Energy communities in Europe – legal framework and best examples

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What is REScoop.eu?

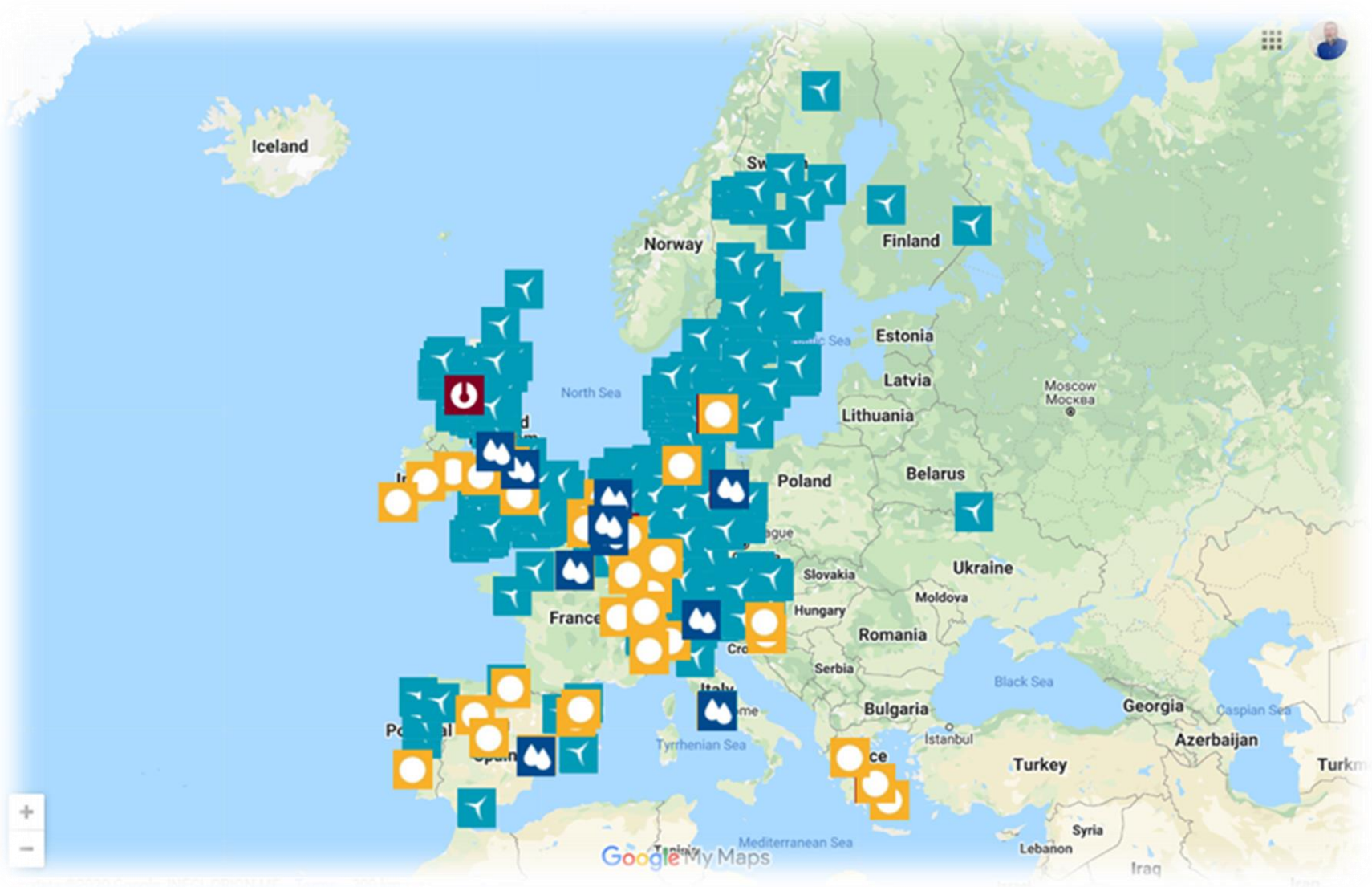
COMMUNITY POWER

cooperatives europe

The Coalition for ENERGY SAVINGS

Right to Energy Coalition

Where?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Moscow
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North Sea
Poland
Belarus
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Hungary
Romania
France
Serbia
Black Sea
Bulgaria
Georgia
Caspian Sea
Azerbaijan
Istanbul
Turkey
Tyrrhenian Sea
Mediterranean Sea
Syria
Lebanon
Iraq
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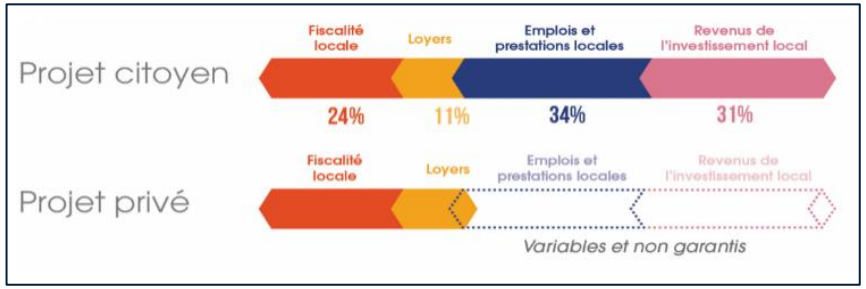
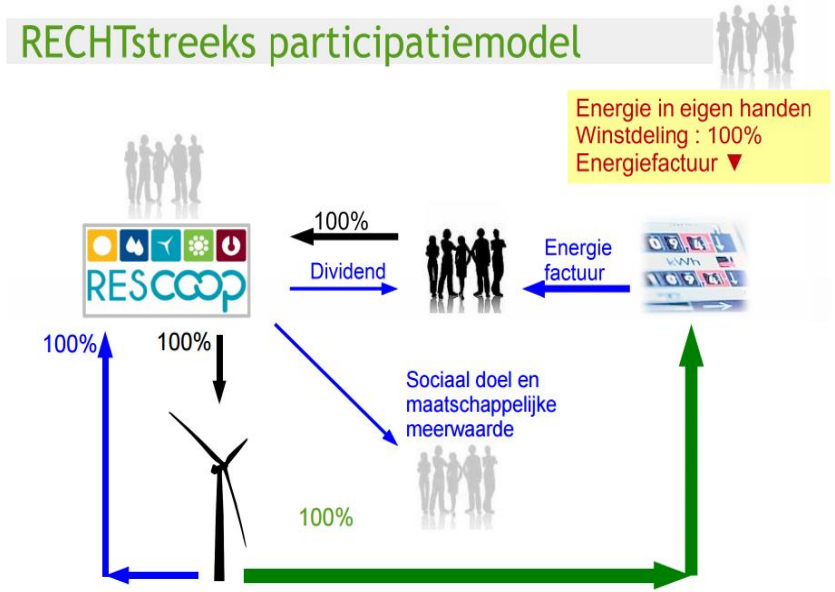
REScoop.eu: Cooperative principles applied to the energy sector

1. Voluntary and Open Membership
2. Democratic Member Control
3. Member Economic Participation
4. Autonomy and Independence
5. Education, Training, and Information
6. Cooperation among Cooperatives
7. Concern for Community

Benefits of community energy ownership

1. Revenues from local renewables to meet local needs (e.g. supply, other services, education, renovations/EE, energy poverty)
2. Democratic community ownership, empowerment
3. Economic benefits for participants (e.g. energy bill savings, return on investment)
4. Public acceptance
5. Promotion of uptake of clean energy technologies & benefits to energy system

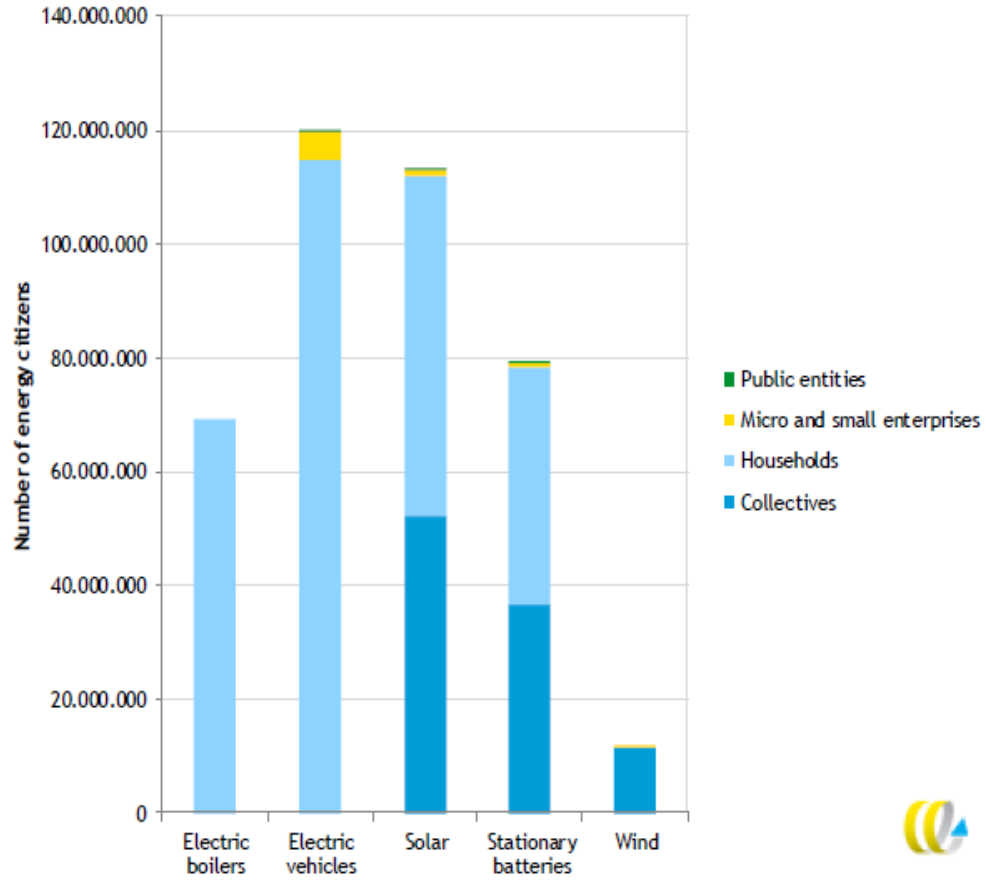




The potential of citizen participation

- 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

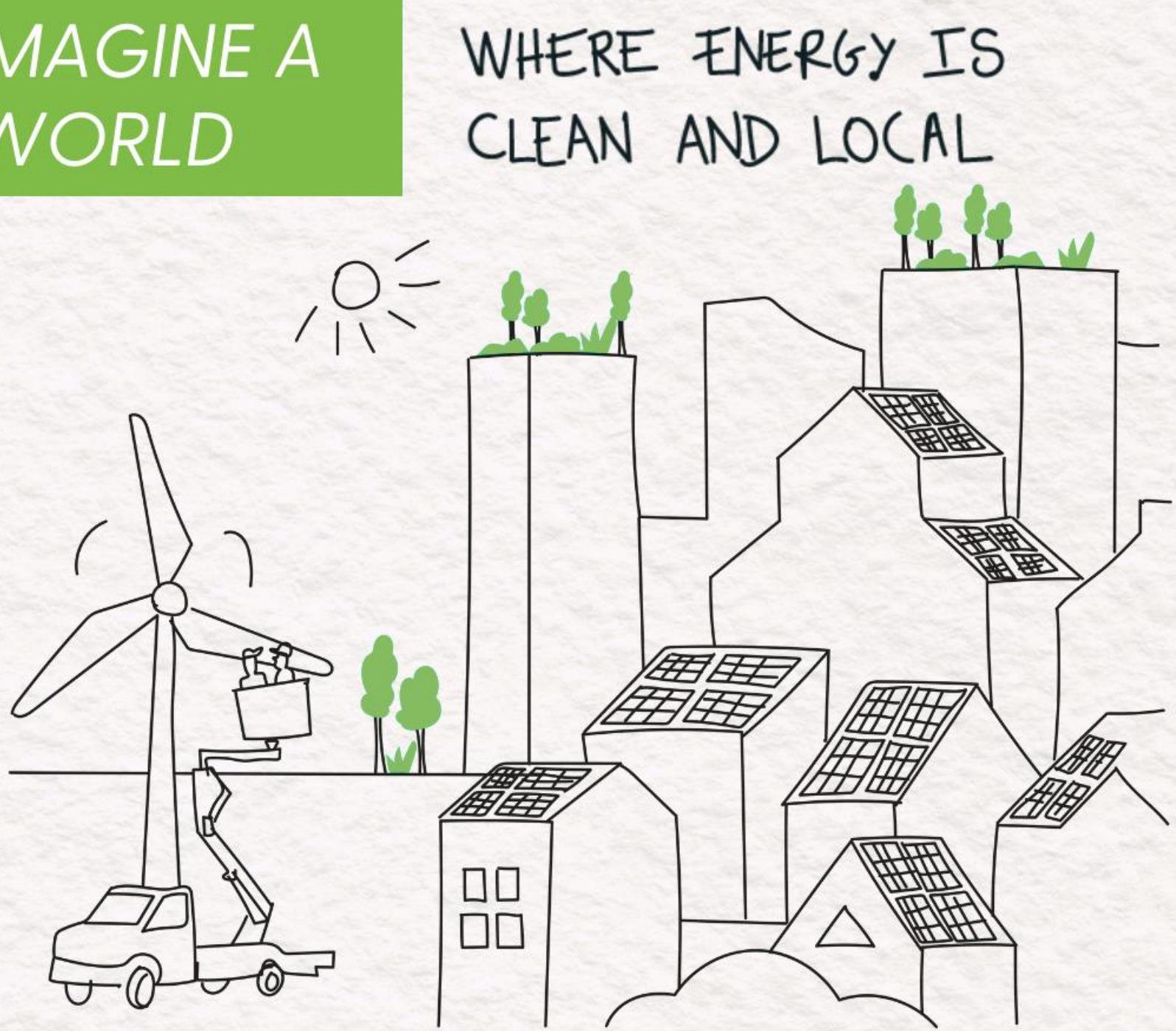


Source: CE Delft study (2016), Figure 12

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



86%

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

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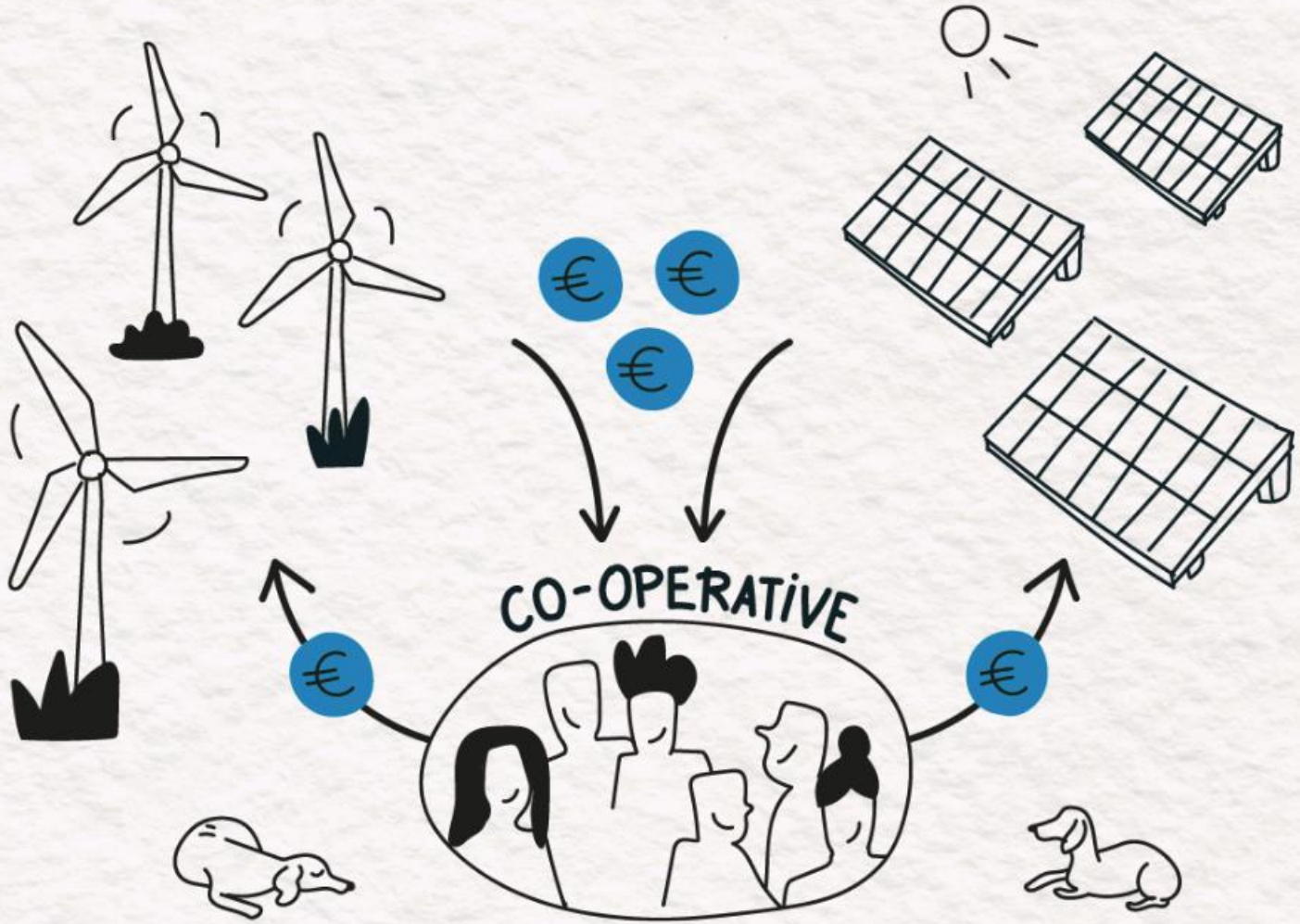
IMAGINE A WORLD

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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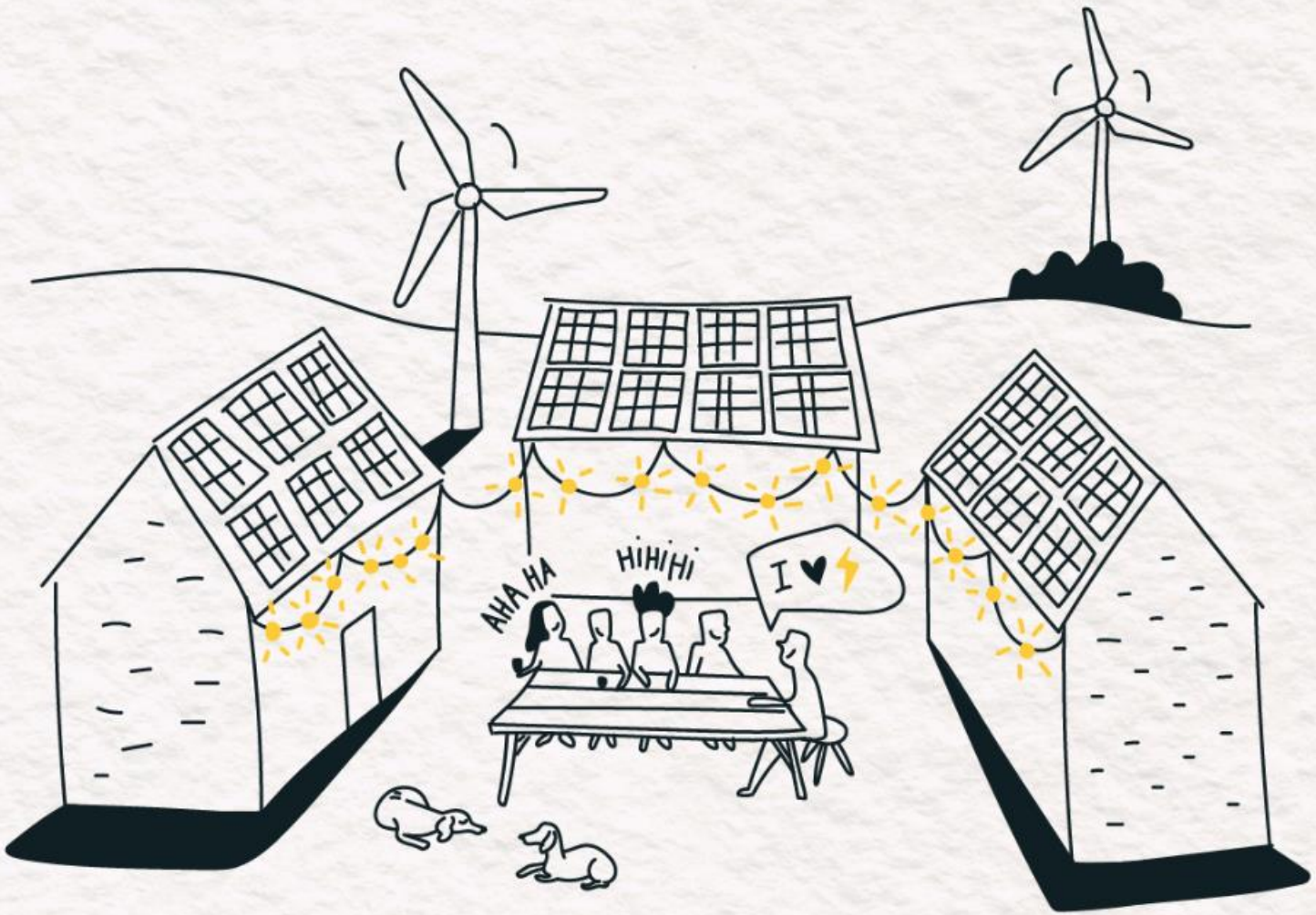
IMAGINE A WORLD

WHERE 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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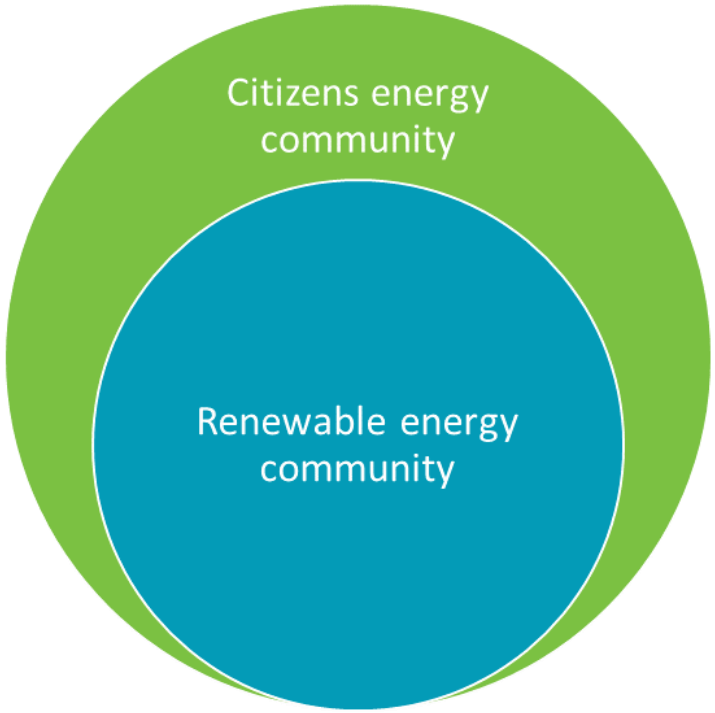
Energy communities in the CEP: an organisational concept

- Legal entity
- Non-commercial purpose
- Open & voluntary membership
- Emphasis on economic participation by citizens, small and medium enterprises and public authorities
- Emphasis on 'effective control' by members not engaged in the energy sector

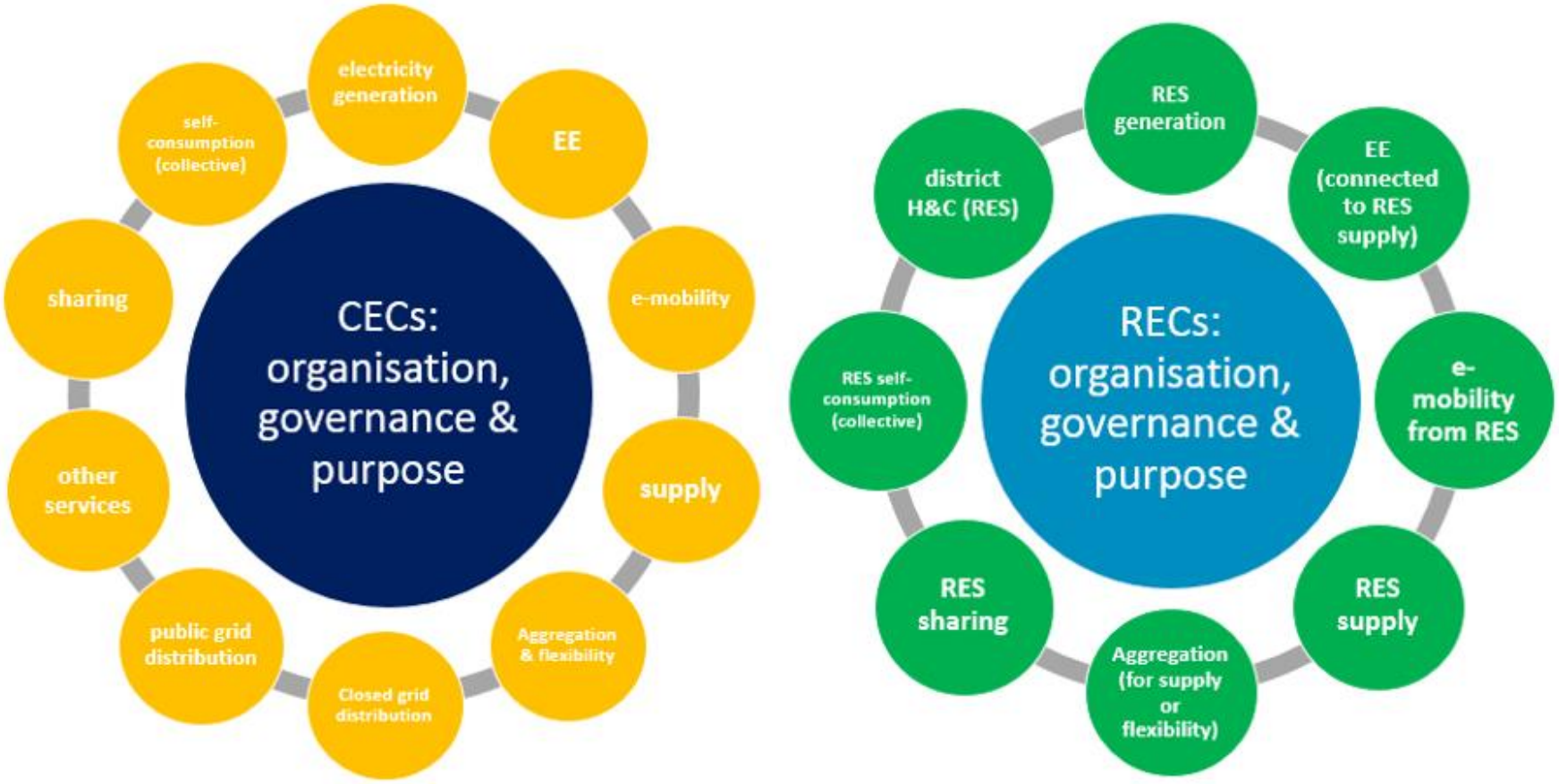


***For RECs: requirement for autonomy + emphasis on 'local'*

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.	• Participation must be voluntary. • 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*

Conclusions

1) Energy communities can help deliver EU energy and climate objectives, while delivering social innovation at the local level
2) Under CEP, energy communities are conceptually defined as non-commercial market actors, and an organizational/social concept
3) Energy communities are not framed around a specific activity – organizational model can be applied to different activities across the market
4) Principles in the definitions are meant to be applied according to context at national level
5) It doesn't end with a concept - Definitions need to be coupled with enabling frameworks and a level playing field

Should the MS only transpose the definitions?

- A complete transposition includes:

- The definitions

- For RECs → assessment of barriers and potential

- Enabling frameworks

- Taking RECs into account when designing support schemes

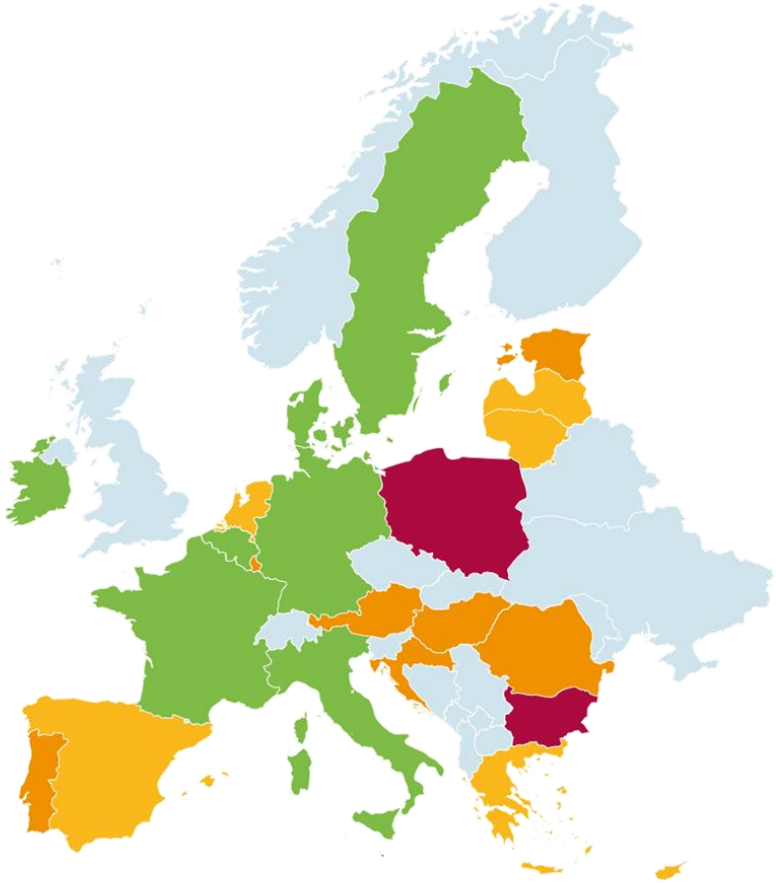
Assessing barriers & potential

ECOLOG
INSTITUT FÜR SOZIAL - ÖKOLOGISCHE FORSCHUNG UND BILDUNG gGmbH

- Several examples exist (both by governments and NGOs)
- Currently pulling together literature/experience from across the EU
- Currently developing a template
- Testing in DE and PL to contrast existing / non-existing community energy sectors
- Aim: tool to help Member States assess/learn about energy communities, the potential benefits they can provide, the existing barriers to development, and the potential measures to remove barriers.

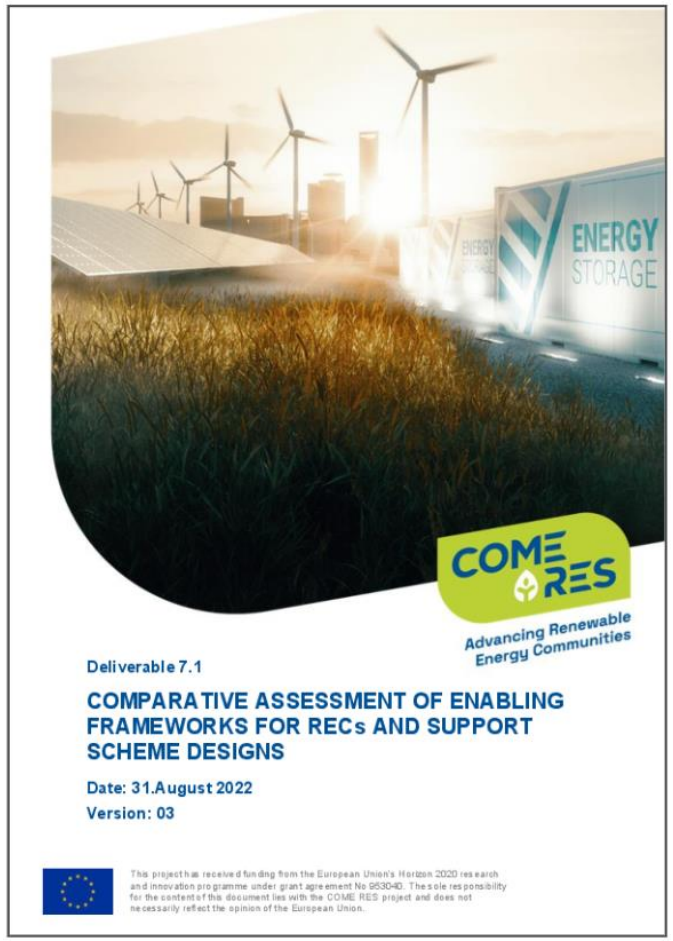
How are Member States doing?

- REScoop.eu **transposition tracker** on REC and CEC definitions
- Information on enabling frameworks and support schemes will be added by the end of 2022
- Transposition trends



https://www.rescoop.eu/policy#transposition-tracker

COME RES Deliverable on transposition progress



- Analysis of the progress in transposing and implementing the provisions contained in RED II that apply to RECs in the nine COME RES countries, namely Belgium (Flanders), Germany, Italy, Latvia, the Netherlands, Norway, Poland, Portugal and Spain
- Review of national legislation on definitions, enabling frameworks and support schemes for RECs.

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Energy Community Platform

One-stop solution for everything about community energy

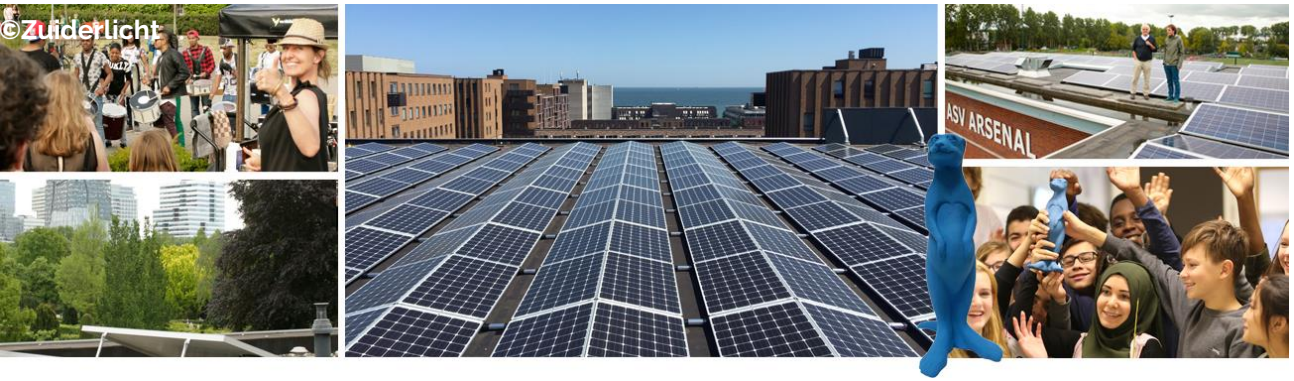
- Resources
- Maturity test
- Communities
- Experts

www.energycommunityplatform.eu

Co-funded by the European Union

Community energy examples in the EU

Netherlands



Zuiderlicht

- Solar PVs on roofs of schools, public and private buildings
- Participation in wind projects
- Central aim is the education and empowerment of citizens for their participation in the energy transition

Deltawind

- Wind and solar parks
- The biggest community owned wind park: 34 wind turbines - 100 MW
- Collaboration between 2 coops Deltawind & Zeeuwind (4.000 members)
- Energy production for more than 100,000 consumers

Belgium

Ecopower - Amel & Büllingen

- Wind farm of 4 wind turbines
- Citizen participation as prerequisite in tender
- Joint ownership model
- 50% ownership citizens
- 50% ownership municipalities

Pajopower – Halle

- Replacing 445 public street lights by LED
- Investment 225.000 euro
- Loan provided to the municipality

Beauvent – Oostende

- Cooperative district heating network
- Getting rid of gas
- Private homes
- Public buildings
- SMEs

Belgium

Partago - Ghent

- Created in 2015 by 5 neighbourhoods
- With the support of 740 citizens and local small enterprises, the cooperative possesses 74 cars and a digital sharing platform

Spain, Portugal


© SomEnergia

Som Energia

- First energy cooperative in Spain - 2010
- More than 70.000 members
- RES production of more than 18,50 GWh/year

Coopérnico

- First energy cooperative in Portugal - 2013
- More than 1.800 members
- 21 Solar PV stations rising to a total capacity of 1,9 MWp


. © Coopérnico

Spain

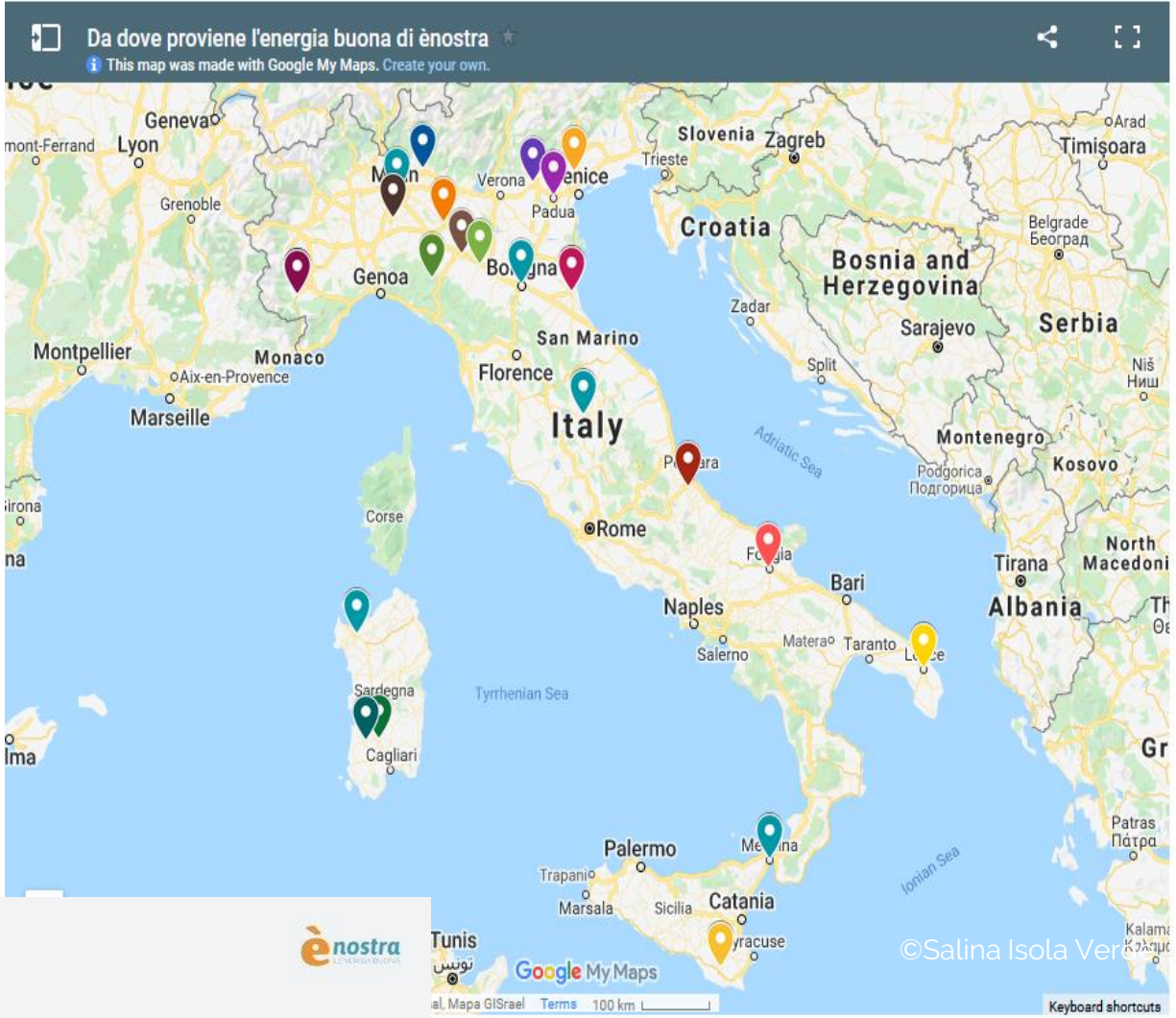
Xenergia

(Som Energía, La Corriente, ONGAWA)

Italy

enostra

- Staff employed: 21
- Number of members: 5,790
- Electricity sold (MWh): 13,982 MWh
  Renewable energy with GO 100%
- Electricity produced by selected plants (MWh): 2,899 MWh (17% of the total energy sold)



Greece

Sifnos

- First energy cooperative in Greece
- Focus on raising awareness:
  coop helped in addressing concerns about
  the installation of 2 wind turbines on the island
- Municipality became member of the cooperative
- Recently the permit has been received for the
  development of a hybrid wind & pumped hydro plan

Greece

ESEK (Karditsa)

- Local Biomass
- Wood pellets
- Becoop (Horizon Europe) support
    - the creation of new bio-coops in Europe

Greece

Hyperion Virtual net metering (Athens)

HYPERION
SOLAR COMMUNITY

Credit: Hyperion Solar Community by Electra

https://www.youtube.com/watch?v=ptwRBKVnRVU

Ireland

Energy Communities Tipperary Cooperative

- A **One-Stop-Shop for Community-led, home insulation upgrade and retrofitting**
- Assist in grant aid, sourcing of contractors and project overseeing
- Funding from the Sustainable Energy Authority of Ireland (SEAI) and in partnership with the regional energy agency and community development company (community loans)
- Between 2012 – 2019 already **827 houses and 25 communal/commercial buildings** in 13 communities have been renovated, leading up to **8.8 GWh** in energy savings through a 10.2 million Euro investment

Useful resources

- REPowerEU for Energy Citizens Manifesto: https://www.rescoop.eu/news-and-events/news/a-repowereu-for-energy-citizens-manifesto
- Transposition Guidance (REScoop.eu, ClientEarth): https://www.rescoop.eu/news-and-events/press/energy-communities-under-the-clean-energy-package
- Community Power: Model legal frameworks for citizen-owned energy (ClientEarth): https://www.communitypower.eu/images/Clientearth_report.pdf
- Transposition Tracker (REScoop.eu): https://www.rescoop.eu/policy#transposition-tracker
- Potential for energy citizens in the EU (CE Delft): https://cedelft.eu/publications/the-potential-of-energy-citizens-in-the-european-union/
- Assessment report of potentials for RES community energy in the target regions (Come RES): https://come-res.eu/resource?t=Assessment%20report%20of%20potentials%20for%20RES%20community%20energy%20in%20the%20target%20regions
- Community Renewable Electricity Generation – Potential Sector Growth to 2020 (Department of Energy and Climate Change, UK): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/274746/20140108_Community_Energy_Modelling_FinalReportJan.pdf
- Community Energy Strategy: Full Report (DECC, UK): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/275163/20140126Community_Energy_Strategy.pdf
- Roadmap for citizen renewable energy in France (Ministere de la Transition Ecologic): https://www.ecologie.gouv.fr/10-mesures-developpement-des-energies-renouvelables-citoyennes
- Barriers to renewable energy communities and opportunities in Hungary (Hnuti Duha, EMLA): https://mtvsz.hu/uploads/files/Megujuloenergia-kozossegek_Ertekelo_tanulmany_MTVSZ-SZGK-EMLA_final.pdf
- The local economic impact of citizen projects (Energie Partagee): https://energie-partagee.org/ressource/etude-retombees-eco-2/
- Study on potential of energy communities in the Czech Republic: https://frankbold.org/sites/default/files/publikace/studie_egu_brno_-_komunitni_energetika.pdf

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