Deliverable D3.4: Report on Stakeholder and Citizen Engagement and on the Creation of Networks for the Development of Rural Energy Communities

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Authors	**Triin Kallas (ELU)** **Almudena Fiunte (UVIGO)** **Xavier Simón (UVIGO)**

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Contributing authors	Reigo Lehtla (AECM)
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Abbreviation list

Term	Description
UVIGO	University of Vigo
UTARTU	University of Tartu
FEGAMP	Galician Federation of Municipalities and Provinces
AECM	Association of Estonian Cities and Municipalities
TREA	Tartu Regional Energy Agency
Sapiens Energia	Sapiens Energia Coop.
ELU	Estonian LEADER Union
ESPAZOCOOP	EspazoCoop Galician Cooperative Union
FJDV	Juana de Vega Foundation
ELARD	European Leader Association for Rural Development
WP	Work Package

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1. Executive Summary

This report on stakeholder and citizen engagement and on the creation of networks for the development of rural energy communities summarises the activities and lessons learned from the first year of progress of the EC4RURAL project. This work package aims to create a strategic decision-making group to oversee the transition to clean energy. The specific objectives are as follows:

- **Identifying Motivators for Stakeholder Engagement in the Clean Energy Transition (CET)**: EC4RURAL seeks to encourage collaboration among stakeholders, helping them evolve from passive consumers to active prosumers and from technology users to effective managers.
- **Facilitating the Co-creation of Networks for Clean Energy Transition through Rural Energy Communities**: Acknowledging that individual efforts alone are not enough, EC4RURAL will prioritize the development of new networks to promote coordinated collective actions.

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2. Introduction

Energy communities represent a transformative approach to local energy management, fostering sustainability, local ownership, and community involvement in energy production and consumption. Engaging stakeholders and citizens is crucial in the development of effective energy communities, ensuring that diverse interests and concerns are addressed, and fostering a sense of ownership and commitment among community members. This report outlines the key stakeholders involved and the strategies employed to engage them throughout the process of creating energy communities.

The successful establishment of energy communities requires the active involvement of diverse stakeholders and citizens. Through effective engagement strategies, communities can build consensus, address concerns, and create a collaborative environment that fosters trust and commitment. By prioritizing inclusivity and transparency in the engagement process, energy communities can harness local knowledge and resources, driving forward sustainable energy solutions that benefit all. This participatory approach not only strengthens community bonds but also enhances the resilience and efficiency of local energy systems.

The specific objectives of the EC4RURAL initiative are designed to address the pressing challenges of stakeholder engagement and collaboration in the Clean Energy Transition (CET).

First pivotal objective is to identify the factors that drive effective stakeholder engagement in the CET process. EC4RURAL recognizes the importance of fostering a collaborative environment among various stakeholders involved in the energy sector. The initiative aims to empower these stakeholders by transforming them from being passive consumers of energy into active prosumers—individuals who both produce and consume energy. This transformation is crucial, as it not only enhances individual contributions to

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sustainable energy practices but also encourages a sense of ownership and responsibility towards energy management. Furthermore, the initiative seeks to elevate stakeholders from being mere users of technology to becoming proficient managers of their energy systems. This shift requires providing the necessary knowledge, tools, and resources, enabling stakeholders to make informed decisions and effectively manage their energy consumption and production.

Another essential objective of EC4RURAL is to promote the co-creation of networks that facilitate the Clean Energy Transition, particularly through the development of Rural Energy Communities. Acknowledging the limitations of isolated efforts, the initiative emphasizes that individual initiatives alone cannot achieve the comprehensive and systemic change required for a successful transition to clean energy. Therefore, EC4RURAL will prioritize the establishment of new collaborative networks that enhance coordination and foster collective actions among stakeholders. By creating these networks, EC4RURAL aims to harness the collective knowledge, resources, and skills of diverse stakeholders, thereby promoting a more integrated and impactful approach to clean energy solutions. These networks will serve as platforms for sharing best practices, exchanging ideas, and aligning goals, ultimately driving the momentum needed for a successful energy transition in rural areas.

Together, these objectives reflect a commitment to enhancing stakeholder engagement and collaboration in the clean energy landscape, recognizing that a concerted effort from all parties involved is essential for achieving sustainable energy practices and an effective transition to cleaner energy sources.

This report provides a comprehensive overview of citizen engagement and the development of collaborative networks, drawing upon the valuable experiences gained from the pilot initiatives conducted in Estonia and Spain. Throughout the course of 2024, a variety of activities were implemented, allowing for a rich exchange of ideas and practices aimed at enhancing community involvement in energy transition processes.

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3. Common Strategies for EPC and CG Creation: the Methodological Proposal

The transition to a clean and sustainable energy system requires not only technological advances, but also a profound change in the way communities and organizations relate to energy. In this context, the role of stakeholders and their active participation in the co-creation of strategies for the implementation and management of Renewable Energy Communities are fundamental. This epigraph describes the methodological approach adopted for the development of participatory strategies and creation of the Energy Policy Council (EPC) as well as the Core Group (CG).

The methodological approach focuses on the formation of a group responsible for making strategic decisions related to the process of implementation and management of RECs, as well as the organization and facilitation of this process. This structure seeks to ensure an inclusive and collaborative process that allows all stakeholders to be effectively involved.

Methodological Objectives

The work is oriented towards the fulfillment of the following specific objectives:

1. To identify the drivers to engage stakeholders: it seeks to understand and mobilize the factors that motivate stakeholders to engage in Clean Energy Transition (CET) processes. In this framework, EC4RURAL plays a facilitating role in the co-creation work, forming Energy Policy Councils as spaces for dialogue and collaboration. The purpose is to transform people and organizations from passive consumers to prosumers.

2. To contribute to co-creation of networks for clean energy transition through rural energy communities: Recognizing that individual actions, although necessary, are not sufficient to generate transformative changes in the energy system, this work focuses on the design and development of networks for collective action. These networks, based on the collaboration and participation of rural energy communities, represent a strategic axis for accelerating the transition to a cleaner and more sustainable energy system.

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The methodology employed consists of various phases and tasks that outline the necessary steps to attain the previously stated objectives concerning the engagement process. A detailed description of each phase is provided below.

1. Stakeholders and energy-citizen engagement (T3.1)

Through this task, EC4RURAL begins linking citizens to the energy transition process. For each pilot study and each municipality included (22+12), a process of encouraging citizen engagement is carried out, assuming the differences and particularities of each territory.

PREVIOUS STEP

The project has successfully conducted interviews with local politicians and technicians. An initial assessment based on these interviews has been completed. Concurrently, all relevant indirect information, including local energy action plans, various local plans and activities, and additional sources of local information, has been gathered.

In each territory incorporated into the project, **the municipality** engaged makes a call to its citizens and local organizations. Both to those who have already expressed interest and to the general public. At the same time, **Local Action Groups (LAG)**, given their multi-stakeholder nature, also contribute to this general call. We propose an initial meeting among Council members, LAG members and national coordination (UVIGO and ELU) for deciding about this call.

FIRST STEP

First meeting: Beginning the engagement and networking process in " " Municipality.

Who will be in charge?	An EC4RURAL partner.
How long will the meeting last?	No more than two hours.
How many people will participate?	The more the better.
Where will the meeting take place?	In the best place proposed by the municipality.

General content:

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- Shared vision about local energy situation.
- How can we spark energy citizenship?
- Community perspectives: how collective action can contribute to improving local quality of life.
- Beginning to define the local energy plan: diagnosis and targets.
- Set date and content of the next meeting.

Specific content and methodology: Beginning the engagement process.

General introduction	- A brief introduction will be given with specific targets in this municipality; main actors… by the EC4RURAL partner. (Less than 5 minutes) - Summarizing the local energy transition by EC4RURAL technician. (Less than 5 minutes) - Discussion 1. Group participation in these topics: introduction of each, personal thoughts, questions, doubts… (20 minutes)
Training (I)	- Introduction to energy citizenship by EspazoCoop/ELU. (Less than 15 minutes) - Discussion 2. Group participation in this topic: What about being an energy citizen? Beyond being a producer? Personal thoughts, questions, doubts… (Less than 15 minutes)
Collective action for clean energy transition by EC4RURAL technician.	- Introduction to collective action: good practices around us. (Less than 5 minutes) - Multiple actors engaged: local municipalities, local action groups, citizens, farmers, NGOs…. (Less than 5 minutes) - Different ways to partake in an energy collective process. (Less than 5 minutes) - Possible benefits and risks from energy collective action processes (Less than 5 minutes) - Discussion 3. It includes two activities: Group segmentation: 4 subgroups to discuss each of the above questions. (15 minutes) Group discussion: sharing of subgroup results. (15 minutes)
	- How to make a local energy community plan. By Sapiens Energia/ TREA. (Less than 10 minutes)

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Training (II). Cocreating local community energy plans (I)	- Discussion 4. A diagnosis of local energy current situation (Less than 5 minutes) - Discussion 5. Main targets in short and medium time (Less than 5 minutes) - Discussion 6. Community energy targets. (Less than 5 minutes)
Conclusions of Meeting	- (5 minutes)
Next meeting	- Do you want to be part of the Energy Policy Council? Please complete this template. (5 minutes)

Available resources:

Course 1: Introduction to energy citizenship (EspazoCoop; ELU)

Course 2: How to make a local energy community plan (Sapiens Energia; TREA)

SECOND STEP

At this moment, we employ a dual approach to invite individuals to participate in the transition process. Initially, a personal outreach is conducted via email or telephone to those who attended the first meeting and expressed a desire to remain involved in the community transition. Additionally, we maintain an open invitation for all interested parties through the same broad channels utilized for the initial meeting.

THIRD STEP

Second Meeting: Local Engagement and Networking in “ “ Municipality.

Who will be in charge?	An EC4RURAL partner.
How long will the meeting last?	No more than two hours.
How many people will participate?	Everyone who manifested interest from first meeting newer peopled attracted for the second open call.
Where will the meeting take place?	In the best place proposed by the municipality.

General content:

- Remembering the conclusions from first meeting.
- Collective action for clean energy transition.

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- The energy chain: working for a decentralized energy system through community-led initiatives.
- Defining the local community energy plan.
- Energy Policy Councils: taking control of energy local decisions.
- Set date and content of the next meeting.

Specific content and methodology: Local Engagement and networking

Introduction	- From the first meeting: main conclusions by the EC4RURAL partner (Less than 5 minutes) - Local citizens and local entities: going ahead with energy citizenship by EC4RURAL technician. (Less than 5 minutes) - Discussion 1. Group participation in those topics: reminders from first meeting; Thinking about my own role in LCET. (10 minutes)
Training (III). Collective action with councils, rural groups, and citizens by UVIGO/UTARTU.	Group segmentation: - Subgroup with local policy makers and municipal staff. (15 minutes) - Subgroup with citizens, ONGs, rural groups and small medium enterprises. (15 minutes) - Discussion 2. Group discussion about local collective action. Roles for each actor. How to build a governance climate (Less than 10 minutes)
Training (IV). The energy chain by EC4RURAL technician.	- From producers to consumers: the new prosumers. (Less than 5 minutes) - Available technology for decentralized distribution. (Less than 5 minutes) - Discussion 3. Mirrors game in which you tell me what you see and tell me what we could see. Group segmentation: in subgroups to discuss the imagined scenarios for LCET. (Less than 15 minutes)
Cocreating local community energy plans (II)	- Discussion 4. The final diagnosis of local energy current situation (Less than 5 minutes) - Discussion 5. The energy targets in short and medium time (Less than 5 minutes) - Discussion 6. The community energy targets for the territory. (Less than 5 minutes)

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	- Discussion 7. The Rural Energy Community (REC): main short run aim. (Less than 10 minutes)
Conclusions of Meeting	- (5 minutes)
Next meeting	- Do you want to be part of the Core Group? Please complete this template. (5 minutes)

Available resources:

Course 3: Collective action with councils, rural groups, and citizens: mobilization and networking (UVIGO; UTARTU)

Course 4: The energy chain: renewable energy production by community-led initiatives (Sapiens Energia; TREA)

1. Network co-creation for rural energy communities (T3.2)

FOURTH STEP

At this stage, the initial components of Core Group have been identified. Local councils may be included in this process, or they might have chosen to take on a different role in facilitating the development of rural energy communities and unlocking local potential. The Pilot Cases associated with EC4RURAL should have initiated collaboration with this group to organize the third meeting. This implies that prior communications among the partners responsible for T3.1 (UVIGO and ELU) and those overseeing the pilot cases (FEGAMP and AECM), as well as the foundational elements of CG, should have already taken place. Discussions would have encompassed the agenda for the upcoming meeting, the primary challenges encountered thus far, the opportunities identified during the previous co-creation process, and the necessary partnerships required to advance the REC creation process, among other topics.

EC4RURAL Coordination suggests maintaining a dual approach to invite participation in the transition process. This involves personally reaching out via email or telephone to individuals who attended the first and second meetings and have expressed interest in continuing their involvement in the community transition efforts. It is equally essential to maintain an open invitation for wider participation by leveraging the same mass communication channels that were used for the initial meetings.

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FIFTH STEP

<u>Third Meeting:</u> Preparing the unleashing of Energy Community Power in " " Municipality.

Who will be in charge?	An EC4RURAL partner.
How long will the meeting last?	No more than two hours.
How many people will participate?	Everyone who manifested interest from first meeting newer peopled attracted for the second open call.
Where will the meeting take place?	In the best place proposed by the municipality.

General content:

- Recalling the insights gained from initial meetings.
- Core group creation.
- Business models available for REC.
- Implementation and operation of REC.
- Set date and content of the next meetings.

After this meeting, the REC dynamic takes total independence from EC4RURAL. This process is commanded by CG. From now on, the role of the project is to accompany the internal decisions about the REC, providing advice and trying to collaborate in the legal, financial and technology decisions that require the "market" and "institutional" participation.

Specific content and methodology: <u>Preparing the unleashing of local power.</u>

Introduction	- The local Core Group: The function of the EC4RURAL partner within the process. (Duration: under 5 minutes) - Anticipated benefits from our REC: Expected results as outlined by the EC4RURAL technician. (Duration: under 5 minutes) - Discussion 1: A forum for open dialogue regarding our REC. (Duration: 10 minutes)
Training (V). Business models by UVIGO-	- Models for internal relationships. The role of municipality. (10 minutes) - Legal decisions about the organizational models. (10 minutes)

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EspazoCoop/UTARTU-ELU.	- How to get financial support: different sources to obtain it. (15 minutes) - Discussion 2. A group dialogue focused on business models, encompassing the scope of installation. (Duration: under 10 minutes)
Training (VI). The implementation and operation of REC by UVIGO and Sapiens Energia; UTARTU and TREA.	- How to get the public installations authorization (10 minutes) - Control of installation operation: alternatives. (10 minutes) - Discussion 3. Simulating REC life. Discussing the global proposal. Identification of challenges and threats (limiting factors) and strengths and opportunities (driving factors). How to manage them? (Less than 15 minutes)
Conclusions of the Meeting	- A draft of our rural energy community project (10 minutes)
Next meeting	- According to CG decisions, EC4RURAL will participate in accordance with the decisions of the CG. (5 minutes)

Available resources:

Course 5: Business models for rural energy communities: economic and legal issues. (UVIGO and EspazoCoop; UTARTU and ELU)

Course 6: Implementation and operations of rural energy communities. (UVIGO and Sapiens Energia; UTARTU and TREA)

Sixth and next steps:

Who will be in charge?	Core Group (EC4RURAL could participate, if it's required)
How long will the meeting last?	As long as necessary.
How many people will participate?	Core Group and who decides the CG.
Where will the meeting take place?	Wherever CG decides.

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4. Description the Stakeholders and Citizens Engagement Process

This section provides an overview of the stakeholder and citizen engagement process, outlining the strategies and methods employed to encourage active participation and collaboration among various groups. Effective engagement is crucial for fostering community involvement, ensuring that the voices of all stakeholders are heard, and building a sense of ownership over initiatives.

The engagement process begins with identifying key stakeholders, which may include local residents, community organizations, businesses, government representatives, and experts in sustainable energy. By mapping out these stakeholders, we can better understand their interests, needs, and potential contributions to the initiative.

The engagement process aims to create a strong sense of community cohesion and mutual understanding among stakeholders. By actively involving citizens in the planning and implementation of renewable energy initiatives, the process not only builds trust in RECs as viable solutions but also fosters a culture of collaboration and collective problem-solving.

Through this comprehensive engagement approach, the initiative seeks to empower citizens, ensuring they possess both the knowledge and skills necessary to contribute to a sustainable energy future. As a result, the community is better equipped to address local energy challenges while promoting a transition to greener energy solutions.

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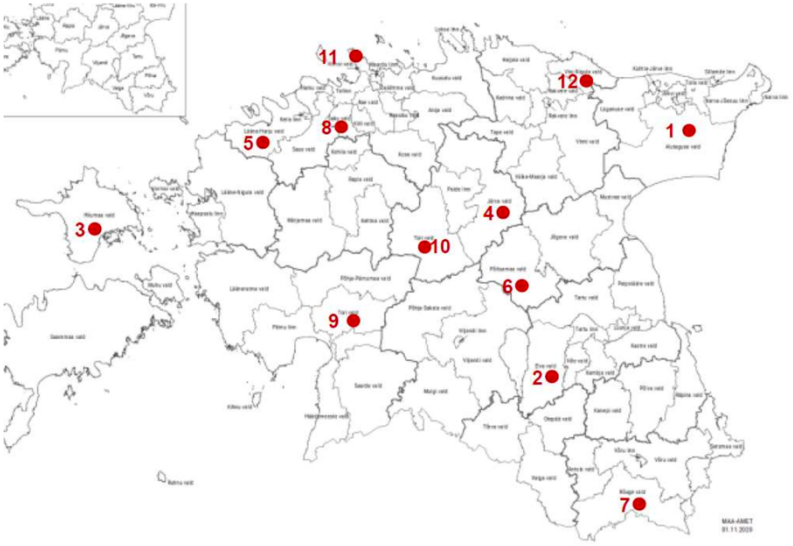
4.1 In Estonia

4.1.1 Main Stakeholders and Engagement Process

The effectiveness of the participatory process in creating and nurturing energy communities relies on the proactive collaboration of various stakeholders, each offering their unique resources, expertise, and skills. From local governments to citizens, small and medium-sized enterprises (SMEs), and the academic sector, all play crucial roles in the participation and development of these communities. The following analysis explores the key stakeholders involved and their contributions within the context of rural Estonia.

In the Estonian pilot, the municipalities that initiated the participatory process under the EC4RURAL framework include: Alutaguse, Elva, Hiiumaa, Järva, Lääne-Harju, Põltsamaa, Saku, Rõuge, Tori, Türi, Viimsi, and Viru-Nigula municipality.



#	LAU NAME NATIONAL	POPULATION
1	Alutaguse vald	4,682
2	Elva vald	14,597
3	Hiiumaa vald	9,381
4	Järva vald	8,837
5	Lääne-Harju vald	12,661
6	Põltsamaa vald	9,616
7	Rõuge vald	5,180
8	Saku vald	10,722
9	Tori vald	11,946
10	Türi vald	10,695
11	Viimsi vald	21,151
12	Viru-Nigula vald	5,575
	TOTAL	125,043

Figure 1: Estonian municipalities who support EC4RURAL

The pilot municipalities vary significantly in terms of size and population. In the initial stages of the project, EC4RURAL partners have conducted interviews with representatives of all the municipalities, mostly mayors and officials responsible for environmental issues and/or development of the territory. An initial assessment based on these interviews has been completed in the framework of WP2. Concurrently, all relevant indirect information, including local energy action plans, various local plans and activities,

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and additional sources of local information, has been gathered. The diagnosis document includes a municipal analysis of each involved municipality, which collect the main aspects about their population and demographic structure, their economy, and their energy resources. Project partners have begun linking citizens to the energy transition process. For each pilot study and each Estonian municipality included, a process of encouraging citizen engagement is being carried out, assuming the differences and particularities of each territory.

First meetings to bring together the EPC have been held in all Estonian municipalities during the first year of the project, more specifically during March and April 2024. After concluding the first round of meetings, our next step involved identifying the initial components of Core Group (T3.2 Network co-creation for rural energy communities). Individual consultations have been held with some of the municipalities and emerging core groups.

To conclude the results of engaging the citizens during the first year of the project, the Estonian pilot has implemented two tiers of development to classify the initiatives based on their particular stage in the participatory process and the formation of the EPC and CG.

The development levels are represented as following:

1st level (CG)	2nd level (EPC)
Elva	Alutaguse
Hiiumaa	Põltsamaa
Järva	Tori
Lääne-Harju	Viru-Nigula
Saku	
Rõuge	
Türi	
Viimsi	

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The first level corresponds to community initiatives where both the EPC and CG have already been established. All eight CGs have also formalized their legal entities. The second level includes initiatives that have established the EPC but have yet to create the CGs. There is an understanding of the possible range of future developments, but the final decision regarding the leaders of the initiative remains unresolved.

The main actors and their roles in the participatory process involved in the community initiatives, were defined as follows:

- **State level regulations**: laws and executive power institutions (ministries)

State government plays an essential role in

  - Creation of the necessary regulations for monitoring community energy (including from the network perspective) and removal of emerging regulatory barriers;
  - Creation of guidance materials for launching energy communities, monitoring (creation of related data/registry, e.g., based on membership, etc.);
  - Promoting the use of energy by the community for its own consumption, including storage; encouraging pilot projects and other supportive instruments;
  - Considering the possibility of creating a similar guarantee as in the case of residential reconstruction to mitigate risks;
  - Supporting the capacity of local governments in planning and implementing renewable energy, including, for example, supplying industrial parks with energy from new renewable energy projects;
  - Providing regional consulting, supporting LAGs or other development agencies.

Estonian EC4RURAL project partners have been involved in this level by participation in advisory committees, and collaboration on regulation documents (ENMAK).

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According to the European Commission's solar strategy, by 2025, each Estonian municipality with over 10,000 inhabitants is expected to establish at least one renewable energy community. Community energy plays a significant role in promoting the adoption of renewable energy and ensuring local energy supply. The principles governing energy communities are derived from the common standards of the EU electricity internal market and are grounded in at least the minimum provisions outlined in the relevant directive.

An energy community can provide energy services to its members, but its primary goal is to deliver environmental, economic, or social benefits to its members or the community in which it operates. When supplying self-generated electricity to its members, the energy community utilizes the electricity infrastructure it has established or relies on the services of the local distribution network operator, who is obliged to collaborate with the renewable energy community project. Currently, energy communities do not enjoy any legal privileges, and their members retain the rights and obligations of household consumers and active network service users as defined by legislation.

- **Local Governments**:

  The main tasks of the local municipalities can be defined as follows:

  - Launching community energy through local energy and climate plans;
  - Creating the projects of using the roof of a municipality building or other surface for local energy production;
  - Prevention of energy insolvency for personal use by ensuring energy production and storage for more stable energy costs;
  - Creating advisory opportunities, e.g. establishing regional advisory centers, creating regional energy agencies and/or making energy communities the focus of regional advisory centers.

The role of the 12 municipalities involved in the project has been primarily to promote the events organized under the EC4RURAL framework, and facilitating the overall community transition process. We have been able to use their communication channels (e.g local newspaper, web pages) for promoting the EC4RURAL initiative and events.

Some municipalities have played a more active role as facilitators and promoters of the initiatives. As facilitators, they have provided municipal spaces for meetings and activities.

During the meetings at Viimsi, Lääne-Harju, Türi, Tori, Saku, Elva, Hiiumaa, the municipality representatives presented a more thorough analysis of their energy situation and prospects. Some of them showed previous experience in CET projects and had a deeper comprehension of the subject.

The EC4RURAL experience has demonstrated the importance of local governments promoting such initiatives, as their involvement ensures credibility and encourages the participation of other actors, such as citizens. As promoters, they have contributed municipal spaces for the installation of the first photovoltaic systems.

- **LEADER Local Action Groups (LAGs)**:

In Estonia, Local Action Groups have been involved into the EC4RURAL initiatives since the very beginning of the project, since Estonian LEADER Union (ELU) is the leader of this working package WP3's task on engagement and on the creation of networks. Local Action Group is a valuable form of networking in the territory, bringing together three main sectors (entrepreneurs, NGOs, and local authorities) to co-create a strategy for the development of the region. LAG initiatives focus on building local networks centered around shared interests while fostering innovation in both social and technological aspects. To promote clean energy transition, some LAGs have created cooperation projects to educate their citizens:

"Inspiring small consumers to implement suitable renewable energy solutions" with Virumaa Koostöökogu and Jõgevamaa Koostöökoda among the partners that cover the pilot municipalities of Viru-Nigula and Põltsamaa. The project aims at developing four common types of combined solutions for ventilation, electricity, and thermal energy production and consumption, and to demonstrate their implementation possibilities in different regions.

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"Green Communities" cooperation project involves Virumaa Koostöökogu and PAIK among other partners and aims at raising awareness and fostering partnerships among stakeholders, to train local governments, entrepreneurs, youth, and community members. The project will organize internal study trips within Estonia to showcase practical energy solutions, as well as an international trip focused on green economy topics.

All local actions groups implement the LEADER program, providing investment grants for communities and enterprises. Several local strategies have identified green energy as a priority for their areas and have adjusted their project evaluation criteria accordingly. This presents a crucial opportunity for new energy communities to seek funding for their projects.

- **Non-Governmental Organizations (NGOs):**

Nearly all active community electricity production initiatives of the EC4RURAL project are associated with some local non-profit organization that operates in the interest of the local community. These can be volunteer rescuers (Rõuge, Tori, Hiiumaa, Elva), village societies (Saku, Viru-Nigula, Viimsi), congregations (Lääne-Harju), cultural societies (Alutaguse). These organizations form the majority of the core groups and are crucial for the successful elaboration of community energy projects. The information about the potential actors was collected first from the LAG of the region and then coordinated with the local authorities.

- **Enterprises (SMEs) and citizens**:

Since local enterprises and citizens are the end-users of the energy produced, their acceptance and active participation are crucial for success. Their involvement in the project is facilitated through non-profit organizations, which serve as intermediaries to connect them with various project activities and resources. These organizations play a crucial role in coordinating efforts, providing support, and ensuring that the interests and needs of the participants are heard and addressed. By serving as a bridge between the community and the project, non-profit organizations help to foster collaboration and

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enhance the effectiveness of the initiatives. This approach not only empowers local participants but also enriches the project by leveraging the expertise and networks of these organizations.

The **participatory process** in Estonia followed a common pattern set by the methodological plan. To initiate the participatory process across the 12 initiatives of the Estonian pilot, as detailed in Deliverables 2.1 and 2.3, interviews were conducted in each municipality with local governments, along with surveys conducted based on documentation (energy plans, strategies etc.).

Following this initial diagnostic phase, the first meetings were organized for each initiative. To coordinate and announce these meetings, ELU reached out to municipal governments to begin preparations. They also reached out to Local Action Groups (LAGs) in the regions, encouraging their participation in preliminary meetings and seeking their support in promoting the event. Reactions from municipalities were all similar and positive. All municipalities offered their facilities for the meetings free of charge. In some cases, municipalities demonstrated more enthusiasm and prepared their own presentations for the EPC meeting. Some municipalities (Viimsi, Elva) had more previous experience from European projects and had collected data from previous studies accordingly. In some municipalities, the participation was more hesitant, for example in Põltsamaa and Viru-Nigula there were no representatives of the municipality present for the first meeting. Attendance at the seminars ranged from around five to twenty-five. The conclusions of the seminars tend to vary according to the previous experience of each municipality around renewable energies, and it should also be noted that there are municipalities with a high level of training around renewable energies, and a great willingness to learn and transition to change.

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4.1.2 Specific Engagement Strategies

Below are the specific strategies that promoted participation in the creation of the EPC and CG in the rural initiatives of Estonia, identifying key actors in each initiative, specific objectives, and practical examples.

1. Mapping of Key Actors

Mapping key stakeholders is a crucial strategy to ensure that all individuals and organizations with influence or interest in the development of rural energy communities (RECs) are represented and actively engaged in the process. This systematic approach involves identifying relevant stakeholders, understanding their interests and capacities, and clarifying their roles within the project. This strategy has been applied across all 12 community initiatives.

To facilitate this mapping, preliminary interviews and surveys were conducted with various local groups to gauge their expectations and concerns regarding energy and sustainable development. The stakeholders involved in this mapping strategy included representatives from municipal governments, local action groups, and citizens associated with each of the initiatives.

Achieved Objectives:

- Ensure equitable representation of diverse local groups: The analysis facilitated the identification and inclusion of representative actors from the community, such as LAGs, SMEs, and citizens with varied needs, creating a diverse and representative group.
- Leverage knowledge and resources of key actors: The mapping uncovered valuable resources, such as land available for energy infrastructure installations, and local insights into social and economic dynamics, enriching the design of the RECs.

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2. Communication

Providing information about the legal framework and benefits of energy communities is crucial for the success of the project.

To facilitate communication, ELU arranged for an article on the benefits of energy communities to be published in local newspapers, accompanied by an invitation to the opening seminar. Information was also disseminated through the LAGs' communication channels, including e-mail lists and social media.

Two online workshops were held during the summer months of 2024.

11th June: I Workshop on the implementation of the pilots in Spain and Estonia.

In the first part, which was common to both countries and in English, the University of Vigo (coordinators), Sapiens Energia, the University of Tartu (UTARTU) and the Association of Estonian Cities and Municipalities (AECM) participated. Through their interventions, participants were able to follow the status of implementation of community energy in relation to renewable energy. There was also a debate on the obstacles encountered in the implementation of energy transition and community energy in both countries and at EU level.

18th July: II Workshop to define the plans of rural energy communities in Spain and Estonia.

This online workshop aimed to promote the exchange of specific objectives and approaches for the definition of energy community plans in the Spanish and Estonian pilot projects, with the idea of learning from each other and involving different stakeholders to create greater awareness of the EC4RURAL project.

There were examples of local energy policies in Galicia thanks to the participation of the mayors of Outes and Vedra.

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TÜRI RAHVALEHT 7. MÄRTS 2024

Kogukonnaenergeetika võimaldab kogukonnal kasu saada

Viimased aastad on toonud katustele paigaldatud päikesepaneelide buumi. Aastaks 2035 prognoositakse, et Eesti kodude katustel võiks neid olla tänasest kolm korda rohkem ning katta veerandi majapidamise elektritarbimisest. Tootvaid tarbijaid on täna üle 15 000, ent kohalikul tootmisel on veel kasutamata võimalusi, mis jäävad individuaalselt ja ettevõttena tegutsemise vahele - kogukonnaenergeetika. Need on energiaprojektid, mida veetakse ühistulistel alustel ning mis pakuvad otsest kasu kohalikele kogukondadele.

Kogukonnaenergeetika algatused võivad võtta mitmesuguseid vorme: need võivad olla kogukonna omandis olevad taastuvenergia paigaldised (näiteks päikesepaneelid või tuulikud), pakkuda elektrisõidukite või -jalgrataste laadimisteenuseid või olla energiatõhususprogrammid või renoveerimisteenused.

Samuti võivad need olla kogukonnapõhised energiakooperatiivid, mis hoolitsevad soojusmajandusteenuste eest või pakuvad muid teenuseid energiaturul.

Seadusandluses on kirjas kaks sarnast, detailides erinevat varianti: taastuvenergiakogukonnad ning kodanike energiakogukonnad. Ent neid ühendab sama printsiip - neis osalemine annab võimaluse olla energiatootmise ja kasutamise otsuste juures ning mõjutada seda, kuidas energiat toodetakse ning kuhu selle kasud liiguvad.

Energiatarbijana oleme passiivsed turul osalejad - stepslist tuleb elektrit ja selle tarbimise eest tasume teenusepakkujale. Kogukonnaenergeetika kaudu aga jääb suur osa otsustusest kohalikule tasandile - rahalise kasu teenimise kõrvalt saab määrata ka teisi hüvesid. Näiteks energiaühistu võib otsustada, et liikmed saavad teenuseid soodsamatel või stabiilsematel tingimustel, sellega kaetakse kohaliku kogukonna ühiseid vajadusi või pakutakse kohalikele lisandväärtust pakkuvatele ettevõtetele ligipääsu taastuvatele energiaallikatele.

Kogukondlik energiatootmine paigutatakse tarbimiskoha vahetusse lähedusse või kasutatakse ära vabu pindu näiteks katustel. Seetõttu puudub sel tugev negatiivne mõju looduskeskkonnale. See vähendab survet loodusele ning mõjutab otseselt ka energiakadude vähenemist.

Kohalikud energiaprojektid loovad töökohti ning panustavad rohkema raha ringlemisse kohalikus majanduses. Nad vähendavad ka sõltuvust keksetest energiavarudest, kasvatavad energiasõltumatust ja vastupidavust, eriti maapiirkondades.

Kuna energiateemades osaleb tavapärasest laiem ring inimesi, siis hõlmavad kogukonnaenergiaalgatused sageli ka haridusprogramme ja korraldavad teavituskampaaniaid, mis suurendab energiateadlikkust ning -tõhusust.

Sarnastele probleemidele lahenduse otsimine, ühised otsused ning ühiselt leitud võimalused projektide rahastamiseks soodustavad sotsiaalset ühtsust, tuues elanikud kokku jagatud eesmärgi ümber, julgustades nii koostööd ning vastastikust toetust. Kokkuvõtteks pakub kogukonnaenergia kogukondadele võimalust oma energiatulevikku ise juhtida, tuues kaasa mitmesuguseid sotsiaalseid, majanduslikke ja keskkonnaalaseid eeliseid.

12 omavalitsust Eestist, 22 maaomavalitsust Hispaaniast ning kümme organisatsiooni osalevad energiakogukondade projektis „Taastuvenergiale ülemineku edendamine maapiirkondade energiakogukondades" (EC4RURAL). Rahvusvahelise projekti eesmärk on aidata kohalikel omavalitsustel ja kogukondadel üle minna puhtale energiale, tagades samal ajal maapiirkondade ja kohalike kogukondade aktiivne osalemine.

2023. aasta sügisel alanud projekti käigus aidatakse kaasa kohalike taastuvenergia kogukondade loomisele, et tugevdada energiasõltumatust, edendada elu maapiirkondades ja vähendada energiavaesust, lisaks luuakse e-õpivara ning viiakse läbi põhjalik koolitusprogramm kohalikule kogukonnale. Projekt kestab neli aastat.

Kui soovid rohkem teada saada kogukondlikust energiatootmisest, oled oodatud osalema EC4RURAL projekti avaseminaril. Rohkem infot leiab Eesti LEADER Liidu kodulehelt https://leaderliit.eu/ec4rural ja Facebooki lehelt https://www.facebook.com/eestileaderliit

INGRID NIELSEN
Eestimaa Looduse Fond

Figure 2: Article published in local newspapers in spring 2024 (see Annex 1 for translation into English)

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Estonian partners organized another (face-to-face) event on 7th August in the central county of Järvamaa. All energy policy councils were invited to share the progress in forming the core groups, as well as get inspired by learning about actions taken in other municipalities. There were 4 presentations from communities as well as the Ministry of Climate, followed by a panel discussion about the challenges in setting up an energy community. The participants were also able to get inspiration from an entrepreneur who has set up several means of producing and accumulating clean energy for the gas station with restaurant and supermarket.

3. Practical aid and training

The Estonian project partners have found that one-to-one consulting and advisory practices yield the highest effectiveness. During these consultations, specific potential energy projects have been identified as core groups (CGs). Following this identification, we reached out to these groups for direct interviews to gain insights into the challenges they face and their ideas for future developments.

To support them further, we have offered assistance from the project partner Tartu Regiooni Energiaagentuur (TREA), which is providing technical consultations focused on conducting a cost-benefit analysis grounded in detailed calculations of energy consumption and production. This technical support is a precursor to a comprehensive training course that is outlined in the project plan.

All core groups have shown significant interest in both the personalized consulting sessions and the upcoming general training, indicating a strong commitment to enhancing their knowledge and capabilities in the energy sector. By fostering this individualized approach, we aim to empower these communities, equipping them with the necessary tools and understanding to successfully implement their energy projects.

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4.1.3 Obstacles for the Engagement Process

The variety of stakeholders, along with varying levels of knowledge and resources, as well as the unique characteristics of rural environments, create challenges that can hinder the effectiveness and scope of these initiatives. Below, we outline the key obstacles identified and their impact on the development of the participatory process.

Local governments face several technical and knowledge-related barriers to development in the realms of renewable energy and community energy. Technical barriers include challenges with connecting to the electricity grid and complications related to sharing and selling self-generated electricity to other parties. Knowledge and awareness-related obstacles stem from a lack of experience, understanding, and skills in renewable energy solutions and community energy. Moreover, the emergence of new concepts and technologies can lead to confusion, and the absence of successful examples further hinders development efforts.

Technical development challenges include difficulties in connecting to the electrical grid and issues related to sharing or selling self-generated electricity to others. Knowledge and awareness-related issues arise from a lack of experience, understanding, and skills in renewable energy solutions and community energy. Furthermore, the introduction of numerous new concepts and technologies often leads to confusion, compounded by the absence of effective role models.

Social development challenges involve the struggle to identify strong leaders despite community interest. Economic and financial obstacles include conflicting information regarding the profitability of various renewable energy solutions, limited investment capabilities, and a lack of relevant subsidies.

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4.2 In Galicia

4.2.1 Main Stakeholders and Engagement Process

The success of the participatory process during the establishment and development of the EPC (Energy Policy Council) and CG (Core Group) depends on the active collaboration of diverse actors, each contributing their resources, knowledge, and specific skills. From local administrations to citizens, small and medium-sized enterprises (SMEs), and the academic sector, everyone plays a vital role in the participation and development process of these communities. Below, the main actors involved and their contributions to the Galician rural context are analyzed.

In the Galician pilot, the municipalities that initiated the participatory process under the EC4RURAL framework include: Avión, Becerreá, Entrimo, Mazaricos, Moeche, Monterroso, Muíños, Muras, Ordes, Ourol, Outes, Palas de Rei, A Pobra de Brollón, O

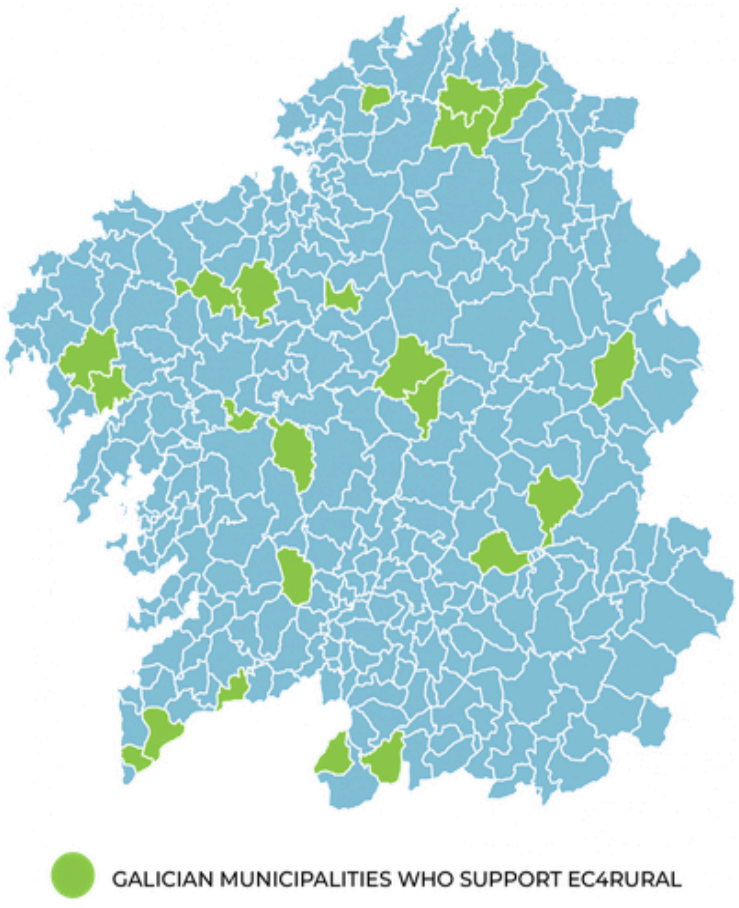

Figure 3: Galician municipalities who support EC4RURAL.

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Rosal, Salvaterra de Miño, Silleda, Sober, Tomiño, Tordoia, O Valadouro, Vedra, and Vilasantar.

Throughout the participatory process in the Galician pilot, each community initiative has displayed a particular level of development, shaped by its socioeconomic characteristics and the level of involvement of the participating actors and their joint configuration. In this context, the Galician pilot has established three levels of development to categorize the initiatives according to their specific stage in the participatory process and the establishment of the EPC and CG.

The three development levels are represented in the following image:

As shown in the image, the first level corresponds to community initiatives where both the EPC and CG have already been established. Furthermore, five CGs have formalized their legal entities, while two are still in the process of doing so.

The second level includes initiatives that have established the EPC but have yet to create the CG. The third level encompasses initiatives that have not yet managed to establish the EPC.

The main actors involved in the community initiatives, categorized by these three levels, are described below:

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The **first level** includes initiatives from the following rural municipalities: Entrimo, Moeche, Muíños, Sober, Vilasantar, Outes, and Silleda. The main actors and their roles in the participatory process are as follows:

- **Local Government**: In these seven initiatives, local governments have actively participated from the start of the process by supporting the identification of other local actors, promoting events organized under the EC4RURAL framework, and facilitating the overall community transition process.

  They have played an essential role as facilitators and promoters of the initiatives. As facilitators, they have provided municipal spaces for meetings and activities. Moreover, the EC4RURAL experience has demonstrated the importance of local governments initiating such initiatives, as their involvement ensures credibility and encourages the participation of other actors, such as citizens. As promoters, they have contributed municipal spaces for the installation of the first photovoltaic systems.

- **Rural Development Groups (RDGs)**: Rural Development Groups play a critical role in identifying potential actors for such initiatives and assessing the energy needs of the territories. All RDGs in Galicia linked to these municipalities participated in an initial interview within the EC4RURAL framework, providing valuable insights into the local context. Notable examples include RDG Limia Arnoia, covering Entrimo and Muíños, which conducts educational and awareness programs on energy, and RDG Deloa, supporting initiatives in Outes.

- **Neighborhood Associations**: In Galicia, neighborhood associations have a strong tradition of leading community initiatives, particularly in rural areas where the wide geographic distribution and low population density require reliable and cohesive organizational structures. However, their participation in this process has been limited, with only one case—Entrimo—involving neighborhood, hospitality, and trade associations.

- **SMEs**: SMEs in rural Galicia can participate as users, service providers, or even investors in these initiatives. Yet their involvement has been minimal, with notable participation only in Outes, where SMEs play a key role in diversifying the range of involved actors.

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- **Citizens**: Citizens are the cornerstone of these initiatives, as they aim to empower local inhabitants as both producers and consumers of energy. In all first-level initiatives, citizens represent the most significant group in terms of participation.

The **second level** includes initiatives from Mazaricos, Muras, O Rosal, Tomiño, O Valadouro, and Vedra. The main actors and their roles in the participatory process are as follows:

- **Local Government**: Local governments have continued to act as facilitators by identifying key actors and providing municipal spaces for meetings. However, progress in these municipalities has been slower, often due to lower prioritization of such initiatives. Efforts are ongoing to increase citizen mobilization. O Rosal stands out as a specific case. Despite being in the second level, its local government has demonstrated exemplary commitment to energy transition by establishing the first Rural Community Transformation Office (CTO) in Galicia, aligning its timelines with the initiative's development.
- **Rural Development Groups (RDGs)**: At the second level, RDGs participated in the initial interview under EC4RURAL, contributing knowledge about the local context. However, their involvement has been more limited compared to the first level, with O Valadouro's RDG Terras de Miranda being the only significant participant.
- **SMEs:** SME participation at this level is even more limited, with Tomiño being the sole initiative involving this actor type. In Tomiño, the EPC primarily comprises businesses from the municipal market.
- **Citizens**: While citizens remain central to these initiatives, their role in this level has not yet been fully defined due to slower participatory processes led by local governments for various reasons, as previously mentioned.

In the **third level**, the initiatives include A Pobra de Brollón, Avión, Becerreá, Monterroso, Ordes, Ourol, Palas de Rei, Salvaterra de Miño, and Tordoia.

As previously mentioned, the EPCs have not been established in these municipalities. Despite efforts by project technicians from the University of Vigo, FEGAMP, and EspazoCoop to engage with various local actors, primarily political leaders, progress has

been limited. Meetings with local actors were planned and held in all municipalities except Ordes and Tordoia. In the municipalities where meetings did occur, further advancement proved challenging due to a lack of proactivity from municipal governments. In some cases, these governments did not contribute to mobilizing actors within their territories. While they initially expressed willingness to collaborate with EC4RURAL, their commitment waned over time. Changes in municipal governments following the 2023 elections played a role in this outcome. In some cases, it was observed that signing letters of intent to support the project coincided with the pre-electoral period, suggesting that some municipal leaders may have viewed their endorsement as an electoral opportunity without pursuing further involvement post-elections. Consequently, there are currently no significant actors to highlight in these initiatives, and there is uncertainty about whether these municipal governments will re-engage with the participatory process and social mobilization within the EC4RURAL framework. For now, these initiatives are considered "lost" to the project, despite several attempts at reactivation, which have been unsuccessful.

To conclude this section, we address the main actors common to all three levels of development. The primary partners responsible for driving these initiatives included the University of Vigo, which provided research, personalized monitoring, diagnostics, and technical, economic, and legal training for local actors; FEGAMP, which facilitated contact with local governments and supported the monitoring of their participation in the project; EspazoCoop, which promoted energy citizenship, encouraged citizen mobilization, and disseminated information about cooperatives as a potential legal framework. However, no initiative has adopted this model to date.

The **participatory process** varied according to the development level of each initiative. To initiate the participatory process across the 22 initiatives of the Galician pilot, as detailed in Deliverables 2.1 and 2.3, interviews were conducted in each municipality with local governments and development groups, along with surveys distributed to the general public.

Following this initial diagnostic phase, the first meetings were organized for each initiative. To coordinate and announce these meetings, both FEGAMP and the University of Vigo reached out to municipal governments to begin preparations. They reached out to

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Rural Development Groups (RDGs) in the regions, encouraging their participation in preliminary meetings and seeking their support in promoting the event. Reactions from municipalities varied significantly. In some cases, municipalities demonstrated a proactive approach, welcoming the meetings with enthusiasm, identifying local actors of interest, and organizing effective mobilization efforts. Notable examples include Moeche, Outes, Entrimo, Silleda, and Vilasantar (first-level initiatives), as well as Vedra, O Valadouro, and Mazaricos (second-level initiatives). For these municipalities, the involvement of local governments was instrumental in successfully initiating the first meeting and forming the EPC.

Conversely, other municipalities exhibited minimal effort, failing to adequately mobilize social participation. This trend was particularly evident among third-level initiatives, such as Avión, Becerreá, and Palas de Rei, where the EPCs were not formed.

The meetings took place in municipal spaces provided by each nascent initiative and were facilitated by staff from the University of Vigo, FEGAMP, and EspazoCoop. The outcomes of these meetings varied depending on the level of engagement from municipal governments, presenting two primary trends:

- **Proactive Participation**: Municipal governments actively engaged with the community energy initiative by allocating municipal resources (e.g., rooftops for photovoltaic installations) and fostering a sense of security and encouragement for citizen participation. This approach characterized all first-level initiatives.
- **Hesitant Participation**: Municipal governments were less committed, creating a ripple effect of uncertainty among other participants. This was observed in some second-level municipalities, such as Mazaricos, Muras, and O Valadouro. Despite follow-up efforts by the University of Vigo and FEGAMP, these initiatives remain in a state of limbo.

For third-level initiatives, as mentioned earlier, attempts to reactivate the participatory process have failed, largely due to the inaction of municipal governments. Second-level initiatives remain pending conditions conducive to reactivation, such as launching a CTO in O Rosal, securing public funding in Vedra and Muras, or addressing changes in municipal governance, as in O Valadouro.

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In contrast, first-level initiatives have continued with subsequent meetings focused on establishing the CGs, planning governance models, and forming the legal vehicles for these initiatives. The following section will highlight specific examples of strategies employed by first-level initiatives in their participatory processes.

4.2.2 Specific Engagement Strategies

Below are the specific strategies that promoted participation in the creation of the EPC and CG in the rural initiatives of Galicia, identifying key actors in each initiative, specific objectives, and practical examples.

1. Mapping of Key Actors

The mapping of key actors is an essential strategy to ensure that all individuals and organizations with influence or interest in the creation of rural energy communities (REC) are represented and actively participate in the process. This systematic analysis involves identifying relevant actors, understanding their interests and capacities, and defining their role in the project. This strategy has been implemented in all 22 community initiatives.

To carry out this mapping, preliminary interviews and surveys were conducted with various local groups to explore their expectations and concerns related to energy and sustainable development.

Priority was given to equitable representation, considering the social, economic, and cultural diversity of each territory, and ensuring the inclusion of less visible actors, such as SMEs or Rural Development Groups (RDG).

The actors involved in the mapping strategy included representatives of municipal governments, rural development groups, and citizens linked to each of the initiatives.

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Achieved Objectives:

- Ensure equitable representation of diverse local groups: The analysis facilitated the identification and inclusion of representative actors from the community, such as RDGs, SMEs, and citizens with varied needs, creating a diverse and representative group.
- Leverage knowledge and resources of key actors: The mapping uncovered valuable resources, such as land available for energy infrastructure installations, and local insights into social and economic dynamics, enriching the design of the RECs.

2. Training of Trainers Workshops:

In-person meetings held in municipalities to establish the EPC and CG were organized in accessible community spaces, such as municipal buildings or cultural centers in the different territories. To ensure the participation of a wide range of individuals representing the diversity of social actors in each area, multiple dissemination methods were employed: social media, physical announcements via posters in high-traffic locations within the municipalities, and direct invitations from actors with territorial representation, such as municipal technical staff or Rural Development Groups (RDGs).

During these workshops, a democratic participation dynamic was fostered. By providing training to trainers on creating and implementing rural energy communities (RECs), the diverse group of involved stakeholders was empowered to make decisions and autonomously manage the process of REC creation and implementation.

Throughout these workshops, researchers from the University of Vigo, facilitation and cooperative development experts from Espazocoop, and FEGAMP personnel experienced in supporting and advocating for local administrations provided protocols and guidance on the following topics:

- Energy diagnostics for municipalities.

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- Promotion of energy citizenship through participatory dynamics in each territory and democratic governance models.
- Procedures for establishing social economy entities.
- Participation processes for local administrations.
- Procedures for transferring municipal spaces.
- Access to public subsidies and various forms of financing.
- Introduction to business model development for community energy initiatives.

Actors Involved:

- Trainers from the University of Vigo, Espazocoop, and FEGAMP.
- Citizens.
- Local Administration.
- Local Development Groups.
- Neighborhood and cultural associations.
- SMEs.

Achieved Objectives:

The objectives achieved can be grouped into the following key areas:

- **Technical Training and Local Autonomy**

  ✓ Skills Acquired: Clear protocols for energy diagnostics, governance models, establishment of legal social economy entities, and participation of local administration.

  ✓ Strengthened Autonomy: Participants, now trained, can identify opportunities and make informed decisions without relying on external agents.

- **Promotion of Inclusive and Democratic Governance**

  ✓ Expanded Participation: Inclusion of key stakeholders such as neighborhood associations, SMEs, local administration, and rural development groups.

  ✓ Participatory Models: Introduction of collaborative dynamics that ensure local voices are heard in decision-making processes.

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- **Boosting Territorial Cohesion and Cross-Sector Collaboration**

  - ✓ Strengthening Local Networks: Active collaboration among citizens, SMEs, administration, and local associations.
  - ✓ Promotion of Joint Projects: Development of connections that can extend beyond the energy sector, fostering synergies in other areas of rural development.

- **Awareness and Promotion of Energy Citizenship**

  - ✓ Community Empowerment: Recognition of the community as a central agent in the energy transition process.
  - ✓ Increased Participation: The use of diverse communication channels (social media, posters, direct invitations) has successfully attracted a broad and diverse representation of the local population.

- **Facilitating Practical Implementation of RECs**

  - ✓ Simplified Access to Resources: Clear protocols for transferring municipal spaces, establishing social economy entities, and accessing public subsidies.
  - ✓ Initial Steps in Business Models: Introduction to designing viable and sustainable economic initiatives.

- **Involvement of Key Actors with Technical Expertise**

  - ✓ Transfer of Specialized Knowledge: The workshops provided practical solutions supported by scientific evidence and cooperative and local experience.
  - ✓ Trust in Institutions**:** The involvement of recognized entities has strengthened the credibility of the workshops among participants.

Practical Examples: As concrete examples of this strategy, in the framework of EC4RURAL, in-person meetings were held in all municipalities included in the first and second levels, with the specific characteristics of each level detailed in section 4.2.1.

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Additionally, two online workshops were conducted. The first workshop aimed to present an overview of the state of community energy implementation in relation to renewable energy in both pilot programs. Through the following link you can access the videos of the first workshop. This workshop included participation from both EC4RURAL pilots. In the case of the Galician pilot, participants included representatives from the initiatives of O Rosal, Entrimo, and Xermade, as well as technical staff from RDG Terra e Auga and costa da Morte.

The second workshop focused on facilitating the exchange of learnings for defining the plans of the community initiatives. In the Galician Pilot, participants included representatives from the municipal governments of Outes (Manuel González López), Vedra (Carlos Martínez Carrillo), and O Rosal (Ánxela Fernández). Through the following link, you can access the videos of the second workshop.

3. Co-creation dynamics

Co-creation dynamics are key tools to ensure that the Governing Councils (CG) meet the needs and aspirations of the stakeholders involved. These dynamics facilitate the design of practical solutions and their direct validation with the community. Moreover, co-creation dynamics ensure that solutions are tailored to the socio-economic and cultural realities of the territory, increasing the likelihood of success and sustainability of the RECs. These dynamics have only been carried out in initiatives at the first level, as outlined in section 4.2.1.

Stakeholders involved:

The stakeholders included multidisciplinary groups where citizens contributed knowledge about local needs and resources; technicians ensured the technical and economic feasibility of the proposals; local administration provided resources and insights into municipal energy and social needs; RDGs offered their expertise in collaborative networks and local actors.

Objectives Achieved:

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- Developing solutions adapted to local realities: Co-creation dynamics enabled the design of energy strategies and projects that reflect the specific characteristics of each community..
- Fostering collective motivation and strengthening social fabric: By being part of the creation process, participants developed a sense of ownership over the proposed solutions, increasing motivation and long-term commitment. Equal collaboration reinforced community relationships and promoted greater social cohesion.

Practical Example: Notable instances of this strategy include the meetings conducted in Outes and Silleda. Using procedures and protocols developed by the University of Vigo, the CG of each initiative co-created the decision regarding the legal entity that would formalize the renewable energy community. The following image shows the co-creation dynamic meeting in Outes.

Figure 4: Co-creation dynamic meeting in Outes.

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4.2.3 Obstacles for Engagement Process

The development of both the EPC and CG for the implementation of rural energy communities (REC) in Galicia faces significant challenges in the participatory process. The diversity of actors, differences in levels of knowledge and resources, and the characteristics of rural environments generate obstacles that can limit the effectiveness and reach of these initiatives.

Below, the main obstacles identified are outlined, along with their impact on the development of the participatory process.

Lack of knowledge about renewable energy communities and their benefits

The lack of knowledge is one of the primary barriers preventing rural communities from understanding and engaging in REC creation. Many people are unaware of what energy communities are, how they function, and the potential benefits they can offer—both individually and collectively. This generates initial mistrust and a false perception that RECs are initiatives exclusive to experts or that they do not provide direct value to local communities.

Furthermore, this lack of awareness hampers communities' ability to evaluate the benefits of the energy transition. For example, rural residents may not be aware of how a REC could reduce their energy costs or improve access to renewable energy sources. Without this information, motivation to participate tends to be low, particularly in communities already facing economic and social limitations.

The impact extends to strategic actors like small businesses and local associations, which could play a key role in REC development but remain sidelined due to incomplete understanding of the model. This informational gap makes it difficult to form local networks that could drive energy initiatives forward.

This obstacle has been identified through initiatives corresponding to the third level. Both the first and second levels have been able to overcome this barrier.

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Economic barriers and limited resources

In many cases, the significant upfront investment required by RECs can deter economically vulnerable sectors, particularly in rural areas. Although RECs are designed to generate long-term economic benefits, these benefits are often not communicated effectively, and immediate financial barriers dominate participants' concerns. This barrier has been identified across all 22 initiatives of the Galician pilot, regardless of their level of development.

Economic barriers also affect local small and medium enterprises (SMEs), which could play a crucial role in REC implementation and sustainability but are constrained by a lack of access to financing or technical support. This limits the development of synergies and the full economic potential of the territory.

Furthermore, access to public funding and other forms of financing can be complex for communities without prior experience managing projects. Bureaucracy and a lack of qualified personnel to advise communities increase these difficulties, leaving out sectors that could directly benefit from RECs.

Lack of leadership and institutional support

In the context of rural energy communities (REC), rural municipalities play a key role as drivers of leadership and institutional support. However, their limited involvement or capacity can create significant obstacles. The absence of an active role by these institutions reinforces uncertainty around initiatives and hampers their progress—an example being the third-level initiatives, which have embodied this obstacle.

The lack of leadership from some rural municipalities creates an organizational void that makes it difficult to coordinate the involved actors. When these administrations fail to act as key references, processes tend to become fragmented, leaving participants without clear guidance on how to proceed. This weakens local actors' trust in the project's viability.

In many cases, municipalities face structural challenges such as a lack of technical staff or financial resources, limiting their ability to lead REC initiatives. However, their

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inaction can also be interpreted as a lack of political commitment, which demotivates citizens and reduces their willingness to participate.

Thus, when municipalities remain disengaged or do not prioritize these initiatives—as has been the case in A Pobra de Brollón, Avión, Becerreá, Monterroso, Ordes, Ourol, Palas de Rei, Salvaterra de Miño, and Tordoia—communities may perceive projects as unreliable or lacking strategic direction. This is particularly problematic in rural contexts where citizens tend to depend on local institutions to interpret and manage new initiatives affecting their environment.

Territorial dispersion and its multiplier effect

Territorial dispersion, which characterizes rural Galicia, acts as a catalyst that amplifies existing social and economic barriers. The lack of physical proximity makes regular interactions between inhabitants difficult, fragmenting communities and weakening social ties. This territorial fragmentation also exacerbates social disintegration, as opportunities for collaboration or interaction in common spaces, such as EPC or CG, are scarce, reducing the ability to build strong and cohesive support networks.

The average population density in Spain is 95 inhabitants per km², which is 4 points higher than Galicia's average. In the municipalities of EC4RURAL, however, population density is relatively low or very low (35.5 inhabitants per km² on average), as shown in this graph:

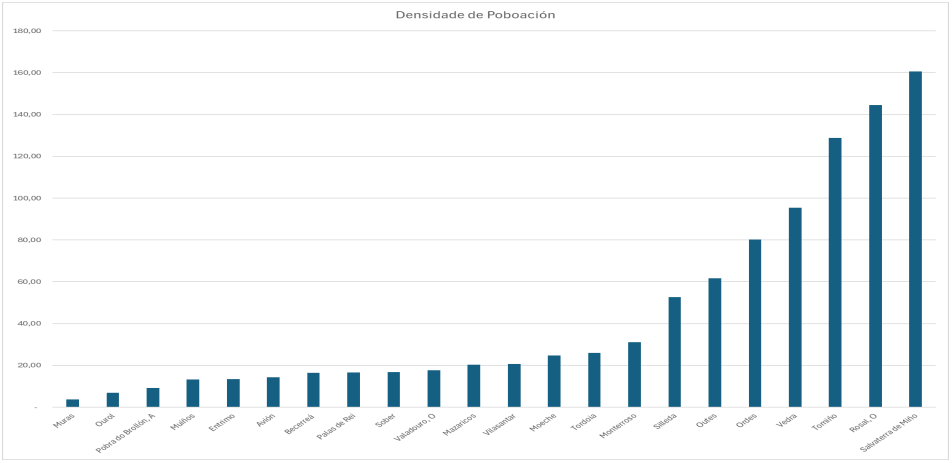

Figure 5: Population density in Galician municipalities.

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Aging and Rural Exodus: A Critical Pairing

Population aging, closely linked to rural exodus, reinforces the participatory weakness of rural communities. On one hand, the migration of young people to cities leaves rural communities with an aging demographic, significantly reducing their capacity for mobilization and leadership, thus losing an important social base for building trust and collaboration.

On the other hand, the lack of generational renewal perpetuates a cycle where community initiatives lack dynamism and long-term perspectives. In this regard, Renewable Energy Communities (RECs) have a total duration of 25 years, and with aging populations and no generational renewal, their emergence is at risk.

A vicious cycle that limits participation

The interaction between these factors creates a vicious cycle that perpetuates community participation weakness. Territorial dispersion reinforces social disintegration, which is intensified by population aging and the absence of young people due to rural exodus. This fragmented environment makes it difficult to mobilize the human and social resources necessary for RECs' success, leaving communities with limited capacity to organize, innovate, and sustain initiatives over time.

In some municipalities of the Galician pilot, characterized by territorial dispersion and aging populations, meetings are often marked by low attendance, a lack of intergenerational representation, and difficulties in making collective decisions. This discourages active participation, perpetuating a sense of disconnection that affects not only the project but also social cohesion in general. In this regard, we highlight specific cases such as Becerreá, Ourol, Palas de Rei, and Avión.

Furthermore, the legal framework for collective self-consumption (Royal Decree 244/2019) stipulates that photovoltaic installations can only provide energy coverage within a radius of 2 kilometers, presenting a significant limitation for municipalities with lower population density (Muras, Ourol, Pobra do Brollón). However, in municipalities like Muiños and Entrimo, with a population density of 13 inhabitants per km², community initiatives have advanced due to the presence of relatively populated urban centers, despite low population densities such as in Muras.

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4.3 Common Features

1. Stakeholder Engagement

The experience of Estonia and Galicia alike underscore the importance of engaging various stakeholders, including local governments, citizens, and community organizations, in the successful establishment of energy communities. However, while the participation of local governments and citizens in Estonia as the smaller pilot area has been quite similar and proactive, The Galician experience highlights the weaker stakeholder engagement in third-level initiatives within Galicia, revealing a disparity in municipal responsiveness.

The participatory processes in both regions are articulated using a tiered development model, albeit with slight variations. Estonia's two levels focus on the establishment of entities and their legal formalization. In contrast, Galicia's three levels provide a more nuanced perspective on the stages of development, reflecting varying degrees of active participation and community readiness to engage in energy initiatives.

2. Role of Technical Support and Capacity Building

Both pilot projects, in Estonia and Galicia, underline the critical role of capacity building in promoting successful engagement and implementation of renewable energy initiatives. In Estonia, the emphasis is placed on personalized support through one-to-one consulting, which has been identified as the most effective method for assisting stakeholders. This tailored approach allows for individualized attention, enabling consultants to closely assess the specific needs, challenges, and aspirations of each stakeholder. By fostering direct relationships, Estonian practitioners can provide customized guidance, ensuring that every participant feels supported and equipped to contribute meaningfully to the initiatives.

In contrast, the Galician pilot takes a broader approach by implementing "Training of Trainers Workshops." This method is designed to empower local actors by equipping them with the knowledge and skills necessary to lead training sessions within their communities. By focusing on a "train-the-trainer" model, Galicia not only enhances the

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capacity of specific individuals but also generates a multiplier effect. Graduates of these workshops can then share their expertise with others, fostering a continuous cycle of learning and capacity building within the community. This approach not only cultivates leadership among local actors but also ensures that training is relevant and relatable, as it comes from trusted community members.

The differing timelines of the training programs may contribute to the distinct strategies observed in each region. With Galicia having initiated its training programs earlier, there is likely a stronger foundation of local trainers and a more developed network of support compared to Estonia, which is still in the process of establishing its consulting framework.

Importantly, both approaches highlight the inherently collaborative nature of capacity building. Through facilitated workshops, stakeholders from diverse backgrounds are brought together to share knowledge, experiences, and ideas. These workshops encourage participatory dialogue, where everyone's contributions are valued, and collective problem-solving is prioritized. This collaborative engagement is essential for fostering a sense of community ownership and responsibility toward local energy initiatives.

In summary, both pilots illustrate the significance of capacity building through differing yet complementary strategies. Estonia's personalized consulting and Galicia's training workshops reflect a shared commitment to empowering local communities. By strengthening the skills and knowledge of stakeholders, both initiatives enhance the overall effectiveness of energy transition efforts, ultimately leading to more sustainable and resilient local energy systems.

3. Challenges and Barriers

Both pilots address the obstacles encountered in the participatory process, particularly regarding the lack of knowledge, economic barriers, and ineffective institutional support. Estonia's chapter mentions knowledge-related barriers as well but provides a more optimistic outlook with ongoing activities in engagement, while Galicia describes the ripple effects of disengaged local governments and territorial dispersion as significant hindrances to participation.

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4. Implications for Community Development

The analysis of stakeholder engagement in both the Estonian and Galician pilots reveals that effective collaboration has the potential to invigorate community initiatives in significant ways. However, the distinct contexts and challenges faced by each pilot highlight different dynamics in the engagement processes.

In Estonia, the emerging sense of agency among engaged stakeholders is a promising development. Citizens appear to be increasingly willing to take initiative and ownership over their involvement in energy transition activities. This sense of empowerment is fostered through the cooperation with LEADER local action groups, which play a central role in the citizen engagement process. These groups provide a platform for individuals to rally together, share ideas, and develop actionable plans for local projects. The emphasis on grassroots organization encourages a spirit of collaboration and collective problem-solving. Stakeholders in Estonia are discovering their voices and contributions, leading to a stronger commitment to sustainable practices and a proactive approach to addressing energy challenges.

In Galicia, the reliance on municipalities as key partners underscores the importance of local governance in facilitating community initiatives. Municipalities often serve as the link between residents and larger regional or national frameworks, providing essential resources, guidance, and political support. However, this dependency can also create challenges if municipal leadership is inconsistent or if there is a disconnect between municipal objectives and community needs.

The reliance on municipalities in Galicia also indicates a more structured approach to stakeholder engagement compared to Estonia's grassroots model. While municipal partnerships can enhance resources and legitimacy for community initiatives, they can also risk diluting grassroots efforts if local voices are not adequately integrated into decision-making processes. The challenge lies in balancing top-down support with bottom-up initiatives, ensuring that community identities are not overshadowed by bureaucratic structures.

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Moreover, the fragmented identities within Galician communities present a notable challenge to cohesive engagement. Diverse interests and historical contexts can lead to divisions that hinder collaboration. This fragmentation requires concerted efforts to build trust and foster a unified sense of purpose among stakeholders. Initiatives aimed at community-building, dialogue, and inclusivity will be vital in overcoming these barriers and enhancing the effectiveness of collaborative efforts.

In summary, while both the Estonian and Galician pilots illustrate the importance of stakeholder engagement to energize community initiatives, they navigate different challenges and strategies. Estonia's emerging agency among local core groups reflects a strong foundation for grassroots collaboration, whereas Galicia's approach, reliant on municipal partnerships, highlights the urgent need to address leadership effectiveness and community cohesion. Both contexts underscore the necessity of tailored strategies that consider local dynamics to maximize the potential for impactful engagement in the energy transition.

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5. Good Practices, Recommendations and Relevant Networks

5.1 Good Practices and Recommendations

The strategies outlined in this section aim to promote the active and sustained participation of various stakeholders, strengthening community cohesion and ensuring the success of these initiatives. They also seek to democratize access to knowledge about sustainable energy, ensuring that all actors understand the fundamental concepts. Additionally, they aim to increase trust in RECs as viable solutions tailored to local needs, while empowering the community by developing practical skills that enable them to actively participate in the planning, execution, and management of RECs.

In this chapter, we will specifically focus on the Galician pilot project, as our Estonian counterparts believe it is still too early to draw definitive recommendations from their experiences. While the initiatives in Estonia have provided valuable insights, the evolving nature of their pilot require further observation and analysis before forming concrete recommendations.

The Galician pilot, on the other hand, has already demonstrated a range of engaged practices and outcomes that offer a rich basis for discussion and potential replication. The diverse strategies employed in Galicia exemplify how localized approaches can effectively mobilize communities, encouraging them to take ownership of the transition to renewable energy. Through community workshops, information sessions, and collaborative planning activities, the Galician initiative has successfully engaged a broad spectrum of stakeholders—from local residents and farmers to small business owners and municipal authorities.

Furthermore, the Galician approach has emphasized skill-building as a key component of its strategy. Through hands-on training sessions and collaborative projects, community members have developed essential skills in areas such as project management, energy efficiency, and sustainable practices. This empowerment has not only enhanced individual capabilities but has also strengthened the overall capacity of the community to sustain long-term engagement and promote resilience in the face of energy challenges.

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As we delve deeper into the insights gained from the Galician pilot, we will highlight specific strategies, successes, and areas for improvement. The knowledge gained from this initiative will serve as a valuable reference point for future projects, both in Galicia and across other regions seeking to enhance community participation in the renewable energy landscape. By focusing on these practical experiences, we hope to contribute to a growing body of best practices that can inform and inspire similar efforts elsewhere.

In this regard, the tools used by the Galician pilot have been:

- **Use of clear and locally adapted language**

It is crucial to use clear and accessible language in all activities and meetings. Technical terms should be explained with everyday examples and references that directly connect with the reality of rural communities. This approach makes the concepts more understandable and relevant to the general public, reducing comprehension barriers and increasing receptivity toward RECs.

- **Specialized training courses on REC and collective self-consumption**

Offering specialized training courses on REC and collective self-consumption is essential to provide local actors with the tools needed to actively participate in these initiatives.

These courses should be flexible in format and schedules, using both in-person and virtual modalities to ensure participation from people with varying levels of availability and access. In this regard, from EC4RURAL, we initiated the training offer “Renewable Energy Communities” in distance learning format. Below is the poster for this course:

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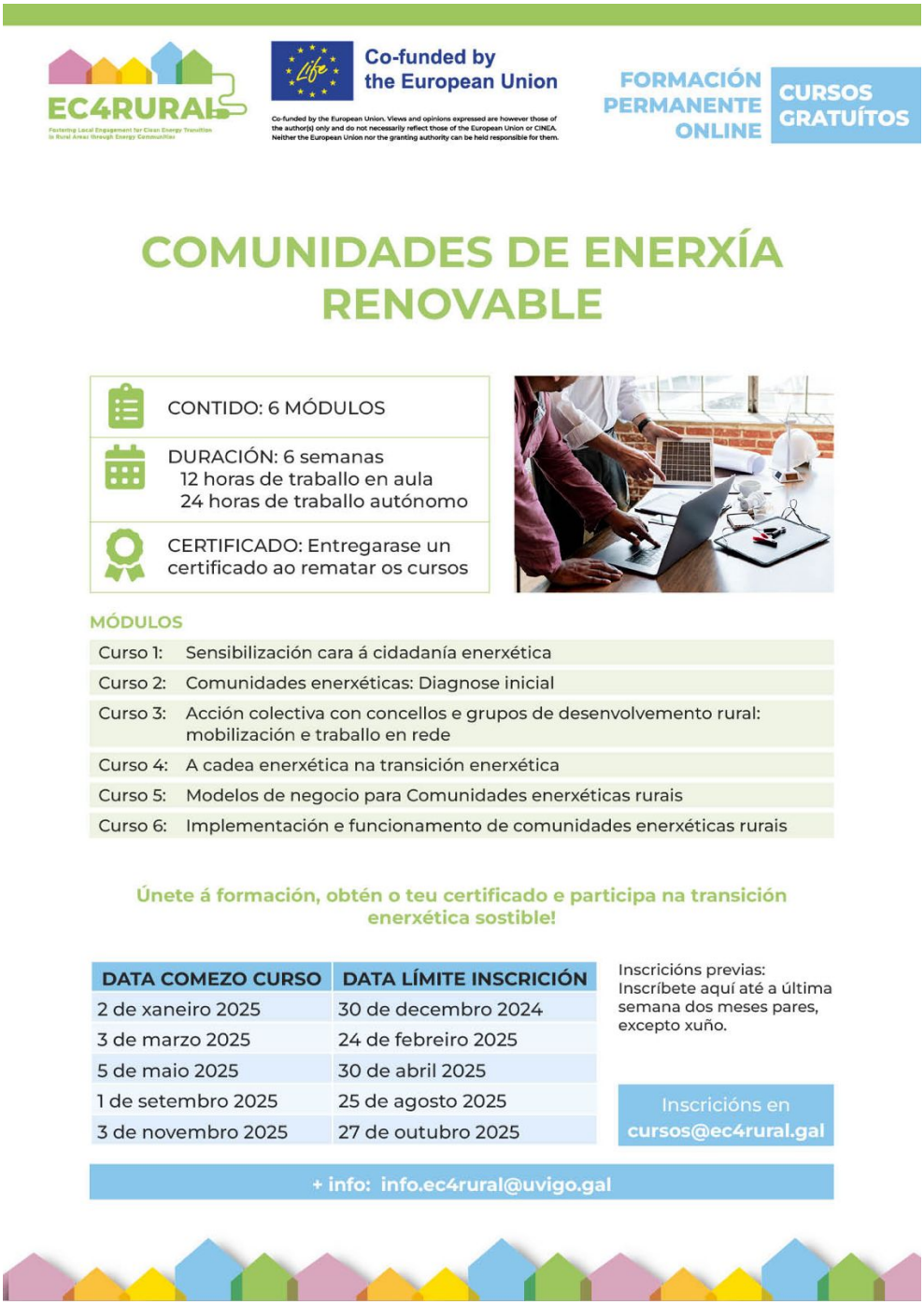

Figure 6: Galician training offer "Renewable Energy Communities".

- **Open informational conferences on energy community initiatives**

Organizing open conferences directed at the general public is a fundamental tool for raising awareness and educating the community about the opportunities and benefits of RECs. These conferences not only increase knowledge on the topic but also inspire confidence and motivation for active participation in initiatives.

In this regard, the Galician pilot has participated in several conferences, including:

- ✓ Conference on Climate Alliance (2023), organized by Energy Cities and Climate Alliance Modena and AESS.
- ✓ First "Energy Communities in Rural Areas: Challenges, Opportunities, and Realities" Conference (2023) organized by GWO
- ✓ LIFE-CET Energy Communities Gathering (2024).
- ✓ First Congress on Energy Communities and Social Economy (2024), organized by the Energy Communities Network in collaboration with the Vitoria-Gasteiz City Council.
- ✓ Energy Transition Day (2024), organized by FEGAMP and RDG Terra e Auga.
- ✓ 10th International Conference on Degrowth (2024).
- ✓ Conference on Distributed Energy through Energy Communities at the School of Mining Engineering (2024), organized by the Galician pilot EC4RURAL.
- ✓ Second "Energy Communities and Community Initiatives: The Galician Ecosystem" Conference (2024) organized by GWO.
- ✓ National Environment Congress CONAMA 2024.

- **Development of analytical tools:**

From the Galician pilot, two analytical tools have been developed that serve as economic analysis models in Excel format. These tools are designed to address common barriers in these processes: a lack of knowledge, insecurity in decision-making, and the absence of technical support.

The first tool is aimed at developing a Business Model for a REC, or more specifically, generating a Viability Plan. Its main function is to analyze the economic viability of

initiatives that are not yet realized but are hypothetical projects. Using this tool, it is possible to study the expected economic behavior of a proposal to assess if, in principle, it is sustainable and to make informed decisions about its development.

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The second tool focuses on evaluating real data from already existing community initiatives. In this case, data is collected from the economic performance of a specific year of the initiative's operation, aiming to analyze its actual economic behavior. This tool utilizes specific economic indicators to identify strengths and potential areas for enhancement in the performance of the initiative.

Both tools play a crucial role in overcoming knowledge barriers, enabling local and community actors to participate more actively and informedly in the development of RECs. These best practices enhance trust and security in decision-making processes, facilitating the shift towards a more inclusive and sustainable energy framework. The provision of accessible and targeted tools not only enhances the technical comprehension of projects but also encourages community engagement, which is essential for the success and establishment of Rural Energy Communities.

5.2 Relevant Networks Created

One of the main strengths lies in the networks created during the participatory process, which have not only facilitated collaboration among local actors but have also connected the project with other similar regional, national, and European initiatives. These networks strengthen the implementation of sustainable strategies, promote knowledge exchange, and support the replicability of innovative solutions.

Networks with other European projects:

The creation of connections with other European projects has played a crucial role in the advancement of the Galician pilot. This collaboration has facilitated the incorporation of insights gained from prior experiences, the reinforcement of best practices, and the efficient utilization of resources in the establishment of local energy communities. In the

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following section, we will outline the informal network formed with ongoing European projects that includes participants from Galicia.

Projects with which EC4RURAL has established synergies, such as COMENERG, ALDEALIX, CEL RURAL, and AGERAR PLUS, share a common focus:

- Promoting local energy communities: Based on renewable energy (solar, biomass) to reduce energy dependence and mitigate energy poverty.
- Community participation: Collaborative processes involving multiple actors (municipalities, citizens, local businesses).
- Rural sustainability: Strategies to combat depopulation and promote local economies through green energy solutions.

Key learning from these networks include:

1. Flexibility in implementation: Each energy community must adapt models to their specific sociocultural and environmental context.
2. Cross-border collaboration: Essential for leveraging shared resources, such as technical knowledge and practical experiences.
3. Importance of training: Training local actors on energy management and benefits ensures the sustainability of initiatives in the long term.

Collaboration between European projects represents a fundamental axis for the success of these initiatives. These networks foster knowledge transfer, allowing involved actors to share learnings from previous experiences, identify successful practices, and avoid common mistakes. This exchange not only enriches technical and organizational capacities but also accelerates implementation by building on proven models.

Networking also strengthens the political and social impact of projects. By integrating into a European energy transition ecosystem, initiatives gain visibility and credibility among communities and policymakers, fostering greater commitment from local actors and ensuring institutional support that is key for the long-term sustainability of proposed actions.

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Finally, building these alliances facilitates replicability, as successful models and solutions can be adapted to other regions with similar characteristics. This approach ensures that the benefits of energy communities are not limited to specific contexts but extend to various European regions, contributing to a more inclusive and cohesive energy transition.

Networks with other local community initiatives:

The progress of energy communities in Galicia has been gradual and hindered. At present, only two have successfully completed their establishment process, with Arousa en Transición being the first to reach this milestone.

Arousa en Transición, with its pioneering Local Energy Community Mar&Luz, stands out for its innovative model of energy self-management, serving as an example of replicability for rural communities.

Mar&Luz has successfully integrated multiple components into its shared self-consumption project, including a 30-kW solar panel installation on a municipal building, a public charging station for electric vehicles—the first in its municipality—and a smart demand management system. This multidimensional approach not only addresses local needs but also drives a cultural shift toward sustainability and electric mobility in Arousa.

The participation of diverse actors, such as the municipality, the OPP20 (Organization of Shellfish Producers), and local families, demonstrates how community governance can generate tangible social and environmental benefits. Additionally, the model fosters the inclusion of small businesses and cooperatives, like GoiEner, responsible for energy commercialization, reinforcing the local ecosystem of the energy transition.

This energy community has participated in two training and dissemination actions organized by EC4RURAL, serving as a speaker at events such as the "Energy Communities in Rural Areas: Challenges, Opportunities, and Realities" (2023) and the meeting organized by FEGAMP and RDG Terra e Auga aimed at promoting energy communities (2024).

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The other energy community currently functioning is the CMVMC of A Reigosa, which will be discussed in the following section.

EC4RURAL has also established ties with another local community initiative: XERando, from the municipality of Xermade. In this initiative, structured as an Association, various stakeholders are engaged, including two public legal entities: the municipality and FEGAMP, which serves as a member and facilitator of EC4RURAL, offering a site for photovoltaic installation. Additionally, two small and medium-sized enterprises, the CMVMC of Lousada, along with 31 local residents, are participating. This initiative is a component of the previously referenced CELRURAL project.

Both initiatives are notable for their capacity to engage rural communities in the realms of renewable energy and sustainability. Important insights gained from these experiences encompass:

1. The role of local cooperation: Both initiatives highlight how collaboration between different actors, such as public administrations, local businesses, and citizens, is fundamental for successful and sustainable projects. The example of Arousa en Transición, with the collaboration between the municipality, the OPP20, and families, demonstrates the importance of creating strategic alliances at the local level.
2. Institutional and financial support: The involvement of public entities and European programs has been crucial in both cases. Arousa en Transición has received funding from the Ministry for Ecological Transition, while XERando from Xermade has benefited from INTERREG support through the CEL Rural project, facilitating access to technical assistance and financing.
3. Replicability and scalability: These projects benefit not only local communities but also serve as models for replication in other regions. Arousa en Transición acts as a model for other islands, and XERando from Xermade has the potential to expand its model to other rural areas seeking autonomous energy solutions.

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Networks with community initiatives (CMVMC):

Collaboration with initiatives led by Mancomunidades de Montes en Man Común (CMVMC), such as Liñares, Tameiga, Buchabade, and A Reigosa, has provided a unique perspective on integrating community land management into energy transition projects. Both Liñares and A Reigosa have opted to create a cooperative society, while Tameiga and Buchabade have maintained their own legal structures and developed collective self-consumption.

These last two CMVMCs, despite the government denying them the status of an existing energy community, have adopted the Collective Self-Consumption model, demonstrating that traditional community management structures can be effectively adapted to new energy paradigms. These initiatives have utilized communal resources to drive renewable energy generation projects, integrating environmental care and community benefit into their designs.

The experience of CMVMCs in projects like Liñares, Tameiga, Buchabade, and A Reigosa shows that traditional land management structures can successfully adapt to energy transition challenges. These initiatives are characterized by:

1. Flexibility in legal and financial models: The use of alternative models, such as collective self-consumption, helps overcome the legal limitations imposed on traditional energy communities.
2. Shared resource utilization: Using communal areas optimizes land use and maximizes renewable energy generation capacity.
3. Innovation in community governance: Combining self-financing, solidarity loans, and public aid strengthens the independence and sustainability of initiatives.

Networking with CMVMCs not only enriches the exchange of best practices but also amplifies the social and environmental impact of energy transition projects like EC4RURAL. Their experience highlights the importance of articulating local management models that integrate sustainability, community autonomy, and adaptability to different legal frameworks.

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6. Conclusions

During the first year of the project, EC4RURAL partners have begun to establish a dedicated group tasked with overseeing all strategic decisions pertaining to the management, organization, and facilitation of training initiatives. A methodological framework for this work package was drafted and discussed in November 2023, laying the groundwork for effective engagement and training processes.

As part of the Stakeholder and Energy Citizen Engagement Task, the project partners have set in motion a comprehensive strategy to involve citizens in the energy transition. In total, this engagement process encompasses 22 pilot studies across Galicia and 12 in Estonia, with tailored approaches designed to reflect the unique characteristics and needs of each municipality. This targeted engagement strategy is crucial for fostering a sense of ownership among residents and ensuring their active participation in the transition towards sustainable energy practices. By considering the distinct social, economic, and environmental contexts of each area, the project aims to enhance collaboration and empower local communities in the energy transition journey.

One of the standout aspects of both pilots has been their focus on creating inclusive opportunities for participation. This has been achieved by tailoring programs to meet the specific cultural and social contexts of the region. By involving citizens in the decision-making processes, EC4RURAL has fostered a sense of agency and accountability. As community members become more informed and engaged, trust in Renewable Energy Communities (RECs) has naturally increased, as they begin to see tangible benefits that resonate with their local needs and realities.

The experiences documented in this report highlight the successes and challenges encountered during the pilots, providing insights into the methods that were effective in fostering citizen engagement. In particular, the report examines the innovative approaches taken to encourage participation, facilitate knowledge sharing, and build networks among diverse stakeholder groups.

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In addition to summarizing the outcomes of the pilots, this report also offers a series of recommendations for future initiatives aimed at strengthening citizen involvement and network creation. These recommendations are grounded in the lessons learned from the Estonian and Spanish contexts and are designed to guide similar efforts in other regions. By reflecting on the successes and setbacks of these pilots, stakeholders can better understand the dynamics of collaboration and engagement, ultimately contributing to more effective and sustainable energy transition strategies.

Overall, the findings presented in this report not only illuminate the engagement strategies employed during 2024 but also serve as a crucial resource for policymakers, community leaders, and organizations looking to enhance citizen participation in the energy sector and beyond.

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Annex 1

Translation of the article published in Estonian local newspapers in spring 2024.

Empowering Communities through Collective Energy Solutions

In recent years, there has been a significant increase in the installation of rooftop solar panels. By 2035, it is projected that the number of solar panels on Estonian homes could triple, potentially meeting a quarter of household electricity consumption. Currently, there are over 15,000 generating consumers; however, there remain untapped opportunities for production that exist between individual and corporate action—community energy. These projects are undertaken on a cooperative basis and offer direct benefits to local communities.

Community energy initiatives can take various forms, including community-owned renewable energy installations such as solar panels and wind turbines, electric vehicle or bicycle rental services, and energy efficiency programs or renovation services. Additionally, they can encompass community-based energy cooperatives that manage heat services or offer other services within the energy market.

The legislation outlines two similar options—renewable energy communities and citizens' energy communities—differing primarily in specifics. However, both share a common principle: participation allows individuals to engage in decisions regarding energy production and consumption, as well as to influence how energy is generated and how its benefits are distributed. Traditionally, energy consumers are passive market participants—we receive electricity from the grid and pay a service provider for its usage. In contrast, community energy shifts much of the decision-making to the local level. In addition to financial benefits, other advantages can also be identified. For instance, an energy cooperative might choose to offer its members services under more favorable or stable terms, thereby addressing the common needs of the local community or providing local value-added companies with access to renewable energy sources.

Community energy production occurs close to consumption sites or makes use of available space, such as rooftops. As a result, it has a minimal negative impact on the natural environment, reducing pressure on ecosystems and directly contributing to lower energy losses. Local energy projects create jobs and facilitate greater financial circulation within the local economy. They also diminish dependence on centralized energy sources, enhancing energy independence and resilience, particularly in rural areas.

Moreover, because a broader range of individuals is engaged in energy matters, community energy initiatives often incorporate educational programs and organize informational campaigns, which boost energy awareness and efficiency. By collaboratively seeking solutions and making decisions together, these initiatives promote social cohesion, uniting residents around common goals while fostering cooperation and mutual support.

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In conclusion, community energy empowers communities to take control of their energy futures, offering a wide array of social, economic, and environmental benefits.

12 municipalities from Estonia, 22 rural municipalities from Spain and ten organisations are participating in the Energy Communities project “Fostering Local Engagement for Clean Energy Transition in Rural Areas through Energy Communities” (EC4RURAL). The aim of the international project is to help local governments and communities transition to clean energy while ensuring the active participation of rural areas and local communities.

Launched in autumn 2023, the project aims to foster the development of local renewable energy communities to enhance energy independence, promote life in rural areas, and reduce energy poverty. In addition, it will create e-learning resources and implement a comprehensive training program for the local community. The project is set to run for four years.

If you would like to learn more about community energy production, you are welcome to attend the opening seminar of the EC4RURAL project. More information can be found on the Estonian LEADER Union website https://leaderliit.eu/ec4rural and on the Facebook page https://www.facebook.com/eestileaderliit.

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