



SCCALE  
203050



# Financing community energy

## A short guide for banks



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# Short guide to financing community energy

**This short guide is an invitation for bank and other financial institution representatives to get to know community energy as a stable and yet future oriented field of activity. It will encourage you to learn more about renewable energies and related energy services that remain in the hands of citizens and municipalities, and inspire you to set up collaborations with energy communities. As a first introduction, it will cover the main questions financiers might ask themselves before funding community energy projects.**

This guide has been developed in the context of the **SCCALE 20 30 50 project**. The overall aim of this Horizon 2020 project is to support and enhance the growth of energy communities in Europe. Our activities particularly target energy communities that engage in renewable energy production, energy efficiency services and district heating. We are developing a series of tools that will support the growth and development of energy communities across the EU. These tools will first be tested in and with pilots in five Member States before being replicated to other communities across Europe.

For more information on energy communities, you can check out the website of **REScoop.eu**, the European Federation of citizen energy cooperatives and the **Energy Community Platform**, a one-stop shop for energy communities gathering information, tools, templates and best practices from many different EU funded projects on the topic of energy communities.



## SCCALE 20 30 50:

- Supports the set-up of at least 25 energy communities.
- Triggers the growth of another 34 energy communities.
- Develops an online toolbox with resources for energy communities to set-up and grow their business.
- Develops a guide for community leaders to support the set-up and growth of energy communities.
- Develops a finance guide, a municipal guide and a guide elaborating on contracts and governance models available to energy communities.
- Develops a self-assessment tool that allows an energy community to identify the development stage they are in and track their progress throughout time.
- Enhances and encourages the proliferation of energy communities across Europe through a network of experts, the so-called community of practice.
- Develops policy recommendations at the EU and national level to support the expansion of the community energy movement across Europe.



“We notice that people no longer want to be a by-stander, waiting until the government or a company solves their problem. People want to shape solutions together with others and according to their own understanding.

This is why Rabobank is involved in dozens of local customer initiatives that together, on a business basis, tackle mostly social issues. We support them with knowledge, financing and, in some cases, a contribution from our own reserves.”

Ronald Kopershoek (Rabobank)

# Why does financing community energy matter?

Europe faces the challenge to facilitate the successful transition of all Member States to a zero-carbon and resilient economy. The European Union chose to do so by putting local actors including citizens, municipalities and SMEs at the centre and fostering collaboration between them. Under the Clean Energy for All Europeans Legislative Package, Member States are required to transpose new EU rules on energy communities into national legislation.

The potential of what local actors can do themselves, privately at home and collectively in energy communities is enormous. A **study conducted by CE Delft** in 2016 highlighted that by 2050 almost half of all EU citizens (households and energy communities) could be producing their own electricity, and meeting 45% of the EU's electricity demand. Furthermore, according to the **EU Commission's 2016 Impact Assessment** for its legislative proposal for a recast of the Renewable Energy Directive, by 2030 more than 50 GW of wind and 50 GW of solar could be under community ownership (respectively 17% and 21% of installed capacity).

Energy communities have many advantages as you can read in more detail in the following chapter. They can provide an effective solution to the current energy crisis by leveraging local actors and relying on natural resources to cover local energy needs. REScoop.eu, Energy Cities and their respective members know from experience that the energy transition to a decentralized zero-carbon energy system based on renewable energy sources will only succeed if local actors are empowered to take ownership of renewable energy production. Such an inclusive approach fosters social acceptance for energy transition and climate action, keeps individual investments affordable and turns out to be an effective way to alleviate energy poverty.



# Community energy in a nutshell

## An energy revolution

In a world facing a climate emergency, transforming fairly towards a fossil-free energy system in Europe has never been more urgent. Communities across the world are already feeling the impacts of climate breakdown. Europe, as one of the world's richest regions and the birthplace of the industrial revolution, has the responsibility to lead the fight to fix it. A socially fair energy transformation means putting renewable energy into the hands of communities and people. This means taking back power from the fossil fuel industry, which has consistently blocked action that threatens its own financial interest, at the expense of people and the planet. All over Europe, the energy revolution is gaining momentum.

## In the hands of citizens

Individuals, communities, cities and local authorities are at the vanguard of Europe's energy transition. They are increasingly controlling and producing their own renewable energy, and fostering the transition to a fairer, democratic, and decentralised energy system. It was citizens who built Europe's first wind turbines by joining together in cooperatives (or 'renewable energy communities'). People and communities all over Europe are installing their own renewable energy projects and energy storage systems, and taking the lead on insulating homes and buildings. Community energy has the power to achieve an energy transformation more quickly, fairly and with added social benefits.

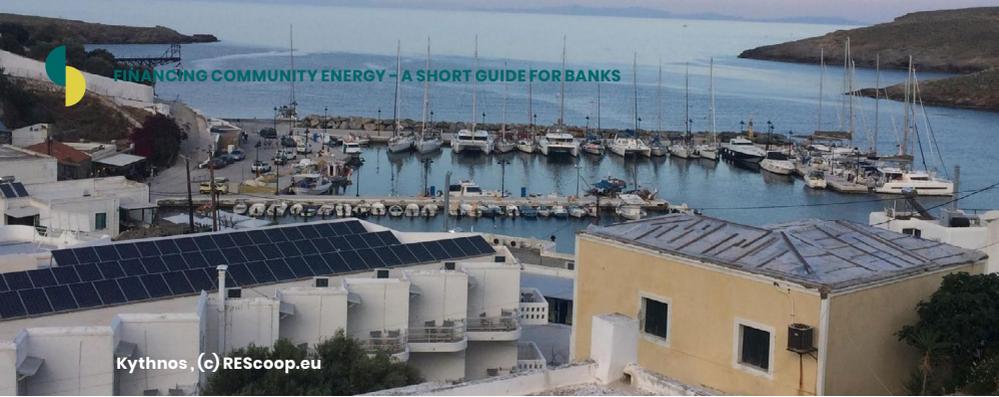


## Tapping into the potential of renewable energy production

Community energy production in Europe has huge potential. A recent study found that half of EU citizens, including local communities, schools and hospitals, could be producing their own renewable electricity by 2050, meeting 45% of their energy demand. Now, building on the new EU community and citizen energy rights, the potential must be fully unleashed, to put Europe on the path to the needed energy transformation.

## With the support of new EU legislation

The community energy movement has received a boost in 2019, in the form of improved EU legislation (Clean Energy for All Legislative Package) which newly gives communities and individuals the right to generate, store, consume and sell their own energy. Also local authorities and private companies can take part in the energy community, as long as citizens have the central, active role. The directives must now be put into practice in EU Member States, including definitions for energy communities, supporting mechanisms and access to financing. You can find more information on the situation in your respective country in REScoop.eu's **Transposition Tracker**.



### Benefitting the local community

An energy community is a way to 'organise' citizens that want to cooperate together in an energy sector-related activity based on open and democratic participation and governance, so that the activity can provide services or other benefits to the members or the local community. In this sense, energy communities represent an alternative type of market actor, and a different way or philosophy to do business, which is now acknowledged by the Clean Energy for All Legislative Package. The primary purpose of energy communities is to create social innovation and to engage in an economic activity with non-commercial aims. Energy communities have many advantages. The most important ones are listed below.

#### They keep money in the local economy

Energy communities use local energy sources and include local citizens. This way, they keep money within the local community that would otherwise flow out to external investors. In addition, they stimulate local employment and boost the local economy.

#### They foster social acceptance for renewable energy

Local opposition to renewable energy projects (typically wind turbines) decreases when citizens are given the opportunity to invest in and co-own the production installations. This is especially true when local citizens are involved from the very start of the project, share in the profits, and have access to clean energy at a fair price.

#### They keep the individual investment profitable and affordable

Not everyone has a roof suitable for solar panels, nor does everyone have the financial capacity to make such an investment. Community energy production installations are typically owned by a large group of citizens, keeping the individual investment affordable. While citizen energy projects do not strive for maximization of profit, they make economic sense.



#### They benefit the local community

Energy communities have a clear concern for the community. They usually share part of the profits with their members and use the rest to develop new projects or benefit the local community as a whole. Some initiatives for example have financed the construction of a local sustainable concert hall, while others built a charging point for electric bicycles. This way, all citizens benefit from the projects and the profits that energy communities generate.

#### Energy communities take action on energy efficiency

The income that results from renewable energy projects is often used to finance energy efficiency measures in public buildings. Some energy communities have paid for insulation material for public buildings, while others pay the wage of a local energy expert who helps citizens and the local municipality improve their overall energy efficiency.

#### Energy communities can and do perform activities across the energy sector

Most of the energy communities in the REScoop network engage in activities linked to the generation of renewable energy sources. However, due to the falling feed-in-premiums for renewable energy sources generation, energy communities have recently started to extend their scope and look into other energy-related activities, including energy supply, provision of energy efficiency services (e.g. collective building renovations), (district) heating and cooling, storage, flexibility services, aggregation, energy poverty mitigation measures, or electro-mobility services (electric car sharing).



### Based on the successful example of renewable energy sources cooperatives

The legal statute that an energy community can adopt differs between Member States and ranges from associations of co-owners to cooperatives and private companies. Energy cooperatives have been the model for the European Commission’s definitions of energy communities (renewable energy communities and citizen energy communities). Energy cooperatives are a type of energy community that adheres specifically to criteria based on the seven International Cooperative Alliance principles.

## 7 ICA principles

- ▼ Voluntary and Open Membership
- ▼ Democratic Member Control
- ▼ Economic Participation through Direct Ownership
- ▼ Autonomy and Independence
- ▼ Education, Training and Information
- ▼ Cooperation among Cooperatives
- ▼ Concern for Community

### Professionally organised

There are over 3 500 energy communities operating across Europe and the numbers are likely to increase when national regulators have to transpose the provisions into their national legislative framework. Community energy Initiatives are likely to organise themselves at the national level. Those of them who, besides falling under the EU definition of energy communities, adhere to the seven cooperative principles stated above are represented at the EU level by REScoop.eu, the European federation of citizen energy cooperatives.





# Financing community energy – how does it work?

## What do energy communities need bank loans for?

Community energy projects, just like traditional projects, run through different stages in their lifetime, and each stage comes with specific needs, including financing. For more detailed information, you can consult the [SCCALE financing guide for energy communities](#).

Generally, the pre-implementation or preparation stage is considered the phase with the most risk. At this stage it is not yet clear whether or not the preparatory work will lead to a viable project that can earn back the investments made at the start; or if all the study work will have to be covered by capital or reserves. This is why many energy communities find it difficult to secure financing for this stage. They solve this either through sourcing grants, offering seed capital shares, or cooperative revolving funds.

It is typically in the implementation stage, when licenses have been obtained, studies have been conducted and construction works are ready to start, that energy communities are looking for bank loans to cover a part of their investments.

In the case of renewable energy production projects, these investments can range from 10 000 euro for small solar installations, to 1 million euro or more for large solar installations and 3,5 million euro for a wind turbine. The price of wind parks on land and district heating networks can reach up to 20 million euro, depending on their



(c) E'nostra

size. The most expensive projects are offshore wind parks which until now have been dominated by commercial developers, but which will require more citizen participation in near future. The average payback period depends among others on the market prices for energy. It is to be expected between 5 years and 15 years.

Similar for energy communities offering services such as collective renovation, efficiency measures, or electrical car sharing, the highest investments are typically being made in the implementation stage when material is purchased, staff is hired and the necessary IT infrastructure is set up, before any income is being generated by the project.



### How do energy communities generate income?

The generation of profits is not the main purpose of energy communities, whose aim is to realise ecological and social objectives. However, income is of course needed for the long-term stability of the company and to finance these added-value projects. There are several ways for energy communities to generate income.

- ▼ **Sell energy to the market (producer):** electricity that is produced by the renewable energy production installations is being sold, either at market price to the grid, or at a convened price in the context of a power purchase agreement (PPA).
- ▼ **Sell energy to the members (producer-supplier):** electricity or heating/cooling is sold to the members of the energy community at cost price plus a small cost for administration and exploitation work. Generally, this price is lower than the market price, creating a reduction on the energy bill of the members. Generally, only energy communities registered as energy suppliers can offer this service. For solar installations on rooftops, there is an additional benefit: the individual self-consumption of the solar energy in the building lowers the energy bill of the residents. If the installation is on a public roof such as a town hall or a municipal swimming pool, the benefit is shared by the whole community in the form of lower local taxes or entrance fees.
- ▼ **Sell services to the members:** for example, an energy community offering electrical car sharing typically works with monthly subscription fees (abonnement).

▼ **Issuing shares:** share prices of energy communities generally range between 10 and 1 000 euro and come with co-ownership of the installation, a voting right in the general assembly, the right to a yearly dividend if the general assembly decides to pay one, and, of course, access to the services of the energy community.

▼ **Support schemes and grants for RES production:** there are specific public support schemes for energy communities which vary between Member States and can range from specific subsidies and grants for the construction of renewable energy sources installations or the development of energy services, to providing price certainty (feed-in premium and feed-in tariff) and trading schemes for Green Certificates.

### How do energy communities combine bank loans with other funding?

Energy communities typically use other financing schemes besides bank loans. A lot of them have actually been operating without bank loans at all, until now. Concerning **other debt financing**, crowd investment is regularly used by energy communities to raise micro loans from citizens. Those can be crowdfunding campaigns for a specific project open to members and non-members, as well as subordinated loans or cooperative obligations open to members only.

**Equity funding** is also an important pillar of community energy financing, as it facilitates the participation of members in project ownership and control. It also provides them with access to the energy community's services. Share offers can be limited in time and often intend to raise seed capital or investment capital for a specific project. But they can also be more permanent in nature, giving the possibility to support the more operational work of the energy community, providing more flexibility to investigate projects that add value rather than increase income.

**Grants** are the third way to finance community energy, ranging from important structural public support schemes to rather ad hoc funding through donations and awards.



(c) Windpark Krammer

## Example of financing a renewable energy production installation: Windpark Krammer (NL)

Windpark Krammer is the largest community-owned renewable energy project in the Netherlands. The nearly 5 000 members of the Zeeuwind and Deltawind cooperatives took the initiative to develop this wind farm of 34 wind turbines on and around the Krammer locks. The 102MW of energy is purchased directly by contracted private companies and supported by the Dutch subsidy from the Sustainable Energy Production and Climate Transition Incentive Scheme (SDE++). For every MWh of electricity generated, 0.50 euro is donated to the Wind Fund, financing sustainable projects in the region.

The total cost of the wind park was 215 million euro. Part of that amount has been invested by the members of the two cooperatives through member bonds. 20 000 member bonds have been issued in 2018 and another 23 700 member bonds in 2021. With a bond value of 500 euro, the amounts involved are 10 million euro and 11.85 million euro respectively. The manufacturer of the turbines, Enercon, was also contributing with equity. The remaining money was provided through debt funding by a consortium of four banks (ASN Bank, ING Bank, Rabobank and SMBC). In 2021 NWB Bank also stepped in the consortium. The duration of the project financing is 15 years, counting from the completion of the wind farm in 2019. In 2020, Enercon sold its stake in the park. That was bought partly by the cooperatives and partly through a public process by a private company.

➔ [More about the project](#)



Warmte Verzilverd - Ecopower

## Example of financing a district heating network: Warmte Verzilverd (BE)

In the Warmte Verzilverd project, Belgian energy cooperatives ZuidtrAnt-W and Ecopower joined forces with the technical experts of Kelvin Solutions, specialists in heat networks. Together they ensure that residual heat from multinational Agfa–Gevaert heats more than 400 households and three SMEs in the city of Mortsel with renewable energy. The CO<sup>2</sup> savings realised by the project are 1 000 tonnes in 2021, and will increase up to 2 000 tonnes in 2026 when all units will be built and occupied.

Part of the investment is funded by Agfa to equip its own network to allow for the purchase of the residual heat. All the other investments, including the heat station, the pipelines through and under the streets, and the digging work have been made by Warmte Verzilverd. About one third of the total cost of 5 million euro for the heat network is equity raised by the cooperatives and one third is financed by Flemish subsidies. The other third is a loan from vdk bank, a Belgian local and value based bank.

"It is a very good cooperation. Initially, many banks were interested but the choice fell on vdk bank. At vdk bank we not only got good financial terms, we could also see from the proposal that the bank was genuinely enthusiastic about our project. Their small-scale image and focus on environmental impact – especially compared to the big, less sustainable, competitors – was a decisive factor."

**Lenn Coussement, project coordinator of Warmte Verzilverd**

➔ [More about the project](#)



## How risky is financing community energy?

As a bank, your main objective is to minimise risk. Energy communities need to be able to convince you that they are worth your trust. They will do that in the same way as any other client i.e. by providing you with a profit and loss calculation, a financing plan, a cash-flow analysis and a fundraising plan, as well as proof of sufficient equity (generally around 30% of the total project cost) raised by shares or grants.

Additionally to what commercial clients provide you with, energy communities can share their legal statutes with you, enabling you to understand their objectives, structure, management and rules. Energy communities can raise equity and debt financing among citizens. They should be able to provide you with proof of their capacity to engage citizens and mobilize money. It is important that energy communities are being given the opportunity to still raise money from their members along the way, as this is part of their nature. There is no need to consider this approach as a higher risk than the promise to sell commercial services to clients, as long as the financing plan is sound and stable. A combination of short-term and longer-term loans may be an appropriate response for such an energy community. It could give the energy community the opportunity to raise additional capital once the project gets implemented. Our experience is that once the project is built and visible to the wider public, it gets easier to raise money from local citizens. Also, the fact that energy communities involve citizens often makes them have the support of people in the neighbourhood and the municipality, which creates more security for the project. When problems and changing circumstances arise, that support can be crucial.

When you are looking for extra reassurances, guarantees, long-term power purchase agreements or concentrating project financing and activities in specific legal entities (SPV's – Special Purpose Vehicles) can be additional ways to reduce the risk of financing energy communities, as you can read in the following paragraphs.

**Guarantees** provide you with the promise that another partner will vouch for the costs in case of the project's failure. Giving bank guarantees to energy communities is not yet very common. However, there are already some successful examples of both municipalities, cooperative banks and bigger energy communities vouching for bank loans (see page 23).



## Example of guarantees

In 2009, the district heating network of the local drinking water company of the Dutch city of Culemborg was for sale. Some inhabitants of Culemborg decided to take the provision of the heating for the district EVA Lanxmeer into their own hands. They founded the limited company 'Thermo Bello' and started to search for funding. However, granting a loan to such a young initiative was considered too big a risk by banks. That's where the municipality jumped in: by providing Thermo Bello with a municipal guarantee on 100% of the amount borrowed from the bank, leading to a bank loan that enabled Thermo Bello to take over the activities of the district heating network.

In 2008, the French energy cooperative Enercoop wanted to participate in a public tender to buy electricity from a French hydropower plant in order to supply its consumers. Crédit Coopératif, Enercoop's banking partner, would not take the risk of guaranteeing this amount alone and asked for counter guarantees. The Belgian REScoop Ecopower decided to vouch for Enercoop through its banking partner Triodos Bank and also decided to buy Enercoop shares in order to support Enercoop's project and the REScoop movement. This had a lever-effect and two other finance operators decided to bring counter guarantees to Crédit Coopératif. Crédit Coopératif agreed to sign the guarantee for Enercoop's response to the call for tender, enabling Enercoop to participate and finally win the call.





# Financing community energy? Don't hesitate!



As the world looks for ways to ensure our society and our economies can recover from the current energy crisis, and become more resilient towards possible future shocks, **citizen participation in the energy transition** will become even more important. Energy communities foster social acceptance for renewable energy, use the profits from renewable energy projects to strengthen the local economy, and encourage citizens to save energy. By actively looking for ways to include and benefit vulnerable households in their area, they contribute to the fight against energy poverty. They are part of a movement that is professionalising at high speed, is being backed by new European regulations, and engages an increasing number of citizens.

Financing community energy also **makes sense from a business perspective**:

- ☛ It helps the bank reach its environment, social and governance goals (ESG) and strengthens the bank's **reputation** in sustainable banking.
- ☛ It **lowers the risk** of the bank's portfolio, with energy community projects regularly turning out to be less risky than conventional projects, i.e. less local opposition and smaller scale so easier to manage and license.
- ☛ In many cases, it is a **stable investment** supported by feed-in tariffs or premiums.

You can become a partner in unlocking the great ecological and social potential of community energy. By liaising with energy communities, you can help them realise valuable projects, leverage funds from citizens, and, together, bring the citizen-led energy transition into practice. **Don't hesitate and join the movement.**



# Want to know more?



Do you want to find out more about the way local actors can speed-up the energy transition? The following organisations and websites are a good starting point:

## ☛ REScoop.eu

European federation of citizen energy cooperatives

## ☛ Energy Cities

European network for progressive local authorities

## ☛ Energy Community Platform

One Stop Shop for community energy, including a map of initiatives, an expert network and a toolbox.

## ☛ Energy Communities Repository

European Commission initiative providing technical assistance to energy communities

## ☛ SSCALE 20 30 50

Horizon 2020 funded project on energy communities



Ecopower, SCCALE 20 30 50

REScoop.eu, Avenue Milcamps 105, 1030 Brussels, Belgium

→ [sccale203050.eu](https://sccale203050.eu)

