ICLEI
Local Governments for Sustainability
EUROPE

# Local Governments and Energy Communities

## Things You Need to Know

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# OUR GLOBAL OFFICES

ICLEI
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# OUR THEMATIC AREAS

We look at how to bring about change in an **INTEGRATED** way. For example, how nature-based development contributes to resilience, or how to bring equity into low emission development.

# What makes a transition „just“?

*“The people will not unite behind science - they will unite behind justice.”*

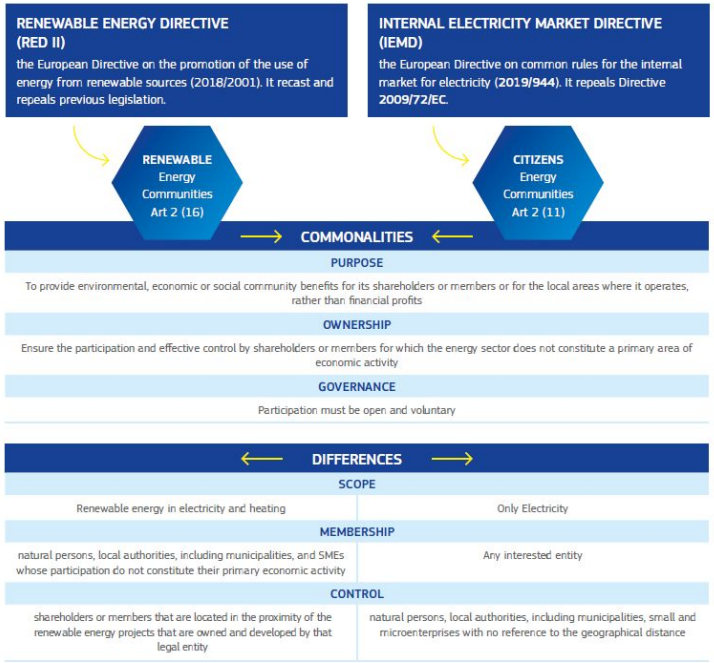
**- Éloi Laurent 2019**

SUSTAINABLE AND JUST CITIES

| | | |
|---|---|---|
| *Distributional justice* speaks to costs, responsibilities, and benefits being spread equally across society | *Procedural justice* speaks to inclusive access to decision-making processes | *Recognition justice* speaks to recognition of everyone’s equal dignity |

# What are energy communities?

Energy communities are a broad concept, but can basically be defined as collective initiatives of stakeholders such as citizens, local authorities, businesses who jointly finance, own, govern and carry out energy-related activities (such as production, consumption, storage, but also energy sharing and aggregation).



# What makes an energy community „just“?

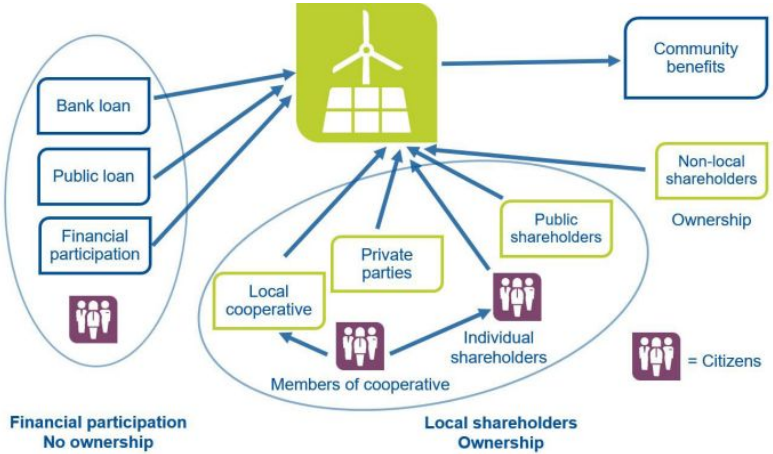



**Figure 1: Different types of participation in a renewable energy project.** Blue = financial participation without ownership; Green = ownership by different types of shareholders

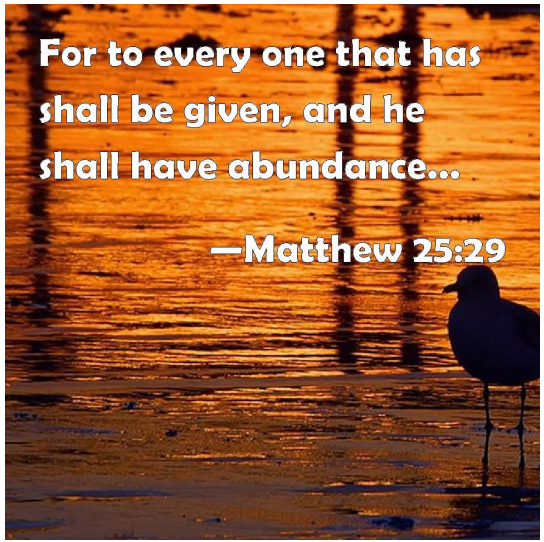
COME RES 2021

# Who?

Who is the citizen in „citizen-led“?

Who is the community in “community-driven”?

But also more local renewables (and acceptance?)

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**Top-down or bottom-up?**

**Active or passive benficiaries?**

**Community volunteering or unpaid labour?**

# Lisbon parish authority of Lumiar, Portugal

- Lisbon parish authority of Lumiar
- Local network of community associations Parceira Local de Telheiras
- NOVA University of Lisbon
- Coopernico

- Setting up an energy community with 18 solar panels **on the roof of the association**
- Energy community involving 18 households
- **Energy sharing scheme** leads to rebates on energy bills
- 600 Euros membership fee per households, 2 of those covered by the local authorities, 1 share covered by the remaining households

- ☐ This is a nice example of a **solidarity-based energy community** allowing those with some savings to sustainably invest into the local energy transition (and receive rebates of their energy bills) while also allowing those in need to profit from such schemes.

Local Partnership of Telheiras & Lumiar Civil Parish

# Inter-municipal collaboration

- An inter-municipal energy cooperative founded in 2009: "Neue Energien West eG"
- 17 municipalities
- Board with three mayors at the top and municipal representatives on the advisory board.
- Each municipal share is 5000 euros
- From an initiative to a company
- Citizens are part of their own cooperative "Bürger-Energiegenossenschaft West eG".
- Shares from 500 euros
- More than 1550 individual members
- Part of NEW eG

# From the region for the region

- Offer of a regional electricity tariff "Regionalstrom Nordoberpfalz" in cooperation with Grünstromwerke GmbH subsidiary of Naturstrom AG.
- Further services such as: An e-car charging station in each member municipality, which is "fuelled" with 100% NEW eG electricity.
- Joint purchase of pellets for domestic heating
- Energy-saving advice
- Employment of local companies to secure local jobs and income


# Dutch energy cooperative „GOED“

- This cooperative benefits from two **dedicated national support programmes**. Firstly, it receives a fixed remuneration on their produced electricity which has been designed especially for energy cooperatives. The only condition for them to receive this fixed remuneration is to have 100 members in the cooperative.

- Dutch government has set up a scheme which allows municipalities to maintain so called “**energy funds**” as loans to social enterprises within the context of that municipality. Because of this, the GOED cooperative does not require any citizen/member upfront investment.

- **Pays a project developer to carry the financial risk** and pays them using the money received from the municipal energy fund. Any proceeds generated during the operational phase of the solar plant also go to the persons in the same post code area who struggle to pay their electricity bill.

- It is still possible for citizens to invest into a particular project and receive a 4% annual return on their investment, but this citizen **financial participation is no pre-requisite for the cooperative’s activities.**

# Benefits via municipal services in Kozani

- Kozani is plannig a 6 MW solar PV park which is expected to **cover the electricity needs of all municipal and public buildings**. They aim to maintain their energy-related character which originated from its lignite-based past.

- In this example participation from local citizens as financial stakeholders in the energy community is not foreseen. Instead, **the benefits for citizens are indirect**. Since the electricity generated by the PV plants is being used to lower the costs of municipal buildings such as schools and the waste management company, the **benefits are for the municipal budget** as well as the electricity costs of the involved municipal services.

- Rather than benefiting via direct cash flows, citizens will profit from a **reduction on the amount of fees they have to pay for these municipal services**.

# Energy Community, but „as a service“

- In the small town of Chaves in the North of Portugal a total of 76,2kWp of solar PV will be installed for the benefit of the adhering members who will be able to buy the electricity produced by the plant.

- **Participants will not be required to make any investment** or change their contracts with their current energy supplier. The finances have been raised via a crowdfunding platform allowing those with enough capital to receive an average 4.5 % annual return on their investment.

- This return for investors is generated by **selling excess energy** while the savings in the electricity costs for the members is achieved via the **collective self-consumption** of electricity.

- This “**energy savings as a service model**” is driven by a private company (Clean Watts) which also provides the energy management software for this energy community.

# What can local governments do?

- Many things! E.g:
- They can **make public space available** and offer energy communities opportunities to **participate in public tenders** and provide **municipal guarantees**
- They can **raise awareness** and **share municipal staff and resources** e.g. join the board of the community
- They can **set concrete targets** for the promotion of energy communities and make them a firm part of their climate & energy plans
- They can bring together different stakeholders and promote innovation through **co-creation and citizen engagement**
- They (often) can become part of energy communities themselves
- They can **profit financially** from engaging with RECs e.g. through the generation of stable business tax revenues and access to renewable energy sources

☐ They can **save costs and can protect vulnerable households**


Image source: PROSEU 2021 / Design Doppel

# There is a need for low-threshold funding

- Special citizen energy fund – Schleswig Holstein, Germany
- Community Energy Fund – Devon County, United Kingdom
- Special funding for small municipalities supporting RECs – Italy
- EU Energy Communities Facility

# Contact us

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# Possibilities via public procurement

**City of Eeklo has integrated social criteria into its tender:**

- 25,000 euros / year must go into a local fund and added value for citizens must be created
- Up to 50% citizen participation must be ensured (based on ICA principles)
- Wind as a common good

**City of Ghent has also done this and facilitated cooperation with a cooperative through a tender.**

- Good example of how municipalities and citizen energy communities can work together through PPAs (Power Purchase Agreements).

- 8MWp solar plant supplies electricity to the city for 15 years via PPA. 750 citizens contribute 750,000 euros and receive dividends between 3 and 6%.

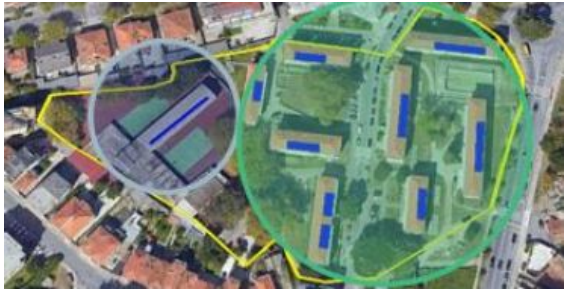
# Energy City Hall REC-1, Italy

- **Town of Magliano Alpi**, Italien
- Making the city hall, the library, the gymnasium and the municipal schools self-sufficient
- A reduction of energy cost for participants
- Municipality provided for smart metering and data management systems that allocate and control electricity flows between production and consumption points
- Municipality is a member of the REC and surrounding municipalities committed to adopt comparable models
- "Magliano & Friends" to test sustainable business models



Municipalities have much to gain from setting up and leading RECs in the electricity as well as heating & cooling markets. Not only can they save costs and work towards achieving their climate and energy targets, but they can also protect vulnerable households.

# Agro do Amial, Portugal



- The project is located in an area with eight residential blocks and a public school in Porto.
- Electricity is generated by PV panels installed on the roofs and consumed in the community, with surpluses fed into the grid. The aim is to include 118 families as well as young consumers who will receive discounts on their energy bills.
- For the first five years, electricity will be distributed to community members free of charge. After that, at a lower rate than traditional suppliers. The municipality is closely involved in the project as it owns and manages a large number of buildings.

Municipalities have the possibility to (re-) create a closer bond between citizens and public infrastructure. RECs can also be an enabler of public-private partnership and investments.

# Homeowners associations

Municipality of Marupe and Riga Planning Region, Latvia committed to smart solutions

- PV panels installed on multi-apartment buildings and row-house buildings. Residents of the buildings benefits through rebates on their energy bills
- Tripartite agreement and ownership will come to homeowners association after 5 years.

☐ Homeowners associations act as energy communities

Municipality of Tartu, Estonia includes SECAP objective is 150 GWh of electricity consumption annually, 15 GWh need to come from apartment association's rooftops

- Awareness raising and capacity building
- Working with homeowners associations
- Improve energy efficiency

Adapted from TREA 2021

More and more municipalities are setting concrete targets for the promotion of community energy projects and make them a firm part of their long-term climate and energy planning. This also sends a strong signal for anyone willing to found a REC in future.

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