



European Energy Network

A voluntary network of European energy agencies

Energy Poverty mitigation in Europe Potential role for Renewable Energy Communities

Annex 1 – Case Studies

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The full study and annexes are available at <https://enr-network.org/energy-poverty-mitigation-in-europe-potential-role-for-renewable-energy-communities/>

About the Study

This publication is an EnR study produced under the 2022 Presidency by ADENE, the Portuguese Energy Agency. It aims at providing the best available knowledge based on policy implementation across EnR member countries. The expressed conclusions do not imply policy positions of individual countries. The European Energy Network (EnR) or any person acting on behalf of EnR is not responsible for the use that might be made of this publication.

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National Agency for the Promotion of the Transition to Sustainable Energy, Luxembourg



Motiva, Sustainable Development Company, Finland



Slovak Innovation and Energy Agency



Swedish Energy Agency



Sustainable Energy Development Agency, Bulgaria

Annex 1 - Case Studies

This annex includes the full answers provided by the energy agencies' regarding existing case studies in their country of measures implemented to tackle energy poverty, in particular through the use of renewable energies and Renewable Energy Communities.

EnR agencies presented 16 case studies for analysis in this survey. The full description of the case studies is- presented in this Annex. An overview of all the case studies is provided in section 5. of the main document of this study (full study and annexes are available at <https://enr-network.org/energy-poverty-mitigation-in-europe-potential-role-for-renewable-energy-communities/>).

Case studies by Country

Netherlands

Netherlands	RREW (Regeling Reductie Energieverbruik Woningen) <i>Regulation for Energy Consumption Reduction in Homes</i>
Website	https://www.rvo.nl/subsidies-financiering/rrew
Geographical scope	National
Description	Subsidy scheme that provides budget for municipalities to introduce and implement small energy saving measures in dwellings (exs: draft strips, LED lamps, radiator foil, adjust heating or ventilation systems in an energy-efficient manner, specific advice for the home, etc.). Aimed at the energy poor, but not exclusively for the energy poor. The municipalities can apply for the one-off specific benefit scheme for the reduction of energy use in homes (RREW). A municipality can use this to encourage tenants or owner-occupiers to save energy in their homes. This regulation reduces CO2 emissions and reduces housing costs. The tenants or owner-occupiers become aware of their possibilities to save energy. The Ministry distributes the available budget on a first-come, first-served basis, after receiving correct applications. A maximum of € 9 million is available per municipality, minus the amount of refundable VAT. A maximum of 100€ is available per home.

United Kingdom

United Kingdom	The Scottish Government’s Community and Renewable Energy Scheme (CARES)
Website	https://localenergy.scot/
Geographical scope	Local
Description	<p>The Scottish Government’s Community and Renewable Energy Scheme (CARES) supports communities to engage with, participate in and benefit from the energy transition to net zero emissions. It aims to accelerate progress towards the Scottish Government’s targets of 2GW of community and locally owned energy by 2030 and decarbonising Scotland’s buildings. This is achieved through funding and support for community groups to install renewable energy generation.</p> <p>The Scottish Government's Community and Renewable Energy Scheme (CARES) serves as a one-stop-shop for all local energy needs, offering advice and funding to communities, businesses, and other organizations in various aspects of renewable energy. This scheme provides financial support and guidance to community groups, businesses, and organizations to establish local energy projects. Moreover, CARES also assists communities interested in shared ownership of renewable energy projects and those approached by commercial developers regarding community benefits packages. The support offered by CARES is impartial and free, covering all stages of a project, including initial planning, development, funding applications, and even post-launch support.</p>

Spain

Spain	
Website	http://www.bonotermico.gob.es/
Geographical scope	National
Description	<p>Since 2009, the Spanish Government has been implementing different measures to protect vulnerable consumers and to fight energy poverty. Currently, households can apply for both an electricity social bonus and a thermal social bonus:</p> <ul style="list-style-type: none"> • The electricity social bonus: is a discount monthly applied to the PVPC tariff (before taxes), aimed at protecting vulnerable consumers, according to the provisions established by the Royal Decree 897/2017, of 8 October 2017 and the Royal Decree-Law 15/2018, of 5 October 2018. Regulated market traders (leading suppliers) are the only power companies authorised to offer the social bonus, which amounts to around €150 million in discounts, borne by the electricity suppliers. The discount amounts to 25% (i) and 40% (ii) for vulnerable consumers and severely vulnerable consumers, respectively. With the aim to mitigate the effects derived from the increase in electricity prices on vulnerable consumers, these discounts have been exceptionally increased to 60% (i) and 70% (ii) from 28 October 2021 to 30 June 2022. The discounts are subject to a restriction on electricity consumption (2 to 4 MWh/year depending on household size). In the case of households at risk of social exclusion, the discount is 100%, with 50% of this bill being paid by social services. In case of temporary impossibility to meet the payment, the electricity supply cannot be interrupted. In addition, as part of the COVID measures, people affected by the coronavirus (unemployment, temporary workforce restructuring plan (ERTE)) can also benefit from this bonus. • The thermal social bonus consists of an annual payment for thermal energy services (heating, domestic hot water and cooking), which depends on both the degree of vulnerability of the consumers and the winter climate severity of the area in which the dwellings are located. This bonus applies to all vulnerable consumers, regardless of the fuel they use to heat their homes (natural gas, electricity, LPG, etc.). All the beneficiaries of the electricity social bonus as of December 31 of the previous year are eligible for the thermal social bonus. The budget allocated for this aid is charged to the general state budget. In cumulative terms, the budget from its implementation in 2019 to 2021 amounts to about €400 million. The minimum reference value for this aid has been increased (Royal Decree-Law 23/2021) in 2021 from 25 € to 35 € to cope with rising energy prices. The aid for severely vulnerable consumers or consumers at risk of social exclusion will be 60% higher than that allocated in the same climate area to vulnerable consumers. Currently, considering the number of beneficiaries, the average aid per beneficiary is around 90 €.

Spain	Aids programs for energy retrofit of existing buildings
Website	https://www.idae.es/ayudas-y-financiacion/para-la-rehabilitacion-de-edificios/convocatorias-cerradas/programa-pree
Geographical scope	National
Description	<p>Aids Program for Energy Retrofit of Existing Buildings (PREE): this program, approved by the Council of Ministers on August 4, 2020, with an overall budget of €420 million from the National Energy Efficiency Fund (NEEF), was intended to boost the sustainability of the existing residential and non-residential buildings through actions on the thermal envelope, thermal and lighting installations, giving continuity to the previous Programs, PAREER-CRECE and PAREER II. The renovation programs have been increasingly including social criteria among the criteria to request the aids. The previous programs made it possible the energy renovation of around 80,000 homes in the period 2013-2018. Nearly 9,000 refurbishments were carried out in homes that requested aid based on social criteria. The MITERD, through the IDAE, is responsible for the coordination and monitoring of the PREE program, managed by the autonomous communities and cities. Among the ultimate beneficiaries of this program are natural or legal persons of a private or public nature who own buildings, communities of owners constituted in accordance with the Horizontal Property Law, owners of buildings, Energy service companies (ESCOs), or energy service providers, local entities, and Renewable Energy Communities and the Citizen Energy Communities. Eligible actions may be framed in one of the following options: interventions in complete buildings, including single-family homes, or interventions on one or more dwellings or premises in the same building, considered individually or as parts of an existing building. To be eligible for the program, the actions must justify the reduction in final energy consumption and CO2 emissions with respect to their starting situation. Likewise, buildings must have been built before 2007, and must improve the building's energy rating by at least one letter with respect to the initial energy rating of the building. The amount of the aid will be the sum of the Base Aid and the Additional Aid (social criteria, energy efficiency, and integral actions). The amount of the Base Aid (15% to 35%) will be different for each type of eligible actions, depending on the type of actions (complete buildings or dwellings and/or premises within a building) and dwelling. The social criteria (up to 15%), are applied to actions carried out in residential buildings classified under some public protection regime by the competent regional body; actions carried out in residential buildings located in the Urban or Rural Regeneration and Renovation Areas; and vulnerable consumers who have been granted the social electricity bonus. The energy efficiency criteria (up to 15%) vary depending on the building's energy rating achieved, and finally, the Integrated action criteria (up to 20%) implies a simultaneous combination of two or more types of actions, one of them being compulsory on the thermal envelope. In line with this program, the PREE 5000 program, approved by the Council of Ministers on August 3, 2021, and currently in force, is addressed to the rehabilitation of existing buildings in municipalities with a demographic challenge (municipalities with up to 5,000 inhabitants and non-urban municipalities with up to 20,000 inhabitants in which all their singular population entities are up to 5,000 inhabitants). This new program, endowed with €50 million from the Recovery Plan, despite being similar to the PREE program, introduces some relevant changes related to energy requirements (30% savings in non-renewable primary energy for all kinds of buildings), while raises the levels of base aids (20-50%) as well as the additional aid related to integrated actions for all typologies. A noteworthy aspect of the PREE 5000 is its social scope, since special attention is given to the granting of aid to carry out rehabilitation in those buildings that welcome vulnerable groups affected by energy poverty.</p>

Spain	Incentive program for the execution of installations linked to self-consumption and storage, with res, as well as the renewable thermal systems in the residential sector
Website	https://www.idae.es/ayudas-y-financiacion/para-energias-renovables-en-autoconsumo-almacenamiento-y-termicas-sector
Geographical scope	National
Description	<p>Incentive program (IP) for the execution of installations linked to <u>self-consumption and storage, with renewable energy sources</u>, as well as the implementation of renewable thermal systems in the residential sector: On June 29, 2021, the Council of Ministers approved the Royal Decree 477/2021 establishing the regulatory bases for the direct concession to the autonomous communities and the cities of Ceuta and Melilla of aid for the execution of 6 incentive subprograms, variable according to the sector and technology. These programs will be in force until December 31, 2023, and have an initial budget of €660 million from the Recovery Plan. Three of these programs are aimed at the residential sector, within which the population affected by energy poverty can be found: IP4 (Installation of self-consumption facilities, with renewable energy sources, in the residential sector, public administrations and the third sector, with or without storage) of €215 million; IP5 (Incorporation of storage in self-consumption facilities, with renewable energy sources, already existing in the residential sector, public administrations and the third sector) of €5 million; and IP6 (Realization of thermal renewable energy installations in the residential sector) of €100 million. The MITERD through the IDAE, is in charge of the coordination and monitoring of the aid, managed by the communities and autonomous cities. The ultimate beneficiaries of the last 3 programs, can be natural persons (IP4,IP5,IP6), communities of owners (IP4,IP5,IP6), local entities (IP4,IP5,IP6), legal entities (IP4,IP5) that do not carry out any economic activity for which they offer goods and/or services on the market, including third-sector entities or organizations, Renewable Energy Communities and the Citizen Energy Communities (IP4,IP5), entities or public or private organizations, non-profit, or legal entities that do not carry out any economic activity for which they offer goods and/or services on the market, that prove the availability of social housing to vulnerable collectives (IP6). Therefore, considering the types of beneficiaries, either directly or through energy communities, the energy poverty can be covered by these programs. The level of aids vary depending on the beneficiary and the type of installation. It is worth to mention that the Royal Decree 477/2021 establishes additional aid for the demographic challenge, for municipalities with up to 5,000 inhabitants and non-urban municipalities with up to 20,000 inhabitants in which all their singular population entities are up to 5,000 inhabitants. The latter is relevant for energy poverty due to the incidence of energy poverty in rural areas.</p>

Spain	Incentive program for singular pilot projects of energy communities (CE implementa)
Website	https://www.idae.es/ayudas-y-financiacion/comunidades-energeticas/programa-de-incentivos-proyectos-piloto-singulares-de
Geographical scope	National
Description	<p>The CE PILOT Program, endowed with €40 million from the Recovery Plan, consists of two calls for aid for pilot projects of <u>energy communities</u> (CE IMPLEMENTA program) differentiated according to the magnitude of the investment of the projects (greater or less than €1 million). The eligible actions must be carried out within five types of action areas (renewable electricity generation facilities, renewable thermal energy use facilities, improvement of the energy efficiency of the thermal envelope, sustainable mobility, and demand management). Eligible pilot projects must include at least one action from those specified within the first four areas of action. The aid will be awarded on a competitive basis and will cover up to 60% of the eligible costs of the project. Within the evaluation criteria of the pilot projects presented in the call for proposals, the innovation of the proposed actions, the business model as demonstrated by the economic and financial sustainability of the projects and the social and gender impact are considered. Concerning the social criteria, attention is paid to the number of partners or members who are vulnerable consumers. This collective can also benefit from the advantages of being part of these communities, in which members can be both producers and consumers of their own (clean) energy, which contributes to a greater democratization of the energy system as well as to an energy saving.</p>

Spain	Loans for energy rehabilitations through a collaboration protocol with financial entities
Website	www.idae.es/ayudas-y-financiacion/para-la-rehabilitacion-de-edificios/convocatorias-cerradas/programa-pree/prestamos-para-complementar-las-ayudas-para-rehabilitacion/entidades-colaboradoras
Geographical scope	National
Description	In the frame of the <u>rehabilitation</u> program, PREE, the IDAE has developed a collaboration protocol with financial entities to ensure that project holders can access repayable loans to help financing the investment in addition to the subsidies available. Project holders (individuals, associations of co-owners, Energy Services Companies or energy communities) can thus find on a page maintained by the IDAE the list of financial institutions providing loans, with links to these loan offers, currently more than 30. The main objective of this protocol is to alleviate the barriers traditionally found in this type of programs (lack of information about complementary loans or the scarcity of financing products adapted to their specific needs), and to facilitate direct contact between the collaborating financial entities and the beneficiaries of the grants that have a favourable resolution issued by the body of the autonomous community granting the grant charged to the PREE program. The protocol is open to all types of financing entities, from traditional banks to crowdfunding systems

Spain	Line of guarantees for the coverage of the financing of rehabilitation works
Website	www.mitma.gob.es/ministerio/proyectos-singulares/prtr/vivienda-y-agenda-urbana/avales-y-deducciones-fiscales-para-impulsar-la-rehabilitacion
Geographical scope	National
Description	<p>Approval of a line of guarantees for the coverage of the financing of rehabilitation works that contribute to the improvement of partial energy efficiency: Through this new line of guarantees, approved by Royal Decree-Law 19/2021, of October 5, 2021, on urgent measures to promote the rehabilitation of buildings, coverage will be offered so that credit entities can offer financing for residential building rehabilitation actions that contribute to the energy efficiency improvement. This will be developed, by means of a loan with a repayment term of up to 15 years, by virtue of an agreement between the Ministry of Transport, Mobility and Urban Agenda (MITMA) and the Official Credit Institute (ICO). In relation to this line of guarantees, the MITMA Ministry may grant guarantees for a maximum amount of €1,100 million. This measure is of interest as it facilitates accessibility for low income and vulnerable to this type of action, which contributes to the efficiency improvement of the dwellings and to the thermal comfort, thereby reducing the incidence of energy poverty.</p>

Spain		Tax deductions associated with rehabilitation works	
Website	www.mitma.gob.es/ministerio/proyectos-singulares/prtr/vivienda-y-agenda-urbana/avales-y-deducciones-fiscales-para-impulsar-la-rehabilitacion		
Geographical scope	National		
Description	<p><u>Tax deductions</u> associated with rehabilitation works related to energy efficiency improvements, approved by Royal Decree-Law 19/2021, of October 5, 2021, on urgent measures to promote the rehabilitation of buildings: Within the framework of the Recovery Plan, three new deductions have been approved in the quota of the Personal Income Tax (IRPF), applicable to the amount invested for rehabilitation works in habitual residences and in residential buildings, accredited through energy efficiency certificate. These deductions (from 20% to 60%) are temporary and will be in force until December 31, 2022 in the case of habitual residences and until December 31, 2023 for actions in residential buildings. The approved tax deductions have an assigned budget of € 450 million. This measure is of interest as it reduces the energy rehabilitation costs, and facilitates accessibility for low income and vulnerable to this type of action, which contributes to the efficiency improvement of the dwellings and to the thermal comfort, thereby reducing the incidence of energy poverty.</p>		

Spain		Programs for the rehabilitation and promotion of social and efficient housing
Website	https://www.mitma.gob.es/ministerio/proyectos-singulares/prtr/vivienda-y-agenda-urbana/programa-de-ayudas-para-la-rehabilitacion-integral-de-edificios-residenciales-y-viviendas www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/transportes/Paginas/2022/240322-vivienda.aspx	
Geographical scope	National	
Description	<p>The strategy to achieve decent, affordable and efficient housing, within the framework of the Recovery Plan, is based on two pillars: the Rehabilitation aid program for economic and social recovery in residential environments, which has a total budget of <u>€2,970 million</u>, and the Program for the construction of <u>20,000 social rental homes</u> in energy-efficient buildings, with an allocation of €1,000 million. These programs address the economic and social reality of households, with special attention to the problem of energy poverty. The first program integrates 5 programs that cover the following actions: <u>rehabilitation at the level of neighbourhoods, buildings and homes; the creation of offices to provide rehabilitation advisory services; and the elaboration of the book of the existing building for the rehabilitation.</u> Municipalities will play an important role in many of these programs. The coordination and monitoring of these programs will be carried out by the Ministry of Transport, Mobility and Urban Agenda (MITMA). The aids will be distributed among the final beneficiaries through the Autonomous Communities and Cities, in proportion to the number of households in each region. The regional governments will receive the aids via transfer resolution between 2021 and 2023. In 2021, €1,151 million have been transferred to the communities, Ceuta and Melilla, with a transfer of €1,389 million expected from the second half of 2022. The level of aids varies between 40% and 80% of the costs depending on the energy savings achieved, with a maximum limit of €21,400/dwelling, and can rise to 100% in case of economic vulnerability. The overall objective of these actions is to reduce the non-renewable energy consumption in homes by at least 30% and reduce the demand for heating and cooling by at least 7%. Through these programs, a total of 510,000 housing renovation actions are expected to be carried out in 2026. The second programme, for its part, aims to increase the public stock of energy-efficient housing intended for rent at an affordable price, through the promotion of newly built homes or refurbishment of non-residential buildings intended for social rental. These buildings must have a primary energy consumption at least 20% lower than the requirement for almost zero energy buildings (15-20 KWh/m²). The construction of 20,000 homes for social rental in energy efficient buildings is planned in 2026, with maximum aid of €50,000/home. Access to people with fewer resources will be favoured.</p>	

Bulgaria

Bulgaria	Sections 4 Policies - Program for RES in households
Website	Not available
Geographical scope	National
Description	<p>Financing program of standalone RES measures in single-family buildings and multifamily buildings. The project is part of the National Recovery and Resilience Plan and its aim is to increase the use of RES in final consumption in the household sector by financing the purchase and <u>installation of photovoltaic systems and solar systems for domestic hot water supply</u>. It is expected that appr. <u>10 000 households</u> will receive an aid to purchase photovoltaic systems and solar systems. The total planned resource (project value) is BGN 199 995 710 (excluding VAT). The maximum amount of grant funding per <u>individual household is expected to be up to 70% of the value of the RES system (100% for vulnerable households)</u>.</p>

Croatia

Croatia	Pilot program for energy renovation of single-family houses owned by citizens at risk of energy poverty
Website	https://www.fzoeu.hr/hr/natjecaj/7539?nid=106
Geographical scope	National
Description	Based on the Programme for <u>energy renovation of single-family houses</u> 2014-2020 adopted by the Government, Croatian Environmental Protection and Energy Efficiency Fund implemented pilot programme for citizens at risk of energy poverty. The programme included 100% grants for owners of houses at risk of energy poverty (users of social aid) for energy renovation of their houses. Measures included <u>thermal insulation of the house envelope including change of windows as mandatory and replacement of heating systems with RES as optional.</u>

Portugal

Portugal	The Efficiency Voucher (Vale Eficiência)
Website	https://www.fundoambiental.pt/apoios-prr/c13-eficiencia-energetica-em-edificios/02c13-i01-programa-vale-eficiencia.aspx
Geographical scope	National
Description	<p>The Efficiency Voucher (Vale Eficiência) program has 162 million euros to distribute to <u>100,000 families</u> until 2025. The measure aims to <u>finance the purchase of services, materials or equipment to improve the energy efficiency or produce renewable energy</u> in the homes of families in situations of economic vulnerability.</p> <p>The "Vale Eficiência" program is part of a set of measures aimed at combating energy poverty and strengthening the renovation of buildings at a national level, allowing for increased energy and environmental performance, thermal comfort, and living conditions, as well as improved health and well-being for families. This contributes to reducing energy bills and ecological footprint.</p> <p>This program is part of Portugal's Recovery and Resilience Plan (PRR), falling under the investment in energy efficiency in residential buildings.</p> <p>Under this program, it is intended to provide "efficiency vouchers" to economically vulnerable families, each voucher worth €1,300 plus VAT (Value Added Tax), so that they can invest in improving the thermal comfort of their homes, either through interventions on the building envelope or through the replacement or acquisition of energy-efficient equipment and solutions. The current phase of the program aims to distribute 20,000 vouchers.</p> <p>The "Vale Eficiência" program also aims to stimulate and energize economic and social development, with the involvement of local and national companies that will provide services to families under this program, thereby boosting economic recovery, generating wealth, and creating jobs.</p>

Luxembourg

Luxembourg	Energy behavior consultancy
Website	Not Available
Geographical scope	National
Description	<u>Energy behaviour consultancy</u> for low-income households, coupled with a subsidy scheme for household appliances. Between 50 to 200 families were involved in the study and an average amount of 750€ to 3000€. It is a measure from the central government.

Lithuania

Lithuania	Modernisation of multi-flat residential buildings
Website	Not available
Geographical scope	National
Description	The priority for modernization is building where most of occupants have <u>compensations for heating bills.</u> Is a scheme that municipalities and involved more than 500 families with an average reduction of 15% on the energy bill.