

Mapping the Social Impact of Energy Communities

RESCOP.EU



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The present brief has been jointly prepared by the <u>European federation of citizen</u> <u>energy cooperatives REScoop.eu</u>, <u>Electra Energy cooperative</u> and the <u>Heinrich Boell Foundation Office Thessaloniki</u>, <u>Greece</u>.

Its purpose is to report back from a multi-stakeholder workshop held online the 19th of November, 2021, which invited academics, practitioners and other stakeholders to reflect on the various social impacts of community energy groups, analyzed through their respective fields of expertise.

For questions and comments or to register your interest to participate in the research process please contact the authors:

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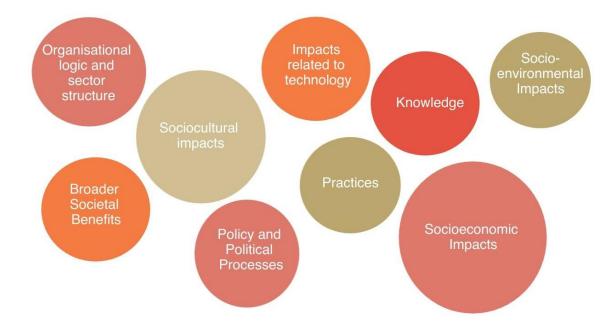
Why Social Impact? Bridging the knowledge gap

Energy communities are a new stakeholder in the energy system, different from private investors and public enterprises. They are considered as a vehicle for enhanced civic participation, a platform for citizens to engage in transforming the energy system in their respective countries and benefit from energy transition. Through energy community projects citizens, local businesses and local authorities plan and implement collective energy production, management and energy saving projects. In order for them to develop it is essential to create an environment that recognises their specific characteristics and supports them appropriately, so that they can bring out and develop benefits for the local communities, in which they are created and operate. These benefits are usually economic and environmental, but they are also social. While the environmental and economic impact of sustainable energy projects is well recognised and largely measurable, it is difficult to make the same claim about the social impact.

Through an intensive literature review, combined with stakeholder input and iterative feedback, we have collated a non-exhaustive, yet rigorous, set of indicators of the social impact of energy communities. For ease of access we have grouped them into key categories as can be seen in Graph 1. For an extensive listing of each category please click this link to view the interactive graph. We acknowledge that not all of these indicators are readily measurable and there might be overlap between them, but we believe that this consolidated mapping exercise can provide a useful, omprehensive overview of the multitude of social impacts that energy communities might offer.



For an extensive listing of each category please click this link to view the interactive graph.



Scan the QR code for the full video of the workshop



Workshop Stakeholder Reflections and Highlights

Participants of the multi-stakeholder online workshop that was realized on the 19th of November 2021, namely academics, members of energy communities and other stakeholders shared some useful tools and interesting reflections stemming from their work. We outline some key points and snapshots from the presentations here.

What do social impacts depend on? Project diversity

Preconditions Direct Longer term indirect Associated Project types Local investment Project scale Earnings allocatio Socio-economic Community Leadership Knowledge & skills Effective intermediaries Empowermen unity Any inclusive Project finance models (Effective outreach and support services) Affordable Continuity of funding Self- consumption Energy literacy & environmentally benign lifestyles Environmental mission Behaviour oriented support & custodia Trust Distribution of costs & benefits Perceptions of place Increased support for renewable energy Berka & Creamer, 2018

KEY INSIGHT 1:

The manifestation of social impacts by energy communities depends on a complex and interconnected array of factors and preconditions (Berka & Creamer, 2018)

KEY INSIGHT 2:

Already energy cooperatives across Europe are integrating social indicators in their work and projects. Challenges persist however, e.g. when it comes to measuring energy poverty, citizens might be reluctant to engage due to lack of capacity, fatigue or stigma.

Social impacts relating to energy communities

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- Shared networks that go beyond the energy's theme: the participation process promotes
 different kind of networks among people that do not only relate to energy, but also to other
 themes, such as human rights, peace, sustainability etc.
- Promotion of a call for ideas for our active members in order to help them with some initiatives for their community, on their territory.

In our energy communities

- · The creation of win win relationship among the different stakeholder
- In Villanovaforru, a project that will benefit the whole municipality. An energy community, can be an incubator where to grow activities, projects that go beyond energy
- In Biccari, the municipality decided to invest on a PV power plant on public housing in order to mitigate energy poverty

Academics and practitioners identified **key challenges** in measuring and operationalising some or all of the above listed indicators, such as:

- Even when social impacts do manifest, we need to ask ourselves:
- Who in the community benefits and who is left out?
- How can impacts be efficiently and equitably spread across the whole of a community?

- Lack of capacity to gather data.
- Lack of time to engage with/operationalise all these indicators.
- Lack of willingness of participants to engage.
- Difficulty in establishing causality for many of these impacts.
- Long time frames for some impacts to manifest (beyond electoral and policy cycles).

Moreover, the extent to which social impacts of energy communities will manifest depends on many variables and factors:

- The specificities of the local context.
- Support and stability of the national regulatory/legal framework to manifest (e.g. stable return on investment based on PPA/feed-in-tariff terms).

Moving from Theory to Practice

The next phase of the *Mapping the Social Impact of Energy Communities* project will involve fieldwork with energy communities across Greece, over the first months of 2022. For energy communities to manifest their social impacts they often rely on a stable and supportive legal framework. Conversely, by demonstrating empirically the social impacts of *Greek* energy communities, from Crete to Thessaloniki, our aspiration is to influence institutional actors and policy makers to develop appropriate supportive tools for energy communities to realise their full potential and deliver this multitude of social and ecological benefits.

Working with local communities increases research legitimacy, as processes of cocreation can unearth novel insights, conflicts and assumptions that literature alone cannot predict or address. This is another key reason why the foundation of this project will be participatory.

We invite energy communities to express their potential interest in the contact details listed below.

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Suggested bibliography

A non-exhaustive **list of resources** on the various social impacts of energy communities:

Adams,S.;Brown,D.; Cárdenas Álvarez, J.P.; Chitchyan, R.; Fell, M.J.; Hahnel, U.J.J.; Hojckova, K.; Johnson, C.; Klein, L.; Montakhabi, M.; et al. Social and Economic Value in Emerging Decentralized Energy Business Models: A Critical Review. Energies2021,14,7864. https://doi.org/10.3390/en14237864

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Ruijsink, S. (ed.) (2017) TRANSIT resources: overview of TRANSIT resources based on Deliverable 6.9, TRANSIT: EU SSH.2013.3.2-1 Grant agreement no: 613169.

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