

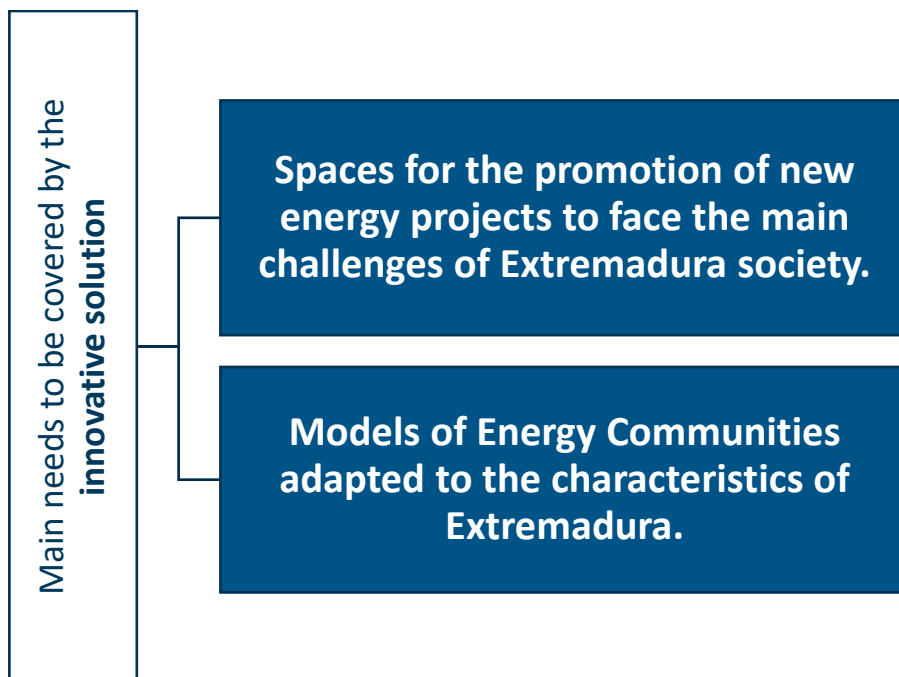
CALL FOR SOLUTIONS

Challenge description – EXTREMADURA

Call title

Increasing general knowledge on energy issues, fostering collaboration between key actors and promoting the development of new energy solutions for the benefit of society.

Full description of the energy innovation need



According to the innovation needs identified, to achieve the changes desired for 2040, **new spaces, tools and resources with which citizens can play a leading role in the definition of the Extremadura energy transition are needed, in order to facilitate the identification of the main social challenges in the field of energy and favouring the development of new, fairer and more sustainable solutions, paying special attention to the Energy Communities Models.** These spaces should serve as a unique meeting point between the main stakeholders in the region, boosting collaboration between them and facilitating access to relevant information to enable the active participation of citizens in the energy transition process. The resources and information provided in the spaces must be adapted to the characteristics of the region and understandable by all target audiences.

A citizenry involved and committed to the energy transition process is the guarantee that structural changes will be more effective and long lasting.

Urgency of the need

The main global trends and European strategies indicate that in order to achieve a complete energy transition it is necessary for citizens to play a leading role in the process, being able to produce, manage and consume their own energy, within a framework of social justice and environmental protection.

In recent years, the increase in global temperatures, geopolitical conflicts caused by fossil fuels, and social movements demanding greater attention to the challenges facing society and the environment have made it necessary, on the one hand, to accelerate the energy transition process and, on the other, to do so hand in hand with society.

The emergence of a system based on renewable energies favours a process of democratization in the operation and development of the energy system itself, offering new opportunities to citizens, public administrations and entities at all levels.

In the participatory process of the Extremadura Energy Transition Lab (ETL), a large part of the participants considered it urgent to create innovative tools that favour the participation of all key actors in the decision-making process regarding the energy transition and, in particular, the participation of citizens.

The creation of **open spaces** in which anyone can participate in decision-making processes on the development of new energy solutions for Extremadura will encourage the active participation of all citizens in the energy transition process in the Region.

Expected impact of addressing this energy need

The main impact of addressing these energy needs will be the development of new socially-led energy projects. Although the main target group is the general public, the other stakeholders should also play a relevant role; the academia providing the necessary knowledge for the development of new solutions; the industry developing these solutions and introducing them into the market; the government developing policies that favour social energy projects; and the environmental experts accompanying the whole process to ensure the lowest possible environmental impact.

Alignment of the need with policy

The **EU Directive 2018/2001** already established that Member States must guarantee consumers the right “to produce, consume, store and sell their own renewable energy, and to assess the barriers and potential for developing renewable energy communities”, thus placing citizens in the centre of the energy transition. But for citizens to be able to measure up and play the role they have to be informed and a social activation is needed. Not only to create awareness and acceptance of deploying new sustainable projects in the region, but by allowing citizens to be part of these projects and of their benefits. They should have an active role in matters such as the spread of installations for self-consumption, energy renovations and the contribution to new policies that affect and address the energy transition.

The main framework developed in the region to achieve the energy transition at regional level is **Extremadura’s Integrated Energy and Climate Plan (PEIEC 2021-2030)**. This plan sets ambitious objectives for GHG emissions’ reduction, integration of renewable energy and increase of energy efficiency. These targets, together with a high political commitment and a favourable regulation towards sustainability, ensure a firm and clear position from the regional government; but for this transition to be inclusive and democratic, it is key that other regional actors can participate and contribute towards the measures and actions developed to reach the set targets. Regarding social activation, in the framework of RIPEET project and the PEIEC 2021-2030 several activities will be proposed, including training and dissemination measures to facilitate and reinforce the role of the citizens of Extremadura and of the agents involved in the energy and climate transition, making sure that it is fair.

In the field of research and innovation, the **Research and Innovation Smart Specialization Strategy de Extremadura 2021 – 2027** (RIS3 of Extremadura) is the product of a participatory governance process and the result of a shared and consensual vision with the agents of the quadruple helix. It has been designed in connection with existing policies and strategies at international, national and regional level, and aims to interconnect business, scientific, technological, institutional and social resources to boost the region's economic development. The RIS3 of Extremadura makes a strong commitment to the energy transition, seeking the generation of value through the sustainable use of its resources and capacities, the orientation of its R&D&I activities towards the specialisation areas, and the attraction of investment and talent to the Region.

Linkages with other regional initiatives

Office of Integral Services for the Energy Rehabilitation of Homes (OSIR): coordinated by the Extremadura Energy Agency (AGENEX), is an advisory service on financial support for the integral energy renovation of blocks of apartments and single-family houses in the region.

Rehabilitation Advisory and Promotion Office (OAIR): coordinated by the Official Association of Architects of Extremadura (COADE), is a service for technical advice, both to citizens and architects, for all initiatives related to the rehabilitation of buildings.

Dual Vocational Training: In the region there are several training programs in which educational centres and companies co-participate in order to generate qualified and quality employment in the energy sector, which needs new professional profiles trained in the latest technologies.

Work Tables: led by the regional government, these are multidisciplinary bodies, with the presence of public and private entities, to attract and locate their value chain in the region. There are currently 3 working groups: Self-consumption, Hydrogen and Electric Vehicles.

EnVerde: created in 2022, it is the first energy cooperative in Extremadura, to promote the consumption of 100% renewable energy by citizens.

Energy Community of Garciaz: is an initiative that is still under development and aims to become the first energy community in Extremadura. It is currently made up of 50 members and is seen as a solution that, in addition to reducing the energy costs of its members, try to avoid the occupation of a natural area that is highly valued by citizens through the development of a large wind farm.

Iberian Energy Storage Research Center (CIIAE): this initiative, financed with funds from the RRM, will allow Extremadura to position itself at the European level in the development of new solutions that favour the energy transition.

Functional scope of the pilot

The proposed solution should take into account the following aspects:

- Importance of keeping the citizenry at the centre of the energy transition process.
- Social concern about the environmental and visual impact of large power plants, and the occupation of agricultural land.
- Increased interest in the Energy Community model, Energy Cooperatives and Self-consumption.
- Economic and social development of rural environments.
- Maintaining Extremadura's sustainable development model.

- Improve regional policies to promote the development of solutions that are committed to a fairer and more sustainable energy transition.
- Necessary awareness and information campaigns for citizens on energy issues.
- Necessary personalized advisory services for citizens on energy issues.
- Necessary training and entrepreneurship programs on energy issues.

In addition:

- The pilot must include a co-creation process carried out in the local languages. The applicants will need to be able to communicate with stakeholder groups in Spanish in addition to English.
- Actors must be able to offer their solution in or to the region of Extremadura

Expected outcomes

The solution should succeed in increasing people's knowledge and skills on energy issues by giving easy access to practical resources and tools, as well as increasing connections between stakeholders in order to foster the development of energy projects that improves citizens' well-being and are environmentally sustainable.

The solution provided should also demonstrate that interactive spaces, communication and support tools help citizens' engagement in the energy transition, and support the process of creating, constituting and developing innovative and citizen-led models such as Energy Communities.

Ethics and Data Protection

For all data collected during any of the phases of the project all activities will be based upon informed consent and informants will be made aware of any possible privacy issue. Under no circumstance will RIPEET include private information, pictures etc. in publications without the explicit and written permission of the respective persons. RIPEET will comply fully with the EU General Data Protection Regulation (GDPR), which will replace the Data Protection Directive 95/46/EC (a directive adopted by the European Union designed to protect the privacy and protection of all personal data collected for or about citizens of the EU, especially as it relates to processing, using, or exchanging such data) and EC 2002/58 (confidentiality of information, treatment of traffic data, spam and cookies) when collecting mailing lists of operational personnel and under no circumstance will share this information with 3rd parties.

All activities are conducted applying fundamental ethical principles and relevant national, EU and international legislation, including the Charter of Fundamental Rights of the European Union and the European Convention on Human Rights and its Supplementary Protocols. Social scientific research in this project will be designed and conducted in accordance with the procedures defined by the European Code of Conduct for Research Integrity, the Code of Ethics of the International Sociological Association (ISA) and RESPECT Code of Practice for Socio-Economic Research. Data collection with human subjects will comply with the ethical standards and guidelines of Horizon 2020 and the General Data Protection Regulation (GDPR), which will be rigorously applied, regardless of the country in which the research is carried out. All research is conducted ensuring respect for the participants and their

dignity, protecting their values, rights and interests and fair distribution of research benefits and burden.

The basic and common principles valid for all methods and all subjects involved will be providing participants with full protection for their personal data unless they agree otherwise. Moreover, participants are informed that researchers shall protect them when desired. Personal data will be anonymised and not be shared with third parties. Data will be collected and stored securely

All data collected within this project are carefully protected in compliance with relevant national data protection legislation of the EU member states implementing the General Data Protection Regulation (GDPR), which replaces the European directive 95/46/EC. All research is designed and undertaken to ensure "the right to privacy, the right to protection of personal data, the right to the physical and mental integrity of a person, the right to non-discrimination", following article 19 of the Regulation 1291/2013 of the European Parliament and of the Council. Personal data will be of qualitative and quantitative nature encompassing also audio-visual formats. Personal data will be stored in a way to not allow the identification of the subjects. The beneficiary will not publish any personal data unless participants have explicitly given their permission. Publications based on personal data will only report aggregated data and shall not contain information that may permit the identification of individual participants unless otherwise agreed.

In compliance with EU and national legislation, collected data are stored in computers, laptops, intranets or hard-drives of the consortium partners accessible through institutional password modified periodically (every 6 months in case of storage of personal data), and protected by regularly updated antiviruses. None of the project data will be left inadvertently available by being left on desks or in unlocked premises. All the materials stored in computers are subjected to back up regularly in order to safeguard them from accidental losses. As a general principle, all materials that could lead to an identification of the person (e.g., informed consent, names/codes list of participants to the audit procedure) are stored separately from actual data (questionnaires, transcripts, data files, etc.) and handled by different members of the team.

All the files containing confidential information and personal details of the participants will be password protected, accessible only to the coordinator and concerned work package and task leaders. When they are no more necessary for the project, they are immediately destroyed. Files containing "sensitive" data will be stored encrypted.

CONTACTS

RIPEET Team in Extremadura: ripeet@fundecyt-pctex.es

Mario del Viejo Martínez, Carmen Sánchez Ruano and Lucila Castro Rovillard from FUNDECYT-PCTEX.

Rachel Tully from AGENEX.