

EMPOWERED

a matchmaking platform that unleashes the potential of RECs

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it is "now or never"
for the world
to avert
climate disaster

IPCC
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The European Commission aims to achieve net-zero greenhouse gas emissions by 2050, with an intermediate goal of a 55% reduction in net greenhouse gas emissions by 2030 compared to 1990 levels. The EU is in the process of revising its objectives for renewable energy to attain a **42.5% share of renewable energy sources** in its energy mix by 2030. To achieve these goals, the EU has introduced the concept of **Renewable Energy Communities (RECs)**. In May 2022, the EU and its Member States committed to establishing one REC in every city with a population of over 10,000 people by 2025.

Currently **only 2 million EU citizens are involved in a REC**, representing 9,252 RECs across the different Member States (50% of them in Germany). However, research shows that, if fully unleashed, the potential of **RECs could cover half of the EU's renewable energy production** and involve 264 million citizens by 2050. By promoting the formation of RECs and fostering citizen participation, the EU can achieve its renewable energy goals efficiently, socially and democratically.

REC?

RECs are community-driven organisations for the production and supply of renewable energy

Key legislation:

1. Renewable Energy Directive (EU) 2018/2001 (REDII)
2. Internal Electricity Market Directive (EU) 2019/944 (IEMD)

✓ RECs enhance climate sustainability:

Increase renewable energy capacity in Europe, strengthen energy security, increase energy efficiency and lower energy consumption

✓ RECs bolster economic prosperity:

Provide stability in energy costs, alleviate energy poverty, mobilize private capital in the clean energy transition

✓ RECs foster social well-being:

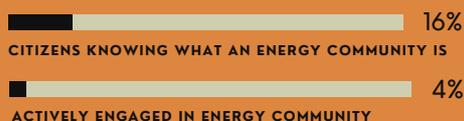
Empower consumers, enhance social cohesion and democracy and increase local acceptance of renewable energy projects

There are currently not enough RECs to meet the Commission's ambitious energy targets.

Three main obstacles remain:

Awareness

Not being aware of the existence of energy communities is the main reason for low engagement (COMETS et al, 2022).



In some Member States, consumers worry about RECs' affordability and reliability. Yet, research shows a positive attitude toward community-based renewable energy projects of over 60% (Kalkbrenner and Roosen, 2016).



Why are citizens not informed about RECs?



Although many existing EU sponsored platforms already provide information about RECs, none of them enable citizens to receive tailor-made, actionable information about RECs in their area and how to join.

Financial resources and expertise

Key barriers to setting up and operating RECs are limited financial resources and expertise.



LACK OF SKILLS/KNOWLEDGE AND FINANCIAL RESOURCES ARE SOME OF THE MAIN REASONS FOR NOT JOINING AN ENERGY COMMUNITY

In energy production, there is inadequate technical/legal know-how, and information sharing hurdles. In energy supply, RECs lack standardised grid access rules, clear timelines, procedures, and face licensing and contract challenges. Government price interventions during the energy crisis further complicate REC supply efforts.



Why is it so difficult to address these legal and financial barriers and to make the most of available resources?



Despite existing assets, there is no systematic bridge between supply (providers of financial resources and expertise) and demand (citizens and collectives). A direct, critical connection between citizens, communities, experts, investors and public institutions is missing to enable successful REC establishment.

Fragmented legal implementation and national regulatory gaps

Fragmented implementation of EU rules at the national level hampers the uptake of RECs, creating discrepancies between Member States. Incorrect transposition of the EU directives enables the co-optation of RECs by incumbent energy suppliers.



MEMBER STATES GOOD TRANSPOSITION OF THE REDII AND IEMD

Furthermore, national regulatory gaps can lead to challenges in energy sharing, data access and IT infrastructure. In some Member States, vulnerable households also face exclusion from benefits when joining RECs.



Why does the EU legal framework fail to safeguard the community focus of RECs?



There is still no operational tool to support the values enshrined in the Renewable Energy Directive and the Electricity Market Directive. This creates a risk of misuse of the REC concept that threatens the envisioned community-based model.

Policy recommendations

Based on this analysis of the practical and legal challenges surrounding RECs we identify a clear need to (i) provide citizens with tailor-made, actionable information about RECs and how to join them; (ii) improve the process of connecting potential REC participants to overcome challenges in financing as well as legal and technical obstacles; and (iii) foster the community-based nature of RECs. By solving these problems, we believe we can fundamentally improve the formation and growth of RECs across Europe. Therefore, **we propose the creation of an innovative online matchmaking platform designed to connect and empower actors interested in forming or joining a REC.** This platform places citizens at the core and serves as a hub for connecting key actors, including local municipalities, private businesses, financial, legal and technical experts, academics, NGOs, energy consultants, and potentially institutions affiliated with the EU.

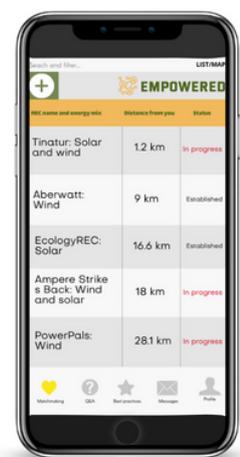
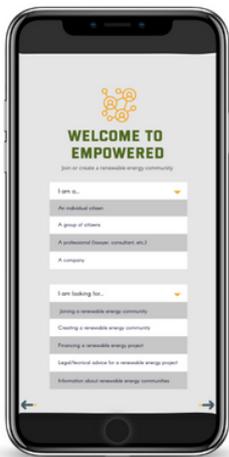
Our policy recommendations are addressed to the European Commission's DG Energy. The user-based matchmaking platform for the uptake of RECs is based on three main pillars:

- L **Platform creation and governance.** DG Energy should commit resources to the creation of an EU-wide online platform (both web and mobile app) facilitating the connection and empowerment of citizens to establish RECs. Two options arise:
 1. DG Energy taking on the administrative responsibilities of the platform in-house; or
 2. Having a long-standing entity with experience in supporting RECs (e.g., REScoop) create and maintain this EU-wide platform.
 - The online platform's development should be initiated through a targeted tender or call for proposals, inviting skilled software developers to collaborate with DG Energy and affiliated parties.
 - Once established, the platform's management should be further enhanced by appointing designated administrators for each Member State or region.
- L **Conscious platform design.** The platform should be purposely designed to foster the community-based nature of RECs, thereby preventing undue influence by incumbent energy companies and commercial interests that may conflict with the needs of local communities. This would ensure that RECs are established in alignment with the substance and intent of the European Green Deal and the Renewable Energy Directive, while complementing Member States' transposition of the Directive.
 - The platform design should set a clear "in-app" threshold for the percentage share of community ownership required for new RECs joining the platform. This is a tangible way for EU institutions to enforce the provisions of the Renewable Energy Directive to enhance community ownership in the energy sector (a regional example of this kind of threshold being currently implemented in practice is Wallonia, which requires new wind energy projects to initially offer 25% ownership to citizen participation).
 - The platform design should enhance transparency regarding commercial interests by including special user categories for corporations, financial institutions, and incumbent energy utilities.
- L **Platform promotion and scaling up.** The matchmaking platform's success hinges on user growth, as its benefits increase exponentially with more participants. Therefore, DG Energy must actively promote the platform to existing RECs, associations, national authorities, experts, business service corporations, and various stakeholder groups. By leveraging existing REC-oriented resources and networks, DG Energy can ensure that the platform reaches a critical user base allowing for the effective uptake of RECs in the EU. An EU-led platform also enables a direct connection between the EU and its citizens.



EMPOWERED
JOIN OR CREATE A RENEWABLE ENERGY COMMUNITY

OUR DEMO OF A TOOL THAT CONNECTS CITIZENS AND SIMPLIFIES THE CREATION OF RECS. IT PROVIDES A MATCHMAKING PLATFORM THAT BRINGS TOGETHER DIFFERENT STAKEHOLDERS INTERESTED IN SETTING UP OR MAINTAINING A REC.



Through the platform, citizens, communities, professionals and public institutions can access tailor-made and actionable information and opportunities to

- Create a REC
- Join a REC
- Find information about RECs

After creating a profile based on needs, resources, expertise, and geographical location, the tool suggests suitable connections, projects or collaboration opportunities.

Based on the model of traditional matchmaking apps used in other sectors (e.g. hospitality, dating, gig working etc), our tool presents users with potential "matches" that fit their criteria for creating, joining or searching info about RECs in their region.