Overview of local community energy trading and energy sharing in EU Countries

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REScoop.eu

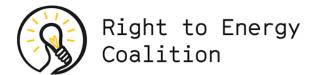
8th November 2023

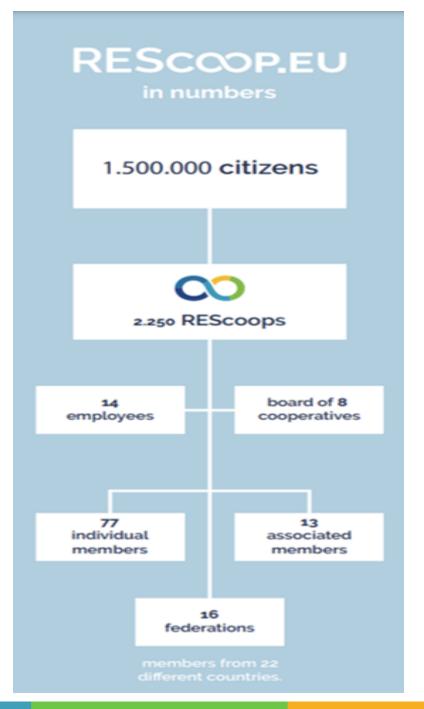
Who is REScoop.eu?









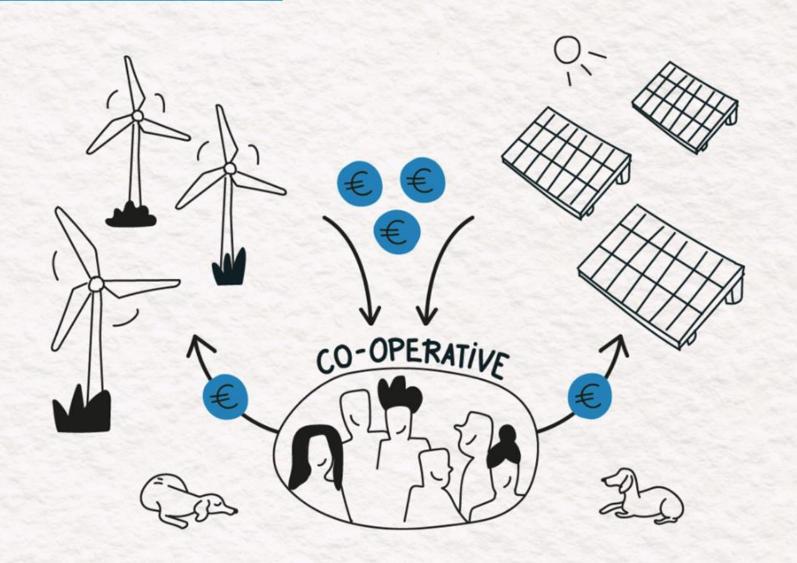


European citizens want ownership of wind and solar projects in their neighborhood

- YouGov study, October 2021
- mapped public attitudes to wind and solar power
- United Kingdom, France, Germany, Spain, Poland, Italy,
 Czech Republic, Greece, Romania and Bulgaria
- strong support for more renewable energy & citizen participation

IMAGINE A WORLD

WHERE ENERGY PRODUCTION IS OWNED BY LOCAL PEOPLE.



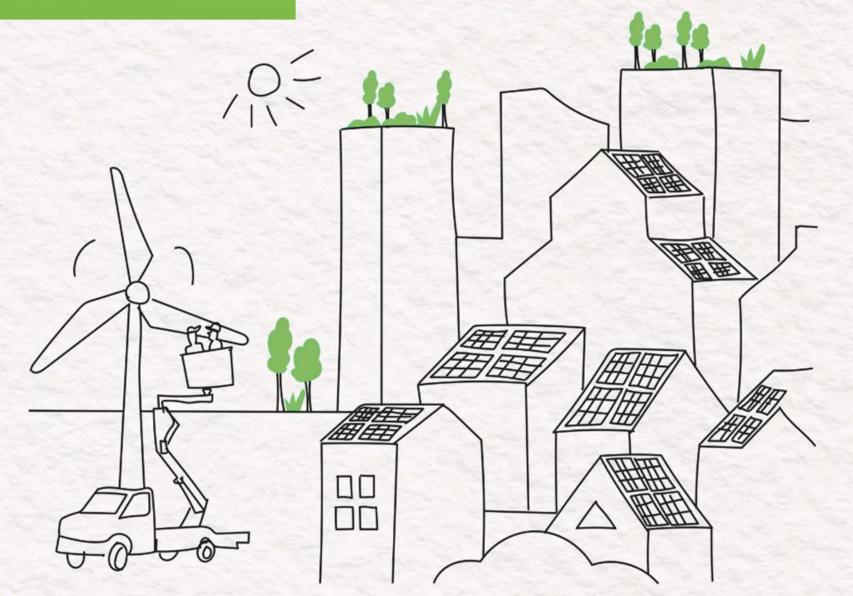
61%

of Europeans would be likely to join an energy cooperative if one were set up in their local area

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IMAGINE A WORLD

WHERE ENERGY IS CLEAN AND LOCAL



86%

of Europeans
support new wind
and solar projects in
their local area

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IMAGINE A WORLD

WHERE COMMUNITY GROUPS GENERATE THEIR OWN CLEAN ENERGY ...



79%

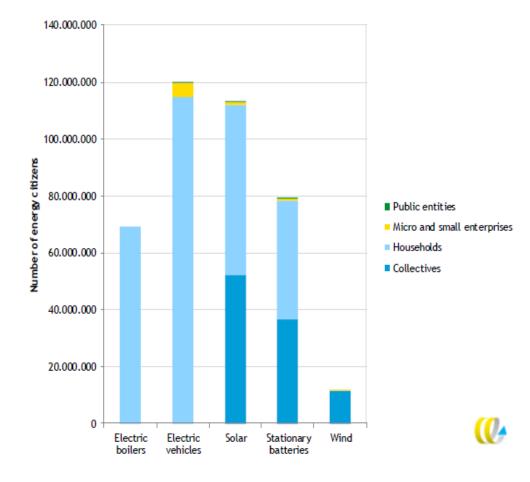
of Europeans want
their governments to
provide more financial
support for community
groups to generate
their own solar and
wind energy

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The potential of citizen participation

- The participation of individuals and communities in the energy transition is essential
- CE Delft study: By 2050, at least half of EU citizens could be producing their own renewable electricity, meeting 45 % of the total electricity demand by then

Figure 12 Number of energy citizens for the various technologies assessed, potential to 2050 for the EU28



Source: CE Delft study (2016), Figure 12

The Clean Energy Package

- May 2019 final legislative files for Clean Energy for All Europeans Legislative Package (CEP)
- Strong shift in the role of citizens from <u>passive consumers</u> to <u>active participants</u> in the energy transition.
- For the first time EU legislation also acknowledges the role community energy ownership can play in helping the EU meet its climate and energy objectives while driving local social innovation.
- In particular:
 - recast Directive 2018/2001 (Renewable Energy Directive II, or REDII),1
 - recast Directive 2019/944 (the Internal Electricity Market Directive, or IEMD)2 and
 - recast Regulation 2019/943 (the Internal Electricity Market Regulation, or IEMR)3
- The CEP defines two new concepts labelled 'renewable energy communities' (RECs) and 'citizen energy communities' (CECs).
- Member states in the EU are responsible for transposing EU directives into national legislation and designing specific support schemes for energy communities.

Figure 1 The Energy Community definitions in the CEP

Article 2(16) Recast Renewable Energy Directive 'Renewable Energy Community'

Article 2(11) Recast Electricity Directive 'Citizen Energy Community'

A legal entity:

which, in accordance with the applicable national law, is based on open and voluntary participation, is autonomous, and is effectively controlled by shareholders or members that are located in the proximity of the renewable energy projects that are owned and developed by that legal entity;

the shareholders or members of which are natural persons, SMEs or local authorities, including municipalities;

the primary purpose of which is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits.

A legal entity that:

is based on voluntary and open participation and is effectively controlled by members or shareholders that are natural persons, local authorities, including municipalities, or small enterprises;

has for its primary purpose to provide environmental, economic or social community benefits to its members or shareholders or to the local areas where it operates rather than to generate financial profits; and

may engage in generation, including from renewable sources, distribution, supply, consumption, aggregation, energy storage, energy efficiency services or charging services for electric vehicles or provide other energy services to its members or shareholders;

Comparing definitions REC and CEC

in the Renewables Directive

Renewable Energy Communities

in the Electricity Directive
Citizens Energy Communities

ELIGIBILITY



Members/shareholders that are:

- · Natural persons.
- Local authorities (including municipalities).
- SMEs.

Members/shareholders that are:

Any entity.

CONCERN FOR COMMUNITY (alternative to for-profit)



Primary purpose:

Environmental, economic, social community benefits for members or local areas of operation rather than financial profits.

Primary purpose:

Environmental, economic, social community benefits for members or local areas of operation rather than financial profits.

OPEN & VOLUNTARY MEMERSHIP



- · Participation must be voluntary
- Participation in renewable energy generation projects should be open to all potential local members based on non-discriminatory criteria.

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- Participation should be open to all potential members based on non-discriminatory criteria.

DEMOCRATIC GOVERNANCE & OWNERSHIP



- Must be autonomous no disproportionate control by individual members/outside partners in decision-making.
- Effective control by members/ shareholders that are in 'proximity' to RES projects.

- No autonomy principle, but decision-making powers should be limited to members not involved in large scale commercial activity and where the energy sector does not constitute a primary area of economic activity.
- Effective control by members/ shareholders that are natural persons, local authorities (including municipalities) and small and micro-enterprises.

Energy communities: organising participation in activities across the market



- Energy communities have right to access all suitable markets individually & via 3rd party
- National frameworks need to distinguish technical activities from organizational forms

What is Energy Sharing?

- There are still many questions about what energy sharing is.
- Both the REDII and the IEMD provide energy communities with a right to engage in energy sharing. However, there is <u>no technical definition</u> of energy sharing in the CEP.
- The recitals provide a vague interpretation of what energy sharing could look like. It states that:

"Citizen energy communities should not face regulatory restrictions when they apply existing or future information and communications technologies to share electricity produced using generation assets within the citizen energy community among their members or shareholders based on market principles, for example by offsetting the energy component of members or shareholders using the generation available within the community, even over the public network, provided that both metering points belong to the community. Electricity sharing enables members or shareholders to be supplied with electricity from generating installations within the community without being in direct physical proximity to the generating installation and without being behind a single metering point."

Transposing definitions into law: common issues

- Beyond principles getting into details
- Choice of legal form
- How to define proximity different approaches
- Eligibility who should be able to participate and how?
- Autonomy What is it and how can it ensure democratic decision making?
- Relationship between RECs vs CECs
- Regulatory oversight (e.g., registration, compliance with criteria, impact on the market, etc)

High level policy objectives and strategic planning

- Netherlands: For new onshore wind and solar PV installations, at least 50% must be offered up for local ownership
- Greece, Ireland and Scotland: 500 MW of community energy by 2030
- France: objective to develop 1000 new locally governed renewable energy projects involving local authorities and citizens by 2028
- **Spain**: Regions are developing community energy strategies





Why enabling frameworks are needed – addressing barriers

• Barriers will depend on the activity the energy community is engaging in (production, sharing, supply, district heating, etc) & national context

Examples:

- Lack of access to finance, info and expertise
- Lack of available space to land for siting production
- Unclear situation around the grid (including procedures, available capacity)
- Lack of clear duties and roles for Distribution System Operators (DSOs) / suppliers
- Lack of technical infrastructure/capability for DSO to facilitate energy sharing
- Lack of clarity regarding remuneration pathways, applicable grid fees
- Lack of support for vulnerable/lower-income social groups

What makes a national framework 'enabling'?

Practically it means:

- 1. Access to finance
- 2. Information/expertise
- 3. Special attention in regulations and administrative procedures
- 4. Safeguards to maintain trust amongst members
- 5. Inclusive (i.e. accessible to different social groups)
- 6. A strong local authority that can support & also participate
- 7. Energy sharing A DSO that can operationalise it and a tariff that fairly incentivizes consumption close to production

Promoting Inclusiveness

There are not many EU examples

- Integrating the objective of tackling energy poverty into the concept of community (e.g. Greece)
- Allowing for organization of citizens living in social housing (e.g. 'tenants' democracy' in Denmark)

Potential learnings from the United States

- Financing programmes to help low-income households invest (e.g. on-bill finance)
- Requirements vs incentives for project developers
- Reduced requirements for participation for target groups (buy-in, representation)





Where are we?

Transposition deadline for the Renewable Energy Directive:

30 June 2021

Transposition deadline for the Electricity Directive:

31 December 2020

We are still at the beginning...

REScoop.eu Transposition tracker





Transposition tracker - definitions

Transposition tracker - enabling frameworks/support schemes

General Overview

Overall Process MS with national definitions for RECS: 21 MS with national definitions for CECs 22 MS with no legislation on RECs or CECs Progress on enabling frameworks MS that Copy-paste of EU legislation 10 MS that have assessed potential/barriers: MS mentioning an assessment of potential/barriers: MS w/an example of removing admin/reg burdens: 12 MS that include energy sharing in transposition: 20 MS with an operational framework for energy sharing: 11

MS that differentiate energy sharing from supply: 5

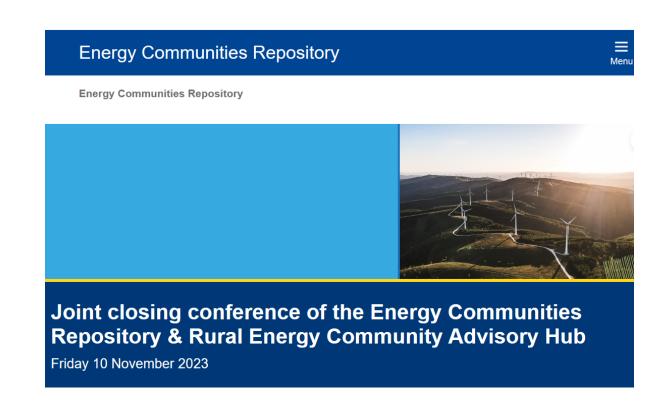
MS that have any special provision on vulnerable/

low-income households



EU Energy Communities Repository

- European Commission launched the Energy Communities Repository
- An initiative that will supports energy communities through technical assistance and training; provide policy analysis and
- Insights for policy-makers, regulators and financial institutions; and more.
- Closing conference this Friday 10th November
- Project outcomes & accomplishments will be published soon afterwards.



Examples of RESCoop members supporting smaller energy communities to organise themselves as energy sharing initiatives

GoiEner

 Preparatory work in several municipalities such as Hernani and Leitza to be able to activate Energy Communities when legislation was put into place in Spain.



Cooperative for the generation and consumption of renewable energy

 Enherkom created in Hernani region - a citizen cooperative that promotes the production of renewable energies, shared self-consumption and efficiency and savings in energy consumption.

Enercoop Midi-Pyrénées

- First energy sharing initiative in France launched in May 2022
- Pousse-Pisse solar park 250 kWp ground mounted solar PV
- Generates the equivalent energy of 250 households
- Cooperative sells energy directly to consumers within 2km of the solar park



Osona Energia Cooperative (OECoop)

- Based in Vic, Spain
- The energy communities
 of Taradell, Balenyà, Sant Pere de
 Torelló and Olost formed a 'second-degree
 cooperative
- Aim to promote the energy communities in the region
- Tool made available to energy communities to identify the 500-perimeter of shared selfconsumption
- Working in partnership with Gematico cooperative to create open source GIS software
- 27 new energy communities identified last year and 13 operational



Energie Samen - Local4Local

- 13 consortium partners, kick off project in July 2023
- Aim is for energy cooperatives will soon be able to organize their own energy supply as an energy community according to their own rules at a price that they also (together) control
- Over the next two years, everything will be investigated at seven pilot locations
- The objective of local4local is to develop and implement a cooperative model for an integrated, sustainable, collective energy supply in which the end user pays no more than the cost price+ for his energy, with minimized impact on the local energy infrastructure.



New EU level developments after the Clean Energy Package

- Fit for 55 Package
 - Renewables Directive
 - Energy Efficiency Directive
 - Energy Performance of Buildings Directive
 - Social Climate Fund
- Gas Directive?
- REPowerEU Plan
 - EU Solar Strategy
- Electricity Market Design reform

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Any questions?

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