

ERP WORKSHOP REPORT – Workshop 21

Workshop Name

Citizen Energy Communities

Names of Leader and Reporter

Pablo Álvarez Fernández Alfonso Garcia

Main issues and lessons identified

Citizen Energy Community:

The legislative framework for "energy communities" has been introduced into European legislation by the Clean Energy Package (known also as "the Winter Energy Package").

In this regard the term: "an energy community" is used in the context of:

- "citizen energy community" (CEC) in the Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market in electricity (recast) and

- "renewable energy community" (REC) in the Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast), known as "the RED II".

'Citizen energy community' - a legal entity: which is based on voluntary and open participation, effectively controlled by shareholders or members who are natural persons, local authorities, including municipalities, or small enterprises and microenterprises. The primary purpose of a citizens energy community is to provide environmental, economic or social community benefits for its members or the local areas where it operates rather than financial profits. A citizens energy community can be engaged in electricity generation, distribution and supply, consumption, aggregation, storage or energy efficiency services, generation of renewable electricity, charging services for electric vehicles or provide other energy services to its shareholders or members.

The benefits for the rural environment are:

- Easy access to local renewable energy resources and other services related to energy, including fight against energy poverty.
- Taking control and responsibility of the self-supply of its energy need, promoting energy democracy.
- Investment opportunities for citizens and local companies in rural or urban areas.
- Capacity of generating income that remains in the local economy to support the socio-economic needs of the community and invest in energy efficiency.
- Seeking public acceptance of renewable energies and other clean energy technologies.

- Allowing citizens to invest and participate in the decision making of projects.

The main challenges for the rural environment are:

- Difficulty to obtain initial financing for the local citizens.
- Dependence on volunteers and non-energy professionals.
- Lack of experience and administrative obstacles to the market access.
- Lack of the use of internal democratic governance and local participation strategies.
- Use of new legal forms.
- A good eco-social context.

People involved and with a common vision, cooperation and team work skills, self-management, leadership coordination.

How is it possible to take part in Citizen Energy Communities?

All citizens are eligible to take part in Citizen Energy Communities, which is based on voluntary and open participation, effectively controlled by shareholders or members who are natural persons, local authorities, including municipalities, or small enterprises and microenterprises.

What kind of framework or legal status for CEE?

There are different legal models in Europe that could adopt a Citizen Energy Community: Company, Partnership (general or limited), Community Interest Company, Limited Company, Charitable Incorporated Organisation, Cooperative....

Renewable energy community:

An Energy Community is a legal entity where citizens, SMEs and local authorities come together, as final users of energy, to cooperate in the generation, consumption distribution, storage, supply, aggregation of energy from renewable sources, or offer energy efficiency/demand side management services. The energy communities contribute to social innovation and regional development objectives, as defined by the European Commission. The definition of an energy community should be framed concretely around governing statutes of entities that integrate the following operative principles that distinguish them from traditional commercial energy undertakings:

- Concern for community the aim of the undertaking is to provide economic, social and environmental benefits for their members or the local area or areas where they are active, rather than being profit driven
- Provide for open, voluntary participation Membership in a cooperative is open to all persons as final users of its services and that are willing to accept the responsibilities of membership.
- Democratic governance of the undertaking direct democratic governance based on equal decision making rights (i.e. one-person-one-vote)
- Autonomy and independence the undertaking is controlled by the members or shareholders who are participating as final users; outside investors or undertakings participating in the community must not have a controlling position within the board.

Despite important differences, both types of energy communities (CECs and RECs) share some similarities, for example:

- they are entities that are set up as a legal person,
- they must be effectively controlled by their shareholders or members, and
- their primary objective is to provide environmental, economic and social community benefits rather than financial profits.

In turn, among major differences between CECs and RECs are:

- the membership issues (much more regulated in RECs than in CECs):
- in RECs there is an additional reservation for private undertakings that their participation must not constitute their primary commercial or professional activity,
- the shareholders or members in RECs must be located in the proximity of the renewable energy projects that are owned and developed by the REC.

CECs are free from the above restrictions.

ResCoop:

REScoop is short name for renewable energy cooperative, and refers to a business model where citizens jointly own and participate in renewable energy or energy efficiency projects. We also refer to REScoops as community power or community energy initiatives.

REScoops do not necessarily have the legal statute of a cooperative, but rather distinguish themselves by the way they do business. They typically respect 7 principles that have been duly outlined by the International Cooperative Alliance:

- 1. Voluntary and Open Membership
- 2. Democratic Member Control
- 3. Economic Participation through Direct Ownership
- 4. Autonomy and Independence
- 5. Education, Training and Information
- 6. Cooperation among Cooperatives
- 7. Concern for Community

All citizens are eligible to join a REScoop. After purchasing a cooperative share and becoming a member or co-owner of their REScoop, members share in the profits and often are given the opportunity to buy the electricity at a fair price. In addition, members can actively participate in the cooperative: they can decide in what and where the REScoop should invest, and are consulted when setting the energy price.

REScoops are leading the energy transition to energy democracy, and make it possible for citizens to actively participate in renewable energy and energy efficiency projects. The REScoop model has many advantages. The most important ones are listed below.

REScoops 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. Stakeholder involvement and direct citizen participation foster social acceptance for renewable energy. Local citizens not only share in the profits, they also have access to clean energy at a fair price.

REScoops keep the individual investment affordable

Not everyone has a roof suitable for solar panels, nor does everyone have the financial capacity to make such an investment. REScoop production installations are typically owned by a large group of citizens, keeping the individual investment affordable. In that case, the rural area is an important context where is possible to find many farmers with a roof suitable for solar panel.

REScoops benefit the local community

REScoops 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 REScoops for example have financed the construction of a local sustainable concert hall, while others erected a charging point for electric cars. Thus, all citizens benefit from the projects and the profits that they generate.

REScoops take action on energy efficiency

The revenues that result from renewable energy projects are often used to finance energy efficiency measures in public buildings. Some REScoops 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.

REScoops keep money in the local economy

REScoops use local energy sources and include local citizens. Thus they keep money within the local community that would otherwise be lost. In addition, REScoops stimulate local employment and boost the local economy.

The REScoops model is very useful for rural areas because provide a new tool for sustainable development and new type of activity that it would help to fix population and welfare for the rural community.

Ideas and case-study examples relating to the theme

Feldheim is home to 128 residents. The municipality of Feldheim, a small village southwest of Berlin that has become the first – and so far the only – place in Germany to be self-sufficient in energy.

This village near Berlin is the only place in Germany that is completely autonomous in terms of energy supply. Thanks to wind turbines in their backyard and an independent grid, residents pay minimum prices for electricity. It's an example for environmentalists everywhere.

The first four wind turbines were put up in 1997. There are now 43 of them, and they produce 140,000 megawatt hours of electricity annually. Pondering alternative energy sources each and every day, the local agricultural cooperative began at some point to mull over the construction of a biogas plant.

The 4.3 million kilowatt hours from the biogas plant could heat more than the buildings for the pigs and the cooperative offices: it could heat the entire village. At that time, many residents still heated their homes with stove heaters. Others who had put in central heating after the energy transformation discovered it had already broken down.

Following a few community meetings it was decided to start up the Feldheim Energie GmbH & Co. KG. The company was intended only to generate district heating for comfortable temperatures in all Feldheimer households, and was also set up to distribute the electricity produced by the wind turbines on the villagers' doorstep. But matters weren't as simple as that. The owner of the local power grid, E.On-Edis, was unwilling to sell or lease its power lines, and so new ones had to be built and installed. And so there arose a

situation unique to Feldheim: there are two power lines in the village today, and the old house connections have been severed.

For its new power supply, Feldheim Energie had to come up with around €400,000. The deposits of the limited partners were just sufficient for this. Only property owners from the district, as well as businesses, the waterworks, the Church, and the town of Treuenbrietzen, which Feldheim belongs to, could be members. The contribution of each came to €3,000 for electricity and heat, or half of that if the shareholders wanted only one of them.

Building the power grid, on the other hand, was a piece of cake compared to the €1.7m that the district heating network cost. The Feldheimer residents could finance that only because the EU and the state of Brandenburg came up with half the funding. For the rest, Feldheim Energy took out a 15-year energy loan, which it is paying off according to plan. Almost all the residents have signed up to the scheme and committed themselves for ten years with their deposit. Only two out of 40 households could not be won over. Still, the agricultural cooperative, the municipality, the waterworks and the Church did join those 38 individual households. The three-kilometre-long heating network runs out to 35 households; the others rely on geothermal energy. Those who have opted for the alternative networks, however, have saved a lot of money.

The heat has been piped in since 2009, and a year later the wind turbines began to feed in their energy. While the average price of a kilowatt hour in Germany is 28 cents, Feldheimer residents pay only 16.6 cents, as they buy the electricity directly from the producer. This unusually cheap fare is only possible thanks to a special provision in the Zugangsentgeltverordnung, the "Grid Access Fees Ordinance". According to the spokesman for Energiequelle Gmbh, Werner Frohwitter, only a fraction of the current generated – around half a percent – flows to Feldheim, while the rest is fed into the public grid. The cost of heat for the Feldheim residents is 10 per cent less than in the rest of the country.

Feldheim has become a model village in all matters related to environmentally friendly energy. In 2009, to complement the biogas plant, a wood-chip heater was built, and it ensures that the old farmhouses stay toasty warm on cold winter days. One of three villages to win the Ministry of Agriculture's "Bio-Energy Village" award in 2010, the municipality ploughed the €10,000 back into continuing to develop renewable energies. Today, its environmentally friendly energy has become a significant factor in the small town's economy. Agriculture, which offers bread and work to 30 people, still dominates nonetheless. But the EQ-SYS company, which makes metal components for photovoltaic systems, has also created 21 jobs.

Eco-tourists from all over the world flock to the village every year, despite the lack of an intact Gasthof where they can sleep. The former restaurant building is currently being converted into a Research and Education Centre by the Feldheim New Energy Forum Foundation, the Förderverein Neue-Energien-Forum Feldheim. The association offers tours of the Ecovillage in German, English, Spanish and French. Japanese is yet not on offer – despite the many Japanese who, last but not least, following the disaster in Fukushima, have found their way to Feldheim.

More info: www.nef-feldheim.info/the-energy-self-sufficient-village/?lang=en

The model of a renewable energy community is a good example of Citizen Energy Community and Community energy leading by a Rescoop. Nowadays, such kind of models are growing along Europe. There are interesting example along Europe like Lizarraga (Spain), Green Energy District in Ghent (Belgium)...

www.rescoop.eu/community-energy-map

The debate about the chances of developing Citizen Energy Communities in Italy, Latvia, Spain and Bosnia Herzegovina had this conclusion.

The "the Winter Energy Package" shows us the path for the development of energy communities. The opportunities for the development of citizen energy communities in these countries are evident. The member states of the European Union will have to implement and develop an easy regulation for the development of citizen energy communities.

It is important that the actors involved in the development of energy communities be taken into consideration by the public administration. The development of citizen energy communities means improving the quality of life in rural areas, improving progress and welfare.

Additional messages for the ERP 2019 Manifesto

There is no sustainable development without renewable energy. The rural areas of Europe must lead this new energy model and the energy transition.

Democratization and energy sovereignty is possible with energy or citizen energy communities, providing tools and capabilities for the development of a new energy model for rural areas of Europe is a necessity for the success of European rural areas.

The decarbonization of the European economy must have rural areas, facilitating not only economic resources, but also more favourable legislation by member states.

Energy is a basic good that has to be accessible, democratic and clean. A citizen energy community and a renewable energy community make it possible.

More info:

www.unionrenovables.coop

www.rescoop.eu