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EMPOWERED

A Matchmaking Platform Unleashing the Potential of Renewable Energy Communities

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Executive Summary

The Intergovernmental Panel on Climate Change (IPCC) recently issued a stark warning: it is "now or never" for the world to avert a climate catastrophe (Pörtner et al. 2022).

In response to this call and as a commitment to climate justice, the European Commission has set ambitious targets, aiming to achieve **net-zero greenhouse gas emissions by 2050**, with an intermediate goal of a 55% reduction in net emissions by 2030 compared to 1990 levels (see <u>'Fit for 55' strategy</u>). Furthermore, the European Union (EU) is revising its objectives for renewable energy to attain a 42.5% (with the intention to reach 45%) share of renewable energy sources in its energy mix by 2030, up from the current 32% target.

To achieve these objectives, the EU champions **Renewable Energy Communities (RECs)**, which are community-driven entities dedicated to the production and supply of renewable energy (European Commission 2023a). In May 2022, the EU and its Member States launched a bold initiative: establishing a REC in every city with a population exceeding 10,000 by 2025 (see <u>EU</u> <u>Solar Energy Strategy</u>).

Currently, only 2 million EU citizens are involved in a REC, representing 9,252 RECs across Member States in 2022, 50% of which are located in Germany (Wierling et al. 2023). 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. Currently, the number of RECs in the EU has yet to reach its full potential, with their share in the energy mix remaining low. Our research and data show that this is due to (i) a **lack of awareness** of the existence and functioning of RECs; (ii) **complexities in sourcing the financial resources** and legal and technical expertise necessary to create and manage RECs; and (iii) **fragmentation** in the transposition and implementation of EU directives across Member States.

In light of the climate emergency and the EU's commitments to mitigate its effects, this proposal focuses on the potential of RECs as a pivotal instrument for enabling a just energy transition.[1] It proposes an EU-initiated, userdriven matchmaking platform designed to foster collaboration between REC stakeholders. The report comprises the following sections: (1) an explanation of RECs' benefits and potential; (2) why RECs are not currently fulfilling this potential and how a matchmaking platform would help to realise it; (3) a detailed policy recommendation for implementing the online platform; and (4) a platform pilot design that accounts for the discussed benefits and challenges of RECs.

This proposal highlights the transformative potential of RECs as a crucial tool for achieving a just energy transition and presents a comprehensive policy recommendation for the establishment of an EU-driven matchmaking platform to unlock their full capacity.

[1] We previously wrote: "Europaeum Scholars on Empowering 'Renewable Energy Communities' in the European Union", 17 November 2022: <u>https://europaeum.org/empowering-renewable-energy-communities/</u>.

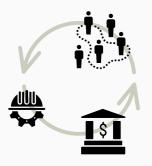
The untapped benefits and potential of RECs

The EU has established a legal framework for the development of energy communities based on Article 194 of the Treaty on the Functioning of the European Union. This states that energy policy is a shared competence between the EU and its Member States, and that promoting renewable energy is one of the goals of EU energy policy. On the one hand, the **Renewable Energy Directive** (EU) 2018/2001 establishes the legal framework for RECs and requires Member States to enact regulations that facilitate the self-consumption of renewable energy.[2] On the other hand, the **Internal Electricity Market Directive** (EU) 2019/944 encourages active consumer participation in electricity markets through a different, although closely related, legal concept: citizen energy communities (CECs). While our focus is on RECs, both directives are relevant because they impose similar obligations on Member States to enable citizen-led energy communities at the local level.

Key legislation

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

What are RECs?



The Renewable Energy Directive defines a REC as a legal entity that is:

(i) open to voluntary participation; (ii) autonomous; and (iii) controlled by shareholders or members located near the renewable energy project itself. The shareholders or members can be natural persons, small and medium-sized enterprises or local authorities, including municipalities. A REC's primary purpose is to provide environmental, economic, or community benefits for its shareholders, members, or the local areas where it operates.

The Directive's definition leaves room for interpretation, as Member States transpose and implement the criteria in their national legislation. While some see energy communities as a way to increase the use of renewable energy, others emphasise their community aspect (IRENA Coalition for Action 2018) or the economic advantages for particular groups (Smith 2023). Differences in national implementation lead to uneven harmonisation and regulatory gaps in Member States, impeding the effective uptake of RECs (see infra 3.3).t

While RECs are a relatively new addition to the EU's policy cooperative framework, energy production and consumption has a long history in Europe (Wierling et al. 2018). Many existing RECs evolved from cooperatives that are several decades old (e.g., Belgian cooperative Ecopower). The EU is currently working on a map of all energy communities in Europe, and research shows that over 8,000 citizens-led energy initiatives exist in Europe (Wierling et al. 2023, 9). RECs can also be organised in different ways. Members of RECs can be citizens, collectives (public entities, NGOs, etc.) and businesses / professionals (farmers, energy companies, etc.). So-called prosumers (i.e., individuals who are both producers and consumers of energy) can also be members.

The different participants contribute to the REC in through various ways, including financial resources, expert knowledge (technological, financial, legal, etc.), infrastructure, and land ownership. RECs can subsequently develop through different business models, such as energy cooperatives, community prosumerism, local markets. third-party-sponsored energy communities, and community energy service companies (Kubli and Sanket 2023).

[2] This directive is currently under review as the European Commission made a Proposal for a Directive for the promotion of energy from renewable sources: COM/2021/557 final.

Benefits and Potential of REC

The positive impact of RECs is threefold: (i) they enhance climate sustainability; (ii) bolster economic prosperity; and (iii) foster social well-being.

In relation to sustainability goals, RECs increase renewable energy capacity in Europe (Wierling et al. 2018) and strengthen energy stability, (Heldeweg and Saintier 2020) enabling the speeding up of the EU's energy transition. Research shows that half of all EU citizens could produce their own renewable electricity by 2050, which would account for 45% of the EU's energy demand (FoE Europe 2016).

In terms of economic benefits, RECs reduce and stabilise energy costs and, thereby, tackle energy poverty. RECs also democratise and provide more flexibility in the energy market. Furthermore, RECs support security of the energy market through decentralisation, increased energy efficiency and lower energy consumption (Come Res 2023: 60). Decentralising the energy market is one of the objectives of the Renewable Energy Directive (see Recital 65) and experts already note a shift towards greater consumer involvement in market (Zachmann the energy and Heussaff 2023, 11). This shift requires longterm structural reforms (ibid: 25), such as regulatory and grid management changes.

The social benefits of RECs flow from their

commitment to energy justice (Hanke, Guvet, Feenstra 2021) and the empowerment of citizens. They also increase community awareness (European Environment Agency 2022) and the local acceptance of renewable energy projects and the energy transition (WISE Power 2016, 60). This is especially true for wind energy, which has a far greater production capacity than solar energy, yet often faces local resistance. Current research shows that involving citizens in the decision-making and implementation of renewable energy projects, such as in RECs, leads to a significant reduction in objections and disputes (European Commission 2022).



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Significant challenges to REC establishment

Methodology

Our research analysed existing policy frameworks and academic literature. We complemented our research insights with qualitative methods; 15 semi-structured stakeholder interviews and an expert survey. The interviewees are based across the EU and have different professional backgrounds, including NGOs, academia, businesses, local authorities, private and EU-affiliated energy consultants, institutions. The survey was distributed to multiple experts. We received 19 responses from Spain, Italy, Belgium, Bulgaria, United Kingdom, Estonia, Germany and the Netherlands. As we targeted experts directly involved in establishing and maintaining RECs, the responses provide meaningful insights into the many complex obstacles that REC projects have faced and are still facing.

Identified key challenges

The implementation of RECs across the EU progresses far too slowly to meet the Commission's energy targets. We identified a plurality of factors hampering this development:

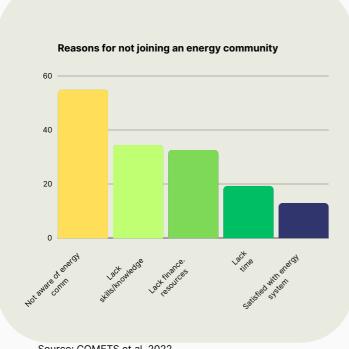


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A. Lack of awareness and connection related to RECs

Citizens are generally supportive of communitybased renewable energy projects, as evidenced by a study in Germany, where 60% of those responsible for energy-related decisions within their households expressed a positive attitude towards such initiatives (Kalkbrenner and Roosen 2016).

However, despite this favourable disposition, research indicates that a lack of awareness hinders widespread participation (see figure below). Merely 16% of European citizens are acquainted with the concept of energy communities, and a mere 4% actively engage in one (ibid). This knowledge gap is particularly prominent in Central and Southern Europe. Regrettably, even authorities and decision-makers often remain uninformed about the untapped potential of RECs (Proka 2022), further constraining their growth and impact.



Source: COMETS et al. 2022



Misinformation about RECs and uncertainty regarding their affordability and energy stability prevail as widespread awareness challenges. This is especially true in Member States with low trust in public authorities. A further reason is the scepticism towards cooperative economic models. Researchers observed this especially in Central and Eastern European countries with socialist histories (Standal, Aakre, and Leiren 2022. Community sense and trust are essential in the acceptance and participation in RECs.

Our expert interviews corroborate these results. The lack of accessible information about RECs presents a principal challenge among important stakeholders. This is critical since citizens must fully comprehend the concept, benefits, and implementation process of RECs before establishing one.

B. Lack of financial resources and technical expertise about RECs

Our research and interview data emphasise that limited financial resources and a lack of technical knowledge are further hurdles to the establishment and maintenance of RECs (see figure above). Very few financing schemes are tailored to the diverse needs of energy communities. Private financing mechanisms, such as investors and financial institutions, are often unavailable to RECs because the latter do not present the typical business case and expected returns. RECs are small, risky ventures that maintain democratic governance and ownership models. They also generally raise the bulk of their financing after the financial close of their project (REScoop 2022).

What about public financing?

Public financing can provide a solution to riskaverse energy communities throughout the EU (e.g. EU regional funds, Cohesion policy funds, Recovery and Resilience Facility, Just Transition Mechanism, Modernisation Fund) (Arnould and Quiroz 2022). However, many regional funding programmes require budget or investment thresholds which are too high for most RECs to qualify. Additionally, the complex application processes of grants hold back many communities with less technical and organisational capacity (ibid). This access is further hindered by delayed, inadequate and/or constantly changing national and regional policies (ibid).

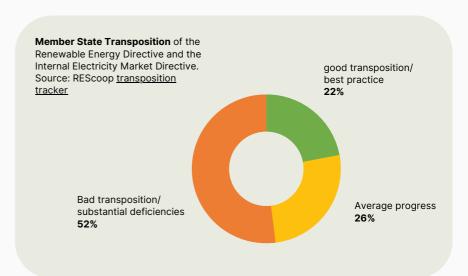


A complicated path

Citizens and local authorities often lack the skills and expertise to develop community energy projects on their own (Proka 2022). A recent survey found that almost 50% of participants either "agree" or "strongly agree" with the statement that "[having] technical knowledge is a key condition to be a member of an energy community" (Andor et al. 2020). Technical issues largely pertain to energy supply and sharing, specifically through a lack of information sharing, IT infrastructure, and energy sharing using the public grid. Technical challenges also encompass a lack of expertise in designing, planning, procuring, implementing, commissioning a project, as well as insufficient expert knowledge in operation and maintenance (Aoidh et al. 2020). These challenges become particularly problematic when RECs take on the intricate role of energy suppliers, operating in a market where electricity consumption needs to closely follow its production, all the while maintaining a steady equilibrium between electricity production and consumption (European Commission 2023).

C. Fragmented legal implementation of RECs

A fragmented implementation of EU rules at the Member State level also hampers the uptake of RECs by making the regulatory landscape more favourable in some Member States than others. The figure below summarises the quality of transposition of the two EU directives that promote energy communities at Member State level, using data from <u>REScoop</u>. The assessment for over half of the Member States is negative: only 6 out of 27 Member States have transposed the directives correctly.



Member States are obliged to ensure the correct implementation of the concept of Renewable Energy Communities. Article 22 of the Renewable Energy Directive prescribes that Member States must "carry out an assessment of the existing barriers and potential of development of renewable energy communities in their territories." National governments must provide an enabling framework to promote the development of RECs. Analysis of Member States' reports on the progress in their national energy and climate plans (NECP)[3] in 2019 shows that actual commitment towards RECs is limited (Roberts and Gauthier 2019). Our analysis of the final reports confirms this. Most NECPs mention RECs by name and list some potential benefits, but only a few Member States present specific plans for the integration and facilitation of RECs in 2019.



Lacking implementation or compliance at the Member State level challenges the proliferation of energy communities in many ways. Incorrect transposition reinforces the problems listed above as it impedes the awareness about RECs among the European population and creates regulatory gaps at the national level, leading to practical problems in the creation of RECs (such as complex permitting rules, unfavourable financing structures, or data access issues). In some Member States, vulnerable households also risk exclusion from some social benefits as a consequence of joining RECs (European Commission 2023c).

Scholars note that some forms of RECs may coincide with the commercial interests of energy corporations (Laes and Bombaerts 2022. However, incorrect or incomplete implementation of the EU directives may open the door for the undue co-optation of RECs and their governance by incumbent energy suppliers. When no attention is paid to these enery sector dynamics in the transposition of the directives, the concept of RECs can become misused for commercial gain, as warned against in the preamble of the Renewable Energy Directive (see Recital 71). Policy choices in the energy domain must ensure the development of the "right kind of REC" (Anfinson et al. 2023). This is not to say that cooperation between energy cooperations and communities cannot be successful. For example, the energy supplier Eneco works with different energy cooperatives in the Netherlands and Flanders to meet targets in new renewable energy projects (Solar Magazine 2022; Verheggen 2015.

A Call for Action

Based on this research on RECs we identify a clear need to (i) improve the process of connecting potential REC participants in a community-centred way; and (ii) help new and existing RECs to overcome financial, legal, and technical obstacles. 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 stakeholders interested in RECs. 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 EU-affiliated institutions. Users would start by creating a profile based on their energy interests, expertise, geographical location, and other factors and search filters. Algorithms would subsequently analyse this information to suggest suitable projects or collaborations for users to join or create.



Policy Recommendation: A Matchmaking Platform for RECs

Our policy recommendation is that DG Energy should allocate resources toward developing an EU-wide online matchmaking platform that connects and empowers citizens in the establishment of RECs. The platform should have three principal pillars, being:

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Proposal

I. An EU-led platform

DG Energy should be strategically involved in the creation of the platform, which would serve as a key instrument for implementing the EU Action Plan for Digitalising the energy sector. In terms of governance, the optimal approach would be for DG Energy to assume direct administrative inhouse control. By integrating the platform as a central hub for the energy transition, DG Energy can align with the strategic vision of existing EU-funded programmes and effectively mitigate challenges often associated with segmented, project-based initiatives that elapse without continuity. Another option would be to give a long-standing entity with experience in supporting RECs, such as REScoop (which is the European federation of citizen energy cooperatives), the mandate to develop this EU-wide platform.

In practice, the online platform should be initiated through a targeted tender or call for proposals, inviting skilled software developers to collaborate with DG Energy (or a partner like REScoop) and affiliated parties. This collaboration should include the design, implementation, and ongoing maintenance of the platform, ensuring that it meets the specific needs and standards of the process to create RECs in current market conditions. Once established, the platform's management should be further enhanced by appointing designated administrators at DG Energy and for each Member State or region. These administrators should be responsible for updating the legal landscape of national energy markets, as well as moderating and verifying the REC networks formed within it. By implementing a rigorous verification process, they would also play a crucial role in preventing platform misuse.



II. A community-enabling platform by 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.

Concretely, 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 (Gouvernement Wallon 2022). Such thresholds ensure that community interests remain central to any REC initiated or searchable on the platform. Moreover, the platform should include separate user category tags and colour codes for different stakeholder groups (e.g., for-profit businesses, cooperatives) to enhance transparency regarding commercial interests and incumbent energy utilities.



III. A wide-reaching platform through promotion

The matchmaking platform should have extensive reach across the EU. To enhance accessibility, it must be available via both a website and a mobile application. DG Energy should actively promote the platform to existing RECs, associations, national authorities, experts, business service corporations, and other stakeholders. The platform's features and strategic promotion will ensure active engagement with the platform. This is crucial as the platform's benefits grow exponentially with an increase in participants, which will consequently lead to a higher number of RECs. This will also increase pressure on Member States to address national regulatory barriers.



Justification

This subsection summarises how a proposed matchmaking platform addresses the challenges of establishing a RECs outlined in Section 2, namely: (i) a lack of awareness about RECs; (ii) a lack of financial resources and technical expertise; and (iii) a fragmented legal framework. The subsequent analysis delves into the available online resources and their limitations, reinforcing the need for a unified matchmaking platform to facilitate REC establishment.

How a platform resolves challenges in REC establishment

Our research on awareness shows a gap between the positive attitude towards RECs among citizens and the low level of actual engagement in RECs. The reason is the general lack of awareness about RECs. In creating an easy-to-use tool for REC establishment and management, we aim to popularise RECs as an alternative energy form and accelerate their creation. Furthermore, launching a promotional campaign for the platform will raise awareness about the potential of RECs.

Our research also finds a perception among Europeans regarding a lack of readily available information about RECs. Actors like REScoop. the Energy Communities Hub and various EUfunded projects such as the Energy Communities Repository provide a plurality of information and guides about RECs. For citizens, the issue lies in accessibility and "sailing the sea of information" – while there is a variety of existing helpful resources, there is currently no coherent way to find specific resources for specific needs. The matchmaking feature of our app and the FAQ section address this hurdle by making the existing information on RECs easier to navigate.

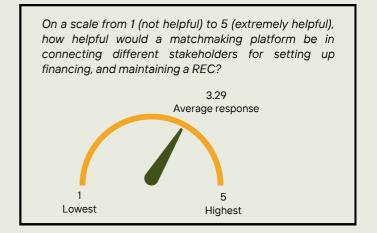
A lack of financial, legal, and technical expertise was highlighted as a further barrier to the establishment and maintenance of RECs. In connecting citizens with financial, technical and legal experts, the platform allows citizens to overcome these issues and gain essential knowledge and advice on the process of establishing complex and maintaining a REC. All the while, it caters to the legal, financial and geographical diversity of the EU's citizens. The platform also illuminates best practices and connects established and experienced RECs with citizens who are interested in joining them or starting their own REC.

Through the choices made when designing the platform, the EU can also ensure that the impact of the fragmented implementation of EU rules is mitigated. By limiting access to the types of projects considered a REC within the framework of the Renewable Energy Directive, the EU can prevent the misuse of the REC concept. As introduced above, one way to achieve this is by introducing thresholds community on participation. The platform can take inspiration from national legislation on permitting, for example, in the Netherlands, where 50% of the energy output of new renewable energy projects needs to be dedicated to the local community (see Klimaatakkoord). To get a permit for a new project, developers must supply a so-called "participation plan" outlining how they will reach this target before a permit is approved.

Survey results confirm the platform's benefits

Our survey results affirm that a platform can be instrumental in addressing key challenges in REC establishment and organisation. While the survey answers illustrated here indicate that a matchmaking platform would be helpful (average score 3.29 out of 5), respondent comments also demonstrate confusion regarding the nature and utility of a platform. This has prompted us to articulate a clearer and more precise definition of our proposed matchmaking platform in this report.

A directory of individuals, businesses, and intstitutions interested in RECs
 A search feature to find potential partners based on specific criteria (location, interest, exerptise etc)
 Informational resources (guides, case studies, legal advice etc)
 A communication tool to facilitate discussions and collaborations
 Project management tools to help organise and track progress in setting up a REC
 75



The bar chart outlines survey responses on functionalities that respondents deem valuable for a REC matchmaking platform. Most notably, respondents give an average score of 64 out of 100 to "information resources" as an essential feature of a matchmaking platform - a feature that our proposal incorporates.

This also highlights the previously explored issue of making existing information more accessible, which our search and FAQ features aim to accomplish. Furthermore, the results indicate a preference for "a search feature to find potential partners based on specific criteria," which scored 10 points higher than "a directory of individuals, businesses, and institutions interested in RECs." In alignment with this preference, our proposed platform is designed to offer such a search feature instead of a directory. Below are the detailed results:

> The feedback from the survey serves as both relevant and encouraging evidence as we elaborate on our proposed online matchmaking platform for RECs.

Currently, no comprehensive matchmaking platform is designed to connect citizens interested in joining or forming a REC with likeminded individuals, nor to facilitate their collaboration with key stakeholders. While existing initiatives have begun to explore certain features that such a matchmaking platform would include, this exploration only underscores the importance of each feature. Moreover, these initiatives demonstrate that the true potential of these features could be exponentially amplified by integrating them into a cohesive matchmaking platform. In our interviews, experts praised the existing initiatives providing information and advice on RECs. Still, they stressed a prevailing lack of connection between individuals, experts, and resources related to establishing RECs across Member States. This explains why we have chosen not to propose a simple awareness campaign related to RECs, basic directories of individuals wanting to establish RECs and experts, or a platform meant only for a specific region of the EU or a single energy source. The subsequent subsections present our analysis of the main existing initiatives relevant to our proposal.

Information and advisory hubs for RECs

Information-sharing initiatives are crucial in disseminating knowledge, best practices, and insights on and for RECs. For example, the <u>Energy Community Platform</u> serves as a one-stop shop, providing tools, resources, and a community energy map to citizens across the EU. Similarly, the Energy Communities Hub focuses on providing an overview of regulatory developments related to renewable and citizens' energy communities, offering country comparisons and insights into emerging energy communities following EU definitions. Projects such as <u>SHAREs</u> and <u>UP-STAIRS</u> also help with the creation of information and advisory hubs in different Member States. Advice-giving initiatives such as the <u>Energy</u> <u>Communities Repository</u> and <u>Rural Energy Community Advisory Hub</u> provide targeted support to RECs. The Energy Communities Repository offers technical and administrative advice to urban RECs, while the Rural Energy Community Advisory Hub extends similar support to rural areas.

Mappings of REC initiatives

Mappings of RECs are essential for visualising the existing landscape of energy communities. Organisations like <u>REScoop</u> (the European federation of renewable energy cooperatives) and <u>Energie</u> <u>Partagée</u> (a French organisation that supports local renewable energy projects) are involved in such efforts. Their initiatives include interactive maps, directories, and databases that showcase the location, size, energy source, and impact of various energy cooperatives.

New technologies and platforms providing support to RECs

Platforms, like <u>NRG2peers</u> and <u>GoParity</u>, leverage digital technologies to support RECs. NRG2peers uses a gamified platform to increase energy efficiency in targeted residential energy communities. GoParity facilitates public investments in energy communities through peer-tp-peer lending, and has enabled projects like the 6 kW PV system for the Sweden School of Lisbon. These platforms showcase the potential of technology in shaping the renewable energy landscape.

Non-REC matchmaking initiatives

While targeted matchmaking initiatives are designed to foster collaboration in various sectors, a notable gap exists in these services specifically for RECs. For instance, the <u>Smart Cities Marketplace</u> serves as a comprehensive hub for urban development, connecting city-led consortia and investors through specialised matchmaking services and events. These initiatives successfully create and identify bankable smart city proposals, leveraging networks and resources to drive innovation and investment. However, the focus on urban development leaves RECs without dedicated matchmaking support.

Features and design of the "Empowered" pilot matchmaking platform

Our pilot matchmaking platform is called "**Empowered**." It adopts the model of matchmaking apps that have recently flourished in various sectors, including hospitality, dating, and gig working. To demonstrate the platform's potential, we provide visualisations illustrating how it would operate in practice.

Register

1

First, stakeholders would create comprehensive profiles, including details such as their location, interests and needs, expertise and resources, as well as other relevant information.

| | WELCOME TO EMPOWERED |
|--------------------------|--|
| G | Sign in with Google |
| 0 | Sign in with Facebook |
| | Sign in in with Phone Number |
| 2 | Create Account |
| | Trouble signing in? |
| By tapping Cro proces | ate Account or Sign Ix, you agree to our Terms. Learn how we a your data in our Privacy Policy and Cookice Policy. |

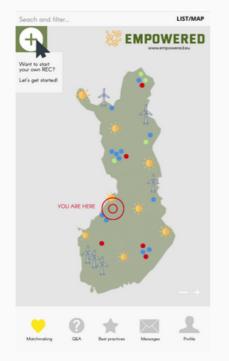
| چې | |
|-------------------------------------|--------------------|
| WELCOME EMPOWE | RED |
| I am a | - |
| An individual citizen | |
| A group of citizens | |
| A professional (lawyer, consultant, | etc.) |
| A company | |
| | |
| I am looking for | - |
| Joining a renewable energy comm | unity |
| Creating a renewable energy comm | munity |
| Financing a renewable energy proj | ect |
| Legal/tecnical advice for a renewa | ble energy project |
| Information about renewable energ | y communities |

| Seach and filter | | LIST/MAP |
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Meet partners

Subsequently, algorithms would analyse profile information and preferences to suggest suitable connections between stakeholders, REC projects, and collaboration opportunities, based on their localisation and affinities. Existing RECs would be depicted on the map as "icons" representing the energy source. Potential partners to create a new REC would be shown as "dots" of different colours, representing various areas of expertise.

Potential partners and RECs could also be seen in list form. For example, when selecting 'list' and 'RECs' on the match-making tab, users could see a list of existing RECs they could join, whether Established or In Progress, within their defined perimeter.



| Seach and filter | | LIST/MAP | |
|--|-------------------|-------------|--|
| + | 👹 EMPOWERED | | |
| REC name and energy mix | Distance from you | Status | |
| Tinatur: Solar and wind | 1.2 km | In progress | |
| Aberwatt: Wind | 9 km | Established | |
| EcologyREC: Solar | 16.6 km | Established | |
| Ampere Strikes Back: Wind and solar | 18 km | In progress | |
| PowerPals: Wind | 281 km | In progress | |
| SunshineCitizen: Solar and biomass | 29.5 km | Established | |
| Helios: Wind | 37 km | Established | |
| Nymphea. Solar and hydropower | 41.2 km | Established | |
| EnergyForUs: Geothermal | ó1 km | In progress | |
| • 0 | | 1 | |

Get in touch

3

A forum on the platform would enable users to make initial contact with potential REC partners and experts. Partners could be contacted with or without a match. After establishing a formal connection, citizens, businesses, and public entities could link their profiles to one another to promote their REC collaboration.



Learn more

The platform would feature a Q&A section. This section would condense essential information on RECs and provide links to existing best practices guides and existing supporting organisations.

Stakeholders could also add RECs from all over Europe to a List of Favourites, accessible through a Favourite tab. This tab would present them with a curated selection of particularly successful European RECs, offering inspiration for their own endeavours.



Our proposal aims to spark a revolution in how RECs are established across Europe. Our user-based matchmaking platform is poised to decrease the obstacles that hamper the growth of RECs: from a lack of awareness, to complexities in obtaining financial resources and navigating intricate legal and technical issues. Connecting citizens and energy communities and facilitating collaboration with experts is a significant stride toward a greener and fairer Europe, where community-driven renewable energy is no longer the exception, but becomes the norm.

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