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Overview of policy mechanisms and financial mechanisms for renovation roadmap development

D4.2

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About RENOVERTY

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

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

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

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List of Abbreviations

CEE	Central Eastern Europe
CEPTI	Composite Energy & Transport Poverty Indicator
CLLD	Community-Led Local Development
ComAct	Community Tailored Actions for Energy Poverty Mitigation
EC	European Commission
EED	Energy Efficiency Directive
ELENA	European Local ENergy Assistance
EPAH	Energy Poverty Advisory Hub
EPBD	Energy Performance of Buildings Directive
EPC	Energy Performance Certificates
EPEEF	Environmental Protection and Energy Efficiency Fund
ERDF	European Regional Development Fund
ETS	Emission Trading System
EU	European Union
EURIBOR	Euro Interbank Offered Rates
GHG	Greenhouse Gas
IEECP	Institute for Energy Efficiency and Climate Policy
JTF	Just Transition Fund
LEADER	Liaison Entre Actions de Développement de l'Économie Rurale
MEPS	Minimum Energy Performance Standards
NECP	National Energy and Climate Plans
PREE	Aids Programme for Energy Retrofit of Existing Buildings
REER	Rural Energy Efficiency Roadmap
RES	Renewable Energy Sources
RRF	Recovery and Resilience Facility
SCF	Social Climate Fund
SE	Southern Europe
SEE	Southern Eastern Europe
WP	Work Package

EXECUTIVE SUMMARY

This report presents an overview of policy and financing mechanisms that are available to be leveraged for the purpose of home renovation within the pilot countries of the RENOVERTY project. It collects information on the financial support as well as the respective policy framework within the European Union relevant to the implementation of Rural Energy Efficiency Roadmaps (REERs) within the project.

The funding opportunities are vastly different for each of the countries. Only in those countries, where instruments are available, that specifically offer support for households affected by energy poverty, sufficient funding quotas are met. However, there still might be other barriers in place as the documentation as well as the necessary assistance to carry out the renovations are often lacking.

In the future, the EU's Social Climate Fund (SCF) will require Member States to incorporate measures to combat energy poverty in their national energy plans. This should drastically improve the funding situation in these pilot areas, where current funding quotas are too low. However, the availability of financing from the SCF might be finalised too late for its incorporation in the REERs of the RENOVERTY project.

In order to improve on the current situation, regional funds might be made available to specifically fill the funding gaps that are left by the national instruments. In order to do so, Local Action Groups might be able to access funds from the European Regional Development Fund, among others.

In summary, attention to current availabilities of existing instruments as well as to – possibly drastic – changes to the national financial assistance programmes has to be paid in all pilot areas, as the funding landscape is currently very rapidly changing all over Europe. This may in part be due to the European Commission putting more effort into its goal of using the Green Deal to ensure a just transition for everyone, with previous initiatives being far from sufficient.

1. Introduction

1.1. General Introduction

This report aims to inform the activities in the pilot areas of the RENOVERTY project by providing an overview of the relevant policy and financing mechanisms that aid rural homeowners affected by energy poverty in carrying out renovation activities on their properties. Additionally, this analysis can serve as input for other initiatives interested in promoting or embarking on home renovations within Croatia, Estonia, Hungary, Slovenia, Italy, Portugal or Spain.

Whereas the policies that are specifically targeted at reducing energy poverty often focus on reducing the cost of energy within most countries, the policies collected within this report focus on the renovation of buildings in order to reduce the amount of energy needed as a means to lower energy consumption and cost simultaneously. This can lead to multiple benefits including a possible reduction of associated greenhouse gas emissions as well as reduced exposure to the effects of energy poverty by households, thereby improving health and well-being. The caveat, however, lies in the fact that renovations to improve energy efficiency are among the costliest activities for homeowners to implement, especially in rural communities, where buildings may, on average, be quite a bit older. Hence, the availability of financial support to carry out these activities is of major importance.

As noted in the *Introduction to the Energy Poverty Advisory Hub (EPAH) Handbooks* there are three main sources of energy poverty: (1) low income levels, (2) low household energy efficiency and energy performance of buildings, and (3) high energy prices. (EPAH, 2022, p. 9)

A roadmap for the renovation of residential buildings has to take into consideration all of these sources of energy poverty. While it directly aims at improving on the second source and helps to alleviate the impact of the third source, the first mentioned source of energy poverty is the main barrier to carry out renovation activities for those households affected by energy poverty. More specifically, the *EPAH Handbook 2* suggests that "the poor energy efficiency of the building stock is a central driver of energy poverty. Individuals living in energy poverty often reside in poorly performing buildings and lack the means to finance renovations." (EPAH, 2024, p. 19) Moreover, it is added that "[r]enovation actions, while delivering a high impact, stand out as the most expensive measures in combating energy poverty. They involve multiple challenges, from the deployment of external consultants for the feasibility, legal and construction procurements to the realisation of the works themselves." (EPAH, 2024, p. 19)

In order to overcome some of the barriers faced by these households, this report summarizes available funding sources in the respective pilot areas. Furthermore, the report provides an overview of the most relevant policies and funding available through programmes of the EU that

might inform decisions of regional and local policy makers regarding energy efficiency, home renovation, and energy poverty.

1.2. Overview of sources

This report refers to a number of sources, described below.

- A report, which has been published by the RENOVERTY project, is included.
- Information on national and regional funding instruments, which are available in the pilot areas of the RENOVERTY project, has been provided by partners within the respective countries through an internal database of financial instruments created within the project.
- The databases of the EPAH as well as the Rural Toolkit have been accessed for examples and funding instruments on the level of the EU.
- The website and document archives of the European Commission and the European Union offer information concerning programmes and legislation at the EU level.

1.3. Structure of the report

After this introduction, the report gives a brief overview of policies on energy poverty and renovation at the European level. In the following section, a concise discussion of different types of policies and their relative challenges in the implementation is presented. In section 4, the currently available national and regional funding instruments for each of the seven pilot areas are discussed individually. The final section concludes the report with an overview of potential risks in achieving appropriately suited financial support to carry out renovations in the pilot areas.

2. Energy Poverty and Renovation in Europe

2.1. Policy framework on the EU-level

This chapter highlights the main policy frameworks and funding instruments available at the EU level. It briefly introduces the major directives and their relation to building renovations and energy poverty and presents the complementing programmes alongside their related funding instruments.[1]

2.1.1 Directives at the EU level

The overarching framework relevant to RENOVERTY through its relation to home renovation at the EU level is the **European Green Deal**, accompanied by the **Fit-for-55** package, with its three main goals:

- no net emissions of greenhouse gases by 2050,
- economic growth decoupled from resource use, and
- no person and no place left behind.

While the first two goals directly relate to inducing renovation of the building stock in a comprehensive manner, the third goal requires the inclusion of measures to allow households with lower incomes to participate in achieving these goals. This aspect is mainly covered within the "[…] new **Social Climate Fund**, which will dedicate €65 billion from the EU budget, and over €86 billion in total to support the most vulnerable citizens and small businesses with the green transition. This will ensure there are opportunities for everyone, by tackling inequality and energy poverty, and strengthening the competitiveness of European companies, leaving no one behind." (European Commission, Delivering the European Green Deal, 2024a)
The main directives, which have been recently revised or put under revision, are the **Energy Efficiency Directive (EED)** and the **Energy Performance of Buildings Directive (EPBD)**. Both of them are briefly introduced.

[1] Note that only a couple of the major programmes and policies are covered. As the implementation of the Green Deal alongside its translation into national policies is an ongoing process, there will be new policies and funding sources relevant to the RENOVERTY project available in the future, which may not be covered within the report.

Energy Efficiency Directive: While the **EED** is focuses on the broad goal of reducing the energy consumption (-11.7% by 2030 compared to 2020 with a progressive reduction path) on all different levels and in a multitude of sectors, renovations are among the most prominent measures featured in the EED. It highlights the obligation for public sector buildings to achieve a 3% annual renovation rate, while the **Renovation Wave** (further discussed below), aims at boosting the renovation rate across all types of buildings from currently about 1% to 2% per year. Of specific interest for the RENOVERTY project is that the revised version of the EED also includes the obligation to Member States to prioritise vulnerable customers and social housing within the scope of their energy savings measures. Furthermore, the directive states under paragraph (78) that "[c]urrent building renovation rates are insufficient and buildings occupied by citizens on low incomes who are affected by energy poverty are the hardest to reach." (European Parliament & Council of the European Union, 2023)

Therefore, it seems that future programmes in support of the EED should incorporate renovations and a plan to address to energy poverty specifically.

Around 40% of the energy consumed in the EU – relating to approximately a third of its GHG emissions – is used in buildings. The **Energy Performance of Buildings Directive** aims at decarbonizing the Union's building stock by 2050, with an intermediate goal of reductions of at least 60% in the building sector by 2030 compared to 2015. (European Commission, 2024b) While these goals are very ambitious – especially under consideration of the challenge noted before, in regards to renovations for households affected by energy poverty – it is also noted that "[...] the revised directive will facilitate more targeted financing to investments in the building sector, complementing other EU instruments and fighting energy poverty by supporting vulnerable consumers." (European Commission, 2024b) Furthermore, the revised version of the directive includes the idea of "one-stop-shops for the energy renovations of buildings for home-owners, small and medium-sized enterprises and other stakeholders", which can be very helpful in making existing funding opportunities more accessible.

Therefore, it seems that supporting measures for the EPBD will also include more specific tools to alleviate energy poverty as a consequence of low-quality housing.

2.1.2 Programmes in the EU

Building on these directives, the main programmes available at the European level are the Renovation Wave and REPowerEU. While the former is likely to be more relevant and aligned with the goals of the RENOVERTY project, there is some albeit limited overlap with the latter one.

Renovation Wave: This is the major EU programme, when it comes to increasing the renovation rate of buildings in the EU as well as doing so in a manner that explicitly includes the challenges faced by households affected by energy poverty. The Renovation Wave also acknowledges that this requires special focus on the worst performing buildings in the EU.

Referring to the national long-term building renovation strategy as well as the EPBD, the main goal lies in doubling the annual energy renovation rate of the private sector by 2030, which is currently estimated to be around 1%. The Renovation Wave acknowledges that "[p]oorly performing buildings have a large potential for improvement, but their renovation faces persistent barriers ranging from regulatory obstacles to structural factors." Therefore, "[f]inancing solutions for low-income households for cost neutrality must address rents, energy and operating costs and local taxes through the use of grants, subsidised renovation measures or the use of energy savings for repayment (limiting upfront investment to available grants)." (European Commission, 2020a)

REPowerEU: As a response by the EC to the war in Ukraine, the REPowerEU programme was aimed at reducing the EU's dependency on energy imports. With a funding of € 300 bn through the Recovery and Resilience Facility (RRF), the main goals of the programme are to save energy, produce clean energy and diversify the EU's energy supplies. While most of the programme is aimed at large scale projects and operations, the specific goals of the RENOVERTY project are only marginally affected by the programme's aim to secure affordable energy supplies. More specifically, the EC commented that "[t]argeted measures are needed to minimize volatility, keep prices in check and protect the individuals in or at risk of (energy) poverty in order to ensure a fair transition for all." (European Commission, 2022)

Therefore, while the Renovation Wave is directly aligned with RENOVERTY's goals, the respective topics will only be covered within the REPowerEU insofar the effects of energy prices on households affected by energy poverty are mitigated.

2.1.3 Funding instruments in the EU

At the EU level, several funding instruments offer financial support for activities that are in line with the goals of the RENOVERTY project. However, these instruments generally require translation into national funds and policies in order to be accessible for homeowners. Therefore, incorporating these instruments into the funding timelines for the REERs[2] may offer more of a future outlook than a directly applicable source of funding.

[2] The Rural Energy Efficiency Roadmaps (REER) of the RENOVERTY project are aimed at assisting individual household renovation activities by providing both technical assistance (from energy audits to

Recovery and Resilience Facility: According to the Commission Staff Working Document, "[t]he Recovery and Resilience Facility (RRF) [...] provides Member States with a considerable additional funding that could be used to finance quality building renovations." (European Commission, 2020b) The EC intended to initiate Member States to prioritize renovation in their national Recovery and Resilience Plans, which had to be prepared to access funding from the RRF. Therefore, the EC issued guidelines with "a detailed Renovation Wave component that Member States are invited to include and to build upon in their national Recovery and Resilience Plans." (European Commission, 2020b) The funds will then be made available to national beneficiaries through dedicated programmes, which may also include households or ownership associations as well as public actors engaging in renovation activities, by each Member State. Furthermore, leveraging public and private sector investment while maintaining a focus on social and affordable housing have been mentioned to be essential to the RRF. As the National Energy and Climate Plans (NECP) are the main tools for Member States to access the RRF in order to improve energy efficiency, it has to be mentioned that the EC's assessment of the draft updated National Energy and Climate Plans states that "[t]o address energy poverty, a vast majority of Member States still need to set out clear objectives and a method for the definition and assessment of vulnerable households. Synergies with structural energy policies, and in particular energy efficiency measures and a stronger framework for consumer empowerment to alleviate energy poverty, are equally not sufficiently explored." (European Commission, 2023b) Therefore, it is not surprising that only very few countries currently have dedicated funding instruments to induce renovation for households affected by energy poverty.

Social Climate Fund: The Social Climate Fund (SCF) was created conjointly with the 2023 revision of the European Emission Trading System (ETS2) to use funding leveraged by the ETS2 to "[...] provide Member States with dedicated funding so that the most affected vulnerable groups, such as households in energy or transport poverty, are directly supported, and not left behind during the green transition." (European Commission, 2024c) This means that the SCF will be the most important tool for Member States to alleviate energy poverty "[...] by supporting investments for increased energy efficiency and access to zero- and low-emission mobility and transport. To unlock the funding, Member States are to submit their Social Climate Plans by June 2025 while building on the 2024 updates of their National Energy and Climate Plans." (European Commission, 2023a). This is especially important as the above-mentioned assessment of the

recommendations to managing expectations) as well as conceptual assistance (overcoming barriers on legislative, financial or administrative issues) that is specific to each of the pilot areas. The REERs are developed in a co-creation process, including nontechnical actors as well as the pilot area's Local Action Group (LAG).

draft updates to the NECPs already stated that "[m]ost NECPs still lack structural policies and measures to alleviate energy poverty, in particular energy efficiency and decarbonisation measures to support vulnerable groups and funding sources, including from the Social Climate Fund." (European Commission, 2023b)

In conclusion, the SCF will be vital for Member States to introduce (or update) national funding instruments to directly initiate comprehensive renovation activities for households affected by energy poverty. However, the timeline noted above will make it difficult to integrate these instruments into the RENOVERTY project.

Just Transition Fund: The Just Transition Fund (JTF) offers support to regions relying on fossil fuels and high-emission industries in their green transition. In addition to aiding these regions in the transitioning of their economic model, the JTF also includes support for consumers explicitly mentioning energy efficiency of housing as a means to reduce energy poverty: "(12) [...] When supporting energy efficiency measures, the JTF should be able to support investments such as those which contribute to reducing energy poverty, principally through energy efficiency improvements of housing stock." (European Parliament & Council of the European Union, 2021a)

However, the financing opportunities of the JTF are only available in the regions which have an approved Just Transition Plan. At the moment of the writing of this report, none of the RENOVERTY pilot areas are mentioned on the Just Transition Platform as having an approved plan.

ELENA Facility: The European Local Energy Assistance Facility (ELENA) of the European Investment Bank offers technical assistance for renovations improving energy efficiency as well as investments in renewable energy for both the private and public sector. Under ELENA technical studies, energy audits or business plans and financial advisory are eligible for support. However, the targeted project size is usually above € 30 million, restricting the applicability to community-driven large scale renovation programmes. Furthermore, some of the activities like energy audits and advise to overcome financial barriers, which are supported by ELENA, are already covered on the household level in the implementation of the REERs developed within RENOVERTY.

2.2. EU funding in the RENOVERTY pilot areas

As the RENOVERTY pilot areas are part of the LEADER programme, this section discusses the possibilities LEADER/CLLD offers in the period 2021-2027 to dedicate funds to the renovation activities aimed for in the REERs. Due to the multifund approach for CLLD, there different funds

accessible, but only two are briefly discussed as they show the closest fit to the goals of the RENOVERTY project.

European Regional Development Fund: In the respective regulation on the European Regional Development Fund (ERDF), it is directly mentioned that "[…] the ERDF and the Cohesion Fund should contribute to reducing greenhouse gas emissions and to tackling energy poverty." (European Parliament & Council of the European Union, 2021b) Furthermore, the ERDF is designed such that by "[…] contributing to achieving national objectives to reduce energy poverty set out in integrated national energy and climate plans, the ERDF should support in particular energy efficiency improvements in housing and buildings […] to contribute to the achievement of a decarbonised building stock by 2050 […]" (European Parliament & Council of the European Union, 2021b).

Therefore, LAGs with access to the ERDF through their CLLD activities are able to direct funds towards achieving these goals in a manner that targets the specific barriers faced, when it comes to renovation, in the respective region. However, not all LAGs have access to this type of funding, as it is only available in case of a multifund approach and when CLLD activities are programmed accordingly. Nevertheless, the ERDF can also be accessed by other public or private organizations, who are required to submit a project proposal to their national managing authority to apply for the funds dedicated to renovation within their Member State's operational programme of the ERDF. The individual project proposal outlines the type of support and requirements for access to this support on the household level, thereby offering the possibility to target the specific issues that are faced on the regional and local level.

European Social Funds Plus: The European Social Fund Plus (ESF+) can be relevant for a number of support activities that can contribute to alleviating non-financial barriers to promote renovations for households affected by energy poverty. It is mainly focused on inclusion of marginalized groups as well as training for educational and employment opportunities. However, in the regulation, the goal of preparing the workforce to participate in the green transition of the energy sector is mentioned explicitly. (European Parliament & Council of the European Union, 2021c) Therefore, accessing programmes in the scope of the EFS+ can help with the problem that a skilled workforce might not be sufficiently available in regions to carry out renovations which are at a higher risk of being affected by energy poverty. Furthermore, education and training for improving building management to fully reap the benefits of renovations can be programmed within the ESF+ and might be crucial for the long-term success of improving the building stock. Through the implementation of these type of skill development programmes for the local workforce, the barrier to renovation derived from the difficult access to firms which carry out the renovations, can be reduced (see the summary on barriers to renovation in the next section). A large number of renovations triggered by the availability of

local companies can also lead to an increase of the economies of scale, with a substantial effect on the local economy.

3. Funding types and energy poverty

This report focuses on funding mechanisms that aid renovation activities for single- and multi-family homes and that, if available, include specific funding for households affected by energy poverty. It must be noted that although most of the pilot countries have some policies targeted towards alleviating energy poverty, they often are focused on comparably low-cost activities like subsidizing energy costs, offering consultation or improving the efficiency of appliances.

As noted in the EPAH Handbook 2, renovation is among the most cost intensive albeit most effective measures to combat energy poverty, as "[i]ndividuals living in energy poverty often reside in poorly performing buildings and lack the means to finance renovations." (EPAH, 2024) However, there is consensus that the financing support to motivate households affected by energy poverty to engage in renovation activities needs to be lot higher than what most existing policies are offering. In IEECP's report on *A Socially-Just EU renovation wave*, this is summarized as follows:[3]

"Experience from past renovation programmes shows that, when provided in a non-targeted manner, energy efficiency subsidies tend to be taken up by households that do not fall in the lowest income groups. This is because accessing such funding often requires co-financing and/or upfront financing, as well as going through complex administrative procedures. To enable low-income groups to make use of the financing, 95–100% of the investment needs should be covered." (IEECP, 2022, p. 24)

These criteria are hardly met in most of the pilot countries' available funding instruments. However, there are a few examples to highlight that offer a greater potential to improve the renovation rate of households affected by energy poverty. Some of these programmes have a very limited availability of funds, and therefore the respective calls might be closed at the time the renovations within RENOVERTY are intended to be carried out. Furthermore, the qualification as well as the documentation of eligibility is very different as between countries there is no standard definition on energy poverty (see the discussion of the CEPTI below). This can lead to national programmes not being able to utilize the funds dedicated to alleviating energy poverty, as their requirements might be too restrictive.

[3] See https://europeanclimate.org/wp-content/uploads/2022/05/ieecp-socially-just-homes-summary-report-may-2022.pdf for the full summary report.

Table 1 – Examples of financing mechanisms in pilot countries

Name and Target	Country	Funding	Restrictions
Energy retrofits of family houses of energy poor	Croatia	100%	132-408 Euro/m²
Efficiency Voucher (C13-i01)	Portugal	100%	Up to 3x €1.300
ZER – Subsidies for reducing energy poverty	Slovenia	100%	Max. 18.000 Euro
Aid programme for comprehensive renovation	Spain	100%	Max. 18.800 Euro

These examples indicate that by combining the goals of increasing energy efficiency through renovation and reducing energy poverty, the requirement of a full funding of the renovation activities can be met. Still, the maximum amounts available through these instruments might hinder the thoroughness of the renovation and leave households to adopt rather low-cost measures to fit within the budgetary restrictions.

Another possible risk of embarking on renovation funded solely through these programmes is that individuals are only eligible to access these funding instruments by providing documentation of being enrolled in a welfare programme or similar. However, these individuals in possession of these documents often do not have the financial funds to be able to make an upfront investment. Even if the funds were available, the possibility of not receiving the funding (or the required amount in full) might pose a big risk that is currently mostly not mitigated within these programmes.

This also relates to the issue of non-standardized eligibility criteria to qualify for special programmes that offer increased funding. As mentioned within the project *Community Tailored Actions for Energy Poverty Mitigation* (ComAct), a major problem for accessibility of funding measures which are specifically tailored to mitigate energy poverty are "[…] persistently unclear national definitions of energy poverty, hindering the development of accessible financing, as current policy efforts still largely revolve around the applicable concept of vulnerability." (ComAct, 2024, p. 2) Within the RENOVERTY report titled *Updating the energy poverty and energy efficiency framework in rural areas across the EU,* a Composite Energy & Transport Poverty Indicator (CEPTI) has been described in order to allow for the consistent and comparable measurement of a region's exposure to energy poverty, thereby identifying vulnerable rural areas. While this is a first step in defining vulnerability criteria on a regional level, similar lines of thought might trickle down to allow somewhat consistent definitions for eligibility across and within Member States, thereby reducing the risk of households to lose eligibility for increased support.

Moreover, 60% of the regional policies listed, have only advisory character. (RENOVERTY, 2024, p. 31) Combining these findings with the stated low energy efficiency of buildings in the pilot areas, it can be concluded that a main focus to implement improvements in energy efficiency

needs to be on developing appropriate financial instruments for the future. However, in addition to the financial barriers, which are regarded as the predominant ones by more than 60% of survey participants,[4] additional problems can occur for carrying out comprehensive renovations (RENOVERTY, 2024, p. 33f.):

- **Awareness and access barriers**: These amount to lack of technical knowledge and information about energy efficiency as well as lack of time and access to traditional marketing channels, especially online information campaigns, with more than 50% regarding this as a relevant hinderance. While the financial barriers have a similar assessment throughout different parts of Europe, awareness and access barriers have been reported more relevant by respondents from SEE (around 60%) than for respondents from CEE (35%).
- **Geographical Barriers**: The geographical barriers make it more difficult for people in rural areas to access professional advice for planning or financing as well as accessing workers and expertise to carry out renovation activities. Respondents to the survey identified these barriers as being only partially relevant to rural areas' ability to renovate their buildings across all regions.
- **Regulation Barriers**: In the literature, regulation barriers are predominantly attributed to an unsupportive and inconsistent policy setting. Furthermore, regulators might still prioritize bigger cities in improving energy efficiency. Again, the responses from the survey vary by region with the most pronounced consent on the existence of regulation barriers for the SEE region (50%) and the lowest for the CEE region (30%).

Overall, it can be stated that across all regions, financial as well as awareness/access barriers are identified as the greatest factors to hinder renovation activities in rural areas. Therefore, policies designed to tackle the improvement of energy efficiency of buildings in rural areas should include both the financing of renovation activities as well as plans to inform the rural population specifically about the possibilities and the effectiveness of a comprehensive renovation.

To showcase possibilities to address energy poverty on a broader scale, two cases from countries outside of the RENOVERTY project are described below.

France: According to the ECs evaluation of the draft updates to the NECP, France was at that time the only Member State, having adopted a legal definition for energy poverty. (European Commission, 2023b) Furthermore, France has implemented different support measures for households affected by energy poverty. According to ESPN Flash Report 2022/51, around 50

[4] There were a total of 130 responses from a wide range of European countries and levels of expertise as well as policy targets in a survey about rural energy poverty. (RENOVERTY, 2024, p. 38)

measures have been implemented that can be grouped into three main categories (Legros & Martin, 2022):

- **Financial Support**: These measures directly try to reduce the cost of energy either by implementing a price cap or granting direct payments to vulnerable households.
- **Regulation of the housing market**: A number of initiatives were advance to contribute to a phase out of the least efficient buildings from the housing market in order to avoid households being trapped by the high expenses for their energy consumption, similar to mandatory MEPS as discussed in the IEECP report on *A Socially Just Renovation Wave* (IEECP, 2022, p. 10).
- **Support for renovation**: There has been a combination of a lump-sum payment of up to € 10.000 to finance insulation, a new heating system, or ventilation accompanied by a reduced VAT as well as access to favourable loan conditions.[5]

These measures have been accompanied by local initiatives to distribute information and allow capacity building for those affected by energy poverty. However, up until 2022, the success of these measures especially in the domain of renovation seems to be very limited. This is attributed to the fact that while renovation activities have increased, only individual measures have been adopted (either insulation or heating system) due to the insufficiency of the lump-sum payment to cover multiple measures. This compromises the gains in terms of efficiency and reduces the opportunities for decisive change in reducing the risk of being affected by energy poverty.

Austria: In Austria there are only two funding programmes specifically targeted at households affected by energy poverty.

- **Clean Heating for Everyone**: The change from a fossil based boiler to a RES one is funded with up to 100%. However, depending on the adopted technology, there is a maximum contribution between € 25.000 and € 38.000, and the recipient needs to qualify for a welfare programme. Furthermore, consultation with a certified energy expert is mandatory.
- **Change of Appliances**: Households affected by energy poverty can register for free energy counselling. If in this process it is identified that the household appliances contribute to high energy cost due to their lack of efficiency, one of the appliances is changed without any cost to the consumer (including transport, recycling, etc.). Through

[5] For example the éco-PTZ offers interest free loans on a twenty year runtime. There is a ceiling on the loan, depending on the thoroughness of the renovation with up to € 50.000 for a comprehensive renovation. Furthermore, the programme offers guidance for the applicants in a ten-step procedure from start to finish.

the required counselling, there is also assistance guaranteed with applying for and receiving the new appliances.

The main benefit of these programmes is in the full funding of the respective measures, but an important part to address the needs of the target group is in the connection with consultation and counselling respectively. This allows households to be guided through the whole process by a professional. However, while these two programmes can have a substantial impact for households affected by energy poverty, the most important measure to increase energy efficiency – retrofitting renovations – has no dedicated funding for the energy poor. The regular funding for private housing renovations currently has a baseline of 50% that, depending on the area, can increase to around 80% for specific measures, which is below the funding threshold of 95% mentioned earlier in this report which would increase the uptake of renovations by vulnerable households.

Another programme that can help alleviate energy poverty in rural communities is the Austrian *Climate- and Energymodelregion*. In this framework, rural areas can adopt a working programme that is specifically tailored to their needs, where funding for personnel to implement this programme is provided by the state. This allows for the incorporation of aspects of energy poverty in rural parts of Austria that are not covered by national programmes and targeting the barriers that are most relevant in the respective area. For example, if funding is available, but difficult to apply for, the manager of the model region often acts as a one-stop-shop – as discussed in the ComAct project (ComAct, 2024, p. 12) – to make these instruments more accessible. If funding is very limited, the region can devote some budget to filling the funding gaps for a number of households.

In summary, there is a wide range of policies to address energy poverty and the associated barriers to boosting energy efficiency of buildings. However, it is difficult to pinpoint a sustainable model offering support for renovations in any of the pilot area countries as well as other Member States of the EU, as they currently have left open spots in their funding and support instruments, which leads to a limited success of the existing measures (i.e. related to upfront costs, enrolment in welfare programmes, conducting energy audits, etc). Nevertheless, a combination of different measures as discussed in the IEECP report on *A Socially Just Renovation Wave* (IEECP, 2022, p. 19)[6] will be required to substantially reduce energy poverty.

[6] The project analyses the introduction of emission trading for buildings, a phase-out of fossil fuel boilers and mandatory minimum energy performance standards (MEPS).

4. Available policies in the pilot areas

This section presents the main focus of this report, as the financing policies available within the pilot areas of the RENOVERTY project are presented for each area individually. After a first overview of renovation financing as well as associated tools, the policies that are relevant for the implementation of the REERs are discussed. In the summary, the funding instruments are grouped into four categories (retrofitting, RES, appliances and other) and for each category the characteristics of the most meaningful instrument in supporting the implementation of the REERs is considered.[7]

However, as noted in the introduction of the report, for most of the pilot areas, the available funding instruments are currently changing quite rapidly. Therefore, it is very important to be aware of availability restrictions and track possible changes along the timeline of the RENOVERTY project.

Furthermore, it is important that in the case of grants, reimbursement generally takes place after the renovations have been carried out. This is especially problematic for households affected by energy poverty as they often lack the funds required for an upfront payment. For the grants that do not require prefinancing by the households, it is especially noted below.

4.1. Sveta Nedelja – Croatia

4.1.1 Overview

At the moment of writing this report only a few funding instruments are open for application in the pilot area of Sveta Nedelja, Croatia. Some calls are expected to get renewed within the upcoming months and are therefore also mentioned in this section. This is especially important since the programmes, specifically targeted at alleviating energy poverty, are offering a full funding of the respective renovation measures. For other programmes, although the maximum contributions are high compared to other pilot areas, the funding quota on these instruments is low, with a maximum of 80% for certain areas or where buildings were damaged by an earthquake.

[7] In case a single program allows different types of renovation measures, the same program might be referenced multiple times within the summary-table.

4.1.2 Financial instruments for renovation

Energy retrofits of family houses: Currently, the most relevant programme available in the Croatian pilot area of the RENOVERTY project is aimed specifically at retrofits of family houses that improve energy efficiency. The target is the renovation of 10.000 family houses, by supporting energy renovation measures, as well as horizontal measures (implementation of accessibility elements, installation of elements of green infrastructure, urban sustainable mobility and electromobility). While the funding quota is only at 60%, the contribution ceiling is quite high with € 62.160 per applicant. The activities which can receive funding also includes installation of RES in addition to improvements to the building envelope. Moreover, installation of a PV-system for electricity self-consumption is eligible as well, co-financed with up to 50%, or up to 600 €/kWp, or up to € 12.000 of total eligible costs. Furthermore, a required assistance in the application process can be funded, alleviating administrative barriers to access the funds, which is often a problem for households affected by energy poverty. Still, the 60% funding may be too low for these households to consider carrying out renovation measures.

In the case that a building has been damaged by an earthquake, the funding rate increases to 80%, which is a significant improvement, but might still end up leaving an investment gap that is too high for the targeted households to become active.

Energy retrofits of family houses of energy poor: The programme most suitable for application within the RENOVERTY project offers up to 100% of funding to alleviate energy poverty by implementing energy renovation measures as well as measures to improve structural and non-structural elements in family houses. However, the programme is currently not active and in the last call only 1.000 houses were funded on a first come, first served basis, which is difficult to implement within the framework of a larger project. While a reissue of the call is expected in the upcoming future, the restrictions on being already within the assistance of a welfare center meant that not all funds were used during the first run of the programme. There was also a ceiling of € 132 – 408 per m², which might prove restrictive in some cases. However, an additional benefit of this programme is that the financing of the renovation was directly taken care of by the *Environmental Protection and Energy Efficiency Fund* (FZOEU).

4.1.3 Summary

Overall, the availability of funding instruments in the Croatian pilot area of the RENOVERTY project is currently limited with a maximum funding quota of 60% for improvements to energy efficiency, unless the building was damaged in the earthquake, which increases the rate to 80%.

Table 2 – Financing mechanisms in Sveta Nedelja (Croatia)

	Funding in %	Restrictions	Availability
Retrofitting	60/80	Higher funding, if affected by earthquake	Call expected
RES	40-80	Funding dependent on type of RES	Call expected
Appliances			
Other	100	Documentation of being affected by energy poverty through receiving welfare	n/a

However, as in the past, there has already been a programme in place that specifically supports households affected by energy poverty, it will be crucial to observe if a similar programme will develop within RENOVERTY's timeframe, as the limited existing funding quotas of current calls might not be sufficient to enable home renovations.

4.2. Tartu – Estonia

4.2.1 Overview

In the Estonian pilot area, there is currently only a very limited number of different instruments in place. In addition, the funding quota is among the lowest, which reduces the chance of carrying out the renovations necessary to combat energy poverty.

4.2.2 Financial instruments for renovation

Reconstruction grant 2022-2027: The grant covers a wide array of renovation activities and finances the complete reconstruction of apartment buildings and, as an individual activity, the replacement of a heating device in apartment buildings that use gas, stove or electric heating with a heating device that uses RES or the connection of these apartment buildings to a district heating network. However, the maximum funding quota lies at 50% and is even lower in the vicinity of Tartu (40%) and the city of Tartu itself (30%). Therefore, it seems questionable whether these quotas are sufficient to induce renovations in homes of families affected by energy poverty.

Furthermore, the grant is available on a limited time window until the budget for the respective year is exhausted.

Apartment building renovation loan: The loan is directed towards apartment associations (at least three apartments in a building) that have received a negative response to their renovation loan application from a bank or an offer with unreasonable terms (e.g. very short term, an interest rate that is significantly higher than usual). As a loan, which can be repaid at favorable conditions (2% + 6-month Euribor and 30-year duration), this programme in itself does not grant funding for renovation activities. However, the combination of the loan with the reconstruction grant discussed above can ease at least some number of associations into renovating their buildings.

4.2.3 Summary

The most crucial aspect of nationally available funding in the pilot area of Estonia is the low funding quota. While the access to favorable loan conditions might significantly increase the availability of adequate financing, the funding required by the households themselves is probably still too high and needs complementation by additional programmes, similar to the "Home support for families with many children", which has been discontinued in July 2023. However, compared to this previous instrument, a more targeted approach focusing on energy efficiency and the installation of RES for households affected by energy poverty, would be more promising.

Table 3 – Financing mechanisms in Taru (Estonia)

	Funding in %	Restrictions	Availability
Retrofitting	30-50		Regularly until 2027
RES	30-50	Focus on connection to district heating	Regularly until 2027
Appliances			
Other	Loan only	2% + 6-month EURIBOR	Available

4.3. Bükk-Mak & Somló-Marcalmente-Bakonyalja LEADER – Hungary

At the time of writing this report, there is currently no national or regional funding available in the Hungarian pilot region which can aid the implementation of the REERs in the RENOVERTY framework. However, in November of 2023 the EC "[...] has positively assessed Hungary's

modified recovery and resilience plan, which includes a REPowerEU chapter. The plan is now worth €10.4 billion (€6.5 billion in grants and €3.9 billion in loans) and covers **67 reforms** and **47 investments**." Furthermore, "[…] the REPowerEU chapter includes support for vulnerable households for energy renovation, and training the current and future workforce to acquire green skills." (European Commission, 2023c) As such targeted programmes which can be of major importance to implement the REERs in Hungary's pilot areas of the RENOVERTY project are expected to start in June 2024. The draft of the call was published, and comments and suggestions related to the call for proposals are expected until 06.05.2024 in the Partnership Forum established for comments.

4.4. Parma – Italy

4.4.1 Overview

In Italy, a wide array of financial support is available, with current deadlines mostly ranging until the end of 2024.[8] However, the funding share is very limited, with many programs only covering 50% of costs, while instruments with a higher contribution are tied to improving aspects like structural safety or reducing architectural barriers to access. Furthermore, the funding is available in the form of a deduction on fiscal taxes. Despite the wide array of different types of funding, none of the presented instruments specifically target or increase quotas for households affected by energy poverty.

4.4.2 Financial instruments for renovation

Bonus Casa/ Bonus Mobili: These programmes offer funding on appliances (Bonus Mobili) and the use of renewable energy or improvements of energy efficiency (Bonus Casa). While this means that these programmes already cover a wide range of possible renovation measures, the funding is limited to 50% of total expenses. However, while the Bonus Mobili is restricted to an expenditure of € 5.000 per household, the Bonus Casa has a high ceiling of € 96.000 per household, which is granted in the form of a fiscal deduction. The Bonus Mobili restricts appliances to minimum class A for ovens, class E for washing machines, washer-dryers and dishwashers and class F for refrigerators and freezers. Furthermore, the funding under the Bonus Mobili is only available if a building renovation has been carried out in the year before changing the appliances. The Bonus Casa is applicable to any type of renovation and there is no restriction on improving energy efficiency.

[8] For some instruments (Super Ecobonus, Sismabonus) there is an extended availability until the end 2025, but with a reduced subsidy quota after 31.12.2024. An overview of the current funding opportunities can be found here.

In alignment with the previous chapter, the low funding share as well as the form of a tax break make these programmes hardly attractive for households affected by energy poverty.

Ecobonus/ Super Ecobonus: The Ecobonus instrument allows substantial tax reductions for improvements of the energy efficiency of buildings and the adoption of renewable energy sources. There are different quotas ranging from 50% to 85% applicable, depending on the measures and technology which are adopted (for example, 50% for biomass boilers and windows, 65% for the building envelope or microgenerators). For the common area of condominiums, a quote of 70% can be applied if the renovated area is at larger than 25% of the total surface. An increase to 75% is possible if the quality of the renovation is sufficiently high. Quotas of 80% and 85% are only available if the renovation includes a seismic risk reduction of 1 and 2 classes respectively.

While this is probably the most attractive funding model currently available in the pilot area, similar to other funding instruments in Italy, the funding is granted as a tax deduction, which drastically reduces its attractiveness to households affected by energy poverty. This has effects on multiple levels as energy poor households are usually not in the tax bracket to sufficiently benefit from these funding mechanisms and additionally, the tax breaks are granted over a multiyear period, which requires financing of the renovation measures well in advance.

Sismabonus: The Sismabonus programme specifically targets the improvement of structural safety, thereby reducing the seismic risk of these buildings. The tax deduction can range from 50% up to 80% depending on the amount of improvement. The higher funding quotas are limited to buildings in seismic risk zones 1, 2 and 3, while in any case, the maximum expenditure per household is € 96.000. Additionally, a tax deduction of up to 90% on a disaster risk policy can be applied for by transferring the tax credit to an insurance company.

As parts of the pilot area are within the respective risk zones, a horizontal renovation that includes energy efficiency as well as seismic risk reduction can be favorable.

Architectural Barriers: The removal of architectural barriers (Barriere Architettoniche) to accessibility as a horizontal measure in a renovation, which goes beyond the scope of the RENOVERTY framework, can be funded with a 75% tax break. The maximum expenditure is € 50.000 for buildings single-family buildings and units that are functionally independent, € 40.000 per unit in buildings from 2 to 8 units and € 30.000 per unit in buildings with more than 8 units.

This funding can be added to the other available instruments, in case a renovation qualifies for its criteria.

4.4.3 Summary

As currently there are a wide range of financial instruments available with some of them being tied to specific conditions of the area or horizontal improvements, which go beyond the scope of renovations targeted at in the RENOVERTY framework, the summary includes mainly the instruments with the highest funding quota without excessive restriction on their applicability.

Table 4 – Financing mechanisms in Parma (Italy)

	Funding in %	Restrictions	Availability
Retrofitting	Up to 65	Variable deductions of up to € 100.000	31.12.2024
Condominium	Up to 75	Min. 25% of surface area; max. € 40.000	
RES	50-65	Restrictions depend on technology used	31.12.2024
Appliances	50	Eligibility only if renovation has been carried out; max. € 5.000	31.12.2024
Other	75	Removal of architectural barriers; max. € 50.000 for single family homes	31.12.2024

In summary, it seems questionable, if the financing quotas – even in cases of a combination of structural measures for seismic safety, which gives the highest quota of 85% – are sufficient to allow households affected by energy poverty to carry out renovations to significantly improve energy efficiency. Furthermore, the funds are offered as tax breaks, which additionally reduces their attractiveness to energy poor households. As there are currently no regional funds available, a possible solution could be to combine the national funds with additional financing specifically targeted towards reducing energy poverty on the regional level.

4.5. Coimbra – Portugal

4.5.1 Overview

There are a number of activities fundable in the pilot area of Coimbra with relatively high funding quotas of up to 85%. Additionally, there is a programme that is specifically targeted at families affected by energy poverty, which potentially offers a complete funding of renovation measures.

4.5.2 Financial instruments for renovation

Support Programme for More Sustainable Buildings (C13): This programme is part of the Recovery and Resilience Facility. The objectives of C13 are to rehabilitate and make buildings more energy efficient, providing social, environmental and economic benefits for private householuds and companies. The programme covers different aspects of retrofitting and installation of RES with a funding quota of 85%. This funding should provide opportunity for carrying out specific improvements that are more cost effective in a given building, as the funding can be used in a modular way. This allows households to stretch renovation measures along a timeline, which alleviates temporary budget constraints. However, each of the measures has specific funding ceilings and technical requirements, as summarized below.

Table 5 – Funding restrictions in the C13 programme (Portugal)

Activity	Max. Funding in €	Restrictions
Windows	1.500	Energy class A+ or higher
Insulation	3.000 roof and floor 4.000 for walls	85% funding for recycled materials; 65% for other materials
Doors	750	
Heating/Cooling	2.500 heat pumps 2.500 solar thermal 1.500 biomass and heat recovery	Energy class A+ or higher
Photovoltaic	2.500	Production of renewable energy for self-consumption
Water efficiency	750	
Bioclimatic solutions	3.000	Favouring natural base solutions

How restrictive these ceilings and requirements end up being in the implementation of the REERs remains to be seen. More crucial could be an additional funding source that improves the general funding quota of 85% by a further 10-15% for households affected by energy poverty.

Efficiency Voucher (C13-i01): This programme addresses people in a situation of energy poverty and vulnerability, offering up to three vouchers of € 1.300 in order to carry out a number of different activities like changing the windows, installing a RES for hot water, heating or cooling

with energy class "A" or higher as well as installing photovoltaics (the latter are restricted to single family households only).

While it is a nice change to see a targeted programme for households affected by energy poverty with a wide range of application, the maximum contribution might be too low to initiate comprehensive renovation by itself. However, the possibility to combine the vouchers with the other existing funding source might be crucial.

4.5.3 Summary

The combination of a high funding, irregardless of household income, for different types of renovations with a programme which is specifically targeted at families affected by energy poverty allows for sufficiently high financial support to implement activities that are suggested in the REERs. As the regular programme allows for more comprehensive renovation, it is listed for retrofitting as well as installation of a RES, while the targeted programme is linked as "other".

Table 6 – Financing mechanisms in Coimbra (Portugal)

	Funding in %	Restrictions	Availability
Retrofitting	Up to 85	Max. contributions vary by activity	Open
RES	Up to 85	Max. contributions vary by technology	Open
Appliances			
Other	100	Max. 3 x € 1.300	Open

The only missing piece is that investment in more energy efficient appliances do not seem to fit into the existing instruments. Here targeted regional funding instruments can further improve the chances of improving the situation of households affected by energy poverty.

4.6. Zasavje – Slovenia

4.6.1 Overview

The major source of funding to improve energy efficiency is the Eco Fund (EKO SKLAD), which is the Slovenian Environmental Public Fund. Soft loans and grants are allocated on the basis of public calls for allocation of the respective funds. Eligibility criteria are defined in the publication of the individual calls. Until the public call is closed, all applications proving eligibility are entitled to the Eco Fund's support.

Slovenia currently has the possibly most comprehensive range of funding instruments available among the pilot area countries, with different types of funding mechanisms and targeted

activities. Furthermore, there are multiple programmes which are either specifically aimed at alleviating energy poverty or at least offer increased funding quotas for recipients of social benefits.

4.6.2 Financial instruments for renovation

For all of the listed instruments, applications can be filed at the time of writing this report. However, the end of each call given its budgetary depletion is announced in the Official Newspaper of the Slovenian Republic.[9]

ZER: With a budget of € 20 million, this is the most comprehensive instrument currently available in Slovenia. It offers 100% funding for measures reducing energy poverty[10] with a very broad list of possible activities:

- thermal insulation of the roof or ceiling against the unheated space, as well as external walls and the floor above the unheated surfaces or room/basement,
- installation of energy-efficient windows and/or external entrance doors,
- installation of a system for the preparation of hot water,
- installation of local ventilation with return of waste air heat,
- replacement of the old heating device with a new one based on wood biomass,
- inclusion of a coordinator to provide support in applying for this public call and implementing the project.

Despite this long list of possibilities, each individual applicant's budget is constrained at € 18.000.[11] Therefore, while it is administratively beneficial to have a single programme cover retrofitting measures as well as the installation of an RES for heating and in addition the assistance, which may be required to apply to the call and implement the renovation, it may be possible that the budgetary restriction is too tight to allow comprehensive renovation within this single framework. Therefore, a combination with any of the following programmes might be required. However, the financing is directly taken care of by EKO SKLAD with the respective contractors.

[9] All relevant calls and programmes to alleviate energy poverty can be found on EKO SKLAD's website here.
[10] The eligibility criteria are socially vulnerable households that live in energy inefficient buildings (150kWh/m2a) or in inadequate living conditions, the applicant has min. 50 % ownership of the apartment/house, and the building, according to the energy consultant's assessment, is suitable for the implementation of the project.
[11] For specific types of investment, there are even lower caps like € 12.000 incl. VAT for a boiler on logs, wood chops or combined fuel on wood biomass.

103SUB-SOG22 and **112SUB-OBPO24**: These programmes are targeted at renovations (installation of RES based heating and insulation of the building envelope) for older buildings (construction date before 2010) with at least three individual parts of the building. While owners and tenants may apply for the funding under these programmes, the base quota is only between 20-50%, depending on the activity and the region (special consideration for buildings in the Triglav national park area). However, for recipients of social benefits, this quota can be increased to 100% and for these households direct financing of the required measures is available from EKO SKLAD.

72OB24: Under this loan programme, a lot of different activities can be granted financing with a fixed (1%) interest rate for a runtime of 10 to 20 years. As they are not contained under any of the other programmes, the most important activities for application under 72OB24 is the purchase of energy efficient household appliances. However, as the loan has to be repaid and faces a minimum value of € 1.500, it might not be very accessible for households affected by energy poverty.

ENSVET: The ENSVET programme offers free expert energy advice on energy efficiency and renovation for all households, thereby aiding in overcoming administrative barriers of adopting energy efficiency measures. Furthermore, households, who receive financial assistance from certain welfare programmes can register for a free home visit from an energy advisor, who determines sources of excessive energy usage and potential savings on site. In addition, they get a free package of simple energy and water saving devices (light bulbs, window seals, etc.). However, most valuably, the expert offers help in the application procedure for the funds offered by EKO SKLAD.

4.6.3 Summary

As already mentioned above, Slovenia currently has the highest number of instruments available to fund renovation activities by households affected by energy poverty. Furthermore, with explicit inclusion of consulting, it is among the most comprehensive. However, in the domain of household appliances there is currently only a loan available, which as discussed in previous sections is much less attractive in an environment of energy poverty.

In the following table, the ZER programme being the most universally applicable, is mentioned for retrofitting as well as RES installation. However, it would possibly require combination with additional programmes from the section above to allow comprehensive renovations.

Table 7 – Financing mechanisms in Zasavje (Slovenia)

	Funding in %	Restrictions	Availability
Retrofitting	100	Max. amount of € 18.000	Open
RES	100	Max. amount of € 18.000	Open
Appliances	Loan only	Fixed (2,8%) or variable (EURIBOR+1%)	Open
Other	100	Energy consulting; no further restrictions	Ongoing

4.7. Osona – Spain

4.7.1 Overview

For the pilot area of Osona and Lluçanès there are a few different types of financial instruments available to fund renovations. The instruments are administered on a national and regional level and can grant up to 100% of funding in case of economic vulnerability. However, technical as well as administrative barriers to reach a high funding quota can in some cases be deterring households from pursuing the renovations.

4.7.2 Financial instruments for renovation

Aid programme for the comprehensive renovation at the building level: Possibly the most noteworthy instrument available within the Osona and Lluçanès pilot area is the aid programme for the comprehensive renovation at the building level. It is a distribution of Next Generation EU funds through the Autonomous Communities and Cities to promote the renovation of residential buildings, housing and neighborhoods. There is a potential contribution of up to 100% if a sufficient saving of non-renewable energy sources is achieved, and qualification for economic vulnerability is granted by the Autonomous Communities. Furthermore, each Autonomous Community has its own funding caps. The following table summarizes the level of funding with the increased funding in case of economic vulnerability in brackets:

Table 8 – Aid programme for comprehensive renovation at the building level (Catalunya, Spain)

Energy saving	Max. funding quota	Max. funding amount	Max. funding per m²
Min. 30%	40%	€ 8.100 (20.250)	€ 72
Min. 45%	60%	€ 14.500 (22.308)	€ 130
Min. 60%	80%	€ 21.400 (26.750)	€ 192

The grant is applied through repeating calls on a first come, first served basis. This could make it difficult to use within the implementation of the REERs. However, in addition to the high funding quota, the grant may be applied in the form of an advance, which is very helpful for households affected by energy poverty, as discussed in the previous chapter of this report. The current call is closing on the 30th of June 2024, which might be too tight of a timeline for utilization within the RENOVERTY project. Especially so as in the application, an energy efficiency certificate for the existing building in the current state has to be provided. Households affected by energy poverty only very rarely are in possession of such certificates, which might pose an administrative barrier to carry out renovations under this programme that may be relieved by RENOVERTY in providing the certificates.

In addition to the comprehensive programme, there exists also a lower depth **programme of aid for actions to improve the energy efficiency of dwellings**, which – in addition to the measures targeted at reducing consumption of non-renewable energy sources by 30% – also includes a reduction of energy demand for heating or cooling by at least 7% or the replacement of windows. However, under this programme the maximum funding quota lies at 40%, while the maximum amount is limited to € 4.000.

Under both programmes the renovation has to be completed by the 30th of June 2026 and the achieved efficiency gains need to be documented by an energy efficiency certificate reflecting the improvements obtained through the intervention provided for in the project

Energy rehabilitation of buildings in demographically challenged municipalities (PREE5000): The programme PREE5000 is issued within the framework of the Recovery, Transformation and Resilience Plan Funded by the European Union – Next Generation EU. The deadline of the programme has been extended to the 31st of July 2024, which might make it difficult to utilize within the RENOVERTY project. However, under this programme, multiple dimensions of improving energy efficiency (insulation of the building envelope or lighting) or substituting non-renewable energy sources (solar, biomass or geothermal) can be funded. While the funding quotas are on the lower end (40% for energy efficiency improvements in envelope, 30% for thermal installations and 20% for lighting), the aid can be combined with other funding sources to increase the total funding quota.

Guarantees and tax deductions to encourage rehabilitation: With regard to tax incentives, there is a significant improvement in the treatment of rehabilitation aid, as it will not be included in the personal income tax base when it has been granted through different aid programmes, thereby eliminating any type of adverse effects on the recipient's incentives. Similarly, to the aid for comprehensive renovations, there are different deductions available depending on the achieved improvements:

Table 9 – Guarantees and tax deductions to encourage rehabilitation (Spain)

Energy saving	Reduction of tax base	Max. amount
7% in heating/cooling	20%	€ 5.000
30% in energy consumption	40%	€ 7.500
30% in residential buildings	60%	€ 15.000

As mentioned in the previous chapter, funding instruments that target tax deductions are usually not as attractive for households affected by energy poverty. However, this instrument helps by alleviating the distortion on incentives to apply for aid and carry out renovation measures, which can be triggered by financial subsidies.

Subsidy request from the IBI for the rehabilitation of facades (City of Vic): In the city of Vic, a real estate tax subsidy on the property tax (IBI) of 90% can be requested when restoration, rehabilitation and security improvement work has been done on the elements of the facade.

4.7.3 Summary

As mentioned in the previous section, there are a couple of different types of financial instruments available in the Spanish pilot area. However, the aid programme on comprehensive renovation, which offers increased support for economically vulnerable families, seems to be the best fit for the objectives of the RENOVERTY framework and is therefore highlighted for retrofitting as well as the adoption of a RES. However, it should be noted that the requirements in terms of the building improvement are high with 60% of energy saving required for 80% funding. Additionally, the qualification for an increase to a 100% funding quota is made by the Autonomous Community. At the time of writing this report, the availability of these increased quotas is not clear, as it depends on the number of applications that are filed.

Table 10 – Financing mechanisms in Osona (Spain)

	Funding in %	Restrictions	Availability
Retrofitting	Up to 100%	Max. € 18.800 or 168 €/m²	30.06.2024
RES	Up to 100%	Max. € 18.800 or 168 €/m²	30.06.2024
Appliances			
Other	Up to 60%	Max. € 15.000 in tax deduction	31.12.2024

In summary the timeline of currently available instruments is crucial for possible adoption within the RENOVERTY project. As major deadlines are very close, this requires special attention in the conception of the REERs. Also, it has to be mentioned that, as in the past, programmes could be discontinued after the deadline and be replaced by new instruments.

5. Conclusions

As this report shows, there are quite vast differences in terms of the availability of adequate funding between pilot areas despite a common European framework. This is due to the adoption of national policies on alleviating energy poverty being far from universal. In some pilot areas, there is financing of up to 100% available if the applicants fulfil certain criteria in terms of their affectedness by energy poverty. On the other hand, there are pilot areas where hardly any to no funding is currently available. While other instruments like low interest credits may be available in some of those countries, these instruments might be of little help for households, which already have a very limited budget. Therefore, unless substantial funding is available in each of the pilot areas, the implementation of renovation measures might only be possible in a very uncomprehensive manner.

Furthermore, a common feature among the collected financial instruments is that they have a limited timeframe within which homeowners may apply for funding, requiring a lot of resources to inform potential recipients and keep them up to date on possible changes of the terms and conditions. However, as previously discussed, proper funding is crucial for households affected by energy poverty to implement any kind of substantial improvement to their homes. Therefore, this poses a crucial challenge for the goals of the RENOVERTY project in implementing REERs. Finally, the lack of assistance in the form of a one-stop-shop offering financing solutions as well as the availability of zero interest loans in order to finance the activities in advance will be a crucial hindrance to further renovations. However, REERs aim to find one-stop-shop models including financing solutions to take care of renovation costs in the pilot areas.

To summarize, it can be stated that while the EC has made efforts to include considerations of energy poverty in all of the directives, programmes and fundings associated with the Grean Deal, there is at the moment only very limited targeted funding available in some of the pilot areas of the RENOVERTY project. However, once Member States submit their national Social Climate Plans to unlock funding available through the Social Climate Fund by June 2025, we could see a significant improvement to the funding coverage of renovation activities for people affected by energy poverty.[12] Hence, it seems of major importance to frequently update the instruments in case improved funding becomes available.

Finally, as the national funding instruments may not suffice, the information presented here, compels an agreement with the RENVORTY project report (RENOVERTY, 2024, p. 103) that the implementation of local and regional policies is required to make improvements of the energy efficiency of buildings more accessible in the future.

[12] Note that the sufficiency of the funds as well as their distribution to rural communities has been questioned from within the European Parliament as well as a number of NGOs.

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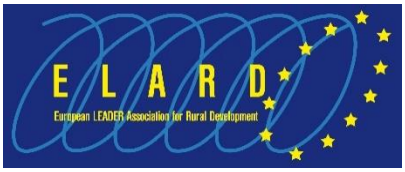


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