



Factsheet n°1

# Energy Poverty and Energy Efficiency in Rural Areas: Desk-Research Findings



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# The Rural Side of Energy Poverty

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Energy poverty is defined as a situation, in which households are unable to access essential energy services and products. Despite its wide recognition, when it comes to European rural areas energy poverty receives limited attention, although it is more prevalent than in urban contexts.

Rural residents are at a **significantly higher risk of facing poverty and social exclusion**. In addition, this situation is particularly pronounced in the case of Central and Eastern (CEE), Southern Eastern (SEE) and Southern European (SE) countries, where rural energy poverty risk reached record levels.

Considering these, RENOVERTY is focused on **upgrading the framework of energy poverty and energy efficiency in rural areas**. To do so, an extensive **desk research** of more than 70 relevant scientific, grey, and policy literature sources has been conducted, with the aim to review **current knowledge** and practice in **energy poverty research and policy in rural areas**.

As a first step, our analysis focuses on the determinants of rural poverty. The most common determinants identified are:

- **Specific demographic structures:** The rural population structure tends to include great number of older people and fewer people of working age.
- **Limited educational capabilities:** In many rural areas, access to education, at all levels, is less available than in urban ones. Characteristically, in the EU, only 18.4 % of the rural population has completed tertiary education, which is around half of those that have completed it in cities.
- **Limited labour capabilities:** Generally, in rural areas incomes are lower and there are fewer job prospects. Moreover, **long-term unemployment rates** tend to be greater in rural than urban areas.
- **Lack of infrastructure and services:** In many rural regions, certain demographic groups become more isolated as a result of inadequate transportation infrastructure which also hinders access to jobs and the growth of social relationships.

The main drivers of rural poverty contribute to the increased exposure of rural populations to energy poverty. The outcomes of the desk research identified the following **key characteristics that contribute to energy poverty in rural areas**:

- **High rates of vulnerable populations:** Lower incomes and higher poverty rates, combined with lower educational and employment opportunities and an ageing population.
- **Inefficient housing stock:** Rural dwellings are old and inefficient, as they were built before the first thermal regulations that were established during the 1970s, which is also usually coupled with equipment in poor technical condition and low efficiency.
- **Limited choices of energy carriers:** Most European rural homes still extensively rely on coal and other high-carbon fossil fuels for heating when compared with urban ones. Limited grid access increases the challenges for rural households.
- **Consumer behaviour:** In rural areas, significant differences in the usage of energy are indicated. Consumer preference towards any given energy service is a function of geographical situatedness, local customs, traditions and tastes including local weather conditions.

## Current Policy Landscape

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For an effective review of the current practices in energy poverty policy in rural areas, RENOVERTY **recorded and assessed relevant energy poverty and energy efficiency policies**.

The main objective is to concisely **review a diverse range of policies** to extract implications and also to **identify the current state of measures and interventions**. The key trends and recommendations for the assessed policies are the following:

- Energy poverty alleviation policies should more effectively **describe and implement frameworks tailoured to the unique characteristics of rural areas**.
- Implemented policies should **strive to monitor and evaluate the performed interventions** to achieve **benchmarks** and judge their efficacy.
- It is crucial for the effectiveness of energy poverty and energy efficiency policies to design schemes that **identify and map rural energy poverty** at local and regional levels.

# Barriers to designing and implementing energy efficiency policies

The **rural “energy efficiency gap”** is a situation in which there is a seemingly **slower uptake** of energy efficiency improvements in **thinly populated rural communities** and is widely recognised across the literature. Through its desk research, RENOVERTY identified key categories of barriers, that contribute to the rural “energy efficiency gap” and **hinder the implementation of energy efficiency policies** in rural areas.

The most prominent categories identified are:



## Financial barriers

- In rural contexts, the **lack of capital** combined with the **higher upfront costs** of energy efficiency effectively discourage the uptake of energy efficiency. Rural households are characterised by **lower median incomes and higher energy burdens**.
- Other important financial barriers identified are related to credit access and debt aversion, due to which many rural residents are unable or unwilling to take on debt to finance efficiency.



## Awareness and access barriers

- Rural populations are exposed to lower educational capabilities, leading to **lack of technical knowledge and information** about energy efficiency aspects and options.
- Widespread **lack of awareness or skepticism** of existing resources among the rural population.
- **Lack of time or other priorities work** also as a significant barriers in rural areas. Finally, the **lack of access to traditional marketing channels** also hinders the implementation of energy efficiency interventions in rural contexts.



## Geographic barriers

- Rural areas are characterised by **geographic isolation**.
- **Limited access to financing, incentives, and professional services** are necessary for the implementation of energy efficiency projects
- **Lack of economies of scale**.
- **Shortage of local energy efficiency workers** and lack of expertise.



## Regulation barriers

- **Unsupportive and inconsistent** policy setting.
- **Political invisibility**- energy poverty in rural areas has not yet been fully recognised by policymakers, who still **give higher priority to urban contexts**.
- Central government policies and commitments focused on energy efficiency developments, they **lack strong sub-national territorial components**.

## ABOUT RENOVERTY

RENOVERTY fosters energy efficiency building upgrades in the energy poor households of Central and Eastern Europe (CEE) / South-eastern Europe (SEE) and Southern European countries (SE) by establishing the methodological and practical framework to build renovation roadmaps for vulnerable rural districts in a financially viable and socially just manner.

RENOVERTY ensures that building retrofits consider the social dimension by incorporating security, comfort, and improved accessibility in the roadmaps to further improve the quality of life of vulnerable populations. Over the project's three years, seven pilots located in Sveta Nedelja (Croatia), Tartu (Estonia), Bükk-Mak & Somló-Marcalmamente-Bakonyalja Leader (Hungary), Zasavje (Slovenia), Parma (Italy), Coimbra (Portugal), and Osona (Spain) will implement the roadmaps, while wider integration of rural and peri-urban development is foreseen in the long run.

**[Access the full report here](#)**

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