

Sharing power to foster renewables: the cooperatives model



Members of the energy cooperative Energética, Spain, Credits: Energética

In the EU there are about 3,400 renewable energy cooperatives owned by citizens. These socially innovative players of the market have overturned the top-down approach of utility companies to spread the culture of energy transition

María Regidor co-owns a mini-hydro power plant in Spain, which produces part of the electricity provided to the residents of the Castile and León region. She is one of the about 1,800 members of [Energética](#), a consumer cooperative founded in 2015, which supplies renewable energy and offers self-consumption and energy-efficiency services mainly in the Valladolid area.

“We want to do things differently,” she says. “Our goal is to be fair and transparent. Our energy tariffs are, for instance, the same for all our clients and are generally lower than those currently proposed by the big companies.” Besides participating in meetings with experts and working groups on specific topics, Energética’s members convene for its general assembly twice a year. “Energy is something that we all need for living, like food and water. I therefore think everybody should be allowed to make their own decisions and have a voice in this field”.

Greater social participation and a switch from centralised to decentralised energy production are some key elements of the so-called “**energy democracy**”: a concept based on citizen inclusion and new governance models, aimed at spreading the decision-making process across more players and at empowering them.

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“Although we have a different legal status, we’re much like a cooperative,” says Iban Lacoste, photovoltaic project developer at [I-ENER](#), a civil-society based in the Basque Country focusing on the production of electricity and heat. “Our aim is to help local development and to let the citizens participate in renewable energy projects. All the benefits that we obtain from marketing green electricity are reinvested into new initiatives. Once you buy a share of I-ENER, you obtain the right to one vote, regardless of how much you invest. Moreover, since the Basque Country has a strong cultural identity, our shareholders know that by investing in our projects, they invest in our region.”

Renewable **energy cooperatives** are based on **voluntary and open participation and are collectively owned by citizens** who tend to be local. Thanks to these characteristics, they play a crucial role in the growth of social innovation and renewable energy projects.

Eleanor Denny is [professor in Economics at the Trinity College in Dublin](#), Ireland, and research partner of [SocialRES](#), a European project aimed at fostering social innovation and development of new cooperation patterns among renewable energy cooperatives, crowdfunding platforms and energy aggregators. “If the community is engaged and has a stake in the project, its involvement can facilitate the acceptance of the project itself and the growth of more renewable energy,” she explains. “In addition to that, compared to utility companies which just say: ‘We want to do this or that for money making’, cooperative projects can also identify with local demands on specific needs.”

Eleanor Denny carried out a [survey in ten EU countries, as well as the UK and US](#), on the behavioural aspects of the engagement with energy cooperatives. It revealed that **investors are more attracted by solar** rather than wind projects and that they especially value greater CO₂ reduction.

It also pointed out that cooperative members differ from general public across a number of **socio-demographic characteristics**. “They are generally older and more left-leaning, have higher income and education, much stronger environmental concern and also differ in their energy behaviour: cooperative members much more likely own an electric vehicle and tend to more actively control their energy consumption,” she says.



Webinar with Professor Eleanor Denny presenting the results of the survey on energy cooperatives

According to the latest available data, today **in the EU there are about 3,400 renewable energy cooperatives**. The vast majority of them are in the Netherlands, the UK, Sweden and, above all, Germany.

Volker Kromrey is deputy managing director at the [Lake Constance Foundation](#), an environmental NGO founded in 1994 in the southern town of Radolfzell. “**In Germany the energy transition movements started to emerge more than 25 years ago** from grassroots organisations, mainly cooperatives,” he says. “It was probably one of the starting points of the energy transition in Europe. So their model is now well established.”

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But renewable energy cooperatives in Germany have, to some extent, become "**victims of their own success**," says Volker Kromney. "Big and medium size companies have also turned to renewable energy and cooperative models as a way to compete. Consequently, the role of cooperatives in the energy transition is no longer as crucial as it was at the beginning.

In order to invert this trend and defend their share of the market "they should focus on projects with a lower return on investment, which are not interesting for the big companies," he suggests. "But they should also stop relying on volunteers and hire more professionals to become more competitive, and they should focus on their specific strengths, like rewarding their members with social benefits or sharing their revenue with local communities."

While Germany alone accounts for about a half of the EU renewable energy cooperatives, **in most Eastern and Southern European countries** they are still quite a new concept and they **struggle to gain more attention**.

"What our survey seems to suggest is that initial capital investment of 500 euros and investment duration of ten years are restricting factors," explains Eleanor Denny. "People want to enter cooperatives for environmental purposes especially, but such financial burdens are crowding them out. They are much more likely to test their engagement with crowdfunding projects, where the minimum amount to participate might be 5 or 10 euros."

At Energética, which is one of the 30 or so Spanish renewable energy cooperatives, there's no minimum investment duration and the initial investment required is only 100 euros. However, **the cooperative struggles to communicate its engagement and mobilise new investors**. "Some concepts are very technical and therefore difficult to explain to the general public," says María Regidor. "Even people who're very interested in energy transition often stick to their contracts with the big players in the market and take a long time to accept alternative solutions like ours. It's as if there was a kind of mental barrier."

Removing this kind of obstacle is among the objectives of recent EU legislation. Developments such the [Clean Energy Package](#) stress the importance of presenting renewable energy communities as a viable option, and of encouraging consumers to choose them as their energy supplier or even to consider membership. Although energy democracy is still far from being achieved, the green transition seems to be definitively in progress: according to [preliminary Eurostat data](#), in 2020 more electric came from renewables than from fossil fuels for the first time.

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