

30/04/2024



Report on activities addressing stakeholders



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| Project Acronym | RENOVERTY |
| Project Name | Home Renovation Roadmaps to Address Energy Poverty in Vulnerable Rural Districts |
| Project Coordinator | IEECP |
| Project Duration | 3 years |
| Website | https://ieecp.org/projects/renoverty/ |
| Deliverable No. | D3.1 |
| Dissemination Level | Public |
| Work Package | WP3 |
| Lead beneficiary | AISFOR |
| Author(s) | Beata Styczeń (ELARD) Marina Varvesi (AISFOR) Pierpaolo Romano (AISFOR) Diana Zimelli (AISFOR) |
| Reviewed by | Mara Oprea (IEECP) Paula Fonseca (ISR) |
| Date | 31/10/2025 |
| File Name | Report on activities addressing stakeholders |

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About RENOVERTY

RENOVERTY will foster energy efficiency building upgrades in the Central and Eastern Europe (CEE), South-eastern Europe (SEE) countries, as well as Southern European countries (SE), by setting the methodological and practical framework to build renovation roadmaps of vulnerable rural districts in a financially viable and socially just manner.

Specifically, the project aims to deliver tools and resources to support local and regional actors to build and execute operational single or multi-household roadmaps for rural areas. A scalable model will also be created to ensure the wide geographical replicability and implementation of the roadmaps by different actors at the EU level. Strategically, the project will contribute to minimising logistical, financial, administrative, and legal burdens caused by a complex and multi-stakeholder home renovation process. Additionally, RENOVERTY will ensure that building retrofits consider the social dimension by incorporating security, comfort, and improved accessibility in the roadmaps to further improve the quality of life of vulnerable populations.

Over the project's three years, seven pilots located in Sveta Nedelja (Croatia), Tartu (Estonia), Bükk-Mak & Somló-Marcalmamente-Bakonyalja Leader (Hungary), Zasavje (Slovenia), Parma (Italy), Coimbra (Portugal), and Osona (Spain) will implement the roadmaps, while wider integration of rural and peri-urban development is foreseen in the long run.

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EXECUTIVE SUMMARY

RENOVERTY is an EU project aimed at addressing energy poverty and improving energy efficiency through building renovations in vulnerable rural areas of Europe. The project focuses on developing scalable renovation plans and operational models by creating Rural Energy Efficiency Roadmaps (REERs) for pilot areas in Croatia, Estonia, Hungary, Slovenia, Italy, Portugal, and Spain, with the goal of replicating these models throughout Europe.

Key objectives include boosting energy efficiency, empowering stakeholders, streamlining renovation processes, and enhancing the social aspects of building retrofits. The project also aims to create policy suggestions for simplifying renovation procedures, promoting citizen involvement and providing training initiatives for effective implementation. By implementing initiatives in pilot countries, RENOVERTY aims to evaluate the effectiveness of energy renovation strategies in various contexts and contribute to the transition to a low-carbon economy.

This report provides an overview of the elapsed activities involving various stakeholders and summarises the actions taken during the project's first phase. It presents the progress made in the pilot areas to date and emphasises the role of local action groups as facilitators of the process at the local level. The third chapter of the report outlines the activities carried out in each pilot area and identifies the ones still pending. This report explicitly covers the tasks that have been executed until April 2024.

The report concludes by summarising the obstacles encountered and the actions taken to overcome them. It also provides information about the next steps to increase citizens' and other stakeholders' involvement. These include completing awareness-raising activities, organising co-creation workshops, and providing direct training to stakeholders.

1. Introduction

RENOVERTY is an EU project funded by the LIFE program, which focuses on tackling energy poverty and encouraging the renovation of buildings to improve energy efficiency in various parts of rural Europe. The project aims to develop effective strategies for developing renovation plans that cater to the specific requirements of rural communities in need, as studies have shown that there are notable differences in economic situations between urban and rural areas in Europe. Rural regions in Central and Eastern Europe tend to face greater economic challenges compared to urban areas, while similar issues are present in Southern European rural areas, where economic inequalities have been difficult to address. As such, RENOVERTY focuses on designing scalable renovation plans and operational models for rural areas in Croatia, Estonia, Hungary, Slovenia, Italy, Portugal, and Spain, with the goal of replicating these models throughout Europe.

RENOVERTY aims to encourage renovation in rural areas, boost energy efficiency in 17 rural areas spanning seven regions, empower all stakeholders in rural renovation projects, and streamline the logistical and financial aspects of home renovation. The initiative also seeks to ensure that building retrofits improve energy efficiency as well as enhance social aspects such as security, comfort, and accessibility for citizens, ultimately enhancing their quality of life. One of RENOVERTY's main outputs includes its Rural Energy Efficiency Roadmaps (REERs). These roadmaps are detailed guides for successful building renovation, customized to suit each pilot area's specific qualities for maximum effectiveness. Furthermore, the project concentrates on creating policy suggestions on both local and European scales to simplify building renovation procedures and encourage citizen involvement. These policies incorporate measures for financial aid aimed at populations struggling with economic difficulties and energy scarcity. Stakeholder empowerment is another key objective of RENOVERTY, with robust training initiatives designed to equip participants with the knowledge and skills needed for effective implementation and sustainability. Training sessions will cover the economic and environmental benefits of building renovation and the co-design process for REERs.

Through the implementation of RENOVERTY activities in these pilot countries and areas, the project will have the opportunity to evaluate the effectiveness of energy renovation strategies in diverse contexts, including rural and peri-urban settings. This approach will provide an in-depth understanding of the specific challenges and unique opportunities that each country and pilot area present for the transition to a low-carbon economy and for the reduction of energy consumed in buildings.

1.1. Structure of the report

This report describes the RENOVERTY strategy for engaging with stakeholders and highlights their importance to the project's success. It provides a comprehensive overview of the scheduled activities involving stakeholders and summarises the actions taken during the first half of the project. It also outlines the significance of these actions in replicating outcomes and achieving long-lasting impacts expected as a result of RENOVERTY. The report acknowledges that progress achieved in the pilot areas to date has varied significantly between countries due to differences in local conditions and flexibility given to pilot partners to align their actions with those conditions most effectively.

While the first chapter provides a description of the project, the second aims to present the main activities addressed to stakeholders and citizens - from the identification of the LAGs in each pilot country, to the workshops and events to raise awareness, and finally to the co-creation workshops. The third chapter describes which activities have been carried out and which still need to be implemented within each pilot country. Then, conclusions and next steps are reported, highlighting the main obstacles that were encountered in the involvement of all stakeholders. To conclude, materials created, collected or used during these activities are presented.

The report specifically covers the tasks executed by April 2024. It is important to note that a more detailed version of the report, which includes all of the remaining materials and conclusions from the initiatives planned for the following months, will be released by the end of the project, as activities involving stakeholders are scheduled throughout the whole duration of action.

2. Main activities addressing Stakeholder

2.1. Collaboration and engagement with LAGs

Key strengths of RENOVERTY were active dialogue and exchange of information between all actors involved in the renovation chain to consider all key stakeholder's inputs in the process of creating Rural Energy Efficiency Roadmaps (REERs). From the initial stage, Local Action Groups (LAGs) were identified as the main facilitators of this process in pilot areas. LAGs are well-established public-private partnerships working in rural areas, which made them valuable partners in reaching out to multiply local stakeholders, like municipalities, local agencies, regional associations, NGOs and citizens living and operating in their area. They adopt an integrated and multi-sectoral approach, where different sectors work together in a holistic manner to solve the problems of rural areas.

LAGs defined a particular territory as a reference area, taking into account the common traditions, resources, identities, needs and expectations of the local population and communities, and brought together the various stakeholders of a region to design and execute strategies for the development of this area. These strategies were called Local Development Strategy (LDS) and they were comprehensive plans or approaches formulated at the local level to promote sustainable development within a particular region or community.

These strategies were typically designed to address the unique economic, social and environmental challenges of a specific location. Effective implementation of local development strategies required establishing and maintaining linkages between various economic, social, cultural and environmental actors. The LEADER approach emphasized a bottom-up elaboration and implementation of the LDS, where local actors participated in its development, selection of priorities, and implementation of projects. Selected projects were funded through the LEADER/CLLD (Community-Led Local Development) budgets that, based on the identified criteria, best addressed the needs of local communities.

Innovation (technological, organisational, social) fell within the interest of LAGs, as this helps them to provide new responses to specific problems within rural areas that remain unsolved by traditional policy instruments. Networking and cooperation were at the core of LAG functioning, as well as the exchange of experiences and knowledge, which was a valid element of the LEADER/CLLD approach and LAG's activities. All of these features made LAGs a valuable partner throughout all of the project phases.

Apart from the role of local facilitator, the LAGs were foreseen to:

- supported identification of the building types to be included in the REERs;

- supported project partners in identifying local stakeholders to be involved in the building renovation process;
- contributed to the development of REERs and participated in trainings and other activities offered by the RENOVERTY;
- supported awareness and capacity building through the organisation of events and workshops addressed to local communities and stakeholders;
- disseminated project outcomes.

Therefore, the first step in the project was analysing the pilot areas to identify LAGs operating in their territories and get their commitment to cooperation within RENOVERTY. To do so, the consortium used various data sources, including ELARD's network information, information gathered by piloting partners in their countries, and interviews with local stakeholders.

Table 1: Local Action Groups identified to cooperate in pilot areas

| Pilot country | LAG in pilot area | Area covered by the pilot | Description of the Pilot Area | RENOVERTY significant stakeholders member of the piloting LAG |
|----------------|----------------------------------|--|---|--|
| Croatia | LAG Sava | Sveta Nedelja | A city of 18,221 inhabitants who live mostly in rural and peri-urban areas | LAG Sava, local government (City of Sveta Nedelja), household members |
| Croatia | LAG Valis Colapis | Žumberak | Very rural and remote, with hills and 609 inhabitants | LAG Vallis Colapis, local government (Municipality of Žumberak), household members |
| Estonia | Tartumaa Arendusselts | Villages in Tartu County | Rural county in the South-Eastern part of Estonia. 145,000 inhabitants, 65% of which live in the regional capital Tartu. | Tartumaa Arendusselts |
| Hungary | Bükk-Térségi LEADER Association | BükkaranyosCser épváralja, Parasznya, Sajókeresztúr. | Located in the most underdeveloped region of Northern HU and is made up of 40 municipalities with a total population of 87,512 inhabitants. | LAG's municipalities, board members of the LAG |
| Hungary | Somló-Marcalmunte-Bakonyalja LAG | Bakonyszücs, Nagytevel, Pápateszér. | Located in the Central Transdanubia, which is one of the most developed regions of HU with several disadvantaged municipalities in the | LAG's municipalities, the board members of the LAG |

| | | | | |
|-----------------|---|--|--|--|
| | | | area. The LAG covers 42 municipalities with a total of 25,073 inhabitants. | |
| Italy | GAL del ducato (Gruppo di Azione Locale di Parma e Piacenza) | Parma | The pilot area is located in the northern area of the Emilia-Romagna region, between the Padana plain and the Tuscan-Emilian Apennines. It involves 60 municipalities in the provinces of Parma and Piacenza, with a total population of 158,000 residents. | UPI Parma, APLA Parma, CNA Parma, GIA Parma, Confcooperative Parma, Unione Agricoltori Parma, CIA Parma, Coldiretti Parma, ENAIP Parma |
| Portugal | ADIBER - Associação de Desenvolvimento Integrado da Beira Serra | Arganil, Góis, Oliveira do Hospital, Tábua | A very rural and mountainous area of 1030 km ² with 49,232 inhabitants. | |
| Portugal | COIMBRAMAISF UTURO - Associação de Desenvolvimento Local de Coimbra | Coimbra | Urban and periruban areas. | |
| Slovenia | LAG Partnership Zasavje | Hrastnik, Trbovlje, Zagorje, Litija | The smallest Slovenian region in area and population with 57,000 inhabitants. It is defined by its mining history. | Območna obrtno-podjetniška zbornica Hrastnik |
| Spain | Associació pel Desenvolupament Rural de la Catalunya Central | Osona county | A rural area with a total population of 162,257 inhabitants (2020) in 50 municipalities. Half of the population is concentrated in 3 municipalities (Vic, Manlleu and Torelló). 24 municipalities have less than 1,000 inhabitants, and 18 of them have less than 500 inhabitants. | LAG's municipalities, CEEC, Associació de Dones del Món Rural |
| | ADRINOC: Associació per al Desenvolupament Rural Integral de la Zona Nord-Oriental de Catalunya | | | Consorti del Ter, LAG's municipalities |

| | | | | |
|--|---|--|--|----------------------|
| | Associació per la Gestió del Programa Leader Ripollès Ges Bisaura | | 28 municipalities of the area are covered by 3 different LAGs. | LAG's municipalities |
|--|---|--|--|----------------------|

After the successful identification of the LAGs, the consortium proceeded to the next step, which involved inviting them to participate in project activities and establishing cooperation. Before reached out to the LAGs, the team first agreed on the best approach to engage them and clearly defined the expectations and planned actions. This internal agreement ensured that the LAGs would be approached in a consistent and organized manner, with a clear understanding of their role in the project and the actions that would be expected from them. Setting these expectations early on, the project team was able to establish a strong foundation for collaboration with the LAGs, which is essential for achieving the project's goals.

As the following step, on 27th of February 2023, an online meeting with all LAGs and project partners was arranged to present:

- the RENOVERTY project, with its policy background and overview of planned activities,
- the concept of renovation roadmaps in pilot countries,
- building capacity for co-creation of renovation strategies,
- expected local action group engagement.

The project was well received, and representatives from LAGs expressed their willingness to collaborate. Following verbal expressions of interest, a template Letter of Intent was drafted to be signed by three parties: ELARD, the pilot partner, and the respective LAG, to signify the parties' interest and commitment to the project.

It was agreed that financial support would be provided to LAGs from designated ELARD project funds to support activities aiming at increasing local stakeholders' engagement, consultations and other project-related tasks. The allocated amount was a lump sum, equal for each LAG. In some instances, additional Letters of Agreement were signed to set settlement details based on the country's requirements. The exemption was the Italian pilot, where ELARD was not involved in a financial settlement and, as a consequence, was not part of the LoI. In this case, the financial support was provided by AISFOR based on a bilateral contract with the LAG.

The next phase involved establishing direct cooperation between the pilot partner and LAGs to plan further activities and agreed on the best communication methods. Depending on the pilot, different approaches were used, such as regular or "on request" meetings. Based on feedback from partners, the cooperation with LAGs had been going well and no interventions were needed. However, the progress differs significantly between countries, which was reported in the following sections. Some workshops and events for communities would also be conducted later than initially planned due to different factors that influenced timing changes in particular cases. Activities involving LAGs were scheduled throughout the whole project since their participation was also expected in training, REERs co-creation, dissemination and replication.

Financing was not the only but came as one of the most important obstacles to undertaking renovations. As such, RENOVERTY worked to define the appropriate financial tools and measures that enhance the adaption and implementation of renovation roadmaps. Analysing existing policies tackling energy poverty and financial mechanisms for renovating dwellings of people affected by energy poverty would allow addressing financial aspects in roadmap development.

In this context, the involvement of LAGs allows for exploring if and how the energy topic was addressed locally through their Local Development Strategies (LDS). The LEADER Programme was financed via Pillar 2 of the Common Agriculture Policy (CAP), the EU's rural development policy designed to support rural areas to meet their wide range of economic, environmental and societal challenges. Although the program's assumptions were established at the European level, the details of the solution might vary in individual countries, as member states were responsible for deciding on specific regulations to be applied. Energy efficiency and activities aimed at environmental protection and green transformation were included in most LDS. However, the budgets were not sufficient to finance large investment projects. Moreover, they cannot be used to support private household undertakings.

Nonetheless, introducing specific measures in the local development strategy might allow the LAG to act as a facilitator finance surveys, feasibility studies, roadmaps, awareness and capacity-building activities.

LAGs interventions could benefit a wide range of local stakeholders, including Small and Medium-sized Enterprises (SMEs) such as limited liability companies, joint-stock companies, general partnerships, commercial associations, self-employed persons, and even farmers. Third-sector organisations like village and community associations, community groups, non-profit associations, and foundations could also benefit. Measures in LDS related to energy efficiency could further encourage these beneficiaries to incorporate actions associated with this topic when applying for grants of other kinds and thus act as change drivers in local communities.

The abovementioned options, as well as others that might appear with during the project, would be further developed and validated during REERs co-creation to check for their feasibility in pilot areas and possibilities for replication.

2.2. Increasing householder awareness (Events)

The overall objectives of RENOVERTY were to foster energy efficiency building upgrades in energy-poor households, promote the renovation in rural vulnerable districts and set the basis for increasing energy efficiency.

The latest data show that approximately 40 million Europeans across all Member States, representing 9.3 % of the EU population, were unable to keep their homes adequately warm in

2022. That is a significant increase from 2021 when 6.9 % of the population was in the same situation.¹

Energy efficiency is Europe's most significant energy resource. The most effective way to address this issue is by reducing energy consumption in residential and non-residential buildings. It is crucial to implement energy-efficient measures to meet energy efficiency targets, especially in existing, old building stock, which is a significant contributor to energy consumption, primarily by private households. However, in parallel, it is crucial to build awareness and educate about consuming energy in a cost-effective way and minimising energy waste.

One of the main focus areas of RENOVERTY was to include households as the primary stakeholders in the entire process from the very early stage.

Energy-poor households were also the main target group receiving support from the respective pilots. After joining the project by agreeing to conduct an energy audit, the households were included in co-design building renovation roadmaps to improve their situation. Obtaining data on the energy performance of buildings was necessary as a contribution to the project's basic task, which was creating REERs. It wouldn't be possible without convincing residents of the benefits of house renovation and getting their buy-in. Next, through increased awareness and bigger engagement, citizens might become active players in the energy system rather than simple energy consumers.

Therefore, the project aimed to increase homeowners' and residents' awareness of the multiple benefits of energy efficiency. Mapping out and understanding the key barriers that rural and peri-urban residents face when it comes to home energy upgrades is the necessary starting point to address all issues, provide solutions on how to overcome them, and encourage vulnerable people to undertake the renovation. Lack of knowledge in that area was identified as one of the barriers that can hinder the implementation of energy efficiency measures.

Through comprehensive desk research and a survey, the project conducted an in-depth analysis to lay the foundation for RENOVERTY activities and gain a deeper understanding of energy poverty in vulnerable rural areas, a topic largely unexplored in terms of its specificity. The findings are detailed in the report "Updating the energy poverty and energy efficiency framework in rural areas across the EU".² This report, in addition to providing information to relevant stakeholders regarding the specific characteristics of rural areas about energy efficiency and energy poverty, was essential to assist subsequent activities of the project that seek to enhance the uptake of energy efficiency and address energy poverty in rural contexts.

The report confirms that villages and small towns face more challenges compared to urban areas. These challenges include a lack of technical knowledge, information and lower

¹ Source: Eurostat (*ilc_md01*).

² Papantonis D., et. al. (2024). *Updating the energy poverty and energy efficiency framework in rural areas across the EU. Deliverable 2.1. EC-LIFE RENOVERTY project.* University of Piraeus Research Center (UPRC), Piraeus, Greece.

educational capabilities. Moreover, people in smaller communities tend to rely more often on word-of-mouth recommendations, which leads to a lack of awareness and scepticism towards assistance programs and resources available.

Therefore, the RENOVERTY project strongly emphasises local communication through trusted individuals and traditional channels. Online communication may not be accessible for those experiencing energy poverty, so these most common marketing strategies can be ineffective. Building communication on the engagement of local stakeholders (municipality and LAG employees, social workers, etc.) seems more valuable and efficient.

Many smaller municipalities are facing significant challenges when it comes to implementing effective climate protection strategies. Unfortunately, these communities often lack the resources, infrastructure, and knowledge needed to tackle this complex issue. As a result, actions taken were insufficient to address specific needs and don't move forward development in an organised way. It provided individual household REERs, according to the distinctive characteristics of the buildings and considering the geographical and social context developed in the pilot areas, and supported rural communities with the ready-to-use tool tested replicable instruments. Finally, it helped to accelerate the transition to a more sustainable environment.

In the project, activities aiming at building citizens' awareness were planned two-fold:

- individual meetings with single households
- events in a collective manner

The first option was included to address the possible issue that some participants might feel uncomfortable discussing their situation publicly. Individual meetings were conducted while identifying houses for energy audits, as well as follow-up meetings to present audit results and possible actions to improve energy efficiency.

The collective events for community members had been planned to present the project from a broader perspective, provide a summary of the analysis, and offer general information on the potential benefits of the dwelling's renovation. In many instances, the benefits were seen only from a financial perspective, while the scope of advantages is much more extensive. They also included:

- physical and mental health
- wellbeing and comfort of living
- poverty alleviation
- impact on building value and rentability
- creating new jobs

In the long run and at macro level, benefits include an increase in energy security, reduced CO2 emission, and decreased health care costs. All of the abovementioned factors are considered when building an education and information campaign.

To best address knowledge shortages and work out tailored communication, the consortium took steps to define tools and resources to properly address and engage households in the

renovation process and to prepare and evaluate communication materials. Different kinds of available examples from other projects and pilot countries were collected to analyse which type of materials would suit RENOVERTY and its specifics, taking into account the message and target groups. A SWOT analysis was conducted to pick the most relevant formats to be adapted or developed further. All materials were translated into pilot countries' national languages; they were also subject to modification to best suit local conditions and needs. All messages were carefully reviewed and consulted to meet consortium expectations but also follow Commission recommendations like building trust among beneficiaries of relevant schemes, avoiding stigmatising vulnerable groups and encouraging the uptake of energy efficiency measures (also in the rental sector, mitigating split incentives between landlords and tenants and reducing energy poverty through lower energy bills resulting from renovations).³

Meetings and events for households included informing residents about energy efficiency measures and benefits and, where available, about financial support for implementing energy-saving solutions.

Tailor-made training materials have been developed to facilitate the learning process for all stakeholders involved. Other materials developed within the project targeting residents will be shaped to be universal and possible to distribute among a bigger audience, also outside the pilot areas/countries.

Table 2: Events for local communities

| Pilot country | 1st event | 2nd event |
|-----------------|--|-----------------------------------|
| Croatia | 30.10; 8.11; 9.11; 16.11; 22.11.23 | 27.02.2024 |
| Estonia | June 2024 | Sept 2024 |
| Hungary | 07.05. 2024 | 28.11.2024 |
| Italy | 28.02.2025 | 31.07.2025 |
| Portugal | 16.01.2024, 23.01.2024, 24.01.2024, 15.02.2024, 2.05.2024, 03.05.2024, | 29.11.2024,18.02.2025, 25.06.2025 |
| Slovenia | Oct- Nov 2023, 19.6.2024, 19.6.2024, 20.6. 2024, 15.10.2024, | 25.3.2025, 17.6.2025 |
| Spain | 20.07.2023, 13.07.2023; 15.09.2023; 19.09.2023; 20.09.2023 | 13.10.25 |

³ European Commission (EC), "Commission Recommendation on energy poverty," no. October. 2023.

2.3. Increasing stakeholder awareness (workshops)

For RENOVERTY, with its aim to improve the energy efficiency of houses in rural areas and enhance sustainability, collaboration is a crucial aspect. To ensure that the project's objectives are met, it is vital to involve local stakeholders from an early stage. This includes local communities, municipalities, businesses, and organizations functioning in the pilot areas. This approach guarantees that all relevant parties are included in the process of co-creating REERs, and by following a bottom-up approach, the project can effectively gather acceptance and engagement from local actors.

The successful design and implementation of energy renovation strategies is a complex process that requires the involvement of various groups of stakeholders with different perspectives, sensitivities, and interests. The RENOVERTY project identifies a non-exhaustive list of stakeholders who play a crucial role in the process. These stakeholders include vulnerable households, national/regional/local public authorities, Local Action Groups (LAGs), energy experts and auditors, financial services, the construction and business industry, and the real estate market.

As regions, and rural areas in particular, face unique challenges due to their diversity of population, natural conditions, infrastructure, and building characteristics, it is essential to engage with different groups of stakeholders to better understand local specifics and identify all factors to ensure successful implementation. The existing LAGs, with their established local relations, knowledge, and LEADER/CLLD methodology, are uniquely positioned to approach rural communities in pilot areas. Their local support on various issues makes it easier to engage with them and benefit from their expertise, thereby enhancing the success of the RENOVERTY project.

LAGs cooperating in the project were involved in supporting the identification of relevant stakeholders in pilots. Furthermore, in some cases, they provided assistance in identifying households that were included in the project through energy audits. Since the LAGs operate in rural areas, they possess extensive knowledge about local conditions, and they have experience in communicating with local entities, especially that many of them are LAG members, such as municipalities, NGOs, farmers and other citizens.

Having identified the parties, pilot partners could start preparing to arrange workshops targeting the main stakeholders in the renovation value chain. In the project, two workshops in each pilot are scheduled:

- The first, to share information and prepare stakeholders to co-design activities,
- The second to present the results of energy audits conducted in the pilot area and engage in the following step, which is setting up the roadmaps.

In general, workshops aim to train facilitators of the co-creation process by providing an overview of the tools, resources, and knowledge needed to manage the REER co-design process. They are also shaped to raise awareness among citizens and stakeholders on the benefits of renovations.

The first informative workshop focuses on presenting the RENOVERTY project in the wider context of energy poverty, followed by a presentation of the project, its objectives, and an explanation of the concept of REERs.

The second workshop includes more detailed information, including presenting pilot energy audit results and introducing a more focused discussion on interventions to improve buildings' energetic characteristics, specific needs, possible barriers and opportunities, which in the following phase will feed into REER development.

Working with local communities to learn their energy needs, preferences, and limitations and incorporate them into the designing process ensures that the project is tailored to the community, more likely to be embraced, and has a higher chance of achieving the desired outcomes. As such, pilot partners have big flexibility in structuring workshops and events to best fit local conditions. They are combined with other activities, like training or participating in external events, if it suits the general purpose of increasing awareness and attracting stakeholders to participate in the REERs co-creation process.

Table 3: Workshops for local stakeholders

| Pilot country | 1st workshop | 2nd workshop |
|-----------------|------------------------|---|
| Croatia | 26.09.2023 | 27.02.2024, 5.11.2024. |
| Estonia | 30.01.2024 | May 2024 |
| Hungary | 07.05.2024 | 12.12.2024; 20.01.2025; 06.03.2025 (two workshops) |
| Italy | 17.05.2023 | 01.02.2024 |
| Portugal | 12.12.2023; 15.02.2024 | 15.02.2024 |
| Slovenia | 19.05.2023; 29.09.2023 | 29.2.2024 |
| Spain | 30.01.2024; | 16.02.2024; 20.02.2024 |

2.4. Cocreation activities

The co-design activities of the RENOVERTY project represent a crucial and engaging moment in the REER development process. Organised under the framework of a participatory and inclusive vision, the collaborative workshops aim to bring together a wide range of stakeholders, including end-users, industry experts and interested parties, to help define innovative and sustainable solutions. These workshops, conceived as real laboratories for ideas and sharing, aim to explore

the specificities and challenges of the different pilot areas of the project. Through interactive sessions and in-depth discussions, participants are invited to share their knowledge, experiences and perspectives, thus helping to shape the design of REERs in a comprehensive and informed manner.

A key aspect of this phase is the empowerment of local communities and stakeholders, who are actively involved in the decision-making process. The aim is to create a tailor-made roadmap that reflects the specific needs of each pilot area, while ensuring a holistic and shared approach towards energy efficiency in renovations. The strategic co-design plan, carefully elaborated and shared with all stakeholders, serves as a guide for the entire process. Through a series of well-defined phases and activities, the plan ensures effective organisation and inclusive participation, culminating in the definition of a final roadmap that represents the fruit of collective work and synergy between the different stakeholders. In addition to promoting the sharing of knowledge and best practices, co-design workshops act as catalysts for innovation and creativity. The interaction between different perspectives and expertise fosters the emergence of original solutions adapted to the local context, thus helping to stimulate change and the adoption of more sustainable practices in the energy renovation sector.

In summary, the co-design activities of the RENOVERTY project represent a crucial moment in the achievement of the project's objectives. Through a participatory and collaborative approach, these activities provide an opportunity to create innovative and sustainable solutions that meet the needs of local communities and help promote a greener and more resilient future.

For further information on co-creation activities, please refer to the document *"Report on proceedings and material from the EU and national level events"*.

3. Activities in the Pilot Countries

3.1. Croatia

Sveta Nedelja and Žumberak are situated in central Croatia, not far from the country's capital Zagreb. Sveta Nedelja is one of the smaller cities, with a total of little more than 18,000 inhabitants, where almost half of its 14 settlements meet the criteria of rural areas. Sveta Nedelja is well developed with an increasing population and living standard. In contrast, the nearby Žumberak municipality has 610 inhabitants spread across more than 100 square kilometres, with a continuous decrease in population and some settlements having less than 5 inhabitants. Žumberak is also listed within the areas of special state protection, based on its economic development, structural challenges and demographics (Act on areas of special state protection, OG 86/08, 75/11, 148/13, 76/14, 147/14, 18/15, 106/18). These two areas have been selected to help identify and better understand rural energy poverty in central Croatia, focusing primarily on single-family houses as the most common type of rural dwelling in Croatia. With the help of LAG Sava and LAG Vallis Collapis who are well familiar with the local situation and trusted among the local community, 15 households residing in family houses have been selected for undertaking the energy audits.

Stakeholders mostly active in rural areas include:

- decision makers and local authorities responsible for policy making and assistance to low-income households;
- NGOs focused on addressing social issues;
- local action groups (LAGs).

LAGs operate in rural areas and are established to empower local communities to take an active role in their own development and address local needs and therefore can also play a crucial role in minimizing energy poverty through various actions.

The table below provides a summary of the activities that were conducted in the pilot areas.

Table 4: Summary of the activities in Croatia

| Activities reported | 1 st Activities | 2 nd Activities | 3 rd Activities |
|---|--|----------------------------|----------------------------|
| Events with single household / Events to households in a collective manner | 30/10/23; 08/11/23; 09/11/23; 16/11/23; 22/11/23 | 27/02/24 | |
| Workshops with stakeholders and REER co-creation activities | 26/09/23 | 27/02/24 | 05/11/2024 |

| | | | |
|-----------------|----------|--|--|
| Training course | 27/02/24 | | |
|-----------------|----------|--|--|

3.1.1 Engagement with LAG(s)

Identifying and involving LAGs in the implementation of the RENOVERTY project involved several steps. Firstly, it was necessary to identify existing LAGs operating in the target (pilot) rural areas. Two LAGs are operating in pilot areas:

1. LAG Sava, established in 2013 as an association that includes 11 Municipalities and the Cities in the Zagreb County, including the pilot area of the City of Sveta Nedelja. The association's work covers area of 781,82 km² with 120.000 people living in the same area.
2. LAG Vallis Colapis, founded in 2009 as a non-profit organization that operates in the area of 14 rural towns and municipalities and rural settlement, including the pilot area of Žumberak. LAG covers an area of 1025km², with over 36.000 inhabitants.

After identifying the LAGs, the project was introduced, and potential areas of collaboration were discussed. Some of the activities outlined to be carried out by LAGs were as follows:

- identification of the building typologies and 15 suitable households to be used in the REERs;
- acting as a facilitator between local stakeholders and Project partners, with a focus on the debates and topics arranged centrally by RENOVERTY;
- supporting RENOVERTY partners in identifying local stakeholders to be involved in the building renovation process;
- participation in training courses offered by RENOVERTY;
- contribution to the development of REERs;
- co-organisation of the workshops;
- dissemination of the information.

Following this, both LAGs signed the Mutual Cooperation Agreement. Although LAGs did not have prior knowledge and experience in projects related to energy poverty, they were very interested in topics related to potential solutions for minimization of energy poverty, such as implementation of energy efficiency measures and funding opportunities. So far, LAGs were actively involved in the communication with the local authorities, organisation of the workshops, training and planning of the REER creation. In the coming months of the project duration, further support of LAGs is expected, especially related to the development of REERs and involvement of local stakeholders.

3.1.2 Workshops and Events

The first workshop for stakeholders was held on September 26, 2023, at the Strmec Community Centre in Sveta Nedelja, involving the pilot areas of Sveta Nedelja and Žumberak. The main

purpose of the workshop was to familiarize the main local stakeholders of two Croatian pilot areas (Sveta Nedelja and Žumberak) with the main objectives and activities of the RENOVERTY project, as well as the topic of energy poverty in general. There were 18 participants in the 1st workshop, representing various groups including city/municipality (9 participants), LAGs/FLAGS (5 participants), Croatian Social Welfare Institute (1 participant), local population/general public (1 participant), and RENOVERTY partner REGEA (2 participants). The workshop was structured as a presentation divided into three main parts: the first part covered the presentation of energy poverty, the second part presented the RENOVERTY project, and the third part was related to the presentation of REERs and its content, including necessary steps within the project. A productive discussion ensued, resulting in agreement on various activities necessary for conducting energy audits, highlighting the important role of LAGs in collaboration with local authorities and the local population. Key topics covered included the introduction of energy poverty, project objectives and activities, introduction of REERs and their content, and necessary steps for the conduction of energy audits. At the conclusion of the workshop, several necessary steps were agreed upon for the selection of energy-poor family houses for the conduction of energy audits, including the preparation of a document by REGEA outlining criteria and necessary data, identification of energy-poor households by representatives of pilot areas in collaboration with LAGs, and the organization of field visits and energy audits.

Table 5 – Details from the first local event organised in Croatia.

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Slavica Robić (REGEA) and Valerija Vrček Habazin (REGEA) |
| Event venue | Community Center Strmec, Sveta Nedelja |
| Date | 26 th September 2023 |
| Title (original language/ English) | Radionica u sklopu EU projekta RENOVERTY / 1 st Workshop as part of EU project RENOVERTY |
| Sectors represented | City/ municipality (9 participants), LAGs/ FLAGS (5 participants), Croatian Social Welfare Institute (1 participant), Local population (1 participant), RENOVERTY partner REGEA (2 participants) |
| Total number of participants | 18 |



Figure 1: 1st Workshop in Croatia (September 26, 2023)

The second workshop was held at the Sošice Visitor Centre in Žumberak, Croatia, involving the pilot areas of Sveta Nedelja and Žumberak. A combined event was organized at the end of February 2024. The goal of the event was to gather local stakeholders and citizens who are (or may be) in any way connected to the energy renovation of energy-poor family houses. During the workshop, the insight into conducted energy audits and their results was provided, with the aim of defining a common vision and planning further steps, especially related to the development of REERs. There were 17 participants in the 2nd workshop, representing various groups including city/municipality (5 participants), LAGs (4 participants), local population/general public (6 participant), and RENOVERTY partner REGEA (2 participants). The event was divided into three main parts: the first part covered the presentation of RENOVERTY project, the second part covered the energy audits results and REER discussion, and the third part, also the last one, was dedicated to the training course.

The participants were very interested and active in the discussion. During the training course, the insight into the open call for energy renovation of family houses announced by the Environmental Protection and Energy Efficiency Fund, under which it was possible to obtain subsidies in the amount of 60% of the investment for owners of family houses (or 80% for those whose houses were damaged in the earthquake), was provided. Considering that many houses, especially those of energy-poor citizens, were not legalized, and also considering the insufficient

subsidy for energy-poor citizens, the discussion on this call resulted in a good basis for financing recommendations that were included in policy recommendations, and further discussed with the local and national level actors. Moreover, the needs of the local population were met, laying the groundwork for drafting the REERs.

Table 6 – Details from the second local event organised in Croatia.

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Slavica Robić (REGEA) and Marko Čavar (REGEA) |
| Event venue | Sošice Visitor Centre, Žumberak |
| Date | 27 th February 2024 |
| Title (original language/ English) | 2. Radionica u sklopu EU projekta RENOVERTY / 2 nd Workshop as part of EU project RENOVERTY |
| Sectors represented | City/ municipality (7 participants), LAGs (4 participants), Local population (5 participants), RENOVERTY partner REGEA (2 participants) |
| Total number of participants | 17 |



Figure 2: Workshop in Croatia (February 27, 2024)

The third workshop for stakeholders was held on November 5, 2024, at the Strmec Community Centre in Sveta Nedelja, involving representatives from the pilot areas of Sveta Nedelja and Žumberak. The main purpose of the workshop was to present the advanced draft version of the REERs and to collect feedback from local stakeholders before its finalisation. The event was organised to ensure that the draft guidelines reflected local needs and realities and that the comments received could be integrated into the final REER document.

There were 13 participants in total, including representatives from city and municipality administrations (6), LAGs (3), family farms (2), and REGEA (2).

During the workshop, participants were divided into two working groups. The first group discussed financial mechanisms and opportunities for funding renovation measures for households experiencing energy poverty, focusing on how to secure accessible financial instruments, the role of local representatives in supporting citizens, and the steps needed at both local and national levels to ensure the long-term sustainability of financing schemes. The second group addressed potential barriers and key stakeholders in the renovation process, exploring the main obstacles to implementation in rural areas, identifying the institutions and organisations most relevant for successful delivery, and proposing ways to strengthen coordination and joint support across different governance levels. After the first round of discussions, the groups exchanged topics, which enabled the collection of a broad set of perspectives and insights.

The interactive format proved highly effective in capturing local experiences and opinions, which provided valuable input for the finalisation of the REER. The feedback gathered during the discussions was particularly useful in identifying both practical solutions and policy recommendations that could support the wider uptake of renovation measures for energy-poor households.

Table 7 – Details from the first local event organised in Croatia.

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Slavica Robić (REGEA) and Valerija Vrčec Habazin (REGEA) |
| Event venue | Community Center Strmec, Sveta Nedelja |
| Date | 5 th November 2024 |
| Title (original language/ English) | Radionica u sklopu EU projekta RENOVERTY / 3 rd Workshop as part of EU project RENOVERTY |
| Sectors represented | City/municipality (6 participants), LAGs (3 participants), Local population/family farms (2 participants), RENOVERTY partner REGEA (2 participants) |
| Total number of participants | 13 |



Figure 3: Workshop in Croatia (November 5, 2024)

3.2. Estonia

In early and mid-90s of the last century, Estonian agriculture went through a transformation from command-based plan economy production in large centrally managed collective farms to free economy profit driven privately owned production units. With this transformation, the social sphere of the rural environment also changed. Central hubs of collective farms with tractor repair shops, large community centres, convenient stores, schools and medical centres were slowly abandoned and fell into disrepair. District heating was discontinued due to loss of clients and consequently bankrupting and multi-family residential buildings were privatised by apartment. Some of these buildings were demolished, some were simply left empty but in a lot of houses residents still remained.

Both Kaagvere and Kääpa are such former hubs of collective farms revived by active locals. Kaagvere is situated 14 km from Tartu, with a population of 227 (2020 census). The village has a convenience store, a boat harbour and a football stadium. A manor of Kaagvere housed an orphanage up to 1957.



Figure 4: Kaagvere village. Creative Commons. Author Tereivoolenjüri

Kääpa lies in a region connected to Estonian mythical hero Kalevipoeg. The population is 203 as of 1.1.2019. There is a convenience store, an elementary school and a care center in Kääpa. The community, with the help of local municipality, has restored district heating for most of the multi-family houses.

Table 8: Activities in Estonia

| ACTIVITIES REPORTED | 1st event | 2nd event |
|-----------------------------|------------|-----------|
| Events to households | June 2024 | Sept 2024 |
| Workshops with stakeholders | 30.01.2024 | May 2024 |
| Training course | TBD | TBD |

3.2.1 Engagement with LAG(s)

“The total area of Tartu County Development Association (TAS) is 2974 km². As of January 1st 2023, the population of the area covered by TAS was more than 58,000 people with an average population density of 20.8 people per km².”

The area of TAS covers most of Tartu County and small parts of Põlva county, for a total of 8 municipalities. The regional centre of attraction is the city of Tartu, the developments of which are of extreme importance to the entire area.”⁴

TAS is a LEADER action group that has positioned itself not only as an implementer of the LEADER support measure, but also as a regional development organisation.⁵ The area covered by TAS has smart communities, entrepreneurial and healthy youth, and innovative businesses whose activities enhance the value of local resources. The opportunities of green and circular economy are applied in the area in a smart way. Cooperation networks and new initiatives are sustainable and well known in Estonia and beyond.⁶

3.2.2 Workshops and Events

The first workshop was organized by LAG TAS on Januari 30th, 2024 as a webinar for stakeholders. Invitations were sent to local and municipal stakeholders in renovation of residential buildings such as architects, interest groups, officials of municipalities of South-Eastern Estonian counties, homeowners associations, representatives of local vocational schools etc.

Over 40 people registered to this webinar. The topics to be discussed at the webinar were:

- Introduction of RENOVERTY Project and Activities in Tartu County, by Martin Kikas, director of Tartu Regional Energy Agency, energy expert;
- Necessity of Energy Efficient Renovation on different Levels of Governemnt, Martin Kikas;
- Ways and Experiences of Renovation In Estonia and Abroad, Kalle Virkus, Civil Engineer;
- Renovation Grant by KredEx Fund. Terms and Conditions, Martin Kikas
- Q&A session.

Martin Kikas gave an overview of RENOVERTY Project, aims and objectives, and proceeded to explain the benefits of renovation for different interest groups and subjects. For homeowners, renovations brought smaller heating and electricity bills, for the local economy, renovations offered jobs, for the national economy, more economical activity and less imported fuels could result from renovations, while less GHG emissions and less strain on the biosphere could happen globally.

Kalle Virkus presented renovations done in countries which have carried out this activity long before Estonia, the best examples of which are Sweden and Germany. In Sweden, the houses built during their “Milionprojektet” 1965-1975 were beginning to be in need of overhaul in late 90s. Swedish renovation differed somewhat from the process in Estonia but the aim was the same – to have a deeply renovated housing unit. The (East) German experience of renovation

⁴ www.tas.ee (2024)

⁵ Idem

⁶ Idem

was different from the Estonian one in that it stems from differences in the privatisation of the housing stock. In Estonia, multi-family houses were privatised by apartments, while in Germany whole groups of houses were privatised by realty maintenance companies. This difference allowed Germans to vacate the houses for renovation which facilitated the process heavily.

Martin Kikas introduced the process of application for a grant for renovation including what documents were needed and what procedures needed to be completed for a housing association to be eligible for a grant. At the end, questions were asked and answers were given.

3.3. Hungary

The Bükk region is located in Northern Hungary, where mining and forestry were dominant in the past, which also influenced the development of villages. The pilot area is located in the most underdeveloped region of Northern Hungary and is made up of 40 municipalities with a total population of 87,512 inhabitants.

In the Somló-Marcalmunte-Bakonyalja area (located in Central Transdanubia) forestry is also important, but agriculture is dominant. The pilot area is located in the Central Transdanubia, which is one of the most developed regions of Hungary with several disadvantaged municipalities in the area. The LAG covers 42 municipalities with a total of 25,073 inhabitants.

Both of the Hungarian pilot areas (Bükk and Somló-Marcalmunte-Bakonyalja) include settlements where the majority of the dwellings are very poor from an energy performance point of view. In the Bükk area, air pollution is a particular problem in winter, when smog from inadequate fuel combustion settles in the river valleys. 4-4 residential buildings typical of these areas were selected for the energy audit with the help of local partners and LAGs.

The municipalities, the decision makers, local NGOs and the LAGs themselves were active in both of the pilot areas. To be more specific, local participation, a real partnership and co-thinking, built on the involvement of local administrations, local businesses and local NGOs, was the main feature of the LAGs work. They contributed to solving energy poverty locally in rural areas.

3.3.1 Engagement with LAG(s)

The Reflex Association has a long-standing cooperation with the Somló-Marcalmunte LAG, particularly with the municipality of Pápateszér, which therefore was suggested as one of the pilot areas. After the project was presented to the general assembly, they agreed to join. The possibility of participation was also shared with our partner organisations in other rural regions of Hungary working with LAGs. Among them, the Bükk LAG expressed interest. Following a personal meeting with its leaders and the subsequent presentation of the project to their general assembly, they likewise confirmed their willingness to take part as a pilot area.

The most important tasks carried out by the LAGs within the cooperation, as recorded in the Letter of Agreement, included the following activities and responsibilities:

- Support RENOVERTY partners in identifying 4-4 households for carrying out energy audits;
- Act as a facilitator between local stakeholders and Project partners;
- Support RENOVERTY partners in identifying local stakeholders to be involved in the building renovation process;
- Participate in training courses offered by RENOVERTY;
- Contribute to the development of REERs;
- Co-organisation of workshops and events aimed at citizens and local stakeholders;
- Dissemination of information.

3.3.2 Workshops and Events

Events and workshops were held in parallel in the two LAGs, resulting in a total of 11 activities in Hungary – 5 events for households (3 in SMB, 2 in Bükk LAG) and 6 workshops with stakeholders (3 in each LAG). The national event was held on the 7th of October where we presented the REERs on national level.

The table below provides a summary of the workshops held for stakeholders and the events organised for households.

Table 9: Workshops and Events in Hungary

| ACTIVITIES REPORTED | 1st Activities | 2nd Activities |
|--|---|----------------------------|
| Events with single households (audit) | 27/09/2023; 03/10/2023; 04/10/2023; 04/10/2023; 05/10/2023; 08/10/2023; 09/10/2023; 14/10/2023 | |
| Events in Bükk LAG | 16/05/2024 | 28/11/2024 |
| Events in Somló-Marcalmunte | 07/05/2024; 15/05/2024 | 11/03/2025 |
| Workshops in Bükk LAG | 07/05/2024 | 12/12/2024; 20/01/2025 |
| Workshops in Somló-Marcalmunte LAG | 07/05/2024 | 06/03/2025 (two workshops) |
| National event | 07/10/2025 | |

1st Workshop in Bükk LAG for stakeholders (Parasznya)

The RENOVERTY project was briefly presented by Ivett Koczka, who outlined the project's objectives and main activities. This was followed by a presentation from József Kiss on the

environmental and social context of residential modernisation, highlighting the importance of energy efficiency and sustainability in rural areas.

After the presentation of stakeholder tasks, a guided workshop focused on the planned guidelines for the energy efficiency renovations of households. Participants, including local government representatives, NGOs, professionals, and entrepreneurs, jointly analysed the opportunities and challenges related to energy upgrades in rural housing.

The workshop continued with small group work, during which participants discussed how municipalities, NGOs, and businesses could support the process of energy-efficient renovation. Tamás Bíró presented the professional steps involved in upgrading rural residential buildings.

Participants provided direct feedback on the practical applicability of the RENOVERTY guides, raising points about the accessibility of funding, technical implementation challenges, and public motivation. Several participants indicated that they would like to receive additional information about the project in the future, and there was consensus that energy efficiency is a key concern for both municipalities and private households.

An important outcome of the workshop was that involving local actors enabled the RENOVERTY guidelines to be tailored to real needs, laying the groundwork for the development of the Rural Energy Efficiency Roadmaps (REER). The project partners concluded that such local events were essential for the success of the project.

Table 10 – Details from the local events organised in Hungary – 07/05/2024 - Parasznya.

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Ivett Koczka (REFLEX) |
| Event venue | Parasznya, Bükk LAG |
| Date | 07/05/2024 |
| Title (original language/ English) | Műhelytalálkozó a lakóépületek energetikai korszerűsítéséhez tervezett útmutatóról // Workshop on the development of the rural energy efficiency roadmap |
| Sectors represented | Stakeholders such as municipalities, companies, government agencies, entrepreneurs; representatives of the Bükk LAG; |
| Total number of participants | 14 |

1st Workshop in SMB LAG for stakeholders (Ugod)

The first stakeholder workshop in SMB LAG was held to lay the groundwork for the development of the Rural Energy Efficiency Roadmaps (REER). Participants included representatives from municipalities within the SMB LAG, members of the SMB LAG, local and regional contractors, and NGOs.

During the workshop, presentations were given on the RENOVERTY project by Veronika Janák-Németh, the environmental and social aspects of energy efficiency renovations in residential dwellings, and the objectives of the REER by Csaba Lajtmann. The session also included small group work focused on how local authorities, NGOs, and contractors could support energy-efficient renovation.

To establish a solid foundation for the REER, stakeholders reflected on several key topics. They discussed which activities could facilitate energy-efficient renovations in rural households, such as municipal role models, the use of multiple heating systems, the involvement of local contractors, sharing information in ways that rural communities could understand, and the engagement of energy experts with construction experience. Participants also considered the main barriers to renovation, including rising costs of contractors and construction materials when subsidies were available, the lack of materials and technical expertise in rural areas, existing loans and financial constraints, limited knowledge of energy efficiency among households, reluctance to hire general contractors due to perceived costs or belief in their own ability to complete renovations, and a lack of financial literacy, particularly among vulnerable households.

Stakeholders also highlighted that people were generally not familiar with the term “energy poverty.” While there was openness to renovation and to the contribution of contractors in energy-efficient upgrades, all participants emphasised the lack of central funding. Without such support, rural vulnerable households struggled to carry out not only deep renovations but even medium-level upgrades. Local authorities had no means to provide financial assistance and were operating under increasingly tight budgets. The LAGs were similarly limited, as their financial allocations were primarily used to support the business sector.

Finally, stakeholders reflected on the roles of local actors in supporting renovations and overcoming these barriers, noting that municipalities can provide face-to-face communication and daily guidance, contractors are expected to act ethically and professionally, and NGOs can offer consultancy, raise awareness, and disseminate information.

The reflections gathered from stakeholders provided valuable input to the REER, ensuring that the roadmap addresses both practical and financial challenges, while remaining responsive to the needs of rural communities.

Table 11 - Details from the local events organised in Hungary - 07/05/2024 - Ugod.

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Csaba Lajtmann (REFLEX), Veronika Janák-Németh (REFLEX) |
| Event venue | Ugod, SMB LAG |
| Date | 07/05/2024 |

| | |
|---|--|
| Title (original language/ English) | Műhelytalálkozó a lakóépületek energetikai korszerűsítéséhez tervezett útmutatóról // Workshop on the development of the rural energy efficiency roadmap |
| Sectors represented | Municipalities of SMB LAG, local and regional contractors and NGOs, representatives of the SMB LAG; |
| Total number of participants | 19 |

1st Event in SMB LAG for Households (Pápateszér)

The informational forum for households was organised with the participation of residents, representatives of the SMB LAG, and the municipality of Pápateszér. The programme included presentations on the RENOVERTY project by Veronika Janák-Németh. Csaba Lajtmann explained the meaning and implications of energy poverty, the environmental and social aspects of energy efficiency renovations in residential dwellings. The expected conditions of the Government's forthcoming Home Renovation Programme were presented as well. In addition, a discussion was held on how households can prepare for the opening of the call for proposals. Following each presentation, time was allocated for questions and answers, enabling participants to seek clarification and engage in dialogue.

The main aim of the forum was to introduce RENOVERTY to households, to discuss how energy poverty affects them, and to highlight the benefits of investing in energy efficiency renovations. In this context, the invited funding consultant explained the anticipated requirements of the Home Renovation Programme.

Feedback from the forum revealed that a significant proportion of households do not perceive themselves as living in energy poverty, although many reported being unable to maintain indoor temperatures of 18°C in their main living areas. Financial resources were generally limited, and while minor energy efficiency renovations — such as partial window replacement or partial wall insulation — have been undertaken in some cases, the combination of scarce financial resources and relatively low utility costs discourages further investments, as payback periods remain lengthy. Participants confirmed that there is a clear need for programmes such as the Home Renovation Programme; however, very few households present were in a position to meet the expected requirements or financial contributions foreseen under the scheme.

Concerns were also raised regarding the Programme's stipulation that households had to finance a preliminary audit from their own resources, and then commission a further audit following the renovations. Even households that had already undergone an audit within the framework of the RENOVERTY project would be required to repeat the process, creating an additional financial burden that they were unable to bear.

Table 12 – Details from the local events organised in Hungary – 07/05/2024 - Pápateszér.

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Csaba Lajtmann (REFLEX), Veronika Janák-Németh (REFLEX) |
| Event venue | Pápateszér, SMB LAG |
| Date | 07/05/2024 |
| Title (original language/ English) | Megéri! Tájékoztató fórum lakóépületek energetikai korszerűsítésének támogatásáról / It's worth it! Forum on support for energy efficiency renovation of residential buildings |
| Sectors represented | households; representatives of SMB LAG; representatives of the municipality of Pápateszér; |
| Total number of participants | 18 |

2nd Event in SMB LAG for Households (Somlóvecse)

The SMB LAG indicated strong interest from households, and therefore an additional forum was organised at another location.

Similar to the previous forum, this event introduced the RENOVERTY project to households and provided information on energy poverty and the forthcoming Home Renovation Programme. As before, households expressed openness to renovation but underlined that a lack of financial resources remains the key barrier to carrying out major energy efficiency improvements.

Table 13 – Details from the local events organised in Hungary – 15/05/2025 - Somlóvecse

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Csaba Lajtmann (REFLEX), Veronika Janák-Németh (REFLEX) |
| Event venue | Somlóvecse, SMB LAG |
| Date | 15/05/2024 |
| Title (original language/ English) | Megéri! Tájékoztató fórum lakóépületek energetikai korszerűsítésének támogatásáról / It's worth it! Forum on support for energy efficiency renovation of residential buildings |
| Sectors represented | households; representatives of municipalities; regional contractors; representatives of SMB LAG |
| Total number of participants | 26 |

1st event in Bükk LAG for households (Bükkábrány)

The event was opened by **Dr. Erzsébet Nagyné Mile**, Head of the Bükk-Térségi LEADER Association, who welcomed the participants and officially launched the forum. This was followed by **József Kiss**, who gave a short presentation on energy poverty and introduced the objectives

of the RENOVERTY project. He also presented the draft guide for the energy modernisation of rural housing, providing practical insights for local stakeholders. **Tamás Bíró** then shared technical information and professional advice on renovation processes. After each presentation, participants had the opportunity to ask questions and engage in discussion.

The forum brought together a diverse group of stakeholders: 15 companies and sole traders, 4 individual citizens, and 17 representatives of local mayors' offices. The interactive format allowed participants to reflect on the relevance of energy efficiency in their own communities. A large number of attendees expressed interest in receiving further information materials about the project. For municipalities, the issue of energy and electricity consumption proved particularly pressing, as many are currently renegotiating contracts with their suppliers and seeking new quotations.

One of the key outcomes of the event was that participants unanimously recognised the urgency of addressing energy efficiency in both municipal and household contexts. Many questions were raised about practical renovation options, expected savings, and the conditions of upcoming grant schemes. From the perspective of the RENOVERTY partners, the forum provided valuable direct feedback, highlighting local concerns such as how to prove energy savings, the adequacy of subsidies, and how to manage rising costs. These inputs have helped to adapt the RENOVERTY guidelines more closely to real needs, thereby supporting the development of practical, region-specific solutions.

Table 14 - Details from the local events organised in Hungary - 16/05/2024 - Bükkábrány

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Ivett Koczka (REFLEX) |
| Event venue | Bükkábrány |
| Date | 16/05/2024 |
| Title (original language/ English) | Tájékoztató fórum a lakóépületek energetikai korszerűsítéséhez tervezett útmutatóról // Information forum on the planned guidelines for the energy upgrading of residential buildings |
| Sectors represented | Among those present were 15 companies or sole traders, 4 individuals and 17 representatives of mayors' offices. |
| Total number of participants | 36 |

2nd event in Bükk LAG for households (Parasznya)

The forum in Parasznya focused on presenting the progress of the RENOVERTY project, raising awareness about energy poverty, and sharing information on potential grant opportunities for home renovation. The session combined project updates with practical guidance, offering

participants concrete insights into the challenges and possibilities of energy efficiency improvements in rural areas.

The event brought together a wide spectrum of stakeholders from across the Bükk-Társégi LEADER Association’s operational area in Borsod-Abaúj-Zemplén county, including local government representatives, private individuals, companies, and individual entrepreneurs. Participants actively followed the discussions and highlighted that energy efficiency issues are of great concern for municipalities as well as households. Many stressed that they rarely had the resources to undertake upgrades independently and therefore relied on monitoring available tenders and external funding opportunities.

Numerous practical questions were raised on the functioning of energy communities, the accessibility of grants, and the expected usefulness of the REER materials. For the RENOVERTY partners, the event proved particularly valuable: participants not only requested further information materials but also expressed a desire to act as active partners in the development process. This feedback underlined the importance of producing practical, accessible and user-oriented guides that can directly support energy efficiency improvements at both the municipal and household levels

Table 15 - Details from the local events organised in Hungary - 28/11/2024 - Parasznya

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Ivett Koczka (REFLEX) |
| Event venue | Parasznya |
| Date | 28/11/2024 |
| Title (original language/English) | Tájékoztató fórum // Informative forum |
| Sectors represented | Companies and individual entrepreneurs, private persons and representatives of mayor's offices from the whole LEADER association's operational area (B-A-Z county) |
| Total number of participants | 32 |

2nd workshop in Bükk LAG for stakeholders (Bükkaranyos)

The workshop in Bükkaranyos, led by Ivett Koczka (REFLEX), focused on presenting the RENOVERTY project, exploring the issue of energy poverty, and sharing practical advice on energy retrofitting in rural housing. Key presentations included “Let’s talk about energy poverty,” an overview of the RENOVERTY project, a guide to rural energy retrofitting, practical renovation tips, and a preview of the forthcoming Rural Energy Efficiency Roadmap (REER). The session concluded with an interactive Q&A segment, allowing participants to discuss local concerns and practical solutions.

The workshop gathered a diverse group of 18 participants, including companies, individual entrepreneurs, private citizens, and representatives of mayor's offices. The discussions highlighted the real-life impact of energy poverty in Borsod-Abaúj-Zemplén county, explored ways to support affected populations, and addressed improvements to the social firewood programme.

Participants showed strong interest in the forthcoming REER guide, requesting to receive it once it is finalised. They also confirmed that energy efficiency remains a top priority for local communities. The event provided an opportunity to discuss practical instruments and local initiatives that can support energy-efficient upgrades, reflecting the participants' needs and expectations.

The workshop was particularly valuable as it allowed the content and focus of the REER guide to be refined based on stakeholder feedback. Active participation and concrete suggestions from attendees ensured that local experiences were incorporated, which was essential for producing a practical, applicable manual that met the real needs of municipalities and households.

Table 16 – Details from the local events organised in Hungary – 12/11/2024- Bükkaranyos

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Ivett Koczka (REFLEX) |
| Event venue | Bükkaranyos, Bükk LAG |
| Date | 12/11/2024 |
| Title (original language/ English) | Műhelytalálkozó a lakóépületek energetikai korszerűsítéséről // Workshop on the energy modernisation of residential buildings |
| Sectors represented | Companies and individual entrepreneurs, individuals and representatives of mayors' offices |
| Total number of participants | 18 |

3rd workshop in Bükk LAG for stakeholders (Parasznya)

The workshop in Parasznya, led by Ivett Koczka (REFLEX), focused on the planned guidelines for energy upgrading of rural residential buildings. Presentations included a short overview of the RENOVERTY project, a detailed guide for energy modernisation of rural housing, practical renovation advice, an introduction to the forthcoming Rural Energy Efficiency Roadmap (REER), and the environmental and social context of housing modernisation. The event also featured a workshop segment exploring how municipalities, NGOs, and businesses can support energy-efficient renovation.

The workshop gathered 14 participants, including local government representatives, companies, government agencies, and entrepreneurs. During the event, participants engaged in a meaningful professional dialogue, sharing practical experiences and insights. The session

concluded with a joint standing reception, providing an opportunity for informal discussions and networking. The discussions highlighted that energy modernisation is a complex challenge requiring cooperation among local actors and the use of available support schemes.

A key outcome of the workshop was a collective exploration of the roles that municipalities, businesses, and NGOs can play in supporting energy-efficient retrofitting. Small group discussions addressed specific issues such as potential funding sources, incentive mechanisms, and sustainable technological solutions. The forum made clear that a comprehensive approach and active involvement of local communities are essential for successful rural energy upgrades.

The workshop not only provided a platform to present the REER guide, but it also allowed for direct feedback from local actors on its practical applicability. The participants' questions and suggestions highlighted real regional challenges and guided the focus areas for finalising the guide. The event confirmed that the project objectives aligned with local needs and that collaboratively developed solutions can significantly contribute to sustainable development in rural communities.

Table 17 – Details from the local events organised in Hungary – 20/01/2025 – Parasznya

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Ivett Koczka (REFLEX) |
| Event venue | Parasznya, Bükk LAG |
| Date | 20/01/2025 |
| Title (original language/ English) | Műhelytalálkozó a lakóépületek energetikai korszerűsítéséhez tervezett útmutatóról // Workshop on the planned guidelines for the energy upgrading of residential buildings |
| Sectors represented | local governments, companies, government agencies, entrepreneurs |
| Total number of participants | 14 |

2nd workshop in SMB LAG for stakeholders (Béb)

The main purpose of the stakeholder workshop was to present the final version of the Rural Energy Efficiency Roadmap (REER) and to discuss the challenges, opportunities, resources and community-based solutions related to rural energy efficiency renovations. Participants included representatives of municipalities, households, and the SMB LAG.

The workshop agenda featured a presentation and discussion of the final REER, as well as the possibilities of energy efficiency renovations within the framework of the Rural Home Renovation call, with particular emphasis on what contractors and municipalities should highlight for households. The programme also included a session for local and regional contractors to introduce themselves; however, no contractor made use of this opportunity.

Compared with the previous year, the range of opportunities for energy efficiency improvements had unfortunately not increased significantly. The Home Building Programme did not meet expectations due to the extensive documentation and financial obligations required for accessing the subsidy. In addition, the conditions of the Energy Efficiency Obligation Scheme (EEOS) have been reinforced. At the same time, the government has reintroduced the previously successful **Rural Home Renovation Subsidy**, which can be applied to any type of renovation, requiring a 50% own contribution.

Rural households have not encountered the EEOS in practice. Those who did not benefit from the Rural Home Renovation Subsidy in 2022 were considering minor renovations under the current scheme. We emphasised that this subsidy offered an excellent opportunity to carry out even medium-level energy upgrades, provided households could cover the 50% own contribution. Unlike other programmes, an energy audit was not required.

Table 18 – Details from the local events organised in Hungary – 06/03/2025 - Béb

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Csaba Lajtmann (REFLEX) |
| Event venue | Béb, SMB LAG |
| Date | 06/03/2025 |
| Title (original language/ English) | Szigeteljen jól! Lakóépületek energetikai korszerűsítésének kihívásai - lehetőségei - forrásai - közösségi megoldásai / Make sure you insulate well! Challenges – opportunities – resources – community solutions for energy efficiency renovations of rural households |
| Sectors represented | municipalities; representatives of SMB LAG; interested households |
| Total number of participants | 17 |

3rd workhop in SMB LAG for stakeholders (Nagypirit)

Similar to the previous forum, and in response to strong interest from stakeholders, an additional workshop was organised. The main aim was to present the final Rural Energy Efficiency Roadmap (REER) and to discuss the challenges, opportunities, resources, and community solutions for rural energy efficiency renovations. Participants included representatives of municipalities, regional contractors, the SMB LAG, and interested households.

While most participants were open to energy efficiency renovations, financial barriers remain a key challenge, particularly for schemes requiring upfront investment or the use of registered contractors. There was strong interest in the **Rural Home Renovation Subsidy**, which is widely applicable and requires a 50% own contribution. Contractors suggested that concise, easy-to-understand guidance would be helpful for households and professionals alike.

Table 19 – Details from the local events organised in Hungary 06/03/2025 - Nagypirit

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Csaba Lajtmann (REFLEX) |
| Event venue | Nagypirit, SMB LAG |
| Date | 06/03/2025 |
| Title (original language/ English) | Szigeteljen jól! Lakóépületek energetikai korszerűsítésének kihívásai - lehetőségei - forrásai - közösségi megoldásai / Make sure you insulate well! Challenges – opportunities – resources – community solutions for energy efficiency renovations of rural households |
| Sectors represented | representatives of municipalities; regional contractors; representatives of SMB LAG; interested households |
| Total number of participants | 16 |

3rd Forum in SMB LAG for households (Pápakovácsi)

The main aim of the forum was to present the final technical Rural Energy Efficiency Roadmap (REER) and to discuss how households perceived the challenges, opportunities, resources, and community solutions for rural energy efficiency renovations. Participants included representatives of municipalities, regional contractors, the SMB LAG, and interested households.

The forum included a presentation and discussion of the final REER, the possibilities for energy efficiency renovations under the Rural Home Renovation call, and an overview of the local and regional contractors who could participate in renovations within this framework.

Our experience during the forum was similar to previous events. Households expressed interest in taking advantage of the Rural Home Renovation Subsidy, but most were not considering additional energy efficiency measures, as many have already replaced windows and insulated their homes. Further renovations were only feasible in small steps, as deep renovation was beyond their current capacity. The REER proved to be a useful guide, providing households with clear information on the sequence of renovation steps and available subsidy opportunities.

Table 20 – Details from the local events organised in Hungary – 11/03/2025 - Pápakovácsi

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Csaba Lajtmann (REFLEX) |
| Event venue | Pápakovácsi, SMB LAG |
| Date | 11/03/2025 |
| Title (original language/ English) | Szigeteljen jól! Lakóépületek energetikai korszerűsítésének kihívásai - lehetőségei - forrásai - közösségi megoldásai / Make sure you insulate |

| | |
|-------------------------------------|--|
| | well! Challenges – opportunities – resources – community solutions for energy efficiency renovations of rural households |
| Sectors represented | representatives of municipalities; regional contractors; representatives of SMB LAG; interested households |
| Total number of participants | 10 |

National event for stakeholders (Budapest)

Beyond presenting the outcomes of the RENOVERTY project, the event provided a platform for stakeholders to explore collaborative solutions to energy poverty. Participants included society organisations, research institutions, municipalities, and policy actors. The speakers presented several initiatives aimed at reducing energy poverty. These were followed by an interactive workshop session on the new Hungarian Climate Law and the Social Climate Fund.

Based on our experience, the approaches developed through the RENOVERTY project can be effectively applied to other regions in Hungary as they are facing similar social and energy-related challenges. We have found that it is essential not only to raise awareness among vulnerable households and promote practical, energy-efficient, and sustainable heating practices, but also to provide them with knowledge, tools, and incentives to reduce energy consumption and improve living conditions.

We have also observed that collaboration and knowledge exchange among civil society organisations are key to sustaining momentum and fostering community-driven solutions to energy poverty. Energy poverty affects not only rural households but urban population as well, emphasising the need to encourage energy-conscious behaviour across society.

Table 21 – Details from national event organised in Hungary – 07/10/2025 - Budapest

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Csaba Lajtmann (REFLEX) |
| Event venue | Európa Pont (Cultural Centre of the EC Representation in Hungary), Budapest |
| Date | 11/03/2025 |
| Title (original language/ English) | Civil szervezetek és helyi közösségek lehetőségei az energiaszegénység elleni küzdelemben / Opportunities for Civil Society and Local Communities in Combating Energy Poverty |
| Sectors represented | representatives of municipalities and NGOs |
| Total number of participants | 36 |

3.4 Slovenia

The Slovenian RENOVERTY pilot took place in Zasavje region. The Zasavje region is in central Slovenia, along the banks of the river Sava. It is the smallest region in Slovenia by surface area (485 km²) and second smallest by number of inhabitants (56.942). However, it is also the third most densely populated region in the country. It covers only four municipalities: Hrastnik, Litija, Trbovlje and Zagorje ob Savi. The average age of the regional population is 45 years. In the past, coal mining was the dominant industry in the region while the glass industry also has a long tradition in the region. The region has the lowest gross domestic product per capita in the country, - 46.1% lower than the national average. This region also has the highest level of serious material deprivation among its population as the living conditions of 4.5% of the population in the region is severely limited due to the limited financial resources of the household. However, 10.1% of the inhabitants live with incomes below the poverty risk threshold, which represented the fourth lowest level among all the regions in the country³.

Larger single or multi-family houses in which only 1 to 2 people live have problems with appropriate heating in winter due to high costs and energy inefficient buildings. Based on the available data of the Statistical Office of the Republic of Slovenia, an estimated 9.6% of all households in the Zasavje region are facing energy poverty, slightly above the national average (7.2%). The number of households experiencing energy poverty is 2000, which corresponds to 3000 individuals experiencing energy poverty in the region⁴.

The region has a good level of cooperation between the key stakeholders. For RENOVERTY pilot, the following stakeholders were most relevant: municipalities of the region, local action group Zasavje, regional development agency, local social actors, such as centres for social work, Red Cross and Karitas, utility companies, housing companies and local NGOs. All the listed stakeholders were interested in RENOVERTY project and showed motivation to contribute to the implementation of pilot activities. To this end, several engagement activities have been implemented, listed in table below. To avoid overburdening the same stakeholders with invitations to different type of events (e.g. training and co-creation) leading to disengagement and unresponsiveness, we combined activities in different WPs (particularly WP 3 and WP 4) in the same event. An event with local stakeholders could thus have a training segment, followed by the REER co-creation workshop.

Table 22: Activities in Slovenia

| Activities reported | Location | Date |
|--|----------------|-----------------|
| Meeting with LAG | Hrastnik | 11.1.2023 |
| Meeting with regional development agency | Zagorje | 11.1.2023 |
| Event with local actors /REER co-creation event | Zagorje/online | 19.5.2023 |
| Event with national actors /REER co-creation event | Ljubljana | 29.9.2023 |
| Auditing and training activities with single households | Zasavje | June – Nov 2023 |

| | | |
|--|-------------------|------------|
| Energy renovation training and increasing householder awareness events/REER co-creation event | Hrastnik Trbovlje | 19.6.2024 |
| | Zagorje | 19.6.2024 |
| | | 20.6.2024 |
| Energy renovation training and increasing householder awareness events | Zagorje | 15.10.2024 |
| | Hrastnik | 25.3.2025 |
| | Litija | 17.6.2025 |
| Training of facilitators for REER cocreation process | Zagorje | 1.2.2024 |
| Energy renovation training /REER co-creation event | Hrastnik | 29.2.2024 |
| REER co-creation events | Zagorje + online | 19.5.2023 |
| | Ljubljana | 29.9.2023 |
| | Hrastnik | 29.2.2024 |
| | Hrastnik | 19.6.2024 |
| | Trbovlje | 19.6.2024 |
| | Zagorje | 20.6.2024 |
| | Zagorje | 19.9.2024 |

3.4.1 Engagement with LAG(s)

In the Zasavje region, there is one LAG active, LAG Zasavje. Focus had already identified it prior to the launch of the project. To kick off the cooperation with the LAG Zasavje, in the beginning of 2023 a 1 on 1 meeting with LAG Zasavje was organised, where Focus presented the project in details and first discussion about the needs and interests of LAG Zasavje was done.

LAG Zasavje took part in the first event that Focus organised to map the interests and needs of the local stakeholders, in May 2023. After this event, formal and informal contact to LAG Zasavje was maintained, mainly revolving around identifying the activities where LAG Zasavje could support the implementation of RENOVERTY.

In the first steps of the project, in energy audits and training for single households, LAG Zasavje could not play a visible role, because Focus decided to cooperate closer with the Centres for social work in this phase. The reason was that people, who received social benefits from the Centres for social work, were eligible to access renovation funds for deep renovation of up to 100% from the Slovenian Eco Fund. As Focus wished to pursue this financial path, it was needed to work with households, which were recipients of social benefits, and which could best be identified by the Centres for social work.

LAG Zasavje became more active in the next phases of the project, where it helped Focus to organise and disseminate the first training and REER cocreation event in February 2024, as well as supported all other co-creation and training events.

3.4.2 Workshops and Events

1. The first event that took place was an **event with local actors in Zagorje**, which took place online on May 19th, 2023. This event was the first multistakeholder event at local level for the implementation of the pilot activities in Zasavje. The purpose of the event was two fold:

- A) To present the RENOVERTY project to the local stakeholders, outlining what the project wanted to achieve and how, based on which
- B) The local stakeholders could share their needs and interests for participation in the pilot activities.

The first part of the event was dedicated to a short presentation of the participants, while the next step was briefly introducing the RENOVERTY project. Benefits of energy renovation were also briefly presented, as well as the next planned steps of the REER co-creation process. Based on the presentations, the local stakeholders were asked to express their needs and interests for taking part in the pilot activities. The next step was mapping the needs of the local actors towards REER, the REER co-creation process and the workshops for citizens and other forms of work with citizens. Finally, the local stakeholders were asked to show interest and support in implementing the energy audits in households, as well as implementing the training for the households along with the visits.

The event had 13 participants from municipalities, local action group Zasavje, regional development agency, centres for social work, Red Cross and Karitas, utility companies, housing companies and local NGOs.

Based on the interests and needs expressed in the event, further cooperation was planned, as well as the training events and REER cocreation process.

2. The next event that took place was an **event with national actors in Ljubljana on September 29th**, 2023. This event was the first multistakeholder event at national level for the implementation of the pilot activities in Zasavje. The purpose of the event was two fold:

- A) To present the RENOVERTY project to the national stakeholders, outlining what the project wanted to achieve and how, based on which
- B) The national stakeholders could share their needs and interests for participation in the pilot activities.

The first part of the event was dedicated to a short presentation of the participants, while the next step was briefly introducing the RENOVERTY project. Based on the presentation of the project objectives and activities, the national stakeholders were asked to express their needs and interests for taking part in the pilot activities. The next step was mapping the needs of the national actors towards REER, the REER cocreation process and the workshops for citizens and other forms of work with citizens.

The event had 5 participants, mainly from the Slovenian Eco Fund, and one from interdisciplinary research institute. It was a disadvantage that some actors from the ministry in charge of renovations and energy were not present, but their needs and interests were later mapped through informal discussions that happened during other events.

Based on the interests and needs expressed in the event, further cooperation was planned, as well as the training events and REER cocreation process.

3. Training of facilitators for REER cocreation process in Zagorje took place on the 1st February 2024, with the aim to training the facilitators who will accompany the REER cocreation process. The first part of the training was dedicated to a short introduction of the general facilitation skills and methods. The second part of the training was focused on the REER cocreation process to explain the facilitators how it would run. The last part was about the first REER cocreation event, specifically outlining the tasks and methods to follow.

The event had 9 participants, 2 from Focus, 3 from LAG Zasavje and 4 from the regional development agency. Based on the training, the facilitators facilitated the working groups during the REER cocreation process.

4. Regarding the training of local actors on energy renovations, it took place on 29 February 2024 in Hrastnik, jointly with one of the REER co-creation workshops. Together with LAG Zasavje and Regional development agency Zasavje we organized an event with local actors that was divided into two parts: training on energy renovation and co-creation workshop for REER. The event had 15 participants and was also attended by representatives of LAG Zasavje, Regional development agency Zasavje, two municipalities and two centres for social work in the regional, local office of the Red Cross, local housing company and the regional office of Chamber of commerce and trade.

Since the participants had different levels of awareness of the project itself and relatively good knowledge on energy use and energy renovations, the aim of the first training part was to establish a common understanding of the RENOVERTY project and provide some key information on energy renovations. The training was thus divided into sections: summarizing RENOVERTY project activities (past and planned), presentation on energy use in households, characteristics and specifics of housing buildings in Slovenia and region Zasavje, differences between deep and step-by-step renovations and obstacles to energy renovations that had so far been identified by national actors (Long-term strategy for energy renovations of buildings by 2050). The RDA Zasavje also presented the Centre for just transition that serves as an entry point for potential applicants as well as the general public interested in the activities of the Just Transition Fund.

5. Auditing and training activities with single households in Zasavje region took place from June to November 2023. The purpose of this activity was four-fold:

- A) To present the RENOVERTY project to the households, outlining what the project wanted to achieve and how,
- B) To implement an energy audit in each household, leading to the creation of the energy certificate for the household,
- C) To give a tailor made advice on energy management, together with a small package of free energy saving devices that could help to reduce energy use and bills and
- D) To introduce the benefits of renovation to the audited households, affected by energy poverty, in order to make them consider further steps towards reducing energy poverty; along with the training on benefits of renovation, the opportunity to access funds from Eco Fund was presented.

In period from June to November 2023, 12 single households were visited in this activity. The visit consisted of 5 components:

1. Brief introduction of Focus and RENOVERTY project
2. Review of energy and water bills and construction documentation where available
3. Measurements and assessments for the energy audit
4. Handing over a package of free energy devices together with tailor-made advice on how to manage energy in the household
5. Brief explanation why energy renovation is beneficial, what would be the most needed measures in renovation, how it can be done and how the Eco Fund grant can be accessed.

6. To increase **householder awareness on the benefits and steps of energy renovation as well as funding available to vulnerable households**, we organized several training events together with local Centers for social work. The first events took place on the **19th and 20th of June 2024** in Hrastnik, Trbovlje and Zagorje ob Savi. These events had a dual purpose: 1) awareness raising among households on the benefits and steps of energy renovation as well as funding available to vulnerable households (and energy saving tips) and 2) gathering input for the REER creation – jointly serving as one of the REER co-creation workshops. Later we organized similar awareness raising events, focusing especially on promoting funding available to vulnerable households. These events took place on the **15th of October 2024 (Zagorje ob Savi), 25th of March 2025 (Hrastnik) and 17th of June 2025 (Litija)**. Altogether 34 participants took part in these training and awareness raising events.

7. Local actors (as well as national) actors were also invited to the **final co-creation workshop (before the final REER event) that took place on the 19th of September in 2024 in Zagorje**. The workshop was attended by 7 people, among them representatives from the Ministry of environment, climate and energy, research institutes, LAG Zasavje and the Regional development agency Zasavje.

Table 23 – Details from the local event organised in Slovenia.

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Lidija Živčič and Matjaž Grmek, Focus |
| Event venue | RRA Zasavje, Kolodvorska cesta 2, 1410 Zagorje ob Savi, Slovenia |
| Date | 19 May 2023 |
| Title (original language/ English) | Uvodno srečanje za pripravo načrtov obnove v Zasavju / Kick-off meeting for the preparation of REERs in Zasavje (1 st co-creation workshop) |
| Sectors represented | Municipalities (3 participants), social actors, such as Center for social work and Red Cross (5 participants), LAGs (2 participants), Regional Development Agency (3 participants), regional NGO network (1 participant), EU information point (1 participant), building management company (1 participant), research institute (1 participant), RENOVERTY partner Focus (2 participants) |
| Total number of participants | 13 (+2 Focus) |

Table 24: Details from the local event organised in Slovenia

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Lidija Živčič, Focus |
| Event venue | RRA Zasavje, Kolodvorska cesta 2, 1410 Zagorje ob Savi, Slovenia |
| Date | 29 September 2023 |
| Title (original language/ English) | Uvodno srečanje za pripravo načrtov obnove v Zasavju / Kick-off meeting for the preparation of REERs with national actors (1 st co-creation workshop) |
| Sectors represented | National funding institution Eco fund, research institute |
| Total number of participants | 5 (+1 Focus) |

Table 25: Details from the local event organised in Slovenia

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Lidija Živčič and Katja Huš, Focus |
| Event venue | RRA Zasavje, Kolodvorska cesta 2, 1410 Zagorje ob Savi, Slovenia |
| Date | 1.2.2024 |
| Title (original language/ English) | Co-creation facilitation training |
| Sectors represented | Regional development agency, local action group, NGO (Focus) |
| Total number of participants | 9 |

Table 26: Details from the local event organised in Slovenia

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Lidija Živčič and Katja Huš, Focus |
| Event venue | Podjetniški inkubator Hrastnik, Cesta 1. maja 83 |
| Date | 29. 2. 2024 |
| Title (original language/ English) | Skupaj zmanjšujemo energetske revščine v Zasavju |
| Sectors represented | Social work, municipalities, housing company, humanitarian organization, regional development agency. |
| Total number of participants | 15 |

Table 27: Details from the local event organised in Slovenia

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Lidija Živčič and Katja Huš, Focus |
| Event venue | Podjetniški inkubator Hrastnik (Cesta 1. Maja 83) |
| Date | 19.6.2024 |
| Title (original language/ English) | Kako znižati položnice za energijo? / How to reduce energy bills? |
| Sectors represented | Households, Center for social work, national funding body (Eco fund), LAG, NGO (Focus) |
| Total number of participants | 8 |

Table 28: Details from the local event organised in Slovenia

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Lidija Živčič and Katja Huš, Focus |
| Event venue | Delavski dom Trbovlje, Trg svobode 11a, Trbovlje |
| Date | 19. 6. 2024 |
| Title (original language/ English) | Kako znižati položnice za energijo? / How to reduce energy bills? |
| Sectors represented | Households, Center for social work, national funding body (Eco fund), NGO (Focus) |
| Total number of participants | 9 |

Table 29: Details from the local event organised in Slovenia

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Lidija Živčič and Katja Huš, Focus |
| Event venue | Regionalna razvojna agencija Zasavje, Kolodvorska cesta 2, Zagorje ob Savi |
| Date | 20. 6. 2024 |
| Title (original language/ English) | Kako znižati položnice za energijo? / How to reduce energy bills? |
| Sectors represented | Households, Center for social work, national funding body (Eco fund), NGO (Focus) |
| Total number of participants | 12 |

Table 30: Details from the local event organised in Slovenia

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Katja Huš, Focus |
| Event venue | Regionalna razvojna agencija Zasavje, Kolodvorska cesta 2, Zagorje ob Savi |
| Date | 19.9.2024 |
| Title (original language/ English) | Kažipot za energetska prenova domovanj na podeželju, ki jih pesti energetska revščina / Energy renovation roadmaps for rural homes facing energy poverty |
| Sectors represented | Regional development agency, LAG, research, ministry |
| Total number of participants | 7 |

Table 31: Details from the local event organised in Slovenia

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Katja Huš, Focus |
| Event venue | Glasbena šola Zagorje, Kolodvorska 2, Zagorje ob Savi |
| Date | 15. 10. 2024 |
| Title (original language/ English) | Kako znižati položnice za energijo? / How to reduce energy bills? |
| Sectors represented | Households, Center for social work, national funding body (Eco fund), NGO (Focus) |
| Total number of participants | 6 |

Table 32: Details from the local event organised in Slovenia

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Katja Huš and Quentin Drouet, Focus |
| Event venue | Mladinski center Hrastnik, Aleša Kaple 9a, 1430 Hrastnik, Slovenia |
| Date | 25. 3. 2025 |
| Title (original language/ English) | Kako znižati položnice za energijo? / How to reduce energy bills? |
| Sectors represented | Households, Center for social work, RENOVERTY partner Focus |
| Total number of participants | 6 |

Table 33: Details from the local event organised in Slovenia

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Katja Huš, Focus |
| Event venue | Center za socialno delo Litija, Ljubljanska cesta 12, 1270 Litija |
| Date | 17.6.2025 |
| Title (original language/ English) | Kako znižati položnice za energijo? / How to reduce energy bills? |
| Sectors represented | Households, Center for social work, RENOVERTY partner Focus |
| Total number of participants | 8 |

3.5 Italy

The Province of Parma, situated in the heart of the Po Valley, which houses 40% of Italy's population and generates 50% of the national GDP, faces significant challenges regarding air quality. Due to geographical and human factors, the Po Valley Basin frequently exceeds limit and target values for atmospheric pollutants. Consequently, an infringement procedure by the European Union (No. 2014/2147 and subsequent) has been initiated, affecting 195 municipalities in the eastern and western Po Valley, including 24 in the Province of Parma. A comprehensive assessment of the building situation in Parma reveals an aged residential building stock predating the 1980s, lacking energy efficiency measures mandated by Law 373 of 1976, Italy's first legislation addressing building energy efficiency. Approximately 90% of homes rely on heating and/or hot water systems, with 77% using methane as fuel. However, rural areas, inadequately served by the methane network, resort to alternative fuels such as LPG, diesel, and wood. In terms of energy efficiency, 75% of Energy Performance Certificates (EPCs) issued in the province fall within the less efficient classes E, F, and G. The existing residential buildings exhibit poor energy performance characteristics, particularly in opaque and transparent dispersing

surfaces, making interventions challenging due to investment requirements and the complexity of the necessary works.

Addressing these challenges requires structural measures beyond mere emergency interventions. Long-term strategies are essential to enhance air quality, particularly given the recent pandemic's reaffirmation of the home's central role in daily life. Such strategies aim to significantly reduce consumption and emissions in the residential sector, hasten the transition to renewable energy sources, safeguard public health, and enhance citizens' quality of life, especially the most vulnerable populations.

Within the territory there are several active stakeholders, such as the Local Action Group (in Italian Gruppo Azione Locale - GAL) "GAL del Ducato", ATES Parma (the Territorial Agency for Energy and Sustainability of Parma), and several building / agricultural associations such as Confedilizia, Confagricoltura, Coldiretti, PEFC Italia, in addition to several municipalities. Also, there is the Faculty of Architecture of the University of Parma, several trade associations and some enterprises. Not all the actors active in the Province of Parma were directly involved in the events of RENOVERTY, as the LAG preferred to focus on those actors who had a greater knowledge of rural areas and the world of agriculture in general.

More precisely, the GAL del Ducato aims to manage the implementation of projects aimed at the economic development of the territory of the provinces of Parma and Piacenza by giving priority to the implementation of the Leader Programme aimed at rural areas, as well as any other type of programme and project useful for the support and economic development and social and cultural identity of the territories.

ATES Parma, on the other hand, is an association that brings together a number of authorities in the province and supports them in local energy policies. It carries out its institutional activities in collaboration with its member municipalities (Parma, Sissa Trecasali, San Secondo Parmense, Fornovo di Taro, Polesine Zibello). It provides consultancy and guidance in energy management through the application of best practices and the implementation of specific projects aimed at local public administration, trade associations, consumers and local authorities, also organising the dissemination of information on operating procedures and financial facilities for the adoption of new technologies related to renewable sources.

Confedilizia is the Italian confederation of building owners and deals with construction and real estate in general. Confagricoltura, on the other hand, is the oldest organisation for the protection and representation of agricultural enterprises. It is committed to the development of farms and the primary sector in general, to the benefit of the community, the economy, the environment and the territory. Coldiretti is another organisation that represents agricultural enterprises and values agriculture as an economic, human and environmental resource. Its main objective is to guarantee development opportunities for agricultural enterprises within a framework of full integration of agriculture with the economic and social interests of the country.

The CREA (Council for Agricultural Research and Analysis of Agricultural Economics), the main Italian research body dedicated to agri-food chains with legal personality under public law, supervised by the Ministry of Agriculture, Food Sovereignty and Forestry (Masaf), was also involved. Their competencies range from the agricultural, zootechnical, fisheries, forestry, agro-industrial and nutritional sectors to the socio-economic sphere. They have full scientific, statutory, organisational, administrative and financial autonomy.

Another active player is PEFC Italia, a non-profit association that is the national governing body of the PEFC (Programme for Endorsement of Forest Certification schemes) certification system. Its members include representatives of forest and poplar owners, final consumers, users, freelancers, the wood industry and craftsmen, environmental organisations, public administrations, cooperatives, certification bodies, and the world of civil society. Among the active local authorities, we have the *Unione dei Comuni Valli Taro e Ceno* (Union of Municipalities of the Taro and Ceno Valleys), which includes 7 mountain municipalities (Bedonia; Bore; Borgo Val di Taro; Compiano; Pellegrino Parmense; Tornolo and Varsi). The Union exercises its functions both with regard to the role of promoting the socio-economic development and enhancement of its territory and the fundamental role of associative body of the municipalities. Its primary task is to activate the associated exercise of municipal functions as provided for by the regulations in force.

The Faculty of Architecture at the University of Parma, on the other hand, offers courses of study in which redevelopment and sustainability are at the core, providing a stimulating and resourceful environment to explore the multiple aspects of architecture and design, with an interdisciplinary approach that encourages experimentation and the integration of new technologies with traditional practices.

3.5.1 Engagement with LAG(s)

There are several Local Action Groups currently active in the Emilia-Romagna region, but only one, the GAL del Ducato, operates in the pilot area of the Province of Parma (see Figure 6).

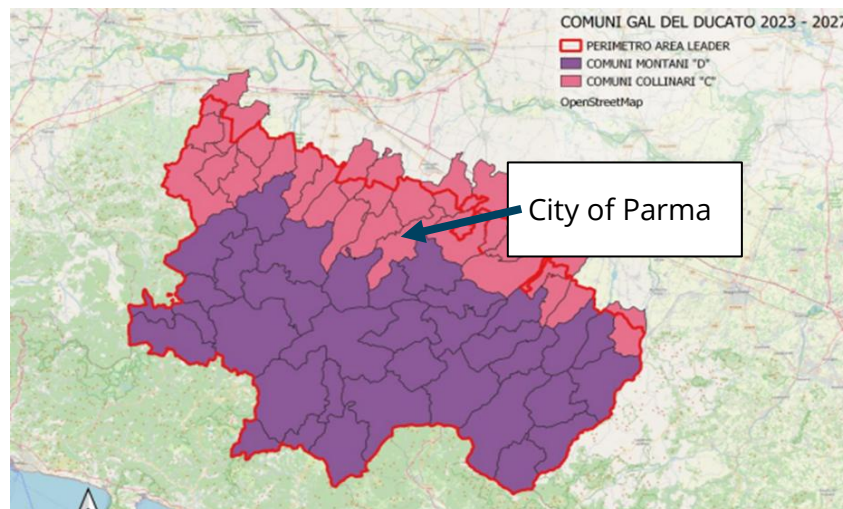


Figure 5: Area of the Italian LAG

This [LAG](#)⁷, which was identified thanks to the LEADER programme and a web search, not only covers the Province of Parma but also part of the Province of Piacenza, bringing together several municipalities and trade associations. Once identified, the first contact was made by e-mail, thanks to the support of ATES Parma, the Territorial Agency for Energy and Development. Subsequently, an initial online meeting was organised, with the participation of ATES, to explain the objectives of RENOVERTY and sound out the LAG's interest in a possible collaboration. After expressing their interest in collaborating and actively participating in RENOVERTY, they signed a Letter of Intent. The letter outlined the activities in which the LAG would play a major role, the support and benefits that RENOVERTY would provide and, finally, the identification of the type of buildings on which REERs would be set. In addition, the activities assigned to the LAG included support for the creation of all local-level workshops aimed at stakeholders and events aimed at citizens. Among the aspects that most attracted the LAG was certainly the possibility of creating a deeper networking with ELARD and the other LAGs involved in the project.

Although the LAG had no experience in energy renovation projects, it immediately took steps to include a section on renovation in its [plan](#)⁸, a reference to the upgrading of buildings, even if not specifically for the residential sector, so that it could support the renovation even more actively. Furthermore, the LAG was crucial in the realisation and success of the workshop addressing stakeholders, leading to the participation of various local, regional, and national stakeholders. Thanks to the active collaboration, AISFOR presented RENOVERTY to the stakeholders involved, the type of buildings to be upgraded were defined and the citizens interested to carry out energy audits in their homes were identified and contacted.

⁷ Website: <https://galdeducato.it/>

⁸ Local Development Strategy <https://galdeducato.it/wp-content/uploads/2024/03/StrategiaAreeRuraliAppennino.pdf>

3.5.2 Workshops and Events

The first workshop, which was held online on 17 May 2023, marked the beginning of the first collaborative activities with the GAL del Ducato in the context of the RENOVERTY project. This workshop was organised in close collaboration with the LAG and ATES, with whom there was continuous communication with emails and online meetings. First of all, they have helped to identify which stakeholders to invite to participate. Furthermore, they were both crucial in outlining the agenda for the workshop.

It saw the participation of a diverse range of actors, both local and national, whose contributions were fundamental in defining the guidelines of the co-design process aimed at the creation of Rural Energy Efficiency Roadmaps (REER) in the municipalities of the Taro Valley, in the province of Parma. Participants in the meeting included representatives from leading organisations such as Confedilizia, Coldiretti, Confagricoltura, CREA, University of Parma, PEFC Italia, Unione dei Comuni Valli Taro e Ceno, and ATES. The presence of these important entities ensured a broad and diversified perspective on the topic of energy poverty and energy renovation in rural areas. The meeting was divided into two parts: in the first part the participants introduced themselves, and RENOVERTY was also presented. In the second part, an open discussion was held and many positive comments emerged. Participants expressed a strong interest in contributing to the co-design process and expressed a willingness to pool their expertise and resources to concretely address the challenges of energy poverty in rural areas.

One of the focal points of the meeting was the presentation of the questionnaire developed by the RENOVERTY project under WP2, for the development of academic research on energy poverty in rural areas. This tool aimed to gather detailed information on the characteristics and causes of energy poverty in rural contexts, as well as possible barriers and solutions for the implementation of policies to alleviate the problem. The involvement of the participants in the compilation and analysis of the survey ensured a more complete and articulate view of the situation, allowing for a more precise identification of the needs and priorities of the rural communities involved.

The discussion then focused on the selection of building types in which to carry out energy audits and how to approach the owners. The active involvement of the stakeholders in these decisions was particularly appreciated, as it allowed strategies and methodologies to be adapted to the specific needs and peculiarities of the local context. To sum up, the first workshop was an extremely fruitful meeting, which allowed to start a constructive dialogue and to lay the foundations for a solid and lasting collaboration between all the actors involved in the RENOVERTY project. The enthusiasm and commitment shown during the meeting bode well for the future, indicating a common will to work together to promote energy sustainability and improve the quality of life in the rural communities of the Province of Parma.

Table 34 – Details from the first local event organised in Italy

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Marina Varvesi (AISFOR), Pierpaolo Romano (AISFOR), Giovanni Pattoneri (GAL del Ducato) |
| Event venue | Online |
| Date | 17 May 2023 |
| Title (original language/English) | Incontro di Avvio del Progetto Pilota e del Tavolo di Lavoro / Pilot Project and Working Table Meeting |
| Sectors and primary target audiences represented | National level policy maker and Municipalities |
| Total number of participants | 8 |

The second workshop, held on 1 February 2024, represented a further step forward in the collaboration and experience-sharing process within the RENOVERTY project. This second workshop, which was again organized with the support of the LAG and ATES, was aimed at presenting to stakeholders the progress of RENOVERTY, the results of the energy audits conducted on the identified buildings and the situation of the building stock in the Province of Parma. Furthermore, the workshop provided additional knowledge to AISFOR as a basis for the future REER co-creation process. This time, the workshop was held in a hybrid format, both online and in presence. Also, invitations were extended to more people, allowing for the participation of both stakeholders already involved in the first workshop and new actors, as well as citizens who had benefited from energy audits offered by RENOVERTY.

During the meeting, an important point was made on the current situation of the buildings audited, presenting the results of the audits conducted to assess the state of the buildings and identify possible interventions to improve energy performance. Participants were given the updated and in-depth EPC (Energy Performance Certificate) of their houses, which provided detailed information on the energy performance of the buildings. This provided a clear and comprehensive view of the current situation and the potential for intervention to optimize the energy efficiency of buildings.

The participation of ATES, with the support of the architect in charge of the energy audits, made it possible to highlight the situation of the building stock in the Province of Parma. It was highlighted that more than 60 percent of the buildings with energy certificates were in the G and F classes, this was mainly due to the fact that almost 80 percent of residential buildings were built before the '80s.

During the discussion, the group's commitment not only to focus on agricultural issues, but also on improving the well-being of farmers and their quality of life. Further activities were suggested

to deepen and clarify the energy assessments of the audited buildings, demonstrating a holistic and integrated approach to the problem of energy poverty.

A significant moment of the meeting was the intervention of two agricultural householders who had been audited. They were asked to share their own past experiences with the renovation process. A complex picture emerged, in which not only the positive aspects but also the criticalities encountered along the way were highlighted. Among these, particular emphasis was placed on the costs of renovation, which have become almost unaffordable for many citizens, and the bureaucratic difficulties encountered along the way. Another obstacle, which is often underestimated or ignored, concerns the difficulties that can arise when the owners are elderly and the sons are not interested in staying in the house or in renovating it, seeing only costs and no benefits. These obstacles, along with other issues, led several citizens to decide not to undertake the renovation of their homes, even though they could not clearly perceive what the medium- to long-term benefits might be.

CREA emphasised that energy poverty is something new, as is the focus on quality of life in agriculture and farmers. Bringing this debate into politics and trying to include it to finance this type of energy upgrading. Not only farm investments, but also living standards and understanding how much we talk about energy poverty, also in the drafting of calls for funding. According to the CREA representative, RENOVERTY could become a case study, to the point of realising a national event aimed in particular at farmers, rural communities and local authorities. On the other hand, the representative of Confedilizia highlighted how the Italian reality poses several challenges, in particular due to the high number of historical or listed buildings, on which it is not at all easy to carry out renovation work.

The meeting was therefore an important moment of reflection, which allowed for a careful analysis of the challenges and opportunities related to the energy upgrading of rural buildings and the identification of strategies and solutions to overcome the obstacles encountered along the way. The active participation of all stakeholders helped to enrich the debate and promote greater awareness and collaboration in the fight against energy poverty in rural communities.



Figure 6: Second Workshop Involving Stakeholders

Table 35 - Details from the first local workshop organised in Italy

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Marina Varvesi (AISFOR), Pierpaolo Romano (AISFOR), Giovanni Pattoneri (GAL del Ducato) |
| Event venue | Online and in person - BORGIO VAL DI TARO |
| Date | 01 February 2024 |
| Title (original language/ English) | Evento di presentazione del progetto RENOVERTY / RENOVERTY project presentation workshop |
| Sectors and primary target audiences represented | National level policy maker, Municipalities, Local Energy Agency, farmers |
| Total number of participants | 26 |

The first event to citizens was held on-line on 28 February 2025 Architects, accountants, and economists were involved, but the session spoke above all to households that are weighing renovation choices in a changing fiscal and financial environment. The meeting opened with institutional greetings from the presidency of the LAG, which explained how the session would unfold and why the project matters for rural areas. It linked the event to an ongoing process and clarified that the goal was to make renovation pathways understandable and actionable. AISFOR then presented the Rural Energy Efficiency Roadmaps. These were described as guidelines able to support and accompany those who decide to start an energy renovation journey. The presentation outlined what the roadmaps contain and how they are developed. It made clear

that they translate local conditions and needs into a coherent sequence of steps. They help owners understand where to begin, which measures to consider first, and how to align actions with available support. Participants heard how the roadmaps connect building characteristics with practical options and how they can guide decisions for both single and multi-family buildings. The session then turned to expected benefits from energy renovation. A contribution from an architect described what renovation can deliver in day-to-day terms. Comfort, control of indoor temperature, and lower energy demand were presented with a frank view of potential critical issues that may arise during works. Planning, coordination among trades, and realistic timelines were treated as factors that can make or break projects. The message was grounded in what residents face when they try to improve their homes. That balance helped the audience see renovation as a manageable sequence rather than a leap into the unknown.

Attention moved next to the policy and fiscal setting. There was a reflection on the experience of the “Superbonus 110%” and on how the landscape has shifted. An accounting perspective explained the tax breaks currently available in Italy following the 2025 budget law and clarified the differences compared with previous benefits. The explanation focused on what is actually in force and on the documentation and timing that matter in practice. Participants asked about eligibility and about how to avoid losing advantages by mis-sequencing steps. The response underlined the need to prepare files carefully and to align interventions with the fiscal calendar. The presentation did not promise effortless gains. It set out what can be used now and what conditions apply. This helped reset expectations after a period of extraordinary incentives and pointed citizens toward a more stable, though more structured, set of measures.

Finance was addressed from another angle as well. A microcredit provider illustrated how microcredit can serve as an alternative channel to support renovation works. The mechanism was explained in simple terms. It can help households that lack large upfront capital or that cannot access traditional credit, while keeping repayments at levels that fit constrained budgets. A concrete case handled by a specialist operator was used to show the path from first contact to disbursement and completion. The example showed how modest loans, combined with advice and the available tax relief, can unlock needed upgrades. This segment broadened the toolbox presented earlier. It also linked the technical and fiscal content to social realities that are common in both rural and urban areas of the province.

The closing part was made by the territorial energy agency, which presented the “Sportello Energia&Condomini,” the one stop shop based in Parma. The agency described the services it offers, from first-line counselling to guidance through procedures and support in preparing applications. The front desk was presented as a neutral public gateway. It provides continuity beyond a single project cycle and gives citizens a place to return to when they need to check requirements or plan the next step. This mattered for the audience. Many people encounter fragmented information and struggle with paperwork. Knowing that a stable point of contact exists reduces uncertainty and encourages action. The event concluded with a short question-and-answer session. Participants asked for clarifications on sequencing, on the interaction between tax relief and microcredit, and on how to engage with the one stop shop for tailored

support. The collaboration among the local action group, the territorial energy agency, and AISFOR gave the meeting both legitimacy and practical depth. It showed how guidance, finance, and local services can be woven into a single narrative that citizens can use.

Table 36 – Details from the first event addressing citizens in Italy

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Marina Varvesi (AISFOR), Pierpaolo Romano (AISFOR), Giovanni Pattoneri (GAL del Ducato) |
| Event venue | On-line |
| Date | 28 February 2025 |
| Title (original language/ English) | Agevolazioni per l'Efficientamento Energetico: strumenti ed opportunità / Facilities for Energy Efficiency: tools and opportunities. |
| Sectors and primary target audiences represented | Architects, accountants and economists were involved. The main target audience was citizens of the province of Parma, including both rural and urban citizens |
| Total number of participants | 23 participants in total |

The second event was held on 31 July 2025 in Berceto and brought the RENOVERTY project into a local forum where citizens, institutions, and community organisations could meet and talk about renovation in concrete terms. The aim was to inform, inspire, and involve people on sustainable energy and energy renovation. The format relied on short presentations, testimonies drawn from local experience, and an open exchange that kept the focus on useful steps. The collaboration behind the event brought together the local action group, the territorial energy agency, AISFOR. Each played a defined role. The local action group anchored the meeting in the priorities of the area, the territorial energy agency presented public services for households and condominium associations, and AISFOR linked the discussion to the project's pathway on rural renovation planning. The session was attended by sixteen people. The audience included representatives of political institutions and third sector entities. The main target remained citizens from across the Province of Parma, from both rural and urban areas.

The opening remarks came from the municipal administration and from the direction of the local action group. The message was one of commitment to citizen-focused energy initiatives and to the idea that renovation is not an abstract goal but a practical route to comfort, lower consumption, and better living conditions. The project coordination from AISFOR guided the flow of the meeting and ensured that the sequence stayed close to the needs of households. This coordination set a clear rhythm. It helped the event move from institutional framing to practical services, and then to lived experience and planning guidance.

The territorial energy agency then presented its mandate and described the work carried out through its energy desk. The service was introduced as a public one stop shop for the province. It offers first-line counselling to residents and to condominium associations. It supports municipalities with information and with the sharing of good practices. It helps users understand

procedures, prepare applications, and find their way through requirements. The presentation emphasised continuity. The energy desk is not a temporary pilot. It is a stable point of contact where citizens can return as their situation evolves. This assurance matters for people who face complex paperwork and fragmented advice. A clear entry door reduces confusion and gives structure to the renovation journey.

The event then shifted to local testimonies that linked technical measures with social conditions. The public housing company explained how it is working to improve the energy performance of its stock and to deliver benefits to tenants. The contribution described how programmes are designed and how interventions can be sequenced to minimise disruption. Two third sector organisations followed with perspectives from the field. One described how it assists families who face constrained budgets. The other outlined its work in supporting households with essential goods and services. Both made the same point: energy issues and social issues intersect. Bills, budgeting, and the condition of homes cannot be separated. The presence of these organisations underlined the need to think about renovation as part of a broader effort to protect vulnerable groups and to keep neighbourhoods stable.

AISFOR then presented the Rural Energy Efficiency Roadmaps developed within RENOVERTY. The presentation explained how these roadmaps help plan renovation in a way that is participatory and technically informed. The roadmaps guide choices from the first assessment to the identification of feasible measures. They help prioritise actions for single homes and for small condominiums. They point to the right moments to act, with attention to funding windows and administrative steps. The speaker also drew practical suggestions from the project experience. The advice stayed close to what owners and small property communities need to decide. It showed how structured guidance can reduce uncertainty and make the process manageable, especially in rural settings where building types are varied and technical capacity is uneven.

The closing remarks came from the regional level. The contribution emphasised inclusive energy policies and cross-sector collaboration. It reinforced the central themes of the meeting. Citizen-facing services build trust and give continuity. Social actors bring knowledge about the pressures that families face and help shape measures that do not leave anyone behind. Public housing programmes can deliver upgrades at scale when governance and finance are aligned. The organisers together can bridge these strands so that renovation becomes a shared task.

Table 37: Details from the first event addressing citizens in Italy

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Marina Varvesi (AISFOR), Pierpaolo Romano (AISFOR), Giovanni Pattoneri (GAL del Ducato) |
| Event venue | In presence |
| Date | 31 July 2025 |
| Title (original language/ English) | <i>Supporto alla cittadinanza in ambito energetico / Supporting citizenship in the energy field</i> |

| | |
|---|---|
| Sectors and primary target audiences represented | The sectors represented were political institutions and third sector entities, while the main target audience were citizens of the province of Parma, including both rural and urban citizens |
| Total number of participants | 16 participants in total |

3.6 Portugal

The activities in Portugal were centred around two distinct locations in the District of Coimbra. The first was in Vila Nova de Oliveirinha, Tábua Municipality, a mountainous region in the centre of Portugal (60 km away from Coimbra). Climatic conditions are, therefore, typical of these regions with hot summers and very cold winters. The buildings are typically single-family houses, with poor energy performance. Although some buildings made of stone can still be found, the majority are made of brick (single wall). Most of the population (around 300 inhabitants) still relies on wood burning (open fireplace) for their heating needs. Activities in this town have been carried out with the assistance of the LAG (ADIBER) and the municipality.

The second was the small village of Arzila (around 650 inhabitants), part of the Coimbra municipality. It is located in the valley of the Mondego River, 30 km from the sea. Because of this, it has a fairly moderate climate, although rather humid. The village borders a marsh which is a natural reserve. The population used to rely on natural resources (fishing, agriculture) for their livelihood but now it is mainly a dormitory town with people working in nearby Coimbra. Buildings are all single-family houses, some semi-detached with poor energy performance. Most houses are over 30 years old and have not undergone renovation. Again, most of the population still relies on wood burning for their heating needs. Engagement with local stakeholders has been carried out with the help of the local LAG (CoimbraMaisFuturo). Stakeholders active in the area include:

- Local Action Groups (LAGs)
- Local authorities (Parish Council and Municipality)
- NGOs and local associations

In general, all stakeholders showed great interest in the project and willingness to cooperate with the activities.

Table 38: Activities in Portugal

| ACTIVITIES REPORTED | |
|--|-------------------------------------|
| Events with single household / | 23-24 January 2024 2-3 May 2024 |
| Events to households in a collective manner | 16 January 2024 15 February 2024 |

| | |
|------------------------------------|---|
| | 18 February 2025 25 July 2025 |
| Workshops with stakeholders | 16 January 2025 15 February 2025 29 November 2024 |

3.6.1 Engagement with LAG(s)

LAGs were identified based on their respective operating areas. ADIBER or Associação de Desenvolvimento Integrado da Beira Serra (Beira Serra Integrated Development Association) was set up in 1994 with the aim of implementing and supporting initiatives for the economic and social development of the territory, creating conditions to improve the quality of life and well-being of the population.

Its area of intervention is the so-called Beira Serra Region, which includes the municipalities of Arganil, Góis, Oliveira do Hospital and Tabua.

CoimbraMaisFuturo is an association focused on local development in the Coimbra region. It is a non-profit private law entity that aims to promote development in both rural and urban areas and improve the quality of life for local populations through sustainable sociocultural and economic initiatives.

Initial contact was done by email followed by telephone calls to explain the objectives of the RENOVERTY project and the main lines of cooperation. Although neither LAG had previous experience with energy efficiency or renovation activities, both were very much involved with the project activities from first contact. After the confirmation of willingness to collaborate, "letters of intent" were signed by both LAGs, ISR-UC and ELARD outlining the main activities to be carried out.

The following activities were carried out in cooperation with ADIBER and CoimbraMaisFuturo.

- Help identifying relevant stakeholders in the region
- Establishing communication between different stakeholders in their operational area.
- Cooperation in the organization of meetings with local stakeholders
- Cooperation in the organisation of local workshops
- Help in the identification of households for audits
- Dissemination of information

3.6.2 Workshops and Events

Two initial workshops were carried out, one in each of the pilot regions with the main purpose of getting the involvement of local stakeholders. The workshops were organised in cooperation with the LAGs, which helped to identify local stakeholders and secure a meeting venue.

The first workshop was held in Vila Nova de Oliveirinha on January 16, 2024. The meeting had the participation of 18 people, including the local municipality Councillor for Housing, the president of the Parish Council, the president of the local Improvements Commission, ADIBER's representative, and local residents.

The meeting began with a short introduction of each of the participants. Next, a brief explanation was carried out on the topic of energy poverty. An overview of the activities to be undertaken during the RENOVERTY project was provided, including an introduction to the REERs and their content, followed by an explanation of the expected collaboration of each stakeholder. The necessary steps for the conduction of energy audits and the benefits of obtaining an energy certificate were also pointed out.

The third part of the meeting consisted of an informal discussion where residents had the opportunity to raise questions on the process and also expressed their views on the topic of energy use in their homes, difficulties they face, etc. The diversity of stakeholders present allowed for the exchange of different perspectives on the topic of living conditions and local development in rural areas, energy poverty and energy renovations. Participants showed great interest in the subject and willingness to cooperate and seemed to understand the benefits, not only to themselves but to the community.

Finally, participants were given the opportunity to volunteer for the energy audits. A "letter of intent" was signed by the volunteers with the agreement to participate and share the data with the project.



Figure 7: First workshop in Vila Nova de Oliveirinha

Table 39: Details from the local workshop organised in Portugal

| | |
|---|---|
| RENOVERTY representative (name and organisation) | João Fong (ISR-UC), Paula Fonseca (ISR-UC), Miguel Ventura (ADIBER) |
| Event venue | Comissão de Melhoramentos de Vila Nova de Oliveirinha |
| Date | 16 January 2024 |
| Title (original language/ English) | RENOVERTY project presentation workshop |
| Sectors and primary target audiences represented | Residents, Municipality |
| Total number of participants | 18 |

The second workshop was held on February 15, 2024, in Arzila. The meeting had the participation of 15 people, including the representative of the Parish Council, CoimbraMaisFuturo representative, and local residents. The meeting followed a similar structure to the one held in Vila Nova de Oliveirinha. During the informal discussions several concerns were expressed regarding the renovation process and, in particular, on the energy audit process.

The participants were given the opportunity to volunteer for the energy audits. A letter of intent was signed by the volunteers with the agreement to participate and share the data with the project.



Figure 8: Workshop in Arzila

Table 40: Details from the local workshop organised in Portugal

| | |
|---|---|
| RENOVERTY representative (name and organisation) | João Fong (ISR-UC), Paula Fonseca (ISR-UC), Ana Fernandes (CoimbraMaisFuturo) |
| Event venue | Junta de Freguesia de Arzila |
| Date | 15 February 2024 |
| Title (original language/ English) | RENOVERTY project presentation workshop |
| Sectors and primary target audiences represented | Residents, Municipality |
| Total number of participants | 15 |

A co-creation workshop was organised in Tábua on 29 November 2024 within the framework of the LIFE RENOVERTY project. The session, held at Espaço CULTIVA, organised by ISR-UC in collaboration with ADIBER, gathered 16 participants, including representatives of local authorities, development agencies, academia, energy cooperatives, and community associations. The objective of the event was to present and discuss the draft Rural Energy Efficiency Roadmap (REER) and to identify strategies for addressing energy poverty in rural areas through energy efficiency measures, building renovation, renewable energy deployment, and community-based solutions.

The workshop was also an opportunity to carry out training on energy poverty, renovation strategies, energy efficiency measures, energy communities and the co-creation process.

The RENOVERTY approach and proposed measures were subsequently presented, followed by an interactive discussion. Participants analysed key barriers, namely insufficient funding, low

levels of energy and digital literacy, procedural and regulatory complexity, and cultural reluctance to adopt new practices.

The discussion highlighted the potential of independent, evidence-based roadmaps to support decision-making and to leverage financing for rural renovation initiatives. Proposed solutions included the establishment of Renewable Energy Communities (CERs) to combine social and technical support, the provision of personalised advice and training for households and contractors, and the promotion of collective initiatives such as awareness-raising events and crowdfunding mechanisms. The outcomes of the workshop confirmed the need to strengthen local capacities and foster multi-level collaboration to ensure an equitable and sustainable energy transition in rural Portugal.

Table 41: Details from the local workshop organised in Portugal

| | |
|---|--|
| RENOVERTY representative (name and organisation) | João Fong (ISR-UC), Paula Fonseca (ISR-UC), Miguel Ventura (ADIBER) |
| Event venue | Espaço CULTIVA, Tábua |
| Date | 29 November 2024 |
| Title (original language/ English) | RENOVERTY co-creation workshop |
| Sectors and primary target audiences represented | Local authorities, social services, energy consulting, engineering, academia, energy cooperatives, and community associations. |
| Total number of participants | 16 |

Two additional events were organised in each of the pilot regions, coinciding with the delivery of the energy certificates to the residents. These occasions went beyond the simple handover of documents and were designed as awareness-raising moments where technical information was translated into practical, simple guidance.

The events provided an opportunity to explain in detail the purpose and benefits of the energy certificate, particularly how it can be used by households to better understand the energy performance of their homes and to guide renovation decisions. The recommended improvement measures identified during the audits were presented, clarifying both the technical interventions and their expected impact on energy efficiency.

In addition, indicative cost estimates and potential savings scenarios were discussed, giving participants a clearer picture of the financial dimension of home renovation and the payback potential of the proposed actions. Particular attention was paid to the non-energy benefits of renovation, including increased comfort, improved indoor air quality, and enhanced wellbeing, which were highly valued by residents.

Finally, the sessions created space for dialogue and questions, allowing households to share their concerns, compare experiences, and discuss practical obstacles to renovation.

Table 42: Details from the local workshop organised in Portugal

| | |
|---|---|
| RENOVERTY representative (name and organisation) | João Fong (ISR-UC), Paula Fonseca (ISR-UC), Miguel Ventura (ADIBER) |
| Event venue | Comissão de Melhoramentos de Vila Nova de Oliveirinha |
| Date | 18 February 2025 |
| Title (original language/ English) | Entrega dos Certificados Energéticos - Considerações Práticas |
| Sectors and primary target audiences represented | Residents, Municipality |
| Total number of participants | 15 |

Table 43: Details from the local workshop organised in Portugal

| | |
|---|---|
| RENOVERTY representative (name and organisation) | João Fong (ISR-UC) |
| Event venue | Junta de Freguesia de Arzila |
| Date | 25 July 2025 |
| Title (original language/ English) | Entrega dos Certificados Energéticos - Considerações Práticas |
| Sectors and primary target audiences represented | Residents, Municipality |
| Total number of participants | 13 |

Regarding the events with single households, twenty energy audits were carried out, 10 in each pilot region. The main purpose was to characterise the buildings in the region in terms of energy performance. The required technical data was collected in order to get the energy certificates for the households. The certificates provide a technical description of the house at the structural and systems level. It also includes proposals for energy improvement and the label with energy efficiency rating.

During the visits, the residents were further informed on the activities to be carried out during the project and the benefits of energy renovation. Furthermore, the visits served as an opportunity for residents to express their individual concerns and the problems they face in terms of comfort, energy use and energy bills. This informal conversation served not only to

assess the difficulties faced by residents but also to further gain their engagement into the project by establishing a closer relationship.

3.7 Spain

In Spain, a large percentage of municipalities, around 90%, are rural areas with a maximum population of 2,000 inhabitants. Surprisingly, one-fifth of the total population of Spain lives in these rural areas. The project has selected two piloting areas, Osona and Lluçanès, situated in the interior of Catalonia, which are the most common organisational structures of rural areas in Spain. Osona has 42 municipalities and Lluçanès has 11. The country boasts a high diversity of climates, which results in varying household energy needs. Both pilot areas have a climate characterised by cold winters with thermal inversions and hot summers.

At the local level, there are various stakeholders involved in the area, including the municipalities themselves, social services, supra municipal authorities, the Local Action Groups (LAGs) and the Local Energy Agency. The local energy communities of Osona can also play a crucial role in the fair energy transition. It is important that all the stakeholders work together more closely to target vulnerable households and make the renovation process effective throughout the roadmap.

All stakeholders involved in the project agreed that the energy renovation process of households needs to be addressed, and that there are many barriers associated with it that affect vulnerable families more strongly. Among these stakeholders, the municipalities, LAGs, social services, and energy communities have identified themselves as lacking prior knowledge of the energy renovation process. They see the RENOVERTY project as an opportunity to empower themselves with technical knowledge and become effective communicators of the process to citizens. The table below provides a summary of the activities that were conducted in the pilot areas.

Table 44: Activities in Spain

| ACTIVITIES REPORTED | 1st Activities | 2nd Activities |
|---|---|----------------|
| Events with single household / Events to households in a collective manner | 13/07/23; 15/09/23; 19/09/23; 20/09/23 | 20/07/23 |
| Workshops with stakeholders | 30/01/24 | 20/02/24 |
| Workshops with stakeholders (Additional WS with citizens + stakeholders; participation of the Renoverty in the annual event of "fair of energy and sustainable construction") | 16/02/24 | |

3.7.1 Engagement with LAG(s)

In the pilot areas, there are three LAGs. The first LAG is called Associació pel Desenvolupament Rural de la Catalunya Central, which covers 13 municipalities in the western region. The second LAG is called Associació pel Desenvolupament Rural Integral de la Zona Nord-Oriental de Catalunya, and it covers 6 municipalities in the eastern region. The third LAG is called Associació Leader Ripollès Ges Bisausa, and it covers 8 municipalities in the northern region. It is important to note that not all municipalities in Osona and Lluçanès are covered by the presence of LAGs. Additionally, the three LAGs are also supporting other municipalities outside the scope of the project pilots.

The three LAGs were identified by working with the Local Energy Agency. Initially, a meeting was held with the three LAGs, the Local Energy Agency and Ecoserveis, to introduce the project and emphasize the crucial role played by the LAGs, as a major supporter of rural development and being in direct communication with the local governments.

None of the three groups had prior experience with the energy renovation process, which motivated them to participate and expand their support to the municipalities. In this sense, its active participation in the organisation and implementation of workshops and events has been more focused in the recruitment phase, identifying relevant actors such as municipalities of the pilot areas, social services, companies, entities, and the general public, among others.

They have participated actively in workshops where they shared their experience in the areas and discussed their potential role in promoting the energy renovation process. They also exchanged opinions with other stakeholders, which helped to establish the baseline for creating the roadmap in Osona and Lluçanès.

To ensure communication and effectiveness, a meeting was held every 15 days between the three LAGs, the Local Energy Agency and Ecoserveis.

3.7.2 Workshops and Events

Regarding the events with single households, twenty energy audits were conducted for vulnerable families in two phases each, technical and conceptual, with the aim to get the energy certificate and to empower the families in energy terms.

The required data was collected from the buildings in the technical phase to move forward with obtaining the energy certificates. This document provided a technical description of the house at the structural and systems level. It also included proposals for energy improvement and the label with energy efficiency rating.

During the conceptual part of the audits, families were provided with an explanation of the RENOVERTY project and the energy renovation process for households and the associated

benefits. The importance of obtaining an energy certificate was also emphasized, along with the available aids for the renovation process. Additionally, the families' domestic consumption bills were reviewed to help optimize them and determine if they were eligible for any available aids. Finally, a report with all this information was sent to the families.

Regarding the **events addressing households in a collective manner**, the target of this event were citizens, and the aim of the activity was to present the project, its collaborations and goals, focusing on the energy renovation process on dwellings and its benefits. The event was also useful to gather the barriers and opportunities that citizens experience in a renovation process. To begin with, the event started with a presentation on RENOVERTY, explaining the energy renovation process, including its benefits and concluding with the financial mechanisms available in Spain.



Figure 9: Event Addressing Citizens

After completing the introductory section, the renovation process was analysed to identify any obstacles and opportunities. Attendees were asked to imagine that they wanted to start an energy renovation project and to think about the barriers they would face, with a special focus on how these problems can be accentuated in vulnerable families.

The main barriers found were:

- Prioritize conservation rehabilitation instead of applying energy efficiency criteria.
- Urban planning restrictions may hinder the implementation of renovation measures.
- Citizens are not well-informed about the benefits of energy renovation measures.
- The digital divide may pose a challenge in terms of ensuring equal access to information and resources.
- Public administration is distant; this may make it more difficult to access for support and guidance.

- For many families, energy renovation process may not be a top priority due to other pressing concerns.
- Lack of funding.
- Lack of collective models of business to promote the renovation process.
- The aid system is complex, making it difficult for some to access.
- For families who rent their homes, it may not be clearer who is responsible for renovation efforts or how it could impact rental prices.

The last part of the event was focused in to analyse the barriers and try to overcome theme. The main solutions were:

- Improve dissemination and information beyond the energy renovation process.
- Seek for synergies with associations and cooperatives to unlock access to information.
- Improve the public administration procedures.
- Increase the deductions in the personal income tax.
- The creation of energy renovation offices with a social focus.
- The creation of the figure of a mediator within the energy communities to support families.
- Create a forum or a discussion space to exchange experiences.



Figure 10: Event Addressing Citizens

Table 45 – Details from the first local event organised in Spain.

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Laia Tarradas and Raquel Rodríguez (ECOSERVEIS) |
| Event venue | Sant Pere de Torelló (Osona) |
| Date | 20 July 2023 |

| | |
|---|--|
| Title (original language/ English) | ENERGY RENOVATION PROCESS ON DWELLINGS: BENEFITS, BARRIERS AND OPPORTUNITIES |
| Sectors represented | Citizens, LAGs and Local Energy Agency of Osona |
| Total number of participants | 18 |

All the information collected will be considered in the roadmap to address the energy renovation process.

Regarding the **workshops with stakeholders**, they have been divided into two sessions. The main focus of the first session was to identify barriers in the energy renovation process, while the second aimed to find solutions to overcome them. All the information gathered, including the insights from the workshop with citizens, will form the basis for the co-creation process in the development of the roadmap.

During the **first workshop**, which took place the 30/01/2024, various stakeholders from different sectors such as the private sector, local administration, social services, the local energy agency, municipalities, LAGs, and regional authorities participated. The primary **objective of this workshop was to identify any challenges** or obstacles hindering the energy renovation process. The event started with a presentation on RENOVERTY, its consortium, and the work done so far. The presentation highlighted the development of a roadmap to address energy renovation of households, with a focus on vulnerability, and the importance of involving stakeholders in the design process. In order to identify the barriers, a dynamic was developed. It consisted in two murals depicted the energy renovation process and various family units identified during the energy audits, with the aim of identifying obstacles throughout each stage of the process and linking them with the distinct characteristics of the families. The steps were: 1) hire a professional team; 2) assess housing needs; 3) technical proposal; 4) budget; 5) administrative procedures; 6) execution of the energy renovation process. The characteristics of the families represented were tenants, owners, youth, pensioners, migrants, large families, unemployment situation, single parent, irregular situation, among others. The mural looked as follows:

- Access to aids.
- Complicated management of requests.
- Misinformation about energy culture.
- Distrust due to high demands and short-term aid.
- Lack of interest of families without immediate profit.
- Difficulties in reaching agreements within communities of neighbours.
- Absence of a dedicated figure to assist families.
- Lack of communication between various actors involved in the process, including administration, companies, and estate administrations.

Table 46: Details from the second local event organised in Spain

| | |
|---|---|
| RENOVERTY representative (name and organisation) | Laia Tarradas and Raquel Rodríguez (ECOSERVEIS) |
| Event venue | Vic (Osona) |
| Date | 30th January 2024 |
| Title (original language/English) | BARRIERS IN THE RENOVATION PROCESS |
| Sectors represented | Private sector, local administration, social services, the local energy agency of Osona, municipalities, LAGs and regional authorities. |
| Total number of participants | 13 |

The same stakeholders who attended the first workshop were present in the **second** one, which took place on 20/02/2024. Firstly, we analysed the barriers that were identified in the previous session in a brief manner. **The objective of the second session was to work on these barriers in order to find possible solutions.** To do so, a mural was prepared with the main titles of the barriers identified, grouped by communal characteristics.

The groups of barriers were:

- Economic capacity.
- Access and procedures for grants.
- Ignorance and mistrust in the energy sector.
- Unattractive investment returns.
- An aging construction sector.
- Low coordination between actors.
- Lack of support for families.
- Agreements between ownership and rental.
- Agreements between neighbouring communities

The mural looked as follows:



Figure 13: Mural developed during the 2nd workshop

This dynamic motivated participation by requiring stakeholders to write possible solutions on the mural:



Figure 14: Activities during the 2nd workshop

The main solutions identified were:

- Economic capacity:
 - o Cross taxation
 - o Register notation for the elderly
 - o Financing and local administration promotion
 - o Quotas to avoid large investments
- Access and procedures for grants:

- Social advance
- Establish social and environmental impact criteria
- Add the rural focus
- More dissemination of the criteria and conditions of subsidies through renovation offices
- Simplification of procedures
- Ignorance and mistrust in the energy sector:
 - Share success stories to generate a domino effect
 - County offices, LAGs, energy communities as a mediators and generators of trust
 - More awareness
 - Strengthen the network of local energy communities to promote the energy renovation process
- Unattractive investment returns:
 - Business bridging loans (that only the part that does not cover the subsidy has to be paid and that it is the company that waits for the money to arrive)
- An aging construction sector:
 - Placement plans
 - Installer training
- Low coordination between actors:
 - Housing tables led by LAGs
 - Conferences for the exchange of knowledge and the state of the sector
- Lack of support for families:
 - Incorporate the figure of the energy renovation process agent
 - Study and map the housing stock to know the needs of the renovation and be able to prioritize
- Agreements between ownership and rental:
 - Promotion of rental models with renovation (example of urban farmhouses)
 - Rental price linked to the energy certificate
 - Housing transfer of use with public mediation
- Agreements between neighbouring communities:
 - Energy renovation process agent

The solutions in the mural looked as follows:

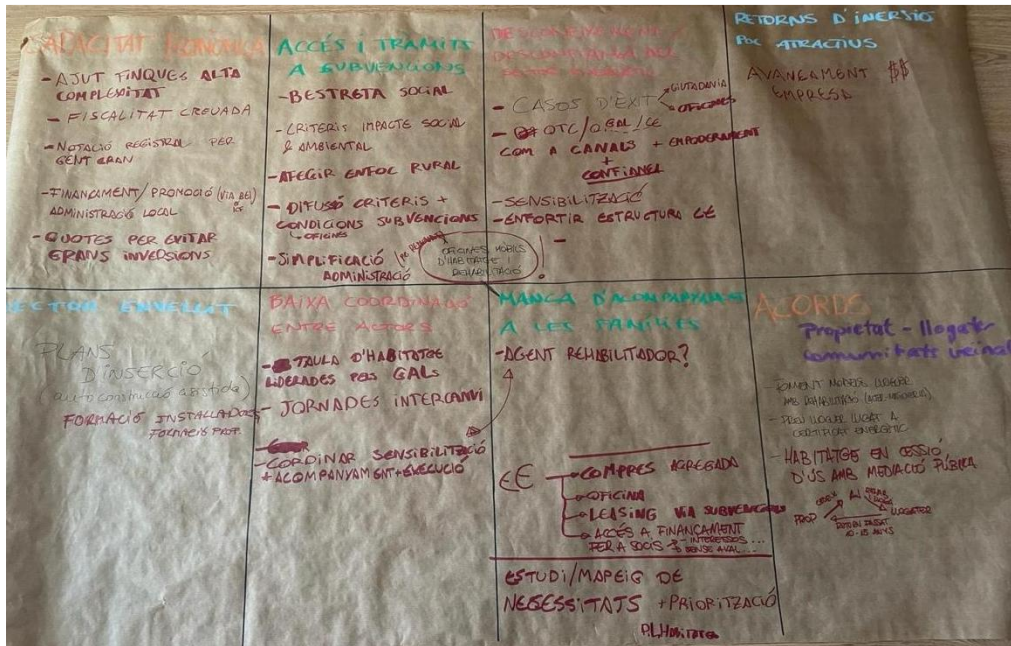


Figure 15: Solutions founded

Table 47: Details from the extra event organised in Spain.

| | |
|--|--|
| RENOVERTY representative (name and organisation) | Laija Tarradas and Raquel Rodríguez (ECOSERVEIS) |
| Event venue | Vic (Osona) |
| Date | 20th February 2024 |
| Title (original language/English) | OPPORTUNITIES IN THE RENOVATION PROCESS |
| Description and key topic | <p>Ecoserveis presented the results from the previous activities with stakeholders and citizens.</p> <p>The objective of this second workshop was to build on the barriers previously identified and work collaboratively to find ways to overcome them.</p> <p>To facilitate the identification of solutions, an interactive activity was prepared. It involved a mural where the barriers were categorised, allowing participants to propose and map out possible solutions for each category.</p> |
| Sectors represented | Private sector, local administration, social services, the local energy agency of Osona, municipalities, LAGs and regional authorities. |
| Summary of main activities at the event | <ul style="list-style-type: none"> Welcome and recap on the last workshop Dynamic to identify solutions to the renovation process |

| | |
|-------------------------------------|---|
| | <ul style="list-style-type: none"> Conclusions and next steps for the REER co-creation process |
| Total number of participants | 12 |
| Material developed | Minutes |
| Work Package and Task Number | WP3, Task 3.3.1 |

In order to find more stakeholders and to contrast the main barriers and solutions, another workshop was held. In this case, we took opportunity of the “*Fira de l’Energia i la Construcció Sostenible*”, an annual event organised in the municipality of Vic. The two topics of the event were the local energy communities and the energy renovation process.

In this event, different professionals from the private and public sectors exchange experiences, knowledge and projects through various activities such as dialogues, exhibitions, presentations and different stands.

At the event, two different activities were conducted. The first one was a public presentation of the RENOVERTY to the broad audience. The second was the participation in one stand in where the RENOVERTY was introduced to every stakeholder, and they were interviewed in order to analyse the barriers collected in the previous workshops. Additionally, they also had the opportunity to share possible solutions. All of the barriers were supported for the new stakeholders, focusing specially in the economical one. The stakeholders were invited in to participate in the co-creation process for the development of the roadmap.



Figure 16: Fira de l’Energia i la Construcció Sostenible



Figure 17: Fira de l'Energia i la Construcció Sostenible

Table 48: Details from the last event organised in Spain

| | |
|---|--|
| RENOVERTY representative (name and organisation) | Laia Tarradas, Raquel Rodríguez and Paco Jofra (ECOSERVEIS) |
| Event venue | Vic (Osona) |
| Date | 16 th and 17 th February 2024 |
| Title (original language/English) | ACTIVITIES AT THE ENERGY AND SUSTAINABLE CONSTRUCTION FAIR (FECS) 2024 Edition |
| Sectors represented | Private sector, local administration, the local energy agency of Osona |
| Total number of participants | 16 |

Regarding the **last event addressing households in a collective manner**, was scheduled for October 14th in Sant Pere de Torelló. It was decided to hold the event in Sant Pere de Torelló, as its Energy Community and Osona Energia Cooperative are key partners in implementing one of the measures included in the REER: **“the creation of a business model that enables the collective purchase of renovation services”**. This measure aimed to boost the pace of home renovation in the municipality and responds to citizens’ strong interest in renovating their households.

The target audience of the event was local citizens, and its main goal was to present the Renovation Guideline, as a key results of the project, developed through the entire co-creation process.

The session began with a brief introduction to Renoverty and the project’s achievements, followed by a detailed presentation of the Renovation Guideline. It was outlined the renovation measures that can be applied to improve household energy efficiency and comfort, the steps to

follow, the professionals needed, and how to request advice to carry out a complete renovation process.

The session continued with a presentation of the financing options being developed with Osona Energia Cooperative to be offered through the Energy Community of Sant Pere de Torelló to local citizens.

The last part of the session was more dynamic and required the active participation of citizens. An exchange space was done between citizens sharing their own experiences in the energy renovation process, with citizens who are planning it. This activity was one of the measures included in the REER, **“the peer-to-peer Renovation Lab”**. This measure creates a space for exchange and learning, a community of practice, between citizens who are considering renovating their households or have already started the process, with citizens that has experience in a renovation process. The event was useful to start implementing this measure.

Table 49 – Details from the second local event organised in Spain.

| RENOVERTY representative Elisenda Cleries (ECOSERVEIS) (name and organisation) | |
|---|---|
| Event venue | Sant Pere de Torelló (Osona) |
| Date | 14 th October 2025 |
| Title (original language/English) | BENEFITS OF ENERGY RENOVATION ON DWELLINGS: RENOVATION GUIDELINE |
| Sectors represented | Citizens, LAGs and Local Energy Agency of Osona |
| Total number of participants | 12 |
| Material developed | Power Point Presentation Minutes |
| Work Package and Task Number | WP3, Task 3.3.1 |



Figure 18: Presentation of Renoverty Renovation Guideline



Figure 19: Implementation of Peer to peer Renovation Lab measure

4. Conclusion and Next Steps

Although the involvement of stakeholders and citizens in the project was progressing well, with a high degree of participation, several barriers and difficulties were encountered:

- Lack of knowledge on the topic of energy renovation and energy poverty, making the various stakeholders initially reticent to get involved in RENOVERTY;
- Scarcity of state funds or subsidies dedicated to building renovation also made it difficult to attract stakeholders and citizens;
- The high number of stakeholders also entails a difficulty, which is to find a convenient date for everyone to organise the workshops and events;
- Other difficulties are due to communication problems, as the people involved often only know the national language or have a low knowledge of English.

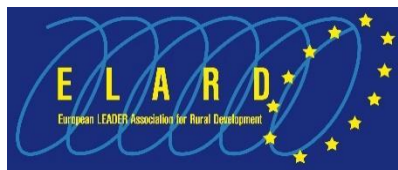
To overcome the difficulties and barriers encountered, specific actions were implemented. For example, to overcome the lack of knowledge on specific RENOVERTY topics, local energy agencies were involved in some pilot areas. Furthermore, the training that was developed within the project covers the topic of energy renovation, trying to use simple language.

On the other hand, with regard to the scarcity of public funds and subsidies, a database containing those currently available was created to overcome this problem, and the existence of other mechanisms was highlighted as well as the return on the initial economic investment. To obviate the difficulty related to the high number of stakeholders, it was decided to schedule events and workshops in advance so as to have as many participants as possible. Even if this meant delaying the completion of some of the activities to increase awareness. Finally, to overcome language difficulties, two main strategies were adopted. First, the translation of the main communication and training material into the national language of each pilot area. Then, support from ELARD with the inclusion of a person who spoke English and could act as a liaison, especially during the meetings held in English.

The next steps that will be taken by RENOVERTY, in which the involvement of LAGs, stakeholders and citizens is fundamental, concern the completion of activities (Workshops and Events) whose aim is to raise the awareness of all those involved. Additionally, co-creation workshops will be organised and conducted, the aim of which is to create the Rural Energy Efficiency Roadmaps (REERs), with the support and involvement of all local stakeholders as far as the first two workshops are concerned. For the following ones, stakeholders at the national level will also be involved and will be addressed to a wider audience.

In addition, the database with public funds and subsidies dedicated to building renovation will be finalised and made available to citizens via an online platform. This database will be updated annually by the partners or if major changes occur in the allocation or existence of the currently identified funds.

At the same time, direct training will be provided to stakeholders and LAGs in the coming months, the aim of which is to give them additional tools to understand energy renovation, the obstacles it can entail, how to overcome them and, above all, what economic and non-economic benefits it can provide.



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Co-funded by the European Union under project ID 101077272. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.