

Benefits of Renewable Energy Communities

A DECIDE factsheet on **the benefits** of collective renewable energy actions **from a local government viewpoint**

CONTEXT

Renewable Energy Communities and Collective Energy Actions have a great potential to trigger substantial positive impacts for individuals as well as their communities. This Factsheet aims to present the **many possible benefits** of these joint activities for the perspective of the local government that can therefore leverage such initiatives to tackle local issues or simply improve the life quality in their jurisdiction.

These benefits are here divided in social, environmental, financial and political benefits but this clustering should not be considered neither a comprehensive list, nor a rigid division. The values that such community-driven initiatives can bring are in reality very much interlinked with each other, supporting a set of principles that relates with **community empowerment** and **energy transition**.

Is energy community and collective action new to you?

Check out more <u>HERE</u>

BENEFITS





By involving citizens, wider political aspirations can be achieved and energy democracy for a more sustainable future can be implemented. Through creating added value for the community, fostering active participation and interaction between local citizens, Energy Communities and Collective Energy Actions can strengthen **local social cohesion** and **community spirit** helping to build a more resilient community.

Whenever active participation of people in energy matters is enabled, social acceptance for renewable energy and the energy transition is strengthened. Evidences shows that community ownership and community energy projects can have a positive impact on the local support for renewable energy technologies. Energy communities can be **instrumental** for facilitating the **energy transition** at the citizen and at the local level. In addition to fostering greater **citizen participation** and **acceptance** of renewables projects, they also provide other socio-economic benefits.

> Energy communities: an overview of energy and social innovation, JRC. 2020



Environmental



In April 2021 the city of Tartu (Estonia) approved the new Sustainable Energy and Climate Plan (SECAP) called "Tartu Energia 2030". The document **includes Energy Communities** as a key element of its strategy with a **calculated saving of over 10,000 tCO₂/per year**. Energy Communities and Collective Actions can boost the widespread of renewable energy technologies with great benefit in terms of CO₂ emission reduction. This is particularly evident for geographically insulated communities (e.g. island or in the mountains) where the energy supply is highly depending on fossil fuel or wood fuel. Moreover, locally energy produced, when deriving from renewable sources, lead not only to an improvement of the quality of the environment but also the possibility for a municipality to achieve climate targets set in their Sustainable Energy and Climate Action Plan. With energy communities and collective actions, citizens can really support Local Governments in raising their ambition and delivery on the EU target of carbon neutrality by 2050.



Economic

Beyond these benefits, local Energy Communities can also bring economic benefits to the community: They have been found to support **community development** and **revitalization**, through **creating jobs** directly in the local market allowing for investments and reinvestments in local areas.

The community engagement in joint energy projects can also be intended from the economic perspective where inhabitants investing in local projects. Municipalities can adopt new business model and **leverage private funds** to integrate the budget needed to implement projects or upscale existing ones. In the municipality of Tula (Italy), **2% of gross revenue** achieved annually for every kWh produced and fed to the network is given to the local municipality. This has led to investment totalling **400,000 €** that has been reinvested in the community. <u>WinWind project, 2020</u>

The city of Anwerp (Belgium) is implementing a collective solution for inhabitants living in energy poverty through either improved control or replacement of the heating system and enable it to be **paid back through the energy savings**. At a broader level, the push that Renewable Energy Communities and Collective Energy Actions gives to the market, **promote innovation** and provide possibilities for innovative technologies at a decentralized level to increase their quality level.

Moreover, local initiatives are a great tool to strengthen energy justice and access to affordable energy, thereby counteracting **energy poverty**.





Furthermore, active citizen participation and community actions enable procedural justice and transparency in political decision-making, fostering support from citizens for the decisions taken in the local community. This is closely linked to energy democracy and reflects the local contribution of EU climate policy. The awareness on the environmental impact of individual behaviors in terms of energy production and consumption is a good basis that can be expanded to other domains of climate actions to higher chances for other environmental projects to be favored by the community.

The energy transition involves a **social transformation** in which civil society and citizens will play a crucial role too. One distinctive social innovation feature of community energy is the ability to **combine the mutual and the public interest.**

overview of energy and social innovation, IRC 2020

Finally, the following graphic summarizes the benefits and positive impacts of energy communities and illustrates the positive effects an energy community can have for you as a local government and your related community.





DO YOU WANT TO KNOW MORE?

- ... What is an energy community or an energy collective action ?
- Which steps should be taken to set up one ?
- What are examples and best practices ?

To answer this and other related questions, check out the <u>DECIDE Knowledge Hub</u> or contact the DECIDE Team: <u>contact@decide4energy.eu</u>

Note:

The information included in this document are extracted from DECIDE Deliverable 1.1 "*Guidelines for characterization, segmentation, and group dynamics of collective energy actions*" where also the full list of references is included.

The most relevant references for the current work are:

- Berka, A. L., & Creamer, E. (2018). Taking stock of the local impacts of community owned renewable energy: A review and research agenda. Renewable and Sustainable Energy Reviews, 82, 3400–3419. https://doi.org/10.1016/j.rser.2017.10.050
- Brummer, V. (2018). Community energy benefits and barriers: A comparative literature review of Community Energy in the UK, Germany and the USA, the benefits it provides for society and the barriers it faces. *Renewable and Sustainable Energy Reviews*, *94*, 187–196.

https://doi.org/10.1016/j.rser.2018.06.013

Soeiro, S., & Ferreira Dias, M. (2020). Energy cooperatives in southern European countries: Are they relevant for sustainability targets? *Energy Reports*, *6*, 448–453. <u>https://doi.org/10.1016/j.egyr.2019.09.006</u>

DECIDE PARTNERS





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 894255. The sole responsibility for the content of this document lies with the DECIDE project and does not necessarily reflect the opinion of the European Union.

