGTHENING LOCAL ECONOMY AND SOCIETY

It is essential that Europe engages now in huge investments in energy sufficiency⁶, efficiency and renewable energy production to stop the addiction to fossil fuels. This would stop the drain of money from neighbourhoods, municipalities, regions, countries, and the EU to authoritarian regimes in countries like Russia, Saudi Arabia, Algeria and Azerbaijan. Crucial in all this, however, is that the investments in local renewable energy projects are mainly done by local citizens in collaboration with municipalities and local SMEs so that the return on investment remains local and can accumulate and strengthen the local economy and society^{7,8}.

Examples across Europe⁹ that this is feasible do exist! They also demonstrate that it is important that citizens engage with municipalities and vice versa. Most successful community energy projects in Europe are those where groups of citizens collaborate with local authorities. Local or regional governments have everything to gain from promoting the scale-up of community energy in their area and can initiate new initiatives. However, despite the growing popularity of the concept across Europe, many cities are still struggling to move from ideas to action. Many local municipalities have committed to energy or climate targets but reaching these can be challenging. Often the ideas come easily, but making things happen is trickier.

The Community Energy Municipal Guide

This guide will support municipalities to encourage and implement municipal collaboration with energy communities, or participation in energy communities outside public procurement, but taking into account the public procurement requirements and tendering framework. It will also provide examples from local pioneers to inspire further action.

The Community Energy Municipal Guide will provide more detailed information about the topic, rather than repeat it. A lot of this information can be found on the websites of the different networks across Europe for progressive local authorities who want to be part of the energy transition, like Energy Cities¹⁰. Another source of information is the website of REScoop.eu¹¹, the European Federation of citizen energy cooperatives and the Energy Community Platform¹², a one stop shop, hosted by REScoop.eu that gathers all interesting information, tools, best practices that have been developed in EU funded projects on energy communities.

The Municipal Guide of the Compile project for example describes how local authorities can promote energy democracy at the local level and four different roles that municipalities can take in supporting the development of community energy initiatives are identified:

- MUNICIPAL SPONSOR Most of the cases explored in the Compile project, municipalities do not have an active role in the investment or the construction of the energy community.
- MUNICIPAL CONTRACTOR This role relates to their purchasing and contracting strategies.
- MUNICIPAL CO-OWNER Municipalities can be a partner and co-owner of local projects with an energy community.
- MUNICIPAL UTILITY Municipalities have the right to participate in an energy community and become a member or shareholder.



Roles 1,3 and 4 require direct municipal action, while role 2 mostly entails indirect municipal action. These roles are often mixed based on the policy goals of the municipality

The mPOWER Municipal guide¹³ takes a slightly different approach identifying three key roles that Municipalities take, namely:

- INITIATOR Where the guide explores stories of municipalities that have established innovative new Energy Communities
- CREATING FAVOURABLE CONDITIONS Showing concrete examples of Municipalities that are acting as enablers, creating the conditions for energy communities to establish themselves and also by adopting long-term policies and objectives
- WORKING IN PARTNERSHIP Inspiring guidance on municipalities that have formed strategic partnerships with existing energy communities, for example for the development of local energy markets, the roll-out of energy sufficiency and efficiency programmes, or the financing of renewable energy projects on public buildings.

Whereas the Compile Municipal guide focuses on contracting because it is the role that is the most accessible for smaller European municipalities and the mPOWER guide offers inspiration and ideas for replication to anyone with a role in a municipality, the present guide builds on chapter 7 of The Community Energy Guide ¹⁴, a publication authored by Friends of the Earth Europe, REScoop.eu and Energy Cities in 2020, providing comprehensive information and inspiring case studies from over forty European Municipalities.¹⁵

Citizens see the light (BE)

In 2017 Leuven (BE) wanted to boost investments in renewable energy locally and sought, through a public tender, a strategic partner to stimulate the energy transition
pro bono. An essential task of the strategic partner was to offer citizens the chance to participate financially through a local renewable energy community. Ecopower¹⁶, a citizen energy cooperative with many members in the city, backed by a consortium of local NGOs and companies active in the energy transition, won the tender.

In May 2017 the partnership was called LICHT-Leuven (LIGHT-Leuven in Dutch), led by a team of 6 people from the City, Ecopower and the NGO Leuven 2030 (see chapter 6), and backed by a general assembly of the initial consortium. It focused first on the development of larger PV-installations on schools, public buildings, apartment blocks, but also intensified existing efforts to make schools more sustainable, help households insulate, green their heating and install solar panels and boilers. Soon it became clear that it was necessary to involve the municipalities and smaller cities around Leuven (BE). When thinking about possible wind farms or biogas production from compostable household waste, collaboration with the neighbours is essential for the capital of the **Province of Flemish-Brabant (BE)**.

With the support of the **Province of Flemish-Brabant (BE)** and by combining existing programs and projects a consistent approach was set up to support all municipalities of the Province to help them reach the targets they set for themselves when signing the Covenant of Mayors and making their Sustainable Energy and Climate Action plans. This initiative was called: LICHT Vlaams-Brabant; the approach was afterwards called the LICHT-approach whereby 9 LICHT-groups spread across the province. Support on both how to set up, grow and maintain an energy community, and technically and financially how to select possible renewable energy projects was received. This has led so far to the creation of 4 new and very active citizen energy cooperatives: ECoOB¹⁷, Druifkracht ¹⁸, <u>NAVITAS Energie</u>¹⁹ and Noordlicht²⁰.

INTRODUCTION

How to get started

COVENANT OF MAYORS AND SECAPS

The **EU Covenant of Mayors** is a network of thousands of local governments who have voluntarily committed to implementing EU climate and energy objectives. To translate political commitment into practical measures and projects, Covenant signatories are asked to submit a Sustainable Energy and Climate Action Plan (SECAP) outlining the key actions that need to be undertaken.

All the local governments that have signed up to the covenant of mayors commit to three objectives:

- Accelerating the decarbonisation of their territories,
- Strengthening capacity to adapt to unavoidable climate change impacts,
- Allowing citizens to access secure, sustainable and affordable energy.

The website of the Covenant²⁵ provides information on the local authorities which have signed up to the initiative. One of many examples is <u>the Climate Plan²⁶</u> of Ghent (BE).

ARGUMENTS TO OVERCOME INITIAL RELUCTANCE

Often local authorities perceive community energy projects as being too complex or too different. Here are some arguments that can overcome some of the preconceived ideas when starting out.

SHARED MISSION

Trust in cooperatives and other community-oriented projects is often built quickly, and both entities can become long-term partners, mutually building capacity. As both the cooperative and the local authority are mission-driven rather than profit oriented, long-term objectives are shared. In Belgium for example, several municipalities and cities, like **Asse, Oostende, Leuven, Eeklo, Beersel (BE)**, have gained expertise and benefited from the support of citizen energy cooperatives to develop and activate their Sustainable Energy and Climate Action Plan.

COLLATERAL BENEFITS

Community energy schemes bring many local benefits beyond contributing to climate objectives. Projects designed and carried out by energy communities with strong democratic governance structures don't just reduce CO2 emissions, they also contribute to other strategic local policy objectives. Projects that are steered by local cooperatives or non-profit foundations have helped local and regional authorities to:

- Improve energy efficiency and reduce energy poverty, either through cheaper tariffs or dedicated schemes to actively involve and support vulnerable consumers²⁷
- Enable a more active form of local citizenship, as these initiatives encourage inhabitants to feel more involved and concerned about their neighbourhood, encouraging them to engage in other sustainable activities such as urban agriculture, recycling initiatives, repair cafés, shared mobility and so on.
- Boost local economic development, as projects owned by local community members can contribute up to 8 times more to local added value creation²⁸.



One important first step is to ensure local authorities commit to community energy development, with long-term plans and roadmaps. This can include pledges to include citizens more directly in climate and energy policy making (through the organisation of debates and dialogues, the launch of participatory budget schemes, etc.)

Local and regional authorities can also adopt concrete long-term objectives related to energy production, such as a specific target to quantify community owned renewable production capacity, in megawatts or as a percentage, within a certain timeframe (more examples in Chapter 1).

Political commitments can also go beyond energy. **Edinburgh's City Council (UK)**²⁹, for example, has pledged to support cooperatives in general. In fact, this happens on all levels. Since the European Commission considers cooperatives as part of the <u>Social Economy</u>³⁰, this opens all kinds of possibilities for municipalities to collaborate with citizen energy cooperatives regardless of whether their involvement has to be tendered or not.

There are various ways through which local governments can either support or directly engage in the development of community energy. In this guide we focus on several of them.





1. Favourable Regulations for Community Energy

Regulations and subsidies supporting community energy are highly dependent on an adequate legal enabling framework at the national level. As mentioned above, according to the revised EU directives of the 'Clean Energy for All Europeans Package' or CEP'³¹ member states must guarantee the development of this framework, following an in-depth assessment of the opportunities and obstacles linked to community energy in their country. They are also required to build local authorities' capacities in this field.

In the REPowerEU plan, member states are urged to transpose and implement their enabling framework for energy communities to give them the opportunity to help speed up the energy transition. Currently (autumn 2022), not all member states have properly transposed the EU legal framework. Luckily, local authorities have some tools at their disposal to create a more favourable environment for community energy development at their level.



Legal framework exempting energy societies from tendering (DE)

Germany was late in its transposition of all provisions for energy communities in the Clean Energy Package (CEP) directives. A previous attempt years ago to define citizen energy initiatives (who were given a favourable treatment) was completely misused by private commercial developers and the previous German government was reluctant to fail again and did not transpose this at all. The current German government eventually did transpose the law in July of 2022: RECs are called Bürgerenergiegesellschaften or citizen energy societies, which can be a cooperative or any other entity that fits the definition. Within this law are some key clauses concerning tendering which is a common challenge for Municipalities and energy communities in Europe (see chapter 7 for more examples). Those citizen energy societies will be exempted from the 1st of January 2023 from tendering, in the case of wind until 18 MW and in the case of PV until 6 MW. However, only citizen energy societies who have not commissioned any plants of the same technology and (in the case of PV) the same segment (either ground mounted or roof top, each above 1 MW) in the previous three years have the right to be exempted for the particular project of the same technology and the same segment. After making use of the exemption, a citizen energy society is not allowed for another exemption or an application in a tender for the same technology and segment in the following three years. A synopsis of the old and new law can be found³⁷ in the law gazette³⁸. The definition is in §3 Nr. 15 and most requirements for the exemption in §22b.

NATIONAL FRAMEWORKS FOR ENERGY COMMUNITIES

FEDERAL LAW

Federal enabling framework for offshore wind energy communities is in place. The Belgian REScoop members got funding from the Federal state for 'Sea2Socket' to prepare its participation in the new offshore wind concessions³².

FLANDERS

The first elements of regional enabling framework, mentioned in the 'Energy and Climate plan 2021–2030'³³, are in place since the publication of the revised 'Local energy and climate pact' with the <u>municipalities</u>³⁴: one additional participative project per 500 inhabitants by 2030, 10M€ package (2022–2024) for projects energy sharing and energy communities and grant to REScoop Flanders federation for supporting ECs

BRUSSELS CAPITAL

A regional 'facilitator' for energy sharing and energy communities, which acts as a help desk, has been put in place by the regional Brussels government. This 'help desk' is meant to provide legal, technical and organisational support and create tools and methods to help build energy communities. The service provided to interested parties is completely free. Reduced grid fees for energy sharing are in place. Energy sharing and energy communities have also been granted legal recognition in the Brussels region.

The Brussels ordinance distinguishes between three types of energy communities that can be created in the Brussels region:

 Citizen energy community (CEC) the particularity of which is that any person - natural or legal (including large companies) - can be a member. However, stricter conditions apply for the exercise of effective control over the community. Another feature is that the activities carried out by the CEC may include non-renewable sources of electricity (gas-fired cogeneration plants, for example).
Finally, if the CEC wants to carry out an electricity sharing activity, it must necessarily own - as a legal entity - the production facility. 2. Renewable Energy Community (REC): as the name suggests, the REC must necessarily use renewable energy sources (fossil fuels are therefore excluded). In terms of participation in a REC, large companies are excluded and for SMEs, their participation in one, or more, energy community cannot be their main commercial or professional activity. Individuals and local authorities can also be members of the REC. In the case of electricity sharing, the REC must necessarily own the production facility.

3. Local Energy Community (LEC): the LEC is a Brussels initiative, which is not specifically mentioned in the European directives, and which aims to make the ownership conditions of the production facilities more flexible by allowing, for example, the use of a third-party investor and existing plants for energy sharing. Unlike the CECs and CERs, the CEL may own the production facility, but it is also possible that one or more of its members are themselves owners or that they have a right of use over the production facility. The activities of the LEC are limited to renewable energy sources. The same conditions for participation in a LEC apply as for the REC, except that any kind of public authority can be a member and not only local authorities.

WALLONIA

A Walloon Decree was approved in May 2022 and the implementing decrees are being finalised in order to provide a functional framework for Energy Communities. In the meantime, a series of pilot projects have been funded to test sharing arrangements in different scenarios. In October 2022 the Walloon government decided on the 'Pax Eolienica '³⁵. It envisages to boost wind energy, and among other measures, it obliges all developers of wind farms to offer 24,9 % of the ownership to the municipality and 24,9% to the citizens to make the energy transition more just. It also provides citizens initiatives with a regional facilitator.

The Dutch Climate agreement stipulates that in the case of sustainable energy projects on land, there must be room for participation by residents and businesses in the area. These agreements relate to two phases in the process:

1. Policy Phase In the policy phase, the local or regional government makes decisions about the projects and where and how they will be realised. These decisions are laid down in a Regional Energy Strategy (RES). The Climate Agreement prescribes that citizens must be involved in this decisionmaking process. It sets a minimum level of participation and advice to actively increase the involvement of citizens, because this benefits the quality of decision-making. 2. Project Phase In the project phase, the initiator of the project is responsible for organising participation. Residents and businesses in the area of the project not only have an influence on its design, but can participate financially in the project. This participation can take various forms, such as co-ownership, financial participation, transfer of part of the proceeds to an environmental fund or compensation for residents. The agreements on participation are laid down in codes of conduct and manuals for the various sectors. The Climate Agreement expresses the ambition to achieve 50% ownership for residents and businesses.

In France, all metropolitan regions are now covered by a network of 'facilitators' whose role is to support the emergence and initiation of projects. In addition, some regional councils have implemented specific calls for projects focused both on the development and investment phases.

At the national level, the state introduced a participatory bonus in 2016 in the calls for tenders of national energy regulators. Initially granted in euros, the bonus now means that electricity projects with high shares of local or citizen participation are granted a higher number of points as part of the selection criteria (3 to 5 points out of 100 for the participatory dimension).

In November 2021, the national government, for the first time, officially committed itself to a quantified target for the scale up of community energy in the country: 1 000 new locally governed renewable energy projects should be launched by 2028. This milestone however, to be truly effective, would still need to translate into policy instruments and supporting measures as part of France's next <u>multi-year energy</u> programme (PPE)³⁶.

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In 2018, Greece became the first EU country to recognise energy communities as legal entities in law 4513/2018, providing a comprehensive and robust framework that allowed for the development of hundreds of energy communities across the country. However, the law was created prior to the Clean Energy for all Europeans Package, thus the relevant Directives have not been fully transposed into national law creating significant distortions such as hijacking by private investors; significant costs, delays and bureaucratic procedures to achieve grid connection; lack of awareness. To tackle the burgeoning problem of private investors setting up 'shell' energy communities, the Greek Government replaced Feed-in-Tariffs with auctions via law 4759/2020 at the end of 2020. Similarly, energy communities selling power to the grid, have had their priority access to the grid removed.

Although the foundations for a strong community energy movement have already existed for years now, the lack of incentives or government assistance has been a significant hindrance to the further development of the movement. In Croatia an enabling framework for REC/CEC is not in place yet. The REC/CEC definitions are formally introduced in Croatian legislation but concerning the practical foundation and actual economically viable operation of REC/CECs there are still many restrictions that are included in the formal legislative definition and in the administrative steps needed for registration. As a result, almost a year after the introduction of the legal definitions (end of 2021) there are still no RECs/CECs in Croatia.



CARES SCHEME, AN EFFECTIVE NATIONAL FRAMEWORK IN SCOTLAND

Local Energy Scotland manages the effective Community and Renewable Energy Scheme, (CARES³⁹), of the Scottish government. It supports communities to engage with, participate in and benefit from the energy transition to net zero emissions and offers a range of financial support to local energy projects. CARES can support a wide range of projects including installing renewable technologies in community buildings, community benefits and shared ownership. It provides a package of support and makes it as easy as possible for communities to deliver their project. For example, to complete a technical feasibility study CARES can assign a consultant to a community who will complete this task for them. A wide variety of community organisations and charities are eligible for CARES support. Applicants must be constituted nonprofit distributing community organisations, including organisations with charitable status, that are established and operating across a geographically defined community or faith groups. This effective enabling framework is flanked by a Community Energy target of 2 GW by 2030 which is also reflected in local municipal plans and the National Energy and Climate Plan (NECP).

Specific land-use or building regulations

Local and regional authorities can adopt specific land-use or buildingrelated regulations that favour the development of citizen or communityowned energy sources. This could be key in getting community energy projects to completion. In the Belgian region of Flanders several local and provincial authorities determined 'urban zones for wind turbines'. Sometimes this leads to disputes about competences between different levels, as illustrated by the example of **Eeklo (BE)** and the **Province of Eastern Flanders (BE) (see chapter 8)**.

Obligation to connect to state-of-the-art district heating & cooling networks

For developers of district heating and cooling systems, regardless of whether they are public, private or cooperative, the obligation to connect is an important support measure since it is crucial for the viability of district heating and cooling systems that there is a high connection degree of the buildings to the system.

In France the federal government acknowledges the importance of district heating and cooling. Quite recently it revised its policy⁴⁰ around this matter. If a district heating and cooling system adheres to or adapts to recent standards (e.g. minimum of 50% renewable energy) it can get a certification and is considered 'classified^{41'}. When this is the case all new buildings or thoroughly renovated buildings are obliged to connect to the system. There are hundreds of both rural and urban systems that are 'classified' in France.

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One of them is in **Lucinges (FR)** in the Region of Auvergne Rhône Alpes where since 2018, the citizen energy society ForestEner has built its first community heating network supplied with local wood, which serves communal buildings and dozens of <u>homes</u>⁴². This illustrates the huge existing potential to develop community heating or cooling networks in France.

In the Netherlands since 2012, the city council of **Amsterdam (NL)** has the authority to decide that, in principle, every new building needs to be connected to an existing (or to be built) district heating or cooling network. Exemptions can, however, be made if the owner of such a building meets at least the same energy efficiency and environmental benefits as the district heating system, see for example a recent decision⁴³ for a new development on Strandeiland.



Data centre's waste-heat keeping the Middenmeer neighbourhood warm (NL)

When in 2015 some people in Amsterdam (NL) learned that waste heat from the ice rink in their neighbourhood could heat 500 houses, they created a citizen energy cooperative called MeerEnergie⁴⁴. Since then, a lot has happened. Equinix, the data centre, now offers waste heat, for free, which is enough for heating 5 000 houses. The cooperative has grown to more than 800 members, and the project of a district heating network is being set up in close cooperation with the city and the DSO Firan. In 2020 the city used the opportunity of road renovations in the neighbourhood to install the pipes. A lot of work (and time) has gone into finding the correct legal way to cooperate with the city, especially by developing a solid business case including technical, legal and financial aspects, in collaboration with the DSO Firan see chapter 6 for more examples). The citizen energy cooperative wants to enable the inhabitants of the neighbourhood to become co-owners of the heat network. Different ways to participate have been developed. This includes having members that invest and can expect a return over time, as well as members that only participate to have access to the heat. This will be the starting point for other initiatives on sustainability in the neighbourhood, such as energy efficiency advice and solar panel installations.



Energy Performance Certificate linked to private or collective investment in

renewables

In the **Flemish Region (BE)** every new or deep renovated house must produce a minimal quantity of renewable energy. This can be done by installing a solar boiler, PV panels, a heat pump, a heat pump boiler, a biomass boiler, connecting to district heating, participation in a renewable energy project or a combination of the above. Participating in a renewable energy project of an energy community, therefore improves the energy efficiency score in the energy performance certificate (EPC) of the <u>house</u>⁴⁵.



Subsidies scheme for cooperative energy generation (NL)

Until April 2022, the Dutch 'postal code' support scheme was intended for residents who wanted to use solar energy but did not have available space. They could form a cooperative and invest in a solar project using a public or private building in the vicinity of their home. In addition to the benefit of using sustainable energy, participation resulted in a reduction in the energy tax for the participants. Since March 2022, this scheme has been replaced by the Cooperative energy-generation grant scheme (SCE⁴⁶). The new scheme focuses on cooperative small-scale collective solar energy, wind energy or hydropower projects. The members of the cooperative are residents and companies located in the postal code area around the project. The cooperative receives a subsidy (more on financing in chapter 3) per kWh produced for 15 years. In Apeldoorn (NL), for example, a project called Het Kristal has been developed with the help of the SCE scheme on the roof of a parking garage by the local citizen energy cooperative deA. It gave 16 households who can't install PV panels on their own roof the opportunity to invest in the energy transition: 168 solar panels of 335 Wp are producing green electricity since October 2020. Participants could buy 'Current Shares' of 260€. For 15 years it is expected they will receive 31€ per current share through their energy bill as a tax refund - 447€ in 15 years. A total of 204 shares were available, and the production is estimated at 50 MWh/year, enough for about 20 average Dutch households.

Long term municipal policies & objectives

Many municipalities in Europe are not fortunate enough to have supportive national or regional legislation to encourage community energy. This did not stop some cities from progressing by including their own long-term goals and targets on community energy in local roadmaps or action plans.

For example, in May 2021, **Valencia's (ES)** Climate and Energy Foundation announced a new policy goal: to establish one hundred Energy Communities within the city by 2030.

In **Leuven (BE)** the 2030 Roadmap chapter on Generating Green Energy states that "A local energy cooperative is to be established, to invest in local production in and outside of Leuven. The aim is for at least 40% of households in Leuven to have joined up by 2030⁴⁸."

In the **Eurometropole de Strasbourg's (FR)** Sustainable Energy and Climate Action Plan (SECAP) there is a specific goal to reach 40% of renewable energy by 2030 and at least 1 MWc (6 000 m²) of communityowned installed solar power in 2030.



A renewable city ahead of its time (DE)

Already back in 2008, **Saerbeck (DE)** set an objective to become independent from the energy supplier and assure that the whole energy power supply for families, businesses, and public lighting, be based on locally produced renewable energy by 2030.

Today over 400 PV systems have been installed on the roofs of private homes, and 350% of the community's own energy needs are supplied by renewable energy including 7 wind turbines, 2 biogas plants and a 29 MWh capacity bioenergy park⁴⁹.

Photo Credit: Henrik Dolle

Set up a memorandum of understanding

Memorandums of Understanding (MoU) can define the terms of cooperation between a municipality and a community group. An MoU is a non-legal commitment that clearly establishes expectations and responsibilities of each partner in view of a common objective, such as a community energy project.

That was the choice of **Pirot Municipality (Serbia)**, already well known for its work on establishing solar power⁵⁰. The municipality signed an MoU in May 2022 with Elektropionir, a pioneering energy community established in 2019⁵¹. They joined forces to install solar power plants, with an approximate power of 5 kWp each, on the roofs of the Temska Municipal Centre in the village of Temska and the House of Culture in the village of Dojkinci. The project started with a crowdfunding campaign on the 21st of June⁵².

Flemish municipalities want citizen participation (BE)

In **Flanders(BE)** 269 out of 300 cities and municipalities have signed the Covenant of Mayors and have a Sustainable Energy and Climate Action Plan (SECAP) in which they express their ambition to reduce the energy consumption and CO2 emissions on their territory.

To achieve this objective, they know it is essential to involve their citizens, schools and SMEs not only in being energy efficient, but also in 'mining' the potential of renewable energy in their municipality. More and more municipal councils are aware that energy communities are best suited to do this. Many are already taking council decisions thus sending a message to all developers of larger renewable energy projects in the municipal boundary.



A message that the council wants a certain percentage (typically 50%) of the ownership to be shared with the citizens and local SMEs. These decisions are not legally binding yet, as this requires a decree on the level of the Flemish Region, but they are also a message to Region itself, to make it legally binding in the future. To illustrate this, in the middle of 2019, the council of **Geraardsbergen (BE)** took a decision⁵³ to:

- 1. Support the need for direct participation of its citizens in large renewable energy projects as members of a citizen energy cooperative.
- 2. 2. Strive within the municipal boundary for, at least, 50% of direct participation through citizen energy cooperatives.
- Put at least 30% of the award points when tendering (see chapter 8 for more examples) the use of its own grounds on the percentage of local financial participation offered in addition to the traditional qualitative and quantitative award criteria.
- 4. Decide that developers should create similar opportunities for direct participation through citizen energy cooperatives also on other semi-public and public grounds.

2. Engagement & Outreach

Today, many people still don't know what community energy is and the benefits it can offer in collectively addressing climate change. Spreading the word about community energy is an important aspect of leading the transition to energy democracy, and at the head of this transition on the local level, municipalities have an important role to play. Cities have the platform, visibility, and legitimacy to educate on community energy, spread awareness of new projects, and engage citizens in the movement.

Understanding & listening to the community

Local authorities have an important role to play in encouraging inhabitants and stakeholders to act. For this, it is important for them to listen, consider how the community responds to communication activities, and adapt the project accordingly. So, when it comes to communicating, local authorities are well placed to tap into the local population's general impressions of a project and integrate this feedback into the project itself.

The first step to building and optimising trust with inhabitants is to understand the community correctly. This is also the first step to developing a good communications and engagement strategy.



Photo Credit: Krizevci City Council

Communication plans & target audience

In order to promote a big project or initiative that engages people and helps with the understanding of the potential and importance, effective communications strategies need to be built. A good communications strategy starts with clear communications objectives, built around a clearly defined mission and vision. To ensure that the community energy actions that a local government is taking are known, a city and municipality should:

- Set the goal: i.e. more people (number or %) should be aware of community energy projects
- Choose a monitoring Instrument: i.e. a citizen survey conducted before or after the communications actions
- Define indicators: i.e. percentage of positive answers.



After clearly defined objectives, the second step is to identify a target audience: who is being spoken to? Which people or organisations could or should be encouraged to be more active? Information on the target audience can be gathered through interviews, discussion groups and local surveys. With this information, stakeholder maps or generic personas can be developed, which will help not only with the communication activities, but also for the implementation of the project itself.

A good tool to map stakeholders was developed by the URBACT initiative. This **STAKEHOLDER ECOSYSTEM MAP**⁵⁴ tool aims at identifying and mapping stakeholders based on the sector and level of importance.

For more information about how to implement a successful communication strategy, check out the Community Energy Communication Guide⁵⁵ developed by REScoop.eu and Energy Cities.

Developing an engagement strategy

Engagement with members is necessary for creating and retaining an energy community. It Is the key element that distinguishes the energy community from traditional top-down energy companies. To secure involvement from members, an energy community needs to explore different approaches to engagement, based on the members' interest and level of involvement. These approaches may range from sharing information and consultation during the conceptualisation stage of the project, to encouraging active participation such as collaboration and empowerment during the project's implementation and operation. Cities can help secure this involvement with detailed understanding of the community, its motivations, and its needs. Getting to know potential members is crucial before applying specific engagement tools and techniques, otherwise the activity may not have the desired impact.



People join energy communities for different reasons. It is a good idea to segment the audience and visualise different profiles according to an associated motivation, in order to know how to communicate effectively with each of these profiles.

- Financial incentive: some people join Energy Communities for financial reasons such as low energy costs and/or for dividends. For this type of profile, it is important to provide transparent and reliable information about the community's activities in order to ensure continued involvement.
- Normative incentive: many people join Energy Communities because of a concern for the environment and a need to be a part of the solution. Publications and social media activity that highlight the cooperative's position in the public energy debate, are good ways of keeping members with this profile engaged and connected.
- Affective incentive: others join Energy Communities for emotional reasons because of the connection to the goals and core values of the energy community and strongly believe that this community is contributing to the transition and to energy democracy. To keep members with this profile engaged, it is important to put in place group communications channels, where members can exchange and ensure that, like in General Assemblies, everyone has an equal voice in these group conversations.



Visualising economic estimations (ES)

In supporting efforts to establish the Castellar - L'Oliveral Energy Community in Valencia (ES), Valencia's Climate and Energy Foundation launched a communications campaign to help spread interest and recruit members based on financial incentive. The campaign was designed to provide clear and individualised information on the economic benefits that local community members would gain by joining the EC. The Foundation drew out a graph calculating estimations on energy and economic savings, investments and payback period. These were based on possible shares of the installation and the household consumption trend, depending on the household's profile. This way, neighbourhood members could identify where they are positioned on the graph, to have a clear idea of what an optimal participation should be, as well as the economic benefits that they would receive. In addition, a limit of 500 metres was set to participate in the EC, so the Foundation also designed a layout to allow people to check if they were in or out the radius limits. These materials - the investment estimations and the layout - were presented and distributed during the public presentation of the project. Together with these two foils, an information sheet about the project was distributed, explaining to people how to get involved, and what were the steps to participate. Thanks to this information, the project garnered much interest. To convince doubtful cases, the Foundation took it a step farther and individually assessed cases, with several investment options, so that they could decide which was the best option for them. In the end, each participant had its own individual study, so that they all came into the EC with the same level of knowledge.

Photo Credit: Valencia Clima y Energia

Listening to the community for more impactful storytelling

Storytelling can be an important way to get closer to the community, convince them of the benefits of community energy, and progressively create new perspectives in society. When crafting a story, create empathy with the character and situation, thereby inspiring and slowly changing belief systems helping to bring about social change. Good storytellers stay true to their audience and mission. For local authorities to spread the word on Community Energy, they must know how to tell good stories from within the movement. For this, municipal involvement in Energy Communities is key. Joining an energy project means becoming a good listener. By listening carefully, it is important to understand what the audience knows and cares about and learn to craft a story with an emotional arc that will resonate with the audience.

Explaining the process & addressing concerns

To help grow the Community Energy movement in a city, energy literacy is a crucial element to consider. The more people are engaged in activities related to energy, the more knowledge there is of the overall energy system. Local authorities can be key in supporting energy literacy. Viewed as a reliable player, local authorities should use this trust to focus communications activities on **explaining the process, facilitating dialogue (more in Chapter 6)** and **addressing concerns** of the local community.





Raising awareness

Awareness campaigns are one of the most effective ways to generate public interest, educate a community about the mission, explain why it matters, and show supporters how to get involved. Not everyone has the same level of awareness: It is important to inform people about the basics of community energy.

People will participate in an awareness campaign because of the attractivity of the mission, so keep the message of the campaign mission focused. The community energy movement has many allies: make maximal use of that benefit by thinking of which networks to contact in order to help and support an organisation and the awareness raising campaign.

For example, **Paris City Council (FR)** has helped the local ambassador network Les Economes⁵⁸ to raise awareness about their initiative, by disseminating its activities via city channels on multiple occasions. These channels help nascent initiatives such as Les Economes recruit new members, by promoting their events open to the public in the city's Volontaire du Climat newsletter, sent out to a group of Parisians interested in engaging in ecological transition actions.

Media & press

Local governments are also likely to have established connections with media and the press that could further Increase the visibility of a community energy project and facilitate its replication in other contexts.



Inspiring 'conCrete' campaigns (GR)

In **Crete (GR)**, the **Minoan Energy Community**, winner of the 2022 EUSEW Award in the Local Action Category, ran a campaign linking the current energy crisis with the need for citizens to produce energy. For this, the President of the energy community appeared on a popular radio station in the island for a 2-hour interview in the winter of 2021, which garnered widespread interest from the audience. Minoan Energy, as well as hundreds of local citizens, also boasts as members 3 local Municipalities and the Regional Authority of Crete (more in chapter 10). Some Municipal buildings are now metering their electricity consumption with the energy produced from a collective solar park. This campaign has received widespread public attention as it is an effort to reduce municipal costs, whilst promoting decarbonisation. In the fall of 2022, all participating stakeholders started a massive outreach campaign towards residents of the island of Crete, emphasising how energy savings and collective self-consumption can massively reduce energy costs, whilst reducing energy poverty.

Photo credit: Minoan Energy Community





Using city channels & networks

Cities have access to many 'official' channels to spread their message. From newsletters to magazines, websites or direct mailing, a communication with a 'city stamp' is likely to receive greater attention. Using city channels to promote and disseminate information about a community project, explaining how to get involved, can help in the project's recruitment process by reaching a wider audience. This is especially helpful for new projects and communities that have not yet set up their own communications channels or built a following. Even for more established cooperatives, communicating via municipal channels can help broaden their usual audiences and reach beyond the usual suspects. Many options are available in terms of platforms and channels, which can be chosen depending on the target audience, budget and objectives:

- Digital communications: social media, websites, online meetings.
- Print: local press, brochures, leaflets & posters, letters.
- In-person communications: workshops & training, networking events, home visits & phone calls and stands.

In **Ghent (BE)**, the city magazine and website have on multiple occasions published news on Community Energy projects⁵⁹, spreading awareness around opportunities for citizen participation and investment in such projects.

For successful communication, it is also important to reach out to other local actors in different sectors, or related initiatives that could amplify the message. Local authorities have a wide network of partners (universities and businesses) and peers that can support via word-ofmouth promotion or even in a more direct way. By creating connections and networks local authorities can help energy communities find new partners, as well as gain from other people's knowledge or direct support (see chapter 6 for more examples).



Campaigning for solar (HR, RS, BA)

The Balkan Solar Roof project is supporting **Porec (HR)**, **Mostar (BA) and Kragujevac (SRB)** to inspire other municipalities in the Balkan region to increase the installation of solar energy. This is being done through capacity building and training for municipalities, as well as support with a communications package, including an online poster-making tool to promote public and private solar installations in local communities. Beyond print media, the campaign will also include a contest and wide outreach in social and other media starting at city level.

Križevci (HR) supported the Green Energy Cooperative (ZEZ) in an innovative crowdfunding micro loan campaign (more in Chapter 3) for two solar power plants. The total investment of 50 000€ was collected in 10 days for the first power plant and in 2 days for the second. Citizen investors, the micro loan providers, are receiving an annual return on the investment to the amount of 3,5 or 4%, depending on the chosen plant . The success of this campaign was in large part guaranteed by extensive national and local coverage by the media, using storytelling and compelling visuals, in which the mayor and the city were very present. ZEZ worked closely with Križevci (HR), who held two public information sessions for residents and actively communicated the project in the local media, making sure citizens were on board. Due to the high enthusiasm for renewables, the project attracted a lot of interest and coverage from the media and benefitted from a coverage which had an estimated value of 150 000€.

Photo Credit: Balkan Solar Roof project



Starting a local network of energy communities (ES)

In September 2022, **Valencia (ES)** and the Valencia Climate and Energy Municipal Foundation organised an event to bring together emerging energy communities from around the city. The goal of this event was to inspire and encourage emerging initiatives by presenting the more advanced cases, while providing a space for citizens to share their ideas, their needs and to explain their initiatives. This meeting was a first step towards fostering the creation of a network of Energy Communities once these initiatives are more mature, with the goal of promoting peer learning. From this network, the city will also be able to hear and collect the needs of emerging ECs and find solutions from the public and private sectors. Also, this type of event is encouraging for nascent energy communities as they demonstrate the municipality's support and commitment to helping them succeed.

Photo Credit: Valencia Clima y Energia

3. Support in financing projects

One common obstacle faced by community energy projects is access to credit. Local and regional authorities can be crucial in providing guarantees for financial institutions. Apart from co-investing (Chapter 9) or financial participation in energy communities (Chapter 10) via equity that can reassure hesitant investors by giving additional credibility and legitimacy to the projects, local authorities can also provide seed funding or be conduits for National support programmes.

In addition, they can also dedicate specific budget lines to support community groups every step of the way, from the initial feasibility and planning stages to actual investment in the infrastructure. This is the case for example of the successful CARES scheme (full example in Chapter 1) in Scotland and for Frome (UK). For municipalities that are providing assistance and advice to fledgling energy communities there are three very good financial guides that have been published recently. The first is the financing guide produced within the Compile project⁶⁰, built to guide energy communities on how to develop a financing plan. The second is the finance quide commissioned by Friends of Earth Europe⁶¹ that sheds light on the current landscape of financing options and the barriers and opportunities inherent to these available models. The final one is the SCCALE 203050 Financing Guide on Community Energy with accessible information on topics such as the difference between equity and debt financing, the relation between financing and ownership. The most common financing schemes are described and illustrated by the stories of diverse energy communities who have successfully made use of them.



Municipal guarantee for financial institutions

For community energy projects that require high amounts of capital to invest in infrastructure such as district heating systems, a municipal guarantee is crucial to obtain better conditions for loans.

Nordic countries got the hots for municipal guarantees (DK, NO)

In Denmark there is the now famous and well documented example from the **island of Samsø (DK)**, where district heating is predominantly in the hands of 50 municipally owned entities and 340 cooperatives. Here the consumerowned society in Ballen-Brundby is a co-operative (coop) with limited liability. The members both own and manage the coop. The coop must be of the greatest possible use to the members, rather than give the highest profit. In a coop every member has one vote, independently of the size of their investment.

The municipal council of Samsø guaranteed the mortgage loans that finance the district heating station in Ballen-Brundby. This is common in Denmark and also in Norway where the **Kommunalbanken Norway (KBN)** is a local government funding agency or a bond bank that is 100% owned by the Royal Ministry of Local Government and Regional Development on behalf of the Kingdom of Norway. KBN can provide loans to companies that have a guarantee from a municipality or county authority. This enables clubs, associations (including energy communities) to receive cheaper loans⁶².



Municipal guarantee kick starts citizen energy cooperative (NL)

In the Dutch eco-district of EVA-Lanxmeer in **Culemborg (NL)**, a collective district heating system with drinking water as the primary heat source was chosen. The drinking water supply in the Vitens water basin is cooled down in winter to heat homes, apartments, and utility buildings in the district. The heat is extracted in the heat station of the citizen energy society <u>Thermo</u> <u>Bello⁶³</u>, which is built next to the clean water basin of Vitens. Thermo Bello is in the hands of a neighbours' citizen energy cooperative to whom the heat is supplied. The cooperative used a municipal guarantee to obtain a bank loan to finance the initial phase in 2008.

After 13 years it was time to substitute the exchange heat pump and upgrade the system. In 2021 the cooperative financed those works via a mixture of bank loans, citizen capital and using their own capital. They got $350\ 000 \in$ from the bank (via a 10 years loan at a good interest rate of 2,7%), $80\ 000 \in$ -100 $000 \in$ from clients/citizens, 100 $000 \in$ from their own saved capital, based on performance of the previous years. Now they have no debt anymore, which will make it easer for banks to finance future investments.





Municipalities as a conduit for national support

programmes

For community energy projects that require high amounts of capital to invest in infrastructure such as district heating systems, a municipal guarantee is crucial to obtain better conditions for loans. area and people better, as well as gain from others knowledge, suggestions or direct support (see chapter 6 for more examples).

Often financing can be sourced for community energy projects via joint bids with municipalities. In the UK, Community Energy England have created a spreadsheet⁶⁴ of funding opportunities that are shared freely online to help assess new central government (and some other) funds that will be channelled mostly via local authorities. Community Energy England is a not-for-profit organisation founded in 2014 by practitioners within the community energy sector and is now representing more than 280 community energy organisations and other stakeholders.

In the Netherlands subsidies are provided via the Fossil Gas-Free Neighbourhoods Programme (PAW)⁶⁵. As part of PAW 64 living labs are investigating how neighbourhoods can be built, free from fossil gas. In the living labs various technologies are used. In addition, insulation measures are part of the program. The aim is to gain knowledge and experience about the various technologies and organisational structures. The government grants a subsidy to the various living labs. These subsidies are requested by the municipality who also has a directing role in the implementation of the projects. An example of a PAW project is the local cooperative Ketelhuis WG⁶⁶ in **Amsterdam (NL)**. A heat network will be installed for 786 homes and 12 non-residential buildings. **Amsterdam (NL)** has received a subsidy of more than €7,7 million from the PAW program to make this project possible.

Energy community acting as an energy service company (ESCO)

A growing number of municipalities contract an ESCO⁶⁷, an Energy Service Company, to make their public buildings more energy efficient. The ESCO invests in insulation, more efficient heating/cooling and other measures, and they get their investment back from the savings in energy consumption. The municipality pays less for energy from the beginning and after the investment cost has been recuperated by the ESCO, the municipality gets the full advantage. When an energy community acts as ESCO, it could be called an 'Energy Service COMmunity, an ESCOM'.

Pajopower finances public LED street lighting (BE)

In 2017 Halle (BE) decided to change the street lighting to more efficient LED system along four major access roads and chose to give all the inhabitants the opportunity to co-invest and adopt their own streetlight through a contract between the city and the local citizen energy cooperative Pajopower⁶⁸. In this case the renewable energy community acts as an ESCO. Pajopower raised money from the citizens and financed the investment done by the city.



Seed funding to kick start energy communities

Community energy projects often need a little financial boost at the beginning to help smaller projects get started or help larger projects when financial risks are higher. If the energy community is new and/or small, the return on investment that municipalities receive as a result is potentially huge. This increases if social return on investment and the multiplier effect of investment in the local economy are included. Support is either provided in the form of loans or grants and can be done at different levels⁶⁹. For example, **London (UK)** created The London Community Energy Fund⁷⁰ to support community groups through the early development stages of energy projects. This can include undertaking feasibility studies, paying for technical consultancy fees or seeking legal advice.

Independent thinking in FRECo (UK)

In autumn 2013 a group of citizens, who had met each other through the local transition group Sustainable Frome, decided to set up Frome Renewable Energy Co-op (FRECo). The group included members of the independent town council and two directors from a neighbouring energy community – Bath and West Community Energy²¹. With no start-up funding on the horizon, the group asked Frome Town Council and Sustainable Frome if they would invest £500 each to cover the initial setup costs. The agreement was that this upfront investment would be turned into community shares during the first share offer. This small but vital investment meant that the group could cover the legal fees of the new co-operative and set up their website freco.org. This in turn enabled the group to secure grants for their first activities which included energy efficiency advice and an open homes initiative to showcase ways to reduce carbon emissions and costs.



When the group launched their first share issue in 2014, to put 200 kW of solar PV on the local medical centre and football stadium, the Town Council and Sustainable Frome were each issued with a share certificate and became official members. This meant both organisations subsequently received an annual return of 6% in interest payments. The co-op raised £280 000 in four days and were able to fund the installations 100% through community shares. The Medical Practice buys back the solar energy at a 20% discount rate and the co-op co-founded a new stand for the football stadium.

The municipality went on to support the co-operative through enabling free use of meeting rooms, contributing staff time and expertise **(see chapter 4 for more examples)** and developed partnership programmes such as Frome Solar Streets and Green Healthy Frome **(see chapter 6 for more examples)**. They also embedded targets around 'supporting community energy' into their climate change strategy (chapter 1) and set up a specific budget line for this area of work in the resilience budget and work programme.

For small municipalities such as **Frome (UK)**, energy communities bring in new investment – in some cases providing 100% of the capital while the municipal landlord receives discounted energy price or an annual rent. This enables new projects to happen without the municipality having to be constrained by limited budgets.

Photo Credit: FRECo



Development fund ups the game by helping larger projects (NL)

Energie Samen, together with the Ministry of Economic Affairs, InvestNL and the National Green Fund set up the Development Fund⁷² for energy cooperatives. With this fund , part of the start-up costs for cooperative local sustainable energy projects; wind and (larger) solar projects can be prefinanced. It is currently being investigated whether it can be expanded for sustainable heat projects.The Fund covers the costs that are incurred in the (risky) preliminary phase of a project. During this phase, it is not known whether the project will continue or not. Sustainable energy cooperatives and associations can borrow money from the Development Fund for

- Strengthening capacity to adapt to unavoidable climate change impacts, personnel support (project supervisor) from a connected project office.
- 2. Out-of-pocket costs for specialist studies or other necessary partial steps to arrive at a bankable business case and an irrevocable permit for the project.

When financial closure for the project has been reached, the cooperative will refund the money made available, with a fee. In this way, the Development Fund ultimately maintains itself. In case the project does not continue, the cooperative does not have to repay the loan.

National fund for small municipalities to launch RES projects (IT)

Villanovaforru and Ussaramanna (IT), both with populations of just over 500 on the island of Sardinia received grants designated by an Italian decree⁷³. They could invest these funds that are destined for small local municipalities either, locally, directly in renewable energy power plants, or for energy efficiency measures⁷⁴. They chose to use the money instead to pay for a feasibility study that Ènostra⁷⁵, the first national not for profit and democratic RES electricity supplier in Italy, did for them. They also used the money to take care of the maintenance of the PV plants. In each municipality an energy community was founded with around 100 members to produce and collectively self-consume the renewable energy produced.

The local authorities chose to leave all the benefits to the citizen members, as there are not many possibilities in the region, and they needed to give people a reason to stay there – and it worked. A lot of journalists went there to interview the communities (See chapter 2 for more examples). Despite their small size they became famous in Italy as pioneers. The start-up costs of the community, the construction and management of the plant are entirely covered by the municipality, while the benefits for self-consumed energy (about 118 € gross for each MWh shared) and for the sale to the system manger (GSE) of the energy fed into the grid (at the zonal price) will be entirely allocated to the members of the community. The two municipalities get a lot of requests from private companies who want to install their wind power plants, but the citizens want to reverse the process: 'We decide where the money comes from and where to install which plant'.



Crowdfunding

Crowdfunding enables fundraisers to collect money from many people via online platforms and it is a sure way to ensure the involvement of local communities in the development and financing of the project.

Croatian municipalities pleasing the crowds (HR)

In 2022, the archipelago of **Cres-Lošinj (HR)** launched a crowdfunding campaign to collect financial resources for the purchase of the land and the preparation of project documentation for the Filozići solar power plant. The campaign intended to collect €65 000 over 2 months but was successful in collecting more than €100 000 in just 3 weeks. Their campaign was inspired by the work of **Križevci (HR)** that was supported by the Green Energy Cooperative (ZEZ) in the first innovative crowdfunding micro loan campaign in Croatia initiated in 2018 to collect funds for two solar power plants. Because of the restrictive legislation in Croatia, it was not possible for ZEZ to raise capital for production projects through membership fees. The total investment of €50 000 was collected in 10 days for the first power plant and in 2 days for the second power plant. Citizens investors, the micro loan providers, are receiving an annual return on the investment in the amount of 3,5 or 4%, depending on the plant in which they invested.

Photo Credit:



4. Sharing staff & resources

The climate emergency is a crisis and should be treated as such. To be able to do so, local governments rely on their staff, which implies having a large enough local workforce to carry out the necessary tasks. However, municipalities are having trouble recruiting the staff they need due to limited operating budgets, strict rules on local government debts, and a need to increase the attractiveness of employment. Within the study 'Human Capacity in Local Governments: the bottleneck of the building stock transition⁷⁶ ', one of the key recommendations is to 'Provide funding and encourage local cooperation' by reallocating budgets to finance local job positions, encouraging local or regional coordination to pool local workforces, sharing extensively of local best practices related to the issue.

Municipalities helping Energy Communities

Municipalities that have competent staff can share human resources, especially as energy cooperatives often depend on inexperienced, voluntary citizens to put their projects together.

Plymouth (UK) supported the creation of the Plymouth Energy Community (PEC), by allocating staff to design a business plan and support the recruitment of 100 founding members. Today, the combined efforts of the 12 staff, 200 members with one hundred active volunteers, the cooperative plays a vital role in supporting households that are suffering from fuel poverty⁷⁷.



Around Naples (IT), UCSA⁷⁸, the Joint Office for Sustainability of Palma Campania, San Gennaro Vesuviano, San Giuseppe Vesuviano and Striano (IT) put a lot of effort into supporting citizen-led initiatives. With the help of the social welfare departments of the four municipalities, they have been taking the lead on establishing links with citizens to set up energy communities in the four communes. A lot of effort is placed on involving the local youth, as they are a great entry point into the community, and they showed a lot of interest in the project. The activities with the youth have mostly focused on raising awareness on the topic of energy democratisation, but more recently, thanks to an EU funded project, UCSA has been trying to set up energy communities to provide cheap electricity to vulnerable households and also in other municipalities⁷⁹. This led to a proposal to create an energy community focused on reducing energy poverty, led by the local catholic church which will be partially funded by a private foundation.

In **Brussels (BE)**, the regional government offers the free services of an 'energy sharing facilitator', Energie Commune⁸⁰, for citizens and project developers who would like to start an energy community or engage in energy sharing. This way, citizen groups and other interested parties will be able to obtain legal, technical, administrative and communication advice for free.

66



Energy Communities helping Municipalities

Sometimes experienced larger energy communities can share professional staff with municipalities and small cities to help them achieve their climate and energy objectives.

Eco-powering two cities (BE)

In 2009 **Eeklo (BE)** prepared a second tender for 2 additional wind turbines (see chapter 8 for more information about Eeklo). The city did not set up the bid on the amount of money but fixed a yearly fee and asked the tenderers what they could offer to the city, its citizens and SMEs besides money. Ecopower, the Belgium cooperative financing renewable energy projects in Flanders, competed against big energy utilities, won and offered the city a part time in-house engineer to study other possibilities such as using waste heat from the household waste incinerator for a district heating project in the city.

The city of **Leuven (BE)** was looking for a partner to help them speed up the energy transition in the city⁸¹ by bringing citizens together to set up an energy community and start investing in PV on (public) roofs. Ecopower won the tender and has since then been assisting the city and the Province of Flemish Brabant, resulting in the foundation or reinforcement of 4 regional energy cooperatives.



Prime office space just a KLIK away (HR)

Križevci (HR), with its vision of becoming energy-independent, offered the best public building to a local cooperative that supports its vision and allocates part of the budget for the activities of the cooperative. This office is situated right in the city centre, a place that most citizens visit on a regular basis, and it serves as a showroom of sustainability where various companies can exhibit their best products. KLIK energy cooperative acts as an 'extended hand' of **Križevci (HR)** by helping individual households, companies or farmers in the energy transition. It provides citizens with energy advice and local or national companies of the sector with a place to promote their products in order to connect informed buyers with suppliers **(see chapter 6 for more examples)**.

Photo Credit: Oranges and Lemons CC BY-NC-ND 2.0

Providing office space

When an energy community starts hiring staff, a municipality can facilitate the process by offering office space and access to the internet, printer, or other services. This can allow the energy community to take important steps in its professionalisation.



Working with students

Work or apprentice opportunities within municipalities are a great choice for students who wish to explore future career options, apply knowledge from their studies and gain valuable work experience at the same time. Students can also bring in a breath of fresh air to existing municipal departments or energy communities.

Students of community energy (BE, FR)

Within the Eurométropole de Strasbourg (FR) the Energy Department has up to 3 apprentices at a time (one in the 'planning' department, one in the 'energy distribution' department and one in 'Renewables'). Each apprentice⁸² works within the department 2 weeks per month. Initially the apprentice in the renewables department was hired for three years to help with general support but the last six months the work will be a full-time graduation project to assist the Energy Community called the Brasseurs d'énergie to carry out their first solar energy installation on the roof of a local primary school. As the newly formed energy community has been struggling to develop projects due to state aid legislation, greater help is needed to support them in the development of a new business model. Apprenticeship contracts are common in many EU member states so this could be an interesting option for other Municipalities. To know more about EU apprenticeship schemes in Europe follow this link⁸³.

Leuven (BE) works with CORE, a cooperative of engineering students of the local university KULeuven and committed partners that develop concepts for efficient and rational use of energy. They develop solutions in which both social relevance and economic and technical feasibility are essential. By raising awareness, CORE⁸⁴ spreads the importance of cooperative entrepreneurship and rational use of energy





5. Developing Supporting Platforms, Tools and programmes

Local and regional authorities and their European networks of cities and municipalities, or European or national federations of citizen energy cooperatives can give crucial support to energy communities by designing dedicated supporting platforms, tools and programmes.

Maps & Atlases

Mapping potential is a straightforward way to help citizens and cooperatives get started, by providing an overview of local deposits in terms of renewable energy or available space for installations. When deploying such maps, including information around grant schemes and educational content can make a big difference.



Seeing is believing (PT, HR, FR)

In **Lisbon (PT)**, the city developed SOLIS, a solar cadastre⁸⁵. By using SOLIS, citizens have the opportunity to be involved in the local energy system. This is done by registering their own installations and providing feedback and testimonies. There is also the possibility to estimate the electricity production of their rooftop and the associated investment and revenue. Also, the platform offers information on market rules and communication tools such as infographics and short animated films.

Mapping tools are also being deployed in **Varazdin (HR)**⁸⁶ where an interactive web application i.e. a map showing solar potential, allows the citizens and all 9 suburbs of the city to calculate the recommended power of the solar power plant on their own facilities. The solar map, as a result, also shows the investment costs of the installation, energy savings and CO₂ emissions through interesting comparisons and most importantly, the profitability of the investment where the city will participate in co-financing the installation of solar panels, namely, by drawing up of project documentation which citizens need to submit.

In the region of **Paris (FR)**, "Mon potentiel solaire⁸⁷" is a tool that allows citizens to calculate the potential solar production of PVs on their roof to install solar panels. It can be used in the IIe-de-France area. Other cities are developing heat atlases to do the same with waste heat or geothermal energy⁸⁸.

Photo Credit: SOLIS Lisboa



One-stop shops

Municipalities can also create dedicated one-stop shops to gather all information needed to set up community energy projects, start collective renovations or collective purchases. One-stop shops can also provide knowledge on funding opportunities and other forms of specialist advice to community groups. They can also provide a space for discussion, to generate new project ideas. One-stop shops can take the form of an online platform, a dedicated "desk" within the municipality or even an external network supported by the municipality or other public bodies.

Many successful one-stop shops have been set up by or with the support of municipalities. **Valencia (ES)** has opened a one-stop shop Energy Office, run by the Foundation València Clima y Energía, which helps and advises citizens, for free, in all questions relating to energy. Among many services, this office offers tailored assistance to citizens interested in creating or joining an energy community. In supporting the creation of Valencia's first energy community in Castellar – l'Oliveral (see more in **chapter 6)**, the Energy Office offered specific workshops around collective self-consumption, explaining in detail how it works and answering all technical questions.

The **French network ECLR** (Energies Citoyennes Locales et Renouvelables) was created in 2014 by the Occitania region and the French energy agency - ADEME, to support knowledge sharing and create a space for discussion among citizens in Occitania. Many community energy projects have been launched with its support.

Ghent (BE) has developed a website⁸⁹ where inhabitants can check if a house is future proofed or not. It provides a clear overview of which investments will bring savings.

The city also supports Energent, the local citizen energy cooperative, to set up a dedicated one-stop shop⁹⁰ for collective renovations thereby tackling this issue of housing refurbishment at neighbourhood level, rather than house by house, with more opportunities for community energy developments.

The **Austrian Coordination Office for Energy Communities**⁹¹ has set up an exchange platform of federal and state governments that provides quality-assured information, project support and allows for a coordinated exchange with stakeholders. **Vienna City Council (AT)** via Urban Innovation Vienna (UIV) is the Platform partner and central contact point in the city.

Prague (C2) decided to establish the 'Prague Renewable Energy Community⁹², a municipal organisation that acts as a one-stop shop to increase the installation of renewable energy in Prague by providing energy evaluations of buildings (public and private), feasibility studies to assess best installed capacity, preparation of grants (national grant), tender support with installation companies. The community has a licence to produce and sell electricity, first for city buildings and later to city districts, city organisations, and finally to inhabitants and institutions operating within the city.

Online platforms

Online platforms can be a useful communication tool for an audience that the municipality would normally miss, providing relevant news on the energy sector and including information on tenders. They can be of support to citizens looking to start their energy projects.



On the sunny side (HR)

Environmental and energy offices of Croatian municipalities are looking for a way to build their capacity to inform citizens about the topics of renewable energy and the citizen energy movement. One solution is to use the information available on the market such as the 'On the sunny side' platform⁹³ that holds recent and relevant educational materials on energy communities and technical aspects of energy projects. It is a platform designed and maintained by ZEZ, a Croatian citizen energy cooperative.

The energy community platform (EU)

EU funded projects (Horizon, LIFE, Interreg) are required to have a project website that displays what has been done in the project, and to maintain it a few years after the project ends. In the Interreg NWE ECCO project the partners co-developed a One-stop shop (OSS) for energy communities. REScoop.eu noticed the increasing number of websites and One-Stop Shops and proposed that two EU projects work together to create one central website that hosts all the useful tools and information on energy communities regardless of who produced it in which project. The Energy Community Platform⁹⁴ will serve this purpose from now on, also for what is developed in the SCCALE project, like this Municipal Guide.

Photo Credit: The Energy Community Pltaform

Energy Academies

Community energy creates spaces to educate people on the issues of energy, climate and democracy. Energy communities raise awareness about the energy transition within the community and empower citizens to take actions such as saving energy. They can only continue to operate autonomously and independently in a democratic and economically sustainable way if they are managed and controlled by people who are sufficiently trained, skilled and committed.

Municipalities are well placed to foment and facilitate these educational spaces, providing information around energy-related topics.

There are different ways to create this education space:

- Asking the city team to share the expertise of in-house renovations or mobility during a workshop or webinar
- Facilitating peer-to-peer training, capitalising on the human capital within the community
- Creating a forum where members can share tips for energy-efficient measures in homes.

Apart from digital or paper tools and platforms, also hybrid or physical events remain an important part of spreading the concept of community energy.



Paris Climate Academy (FR)

Paris (FR) opened in mid-2021 its Académie du Climat in the city centre. It is a place dedicated to encouraging the ecological transition and aims to educate Parisians on the subject. The Academy's programme is an ideal space to relay and amplify educational activities run by citizen-led initiatives. City-led educational platforms such as the Académie du Climat give associations' educational activities a wider reach and greater impact. For example, the local ambassadors network Les Economes⁹⁵, regularly carry out awareness-raising activities around energy savings in Paris. Among these activities, they have developed a card game based on Mille Bornes⁹⁶, a popular card game in France but now adapted to the subject of energy sufficiency. This game will also be used to train city employees and to raise awareness in schools.

Photo Credit: Enercoop

The European Citizen Energy Academy

REScoop.eu, its member Electra Energy Cooperative (GR), and its other partners in the **EUCENA**⁹⁷ project (funded by EUKI), as well as the Compile project (funded by the EU's Horizon 2020 R&I programme) organised a 3-days **Thessaloniki Summer School (GR)** with the ambition to strengthen the community energy movement in Europe.

The aim of the Summer School was to foster networking at EU and Balkan level and cross-country exchange of ideas, tools, knowledge, and good practices. The exchange and collaboration of the community energy movement in Eastern Europe, where citizen energy is just developing, with partners from Central Europe and Western Europe, which already has a strong tradition of citizen energy, was facilitated with the ambition to support the consolidation of the movement in the Eastern part of Europe.

The summer school gathered more than 150 participants from 24 countries across (Southeast) Europe, the Balkans, and the Caucasus region, achieving a great geographic- as well as social diversity, and a gender balance in all the sessions' organisers and facilitators. A list of 25 people were engaged as speakers and facilitators representing 25 different organisations. The threeday program involved sessions on topics such as: Gender justice, Energy poverty, Organising matters around the Building of a citizen energy initiative, as well as Financing and Funding a citizen energy initiative, Social impacts of citizen energy projects, Citizen energy and the role of municipalities, Just transition in coal regions, Energy markets and the role of citizens, Transposition process of European directives, and, Citizen energy policymaking and advocacy. With the support of the European Climate Foundation REScoop.eu will organise a second Summer School in 2023.

6. Facilitating dialogues between local stakeholders

Small energy communities may have useful contacts and resources, but local authorities can have a bigger reach. The local authority can be very helpful in putting Energy Communities in touch with relevant economic players, and other societal, environmental or energy actors in the area.

Intermediation with legal & technical actors

Local authorities can help energy communities deal with the wide range of legal and technical actors that are involved in establishing an energy community. Accompanying energy communities through all phases of development ensures the process is carried out smoothly and successfully.

The role of development & energy agencies

Local or Regional development or Energy agencies can also be involved, as they already work closely with cities in many cases and can support the establishment of community energy schemes.



Stand by me (ES)

In Valencia (ES), the city's Climate and Energy Foundation, Valencia Clima i Energia, played a key role in setting up the Energy Community in Castellar-L'Oliveral, through all its phases of development. At the very beginning, they contributed to writing the statutes for the association, thanks to a collaboration agreement with Horta Sud Foundation, who are experienced in association management. In parallel, the Foundation supported the Energy Community with all the municipal administrative procedures, obtaining permission to use the rooftop of the public building "La Cebera" (see Chapter 8), around which the community would be established. Once the association was legally registered and the rooftop approved, Valencia Clima i Energia got in touch with an Energy Cooperative to get a first project draft of the potential PV installations. They then acted as intermediary and legal advisor of the energy community throughout the entire dialogue and process with the Cooperative until closing the deal. As this dialogue was unfolding, the Foundation helped the Energy Community strengthen its financing and business model: first by helping them with the project proposal, to apply for a grant from the regional authority IVACE, and then by helping them find a suitable business model, giving them technical support, estimations, and informational materials on legal restrictions around collective selfconsumption within the Spanish legal framework. Once the deal was closed, the Foundation acted as an intermediary with the licensing authority from the municipality to accelerate the process to get permits. During the installation, the Foundation continued to assist the project, making sure that all was done according to municipality requirements. Now, the Foundation is more focused on facilitating and solving the problem of connecting to the grid.



Learning, planning, doing (IR)

In Ireland, Dublin's energy agency, Codema, coordinates support to over 100 energy communities in **Dublin City**, **Dún Laoghaire-Rathdown**, **Fingal**, **South Dublin**, **Wicklow**, **Kildare and Meath**. The agency acts as a "coordinated mentor" to each of them, to guide them through a three-step process called "Learn – Plan – Do". This planned approach will help the Sustainable Energy Communities (SEC) to be energy-efficient, use renewable energy and consider smart energy solutions. The SEC Programme⁹⁸ significantly supports the Government White Paper on Energy "Ireland's Transition to a Low Carbon Energy Future 2015-2030" which acknowledges the critical role of communities in facilitating the development of energy infrastructure and in developing energy efficiency, security and sustainability (See more in Chapter 1).



ANKA development agency promoting local partnerships (GR)

In Greece, the Development Agency of the region of Karditsa (ANKA) helped set up Energeiakh Koinothta Karditsas Synpe (ESEK LLC), the regional Energy Cooperative Society. ANKA supports and develops new collective structures that contribute to social development and the general development of Karditsa (GR). The main shareholders are local authorities and organisations representing the society of Karditsa, such as regions, municipalities, cooperatives, chambers of commerce. The Agency was able to put all the key actors together in 2010 to establish a citizen energy cooperative to foster renewable energy in the region. In 2019, the energy cooperative was converted into an energy community, with over 400 members, including municipalities, SMEs and local associations. The main activity of the energy community is the management of a biomass plant to produce solid biofuels to generate energy for heating purposes. The raw material consists of industrial residuals such as sawdust wood chips, logging residues such as branches, tops and stumps, coming from Forest Cooperatives. Partnerships with local authorities allow the Energy Community to expand the supply chain with plant biomass coming from municipal waste (branches and tops of city trees). This Urban biomass is estimated at 1.000 - 2.000 tonnes/year.

Photo Credit: Karditsa Regional Government



Linking with DSO

Local or regional municipalities can play a role in facilitating or building a good relationship between the distribution system operator and a local energy community. Key information provided by the DSO makes it much easier for the energy communities to assess if a project is feasible or not and improves troubleshooting.

The French connection (FR)

In **Grenoble (FR)**, the metropolitan authority helped the local energy community sign a cooperation agreement with the Distribution System Operator (DSO) Enedis. Energ'Y Citoyennes was supported by the Grenoble-Alpes Métropole to obtain an agreement with Enedis so that they can ask for connection cost evaluations during the pre-study phase of their solar projects. This allows them to know at a very early stage if a project of a given power is feasible from a connection point of view (technical and financial feasibility).

In the agreement, Energ'Y Citoyenne included annual plans with the city and Enedis, to review the connections and try to dialogue with Enedis in order to know as much information as possible up front, i.e. how they evaluate, etc. Also, during these plans, if there is a complicated project with different interlocutors in Grenoble, Enedis helps to find different solutions to unblock the situation. During the development of these plans, Energ'Y Citoyennes shares with the metropolis how much the connections have cost, or what is blocking them.

Energy Coaches & Street Ambassadors

The role of coordinating or facilitating is essential, as the people involved in Energy Communities have key skills that can contribute to the creation of meaningful local projects. That is why municipalities can take advantage of this knowledge and promote energy coaching or ambassador programmes on their territories.

Community Energy Coaches (NL)

Energy coaches are active in many municipalities in the Netherlands. These are volunteers who give advice to residents about possibilities to save energy. Most energy coaches are trained by Hoom, a cooperative that is part of the national energy cooperative Energie Samen. In many cities, this approach is supported by the municipality, among other things by paying for the training of the energy coaches. In addition to energy coaches, who give energy advice to individual residents, there are street, or neighbourhood ambassadors active in various places. These volunteers try to organise collective actions in their street or neighbourhood. This can involve sun-on-roof projects, joint purchasing, or joint research into insulation measures. For this group, Energie Samen organises the training to become a cooperative neighbourhood counsellor. These activities are also supported by the municipality in various cities. In **Zwolle (NL)**, the local energy cooperative Blauwvinger Energie⁹⁹ has been engaged by the municipality to coordinate the deployment of the energy coaches. For more information see the website of Blauwvinger Energie. Coöperatie Hoom¹⁰⁰ has already trained more than 3,000 energy coaches. They are active in 138 municipalities. Due to the rising energy prices, the demand for energy coaches and therefore, also the demand for training is currently very high.

Communities of practice



Members of the Local Administration working on energy topics can join Communities of Practice (COP) around Community Energy to exchange with citizens and share their perspective and experience of energy communities from the municipality.

It takes practice (NL)

In **Zwolle (NL)**, a COP has been organised since the end of 2020 about issues concerning the heat transition¹⁰¹. Both members of the municipality's energy team and representatives of neighbourhood initiatives are participating in the COP. Participants in the COP bring their issues and dilemmas for discussion in the COP meetings. In this way, a bridge is built between the perspective of the municipality and of the perspective of the energy communities. Part of the process is also the expression and examination of mutual prejudices. This process leads to increased mutual understanding, a stronger positioning of the energy communities in the municipal organisation and in the municipal administration. A nice symbol for this positioning was the alderman's invitation to the local energy communities to join him in the skybox at a match of the local football club. Usually, such invitations go to big commercial or public partners of the municipality.

Heat brokers

In the Netherlands¹⁰², but also in the Flemish Region in Belgium, most people heat their home with fossil gas. Climate change and now also the war Russia started in Ukraine, urges us to get rid of, or reduce dependence on this fossil fuel. Heat Brokers - or in Dutch Warmtemakelaars- are helping municipalities and neighbourhoods to switch to another, sustainable way of heating and cooling our buildings.



The heat is on (BE)

In **Kempen**, the northern part of the **Province of Antwerp (BE)** there is an intermunicipal organisation called IOK that is acting as a 'Heat Broker ¹⁰³'. It supports local authorities in the transition to renewable heating, helping to answer the following questions:

'What are the alternatives to fossil gas in new allotments and projects? When is it appropriate to equip new residential projects with a heat network and when are individual solutions the best option? What are the available renewable sources to feed a heat network? And how do I, as a municipality, ensure that the existing building patrimony can also make the shift to renewables?'

IOK and partners are trying to find an answer to these questions in the 'Heat Makelaar Kempen' project. Warmtemakelaar Kempen supervised 6 municipalities from 2018 to 2021. Another 5 municipalities (**Herentals**, **Turnhout, Hoogstraten, Beerse and Geel**) received support in drawing up a heating plan. Based on a heat zoning map, these municipalities set to work to roll out the heat policy. In **Rijkevorsel (BE)**, the heat planning focused on research into smart heat clustering in public buildings.

The project ended in May 2021, but the success led to the approval of a follow-up project 'Heat Makelaar Kempen 2.0'. 11 additional Kempen municipalities (Balen, Grobbendonk, Meerhout, Merksplas, Mol, Nijlen, Oud-Turnhout, Ravels, Vosselaar and Westerlo) are taking the step towards heat planning with the help of Warmtemakelaar Kempen.



A shared governance model

Local governments can play an important role in involving a wide-range of citizens and stakeholders in their transition to climate-neutrality. By engaging civil society and other sectors of society in the creation of a transition roadmap, local decision-makers can bring together key actors and build synergies to bring to life all sorts of initiatives, including energy communities.

A roadmap to climate neutrality

Leuven 2030¹⁰⁴ is a non-profit organisation founded in 2013 by 60 members, including **Leuven (BE)** and committed citizens. The NGO has grown today to a solid organisation with more than 600 members. In the organisation, inhabitants, companies, civil society organisations, knowledge institutions and public authorities are equally represented.

In 2018, Leuven 2030 developed a Roadmap 2025 – 2035 – 2050¹⁰⁵ with the help of the urban-planning agency and over 70 local experts. In 2022 the European Commission selected Leuven as a pioneer city for the "100 Climate-Neutral and Smart Cities by 2030" mission, raising the ambition for climate neutrality by 2030. To accelerate its implementation, Leuven2030 is supporting the Roadmap with a financial plan and an adapted step-by-step plan. Currently, 180 climate initiatives from the 13 programs are ongoing or in sight. They concern housing, mobility, energy (mainly), agriculture and nutrition, nature and consumption etc. They are led by a set of 18 coordinators from the local community.





7. Giving access to public sites

A local authority owns buildings (town halls, sport halls and schools) and land that could be used by energy communities looking for available space for their renewable installations. Public buildings make an ideal site for community energy projects because their use rarely changes overtime and it is also a direct way for such projects to benefit the local community, thanks to the cheaper energy bills. To allow for this to happen, the municipality has to tender the right to use their property. Since the EU considers all cooperatives part of the Social Economy¹⁰⁶ authorities are allowed to favour actors from the Social Economy via their tender's specifications, or by renting the site at a discounted price.

For example, in September of 2020 a decision of the council of **Strasbourg Eurometropole (FR)** authorised the provision of 3 public roofs to an energy community. In July of 2021 they launched a "call for expression of interest" for the installation of a PV system on a public school roof. Within this call they added the following specification: "(...) Only applicants with the form "citizen energy community" according to Articles L292 1 to L292 3 of the Energy Code and Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 are eligible to submit an application". **'Les Brasseurs d'Energie¹⁰⁷⁷** (the Energy Brewers), a local citizen energy cooperative won the tender and is meanwhile installing the infrastructure **(learn more about this cooperative in chapter 4 and 10).**



A Central & Eastern Europe frontrunner (PL)

Serock (PL) is a small town of 4 000 inhabitants located north of the capital Warsaw. In 2021 The "Słoneczny Serock" energy cooperative¹⁰⁸ was established as one of the first energy cooperatives in Poland and Central and Eastern Europe. It currently has around 60 members and is growing steadily. The cooperative is building a solar power plant on the site of the former municipal landfill. The municipality is leasing the land to the cooperative and after an 'as yet undetermined start-up period', the cooperative will pay for the lease of the site, but at a preferential rate that will be negotiated with the municipality. Note that the choice of a previous municipal landfill for this project requires a number of permits and special attention.

The municipality has supported the citizens' initiative from the beginning. The town of Serock initiated the energy cooperative, is a permanent partner in the project, activates citizens and provides the cooperative with a meeting place. The president of the energy cooperative combines the position of president with the position of head of the infrastructure department in the Serock Town and municipality Office (see more in Chapter 5). The mayor of the town is also a member of the energy cooperative, and the municipality is a direct member of the cooperative (see more in Chapter 10).



20 wind turbines without public objection

In 1999 **Eeklo (BE)**, a small city in Flanders with 20 000 inhabitants, made the first wind plan in Belgium. Inspired by a driven civil servant, **Eeklo (BE)** explored the possibilities of harvesting its own wind to provide the city with its own electricity. A field visit to a wind farm in nearby Netherlands was organised and taught them that citizen participation was key to acceptance. In 2000 the city issued a first public tender to find a partner to build and exploit 2 wind turbines. An important element of the evaluation was the extent local citizens and SMEs could participate in financing the project. Although Ecopower at that moment only had about 30 members and €50 000 of capital, the city did not hesitate to award the tender to them because Ecopower was willing to let the people and SMEs of Eeklo finance the project 100%. Within a year, permits for building and exploiting 3 wind turbines were awarded without public objection.

In 2009 **Eeklo (BE)** prepared a second tender for 2 more wind turbines. Again, Ecopower won against competition from big energy utilities and again no objection was received when the permits were under investigation. More recently, when the province overruled the wind plan of the city, and 15 extra wind turbines were made possible along the highway, no one objected to the building permits. Unfortunately, only one of these wind turbines was cooperatively owned. This against the will of the province who wanted at least 20% of citizen participation in all of the wind turbines¹⁰⁹. (More information about Eeklo in Chapter 4 and 8)

8. Buying community power or heat

Municipalities operate many public buildings. This results in considerable energy needs that can be met by purchasing renewable energy from citizen energy projects which is a good deal for the environment, public spending, and for the local community. By purchasing energy at cost-price (cost of production) instead of market-price, the local authority guarantees return on investment to the cooperatives while accessing cheaper or simply more stable prices in times of an energy crisis. In addition, this might facilitate the participation of local citizens as investors or community members in ownership structures of renewable energy projects.

Defining preferential criteria in public tenders

To be able to contract energy communities, local authorities can define qualitative criteria in their tenders that more or less directly favour citizens-owned energy supply. This different way of public tendering, not solely focused on economic factors but also social aspects, can bring about real change.



In Belgium, for example, **Eeklo (BE)** tendered the concession for a district heating network based on waste heat and renewables with a minimum of 20% citizen ownership and up to 20/100 extra points if more. This resulted in the cooperative Ecopower winning the bid in cooperation with the energy company Veolia (learn more about Eeklo in Chapter 4 and 7).

Framework Contracts

Municipalities or other public entities can also develop Framework Contracts, to supply energy for more buildings at once. A major advantage of the framework contract is that the administration, school or non-profit organisation does not have to carry out a public tender each time, but can take advantage of the offer directly. This reduces the administrative burden and accelerates the increase of renewable energy production.

For example, **Vlaams EnergieBedrijf**, **VEB**, **(BE)**, a public energy supplier to public authorities in the Flemish Region and Brussels, launched a tender for a framework contract to install solar panels with citizen participation on the roofs of public administration buildings, schools and other public services. Winning the tender, experienced citizen energy cooperatives like Ecopower and BeauVent now may execute this contract in cooperation with local, less experienced, citizen energy cooperatives.

Signing Power Purchase Agreements

Another option to be considered for high energy consumption public facilities is to sign direct Power Purchase Agreements (PPAs) with energy communities. These long-term contracts provide financial stability to communities: it allows them to benefit from a stable revenue stream (based on a fixed electricity price over a long-term period) in the absence of dedicated support schemes. They could be called: **'Community Power Purchase Agreements: C-PPAs'**.



"Cities should tender public ground, public underground and public roofs to be used by citizens' energy cooperatives. " Bob D'Haeseleer

Former vice-mayor of the City of Eeklo

Photo Credit: Lawrence Schoonbroodt





In the Netherlands the citizen energy cooperatives in **Wageningen, Ede**, **Barneveld, Wijk bij Duurstede and Weert (NL)**¹¹⁰ started supplying their locally produced energy to their municipality at cost-price. This means that every kWh that the municipality uses is locally produced and the municipality pays the price of the cost of the production instead of the current market price. All other electricity is bought from the international market. This model gives the local energy communities certainty for their investments and thus stimulates local production. In times when the market price is higher than the cost price (which is the case in the current energy crisis) it gives the municipality a stable and cheaper energy price.



Cooperation agreement for a municipal school (GR)

In 2021 **Karditsa (GR)** took the decision that the Energy Cooperative Society of Karditsa, ESEK LLC, would provide wood pellets to a local municipal school, so that the school would not have to face the rising price of fossil gas. The municipality wants the buildings that they manage and that host the public to benefit from cleaner and more reasonably produced energy. The main goal in 2022 is to increase the number of public buildings to be heated using biomass. The first connection will be used as a pilot to see how it works and assess the benefits and the results. Then in the next few years it could be done in more schools as the potential is big: there are about 40 schools in **Karditsa (GR)** and the villages around it **(learn more on Karditsa in chapter 6)**

Pyrenees Power (FR)

Across the municipal borders of Carlus and Le Séquestre (FR), the citizen energy cooperative, Enercoop Midi-Pyrénées^{III}, has built its 10th solar park. This installation is also a collective self-consumption operation intended for the inhabitants and structures located less than 2km from the park. In this context, Le Séquestre (FR) buys electricity from the cooperative for its public buildings via a 4-year Power Purchase Agreement. The park produces 325MWh per year for a power of 250kWp. This park was made possible thanks to the dynamism of the local actors. It was the commune of Séquestre (FR) that identified the land as suitable for a citizen energy project and they also contacted all the local key stakeholders and citizens (see chapter 6). Enercoop Midi-Pyrénnées has also developed a tool called 'Elocoop ' that provides easy access to information about the collective self-consumption operation (see chapter 5 for more examples of tools and platforms).



9. Co-investing in a jointly owned local project

Municipalities can be a partner and co-owner with an energy community of a local project. In this scenario, two separate entities invest jointly, and the public funds are poured into a joint investment vehicle.

Municipalities also often receive a better rate of interest than in most bank accounts. There are also opportunities for municipal pension funds to invest.



Twice as much power and participation (BE)

This project consists of 6 wind turbines in **Amel and Büllingen (BE)**, in the German speaking region of Belgium. Both municipalities already had a wind farm on their territory and knew how important it was to involve local citizens. They had seen the success of the Courant d'Air cooperative in **Waimes (BE)** and decided that citizen engagement should be a number one priority when considering new projects. As a consequence, the municipal councils of both Amel and Büllingen decided to organise a public tender for the development, construction and operational management of a wind farm. Grid capacity had been reserved years before by the municipalities.

The public tender was launched in June 2015 and explicitly requested the participation of both local citizens and the municipalities. The level of engagement had a strong impact in the final evaluation and prior to selecting a service provider. Courant d'Air and Ecopower submitted a joint proposal offering up to 60% of the project to the municipalities. The remaining 40% would stay in the hands of local citizens through the cooperatives. In addition, Courant d'Air and Ecopower included a series of energy efficiency measures in their offer mainly targeting private homes and public buildings. They won the tendering procedure. The company EDF – who also responded to the public tender – immediately appealed against the decision but then decided to leave it there soon after. The project comprises 6 wind turbines with a total capacity of 21,6 MW. A permit was granted, but appeals are still pending.



10. Becoming a direct member of an energy community

The revised EU Directives of the Clean Energy for All Europeans Package encourage local authorities to join energy communities as actual members besides their citizens and local SMEs, but without taking full control. Directly taking part in Energy Communities as a local authority is a good way to lead the transition by setting an example, ensuring access to capital and making sure that the Energy Community looks after the most vulnerable.

The most common case is for local authorities to join in the field of energy generation, but also in activities that span all energy services, from mobility, energy efficiency, aggregation, and balancing.

Supporting the most vulnerable

To ensure a just transition, it is important that Energy Communities take into consideration the most vulnerable population and communities. When a municipality joins an Energy Community, with the public interest at heart, they can play a role in ensuring that the community looks after and includes the energy poor.



Tripling efforts to reduce fuel poverty in Crete (GR)

The municipalities of **Minoa Pediadas**, **Archanes-Asterousia and Viannos** (**GR**) are members of Minoan Energy Community. Minoan Energy was founded in the Crete city of Arkalochori at the end of 2019, as the first energy community in Crete. It focuses on solidarity and providing special attention to the vulnerable groups in Crete. The ultimate goal of this energy community is the elimination of energy poverty and to ensure equal access of all Cretan citizens to the energy potential of the island¹¹³. The municipalities joined from the early stages and helped with some procedural yet important issues, such as leasing land **(Chapter 7)** at a very low price for the community to install its first two collective solar parks.

In September 2021 Arkalochori was struck by a strong earthquake, forcing roughly 20% of its population to temporarily change place of residence and leaving some hundreds residents homeless. With its second PV park of 1 MW power, funded with the support of the Regional Authority of Crete, the community will provide 100 earthquale victim, low-income families, with free electricity. Additionally, a portion of the produced energy from these parks will be used to power some buildings of these Municipalities, as well as from the Regional Authority of Crete (More on Minoan Energy in Chapter 3).

Photo Credit: Minoan Energy Community



Ensuring capital

By joining an Energy Community and purchasing shares, the municipality can help new projects get off the ground by expanding its capital.

For example, in September 2020, a deliberation resulted in an official decision from **Eurométropole de Strasbourg (FR)** authorising the purchase of 100 shares of 'Les Brasseurs d'Energie', the local citizen energy cooperative. This was done in the aim of expanding equity capital for the first projects to be carried out by the 'Energy Brewers' (more on this cooperative in chapter 4 and 7)

Leading by example

When a municipality directly joins an Energy Community it sends a message to its constituency. Not only does it send the message that local leaders are committed and engaged in the transition, but it also spreads visibility around Energy Communities as an effective way to implement that transition. Since local leaders have the public interest at heart, when they join an Energy Community, they help foster trust and belief in this system as one that benefits the local community **(more about building trust in Chapter 2).**



Croatian municipalities standing out from the crowd (HR)

In Croatia, "Apsyrtides" is a new energy cooperative created to self-manage the energy on the archipelago of Cres and Lošini, which aims at managing a small photovoltaic farm. It is the first energy cooperative in Croatia that has 2 municipalities (Cres and Lošinj) in active cooperative membership. Inspired by the success of a fully crowdfunded solar power plant in Križevci inaugurated in 2018¹¹⁴, the archipelago of Cres-Lošinj launched a crowdfunding campaign to collect financial resources for the purchase of the land and preparation of project documentation for the Filozići solar power plant. The campaign intended to collect 65 000€ over 2 months but was successful in collecting more than 100 000€ in just 3 weeks. The campaign also succeeded in recruiting 23 new members to the newly formed energy cooperative, Apsyrtides. The success of this campaign was helped by these two municipalities leading by example. As the municipalities were part of the energy community, they helped bring more visibility to the project. As a result, local communities were already well informed about the intentions of building a power plant and had faith in its benefits. This helped ensure the reach and effectiveness of the communications campaign (see chapter 2 for more examples), for which the cooperative produced a video structured around a Q&A to promote the project, using members of the community that are well-known to the community, as a way of building more trust and familiarity.



Dedicated legal entity for collaboration with

different stakeholders

Long before the Renewable Energy Directive was revised and provided a common definition for renewable energy communities where citizens, municipalities and local SMEs could collaborate, France already had a dedicated legal entity suited for this. In 2001 France set up an interesting legal entity that also enables a municipality to cooperate with its citizens: a SCIC¹¹⁵, a 'Société coopérative d'intérêt collectif' or translated, 'a cooperative society of collective interest'. It can have different legal forms (SARL, SAS or SA), all with a variable equity and a common aim: 'the production or supply of goods and services of collective interest that have a social character'.

The members of a SCIC must be:

- Producers of goods or services (employees, executives);
- Beneficiaries of the goods and services offered by the cooperative (supplier customers, or residents);
- Other types of partners, natural or legal persons under private or public law, contributing to the activity of the cooperative (such as companies, associations, craftsmen, volunteers, farmers, communities).

It is also possible to create a SCIC with unpaid producers of goods and services, thus allowing the constitution of a SCIC without employees.



Reach for the sun (FR)

Cintegabelle (FR) has been a member of the Board of Directors of the citizen energy cooperative Enercoop Midi-Pyrénées since 2019. Two years earlier, a scouting exercise had identified a potential site for a solar farm on a former gravel quarry. Meetings and discussions with the local authority, who owns the land, were well received, as the development of local renewable energy met a need in the area.

In 2018, Cintegabelle became a member of the SCIC Enercoop Midi-Pyrénées, a tool for the energy transition. The following year, the solar park was inaugurated with the elected members and inhabitants, and Cintegabelle joined the Board of Directors of the cooperative. To this day, it continues to carry its vision of transition by representing local authorities alongside the other members¹¹⁶.





A community special purpose vehicle

When renewable energy project developers meet during the starting phase of a project, they sometimes avoid competing by co-developing the project. This results in the founding of an SPV, a Special Purpose Vehicle. Sometimes they offer municipalities and citizens who demand participation to set up an SPV with them. When the developer is a citizen energy cooperative, we could call that SPV a 'Community Special Purpose Vehicle or C-SPV'.

Two cities have got wind of something new (BE)

Launched in 2010, the **Moulins du Haut-Pays (MHP)** is a renewable energy community which operates two wind turbines. The renewable energy community is constituted by a citizen energy cooperative, Émissions Zéro, and by the municipalities of **Dour and Quiévrain (BE)** in the Walloon region. While Emission Zero initially owned the largest amount of the shares, they have since 2015 been split (almost) 50-50 between the two municipalities and the cooperative, with equal voting rights.

The two wind turbines are part of the Dour-Quiévrain-Hensies wind farm, consisting of 18 wind turbines, with a total capacity of almost 40MW. The annual production of the wind farm is equivalent to the average consumption of 26 000 households, which is twice the number of households living in the three municipalities concerned. It is also one of the biggest wind farm facilities in Belgium.

Complementary resources

COMMUNITY ENERGY: A PRACTICAL GUIDE TO RECLAIMING POWER

Friends of the Earth Europe, REScoop.eu, Energy Cities, 2020 Available in English, French, Dutch, Polish, Greek, Czech, Spanish, Romanian and Portuguese Available at https://energycommunityplatform.eu/

COMMUNITY ENERGY COMMUNICATIONS

REScoop.eu, Energy Cities, 2022 Available at https://energycommunityplatform.eu/

COMPILE, THE MUNICIPAL GUIDE

REScoop.eu, ZEZ, 2022 Available at https://energycommunityplatform.eu/

BUILDING ENERGY COMMUNITIES

mPower project, 2022 Available at https://municipalpower.org/best-practice-guides/guide2/

References







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