



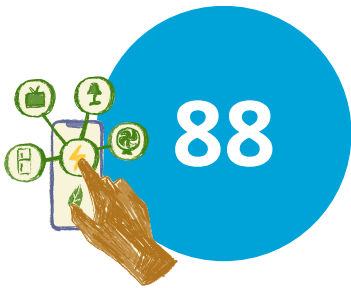
## Final Report

# Home Renovation Roadmaps to Address Energy Poverty in Vulnerable Rural Districts



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.

# RENOVERTY's Key Achievements



**Audits conducted on rural and peri-urban households**



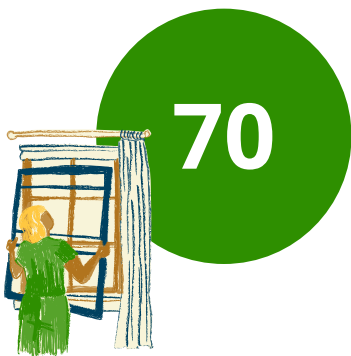
**Rural Energy Efficiency Roadmaps (REERs) created, of which 16 tailored for households and 16 for stakeholders, developed across 7 pilot countries and 11 rural regions**



**Implemented measures derived from the REERs**



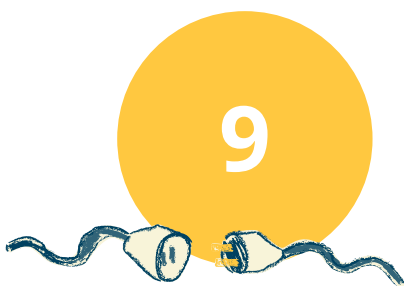
**Households and stakeholders trained**



**Individual households and buildings with multiple households have been renovated, have begun renovation, or have the intention to start shortly, totalling 24,377m<sup>2</sup>**



**Policies, regulations, legislations, guidance documents and initiatives influenced during the project's lifetime, and a minimum of 21 more to be impacted in the coming years.**



**Replicators of the REERs, measures, and co-creation methodology**

# Executive Summary

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The **RENOVERTY project** (*Home Renovation Roadmaps to Address Energy Poverty in Vulnerable Rural Districts*) ran from November 2022 to October 2025 under the coordination of the Institute for European Energy and Climate Policy (IEECP) and funding from the LIFE Clean Energy Transition Programme. Its mission was to foster energy-efficient home renovations in **vulnerable rural and peri-urban areas** across Europe, reducing energy poverty and promoting a fair and inclusive energy transition.

RENOVERTY developed and tested a co-creation methodology for building **Rural Energy Efficiency Roadmaps (REERs)** — locally tailored, step-by-step guides supporting households and authorities in planning, financing, and implementing energy renovations. The approach bridged technical, financial, and social dimensions of energy poverty, turning policy ambitions into local action.

Across seven pilot regions in Croatia, Estonia, Hungary, Slovenia, Italy, Portugal, and Spain, the project carried out **88 household and building audits**, delivered **293 trainings**, and created **16 tailored roadmaps for households and stakeholders** each. In total, **30 REER measures** were implemented, with **70 individual households and buildings** either renovated, in progress or showing intention to renovate in the short term, covering over **24,000 m<sup>2</sup>**.

The project's survey and research confirmed that rural energy poverty stems from structural disadvantages such as old, inefficient housing, limited income and credit access, and weak policy support. RENOVERTY addressed these barriers through stakeholder mapping, capacity-building workshops, and participatory roadmap design, ensuring that local realities guided decision-making. Each pilot tested and implemented practical solutions for technical, financial, legal and community barriers to rural home renovation, and demonstrated how community engagement, clear guidance, and flexible financial tools can unlock renovation in rural contexts.

In its 3 years, RENOVERTY influenced **60 policies, strategies, and initiatives** across all governance levels, from local development strategies to national Social Climate Plans & the EU Committee of the Regions, embedding its findings in ongoing policy frameworks.

Through its combination of bottom-up and top-down activities, the project proved that alleviating rural energy poverty through energy efficient renovation requires not only funding but trust, coordination, and policy coherence. **By combining technical assessments, community participation, and policy advocacy, RENOVERTY has established tools to be used by both households and stakeholders to reduce energy vulnerability, as well as a replicable model for inclusive renovation, ensuring that Europe's energy transition reaches its most remote and vulnerable communities.**

# Introduction: Objectives and Scope

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The RENOVERTY project, active between November 2022 and October 2025, sought to foster energy efficiency building upgrades in the Central and Eastern European (CEE), South-Eastern European (SEE), and Southern European (SE) countries by establishing a methodological and practical framework to develop renovation roadmaps for vulnerable rural and peri-urban districts in a financially viable and socially just manner.

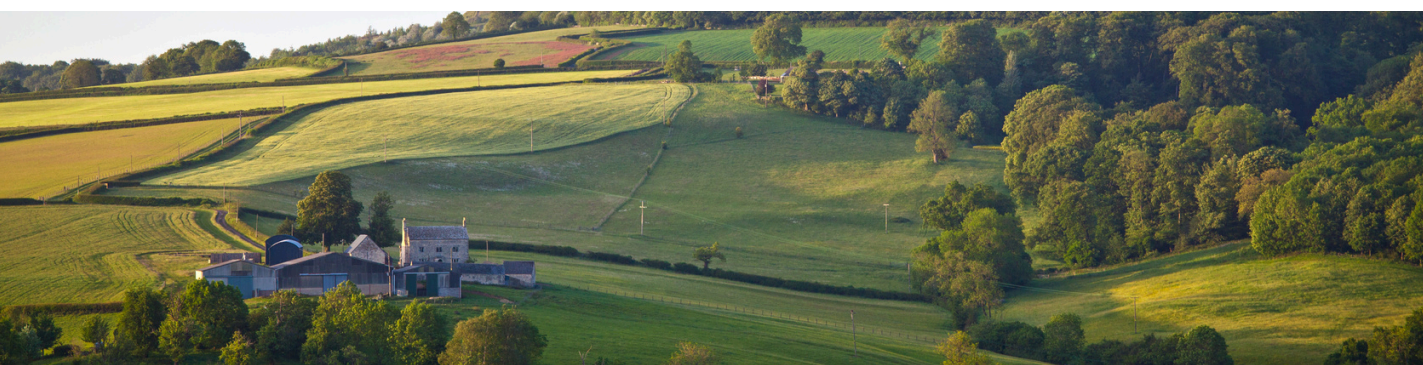
Specifically, the project delivered tools and resources to support households in renovating their homes to increase their energy efficiency and comfort while decreasing vulnerability, as well as local, regional, and national actors in building and executing operational renovation roadmaps for rural areas. A scalable model was created to ensure wide geographical replicability and implementation of the roadmaps by different actors at the EU level. Strategically, the project contributed to minimising financial, technical, community, and legal burdens caused by the complex, multi-stakeholder home renovation process.

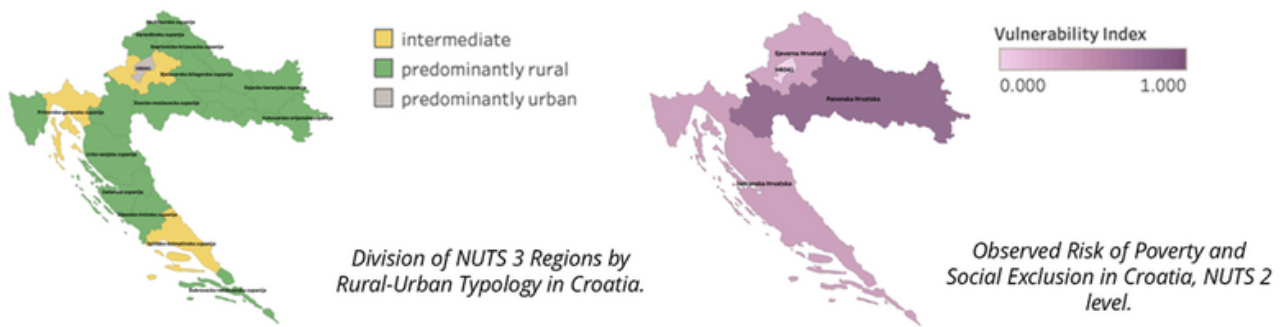
Over the project's three years, seven pilots located in Sveta Nedelja & Žumberak (Croatia), Tartu (Estonia), Bükk Térségi (earlier called Bükk-Mak) & Somló-Marcalmente-Bakonyalja Leader (Hungary), Zasavje (Slovenia), Parma (Italy), Vila Nova de Oliveirinha & Arzila (Portugal), and Osona & Lluçanès (Spain) implemented the roadmaps, resulting in the integration of rural and peri-urban development that will continue to serve rural and peri-urban communities past the project's end.

## Framing the Rural Energy Poverty Problem

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While the subject of energy poverty is widely recognised and discussed, there is a substantive body of evidence to suggest that rural areas in Europe are left behind in the efforts to achieve a clean and just energy transition, even though rural populations are at a significantly higher risk of facing poverty issues. In addition, this situation is particularly pronounced in the case of CEE, SEE and SE countries, where populations are highly exposed to energy poverty. RENOVERTY addressed this gap and updated the energy poverty framework on rural and peri-urban energy poverty.





**Figure 1. Correlation of vulnerability and rurality identified by the RENOVERTY-developed Composite Energy & Transport Poverty Indicator (CEPTI Indicator)**

According to an extensive desk research of more than 80 relevant scientific and grey literature sources, rural areas across Europe face unique structural, economic, and infrastructural challenges that significantly contribute to energy poverty. These include physical isolation, limited economic diversity, lower incomes, ageing populations, and fewer educational and employment opportunities. The rural housing stock is typically older and less energy-efficient, often built before the introduction of thermal regulations. Rural households also have limited access to clean and affordable energy sources, relying heavily on coal, biomass, and heating oil, leading to higher energy costs. Additionally, low population density results in higher grid-related expenses and limited access to energy infrastructure, including renewable energy systems. Sociocultural factors and local consumer behaviours further shape the distinctive nature of rural energy poverty.

RENOVERTY conducted the first survey with a specific focus on energy poverty in rural areas, thus providing insights regarding key challenges contributing to energy poverty in vulnerable rural and peri-urban areas and validating previous research. The survey found that high transportation costs and inadequate public transport significantly impact rural households and expose them to energy poverty. Additionally, the outdated and inefficient nature of the building stock is a major driver of energy poverty, coupled with a lack of sufficient investment to address rural specificities, which also magnifies the effect of the existing challenges. The results also highlighted four main categories of barriers to the implementation of energy efficiency policies in rural areas: financial, awareness and access, geographical, and regulatory/political barriers, with financial barriers being the most prominent. Key financial obstacles include a lack of capital and high upfront costs, while for awareness-related challenges, limited access to technical information and scepticism among rural residents are crucial. Among geographical barriers, the shortage of local expertise and workers is highlighted as the most prominent, while for regulatory barriers, unsupportive or inconsistent policy frameworks are highlighted. Another conclusion from the qualitative analysis survey responses is the need for coordinated action across all levels of governance, EU, national, regional, and local, to develop context-specific strategies that address the unique needs of rural communities and promote inclusive, effective energy efficiency interventions.

An analysis of energy efficiency and energy poverty policies targeting rural areas highlighted the limited and often inadequate tailoring of national frameworks to rural specificities. Although some policies claim to focus on rural areas, they frequently lack mechanisms that address the unique socioeconomic and infrastructural characteristics of these regions, because of their recent development and insufficient rural-focused research. While promising examples offering more targeted approaches exist, widespread challenges remained, including limited monitoring and evaluation, overreliance on financial support measures, and bureaucratic barriers such as the requirement for legal building registration. Advisory and educational components also vary significantly in scope and effectiveness. Overall, the current policy landscape is fragmented and underdeveloped, underscoring the need for more nuanced, context-sensitive interventions to effectively combat energy poverty in rural areas.

With the high prevalence of energy poverty in rural and peri-urban areas, but the low support offered for residents, RENOVERTY has been working towards providing top-down and bottom-up solutions to reduce rural household's vulnerability through energy-efficient renovations.

## Methodology

RENOVERTY was centred on the **co-creation of Rural Energy Efficiency Roadmaps (REERs)**, designed as practical, locally adapted tools to support rural and peri-urban communities in addressing energy poverty through energy-efficient renovations.

Developed collaboratively with key stakeholders across all governance levels, ranging from national ministries and implementing agencies to local authorities, social welfare offices, Local Action Groups (LAGs)[1] and civil society, the REERs served as **tailored, step-by-step guidance documents** to support both households and institutional actors. Two complementary types of REERs were produced for each pilot area:

- **Household-focused REERs**, explaining the benefits of energy upgrades and providing accessible, phased or deep renovation pathways, including guidance on energy measures to be implemented, budgeting, timelines, technical and administrative resources, funding options, implementation steps and advice on how to overcome common barriers to rural renovation.
- **Stakeholder-focused REERs**, outlining roles and responsibilities, identifying renovation objectives and indicators, analysing barriers and high-level strategies to overcome them, and linking local actions to relevant national and regional programmes.

[1] Local Action Groups (LAGs) are partnerships of private, third sector, and public organisation that work to implement Local Development Strategies (LDS) and develop rural areas. LAGs have played a central role in RENOVERTY to engage with the rural community and to upscale the project's policy impact.

The co-creation process ensured that each REER reflected the **specific social, technical, legal and financial contexts** of the pilot regions. Beyond being a tool for implementation, the REERs also act as **frameworks for coordination**, defining how different actors can collaborate to assist households experiencing energy poverty and align local actions with broader policy landscapes, such as National Energy and Climate Plans (NECPs), Social Climate Plans (SCPs), and Long-Term Renovation Strategies.

To support the development and uptake of the REERs, RENOVERTY implemented several complementary methodologies:

**Stakeholder mapping** identified relevant actors across governance levels and clarified institutional responsibilities for renovation and energy poverty alleviation, leading to their involvement in the project.

**Rural home audits** were conducted on a small but representative selection of residences to understand the average energy needs of the homes in the area, allowing for tailored energy efficiency improvement recommendations to be made.

**Capacity-building and training**, delivered through both digital and in-person formats, thereby enhancing local knowledge on energy poverty identification, renovation planning, financing, and renovation roadmap co-creation.

**Co-creation of measures** developed and validated with key stakeholders in feedback loops to alleviate technical, financial, legal, and community barriers to rural and peri-urban residential renovation.

**Implementation of measures** where the co-created solutions were initiated.

**Policy integration activities** ensured coherence with existing strategic frameworks, strengthening the REERs' sustainability and potential for replication.

**Replication of the co-creation methodology and the REERs** took place to increase the impact of RENOVERTY's activities within the piloting countries and beyond them.

Together, these approaches enabled a structured yet flexible process that fostered cooperation between institutions, improved local implementation capacity, produced adaptable REERs that can serve as templates for replication across Europe, and laid the groundwork for future policy and programme improvements tailored to the specific needs of vulnerable households in rural and peri-urban areas. The co-created REERs therefore stand as a key methodological and practical outcome of RENOVERTY, bridging local action and policy to accelerate rural energy poverty alleviation through inclusive renovation strategies.

# Rural Audits and Energy Efficiency Improvement Recommendations

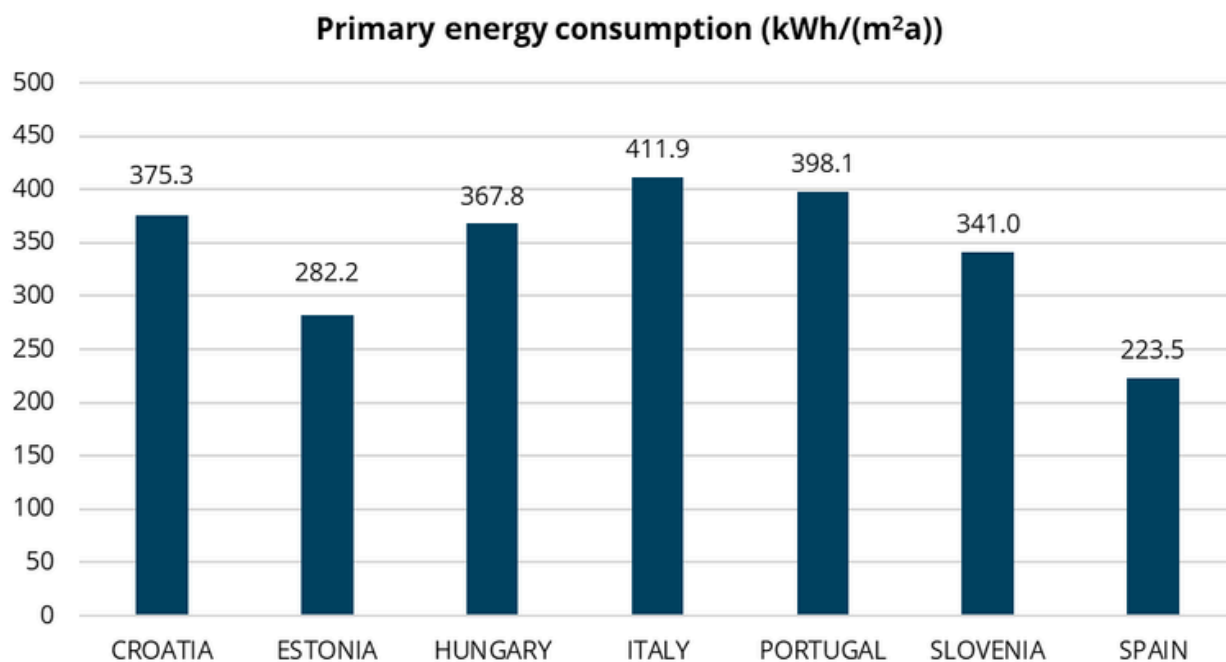
An energy audit is a systematic inspection and analysis of energy use and energy consumption of a building. In simpler terms, an energy audit offers detailed information about the energy characteristics of the dwelling, its energy systems and energy sources and provides us with a list of measures identifying potential for improving the overall energy efficiency.

This type of information is crucial to fully understand energy poverty in rural areas, as well as to be able to address the identified contributing factors according to prevalence and severity and finally, to be able to successfully address them.

A total of **88** households were audited within the RENOVERTY pilots.



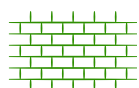
The majority of the audited buildings and households have minimal insulation, resulting in poor thermal performance. These buildings generally have low energy efficiency due to heat losses through walls, roofs and windows and therefore tend to have high energy consumption compared to modern standards. Most heating systems are outdated and fuelled by natural gas, wood, electricity, or oil and are generally inefficient heating sources that can pose health risks due to incomplete combustion, emissions of harmful particulate matter, poor indoor air quality and inadequate heat distribution. The poor energy performance of the audited buildings is best reflected in their annual primary energy consumption, as presented in **Figure 2**.



**Figure 2. Primary energy consumption of the audited buildings in the RENOVERTY pilot areas**

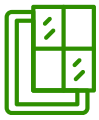
The Energy Performance Certificate (EPC) data collected from these households was then fed into a modelling assessment tool, allowing for the evaluation of several Energy Efficiency Measures based on their impact in households' energy profiles and technoeconomic viability. To do so, the **Dynamic high-Resolution dE-mand-side Management (DREEM) model** was employed to apply a portfolio assessment framework that determined the most suitable Energy Efficiency Measures in each pilot, based on their energy-saving potential and their technoeconomic viability. The energy performance and technoeconomic evaluation were also complemented with avoided emissions calculation and thermal comfort analysis for each measure.

The Energy Efficiency Measures selected are:



**EEM<sub>1</sub>: Exterior wall insulation**

Insulating the main walls of the building under study from the outside, which commonly have solid walls with no cavities.



**EEM<sub>2</sub>: Double-glazed windows**

Replacing single-glazing windows with energy-efficient glazing (Double-glazed windows) to reduce heat loss.



**EEM<sub>3</sub>: Roof insulation**

Insulated between and under the rafters of the roof itself, reducing the overall heat transfer coefficient by adding materials with low thermal conductivity - this measure applies only in the case of Single-Family Houses (SFH)



**EEM<sub>4</sub>: Boiler upgrade - gas**

In this case, the dwelling's outdated heating system is replaced by an efficient gas boiler with a higher efficiency ratio.



**EEM<sub>5</sub>: Boiler upgrade - biomass**

In this case, the dwelling's outdated heating system is replaced by an efficient biomass boiler with a higher efficiency ratio.



**EEM<sub>6</sub>: Heat pump**

In this case, the dwelling's outdated heating system is replaced by a heat pump with a higher efficiency ratio.



**EEM<sub>7</sub>: Energy efficient lighting**

In this case, the conventional tube lights and bulbs (fluorescent lamps) are replaced by high energy-efficiency ones (LED lamps).

Modelling results provided detailed information on the energy-saving potential, the environmental impacts, the cost-effectiveness, and the household profitability from the implementation of the different measures, indicating varying results across the different case studies. The energy-saving potential of the Energy Efficiency Measures is highly affected by the baseline situation of the building envelope and heating systems, underscoring the critical role of baseline conditions in determining the effectiveness of interventions aimed at reducing energy consumption and environmental footprint. By targeting areas and cases with greater inefficiencies, RENOVERTY could prioritise the recommendations of interventions that yield significant improvements in both energy efficiency and environmental sustainability in the REERs.



# Stakeholder Engagement and Co-creation

The **RENOVERTY project's co-creation methodology** placed local participation and cross-level collaboration at the heart of developing the REERs. This participatory process ensured that the roadmaps were not only technically sound but also socially grounded, reflecting the real needs, constraints, and capacities of rural and peri-urban communities.

The co-creation process unfolded through a **series of structured, iterative steps**:

1

**Local needs assessment** – Community workshops and in-home consultations identified the main barriers faced by vulnerable households, including technical knowledge gaps, administrative complexity, and limited coordination among governance levels. These findings informed the design of a **multi-level, bottom-up collaboration model**, clarifying the roles and communication channels between local, regional, and national stakeholders.

2

**Stakeholder engagement and capacity building** – Training sessions and roundtables brought together municipal authorities, regional agencies, civil society organisations, technical experts, and building professionals. These activities built shared understanding around energy poverty, renovation processes, and financing models, while strengthening the local ecosystem needed to implement the REERs.

3

**Participatory co-design workshops** – In each pilot area, multi-level workshops and bilateral meetings were held with a total of **1031 homeowners, tenants, social service providers, construction professionals, and community groups**. These sessions served to:

- Validate local audit findings against lived experiences;
- Identify social, financial, legal, technical and cultural barriers to renovation;
- Co-design tailored support mechanisms and measures with local, regional, and national actors to help address common barriers to renovation for vulnerable rural households and guarantee successful use and implementation of the REERs

4

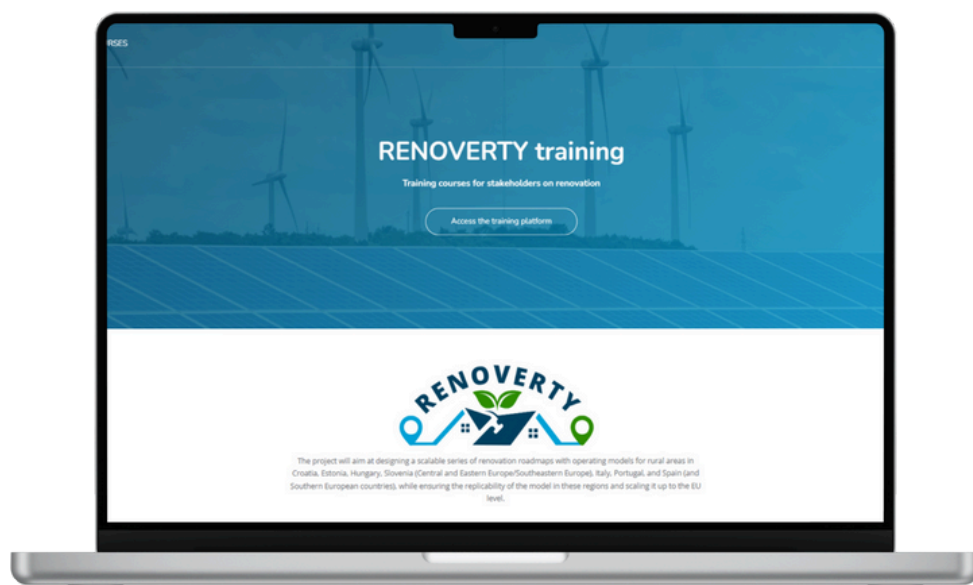
**Synthesis and roadmap development** – The insights gathered were translated into **context-specific REERs**, which presented feasible renovation pathways, operational priorities, and coordination mechanisms suited to each community. In some cases, distinct REERs were created for different housing types such as single-family homes, multi-apartment buildings, rental housing, and historic settlements, while in others, individual REERs were created for different climate conditions, ensuring that guidance was both practical and inclusive.

Across all pilots, the co-creation process **fostered customisation, flexibility, and local ownership**, resulting in roadmaps that balanced technical ambition with social feasibility. This approach embodied key principles of the revised Energy Performance of Buildings Directive (EPBD), notably citizen participation, renovation of worst-performing buildings, and tailored measures for vulnerable groups.

Ultimately, RENOVERTY's co-creation methodology built a shared foundation for action, empowering communities, strengthening institutional coordination, and producing REERs that are deeply rooted in local realities yet scalable across Europe's rural and peri-urban contexts.

## Stakeholder Training

RENOVERTY developed training materials and courses for households, educating them on the basics of energy efficiency and home renovation. Similarly, materials were developed for stakeholders on RENOVERTY's co-creation methodology, particularly for the creation of renovation roadmaps. **A total of 33 households and stakeholders** have been trained via the courses on Moodle, while **a total of 260** have been trained in person. The training materials can be found below.



Click [here](#) or scan the code to register and access all training resources!



# The Rural Energy Efficiency Roadmaps (REERs)





























Following consultations with key actors in rural communities and cocreation with households and stakeholders, a total of 16 **Technical REERs for Households** have been developed, along with 16 **REERs for Stakeholders**, each in **English and in the national and/or local languages**.

The roadmaps developed in each pilot include actions aimed at addressing the main barriers and levels of rural home renovation, namely technical, financial, legal, and community. The successful implementation of these actions has depended on creating strong synergies between these different dimensions. Although solutions are ultimately presented within four main categories, many of them are transversal by nature, since real progress typically depends on several types of interventions working together. For example, social and community actions often succeed only when supported by an adequate legal framework, stable funding programmes and the necessary technical expertise. Likewise, financial support mechanisms tend to have the greatest impact when there is strong community engagement and sufficient administrative capacity, while technical measures usually rely on enabling legal, financial and social conditions to be effective and sustained. Recognising and addressing these transversal interdependencies is therefore essential for achieving lasting results.



**Find the roadmaps here!**



Pilot	Overview of measures implemented by the pilot and levels of intervention			
<b>Spain</b>	Accompanied self-renovation actions by the energy retrofitting office 	- Activation of support and promotion mechanisms for energy renovation - Promotion of renovation with public investment in return of social rent 	Creation of a business model to facilitate aggregated purchases 	Creation of a peer-to-peer renovation lab 
<b>Slovenia</b>	Implementation of renovation works 	Inclusion of REER-based energy renovation measures in the national Social Climate Plan 	Improvement of OSS-roll out in Slovenia 	Increase of collaboration between local actors 
<b>Hungary</b>	Energy audit implementation with technical assistance 	Elaboration of Policy Recommendations for the National Social Climate Action Plan & Proposals for the revision of the Hungarian Climate Law 	Contractors' inclusion in the EEOS scheme 	Awareness-raising campaign 
<b>Italy</b>	Promotion of shared renovation tool bank and RENOLABS (Emporio Solidale Borgo Val di Taro) 	- Promotion of Renewable Energy Communities (RECs) - Creation of a short policy brief for the local level 	Partnerships with Third-Sector Entities 	Collaboration with "Sportello Energia Web" 
<b>Portugal</b>	Guidance on renovations actions and implementation of itinerary OSS 	Elaboration of Policy Recommendations 	Facilitation of aggregate purchases 	Facilitation and promotion of a Collaboration/ Exchange Platform 
<b>Croatia</b>	Promotion and installation of PV systems 	Participation in the working group for the development of the SCP 	Inclusion of households experiencing energy poverty in energy communities 	Organisation of events with households to present the REERs and subsidy schemes 
<b>Estonia</b>	Initial task development and technical design / reconstruction project 	Provision of recommendations to national renovation guide 	Promotion of renovation / awareness raising for stakeholders 	Creation of exchange platform for households in apartment buildings for guidance in renovations 

Technical: **grey** | Legal/policy: **yellow** | Financial: **green** | Community: **light blue**

# Results from Pilots

This section outlines the concrete implementation processes and main outcomes of each RENOVERTY pilot, illustrating how planned actions were translated into practice to overcome local barriers, and presents the key successes and tangible results that were achieved.



Energy poverty remains a persistent challenge in Croatia, especially affecting households in rural and peri-urban areas. These communities are often characterized by ageing housing stock, low energy performance, and limited access to financial or technical support for renovation. Administrative complexity, co-financing obligations, and a lack of tailored outreach tools frequently prevent vulnerable households from accessing available public schemes. The problem is particularly pronounced in individual family houses, which represent the dominant housing typology in such areas.

In Croatia, family houses account for approximately 65% of the housing stock and are responsible for nearly 40% of the country's total energy consumption. A large portion of these buildings were constructed before 1987, and many fall into energy class E or worse. They typically lack adequate thermal insulation, use outdated heating systems, and have inefficient joinery. As a result, they consume up to 70% of their energy for heating, cooling, and domestic hot water. The implementation of basic energy efficiency measures, such as thermal insulation, window replacement, and heating system upgrades, has the potential to reduce energy consumption by up to 60%, significantly improving indoor comfort and lowering energy bills.

To gain deeper insight into the living conditions and renovation needs of households experiencing energy poverty in rural and semi-urban settings, RENOVERTY conducted 15 energy audits in the pilot areas of Sveta Nedelja and Žumberak. The audits confirmed that the majority of the inspected buildings lack proper thermal insulation, use inefficient heating systems, and exhibit signs of dampness and mould, which in addition to elevated energy bills, also pose risks to the residents' health and overall well-being.

The RENOVERTY pilot in Croatia was implemented by **REGEA** (North-West Croatia Regional Energy and Climate Agency), with strong cooperation from local actors such as LAGs, municipalities, and social welfare centres. A key implementation achievement was the development and testing of the REERs. Despite the progress made in piloting tailored renovation approaches for energy-poor households in rural and peri-urban areas, several persistent challenges were encountered throughout implementation:



Until spring 2025, the absence of an official and operational national definition of energy poverty hindered the effective targeting, prioritisation, and tracking of support mechanisms. The definition was formally adopted through the amendments to the Energy Efficiency Law on May 2025, marking a significant step forward. However, **practical implementation and integration into existing programmes still require further institutional and technical alignment.**



**Fragmented ownership** structures and **unresolved property rights**, common in both rural and peri-urban areas, significantly complicate the planning and execution of renovation works.



The **illegal status of many buildings**, combined with the legal impossibility of submitting new requests for regularisation, effectively excludes a portion of vulnerable households from accessing public support schemes or participating in energy renovation programmes.



**High administrative complexity** and **insufficient technical assistance** at the local level slow down the uptake of existing renovation programmes and contribute to low participation rates.



**Weak coordination between national, regional, and local authorities** undermines the coherence and long-term planning of interventions to tackle energy poverty.



**Limited availability of financial instruments** tailored to the needs of low-income rural households, particularly in terms of addressing high upfront costs and enabling pre-financing, remains a key barrier to renovation.

Despite the challenges encountered, the Croatian implementation of the RENOVERTY project successfully established several enabling conditions that can significantly enhance future efforts to tackle energy poverty in peri-urban and rural areas. Key successes of the Croatian pilots include:



**Development of tailored REERs** that provided a structured process for identifying barriers, defining measures, and empowering local actors and citizens to start implementation even within existing frameworks.



**Strong local collaboration and capacity-building** among with LAGs, municipalities, and regional stakeholders, which improved technical understanding, citizen engagement, and readiness for future renovation programmes and funding opportunities.



**The establishment of Croatia's first renewable energy community** led by the Energy community SAVA LAG, demonstrating how community-driven models can link renewable production with renovation support for vulnerable households.

Additionally, the following measures were implemented within the Croatian pilot:

- **Promotion and facilitation of PV system installation:** Building on REGEA's previous PVMax experience, this measure guided citizens through technical and funding options and developed guidance for small-scale PV installation in rural areas. It has proven successful in increasing awareness of renewable energy opportunities, strengthening trust in local support structures, and advocating for higher co-financing levels in future national subsidy schemes.
- **Participation in the Social Climate Plan working group:** Through active participation in consultations and the SCP working group, REGEA brought evidence from pilot areas to national policymakers, highlighting rural-specific challenges and needs. This measure has been successful in ensuring that energy poverty in rural areas is recognised within national frameworks and in paving the way for the integration of REER findings into future Social Climate Fund (SCF) measures.
- **Inclusion of vulnerable households in energy communities:** Collaboration with LAG SAVA and four municipalities led to the creation of the Energy Community SAVA in August 2025, Croatia's first renewable energy community founded by a Local Action Group. The measure has proven successful by demonstrating how community-based models can combine renewable generation and renovation support for vulnerable households, inspiring replication among two additional LAGs.
- **Citizen outreach and awareness-raising:** A series of information events and direct cooperation with LAGs helped around 20 households prepare documentation for the national Call for expression of interest for the energy renovation of family houses for citizens at risk of energy poverty and better understand future funding opportunities. This measure has proven effective in mobilising citizens and strengthening their confidence to take part in renovation once the 100% subsidy call becomes available.

Overall, the Croatian pilot has laid the groundwork for long-term progress in addressing rural energy poverty. By combining technical expertise, community mobilisation, and policy advocacy, it established a replicable framework for scaling up energy renovation and renewable energy solutions across rural territories.



# ESTONIA

Energy poverty in Estonia is closely linked to the country's ageing housing stock and the high costs associated with energy renovations, particularly in rural and remote areas. National policy frameworks such as the Wellbeing Development Plan 2023–2030 and the Long-Term Strategy for Building Reconstruction (targeting the comprehensive renovation of pre-2000 buildings by 2050) have set ambitious objectives to improve living conditions and energy efficiency across the building stock. These frameworks aim to ensure that the benefits of reconstruction—including energy savings, improved indoor climate, and increased accessibility—reach all population groups.

However, despite the existence of national energy efficiency strategies and amendments to the Energy Sector Organisation Act (2019), which clarified procedures for addressing energy poverty, challenges persist in ensuring that vulnerable and low-income households can benefit from renovation measures. Rural areas, in particular, face structural and socio-economic constraints such as lower organizational capacity, higher renovation costs, limited access to contractors, and declining housing market values, which reduce the incentive and feasibility for large-scale retrofits.

Against this background, the Estonian pilot of RENOVERTY, led by **TREA** (Tartu Regional Energy Agency), focused on improving energy efficiency and comfort in apartment buildings located in remote rural areas, specifically in Kaagvere village (Tartu County) and Kääpa village (Jõgeva County). These sites were selected to reflect diverse socio-economic contexts and to explore scalable approaches for alleviating energy poverty through energy-efficient renovations.

Through its pilot work, TREA identified several interlinked barriers that constrained the implementation of energy efficiency improvements in rural Estonian households:



**Financial Barriers:** High upfront renovation costs remain the main obstacle, as many homeowners and housing associations lack sufficient financial capacity or access to affordable credit. Costs are often higher in rural areas due to limited contractor availability and logistical challenges.



**Access to Information and Support:** Households experiencing energy poverty often lack knowledge about renovation options, subsidies, and support mechanisms. The absence of advisory services and accessible guidance discourages participation in renovation schemes.



**Administrative Complexity:** Application procedures for existing programmes are often unclear or overly technical, making it difficult for residents to prepare and submit required documentation.



**Technical and Legal Limitations:** Older rural buildings often require substantial structural repairs before energy efficiency measures can be applied, further increasing project complexity and costs.

These challenges underscored the need for integrated, user-friendly solutions that combine technical assistance, financial guidance, and community engagement. To address these barriers, the Estonian pilot implemented a collaborative and capacity-building approach that successfully tested several innovative elements of the RENOVERTY methodology:



**Establishment of Local Action Groups (LAGs):** TREA convened key stakeholders, including households, apartment associations, municipalities, grant authorities, and technical experts, to jointly identify renovation needs and design suitable measures. This co-creation process helped build trust, strengthen local ownership, and align national and local policy objectives.



**Creation of a consultation and training platform:** A dedicated platform was established to provide ongoing support, information, and training to local stakeholders. Two training programmes were developed and delivered to enhance understanding of energy renovation processes, financing options, and smart renovation practices.



**Testing of a One-Stop-Shop (OSS) Model:** TREA successfully piloted a comprehensive OSS service integrating all stages of the renovation process, from co-design and technical supervision to grant application and procurement support. This model guided apartment associations through the entire renovation journey, demonstrating its potential for replication in other rural regions.

Additionally, the following measures were implemented within the Estonian pilot:

- **Technical design for reconstruction:** Along with residents and architects, TREA co-created the technical design needed prior to the renovations, while taking into account national building codes, national energy and climate goals and the wishes of the residents and ensuring a safe, modern and functional living environment for residents. The more precise and well-thought-out the design, the smoother and more effective the renovation process will be.

- **Provision of recommendations to a national renovation guide:** The Construction (Renovation) Guide is an online tool designed for homeowners to find the right and suitable solutions for renovation. TREA contributed to this with knowledge and information obtained from feedback during meetings with owners. Through this, access to correct and controlled information is ensured for different social groups.
- **Promotion of renovation for stakeholders:** Awareness-raising events and activities aimed at various stakeholders, particularly households, shared information on renovation and energy efficiency, while consultations at the municipal level made the understanding and attitude towards the need for renovation as well as the possibility and availability of support more understandable for all stakeholders. This increased confidence in households about the effectiveness and feasibility of the renovation process
- **Creation of an exchange platform for households in apartment buildings:** A platform was created, allowing for trainings and on-site face-to-face consultations, which had a positive effect on capacity building and encouraging vulnerable groups towards renovation.

Overall, the Estonian pilot of RENOVERTY demonstrated that co-creation, capacity building, and integrated service models can effectively reduce barriers to renovation in rural areas. By combining participatory planning with practical technical and financial support, the pilot laid the groundwork for scalable solutions that advance Estonia's long-term energy efficiency and social inclusion goals.





# HUNGARY

In Hungary, the concept of energy poverty is well understood among researchers, NGOs, and policy experts, yet it remains unfamiliar to much of the general public, even among those directly affected. The country currently lacks a formal, legally recognised definition of energy poverty, and while policy documents such as the National Energy and Climate Plan (NECP) acknowledge the issue, there is no targeted legislative or social framework to address it systematically.

According to EU-SILC data, 7.2% of Hungary's population experienced energy poverty in 2023, placing the country among the more favourable third within the EU. However, this seemingly positive ranking is largely attributed to government-regulated electricity and gas prices rather than to improved building performance. These artificially low tariffs, while protecting consumers in the short term, have inadvertently discouraged investment in energy renovation by lengthening payback periods and reducing incentives for efficiency upgrades.

The residential sector accounts for 33% of national final energy consumption and 13% of greenhouse gas emissions, with over 70% of household energy used for heating. Approximately 54% of the population lives in single-family homes, and alarmingly, 78% of these dwellings fall into the four lowest energy efficiency categories. Despite several available national support schemes, such as the Home Renovation Programme, Energy Efficiency Obligation Scheme (EEOS), and Rural Home Renovation Grant 2025–2026, these often remain inaccessible to low-income households due to co-financing requirements, debt obligations, and administrative burdens.

Within this national context, the RENOVERTY pilot in Hungary was implemented by **REFLEX** (Reflex Environmental Protection Association) in two distinct regions: the Somló–Marcalmente–Bakonyalja (SMB) region (25,037 inhabitants, 42 municipalities) and the Bükk Region LEADER Action Group area (76,960 inhabitants, 42 municipalities). Together, these pilot regions face common challenges such as outdated heating systems, limited technical expertise, low awareness of renovation opportunities, generally low levels of education (in the Bükk region, 20.5% of the population has not completed primary school), and scarce financial resources. The Bükk Térségi area, part of a Just Transition region, brought additional policy relevance, as households in this area rely more heavily on fossil fuels for heating, highlighting the urgency of addressing fossil fuel dependency and social vulnerability.

The RENOVERTY co-creation process in the Hungarian pilots revealed persistent barriers spanning technical, financial, administrative, and social dimensions.



**Technical challenges:** There is a severe shortage of skilled professionals capable of carrying out high-quality renovations. Many available contractors lack sufficient expertise, leading to quality concerns and low trust among households.



**Financial barriers:** While regulated energy prices keep utility costs low, they also extend renovation payback periods. Vulnerable households often lack the capital to invest in efficiency upgrades, and available subsidies are unpredictable and administratively complex.



**Legal and administrative barriers:** Subsidy and service contract are difficult for non-experts to navigate. Additionally, typically the most vulnerable rural residents often live in buildings that are not officially a residential property but is being used as housing. Such buildings are usually energy-inefficient and in urgent need of renovation, yet they are not eligible for financial support because they are not classified as residential.



**Social challenges:** Households experiencing energy poverty are often unaware of renovation benefits or eligible subsidies. Many remain sceptical of public programmes, and widespread distrust toward contractors discourages participation in renovation initiatives.

These overlapping obstacles underscore the need for locally tailored, transparent, and trust-based approaches to promoting energy-efficient renovation in rural Hungary. Despite these constraints, RENOVERTY achieved notable progress through the introduction and testing of several practical, replicable approaches that strengthened both community engagement and institutional collaboration.

Key successes of the Hungarian pilots include:



**The introduction of members of the two LAGs** - municipalities, civil organisations, and local businesses - to the topic of energy poverty and its local implications.



Households in the LAGs have realised that energy poverty is different from social (or income) poverty, and have recognised the **importance of energy-efficient home renovation**.



**REFLEX co-created two REERs** to provide clear, step-by-step renovation guidance for rural households. These tools helped local actors better navigate funding opportunities, technical requirements, and renovation sequencing.



The RENOVERTY project has significantly contributed to **strengthening the network of organisations** working in the field in Hungary.

Additionally, these following measures were implemented within the two Hungarian pilots:

- **Targeted technical assistance:** By carrying out and combining light energy audits with tailored technical and financial guidance in the home, this proved the most successful approach for reaching vulnerable households, helping them to identify feasible renovation options and prepare funding applications.
- **Awareness-raising and direct engagement:** REFLEX, in collaboration with local civil society organisations and municipalities, implemented awareness campaigns focused on the benefits of energy renovation and available subsidies. Although digital outreach achieved moderate success, as without the use of paid advertising, professional content tends to reach a limited audience, the light energy audits conducted door-to-door proved far more effective, offering households tangible, site-specific advice and fostering trust in renovation processes.
- **Policy engagement and advocacy:** REFLEX submitted policy recommendations to national authorities as part of the ongoing development of the SCP, and has received a commitment from the Ministry to continue discussions once the draft has reached an appropriate level of development. The organisation also joined a civil working group advocating for the inclusion of vulnerable households' needs in Hungary's forthcoming climate law, supported by broad alliances including NGOs, legal experts, and public officials.
- **Local cooperation with Energy Efficiency Obligation Scheme (EEOS) actors:** Through engagement with municipalities and construction companies, the pilot helped initiate EEOS-supported insulation activities, including a free attic-floor insulation programme in the SMB region, which immediately attracted over 40 households.

Overall, the Hungarian pilot demonstrated that integrated, community-based and participatory approaches, combining awareness-raising, technical assistance, and policy advocacy, can effectively advance energy renovation in rural areas. The methodologies piloted under RENOVERTY have laid a foundation for scaling up REERs, enhancing policy coherence, and ensuring that Hungary's future renovation programmes are both socially just and accessible to the most vulnerable households.



# SLOVENIA

In 2024, Slovenia continued to face significant levels of energy poverty, with approximately 7.3% of households (around 63,000) and 4.9% of individuals (about 110,000) affected. Contributing factors include inadequate housing conditions, inability to adequately heat homes, and overdue housing-related expenses. To address this, Slovenia adopted the National Plan for the Reduction of Energy Poverty (2023), setting targets to reduce the share of energy-poor households to between 3.8% and 4.6% by 2030, including at least 3,500 energy-efficiency and renewable energy upgrades for vulnerable households. A central instrument in this effort is the Eco Fund (Eko Sklad), which provides grants covering up to 100% of renovation costs (up to €18,000 including VAT) for eligible households under the ZER 2024 scheme. The programme includes a free energy audit, coordination support throughout the application process, and direct payment to contractors, ensuring beneficiaries do not need to pre-finance renovations. Despite its strengths, the programme's visibility and uptake remain limited, particularly among vulnerable groups such as tenants and those outside formal social assistance systems. Barriers include a lack of awareness about available aid and coordinators, perceived complexity of applications, insufficient coverage for deep renovations, and limited contractor availability.

Within this broader policy landscape, the RENOVERTY pilot in Slovenia, implemented by **FOCUS** (the Association for Sustainable Development), focused on the Zasavje region, a historically industrial area in central Slovenia. Covering 485 km<sup>2</sup> and home to about 57,000 inhabitants across four municipalities (Hrastnik, Litija, Trbovlje, and Zagorje ob Savi), Zasavje has a legacy rooted in coal mining and glass production. Today, it has the lowest GDP per capita in Slovenia (46% below the national average) and high levels of material deprivation (4.5%), making it a key region for testing inclusive renovation approaches.

The RENOVERTY pilot in Slovenia identified several interlinked challenges that hinder effective renovation among households experiencing energy poverty, particularly in rural and post-industrial areas:



**Low awareness** of Eco Fund subsidies and the availability of free coordinators to assist with applications (related also to ineffective collaboration between Eco fund and local stakeholders that are in touch with vulnerable households).



**Complex administrative processes** for accessing support, particularly for vulnerable or elderly applicants.



**Inadequate financing** for deep renovations, with many households unable to cover co-funding gaps or meet eligibility requirements.



**Exclusion of some disadvantaged groups**, such as informal workers or households not receiving state social benefits.



**Lack of mechanisms to support energy renovation** of rental housing, leaving tenants particularly vulnerable.



**Complexity in decision-making** for multi-apartment buildings, delaying collective renovations.



**Shortage of qualified contractors** available for small-scale rural projects.

These barriers highlight the ongoing need to simplify access to renovation funding, expand eligibility criteria, and ensure that rural and low-income populations are not left behind in Slovenia's green transition.

While the REERs offer practical and tailored guidance for rural renovation, several challenges remain for their full implementation:

- Scaling up localized models like the REERs across broader regions.
- Reaching the most vulnerable groups.
- Addressing rural-specific issues beyond the initial pilot areas.
- Aligning energy, housing, and social policies to maximize overall impact.

These challenges will be overcome by the uptake of REERs to other regions in Slovenia (3 of the REERs are fully transferable to other parts of the country, as the REER on 'miners' colonies' is specific to the Zasavje pilot region).

Despite the challenges encountered, RENOVERTY has identified and carried out several actions that have helped to increase the uptake of Slovenia's Rural Energy Efficiency Roadmaps and can enhance future efforts to tackle energy poverty in rural areas. The Zasavje pilot demonstrated how participatory, localised, and cross-sectoral approaches can foster collaboration and improve access to renovation schemes for vulnerable households.

Key successes of the Zasavje pilot include:



The RENOVERTY pilot in Slovenia successfully established **a strong framework for community-driven renovation planning**.



RENOVERTY influenced **national policy discussions** by showcasing how local engagement can align with broader energy transition goals.



RENOVERTY demonstrated that combining local actor involvement with national policy coordination can **speed up a fair energy transition**.

Additionally, the following measures were implemented within the Slovenian pilot:

- **Implementation of energy renovation works in vulnerable households**, which was possible due to stakeholder engagement and awareness-raising that was stimulated by the RENOVERTY events for vulnerable households (collaboration with Centres for Social Work) to exchange knowledge and provide hands-on guidance on accessing Eco Fund grants for energy renovation for the vulnerable households.
- **Inclusion of REER-based energy renovation measures in the national Social Climate Plan**, which was the success of the policy dialogue that FOCUS lead with the decision-makers through meetings, as well as organization of a national event that included a SCP workshop and submission of targeted recommendations for vulnerable households.
- **Improvement of OSS-roll out in Slovenia**, which has proven successful due to RENOVERTY's collaboration with the RenovAID pilot and efforts to establish a dialogue between local actors in Zasavje to replicate effective OSS models in the region.
- **Increase of collaboration between local actors**, which is the result of series of successful RENOVERTY collaborative platform events that brought together the diverse stakeholders in the pilot area to exchange knowledge, experiences and build partnerships in addressing energy poverty. These activities engaged new local actors (e.g. healthcare workers), thus aiming mid-term to also stimulate more households to apply for renovation funding. These activities also provided valuable insights into opportunities for simplification of access to energy renovation funding for vulnerable households as well other topics (including establishing OSS in the region).

The RENOVERTY pilot in Slovenia has succeeded in building a solid foundation for community-based renovation planning, influencing national policy processes, and demonstrating how integrated local engagement and national policy alignment can accelerate fair and inclusive energy transition efforts.



# ITALY



Energy poverty remains a persistent challenge in Italy, particularly within the rural and inner areas of Emilia-Romagna. These territories are often characterised by ageing housing stock, poor energy performance, and limited access to the natural gas grid, especially in the Apennine municipalities. Households in these areas frequently lack the financial means or technical support to carry out renovation works. Additionally, bureaucratic hurdles, co-financing obligations, and the absence of locally adapted outreach tools make it difficult for vulnerable populations to access national incentive schemes such as the Bonus Casa or Ecobonus.

The RENOVERTY pilot in Italy was implemented in the Province of Parma, a region marked by sharp contrasts. The flat northern area is densely populated and urbanised, while the hilly and Apennine zones to the south consist of small, scattered settlements often affected by depopulation. These mountainous areas contain a large number of old and energy-inefficient buildings, around 75% of EPCs issued fall into classes E, F, or G, and most houses were built before Italy's first legislation on energy efficiency.

The development of the REER in the Province of Parma was led by piloting partner **AISFOR**, through a participatory process combining technical analysis, community engagement, and co-creation. In cooperation with the Local Action Group GAL del Ducato and the Territorial Agency for Energy and Sustainability (ATES Parma), eight residential buildings with a total of 24 apartments were selected for comprehensive on-site energy audits. These included both single-family rural homes and multi-family buildings located in municipalities such as Albareto, Bedonia, Berceto, Fornovo, Solignano, and Tornolo. Many of these buildings exhibited poor insulation, outdated heating systems, and significant energy loss through walls, roofs, and windows, conditions that directly contribute to high energy bills and poor indoor comfort.

The development of the REERs in the Parma pilot region highlighted a range of economic, technical, administrative, and social barriers that must be addressed to enable wider uptake of renovation measures in rural Italy.



**Economic barriers** remain among the most pressing. Many homeowners, particularly elderly residents or those in socio-economically vulnerable conditions, lack the liquidity to begin renovation works, even when eligible for fiscal incentives such as tax deductions. The instability of national incentive schemes, such as the Superbonus and the shifting rules around tax credit transfers, has further undermined trust and slowed decision-making.



**Technical constraints** are significant. Rural and historic buildings with stone masonry, wooden frames, and traditional finishes often require bespoke solutions. Heritage or landscape protection rules limit the use of standard interventions like external insulation. This increases complexity and costs, necessitating skilled labour and tailored materials.



**Administrative hurdles** also impede progress. Permitting processes in protected areas are lengthy and require specialised expertise. In many cases, households lack the technical or bureaucratic capacity to navigate these procedures independently.



**Social and informational barriers** compound the issue. Limited digital access and low awareness of renovation incentives make it difficult for residents to identify available opportunities. Skepticism and mistrust towards renovation proposals are common, while in multi-unit buildings, achieving consensus for joint renovation works is often difficult.



Additional **local challenges** include unauthorised or partially regularised buildings, absence of active utility contracts, shortage of trained professionals, and a mismatch between landlord-tenant interests in the rental sector. Moreover, surges in demand during major fiscal incentive periods have led to market inflation, with increased prices for materials and services that disproportionately affect low-income households.

Despite these challenges, some key successes of the pilot include:



The **bringing together of local councils and technicians** to discuss regulatory barriers through targeted workshops, aligning local practices with EU policy guidelines.



The promotion of a **multi-stakeholder alliance** (GAL del Ducato, AISFOR, ATES, national/provincial authorities) which coordinated the needs of the local community and was directly involved in various stages of the project.



The demonstration of the possibility to find **alternative sources of financing** for citizens who cannot access traditional banking channels.

Additionally, the following measures were implemented within the Italian pilot:

- **RENOLABS & Community Tool Bank:** Hands-on RENOLABS trained residents in simple DIY upgrades and paired them with a free community tool bank. This cuts upfront costs and builds confidence, turning “intent” into immediate action and making replication straightforward via ready-to-use guidelines.

- **Third-Sector Partnerships & Microcredit Line:** RENOVERTY and third-sector partners set up a dedicated microloan scheme for small-scale renovations, defined by a Memorandum of Understanding with clear eligibility and support protocols. This unlocks affordable finance for low-income households and, guided by REERs, enables staged upgrades that are feasible, trackable, and replicable.
- **Collaboration with “Sportello Energia Web”:** The project launched a new dedicated “rubrica” (section) within Sportello Energia Web with articles that presents plain-language renovation guidance, incentive links, microcredit access, and OSS referrals. This leverages a trusted public channel and municipal workflows, boosting sustained visibility and conversion from information to assisted applications.
- **Renewable Energy Communities (RECs) with Social Solidarity Clause:** The pilot started a dialogue with the Parma 2030 CER Foundation to add a statute clause allocating a share of REC revenues to renovate homes of energy-poor households, which could have high impact by linking a stable local revenue stream to targeted renovations, transforming RECs into co-financiers and creating a scalable, policy-compatible model.
- **Creation of a policy brief for the local level:** A policy brief aimed at municipalities and trade associations serves to show how renovation and the fight against energy poverty have become central issues at EU level and how local development strategies must also change and adapt. This could encourage guidelines from local councils on renovation and tackling energy poverty, with possible updates to the SECAP/SEAP.

Through these actions, the RENOVERTY pilot in Italy demonstrated how locally grounded, participatory renovation approaches can overcome structural barriers and create a scalable framework for tackling energy poverty in rural regions. The combination of community training, innovative financing, and institutional collaboration provides a solid foundation for replication across other Italian territories.





# PORTUGAL



Energy poverty remains a significant challenge in Portugal, particularly in rural and interior regions. In 2023, over 20% of the population reported being unable to heat their homes adequately, with around 660,000 people living in conditions of severe energy poverty. This situation is most acute in rural areas with ageing populations, poor building quality, and housing that often predates thermal insulation standards, leading to high energy bills and low thermal comfort.

To address this, the Portuguese government adopted the *Estratégia Nacional de Combate à Pobreza Energética (ENPE)* in 2021, setting targets to reduce energy poverty by 2030 through better housing, awareness-raising, consumer support, and building renovation. However, implementation has been uneven, and rural households still face major administrative, financial, and technical barriers to accessing support schemes. RENOVERTY therefore sought to bridge this gap by co-developing rural renovation roadmaps through participatory processes involving Local Action Groups (LAGs), municipalities, and residents.

The RENOVERTY pilot in Portugal was led by **ISR** (Instituto de Sistemas e Robótica) in two rural communities of the Centro Region: Arzila (municipality of Coimbra) and Vila Nova de Oliveirinha (municipality of Tábua). These areas illustrate the diversity of rural energy poverty contexts, one peri-urban and one deeply rural, but share common challenges such as deteriorated housing stock, ageing populations, and low awareness of renovation opportunities. In both sites, RENOVERTY worked closely with LAGs ADIBER and CoimbraMaisFuturo, parish councils, and municipal authorities to identify vulnerable households, engage communities, and build trust.

Vila Nova de Oliveirinha, a small mountain village of about 300 inhabitants, faces harsh winters and hot summers. Homes are typically old, detached single-family buildings with brick walls, little insulation, and frequent dampness. Heating is mainly provided by wood-burning fireplaces or oil radiators. Arzila, with roughly 650 inhabitants, lies on the floodplain of the Mondego River near Coimbra. Despite its proximity to the city, most dwellings are over 30 years old, unrenovated, and highly inefficient, resulting in poor thermal comfort even in milder winters.

Energy audits in the regions confirmed widespread inefficiencies, as most homes were rated E or F, and common issues included poor insulation, single-glazed windows, outdated heating systems, and dampness. Based on these findings, each household received a tailored renovation plan combining low-cost measures (e.g., improved ventilation, water-saving devices) with long-term options such as roof insulation, window replacement, and heating upgrades. Energy savings and indicative costs were estimated for each proposed action, laying the groundwork for targeted renovation strategies in similar rural contexts.

The RENOVERTY project identified several key barriers that constrain the implementation of energy efficiency improvements in rural Portuguese households. These barriers span financial, administrative, technical, and socio-cultural dimensions:

**Affordability:** Most households lacked the financial capacity to invest in renovation measures, even when eligible for support. Co-financing requirements under national schemes remain out of reach for many low-income families.



**Affordability:** Most households lacked the financial capacity to invest in renovation measures, even when eligible for support. Co-financing requirements under national schemes remain out of reach for many low-income families.



**Administrative complexity:** Existing support programmes are often perceived as bureaucratically demanding, requiring digital skills, documentation, and procedural knowledge that many residents do not possess.



**Limited awareness and trust:** Many residents were initially unaware of available support mechanisms or sceptical about engaging with external programmes. This mistrust is reinforced by previous negative experiences with bureaucracies or failed interventions.



**Low digital and functional literacy and the cultural perception:** Especially among older residents, digital illiteracy and limited schooling impede access to information and services. In addition, they do not perceive the need for renovation improvement, as they have always use wood for heating (and even cooking).



**Scarcity of technical professionals:** Rural areas face shortages in skilled labour for energy audits and renovation works, limiting both the pace and quality of implementation.



**Fragmentation of responsibilities:** Lack of coordination between social services, housing departments, and energy programmes results in missed opportunities for integrated approaches.

These barriers collectively underscore the need for not only technical solutions but also tailored, community-based support mechanisms that account for the lived realities of vulnerable rural populations. In light of these challenges, RENOVERTY undertook a series of actions designed to both address immediate needs and lay the groundwork for systemic change:



**Energy audits and tailored renovation plans** were conducted and made in 20 households, providing concrete technical diagnoses and building resident awareness of potential improvements.



RENOVERTY contributed to the **integration of rural-specific guidance and service adaptations** within the existing OSS in Coimbra, and recommended an itinerant OSS model to serve neighbouring small municipalities and parishes in the Tábua region.



RENOVERTY suggested the establishment of a **collaboration space among neighbouring municipalities, LAGs, and social organisations** to share experiences, align actions, and strengthen collective advocacy efforts. While not formally established during the pilot, this platform was identified as a valuable mechanism to support knowledge exchange and regional coordination.



Project findings were shared with regional and national authorities, contributing to ongoing discussions on the **ONPE, the Long-Term Renovation Strategy, and the design of future programmes under the SCF.**

Additionally, the following measures were implemented in the Portuguese pilot:

- **Recommendations to the National Long-Term Strategy to Combat Energy Poverty:** Building on discussions with local and regional stakeholders, and supported by exchanges with the Strategy's coordination team and the National Observatory for Energy Poverty (ONPE), the project results were presented in national forums and public consultations and summarised in a policy brief proposing inputs for the National Strategy to Combat Energy Poverty, linking REERs with local development and housing plans.
- **Citizen engagement and capacity building events:** Capacity on rural renovation was built via awareness raising campaigns, household visits, and walk-through energy audits. EPCs were delivered during community events, combined with practical renovation advice and informal gatherings to foster peer exchange.

- **Establishing a Renewable Energy Community** : Groundwork was laid for the creation of a REC in VNO, managed by a local housing improvement association in close collaboration with the LAG ADIBER, following the cooperative model of Coopérnico, which includes vulnerable households and promotes joint purchases of materials and services for the community.
- **Setting up an itinerant one-stop-shop for rural areas**: The foundations are in place for establishing a mobile One-Stop-Shop to deliver advisory services directly to rural communities, which would help rebuild public trust, reduce administrative barriers, and accelerate the implementation of energy renovations. Collaboration with CIM, ADENE, and the National Energy Poverty Observatory ensures institutional backing and long-term access to renovation support across dispersed and often underserved rural territories.

The Coimbra pilot brings a holistic approach to fostering renovation in vulnerable rural territories, one that bridges technical intervention with capacity-building, institutional coordination, and strategic advocacy.





# SPAIN



Nearly 60% of Spanish homes were built before the first regulation requiring minimum energy efficiency standards, introduced after the 1970s oil crisis with the NBE CT 79 standard. Homes built between the 1980s and 2007, although adhering to CT 79 standards, were constructed during a period of rising family incomes and declining energy prices, leading to limited focus on energy efficiency and low social awareness of climate issues. This resulted in a significant number of households that have an energy class of E or worse due to poor insulation, outdated heating systems, and inefficient windows and doors. These homes often spend as much as 70% of their energy consumption on heating, cooling, and domestic hot water, making them highly energy inefficient.

As such, energy poverty continues to be a significant issue in Spain, particularly affecting households in rural regions. Rural households in Spain consume up to 52% more energy than in the urban regions, due to the housing stock conditions, which is often older, less efficient, and more dependent on fossil fuels because of the limited grid access. Additionally, rural regions benefit less from renovation programs, with only 8.8% of renovation plans targeting rural areas. As a result, 36.4% of Spanish rural households experience energy poverty, which is greater than the national average. Given this situation, addressing the renovation challenge, particularly in rural areas, is crucial.

The RENOVERTY pilot in Spain was implemented in Osona County, a region located in inland Catalonia. Until 2023, a part of the territory known as the Lluçanès was considered to fall within Osona, however, after a public consultation, the region was legally constituted as a new county. Within RENOVERTY, Lluçanès is still considered part of the Osona pilot.

The majority of the buildings in Osona are inefficient, with 46% having received an EPC grade E, 85% are between grades D and G, and only 15% make up grades of A, B and C. The geoclimatic situation of Osona requires adequate solutions to face the varied climatic conditions to ensure thermal comfort at home in these buildings year-round.

The development of the REER in Osona was led by piloting partner **ECOSERVEIS**, in cooperation with the Osona Energy Agency and the three Local Action Groups active in the region (Associació pel Desenvolupament Rural de la Catalunya Central, ADRINOC and Associació Leader Ripollès Ges Bisaura). During the co-creation process of the RENOVERTY REER, several barriers to renovation were identified, highlighting the specific obstacles that rural households face in improving energy efficiency:



**Economic liquidity:** This is the biggest challenge for energy retrofitting, as renovation projects are costly and material price inflation has increased the financial burden. Grants and subsidies can help, however, even if subsidies are available, families must often pay upfront. Despite options for full grants for vulnerable groups, retrofit rates in Spain are far below European targets.



**Complexity of grant and subsidy procedures:** Grant procedures are complex and often involve waiting for required information, with documentation differing between types of grants, which creates delays in planning and execution. Information on grants is not equally accessible in rural areas compared to urban ones, and even when information reaches rural communities, it is not well-understood.



**Lack of knowledge and mistrust in the renovation sector:** Family engagement remains a challenge, while trust is also a key issue, especially among vulnerable groups, who may lack awareness or trust in the process.



**Lack of support for families on reaching agreements between property owners and renters:** Many families live in rented homes, so the lack of cooperation or confusion about how to work with landlords is a significant barrier. Even when families are informed about energy renovations and are willing to participate, mediation is often needed between tenants and landlords, or within neighbourhood associations, especially in multi-family buildings where no established community exists.



**Lack of qualified professionals in renovation sector:** The construction and installation sectors are facing an aging workforce with limited staff to execute renovation projects. Moreover, some materials require specialized training, which creates delays in execution when trained workers are unavailable or retire, leading to further challenges in project implementation.



**Low coordination between actors:** Numerous actors are involved in retrofitting projects, and communication between them is often inefficient.

In Osona, a range of solutions were co-created with national, regional, and local stakeholders to overcome these key barriers to renovation and to ensure lasting impact. These actions strengthened institutional collaboration, improved access to renovation support, and promoted community-led energy transitions. Key successes of the Spanish pilots include:



**Boost energy renovation growth in Osona:** The pilot nurtured the early seeds of energy renovation in Osona by transforming initial concepts into tangible and operational projects, as the itinerant renovation office and the collective renovation business model designed for energy communities. This has accelerated local capacity-building and strengthened the territorial ecosystem for energy renovation, implementing projects that will continue to evolve beyond the project.



**Strong national policy impact and institutional recognition:** Through sustained engagement with national institutions, the pilot has successfully positioned the RENOVERTY approach within Spain's policy landscape, contributing to its inclusion in the new SCP. This demonstrates its relevance to national energy transition strategies and reinforces its potential for wider replication.



**Credibility of the REER co-creation methodology:** The pilot consolidated the legitimacy of the REER co-creation methodology, proving its value as a structured, bottom up and community-driven approach to tackling energy poverty and promoting energy renovation in rural contexts. This strengthens the basis for its replication in other regions, offering a scalable governance tool grounded in local empowerment.

Additionally, the following measures were implemented within the Spanish pilot:

- **Itinerant OSS for accompanied self-renovation:** RENOVERTY contributed to the design and launch of an itinerant renovation office in Lluçanès County, led and financed by the LAG (Associació pel Desenvolupament Rural de la Catalunya Central), that provides technical advice, administrative support, and information on public funding to vulnerable rural households. It brings specialised renovation services to rural areas where they are typically inaccessible, enabling equitable access.
- **Promotion of renovation with public Investment in Exchange for Social Rent:** This initiative in Alpens municipality aimed to renovate vacant private dwellings using public funds in exchange for temporary use as social housing. Although paused due to legal barriers, it demonstrated an innovative and replicable model for increasing affordable housing supply while improving rural building quality.

- **Activation of support mechanisms for energy renovation:** The Osona REER influenced national policy by being integrated into Spain's SCP. It was recognised in the National Energy Poverty Strategy and was used by regional governments such as Barcelona Provincial Council which promoted regional replication, as well as by Osona Energia Coop, which was selected as a Citizen-Led-Renovation enabler following its use. By unlocking national and regional resources to promote energy renovation, the REER demonstrated strong policy impact and replication potential.
- **Aggregated renovation and collective purchasing models:** A collective renovation business model is being developed by OE Coop for farmhouses in the Sant Pere de Torelló municipality, which will be used by the energy communities across Osona County to offer building renovation as a service to citizens, and expected to be launched in 2026. This model has the potential for strong impact as it lowers renovation costs, simplifies decision-making for households, and will be implemented through existing energy communities.
- **Peer-to-Peer Renovation Lab:** Exchange session launched in October 2025 in Sant Pere de Torelló connected renovated and non-renovated households to exchange practical knowledge, challenges, and solutions for renovation. This approach is promising as peer learning builds trust, empowers residents, and encourages replication of effective renovation practices across the region.



# Policy Relevance and Recommendations

The renovation of households experiencing energy poverty in rural and peri-urban areas requires a comprehensive and systemic policy approach that accounts for the challenges faced by these communities. Achieving this, demands coordinated efforts among multiple stakeholders, including national and local governments, civil society, and EU institutions. Implementing energy efficiency policies to address energy poverty is not just a question of technical capacity, it is related to wider financial, social, geographical, and regulatory challenges, urging the necessity for tailor-made solutions specifically addressing the needs of rural households.

Despite overlapping synergies between energy efficiency, climate goals, and rural development, strategies often do not explicitly incorporate energy poverty or building renovation into their rural development targets. This misalignment represents a missed opportunity to integrate energy justice within broader frameworks of rural resilience and regeneration. Building on the RENOVERTY project findings and the evolving EU legislative context, as well as on the interaction with several stakeholders, various practical solutions to overcome ongoing challenges at different levels (i.e., EU, national, regional, and local) have been identified and emerged with the potential to alleviate rural energy poverty through renovation, thus providing an effective solution to the issue of rural energy poverty with overlapping and common themes across the different levels of governance.

To effectively address energy efficiency in rural areas, **EU governmental bodies** are encouraged to focus on several key areas. These include driving policy transformation by introducing regulatory and legislative changes tailored to rural contexts, as well as setting clear targets for energy efficiency and energy poverty alleviation. Ensuring adequate financial mechanisms and support is also crucial to make schemes aiming to increase the uptake of energy efficiency viable and sustainable. Additionally, engaging a broad range of stakeholders, from local communities to national governments, is essential for coordinated action. Finally, EU institutions are encouraged to lead educational and awareness initiatives to inform and empower rural populations about energy efficiency solutions and opportunities.



**National governments** are encouraged to take comprehensive action to address energy efficiency and energy poverty in rural areas. A key priority is the development and implementation of well-designed policies that reflect the specific challenges of rural communities. This includes establishing subsidies, monitoring systems, and legislation that promote energy efficiency, while also empowering local governments and stakeholders to lead context-specific initiatives. Financial support is equally important, with recommendations for dedicated funding, tax incentives, and accessible subsidies to make energy upgrades feasible for rural households. Furthermore, improving access to information, training, and financing is essential. Raising awareness about energy efficiency measures, offering workshops, and providing practical support can help rural populations adopt energy-saving practices and benefit from available technologies and resources.



**Regional governments** have a crucial role in the development of a novel and comprehensive approach to address energy poverty and foster sustainable development in rural areas. Many stakeholders agree that there is a need for region-specific strategies that empower local governments and communities to create tailored solutions based on local characteristics and resources, moving beyond urban-centric approaches. Financial support is also vital, with calls for accessible subsidies, long-term funding, and partnerships with financial institutions to ensure investments in energy efficiency, particularly for marginalised communities. Strong collaboration across governance levels is essential, alongside advocacy to improve rural-focused policies and align regulatory frameworks. Enhancing infrastructure, such as transport and energy systems, and encouraging local innovation can further support the transition toward the energy security of rural communities. Finally, data-driven planning is seen as key to effective policy implementation, requiring robust data collection, analysis, and monitoring systems to ensure accountability and informed decision-making.



**Local governments** are seen as pivotal actors in addressing energy poverty and promoting energy efficiency in rural areas through several key actions. A strong emphasis is placed on the provision and targeted allocation of financial support, particularly for retrofitting buildings and assisting vulnerable households. Local policy development is also essential, with calls for context-specific solutions that reflect the unique challenges of rural regions, including access to technical expertise and addressing transport poverty. Active engagement with local communities is encouraged, promoting participation in decision-making and the formation of local energy communities to foster a sense of ownership in the energy transition. Finally, effective coordination with regional, national, and EU authorities is considered critical, with local governments playing a bridging role to adapt broader policies to the local context and communicate specific community needs.



In conclusion, the project's findings and results, along with the insights from the interaction with stakeholders throughout the project, underscore **the strategic role of governmental authorities in addressing energy poverty and enhancing energy efficiency in rural areas**, particularly through informed, inclusive, and locally tailored interventions. Consistent emphasis has been placed on the need to empower local communities through adequate information, institutional support, and targeted financial assistance., while also developing contextualised strategies for rural areas, where energy poverty frequently intersects with deeper structural and socio-economic vulnerabilities.

In this regard, the development and implementation of place-based policies, co-designed with local stakeholders and adapted to regional specificities, were identified as essential components of effective intervention frameworks. Moreover, the promotion of multi-level governance and inter-institutional collaboration emerged as a key facilitator of sustainable outcomes, enhancing policy coherence and resource mobilisation across different administrative levels.

Lastly, RENOVERTY's findings also highlighted the role of stakeholder collaboration, engagement, and policy advocacy in fostering systemic change. In particular, the integration of innovative practices, the use of data-driven planning tools, and the establishment of accountability mechanisms are critical to advancing socially equitable and energy-efficient rural transition. Collectively, these elements contribute to the formation of inclusive, resilient, and low-carbon rural environments aligned with broader climate and social justice targets and objectives.

# The Way Forward: Summary of Key Outcomes and Lessons Learned



**Funding adequacy & access:** Across pilots, measures progressed when support covered nearly all costs. Anything below that or requiring households to pre-finance failed when it came to the renovation of vulnerable household. Continuous, simple cycles also worked better than sporadic “campaign” calls.



**Trusted intermediaries:** Mobile/itinerant desks and links with social workers solved trust and distance barriers, helping residents engage in the renovation process while navigating subsidies and contractors. Additionally, community renovation labs and joint events with social services increased awareness and applications, especially for hard-to-reach rural households.



**Legal simplification:** Many rural homes lack clear permits and registration. Guidance and municipal regularisation are prerequisites so vulnerable households aren't excluded from renovations by paperwork.



**Capacity & workforce:** Many pilots faced contractor shortages, therefore, training and stable demand signals (not stop-start grants) are needed for supply chains and municipal teams.



**Community models:** Aggregated purchases and RECs lower costs and can recycle revenues into renovations, but only with transparent statutes and conflict-proof governance.



**Technical “first mile”:** Audits and building designs provide households concrete, staged plans and unlocked eligibility for grants. They also serve as effective entry points for renovation.



**Policy stability:** Sudden subsidy/regulatory changes (e.g., PV co-financing, end of net-metering) erode confidence. Therefore, predictability is as important as availability.



**Mind LAG constraints:** Because LDS cannot easily change mid-period and grants per project can be small, it is best not to rely solely on LEADER funding for the renovation of dual-purpose households, but rather to pair with SCP/SCF and other instruments.



**Outreach, feedback loops & peer learning:** Needs assessments, co-creation, measure validation and training opportunities maintains stakeholder involvement throughout the multi-year process.



**Alignment with national/EU plans:** The co-design of solutions with ministries and funds meant REER proposals flowed into SCP/SCF and other calls, creating a pipeline from roadmap to action.

# Policy Influence and Potential for Wider Application

RENOVERTY's effect on local, regional, nation, and EU-level policies, strategies, regulations, and initiatives is summarised below.



## CROATIA



### Policy Impacts Achieved during the Project

- **Social Climate Plan and National Renovation Plans:** Engagement with ministries and the Environmental Protection and Energy Efficiency Fund to align these frameworks with REER guidelines.
- **Local Development Strategy of LAG SAVA:** Integrated RENOVERTY outcomes.
- **Sustainable Energy and Climate Action Plan (SECAP) of Sveta Nedelja:** Revision expected to incorporate project findings.



### Future Policy Influence

- **Local Development Strategies:** Three LAGs (Mura Drava, Izvor, Vallis Colapis) expressed commitment to integrating results.



## ESTONIA



### Policy Impacts Achieved during the Project

- **Energy Sector Development Plan 2035:** RENOVERTY outcomes presented during consultation.
- **Renovation Grant Conditions:** Policy proposals submitted via public consultation.
- **Ministry of Climate Policy Dialogue:** Ongoing proposals on energy communities and community energy legislation.
- **Local Development Strategy (Tartu County LAG):** Updated project selection criteria (adopted 03/03/2025) now include green transformation and sustainability, aligning with REER principles.



### Future Policy Influence

- **Local Development Strategies:** One LAG (Tartu County Development Association) expressed commitment to integrating results further.



# HUNGARY



## Policy Impacts Achieved during the Project

- **Social Climate Plan:** RENOVERTY partners contributed recommendations during consultation (pending publication).
- **National Climate Law:** Active participation in working group revising the law (completion expected mid-2026).
- **The Community Energy Provider Non-Profit Ltd** included RENOVERTY REERs as useful tools in their [website](#)



## Future Policy Influence

- **Social Climate Plan:** RENOVERTY partners contributed recommendations during consultation (pending publication).
- **National Climate Law:** Active participation in working group revising the law (completion expected mid-2026).
- **Municipal Strategies:** Agreements with Kunsziget and Romonya to integrate REER findings into local plans.
- **Local Development Strategies:** Two LAGs (Bükk-Társégi, Somló-Marcalmunte-Bakonyalja) committed to integrating results into future LDSs.



# ITALY



## Policy Impacts Achieved during the Project

- **Dialogue with the Directorate-General for Energy Demand and Efficiency (MASE):** Discussions initiated on embedding REER insights in national energy efficiency frameworks.
- **Public Consultations:** Contributions made to the Rome's Climate City Contract and the national Social Climate Plan development process.
- **Local influence:** Making REERs available on the Sportello *Energia&Condomini*



## Future Policy Influence

- **ENEA Portal (National Energy Agency):** Agreement to publish RENOVERTY roadmaps and training materials as best practices.
- **Local Development Strategies:** LAG Del Ducato committed to integrate project results in upcoming LDS.



# PORTUGAL



## Policy Impacts Achieved during the Project

- **National Long-Term Strategy to Combat Energy Poverty:** Policy recommendations from RENOVERTY incorporated, especially on rural eligibility criteria and financing mechanisms.
- **OSS Funding Programme:** RENOVERTY collaboration with ADENE contributed to the launch of Portugal's OSS funding programme.
- **The National Observatory for Energy Poverty (ONPE)** included RENOVERTY REERs as useful tools on their [website](#).



## Future Policy Influence

- **Local Development Strategies:** Two LAGs (ADIBER, Coimbra Mais Futuro) to integrate project results in upcoming LDSs.
- **Municipal Strategies:** Coimbra and Tábua are integrating REER findings into local housing and renovation planning and strategies.
- **Policy actions on EPBD:** The Institute for Research and Technological Development in Construction, Energy, Environment and Sustainability is committed to exploiting the project outcomes for future policy-related activities in the field of energy performance of buildings.



# SLOVENIA



## Policy Impacts Achieved during the Project

- **Social Climate Plan:** Ministry of Environment, Climate and Energy confirmed that RENOVERTY REER-based recommendations supported its development.
- **One-Stop-Shop Rollout:** National OSS framework informed by RENOVERTY's REER guidance.



## Future Policy Influence

- **Local Development Strategies:** One LAG (Zasavje) expressed commitment to integrating results.



# SPAIN



## Policy Impacts Achieved during the Project

- **Social Climate Plan (SCP):** The RENOVERTY REER methodology was identified and selected as a priority action in the formal participatory process of the national SCP.
- **National Renovation Plan:** Project inputs submitted for consultation.
- **National Strategy Against Energy Poverty 2025–2030:** Contributions submitted highlighting rural energy poverty.
- **Catalonia's Integrated Energy and Climate Plan:** RENOVERTY recommendations incorporated.



## Future Policy Influence

- **Local Development Strategies (LDS):** Three LAGs (ADRCatCentral, ADRINOC, ALRGB) committed to integrating RENOVERTY results into upcoming LDSs.
- **Regional Strategies:** A testimony was provided from Diputació de Barcelona, committing to supporting rural municipalities in their renovation efforts as it is essential not only to reduce energy poverty and improve living conditions but also to advance toward the decarbonization of the building stock and strengthen territorial cohesion.
- **Local strategies:** A testimony was secured from Sant Pere de Torelló municipality, committing to improving the energy efficiency and living conditions of residents who lives in older, detached and isolated single-family households.





# EUROPE



## Policy Impacts Achieved during the Project

Direct influence on EU-level policymaking was more complex but achieved through targeted advocacy and collaboration:

- **European Committee of the Regions (CoR):** RENOVERTY contributed to two Own-Initiative Opinions (OIOs), ensuring rural energy poverty and community-based renovation approaches were represented in EU-level discussions:
  - *“State of the Energy Union: getting prepared for a smooth implementation of energy transition in line with Fit for 55 targets” (rapporteur: Joško Klisović).*
  - *“Action Plan for Affordable Energy – how to secure affordable, stable and clean energy for all EU cities and regions” (rapporteur: Hannah Zdanowska).*

**EU Networks and Platforms:** RENOVERTY results were disseminated and embedded in policy-relevant platforms:

- **EU CAP Network,**
- **Rural Pact Support Office,**
- **European Smart Villages Observatory,**
- **LDnet, ERCA, PREPARE, and the Covenant of Mayors** (which featured RENOVERTY REERs on their website).

These collaborations strengthened visibility and uptake of project results in broader EU rural and energy transition dialogues.



## Future Policy Influence

- **Joint Research Centre (JRC):** A testimony was secured confirming interest in using RENOVERTY knowledge for future EU policy-relevant work, particularly related to **EU ETS II, cooling demand, and summer energy poverty.**
- **Regional Union of Municipalities of Western Greece (PEDDE):** A testimony was secured confirming that future policy-related initiatives of the organisation will exploit knowledge and findings produced by the RENOVERTY project.

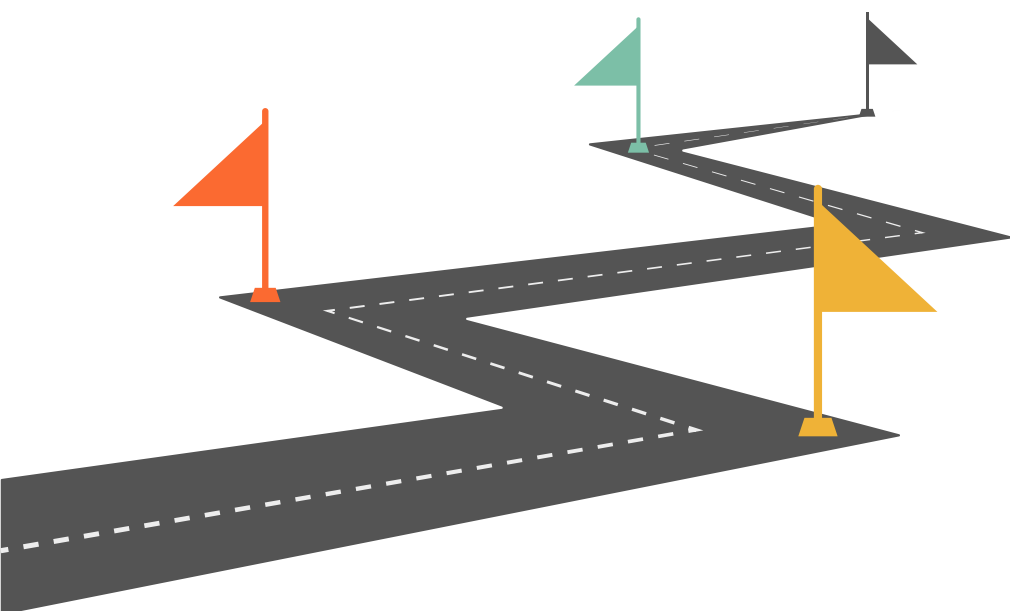
Aside from integrating RENOVERTY’s outcomes in policy-making, RENOVERTY partners also put strong emphasis on replicating the REERs, measures, and the cocreation methodology.

Following the launch of a call of interest for replicators, a total of 8 applications were submitted, but one from Hungary was a duplicate. From Spain we have the Green Living Projects and the Beteta Municipality, from Hungary we have the Kunsziget Municipality and the Romonya Municipality, from Greece we have the Regional Union of Municipalities of Western Greece (PEDDE), from Ireland we have EcoVision and from Croatia we have the Izvor LAG and the Mura Drava LAG.

Of the two Spanish replicators, the Green Living Projects will replicate the co-creation activities, while the Beteta Municipality will focus on REERs. In Hungary, the Kunsziget Municipality and the Romonya Municipality will focus on replicating training and co-creation activities. In Greece, PEDDE will focus on replicating the main outputs of the project: REERs, training, and co-creation activities. In Ireland, EcoVision will focus on co-creation activities and potentially recreating the roadmaps as an innovative solution to reduce energy poverty for vulnerable and elderly citizens. Finally, in Croatia, Izvor LAG will focus on REERs and co-creation activities, while the Mura Drava LAG will focus solely on co-creation activities.

## Next Steps and Future Action

Local and regional authorities can benefit from the knowledge derived from RENOVERTY on the very local specificities of the most vulnerable areas under their responsibility. Additionally, they should be encouraged to conduct more similar actions to enhance research activities within their contexts, aimed at alleviating rural energy poverty. This involves collecting accurate data to identify energy-poor households, facilitating data-driven interventions that effectively address the issue. With this information at hand, they can act as intermediaries, recording the unique challenges faced by rural areas, including stakeholders and vulnerable communities, in the energy efficiency policy discussion. They can also communicate specific inquiries and support national and EU authorities in developing and disseminating targeted policy measures and financial grants to rural areas. Using the tools provided by RENOVERTY having understood the communities' true needs, including the trainings for households and stakeholders, the CEPTI indicator, the energy efficiency measure models and recommendations based on audits, the REERs, and the developed measures, authorities can prioritise the allocation of funding where it is most needed, while also further developing and implementing solutions to increase energy efficiency and alleviate energy poverty in Europe's rural and peri-urban areas.



## ABOUT RENOVERTY

RENOVERTY has fostered energy efficiency building upgrades in households experiencing energy poverty across Central and Eastern Europe, South-eastern Europe and Southern European countries by establishing the methodological and practical framework to build renovation roadmaps for vulnerable rural districts in a financially viable and socially just manner.

RENOVERTY ensured that building retrofits consider the social dimension by incorporating security, comfort, and improved accessibility in its roadmaps to further improve the quality of life of vulnerable populations. Over the project's three years, seven pilots located in Croatia, Estonia, Hungary, Slovenia, Italy, Portugal, and Spain implemented the measures presented in the roadmaps, and wider integration of rural and peri-urban development is expected due to its activities.

**Our website: <https://ieecp.org/projects/renoverty/>**

**Find us on [LinkedIn](#):**  
**@RENOVERTYproject**



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