SOCIALWATT

CONNECTING

OBLIGATED PARTIES

TO ADOPT INNOVATIVE SCHEMES TOWARDS

ENERGY POVERTYALLEVIATION

D4.6

Policy factsheets

May 2023

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

WWW.SOCIALWATT.EU

PREFACE

SocialWatt enables utilities, energy suppliers and obligated parties under Article 7 of the Energy Efficiency Directive across Europe to develop, adopt, test and spread innovative energy poverty schemes. In particular, by:

1. Supporting utilities and energy suppliers contribute to the fight against energy poverty through the use of decision support tools.
2. Bridging the gap between energy companies and social services by promoting collaboration and implementing knowledge transfer and capacity building activities that focus on the development of schemes that invest in Renewable Energy Sources / Energy Efficiency to alleviate energy poverty.
3. Implementing and replicating innovative schemes to alleviate energy poverty.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

CONSORTIUM

ICCS	INSTITUTE OF COMMUNICATION & COMPUTER SYSTEMS	EL
IEECP	INSTITUTE FOR EUROPEAN ENERGY AND CLIMATE POLICY STICHTING	NL
RAP	REGULATORY ASSISTANCE PROJECT	BE
E7	E7 ENERGIE MARKT ANALYSE	AT
ISPE DC	ISPE PROIECTARE SI CONSULTANTA SA	RO
EDP NEW	CNET CENTRE FOR NEW ENERGY TECHNOLOGIES SA	PT
NATURGY	NATURGY ENERGY GROUP SA	ES
PPC	PUBLIC POWER CORPORATION S.A.	EL
CEZ VANZARE	CEZ VANZARE SA	RO
GREN	SIA GREN JELGAVA	LV
HEP ESCO	HEP - ESCO DOO ZA VODENJE I FINANCIRANJE PROJEKATA ENERGETSKE UCINKOVITOSTI	HR
EVISO	EVISO SPA	IT
CARITAS AUSTRIA	OSTERREICHISCHE CARITASZENTRALE	AT

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

CONNECTING OBLIGATED PARTIES TO ADOPT INNOVATIVE SCHEMES TOWARDS ENERGY POVERTY ALLEVIATION

GA#: 845905 **Start Date:** September 2019
Topic: LC-SC3-EC-2-2018 **Duration:** 43 Months
Type of Action: CSA **Coordinator:** ICCS

Deliverable Number	D4.6
Deliverable Title	Policy fact sheets
Work Package Number	WP4
Task Number	Task 4.4
Date of Delivery	May 2023
Dissemination Level	Public
Work Package Leader	IEECP
Lead Beneficiary	IEECP
Contributors	Jean-Sébastien Broc (IEECP), Marco Peretto (IEECP), Andriana Stavrakaki (ICCS), Georg Benke (E-SIEBEN), Sem Oxenaar (RAP), Almudena Laguillo Garcia Pelayo (Naturgy), Camelia Vasile (ISPE), Miguel Brito (EDP New)

Disclaimer

The sole responsibility for the content of this publication lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EASME nor the European Commission is responsible for any use that may be made of the information contained therein.

Copyright Message

This report, if not confidential, is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0); a copy is available here: https://creativecommons.org/licenses/by/4.0/. You are free to share (copy and redistribute the material in any medium or format) and adapt (remix, transform, and build upon the material for any purpose, even commercially) under the following terms: (i) attribution (you must give appropriate credit, provide a link to the license, and indicate if changes were made; you may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use); (ii) no additional restrictions (you may not apply legal terms or technological measures that legally restrict others from doing anything the license permits).

Table of Contents

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

Executive Summary

SocialWatt, a project funded by the EU's Horizon 2020 Research and Innovation Programme, aims to enable energy suppliers and utilities to develop, adopt, implement and spread innovative energy poverty schemes across Europe. More specifically, the project aims to enable energy suppliers and utilities to build their capacity and use tools developed within the framework of the project to effectively engage with their customers and implement schemes that alleviate energy poverty.

In order to facilitate the replication of energy efficiency/renewable energy schemes and actions developed within the framework of the project, numerous policy factsheets have been developed, as presented in this report. These briefs present recent major developments in alleviating energy poverty and in policy measures put in place to face the current energy crisis, as well as to more systematically tackle energy poverty with energy efficiency measures.

In **Austria**, the Stromhilfefonds, initially developed by Caritas with the collaboration of one energy utility, has now been deployed over the whole country, with an increasing number of organizations and energy companies participating. Two recent national energy efficiency schemes also target vulnerable groups (renovation of large buildings, and the replacement of fossil fuel heating systems in individual homes), with allocated budgets amounting to 375 million euros between 2022 and 2025.

In **Croatia**, a national programme to combat energy poverty is under development with already two pilot renovation programmes (on individual houses and on social housing). These are the first Croatian renovation programmes explicitly aimed at reducing energy poverty, with a grant rate of 100%. The objective is to expand them based on the experience from the first years of their implementation.

In **Germany**, energy poverty is not yet fully acknowledged as a specific issue and is rather addressed as part of the more general poverty issue, through social welfare policies. Nevertheless, national schemes with local implementation make energy advice and complementary support available for free to low-income households.

In **Greece**, the grant schemes for building renovations and the replacement of appliances have recently moved away from a first come-first served basis. The new renovation programme includes a specific budget dedicated to grants for low-income households. The new schemes for appliances ranks and selects applications according to economic and social criteria.

In **Ireland**, the recent change in the Energy Efficiency Obligation Scheme (EEOS) promotes deeper renovations in less energy efficient dwellings. Households receiving support through the EEOS can combine this with the other national level efficiency schemes.

Italy has two national observatories on energy poverty (one independent created in 2019, and one institutional established in 2022), but does not have yet a national energy poverty strategy or action plan. In fact, there is no national energy efficiency measure fully dedicated to tackle energy poverty. Nevertheless, the tax deductions have been revised (ecobonus) or directly designed (superbonus) to make it possible for low-income households to benefit from these schemes.

Since August 2021, **Portugal** has implemented an energy efficiency voucher for energy poor

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

households (i.e. households eligible for the social tariff), as part of its Recovery & Resilience Plan. However, the results have been so far suboptimal, partly because the amount of the voucher seems not to be attractive for installers. The scheme is thus under revision.

In **Romania**, the adoption of an official definition of energy poverty in September 2021 paved the way so that the programs / measures financed under the National Fund for Energy Efficiency can now be implemented as a priority, directly or indirectly, among vulnerable households. This can be seen in two recent schemes part of the Recovery & Resilience Plans: these schemes focus on the renovation of buildings in deprived areas, with allocated budgets amounting to 1 billion euros in total.

In **Spain**, the National Strategy against Energy Poverty (ENPE) was approved by the government in April 2019, including an axis on building renovations and another one on regional and local initiatives, and especially energy poverty offices to provide tailored support to vulnerable households (following the example of Barcelona). One part of the 'Building renovation and urban regeneration plan' included in Spain's Recovery & Resilience Plan is focused on neighbourhood retrofitting in deprived areas. Another part aims at the construction or rehabilitation of buildings to provide further 20,000 social housing dwellings of high energy efficiency standards, with a total budget of 1 billion euros.

In the **United Kingdom**, England's and Wale's Energy Company Obligation has been progressively revised to be 100% focused on energy poverty alleviation from 2018, and more recently to further focus on the least energy efficient dwellings. A Minimum Energy Efficiency Standard is also in force since 2020 to address energy poverty in the private-rented sectors, by requiring landlords to make a minimum investment in energy savings works in the least energy efficient dwellings. Different energy efficiency schemes are implemented in England, Scotland, Wales, and Northern Ireland, with different targeting approaches.

This overall trend, i.e. developing and reinforcing energy efficiency schemes to tackle energy poverty, is expected to continue, especially since the recast of the Energy Efficiency Directive introduces an energy poverty ringfence (i.e. that requires Member States to achieve a minimum share of their energy savings among priority groups)[1]. This is particularly important since energy efficiency schemes bring long-standing impacts that help alleviate energy poverty, in a much more sustainable way than financial interventions to support energy poor households and emergency measures put in place to face energy crisis.

[1] For more details about the changes brought by the EED recast, see the corresponding policy brief: https://socialwatt.eu/en/node/90

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

1 INTRODUCTION

Within the framework of the SocialWatt project the status quo of energy poverty and related policies was reviewed in a selection of 11 countries (Austria, Belgium, Croatia, France, Greece, Ireland, Italy, Latvia, the Netherlands, Romania, Spain) in November 2019[2].

The COVID-19 outbreak from March 2020 and then subsequently the energy crisis with strong increases in energy prices starting from the summer of 2021, have drastically changed the situation of energy poverty in Europe. Energy poverty has been in the headlines of all medias and became one of the main issues on the policy agenda. The topic that was so far debated in small circles of specialised policy experts, researchers and activists, became a concern for all governments and an issue for much larger share of households.

The policy responses adopted by the Member States changed sharply to face this unprecedented situation. The country factsheets included in this report were prepared from September 2022 to March 2023, at a time when crisis measures were still evolving. This is therefore a snapshot documenting this very particular moment. It builds on searches in official sources (websites of ministries, regulatory bodies, energy agencies), complemented with interviews with national experts of energy poverty.

While SocialWatt is about developing energy efficiency schemes to tackle energy poverty, the country factsheets also looked at the measures taken to help with energy bills. These have indeed been the first answer to the skyrocketing energy prices, to protect consumers. In most countries, these crisis measures evolved rapidly over time.

The energy crisis also happened at the same time that most EU Member States started to implement their Recovery & Resilience Plans, answering to the previous crisis (COVID-19) and often including special provisions for renovation programmes. One of the objectives of these programmes is likely to support the construction sector, while contributing to the energy and climate objectives. They also sometimes include specific provisions or sub-programmes to tackle energy poverty.

The country factsheets thus include the following sections:

- **Background**: this section provides an overview of the situation of energy poverty in the country (official definition if any, indicators and recent data on number of households in energy poverty, quick insights on the building stock, energy poverty strategy if any, main measures in place before the energy crisis)
- **Main recent measures to help households face the energy crisis**: short description of the measures adopted to face the energy crisis, distinguishing when relevant the measures for all households and the measures targeted to priority groups (e.g. vulnerable households, low-income households).
- **Main national energy efficiency measures tackling energy poverty**: short summary presenting national energy efficiency measures that are either fully focused on tackling energy poverty or that include a social dimension.
- **Focus on Article 7 EED and the role of energy companies**: short discussion on whether the country has already reported energy efficiency measures under Article 7 of the EED

[2] SocialWatt (2019). Report on the Status Quo of Energy Poverty and its Mitigation in the EU. Deliverable D1.1 of the SocialWatt project, funded by the Horizon 2020 programme.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

that can also contribute to tackle energy poverty, and how energy companies have been involved (or not) in these policy measures (especially when an Energy Efficiency Obligation Scheme is in place).

- **Interviews with national experts**: discussing how energy poverty is currently evolving, whether changes occurred in the strategy and policies to tackle energy poverty, and the role of energy efficiency in this strategy.

The factsheets cover 10 countries, as summarised in the table below. SocialWatt would like to thank the 23 interviewees who took time to answer the questions and share their experience.

Each factsheet can also be downloaded as a stand-alone document from the SocialWatt website[3]

Table 1. Countries covered by the factsheets and list of interviewees.

Country	Interviewees
Austria	Florian Pichler (e-control); Marie Elisabeth Bruckl (Caritas Austria)
Croatia	Miljenka Kuhar (Door); Vesna Bukarica (EIHP)
Germany	Michaela Hofmann (Caritas Köln); Caroline Oppenrieder (Electricity Saving Check's coordinator); Antje Kahlheber (Rhineland-Palatinate's Consumer Association)
Greece	Christos Tourkolias (Centre for Renewable Energy Sources and Saving - CRES)
Ireland	Ray Breen (Electric Ireland/ESB); Niall Farrell (Economic and Social Research Institute)
Italy	Alessandro Fiorini (ENEA); Daniele Bergesio (eVISO)
Portugal	Antonio Bello (EDP); João Pedro Gouveia (NOVA University of Lisbon)
Romania	Pavel-Casian Nitulescu (Ministry of Energy); Cornelia Szabo (Cez Vânzare); Andreea Vornicu-Chira (Centre for the Study of Democracy)
Spain	Ester Sevilla (Naturgy Foundation); Roberto Barrella, José Carlos Romero and Efraim Centeno (Comillas Pontifical University)
UK	Peter Smith (National Energy Action); Gillian Campbell (Existing Homes Alliance Scotland)

[3] https://socialwatt.eu/en/node/120

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

2 COUNTRY FACTSHEET: AUSTRIA

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

COUNTRY FACTSHEET

February 2023

SOCIALWATT

CONNECTING OBLIGATED PARTIES TO ADOPT INNOVATIVE SCHEMES TOWARDS ENERGY POVERTY ALLEVIATION

Austria

BACKGROUND

- **No national binding definition** of energy poverty in Austria. The National Energy & Climate Plan (NECP) used the following definition from (E-control 2013): "*A household is considered energy poor if its income is below the at-risk-of-poverty threshold and, at the same time, it has to cover above-average energy costs*"
- **Official figures** set a scope and provide an order of magnitude. Every two years, Statistics Austria produces a report on behalf of E-Control, the national regulator for the liberalised energy market: this estimated that 250'000 persons (123'800 households) were affected by energy poverty in 2021 (i.e. **2.8% of the population**).
- A **national roadmap** for energy poverty has been elaborated but has **not yet been published**.
- **No social tariff**, but financial support for poorer households, which must also cover the energy costs: a household receives entitlements under the energy poverty designation if it is granted the 'broadcasting fee' exemption (upon application, depending on the household income and size), then giving right to an **exemption from certain cost shares of energy fees** or a **heating cost subsidy** (about €120).
- Also rules regarding the **security of supply for households**. For example, an energy supplier cannot refuse to provide a customer with the basic supply even if the customer has bill arrears. The supplier is then also not free to choose the tariff at which it supplies the household.
- **Well-regulated procedure in case of late payment** and associated termination procedures: energy suppliers have to comply with deadlines and procedures before electricity or heat is switched off.
- Energy suppliers are also obliged to offer **energy advice**.
- Assistance that goes beyond state support is most often provided by church or social institutions. The largest programme in this regard is the **Electricity Assistance Fund** handled by Caritas Austria: numerous energy suppliers cooperate with the local Caritas or give a large donation for their work. These organisations then also support the households in their contacts with the energy supplier.

WWW.SOCIALWATT.EU

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

MAIN RECENT MEASURES TO HELP HOUSEHOLDS FACE THE ENERGY CRISIS

Measures focused on vulnerable households

- **Extra cost subsidy for vulnerable groups** (€ 200) to compensate the increase in grid fees.
- **Specific measures taken by energy suppliers**: some energy suppliers have an extra social pot to provide support in case of payment difficulties. However, this is not actively communicated, and little information is available about this.
- Clean heating for everyone (2022-2025): subsidy up to 100% of the eligible costs, with cost caps per technology, to support low-income households for replacing fossil-fuel heating system (see more details in the table about energy efficiency measures below).
- Climate-friendly buildings for those in need of protection (2022-2025): Increased subsidy for renovation of large housing buildings occupied by poor households (see more details in the table about energy efficiency measures below).
- Complement to the electricity price brake (January 2023 and June 2024): in addition to the electricity price brake applicable to all households (see below), low-income households (i.e. eligible to the exemption of broadcasting fees) can receive a network cost subsidy of 75% between the 1st of January 2023 and the 30th of June 2024. The annual amount is to be limited to €200. This may benefit to about 300 000 persons.

Measures for all households

- Energy cost compensation (decided in January 2022): one-time payment (€150) related to electricity bills for most households (up to an income of €55000 per year). Households with 5 or more persons can apply for an additional subsidy. There is additional support for all households from the regions (Länder) (which is to be seen with local elections taking place in 2023).
- Climate bonus and anti-inflation bonus (2022, to be renewed): bonus paid to all people living in Austria. In 2022, this was € 500 per adult (over 18), and €250 per younger person. This will be renewed in 2023, with an amount depending on the local public transport infrastructure (€100 for inhabitants of Vienna; €250 for remote areas).
- Mandatory RES levy on electricity was **suspended** in 2022 (for all customers, no targeting)
- Electricity price brake (December 2022 to June 2024): the estimated basic electricity consumption (up to 2900 kWh per year, i.e. **80% of the average electricity consumption** of households) is subsidised to **cap the price to 10 cents/kWh** without VAT (i.e. average pre-crisis price). This is applied automatically by the electricity supplier if the electricity price exceeds the 10 cents threshold, covering the price difference until market prices of 40 cents/kWh (to prevent excessive increases in market prices). This means that in practice, the subsidy **cannot cover more than a price difference of 30 cents/kWh**. Consumption beyond 2900 kWh per year is not subsidised. The cost to the State budget could amount to about 2.7 billion euros in 2023 and 1.1 billion euro in 2024.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

MAIN NATIONAL ENERGY EFFICIENCY MEASURES TACKLING ENERGY POVERTY

Caritas Stromhilfefond (2010 – on-going)	〉 The project aims to alleviate energy poverty by focusing on three key areas: (1) **financial aid**, (2) **in-person visits** by energy advisors for tailored information on energy saving measures, and (3) **free replacement** of broken or old **household appliances**. 〉 The target group are **energy poor and at risk households**, which can be reached via the social counselling centres of Caritas in Austria. During the counselling sessions of up to an hour, a number of topics are discussed, energy related struggles among them. The social counsellor helps households sort through finances and possible support measures and then direct them towards the appropriate contact points. 〉 It was initially **fully sponsored by VERBUND AG, an energy utility** in Austria, and conducted by Caritas Austria in 6 participating dioceses. This has been a major success for energy poor households and the advocacy surrounding this best practice project. The cooperation was the first of its kind at the time and has since **inspired other utilities** to follow suit. 〉 Most recently, the **Austrian government** has decided to fund energy counselling and the exchange of household appliances with **120 million euros from 2023 to 2026**, enabling **Caritas and other organisations** as well to offer the services of VERBUND-Stromhilfefonds throughout the **whole country**. 〉 There is also an additional energy fund about to be launched, which will financially aid households struggling to pay the currently extremely inflated electricity and gas bills. 〉 **Since 2009** the scheme has supported **more than 15,800 people** in over 6,100 households and saved 8,500 MWh and their equivalent of 1,200 tonnes in CO_2 emissions. Over 4,800 energy counselling sessions were conducted and **3,300 household appliances** were switched to new, energy efficient ones.
Ombutsstelle Wien Energie (2011 – on-going)	〉 The Energy Poverty Outreach and Counselling Centre of the utility Wien Energie serves private clients as well as clients of social institutions who find themselves in difficult life situations and are thus unable to pay their energy bills. It is an **own Departement within "Wien Energie"**. The service and support services include, but are not limited to: o Advice and assistance with life support equipment, payment difficulties and reinstating energy supplies. o **Simple energy advice services** o Information on social benefit entitlements and applications o Contact with public and private social services and debt counselling. 〉 The counsellors work closely with social institutions to defuse the conflict situation through their professional expertise and specific training. 〉 The internal department consists of 6 experts who supported about 3,100 clients in the year (2021). It is fully funded by the energy provider.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

Clean heating for everyone (2022-2025)	〉 Funding **up to 100%** of the eligible costs[4] to support low-income households for **replacing fossil-fuel heating systems** with 'climate-friendly' systems (priority to local/district heating, or if not possible, wood-fired central heating or heat pump), for one- or two-family houses or terraced houses. Eligible costs are capped (cap between €22,000 and 32,500 according to the technology). 〉 The application process includes an **energy consultation** (coordinated by the Länder' agencies), that will check the eligibility conditions and then provide support in obtaining quotes and completing the application. 〉 Budget of **140 million euros in 2022**, and 190 million euros decided for the years 2023 to 2025 (Klima:aktiv website). The scheme is financed by the federal government and **implemented together with the federal states** (Länder).
Climate-friendly buildings for those in need of protection (2022- 2025)	〉 Specific programmes for listed charities, NGOs or municipalities owning or operating[5] **buildings larger than 300 m²**, older than 20 years and **inhabited by low-income or vulnerable people** (for more than 50% of the heated area). This also includes accommodation for refugees or the homeless, women's shelters, children's homes. 〉 Supported actions: **primarily thermal renovation measures** (building envelope), and **heating systems** (connection to district heating, wood central heating or heat pumps) **if jointly done with thermal renovation** (or if thermal renovation was already done). 〉 Funding **up to 100 %** of the net costs incurred, with a flat-rate up to €300 or €360/m² (depending on the energy performance achieved) for building renovation[6], and €150/m² for heating systems. Total budget of **45 million euros** (renovation projects must be completed by June 2025). 〉 Scheme co-funded by the Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and NextGenerationEU (under Austria's Recovery and Resilience Plan) through Austria's Environmental Promotion Fund in Austria, and operated by Kommunalkredit Public Consulting 〉 Further discussion on-going on how poor households living in large buildings can be helped in a more targeted way when retrofitting the building, by adapting the law.
Energy Efficiency Obligation Scheme (EEOS) (2015-2020)	〉 As part of the EEOS, a bonus factor was meant to **incentivise energy efficiency actions done for low-income households**: they were rewarded with a **bonus factor** of **1.5** (i.e. 50% more energy savings counted towards the achievement of obligated parties' targets). 〉 However, this bonus proved **insufficient**: **only 0.66% of the savings** reported to the EEOS have been achieved in the scope covered by this bonus (Austrian Energy Agency, 2020). 〉 The EEOS has not been renewed after 2020 (see below).

The table above is focused on national EE policy measures tackling energy poverty. More initiatives

[4] The dismantling and disposal costs for decommissioned boilers and tank systems are also eligible.
[5] The operation of the building must serve as a "service of general economic interest". For-profit facilities (e.g., old people's homes, nursing homes, holiday homes) are not eligible.
[6] This flat-rate is increased by €30/m² if at least 25 % of the insulation material is made of renewable raw materials.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

exist at regional or local level, or led by stakeholders such as energy companies. As illustrated by the schemes developed as part of SocialWatt. In Austria, the Regions (Länder) have a major role in the implementation of energy efficiency programmes (including for the renovation of buildings). Some of the regional schemes may include provisions related to energy poverty alleviation.

FOCUS ON ARTICLE 7 EED AND THE ROLE OF ENERGY COMPANIES

In the period **2014-2020**, the only measure reported by Austria that had a provision related to energy poverty was the **Energy Efficiency Obligation Scheme (EEOS)**, with the **bonus factor** of 1.5 for actions for low-income households. Therefore the energy suppliers had an incentive to implement energy efficiency actions for low-income households. However, this bonus was **little used** by the energy suppliers (see above).

The NECP was not clear about possible policy measures reported to Article 7 EED for the period 2021-2030 that could include provisions related to tackling energy poverty. The **new Energy Efficiency law** (EEff-RefG 2023) proposed by the Austrian government on 1st of February 2023 clarified that Austria will not report an EEOS for the period 2021-2030: **Austria will rely only on alternative measures**. The proposed new law also set that at least 34% of Austria's energy savings target should be achieved among households, with **3% among "priority households"** (which can be considered as an 'energy poverty' ringfence, anticipating the recast of the Energy Efficiency Directive). It is however not specified yet how the policy measures will be designed to target these priority households.

Energy companies will remain involved in the energy efficiency strategy, with a new type of obligation: **energy suppliers** with energy sales to end customers of more than 35 GWh **have to set up advice centres for households**, and report about this to the new monitoring authority e-Control. These advice centres should also address issues related to energy poverty. Moreover, as illustrated above with the Caritas scheme, energy companies can also be involved in partnerships with NGOs or local authorities.

The general role of energy companies in energy efficiency for the energy poor is particularly contested and controversial since a) energy efficiency clashes with core business interests of energy companies, that is, selling energy by volume, and b) energy companies face competitive short-term pressure at energy markets, which externalize more social aspects of affordability and energy poverty by design.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH FLORIAN PICHLER (e-control)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Yes, rising energy prices and costs most obviously put additional stress on already tight budgets of households at risk of energy poverty. This is already evidenced by a significantly larger share of the Austrian population stating that they have difficulties to keep their homes warm (8.4% in Q2 2022 v. 1.7% in Q2 in 2021). It remains to be seen to what extent, short-term state aid succeeds in assisting households to cope with this situation, especially the energy poor with higher levels of consumption.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

Yes, from the second half of 2021 onwards a series of short-term policy measures have provided financial assistance to Austrian households, where most of these policy measures are available to all households but only a few additional policy measures target low income (energy poor) households specifically. Generally speaking, it is unlikely that such short-term measures tackle energy poverty in a more sustainable sense. Much needed long-term instruments are still in the making.

Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

Yes, according to the latest NECP from 2019, energy efficiency measures especially in the heating sector (space heating and domestic hot water) are seen as key to tackle energy poverty. However, the devil may be in the detail with regard to how to fight energy poverty with energy efficiency because of the many constraints regarding the practical implementation of effective energy efficiency measures for lower income households.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

This question touches upon the organizational principles of energy markets, what to internalize and externalize and where to locate energy companies therein. Currently, energy companies must abide by restrictions preventing premature disconnections and provide information. Some energy companies do more CSR (Corporate Social Responsibility) than others – maybe also they are publicly owned to a greater extent. My impression is, however, that there is a strong feeling that energy poverty is more of a "social" than "energy" kind and thus better targeted via social security (and the State) in Austria. Be that as it may, the roles of energy companies in schemes tackling energy poverty, or energy efficiency for that matter, too, need to be better clarified to guarantee an effective handling, including sufficiently funded policy measures, of such challenges in the future.

〉 Could an "energy poverty" ringfence or sub-target in Article 7 EED change the way energy poverty is tackled? (or could it make that energy efficiency measures would better include a social dimension?)

I am not convinced that it is that straightforward. Energy efficiency and energy poverty have long been on the political agenda, but when it comes to action, we see a lot of procrastination. What is needed is being much clearer on the promises of energy efficiency especially among the low-income population.

〉 Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

I often asked myself where the vast potentials for energy savings, demand reduction and energy efficiency improvements really are? I am now convinced that it is not among the low-income households since income and energy consumption are (strongly) positively correlated. We need to make sure that energy efficiency is not simply an "option" for those who can afford higher energy prices based on fossil fuel combustion. A too strong focus on energy poverty in energy efficiency distracts from the real problem in my opinion. But obviously, measures to provide much required energy and energy efficiency for the energy poor need to be always implemented. Yet, these measures need to go beyond information and funding, they need to assist low income and energy poor populations in implementing them in practice, providing hands-on support and representation.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH MARIE ELISABETH BRUCKL (Caritas Austria)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Yes, in the social counselling centres of Caritas in Austria an increased number of people inquiring about assistance in regards to energy bills can already be seen. It is additionally worrying that the financial pressure on poor households has increased in all other areas as well (food, rent, items of daily necessity). Further, the amounts energy utilities expect households to pay in the coming year is often double with or triple what they used to pay before. Poor households, but increasingly also lower middle-class households, are unable to afford this increase.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

Yes, the Austrian government has decided to fund energy counselling and the exchange of household appliances with a total of 15 million euros, enabling Caritas to offer the services of VERBUND-Stromhilfefonds throughout the whole country. There is also an additional energy fund about to be launched, which will financially aid households struggling to pay the currently extremely inflated electricity and gas bills. This will come as a big relief for energy poor households in Austria, but it is not a long-term solution.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

The topic of energy poverty has certainly gained visibility in the last months, and a number of measures are in the works by the government to aid people in need. A more long-term concept will have to be discussed though, as the energy prices will likely stay inflated for a longer period of time. It is not a problem that can be solved with one-time financial support.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

All but one of the energy companies in Austria lacks a proper contact centre for energy poor customers to find support. Both the utilities and the customers would benefit from the implementation of such a centre. In general, the cooperation of energy companies and NGOs has increased over the last years, to the benefit of the energy poor households. This engagement, whether it be shorter contact points in case of an issue, support of the NGOs in their work, should be increased and continued.

〉 Could an "energy poverty" ringfence or sub-target in Article 7 EED change the way energy poverty is tackled? (or could it make that energy efficiency measures would better include a social dimension?)

The explicit inclusion of energy poverty into these targets can help to increase visibility of the issue and highlight the importance of combatting it alongside energy efficiency targets. Energy efficiency cannot be achieved in a sustainable way without considering and being mindful of the social dimensions of energy supply and usage.

〉 Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?

To reach energy poor households and include them successfully into energy efficiency measures, there need to be services in place that support these households along the way. This can be a sustainability guide who helps such a household in regards to changing their

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

heating system, from applying for grants to getting the new system installed. These processes are incredibly complex and can be impossible to tackle for households who are already struggling. Additionally, upfront costs cannot be expected from these households, because that would raise the threshold for accessibility too high.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

3 COUNTRY FACTSHEET: CROATIA

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

COUNTRY FACTSHEET

April 2023

SOCIALWATT

CONNECTING OBLIGATED PARTIES TO ADOPT INNOVATIVE SCHEMES TOWARDS ENERGY POVERTY ALLEVIATION

Croatia

BACKGROUND

- **No official definition of energy poverty** in Croatia, nor official methodology and indicator to measure it[7]. A definition and criteria have been adopted about **vulnerable customers**, based on social and economic criteria.
- In 2021, 5.7% of the population was deemed to be unable to keep its household adequately warm, and 15.2% of the population presented arrears on utility bills (Eurostat).
- 61% of the housing areas are houses (up to 3 dwellings), and 39% are multi-apartment buildings (more than 3 dwellings). The rate of owners-occupiers (about 90%) is the second highest of the EU. About **60% of the housing areas** were built **between 1941-1988**. About **28% of houses** and **8% of multiapartment buildings** are in **energy classes E, F or G**. (Long Term Renovation Strategy – LTRS 2020)
- The public institutions involved in combating energy poverty include the Ministry of Economy and Sustainable Development (MINGOR), the ministry responsible for social welfare (MROSP), and the National Coordination Body for Energy Efficiency (NKT). The Croatian Bureau of Statistics is also involved in the assessment and monitoring of energy poverty. The Ministry of Spatial Planning, Construction and State Property (MPGI) is in charge of the renovation programmes (MPGI 2021)[7].
- Until recently, there was no policy measure explicitly designed to tackle energy poverty. However, measures have been in place to **support vulnerable households with their energy costs**:
    - **Monthly compensation for vulnerable energy buyers** (from 2016, Decree NN 140/2015): this can be considered as the energy complement to the Guaranteed Minimal Support (GMS, started in 2013), that provide low-income households with financial assistance to meet their basic needs. The monthly compensation for energy is thus targeted to households receiving the GMS or including a person receiving a disability allowance. In 2021, the monthly compensation could be up to HRK 200 (EUR 27) per month for the electricity, gas or district heating bill. This compensation is funded by the electricity suppliers, from a fee on electricity (HRK 0.03 / EUR 0.004 per kWh). The compensation supported 62,301 households in 2019.
    - The **housing cost support** is a social support for housing costs including costs for electricity, gas and heating. It is provided by both the national and local governments, for households receiving the GMS.

[7] Ministarstvo prostornoga uredjenja, graditeljstva i drzavne imovine (2021). *Program suzbijanja energetskog siromastva koji ukljucuje koristenje obnovljivih izvora energije u stambenim zgradama na potpomognutim podrucjima I podrucjima posebne drzavne skrbi za razdoblje do 2025. godine*

WWW.SOCIALWATT.EU

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

- The **firewood allowance** is provided by both the national and local governments, for households using wood for heating and receiving the GMS. The support can be either with a cash payment once a year or the recipient is provided with 3 m^3 of firewood per year.
- A **one-time support** may be granted to households receiving social benefits, vulnerable households, and low-income households, in exceptional circumstances, such as higher heating costs in winter or urgent need for repair or replacement of the heating system.

› Croatia's National Energy and Climate Plan (NECP) mentions the **preparation of a programme to combat energy poverty**. This programme was meant to:

- Identify **indicators for monitoring energy poverty** and establish a **monitoring system**, building on the existing system for the collection of data on household consumption and habits (Croatian Bureau of Statistics). The data will be used to analyse a possible extension of criteria for attaining the status of vulnerable energy customers. The 'Open partner dialogue' initiative already organised a discussion among stakeholders on energy poverty criteria, at its second working meeting focusing on energy poverty. Criteria considered include: eligibility to the guaranteed minimum allowance; household income; building energy rating (Energy Performance Certificate – EPC); floor area per household member; share of total energy costs in total household income; other social welfare categories (disability benefits, child benefits, pensioners with the minimum pension, welfare and health insurance threshold, means testing, etc.).
- Further develop a **model for the coverage of energy costs**, by determining the level of assistance required for households facing problem with paying their energy costs, based on the amount of energy required to meet the minimum housing standard.
- Continue capacity building through **local information centres**, to provide households at risk of energy poverty with information and advice on energy efficiency measures and related financing opportunities.
- Set up **co-financing schemes** for the implementation of **energy efficiency measures** in energy-poor households, such as replacement of household appliances, improvement or replacement of heating systems (primarily with RES systems).
- Consider the possibility to implement these measures under the **Energy Efficiency Obligation Scheme** (EEOS).
- **Integrate energy poverty criteria into the energy renovation programmes** for multi-apartment buildings and family houses for 2021–2030 (LTRS) (see more details about the pilot schemes in the table below).

The percentage of population presenting arrears on utility bills in 2021 has increased compared to the previous year. Considering the energy crisis that was experienced in 2022, this number is expected to increase further.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

MAIN RECENT MEASURES TO HELP HOUSEHOLDS FACE THE ENERGY CRISIS

Measures for all households:

- **VAT reduction on gas bills** (February 2022 – March 2023): Initially, this measure reduced the VAT rate for gas and heat from 25% to 13%. In April 2022, this was lowered to 5% until the end of March 2023. All households utilising natural gas are eligible. This measure is envisioned to cost 600 million HRK (79.6 million EUR).
- **Direct support for the payment of gas bills** (March 2022): the use of the revenues from the emission allowances was amended to dedicate 1.2 billion HRK (160 million EUR) to help households, micro, small and medium-sized enterprises with their gas bills.
- **Price caps on energy bills** (October 2022 – March 2023): This measure was announced as part of a new energy package presented on September 8th, 2022. Households paid 5.9 eurocents/kWh up to 2500 kWh and 8.8 eurocents/kWh when consuming more than 2500 kWh, starting from October 2022 until the end of March 2023. The energy package is worth 21 billion HRK (2.8 billion EUR).

Measures for vulnerable households (receiving the GMS):

- **Doubling and extension of the monthly compensation for energy** (October 2022 – March 2023): temporary increase from EUR 26.54 (HRK 200.00) to EUR 53.09 (HRK 400) per month. Moreover, the eligibility was extended to other groups including recipients of the national benefit for the elderly, or of financial compensation for unemployed Croatian veterans from the Homeland War, or of monetary compensation for civilian victims of the Homeland War.

MAIN NATIONAL ENERGY EFFICIENCY MEASURES TACKLING ENERGY POVERTY

Special calls for renovation of houses to tackle energy poverty (June 2020 – on-going)	- First call focused on tackling energy poverty, i.e. on the most socially vulnerable groups (primarily recipients of the guaranteed minimum allowance) - Grant rate of 100% for renovation projects for houses of households at risk of energy poverty - Social welfare centres coordinate with EPC (Energy Performance Certificates) certifiers for them to provide the most vulnerable groups with a door-to-door service including full technical assistance and management for both the use of financial incentives and the implementation of the renovation project. - Launched at the end of June 2020 by the Environmental Protection and Energy Efficiency Fund (EPEEF) - The results from this pilot scheme (and the one below) are used to elaborate the national definition of energy poverty and the criteria for identifying the households at risk of energy poverty. The schemes should then be expanded. - EPEEF will launch in December 2023 a new tender focused on tackling energy poverty, with an allocation of 25 million euros to renovate 1,000

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

	houses (with co-financing covering 100% of the renovation costs, including structural and non-structural elements where needed). This new call is mostly funded from the sale of the emission allowances. It is part of a package of 225 million euros for the energy renovation of dwellings (Ministry of Spatial Planning, Construction and State Property 2023).
Pilot schemes for state-owned multi-apartment buildings (December 2021-2025)	〉 Focus on worst-performing public-owned buildings in deprived areas or other priority areas. 〉 Renovation of about 400 buildings owned and managed by the Central State Office for Renovation and Housing, selected because their occupants cannot contribute to the renovation costs and that the buildings require a major renovation (including for safety reasons). They represent a total floor area of about 300 000 m², with investments needed for their renovation estimated to HRK 355 million (EUR 47 million), whose 42% will be funded from the Recovery & Resilience Plan, the remaining coming from the State budget and left-over from the solidarity compensation funds for vulnerable customers. 〉 Renovation priorities set according to the deficiencies found in the buildings, with estimation of the related savings potentials, amounting to a total final energy savings' potential of 26 GWh per year. Installation of PV panels for self-consumption could generate about 4 GWh per year. Altogether this would save 691 tCO_2 per year. 〉 Objective to develop a detailed set of criteria for the assessment of the energy renovation potential of the worst-performing buildings, and their ranking according to energy renovation priorities, to then replicate the approach to all other residential buildings 〉 Co-financed by the EPEEF, EU funds and obligated parties under the Energy Efficiency Obligation Scheme

The table above is focused on the national EE policy measures tackling energy poverty. More initiatives exist at regional or local level, or led by stakeholders such as energy companies. As illustrated by the schemes developed as part of SocialWatt.

The LTRS 2020 also mentioned that as part of the continuation of the energy renovation programme for multi-apartment buildings, the creation of a special fund was under consideration, with the purpose to reimburse the remaining renovation costs to households at risk of energy poverty. This has the double objective to remove the barrier to the vote for the renovation project when some of the co-owners cannot afford its cost, and to tackle energy poverty. The LTRS also highlights that specific information and technical assistance are needed to make vulnerable households aware of the support available and to help them with the application process.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

FOCUS ON ARTICLE 7 EED AND THE ROLE OF ENERGY COMPANIES

The Rulebook on the EEOS (OG 41/2019) was enacted in May 2019, setting an energy efficiency obligation on energy suppliers delivering to end customers more than 300 GWh/year. The regulation of the EEOS states included a bonus (uplift factor) to incentivize the obligated parties to implement energy efficiency measures in households affected by energy poverty or living in social housing. In practice, the criteria for the bonus is defined in terms of residential areas of beneficiaries of compensation for vulnerable energy customers in accordance with the regulation on social welfare and in households in special state welfare areas (i.e. deprived areas) as defined in the law governing regional development. For the first years of the EEOS, the uplift factors are 1.1 for actions implemented in special state welfare areas, 1.2 for actions for vulnerable customers, and 1.3 for actions combining both criteria, i.e. for vulnerable customers in special state welfare areas. The uplift factors have been little used so far.

The renovation programmes that now integrate energy poverty criteria (see above) will also likely be reported to Article 7 EED. The other energy efficiency measures considered in the programme to combat energy poverty (local information centres, co-financing for replacement of appliances or heating systems) could also be reported to Article 7 EED.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH MILJENKA KUHAR (DOOR)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Based on the results of the pilot survey DOOR did in the City of Zagreb (September 2022) – citizens are in fear that the current rise in the energy prices will affect their income in a negative way. The ones who have had trouble with their energy costs before the crisis will continue to struggle. So based on the preliminary results we are expecting that there will be a significant increase in the number of households who will, as a response to high energy prices, try to reduce their costs, by lowering the temperature of heating, by not heating at all, and by reducing other costs (food, vacation and similar).

Additionally, it needs to be mentioned that the increase in the social allowance from 200 to 400 HKR was done without previous impact analysis, so we cannot be sure that this increase will have any effect. The scope of the measure is not broadened either which means that again only the ones who are already beneficiaries of the welfare system will receive this allowance, and not necessarily all consumer who could be defined as energy poor ones.

Again, based on the preliminary results of this, and previous surveys as well, we know that not only the beneficiaries of the welfare system are the ones who are vulnerable or are at risk of energy poverty.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

Since there is still no official definition or criteria on a national level, my answer would be no. Even though, the increase in the value of energy vouchers could be seen as a recent measure. The energy poverty alleviation Program, which includes the use of renewable energy sources in residential buildings in subsidized areas and areas of special state care for the period until 2025 adopted at the end of 2021, could also be seen as a recent measure. The program targets the renovation of specific buildings in specific areas mapped by the State Office for Reconstruction and Housing. The issue with the program is that it does not target specific energy poor households but energy inefficient multiapartment buildings (usually owned by the State).

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

The national energy efficiency action plan for the period 2022-2024, mentions two programs whose aim is, by implementing energy efficiency measures, to tackle energy poverty: one is the above-mentioned program, and the second one is the Energy renovation program of family houses for the period 2021- 2030 with its subprogram for energy poor households whose aim is to renovate 11.5 million m² in the period until 2030. That would mean on an annual basis to renovate an average of 12,800 houses, or 1.15 million m², which would achieve the objectives of the long-term strategies for the renovation of the national building stock. Until 2024 the goal is to energy-renovate about 7,500 family houses for owners at risk of energy

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

poverty, i.e., 562,500 m². The total investment until the end of 2024 for citizens at risk of energy poverty should amount to 421.9 million HKR (estimated needs). Estimated annual energy savings could be 0,07 PJ (20,5 GWh).

› **What is or should be the role of energy companies in the schemes to tackle energy poverty?**

Article 7 of the EED provides good guidelines for energy companies to tackle energy poverty. The funds accumulated through energy savings obligation schemes should be directed towards vulnerable customers and final users affected by energy poverty and, where applicable, people living in social housing. Meaning that energy companies in Croatia should take a more active role in: a) collecting and monitoring the data on energy consumption among vulnerable customers and final users affected by energy poverty and, where applicable, people living in social housing; b) providing information/advices to these groups; c) developing funding schemes for these groups targeting energy savings and the promotion of RES.

› **The current recast of the Energy Efficiency Directive will likely introduce an "energy poverty" ringfence or sub-target as part of the national energy savings obligation. Do you expect changes in the policy measures to meet this sub-target?**

Energy poverty is a multidimensional problem and cooperation of different sectors is a prerequisite for a wholesome solution. Article 7 provides theoretically a good basis but implementation at the national level is always more problematic.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH VESNA BUKARICA (EIHP – Energy Institute Hrvoje Požar)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Yes, an increase in number of households in risk of energy poverty can be expected, but it depends very much on the government measures and future policies.

Current measures have definitely decreased the impact on households but they expire on 31st March 2023 and we have no information at this moment what changes, if any, will take place after that.

We do not expect that anything significant will change.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

The most important one in the recent past is the one from end of 2021 – Energy renovation program of buildings - program to combat energy poverty by complete refurbishment of social and private buildings inhabited by energy poor households.

In addition, the adoption of the Program for energy renovation of family houses is expected this year, which will have a specific component focused on combating the energy poverty.

Other policy measures such as limitation of prices, increase of the maximum amount of vouchers for energy bills, are short-term measures which have a certain impact too.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

The two schemes initiated by HEP ESCO and implemented by HEP Elektra are necessary and useful but the initiative of renovation of social housing is a targeted investment which will result in significant energy savings and relief of energy poverty for the households and is therefore, from my perspective the most important as of today.

〉 How do you see the role of energy companies or ESCos (Energy Service Companies) in the field of tackling energy poverty?

I see no role for ESCos. In the situation as it is, energy poor households spend more energy because they have less efficient energy systems at home, and on the other side, they spend less because they are forced to save. I see no possibility for an ESCO company to find a possible business model for this category of beneficiaries.

To my opinion, tackling energy poverty is not a business category; it is up to the state to tackle as it is primarily a social problem.

As for utilities, it can be an advantage in the national EEO system to have such projects/savings achieved as an incentive (i.e. in Croatia 20% administrative uplift) but this is far from a sufficient incentive and the experience show that this incentive has not resulted in any new projects for energy poor households.

State energy poverty programs are better and they should be implemented by the state institutions, as part of government policy.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

〉 The current recast of the Energy Efficiency Directive will likely introduce an "energy poverty" ringfence or sub-target as part of the energy savings to be achieved by Member States. Do you expect changes in the Croatian policy measures to meet this sub-target?

At the EU level, this is a good initiative, as the directive recast will prescribe that one part of the target is to be achieved in energy poor households.

In that sense, there may not be significant changes in the policy but it will incentives the policy makers to define the policies and legal framework more precisely and in a more focused and scaled up manner. Example: if this is an alternative measure, then e.g. the Croatian Energy Efficiency Fund must allocate specific funds for the program. Before that, a comprehensive analysis needs to be done in order to have a focused and targeted approach. The change will be in the direction of streamlining so that they are more directed and implemented more regularly.

My personal opinion is that it would be a mistake to put it in EEO as mandatory.

〉 Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?

Comprehensive energy efficiency measures such as building nearly zero energy social building by the state, would enable a situation in which a minimum of amount of energy is used and human living conditions achieved.

Energy poverty should not be spread throughout many areas of energy efficiency but should be much more focused.

Energy poverty and poverty are inter-connected. We have done a good thing in Croatia as we addressed those who receive social assistance (fiscal) and thus started from the most deprived part of population. However, more analyses are required in order to go ahead with specific programs.

Another issue that is worth mentioning – we have encouraged housing construction which is used by all those who need it and those who do not. Social housing in EU is technologically state of the art in some countries, and in Croatia this is definitely not the case.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

4 COUNTRY FACTSHEET: GERMANY

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

COUNTRY FACTSHEET

March 2023

SOCIALWATT

CONNECTING OBLIGATED PARTIES TO ADOPT INNOVATIVE SCHEMES TOWARDS ENERGY POVERTY ALLEVIATION

Germany

BACKGROUND

- **No official definition** of energy poverty in Germany: energy poverty is seen as a manifestation of poverty in itself. There is **no regular official survey** either to assess and monitor the extent of energy poverty in Germany.
- The Federal government keeps a comprehensive approach to poverty alleviation. Specific funding or policies about energy poverty are thus not envisaged at the federal level. The German approach is that the **basic energy needs** are **part of the minimum subsistence level** that is part of the guaranteed rights of all citizen.
- One of the main measures for the minimum subsistence level is the housing benefit available since 2009 for the households eligible to the minimum living wage (**Wohngeld** / Hartz 4; about 500,000 households in 2019). The determination of the amount of the **housing allowance** includes the **expenses for heating** the dwelling. This housing benefit also includes a **flat-rate payment for electricity**.
- In Germany (Eurostat, 2021), around 13.0 million people are considered to be **at risk of poverty**. This corresponds to **15.8% of the German population**. In 2019, around 2.0 million people in Germany lived in households that could **not keep their flat or house adequately warm** for financial reasons. This amount corresponds to **2.5 % of the population**.
- According to Germany's Long Term Renovation Strategy of 2020, **about 30% of the residential floor area** would be rated with an energy **class of G or H** (i.e. with a final energy consumption of 200 kWh/m².year or more). The rate of worst-performing dwellings is higher for single-family houses (40% for single-family houses, and 16% for apartment blocks) and especially for older houses (60% for single-family or two-family houses built before the first Thermal Insulation Ordinance of 1978).
- One specific concern about energy poverty in Germany is related to the **high electricity prices** for households, partly due to the financing of electricity produced from renewables (EEG Law). This may explain why one of the key objectives of the German government that can be related to energy poverty alleviation is to **ensure affordable energy prices** in the process of energy transition (as highlighted in Germany's National Energy and Climate Plan).
- Households eligible to social or unemployment benefits can get support from their social or job centre, in case they cannot afford to pay their **electricity bills**. They can apply for an **interest-free loan**, as part of the Hartz 4 measures (now citizen's income). Charity organisations and local authorities also provide advice and support for households about the aids they can get and the administrative process (see e.g. Cari...

WWW.SOCIALWATT.EU

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

- In this context, **electricity disconnections** can be seen as an indicator of energy poverty. The number of disconnections carried out by network operators was 296,370 in 2018, 289,012 in 2019, 230,015 in 2020 and **234,926 in 2021** (i.e. **0.45% of the households**) (Bundesnetzagentur). The number of disconnection threats by suppliers to household customers is much higher. It was for example 4.9 million in 2018, whose around 1 million resulted in a disconnection order being issued to the relevant network operator. **Gas disconnections** have progressively decreased from 46,488 in 2014 to 30,997 in 2019, and then 23,991 in 2020 (see next point) and **26,905 in 2021**.
- Electricity and/or gas disconnections and cuts are **strictly regulated by law** (StromGVV for electricity, GasGVV for gas) and monitored by the Ministry of Economy and Energy (BMWi) and the Federal Network Agency (Bundesnetzagentur – BnetzA). For example, a disconnection must be announced four weeks in advance and three days before the disconnection itself. The supply is only resumed when the cause of the disconnection (payment debt) has been eliminated. During the Corona period, there was an agreement and **voluntary suspension of disconnections** by many energy suppliers, which greatly reduced the number of disconnections.
- The two major support and promotion programmes (see next pages) that can contribute to more structurally alleviate energy poverty are financed by the **Ministry of Climate Protection**.

MAIN RECENT MEASURES TO HELP HOUSEHOLDS FACE THE ENERGY CRISIS

In order to relieve the citizens from the effects of the energy crisis, numerous financial measures were taken with a series of "Relief packages", some of which for all citizens, but also individual measures targeted at poorer households. However, these are short-term financial measures.

Measures targeted at vulnerable groups

- **Heating cost allowance** (June 2022): one-off automatic payment to eligible households/persons at the time annual heating or ancillary cost bills are issued (summer). It benefits to an estimated 2.1 million persons in total (2.5% of the population), with amounts that were doubled between the original draft proposal in February 2022 and the final adoption in April 2022 (total funding estimated to €380 million):
    - Additional aid for the recipients of housing allowance (see above), with an amount depending on the household size (€270 for single persons, €350 for two people, then €70 for each additional person of the household) (710,000 eligible households / 1.6 million persons)
    - Special aid for trainees and students (€230 per person) (510,000 eligible persons)

In line with the comprehensive approach to alleviate poverty (see above), most of the aids to support vulnerable households in the current crisis were **not specific to energy expenses**. For example:

- In July 2022, there was a €100 or €200 one-off payment for recipients of unemployment benefits, social assistance or basic security (amount depending on their situation). There was also an immediate supplement of €20 for children, youths and young adults affected by poverty.
- In October 2022, the statutory minimum wage was increased to €12/hour.
- At the beginning of 2023, the standard requirement for the citizen's allowance was increased, the maximum income limit for mini-jobs was raised, and the child benefit was increased to € 250 per

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

month. A reform of the housing allowance was also carried out, which increased the number of eligible households as well as the amounts they can receive.

Measures for all households

- **Abolition of the EEG levy on electricity** (from July 2022, permanent): the EEG levy('green electricity levy' in place since 2000) was first reduced by about 43% (from 6.5 to 3.723 cents per kWh) from January 2022, and then completely removed from July 2022. For an average electricity consumption of 3500 kWh/year, this means bill savings of €227.5/year. The energy crisis accelerated the switch from the EEG levy (i.e. electricity customers) to a combination of Federal budget and CO_2 pricing (Energy and Climate Fund) to finance the development of RES (the abolition of EEG was initially planned for 2023). This represents about €6.6 billion/year.
- **Energy price flat rate** (September 2022): one-time energy price flat rate of 300 euros for employed, self-employed and tradespeople (payment via the employer's payslip, or prepayment of income tax reduction for the self-employed)
- **Gas tax cut** (October 2022 – March 2024): sales tax on gas temporarily reduced from 19% to 7% to compensate for the new gas surcharge.
- **Emergency aid for households and companies** (December 2022): households with heating from gas or district heating did not have to pay the advance or progress payment due in December 2022 (for a consumption limited to the level forecasted in September 2022). This emergency measure was adopted to bridge the period up to the price brake (see next point).
- **"Price brake" on electricity, gas and district heating** (March 2023 – April 2024, with retroactivity for January-February 2023): a price cap is applied to 80% of the projected or historical consumption for 2023 (limit to encourage energy savings). Cap of 12 cents/kWh for gas, 9.5 cents/kWh for district heat and 40 cents/kWh for electricity. For tenants, their landlords must pass on this relief on utility bills for example with a reduction in the fixed advance payment for operating costs). The price brake will be partly funded from the levy on the extra income made by electricity producers.
- **Hardship support for heating oil, LPG or pellets** (2023): an Economic Stabilization Fund (with €1.8 billion) was created to provide financial support to households with heating systems fuelled with oil, LPG or pellets. The Federal government and Länder need to agree on the rules to use this Fund for providing these households with heating subsidies.
- **Extension of the waiver agreement to all households** (2023): households with the basic electricity service already have the right to conclude a waiver agreement (i.e. paying off energy bills in installments without interest, preventing energy cuts). This possibility is extended to all households during the period of price brake, for electricity and gas bills.
- **No increase on electricity transmission fees** (2023): the Federal budget will be used to cover the increased costs of electricity transmission in 2023, so that these charges remain the same for electricity customers (cost estimated to €12.84 billion, including for non-residential customers).
- **Tax relief on transport fuels** (June 2022 to August 2022): energy tax on transport fuels was reduced to the minimum allowed by the European legislation. The tax relief amounted to 30 cents per litre for petrol and 14 cents per litre for diesel.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

- **Reduced monthly ticket for public transport** (June 2022 to August 2022): local and regional transport ticket for €9/month (financed by the Federal budget; €2.5 billion for the 3 months). This benefitted to the 10 million persons already having a monthly subscription, and further 52 million tickets were sold over the 3 months.
- **Increased distance allowance for long-distance commuters** (2022-2026): allowance increased by 8.6% (from 35 to 38 cents) from the 21st kilometer, to mitigate higher costs (including CO_2 pricing) for long-distance daily trips to work. The allowance applies regardless of the means of transport.
- **Postponement of the increase in CO_2 costs until 2024**

Other measures available to all households include additional funding for replacing their heating systems with heat pumps or RES systems. The BAFA subsidy scheme for example include a 10% heating exchange bonus when replacing oil, gas, coal and night storage heaters. A zero rate of sales tax is applied for the supply and installation of photovoltaic systems. However, these schemes do not include specific provisions for low-income or energy poor households.

MAIN NATIONAL ENERGY EFFICIENCY MEASURES TACKLING ENERGY POVERTY

Caritas Electricity Saving Check ('Stromspar-Check Aktiv') (2008 - on-going)

- **Free on-site energy counselling** provided by **long-term unemployed people trained to become energy-saving advisors** for the scheme, in three steps:
  - First visit to measure and analyse energy usage
  - Second visit to provide an **energy saving plan** (tailored advice) and **low-cost devices saving energy or water** such as LEDs, water-saving shower heads or switchable power strips
  - Third visit (optional) to monitor the effects after one year
- The participants can also benefit from a **voucher** (€100 to €200) **to replace their inefficient cold appliance** (if older than 10 years) with a high efficiency one.
- The scheme is aimed at **households at risk of poverty**. It started in 2008 with local projects and has **expanded progressively**, with now more than 1,000 advisers in **more than 150 locations**. It now also offers energy advice by phone or online for the areas not yet covered by the on-site visits.
- Between 2009 and March 2023, more than **412,000 low-income households** (i.e. **more than 1 million people**) were advised and 720,000 t of CO_2 were saved. The savings are **on average € 190/year** (and 300 kgCO2/year) per household. The savings can increase to €300/year when replacing the cold appliance (Stromspar-Check website).
- 20% of the trained energy advisors have found a job
- The scheme has been developed by **Caritas Germany** in partnership with the **Federal Association of Energy and Climate Protection Agencies**,

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

	coordinated by Berlin Energy Agency and funded by the Ministry of Economics and Climate Protection (BMWK) as part of the **National Climate Protection Initiative** (NKI). The funding adopted for **2023-2026** amounts to **€39 million**. This new period will have a focus on energy **savings for heating**, and advice will also cover avoiding waste and food waste (BMWK, 2022).
Preventing energy poverty with a systemic advisory approach (2012 – "ongoing")	〉 The counselling concept follows a multi-level systemic approach in which the problem-solving and debt relief process is accompanied by mediation and legal and technical issues are clarified. The counselling mediates in the system between EVU, those seeking advice, authorities and social institutions. Those seeking advice are advised by telephone, at the consumer advice centre or on site. 〉 Free counselling for people with low incomes, or with normal incomes and special burdens, as well as households that can no longer pay their energy costs and are therefore usually threatened by a supply cut-off. 〉 This access was initiated by the Consumer Advice Centre of North Rhine-Westphalia and is now offered throughout Germany. Funding is provided by the Ministry of Climate Change. 〉 The evaluation shows that after 6 to 12 months there is an improvement in 85% of the households.
Consumer Associations' Energy Savings Check (since 1978)	〉 **On-site energy consulting** provided by the local consumer associations ('Verbraucherzentrale') that is available for **free for low-income households and tenants** since 2019. The fee for other households is €30. Depending on the format, the on-site energy advice (and resulting report) is worth between €77 and 538 per hour. The remaining cost is funded by the Federal Ministry of Economics and Climate Protection. 〉 The visit is decided after a first contact by phone or online (free step for all).
Social Housing Promotion Act (Wohnraumförderungsgesetz) (2002 – on-going)	〉 This law set the framework conditions for social housing in Germany, with some margins for the Länder to implement it. 〉 One of the provisions allows **additional funding** to cover extra construction or renovation costs **to achieve higher energy performance**, with the aim **keep net rents** (paid or charged) **affordable**. 〉 The type of funding (e.g. soft loan, grant) and the criteria are set by the Länder.

The table above is focused on national EE policy measures tackling energy poverty. More initiatives exist at regional or local level. The German regions (Länder) have an important role in the implementation of energy efficiency programmes. They may implement schemes complementary to the national/Federal programmes, possibly with provisions related to energy poverty alleviation.

There are numerous other financial support mechanisms for energy savings available to households

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

(mainly for housing renovation), but these rarely focus on vulnerable or energy poor households. The same for the labelling scheme for old heating systems ('Heizungsanlagenlabel') and optimisation scheme for heating systems (' Heizungsoptimierung'). Whereas both schemes do not include specific provisions for vulnerable households, they can contribute to alleviate energy poverty, as energy poor-households tend to have old and inefficient heating systems. About 13 million boilers older than 15 years are to be labelled over seven years (see Germany's Long Term Renovation Strategy 2020).

FOCUS ON ARTICLE 7 EED AND THE ROLE OF ENERGY COMPANIES

Germany follows the approach that energy poverty is a part of poverty and to be tackled mostly with social policy. Reciprocally, the energy efficiency strategy does not include a specific social dimension. Therefore, Germany did not report any policy measure as contributing to alleviation of energy poverty, as part of the policy measures reported to Article 7 of the EED.

Similarly, the energy companies have not been directly involved in the national energy efficiency schemes. Nevertheless, they have an important role in the implementation of the measures for vulnerable households, as regards ensuring access to affordable energy and preventing energy cuts (see above). Some local energy companies have developed offers that can bring advantages to low-income households (see the example of EnergieRevolte Düren in the good practices of the factsheet about Germany done by the French observatory on energy poverty).

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH MICHAELA HOFMANN, Diözesan-Caritasverband für das Erzbistum Köln e.V., Bereich Soziale Integration

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Yes, definitely. Not only energy costs are rising, but also the cost of rent and food. Every day anew, people have to decide what to spend their money on. They then weigh up what to pay for first. And in general, incomes and also social benefits are not increasing in such a way that the percentage for energy to be paid out of the household income is decreasing. The situation will get worse for many households and the number of electricity and gas disconnections will increase.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

In Germany, Energy poverty is understood as part of financial poverty. Through minimum wages, the increase of housing allowance and the expansion of those entitled to housing allowance, attempts are made in principle to avoid electricity and energy blackouts. For people receiving basic security benefits, heating costs are covered at an appropriate level and this is usually sufficient to ensure heating. Electricity costs are only paid via the standard rate and here the problem arises that the calculation is not based on the actual costs and this results in electricity debts. More targeted measures would be desirable.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

Energy efficiency programmes are linked to climate protection and include housing and building renovations, renewal of heating systems, etc. They are not aimed at preventing energy poverty. The only programme that could come close is the electricity savings check, which is carried out in low-income households. However, this only includes advice on saving electricity costs and identifying electricity guzzlers. And there is the possibility of replacing refrigerators with high electricity consumption. However, only a subsidy is paid here.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

Many municipalities have had round tables on energy poverty for several years. These were set up to avoid electricity and gas cuts. In this context, they are the most important actors, because without the concession and cooperation of the energy suppliers, no agreements could have been made about instalment payments, deferrals, reduction of reminder fees, information about loan payments from the job centre, etc. The energy suppliers can also provide important information about the amount of the loan, the amount and type of energy debt, so that conclusions can be drawn about measures to help prevent energy poverty.

〉 Could an "energy poverty" ringfence or sub-target in Article 7 EED change the way energy poverty is tackled? (or could it make that energy efficiency measures would better include a social dimension?)

Many good measures have come about through laws or directives, so an insertion in Article 7 would certainly give an impetus to also include people's financial possibilities. However, this would then require clear specifications of what would have to be implemented or addressed so that there is also an incentive to implement energy efficiency measures socially.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

〉 Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?

It is important to recognise that people with low incomes, in contrast to people with higher incomes, consume little energy. This should be rewarded by replacing energy guzzlers, making kWh cheaper. And people who live in poor housing are not able to heat in an energy-saving way. Measures are needed here to ensure that people with a low-income can also live in an energy-efficient way.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH CAROLINE OPPENRIEDER (Specialist Coordinator Electricity Saving Check, Caritasverband Frankfurt e.V.)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Yes, we assume that the number of households suffering from or threatened by energy poverty is growing. Already in the past, the standard rates provided for electricity in the unemployment benefit II were clearly too low to cover the actual costs. This was already determined by ZEW in 2015 in a study in cooperation with Stromspar-Check. According to a recent study by the Institut der deutschen Wirtschaft, 25% of Germans spent more than 10% of their net income on energy in May 2022. This includes expenditure on heating, hot water and electricity. By comparison: in 2021 it was only 14.5%. So the burden of energy costs is growing, and naturally it is hitting low-income households the hardest, who already had to spend a significantly larger share of their income on energy before the price increase.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

In my view, the fundamental position on the issue of energy poverty has not changed. Various short-term measures have been initiated by the federal government. However, only a few of these measures were specifically designed for low-income households. A large part of the assistance was available to all households. An analysis within the framework of the Ariadne project shows that a large share of emergency gas assistance (between 56 and 66%, depending on the threshold chosen) goes to presumed non-needy households.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

Energy efficiency measures do of course play a role in the policy mix, e.g. in the building sector, but so far more under climate protection aspects. Unfortunately, the response to the energy crisis has so far focused mainly on financial cushioning and not enough on incentives to save energy. The financial cushioning was necessary, but we now urgently need measures that promote energy savings on a large scale and, above all, consider the restrictions of low-income households.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

In the summer of 2020, due to the Corona pandemic and the associated burdens, there was a moratorium from April 1st 2020 to June 30th 2020, during which consumers who had suffered economic disadvantages as a result of the Corona pandemic could temporarily suspend payments of electricity and gas bills on the basis of a legally standardised right to deferral. In addition, around 72% of the electricity suppliers surveyed in the monitoring report stated that they had voluntarily refrained from blocking their customers. The position of Caritas and thus of the Electricity Saving Check is that electricity and gas disconnections in private households should be prohibited, as the supply of energy is existential, an interruption makes an orderly life impossible and further exacerbates hardship. Fees that are currently still charged for disconnection and reconnection must be waived for recipients of transfer payments. Because energy poverty is often a combination of precarious living conditions, low income, poor education, socio-cultural habits and other factors, some of which are very individual. There is also a need for comprehensive, individual counselling that helps to reduce consumption.

〉 Could an "energy poverty" ringfence or sub-target in Article 7 EED change the way energy poverty is tackled? (or could it make that energy efficiency measures would better include a social

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

dimension?)

The inclusion of appropriate criteria would certainly lead to the issue becoming more visible, even independently of acute crises. This is desirable. Low-income earners more often live in dwellings with a poor energy condition (old buildings, poorly insulated, old heating systems with night storage heaters and oil heating) with a corresponding high energy demand. Ideally, social criteria in the Energy Efficiency Directive should, for example, lead to such low performance buildings being refurbished as a matter of priority, whereby care should be taken that energy refurbishments do not lead to strong rent increases and thus to displacement.

› **Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?**

Energy poverty and socially just climate protection must be considered together. Consistency, efficiency and subsistence are necessary for both. There is a strong correlation between energy consumption and income; accordingly, we must also work towards ensuring that higher-income households drastically reduce their consumption. Lower-income households are not the cause of the climate crisis, but the ones who suffer most from its effects.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH ANTJE KAHLHEBER, project leader of 'Energy cost advice for low-income households' of Rhineland-Palatinate's Consumer Association

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Yes, we are observing a significant increase in enquiries in our advisory services.

As early as 2021, around 5 million households in Germany were threatened with disconnection of electricity or gas supply (BNetzA monitoring report 2023). This corresponds to around 12 percent of households. If one takes into account that less than half of the households use gas for heating and that households that have already been disconnected are not included in this figure, the number of unreported cases is probably even higher. Due to the energy price crisis, we expect 15-20 percent of households to have problems paying their energy bills (heat and electricity) in the course of the year.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

The German government has taken a variety of measures to cushion the burden of increased energy prices. Some of these are quite unspecific and also benefit high-income households. Measures that are specifically effective for low-income households include flat-rate energy allowances for pensioners, students and recipients of social benefits, an increase in child benefit and child supplement, heating allowances for recipients of housing benefit and BAföG, and the reform of housing benefit (see here: https://foes.de/publikationen/2022/2022-11_FOES_Energiepreiskrise.pdf).

In practice, the current changes in energy law are of great importance, among other things, to avoid blocking by means of an avoidance agreement, a three-month payment moratorium as well as relief under social law for one-time applications for social benefits - for example, for the month of a heating cost arrears payment or fuel delivery.

The overall effect of the measures will only become apparent over time, especially since there is currently an implementation backlog at several levels: Not all suppliers are able to implement the price brakes on time; the social welfare authorities lack the personnel capacities to process applications quickly and some customer centres can no longer be reached to negotiate the instalment amount in an avoidance agreement.

In addition, classically vulnerable households include many people who are uninformed or limited in their ability to act - due to language barriers, illness, overwork or lack of education. It is possible that these households are not reached in time by all measures because they are not able to use their possibilities. For such vulnerable households, a possibility - yet to be established in Germany - of socially graduated direct payment of relief would be easier..

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

With regard to heating energy, the energy efficiency programmes in Germany do not specifically address low-income households. For them, energy modernisation measures are usually not affordable, even with government subsidies. In addition, most low-income households rent and have little influence on the energy condition of their house.

In contrast, free advice on energy saving is supported or financed by the state, e.g. by the consumer centres with a nationwide network of advisors, as well as by the Caritas electricity saving check, which specifically addresses recipients of social benefits and also has the possibility of promoting low-investment measures through savings articles

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

Currently, the legislator has imposed many additional obligations on suppliers, which have strengthened the position of consumers. Now the implementation of these obligations must be ensured. Suppliers should design their receivables management in such a way that consumers are still able to settle arrears through instalment plans, i.e. warn early, block late. Often, arrears have already accumulated to such an extent that disconnections can no longer be averted. We experience time and again that utilities cannot be reached or do not react promptly, even when we have worked out solutions for the debts. In the case of disconnections, short-term accessibility must be guaranteed.

For many households, free monthly statements would be a great help in controlling their consumption.

In connection with the planned rollout of smart meters, it was unfortunately neglected to equip them with a low-threshold benefit for customers. For example, a display showing the monthly electricity costs. Only a few people know how to extrapolate their annual consumption and estimate whether the monthly payment is sufficient or whether an additional payment is imminent. A direct feedback of consumption and costs would probably have a positive effect on consumption behaviour.

We also see a need for action at the level of the national control authorities. The Federal Network Agency must monitor market access more closely, and the abuse supervision by the Federal Cartel Office, which according to the current amendment is to control excessive prices, must be carried out promptly. The ranges of electricity and gas prices are currently extreme and cannot always be explained by different procurement strategies of the suppliers. Electricity and gas prices that are above certain limits should therefore be reviewed immediately.

We do not see energy saving and energy efficiency measures as a core task of the utility industry but as a task of economically independent institutions. Utilities should focus on low-cost supply, transparency of consumption and costs, and quick help with debt settlement to prevent energy poverty.

〉 Could an "energy poverty" ringfence or sub-target in Article 7 EED change the way energy poverty is tackled? (or could it make that energy efficiency measures would better include a social dimension?)

Improving the energy quality of apartment buildings is essential for combating energy poverty in the area of heating energy. Therefore, the implementation of minimum energy standards, as provided for in the EU Buildings Directive, seems to be expedient. Unfortunately, the current decision has moved far away from the obligation to renovate existing buildings as originally envisaged, the timetable has been extended and numerous exceptions have become possible, even in the area of social housing.

This does not help energy-poor households and counteracts the goals formulated in the EED to combat energy poverty through efficiency measures.

As a way for landlords to make investment in energy-efficient buildings and heating systems attractive, the introduction of warm rent models is being discussed (e.g. Agora Energiewende, A Building Consensus for Climate Neutrality). If rent and heating costs are paid together, the incentive for landlords to keep heating costs low should increase. This would require changes in the EED, which prescribes consumption-based billing. However, whether this model achieves the desired effects and how a savings incentive for tenants can be

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

maintained would have to be examined more closely and tested in practice.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

5 COUNTRY FACTSHEET: GREECE

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

COUNTRY FACTSHEET

March 2023

SOCIALWATT

CONNECTING OBLIGATED PARTIES TO ADOPT INNOVATIVE SCHEMES TOWARDS ENERGY POVERTY ALLEVIATION

Greece

BACKGROUND

- Within the Action Plan for Alleviating Energy Poverty (2021) a number of indicators have been examined for the quantification and monitoring of the phenomenon of energy poverty. **Indicator 'I&Ileq'** was selected as the primary indicator to define energy poverty in Greece: **energy poor households are those households with an annual energy cost lower than 80% of the annual cost that covers the minimum required energy consumption, and at the same time with a net annual income lower than 60% of the respective equivalent median income based on the number of people in each household, according to the equivalence scale of the OECD**.
- The evolution of energy poverty in Greece is supported by conflicting evidence. According to the Annual Progress Report of the Action Plan for combating Energy Poverty (2021), when considering the M/2 and 2M indicators, energy poverty levels increased between 2019 to 2020 (by 2-3%), whilst the opposite trend was observed with the indicators "Inability to keep home adequately warm" and "Arrears on utility bills". Overall, it is estimated that **497,000 households were affected in 2020 by energy poverty in Greece** (approximately **12%** of total households) based on indicator I&Ileq, which represents more households (by 0.8%) than 2019, but less (by 1.8%) than 2016.
- According to the Long Term Renovation Strategy – LTRS March 2021, Greece had approximately 4.632 million residential dwellings in 2015, 56% of which were built before 1980 (the year that the first regulation on thermal insulation of buildings was established). Furthermore, 54% (2.515 million) of the main residential dwellings in 2015 were multi-dwelling buildings. **About 67% of the dwellings are classified under energy classes E to G**. Compared to the EU average, **households in Greece have a high energy usage, mainly due to a high consumption for space heating** (189 kWh/m².year) that represent 66% of the final energy consumption in the residential sector. Heating oil was the primary type of fuel used (48%) in 2015, followed by biomass (29%) and natural gas (12%).
- Greece had the **highest electricity prices in the EU** in 2022 (Eurostat). In addition, approximately 39% of poor households report that they cannot afford adequate heating in winter, whereas the corresponding percentage of non-poor households is 14.1% in 2021. On the other hand, 50.7% of poor households report that they are confronted with payment arrears regarding the utility bills for electricity, water, natural gas, etc., whereas the respective share for non-poor households is estimated at 30.1% (Hellenic Statistical Authority) The European Anti-Poverty Network (EAPN) speculates that energy poverty makes people use cheaper and sometimes unsafe forms of heating, resulting in urban fires (Poverty Watch 2022 Greece).

WWW.SOCIALWATT.EU

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

- The Ministry of Environment and Energy published the Energy Poverty Action Plan, and is also in charge of national energy efficiency policies. The Centre for Renewable Energy Sources and Saving (CRES) is the official advisor of the state in matters of national policy, strategy and planning of renewable/energy efficiency, whilst it has also developed the National Energy Poverty Observatory. The Regulatory Authority for Energy (RAE) supervises the application of social electricity tariff (see below) and the consumer protection measures set in the Energy Law 400/2011, including partial and interest-free payment of bills and suspension of disconnections.
- A **Social Electricity Tariff** is in place since 2011, with eligibility criteria based on income and property value. Its cost is covered by the utility service charge included in electricity bills (except for the beneficiaries of the social tariff). Eligible households have to apply for it. The discount is 4.5 or 7.5 Euro cents/kWh (depending on the household category) with a limit of electricity consumption (1,400 to 2,000 kWh for 4 months, depending on the household size). In addition, a **heating oil allowance** (I.e. financial support to cover heating oil costs) is in place since 2013, and from the winter of 2020/2021 there is also for natural gas and biomass.
- The NECP (National Energy and Climate Plan, December 2019) specified the **national target** to reduce energy poverty by 50% in 2025 and by 75% in 2030 compared to 2016, meeting levels below the EU average by 2030. The NECP also outlined policy measures that were further specified in the Action Plan for Alleviating Energy Poverty in 2021. A first group of proposed measures aims at providing vulnerable households with **direct support to cover their energy bills**: e.g. M1 – improvement of the social tariff; M2 – "energy vouchers" to help with the increase in energy prices (for electricity, gas and biomass); M3 – measures for consumer protection (automatic migration of vulnerable customers to the updated 'Universal Service' regime, and a fast-track reconnection process). A second group of proposed measures is about **energy efficiency improvements**:
  - M4 - **Energy upgrades of residential buildings and installation of renewable energy sources** (2021 - 2030), aimed to improve the dwellings of 120,000 energy poor households with deep energy retrofits and renewable energy systems (planned budget of €1.8 billion).
  - M5 - **Providing incentives to existing mechanisms for actions targeting affected households in coal regions** (2021 - 2030), aimed at installing energy efficiency and renewable energy technologies in dwellings of 10,000 energy poor households in regions affected by the delignitization of the power generation sector (planned budget of €210 million).
  - M6 - **Providing incentives to existing mechanisms for actions targeting affected households - Energy Efficiency Obligation Schemes** (2021-2030), aimed at facilitating obligated parties target energy poor households by providing incentives (planned budget: €70 million).
  - M7 - **Using energy communities for alleviating energy poverty** (2021 - 2030), aimed at amending the regulatory framework and providing incentives for tackling energy poverty through energy communities, for 90.000 energy poor households to benefit from local RES (planned budget: €100 million).
  - M8 and M9 - **Information and education for energy poor households** (2021 - 2030), aimed at providing targeted energy efficiency and sustainable energy use advice, either from the obligated parties as part of the EEOS (objective to reach 350,000 energy poor households) or from programmes led by the Ministry of Energy and Environment (objective to reach 100,000 energy poor households; planned public budget: €10 million).

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

MAIN RECENT MEASURES TO HELP HOUSEHOLDS FACE THE ENERGY CRISIS

A series of measures were adopted to help households deal with increased energy prices in recent years, including:

- **Subsidy for electricity** (from October 2021 onwards): Initially announced in September 2021 with €9 per month (3 cents/kWh for up to 300 kWh/month), this subsidy was doubled to €18 per month in October 2021 for households connected to low voltage lines, whilst it was 33% higher (€24 per month) for households under a social tariff. As shown in the table below (not exhaustive), the State subsidy evolved over time, adapting to the changes in electricity prices:

Dates	Nov-Dec 2021	January 2022	May 2022	July 2022
For all households	13 cents/kWh	4.2 cents/kWh	€56.6/month[8]	20 cents/kWh
Under the social tariff	15 cents/kWh	18 cents/kWh	21.5 cents/kWh	24 cents/kWh
Consumption limit	300 kWh	300 kWh	See footnote	none

Dates	August 2022	Feb 2023	April 2023
For all households	33.7 cents/kWh	4 cents/kWh	1.5 cents/kWh
Under the social tariff	37.7 cents/kWh	8.8 cents/kWh	5.4 cents/kWh
Consumption limit	none	500 kWh[9]	500 kWh

- **Suspension of network fees on natural gas** (from November to December 2021): this measure was estimated to reduce bills of households with an average consumption of 2 MWh/per month in the winter by €20 to €40 per month.
- **Subsidy for gas** (from January 2022): State subsidy for all consumers, adjusted monthly. This for example amounted to 2 cents/kWh in March 2022, and 4 cents/kWh in April 2022 for households.
- **Power Pass** (June 2022): special financial support that can be up to €600 per household, to cover 60% of the increase in the electricity prices for households' electricity bills from December 2021 to June 2022 (with net income threshold set to €45,000 per year). As a result, a total of €295.6 million from the State budget was paid to 866,181 beneficiaries (Ministry of Energy, September 2022).
- **Suspension of the adjustment clause in contracts for electricity supply** (August 2022 – July 2023): measure aimed at stabilizing retail prices (by disconnecting them from the marginal generation prices). Moreover, electricity suppliers have to announce prices one month in advance, and consumers can change providers free of charge, without having to pay a penalty due to early withdrawal.
- **Increase and extension of the heating allowance** (winter 2021/2022 and 2022/2023): the allowance is extended to blue kerosene (in addition to heating oil, natural gas, LPG, firewood and pellets, and district heat) and to more households (higher thresholds on income and property value). The basis of calculation and the maximum amount of subsidy was also increased. In particular, for the winter 2022/2023, the amount was doubled (up to max €1,600) for new beneficiaries who do not use

[8] 20.5 cents/kWh up to 150 kWh ; then 16 cents/kWh from 151 up to 300 kWh; then 10 cents/kWh beyond 300 kWh (for households under the social tariff, the 21.5 cents was applied to their full consumption).
[9] 90% of Greek households consume less than 500 kWh/month. Households with higher consumption can still receive the subsidy, provided that they reduce their average daily consumption by 15%, compared to the previous year.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

natural gas and for existing beneficiaries that switch from natural gas to another eligible energy type. A budget of €300 million was planned by the State for the winter 2022/2023 (vs. €174 million paid for the winter 2021/2022).

- When announcing on 24 March 2023 the update of the measures to face high energy prices, the Minister of Energy and Environment pointed that the Greek government spent more than 9 billion euros from August 2021 to March 2023 (for all energy consumers, not only households) in measures to mitigate the increases in energy prices. About 70% of this amount comes from the taxation of the surplus profits of electricity companies, and the revenues from the Emission Trading System (ETS) auctions, that both feed in the Energy Transition Fund.

MAIN NATIONAL ENERGY EFFICIENCY MEASURES TACKLING ENERGY POVERTY

Programmes for energy efficiency renovations of buildings

National programmes for energy efficiency renovations have been implemented in Greece since 2011 for all households. The programmes were designed to make the participation of vulnerable and poor households possible, by providing higher subsidies to low income households. However, the share of low-income households who have benefitted from these programmes is unknown. Nevertheless, the 'Save 2021' programme includes a separate budget for the lowest-income households.

Savings at Home *(Exoikonomisi kat' Oikon;* 2011 – 2016)	- A **30%** subsidy rate to households in the lowest income category (two more categories with a 15% and 0% subsidy rate), together **with a free-interest loan** for the remaining amount. Maximum eligible cost: €15,000 per dwelling (including VAT). - Energy efficiency interventions to increase by at least one energy class. - 57% of the about 27,000 participating dwellings were upgraded to class C-D and 14% to class A-B (CRES). Total budget of **396** M€ (co-funded by the European Regional Development Fund – ERDF).
Savings at Home II *(Exoikonomisi kat' Oikon II;* 2018 – 2021)	- **Up to 70%** subsidy rate (the main subsidy rate is 60% plus bonus per dependent child) to households in the lowest income category (7 categories for this programme), together **with a free-interest loan** to cover the remaining amount. Maximum eligible cost: €25,000 per dwelling (including VAT). - About 50,000 dwellings were renovated. Total budget of **503** M€ (co-funded by the ERDF).

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

Saving Autonomous (*Exoikonomo Autonomo*; 2020 – on-going)	〉 A **85%** subsidy rate to households in the lowest income category, including a 10% COVID-19 premium and a 10% energy premium for reaching an energy class B (5 rates/income categories), and up to 95% for households in coal transition regions. Complemented with soft loans to cover the remaining costs. 〉 Energy efficiency renovation of dwellings to gain at least 3 energy classes, including the installation of renewable energy systems (e.g. solar PV, energy storage systems, with batteries electric vehicle charging points). 〉 Total budget of **896** M€ (co-funded by the ERDF).
Save 2021 (*Exoikonomo 2021*; December 2021 – on-going)	〉 A **75%** subsidy rate (65% if not owned by the beneficiary) to households in the lowest income category (5 rates/income categories) together **with a free-interest loan** to cover the remaining cost. 〉 Energy efficiency renovation of dwellings to gain at least 3 energy classes so that primary energy savings are over 30%. 〉 Applications are ranked and selected according to the effectiveness of the proposed interventions (50% of the score), the household income level of beneficiaries (14% of the score) and other criteria, whereas previous schemes worked on a first come-first served basis. 〉 The programme also includes a **separate budget for the lowest-income households** (with the 75% grant rate), also progressively increased to reach 202 M€ for 14,246 households by August 2022. 〉 Part of the Recovery and Resilience Plan, with a total budget progressively increased to about €1.2 billion. 87,578 households beneficiaries by August 2022 (exceeding the initial objective of 50,000).
Save – Renovate for young people (*Exoikonomo – Anakainizo*; to start later in 2023)	〉 A 75% subsidy rate (65% if not owned by the beneficiary) for energy efficiency retrofits paired with a 30% subsidy for conventional renovations, for dwellings owned by young people (18 to 39 years old). An additional 15% subsidy is given for dwellings located in municipal units with a population under 2,000 residences.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

Programmes for replacing appliances

As part of the measures to face the current energy crisis, two new programmes have been announced recently for replacing inefficient appliances, with criteria according to income levels.

Recycle - replace my appliance (2022-2023; guide for applicants)	〉 Financial aid for **replacing old electrical appliances** (air conditioners, refrigerators or freezers) with new energy-efficient ones (up to 3 devices per application, and 1 application per adult). 〉 **Grant depending on income levels** (4 categories, from 30% to 50%), with maximum grant values per type of appliance. 〉 Applications are **ranked and selected according to economic and social criteria** (income per household member; family member with a disability; single parent families; number of dependent members). 〉 Total budget of 286 M€ co-financed by the ERDF. 〉 367,185 vouchers for air conditioners; 271,075 for refrigerators and 74,358 for freezers were issued by 10 April 2023.
Recycle - Change Water Heaters (from April 2023)	〉 Grants to replace electric water heaters with **solar water heaters**. 〉 Subsidy rate and maximum **amount depending on the income level**: from 50% (annual income per household member less than €30.000) to 60% (annual income per household member less than €5.000). 〉 Applications are **ranked and selected according to economic and social criteria** (average annual income per family member, families with disabled members, single-parent families with at least one dependent child, families with dependent members). 〉 Objective to support at least 120,000 households with a budget of €100 million, co-funded with EU funds (Ministry of Energy, 2023).

Other programmes for energy poor households

A new programme 'PV on roofs' was recently announced (end of March 2023) for installing solar PV panels with storage systems on the roofs of residential buildings and for installing PV systems for farmers self-consumption, with a budget of €200 million and subsidy rates up to 75% for households. However, it is not known yet what special provisions it will include for low-income and vulnerable households.

Another scheme was pre-announced in September 2021, as part of the Recovery and Resilience Plan, for municipal energy communities to build PV stations to provide vulnerable households with electricity at no cost.

This section focuses on national policy measures tackling energy poverty. More initiatives exist at regional or local level or led by stakeholders such as energy companies, as illustrated by the schemes developed as part of SocialWatt (see also the Energy Efficiency Obligation Scheme below).

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

FOCUS ON ARTICLE 7 EED AND THE ROLE OF ENERGY COMPANIES

In order to comply with Article 7 of the Energy Efficiency Directive (2012/27/EC), Greece is implementing an Energy Efficiency Obligation Scheme (EEOS), along with alternative policy measures (e.g. this includes the renovation programmes Saving at Home I and II in the period 2014-2020).

The EEOS **started in 2017** for a first period running until the end of 2020. All electricity, gas and fuel suppliers had to achieve the energy savings targets set. These did not include an 'energy poverty' sub-target. However **energy savings in low-income/vulnerable households got a bonus factor (x1.4)**. Therefore, the EEOS triggered actions that also benefited energy poor households with programmes including **awareness raising and behavioural measures**. In the new period (2021-2030), the EEOS does not offer a bonus factor for low-income/vulnerable households, but only for the implementation of technical measures.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH CHRISTOS TOURKOLIAS (Centre for Renewable Energy Sources and Savings)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Obviously, the current energy crisis has already intensified the phenomenon of energy poverty in Greece. The energy prices have been increased enormously, while the continuous rise of the inflation has increased the cost of living, reducing considerably the disposable income of the households. The impact of the energy crisis is depicted through the performance of the energy poverty indicator in 2021, which presented an increase equal to 11% compared to 2019. It should be noted that the increase in 2022 is expected to be significantly higher compared with the respective one in 2021.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

The Ministry of Environment and Energy has introduced a combination of measures to tackle energy poverty triggered by the energy crisis. The provision of both price and income supports constitute the most important measure diminishing the considerably high increase of energy poverty levels in Greece. Additional measures have also been carried out, such as the conduction of awareness-raising and educational measures and the imposition of taxes on windfall profits. Last but not least, the programmes for the energy renovation of the residential buildings constitute also an alternative option for combating energy poverty. Indicatively, it is mentioned that the number of the low-income households, which participated into "Exoikonomo 2021" (Save 2021) programme, is higher compared with "Exoikonomo-Autonomo" (Save Autonomous) programme. Finally, a dedicated budget for low-income households (100 million €) was foreseen in "Exoikonomo 2021", which was financed by the Recovery and Resilience Plan in order to combat energy poverty.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

The energy efficiency obligation scheme has already been included within the Action Plan for the alleviation of Energy Poverty as a potential measure to tackle energy poverty in Greece. More specifically, two targeted measures have already been incorporated focusing on the implementation of low-cost technical measures and the conduction of awareness-raising and educational measures in energy poor households.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

Generally, the role of energy companies can be meaningful taking into consideration the fact that they tend to identify the most cost-effective measures to achieve the specified energy efficiency target. Nevertheless, the objective difficulty for energy poor households to invest own funds can hinder the implementation of energy efficiency measures among energy poor households, as energy companies will prefer the implementation of energy efficiency measures in other end-users. Therefore, it is crucial to ensure the design and implementation of targeted measures in energy poor households so as to support the energy companies and to reduce the incurred cost. Last but not least, the identification of energy poor households should be facilitated with the utilization of specific criteria, while the adoption of the framework for on-bill financing may support the further implementation of energy efficiency measures.

〉 The current recast of the Energy Efficiency Directive will likely introduce an "energy poverty" ringfence or sub-target as part of

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

the national energy savings obligation. Do you expect changes in the policy measures to meet this sub-target?

The potential introduction of an energy poverty ringfence or sub-target as part of the national energy savings obligation is imperative in order to ensure that energy companies will play an essential role in the alleviation of energy poverty. Nevertheless, the general framework should be developed in regard to the calculation methodologies for estimating the delivered energy savings taking into account the rebound effect. Additional incentives should be provided, such as indicatively the potential removal of the additionallity criterion in the case that the energy efficiency measures are implemented in energy poor households by energy companies within the framework of Article 7 of the EED. Moreover, the synergies with the PV systems should be fostered also taking into account that RES constitutes a fundamental pillar for the alleviation of energy poverty in combination with energy efficiency measures.

› **Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?**

In any case the confrontation of energy poverty should be considered as the main priority, irrespective the fact that the potential energy savings are lower within the framework of Article 7 of the EED.

The energy renovation of residential buildings is the only viable solution to combat energy poverty on a long-term basis.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

6 COUNTRY FACTSHEET: IRELAND

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

COUNTRY FACTSHEET

February 2023

SOCIALWATT

CONNECTING OBLIGATED PARTIES TO ADOPT INNOVATIVE SCHEMES TOWARDS ENERGY POVERTY ALLEVIATION

Ireland

BACKGROUND

- **Definition** of energy poverty (Ireland's Department of the Environment, Climate and Communications – DECC website): "*Energy poverty can be described as a situation whereby a household is unable to attain an acceptable standard of warmth and energy services in the home at an affordable cost*." It is more concisely defined as the "*inability to heat or power a home to an adequate degree*" in Ireland's Strategy to Combat Energy Poverty 2016-2019.
- The general definition is transcribed in a **main indicator** used to measure energy poverty: "*households are currently defined as energy poor if they spend more than 10% of their disposable income on energy costs in any one year, in severe energy poverty if spending more than 15%, and in extreme energy poverty if spending 20% or more*" (DECC website). Using this indicator with the 'objective method' (estimating the level of energy expenses needed to heat their home adequately), around 28% of households were at risk of energy poverty in 2015 (Government of Ireland, 2016). Using the same indicator with data of households' actual energy expenses ('expenditure-based method') gives a very different estimate of about 13% in 2015/2016 with a huge increase to 29% in 2022, estimated by modelling the impacts of the strong increase in energy prices (Barrett et al., 2022).
- Ireland has the youngest dwelling stock in the EU. However, about 58% of the dwellings were built before the first building regulations including explicit energy performance requirements (issued in 1992). The average final energy consumption per dwelling has decreased from 24 MWh/year in 2005 to 18 MWh/year in 2018. **9 to 15% of the dwellings** were in the **least efficient classes (F or G)**, depending on the dwelling type. Space heating was still supplied in 2018 mostly from heating oil (38%), and then from electricity (25%) and natural gas (22%). Individual homes represent close to 88% of the dwellings, and about two-thirds of the dwellings are owner-occupied (all data from Long Term Renovation Strategy 2020).
- Ireland has already published **two strategies to combat energy poverty**, the first in **2011**, and the second in **2016** (Government of Ireland, 2016) which was **reviewed in 2022** (Government of Ireland, 2022). Its main goals are to improve the energy efficiency of the homes of households most at risk of energy poverty, support lower income households with their energy costs (see below), and minimize the cost for consumers of action on climate change and security of supply. Three **national energy efficiency schemes** have been implemented to achieve this (see table below).
- **Regular aids with energy costs** (in place before the energy crisis) include:
  - The **Fuel Allowance**, in place **since 1942**: direct support to cover heating costs during winter months (€630 in 2018/2019), for households receiving long-term social welfare benefits

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

(370000 households in 2018/2019) (see below about special recent increases).

- The **Electricity & Gas Allowance**, in place since at least 2004: direct support as part of the 'Household Benefits Package' to eligible households (people aged 70+, and people under 70 under special circumstances). One person per household can apply for a 35-euro monthly (year-round) subsidy to cover their gas or electricity costs. 476,000 people received the allowance in 2021, to a total cost of 195.31 million euros.

Since 2021 the **sharp increases in the prices of all energy sources** in Ireland following the energy crisis have led to a strong increase in households facing energy poverty. As of April 2022, price for home-heating oil was up 86%, electricity 45%, gas 53%, and solid fuels 32% compared to 2015. If prices were to rise another 25%, over 40% of households in Ireland would be in energy poverty (according to the 10% indicator with the 'expenditure-based method')(Barrett et al., 2022). In response to the current energy crisis and consequent cost of living increases the Irish government has introduced more immediate and broadly targeted measures as part of their '**National Energy Security Framework**'.

MAIN RECENT MEASURES TO HELP HOUSEHOLDS FACE THE ENERGY CRISIS

- **Fuel Allowance (permanent) + extra payments** (2022): eligible households on long-term welfare payments can receive a weekly fuel allowance (33 euros per week from September 2022 to April 2023). For the year 2022 households received an extra 400 euro and more households have been made eligible to the scheme. In winter 2022/2023 371,000 households will receive fuel allowance (around 20% of all households). The scheme will be expanded in 2023, with 81,000 additional households (with one or more people aged 70+) becoming eligible for the scheme.
- **Electricity Cost Emergency Benefit Scheme I & II** (2022 – 2023): each domestic electricity account holder received a €200 subsidy from the national government towards their electricity bill in March 2022, to be followed by three further instalments of €200 over the course of 2022/2023
- **VAT reduction on domestic electricity and gas bills** (May 2022 – May 2023): VAT has been reduced from 13.5 to 9 percent for all domestic users, this can have a preventative effect on energy poverty.
- **Enhanced budget and grant rates for ongoing home renovation programmes** (2023): the 2023 budget for fully funded energy upgrades to homeowners receiving certain welfare payments has been tripled (see table below). Also, grants for attic and cavity wall insulation are increased to cover 80 percent of typical costs for these measures and are available to all homeowners.
- **Moratorium on household disconnection from gas/electricity** (2022 – 2023): the usual obligatory 1-month pause on household disconnections for non-payment has been extended to three months (December 2022 – February 2023), and for vulnerable customers it has been extended to six months (October 2022 – March 2023)
- **Excise duty reduction on petrol and diesel** (March 2022 – February 2023): a fossil fuel subsidy targeting all end users but can have a preventative effect on energy poverty.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

MAIN NATIONAL ENERGY EFFICIENCY MEASURES TACKLING ENERGY POVERTY

Free Energy Upgrades/ Better Energy Warmer Homes Scheme (ongoing)	〉 Free energy upgrades paid by the national government 〉 Target group: homeowners most at risk of energy poverty that receive welfare benefits. **Prioritises homes** built & occupied before 1993 with a BER (EPC) of **E, F, or G**. 〉 **143.000 free upgrades** have been delivered since start of the scheme. For 2022 a budget of 109 million euro has been allocated, supporting 400 renovations per month (up from 177 per month in 2021). The scheme currently has a waiting time of around 18 – 24 months. For 2023 the **budget** has been **increased to 337 million euros**.
Communities Energy Grant scheme (ongoing)	〉 Grants supporting energy efficiency upgrades in buildings. Energy poor homeowners can receive grants of **up to 80%** of renovation costs, while households in municipal owned homes can get up to 35% and in social housing up to 50% funding. 〉 Target group: (energy-poor) homeowners, community groups, private sector organisations, and public sector bodies including social housing. 〉 In 2022 there will be **15 million euro for home retrofits**.
Energy Efficiency Obligation (EEOS) Scheme (ongoing)	〉 **Direct support** by the obligated party (large energy suppliers) for households to implement energy efficiency measures **to reach BER (EPC) B2**. 〉 Target group: all households, including **ringfence of savings to be achieved in fuel poor households**. **Eligible energy poor homes** must have a BER (EPC) of **D2 or worse** and the inhabitants must be recipients of different types of welfare payments, live in a home owned by a local authority or housing association, or in an area designated for revitalisation. 〉 Between 2014 and 2020 energy efficiency actions were implemented in more than 290.000 dwellings. For 2017/2018 (most recent data available) around 3 percent of achieved savings came from energy poor households(Ensmov EU, 2020), 2 percent below the target.

The table above is focused on the national EE policy measures tackling energy poverty. More initiatives exist at regional or local level or led by stakeholders such as energy companies. As illustrated by the schemes developed as part of SocialWatt.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

FOCUS ON ARTICLE 7 EED AND THE ROLE OF ENERGY COMPANIES

In the period 2014-2020, the only measure reported by Ireland to Article 7 EED and that had a provision related to energy poverty was the **Energy Efficiency Obligation Scheme** (EEOS). Based on the NECP, this remains the same so far for the period 2021-2030.

As obligated parties under the EEOS, large energy suppliers in Ireland contribute to the implementation of energy efficiency measures in energy poor homes. From 2017 onwards, **5 percent of the EEOS target** in Ireland has to be achieved in energy poor households. For the 2022-2030 period this amounts to one third of residential savings totalling 1.821 GWh cumulative final energy savings (Government of Ireland, 2021). Eligible energy efficiency measures include improving envelope insulation, optimizing and replacing heating systems (including heat pumps), and improving control and monitoring systems. Moreover, in the 2022- 2030 period residential efficiency measures should be taken as part of a pathway (with a minimum uplift of 100kWh/m^2 when implementing measures) **towards a deeper renovation** (to BER B2) of the home and **refrain from single and shallow measures**.

Households receiving support through the EEOS can **combine this with the other national level efficiency schemes** outlined above. These other schemes have not been reported to Article 7 EED to avoid double counting.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH Ray Breen (ESG Leadership Development & Engagement Lead, Electric Ireland/ESB)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Yes, there definitely will be an increased number. According to some estimates even up to 60% of the population. But that also shows the difficulty of using the energy poverty definition based on energy spend as percentage of income.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

Unfortunately a lot of the support for fuel poverty in Ireland is reactionary, just dealing with fallout of increased bills, rather than treating the underlying symptoms. In response to the energy crisis a fund from government to alleviate fuel poverty has been set up. But this support is going to everyone, not just fuel poor. Initially households have been given a €200 rebate on their energy bill, this has been expanded with a further €600 euro in tranches of €200. Energy supply companies are discounting it directly from people's bills. Also, the moratorium on disconnecting households that has been in place since the covid-19 pandemic has been extended until spring 2023. Individual companies have also stepped up and provided support. For example, our company Electric Ireland as largest supplier has provided 2.5 million euro in support households in arrears with their bills.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

On a more systemic level, more support has gone to alleviating fuel poverty through bringing homes up to standard. Although this will only address the heating side of the energy bill, while electricity bills are also at all-time highs right now.

The government has brought in a few small incentives to assist people. Such as one-stop-shop giving up to 50% grants for deep retrofits. But this mainly supports people that can afford to spend 50 to 60 thousand euro on a renovation. Which is not those most at risk of energy poverty. Also through government programs eventually every home that is owned by a local authority/housing authority will have gotten funding by 2030.

In general in Ireland you could divide households into four cohorts. A top layer of homeowners that can afford to renovate their home by themselves, the lower-income tenants living in council or housing authority homes that will get their renovations paid for, and the middle groups of private homeowners without enough funds and private rentals. The real struggle in Ireland will be in those middle-income groups, as there are very few incentives for them in the current policy system. Most people in energy poverty will thus also be in the private tenant group. More and more of the people in this group will fall into energy poverty.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

The Energy Efficiency Obligation Scheme is quite an important part of energy efficiency and energy poverty policy in Ireland. Up to 2021 20% of the obligations had to be fulfilled through interventions in the residential sector, reducing the risk of households going into energy poverty. However, with the new system that will hopefully enter into force in 2023 this has been reduced to only 10%. In both the old and the new system there is 5% ringfence for energy poor households. However, the new system will likely be further delayed due to new obligated parties (oil fuel providers) engaging in legal challenges.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

As an obligated party we see that the scheme has moved away from giving credits for lower-level 'easy' measures such as smart heating controls, attic insulation, and boiler upgrades for individual homeowners/tenants towards supporting large-scale area-based works and deeper retrofits. The minimum uplift per home needs to be at least 100 kWh/m² or to BER B2, and we can only do homes with a D label or worse.

But these rules apply to energy poor as well. This has driven us to only being interested in working directly with councils on doing deep retrofits on 30 to 40 houses or more, and we will give them support and get the energy credits in exchange.

Although this means larger amounts of energy will be saved in a shorter amount of time, it also means much fewer households will be reached. Even though the easier single interventions could lead to very meaningful savings of up to 30% on households bills in some situations. This means, again, that the middle group is not being supported any more as we cannot get credits for that. This leaves 270.000 homes, or half a million people (on population of 5 million) without support.

› **The current recast of the Energy Efficiency Directive will likely introduce an "energy poverty" ringfence or sub-target as part of the national energy savings obligation. Do you expect changes in the policy measures to meet this sub-target?**

As Ireland already has a ringfence for energy poverty so I do not expect large changes here.

› **Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?**

I think another problem with the current (EEOS) system is how energy poverty is defined. The definition based on income (>10% of income spend on energy) makes it very difficult to accurately target the households that need it most with measures. To get around this issue they decided to connect it to the welfare system. So, if you get specific welfare payments, you qualify for support. But this again leaves out a big group of low-income people that are not on benefits, and many of the people receiving some sort of benefits are already living in council or housing authority homes, which will anyway likely be renovated by 2030. We need to move to a system that takes into account a broader set of variables to really target those that need it most, and also support those that are now falling outside of the system.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH Niall Farrell (Senior Research Officer, The Economic and Social Research Institute)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Yes, absolutely. As you can see from our recent study up to 40 percent of Irish households is now (April 2022) in energy poverty, defined as more than 10 percent of their income going to energy (based on 2015-2016 data adjusting for prices in the intervening period). However, this does not account for demand response to prices. In the worst-case scenario, a lot of people will lower their demand in respond to the prices. Although this does not necessarily lead to people underheating their home. Perhaps people can still afford it, but they are underspending on other things.

The 10 percent metric is more designed for 'normal' circumstances, with stable and low prices. In the current price crisis, it is not that useful anymore, as it is not capturing the same outcome as it used to. If you are looking for who needs support the most, then we should try make indicators that capture that. People with low incomes, high energy costs, and low efficiency homes. Those should be prioritized.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

Different measures have been proposed in Ireland to support households, including changes in prices (price cap) &, changes to indirect taxes (VAT, excises), lump sum payments, and using the welfare system (increasing benefits). The best option is to use the welfare system, the 2nd best is to give all households a flat rate payment (as % of their income), while changing taxes would be the least effective in reaching those at need. The governments first response has been a flat rate transfer, households received 200 pounds last spring (2nd best option), in addition they made a few adjustments to indirect taxes, and introduced some welfare changes introduced as well (households that receive child benefits).

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

For the recent measures the focus was on the short term, getting vulnerable households through the winter. The governments general energy poverty strategy is being reviewed and as part of that they are trying to better target households in energy poverty and try and link energy and socio-economic data to better understand which households need support. This work will hopefully also lead to improved definitions and will emphasize efficiency and decarbonization more. For example, the government has huge targets on replacing oil and gas boilers with heat pumps and has support measures in place for that. However, a large barrier here is the availability of tradespeople being able to do the installation.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

There is a split incentive as energy companies incentive is to sell energy, not to reduce demand. Perhaps their role should be more as data providers as opposed to doing the implementation of the efficiency measures. They have information on consumption and this can be very useful in identifying who is energy poor and needs the support the most.

Also, a concern is whether it is in the interest of the energy companies to deliver good implementation, which is very important when it comes to delivering energy savings in homes. They do have a good incentive to reduce costs, but this could also lead to cutting corners.

Finally, it is a question if the EEOS system is fair for consumers. Who should be footing the bill of the

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

upgrade? We subsidize them because there is a public good element, but maybe it should be the taxpayer and not the energy consumer that pays for this? From an equity perspective it should be the taxpayer.

› **The current recast of the Energy Efficiency Directive will likely introduce an "energy poverty" ringfence or sub-target as part of the national energy savings obligation. Do you expect changes in the policy measures to meet this sub-target?**

I don't know if this is related to the recast of the EED coming up, but there is ongoing work by the government to target energy efficiency measures to those who are energy poor. A major new measure that was brought in this year was to reserve the income from the carbon tax for energy efficiency. They earmarked €337 million for efficiency grants through the Warmer Homes Schemes. This can fund over 37,000 home upgrades for vulnerable households. This is the highest funding commitment to energy efficiency the government has ever made.

› **You have done a lot of research on defining energy poverty in Ireland, can you say anything on what developments we can expect here?**

One thing we will be trying to do is to get new data to try and incorporate that into the definition to make sure we prioritise those households that need upgrades the most. This included looking at energy efficiency in general, e.g. how well do EPC labels predict if households actually have low efficiency, as a lot of building performance is not well captured by the EPC system. For example, label B and C do not have strong differences in heat loss, with the main difference between them being the installation of renewables. And also of course the rebound effect distorts the predictive value of EPC's for targeting most at need households.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

References

Barrett, M., Farrell, N., & Roantree, B. (2022). *Energy poverty and deprivation in Ireland*. ESRI. https://doi.org/10.26504/rs144

Ensmov EU. (2020). *Snapshot of Energy Efficiency Obligation Schemes in Europe (as of end 2019)*. https://ensmov.eu/snapshot-of-energy-efficiency-obligation-schemes-in-europe-as-of-end-2019/

Government of Ireland. (2016). *Strategy to Combat Energy Poverty 2016-2019*. https://www.gov.ie/en/publication/14e2b-strategy-to-combat-energy-poverty/

Government of Ireland. (2021). *Ireland's Energy Efficiency Obligation Scheme: Summary of responses to public consultation and policy decisions on scheme design*.

Government of Ireland. (2022). *Strategy to Combat Energy Poverty – Progress Review and Public Consultation*.

SocialWatt. (2020). *D2.1 Evaluation of schemes to tackle energy poverty*. https://socialwatt.eu/sites/default/files/news/D2.1%20Evaluation%20of%20schemes%20to%20tackle%20energy%20poverty.pdf

7 COUNTRY FACTSHEET: ITALY

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

COUNTRY FACTSHEET

April 2023*
** policy changes may have occurred between the time of preparation and publication of this factsheet*

SOCIALWATT

CONNECTING OBLIGATED PARTIES TO ADOPT INNOVATIVE SCHEMES TOWARDS ENERGY POVERTY ALLEVIATION

Italy

BACKGROUND

- **No official definition** of energy poverty, but the National Energy & Climate Plan (NECP, 2019) refers to energy poverty as "*the inability to purchase a minimum energy basket of goods and services or a situation where access to energy services entails a diversion of resources (in terms of expenditure or income) higher than the socially acceptable level*" in line with the definition suggested in the National Energy Strategy of 2017.
- The main **national indicator** used to estimate energy poverty is the one defined in a report of the Bank of Italy in 2014, that combines two sets of energy poverty conditions:
  - **EITHER high energy expenditures**: when the equivalent energy expenditure is twice the average expenditure, AND that the total expenditures net of energy expenditures are lower than the relative poverty threshold.
  - **OR deprivation**: when the total equivalent expenditure is lower than the median, AND, that the heating expenditures are negligible (close to 0).
- The trend over 2018-2020 decreased down to 8% of households in situation of energy poverty in 2020 (OIPE 2021). The indicator is monitored by the **independent Italian observatory on energy poverty** (**OIPE**, created in 2019). OIPE's latest estimate showed an increase to **8.5%** (i.e., **about 2.2 million of households**) **in situation of energy poverty in 2021**, close to the 2016 level (OIPE 2022).

The OIPE published two annual reports in 2019 and 2020 that investigated different aspects of energy poverty in Italy and continues to share studies in the field. Studies for example analysed the differences among regions and found that the Southern regions present the highest rates of energy poverty. A new report should be published by the end of June 2023.

Other indicators account for a worsening of energy poverty during the last 2 years. The share of households with arrears on utility bills (EU-SILC/Eurostat) increased from 4.5% in 2019, to 6% in 2020, and 6.5% in 2021. In December 2021, the price index for "Dwelling, water, electricity, gas and other fuels" increased by 14.4%.

The **National Energy Poverty Observatory**, institutional observatory, was **established in March 2022** (Legislative-Decree n. 210 of 8 November 2021, in application of the Directive EU/2019/944) by the Ministry of Ecological Transition (now Ministry of Environment and Energy Security since the change of government in October 2022).

- Italy has **6 climate zones**, with very different energy needs (both, for space heating and/or cooling). **Over 65%** of the 12.4 million residential buildings (about 32 million dwellings) was **built before the first energy requirements** for buildings set in 1976. The database of Energy Performance Certificates

WWW.SOCIALWATT.EU

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

provides an overview of the distribution of the dwellings per energy class: **78,8% of the rated dwellings are in the least performing classes (E to G)**, with 37% being in the G class (LTRS – Long Term Renovation Strategy 2020). Natural gas is the dominant energy for space heating.

- The Legislative Decree 17/2022 amended the Article 11 of the Legislative Decree 210/2021 implementing the EU legislation on electricity markets, by requiring the **development of a national strategy against energy poverty**. However, this strategy has not yet been adopted.
- The main measures to alleviate energy poverty, as presented in the NECP and in place before the COVID outbreak, have been **measures to help low-income households with their energy bills**, i.e., direct aids in the form of **electricity, gas and "Physical discomfort"[10] bonuses** available since 2008. The bonuses are funded through a charge on the electricity and gas tariffs. Households are eligible based on income criteria and the amount depends on the household size.
    - In 2019, the electricity bonus amounted to 137 million euros for about 840,000 households, and the gas bonus to 76 million euros for about 560,000 households.
    - The NECP however pointed that the regulatory body (ARERA, in charge of the bonuses) estimated that only 30 to 35% of the households who could be eligible applied for receiving the electricity and gas bonuses. This is why their payment was made automatic to all eligible households from January 2021.
- The main **measures for energy efficiency** in residential buildings are the **tax deductions** on energy renovation works: the "Ecobonus" (since 2007) and the "Superbonus" (since 2020 to 2023). These tax deductions are open for all households. Specific provisions were adopted to make it easier for low-income households (from 2017) and for social housing bodies (from 2018) to use the scheme (*see more details in the table about energy efficiency measures below*).
- Another national measure was initiated in 2020 to use **Renewable Energy Sources** (RES) to alleviate energy poverty. Building on the pilot scheme (Reddito Energetico) implemented in the municipality of Porto Torres, the **National Energy Income Fund** is a revolving fund with 200 million euros initially set to cover 100% of investment costs for the installation of PV panels for low-income households for own consumption. The revenues from the excess electricity fed in the grid go back to the fund. The Fund is operated through agreements between regions and GSE, a public operating body that manages several energy efficiency and RES schemes like the feed-in tariffs for RES.

MAIN RECENT MEASURES TO HELP HOUSEHOLDS FACE THE ENERGY CRISIS

- **Superbonus 110%** (Residential energy efficiency improvement incentive, 1st of July 2020 – 31st December 2023): special increased rate for the financial incentive (income tax reduction) for energy efficiency in dwellings, adopted as part of the Recovery & Resilience Plan (see more details in the table below).
- **VAT reduction on gas bills** (Last quarter of 2021-First quarter 2023): VAT reduced from 10% or 22% (depending on consumption level) to 5%. On December 18th, 2021, 608 million EUR of revenue loss were agreed to finance it. On April 21st, 2022, an additional 5.5 billion EUR were approved towards

[10] All households including a member requiring electro-medical equipment are eligible for the "Physical discomfort" bonus, administered by ARERA and the municipalities.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

this measure and keeping electricity bills to zero throughout summer.

- **General system charges rates set at zero** (Last quarter 2021-first quarter 2023): The rates of general system charges to be paid by users were kept at zero. Directed towards 29 million domestic consumers during the last quarter of 2021. On December 18th, 2021, an additional 1.8 billion EUR were disposed for this measure.
- **Mechanism to enable instalment payments for electricity and natural gas bills** (December 2021-April 2022): energy suppliers had to offer to their residential customers with payment difficulties an instalment plan without interest over maximum 10 months. The mechanism was defined by the regulatory agency (ARERA). In compensation, ARERA provided an advance (capped to 1 billion EUR in total) to the energy suppliers, and to be reimbursed by the suppliers by December 2023. A similar (but smaller) mechanism was used during the COVID crisis. This mechanism makes it possible to help households that face temporary difficulties with their energy bills and are not eligible to the social bonus (households eligible to the social bonus can also benefit from the instalment mechanism).
- **Extension of the social bonus** (April 2022 – on-going): the equivalent annual income threshold has been increased from 8,000 to 12,000 EUR from April 2022, ensuring that over 3 million households receive the electricity bonus and over 2 million households the gas bonus. Further extensions were made (e.g., increasing the income threshold specifically for large families).
- **Reduction of excise duties on transport fuels** (March to October 2022): successive tax reduction on transport fuels were implemented, with different rates (according to the trends in the market prices)
- **One-off bonus** (September 2022): one-off bonus of 150 EUR for households with an equivalent annual income lower than 20,000 EUR (about 22 million people, i.e., more than a third of the population).

The 'crisis' measures were decided as part of successive '**Aiuti packages**'[11,12]. The end of the main 'crisis' measures from the second quarter of 2023 was decided according to the decrease of electricity and gas wholesale prices. Nevertheless, the regulatory agency reminded that the increase in the average household electricity bill will be about 33% over 12 months (for July 2022-June 2023 vs. July 2021-June 2022)[13]. The social bonus then remains an essential measure (ARERA 2023).

[11] https://www.corriere.it/economia/consumi/cards/decreto-aiuti-bis-14-miliardi-taglio-cuneo-bollette-pensioni-misure/gas-tutela-clienti-vulnerabili.shtml
[12] https://tg24.sky.it/economia/2022/09/13/decreto-aiuti-bis-2022#06
[13] The average increase was about 83% in July2021-June2022 compared to July2020-June 2021. The average increase in households' gas bills was about 71% over the same period (ARERA).

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

MAIN NATIONAL ENERGY EFFICIENCY MEASURES TACKLING ENERGY POVERTY

Ecobonus (renewed periodically since 2007)	› Income tax deduction for energy and seismic renovation works, rate from 50 to 90% depending on the action type (this incentive rate has evolved strongly over the years); it is granted in 10 equal annual instalments (making it difficult for low-income households to use it). › The scheme does not include social criteria for eligibility or grant rate. New provisions were added in 2017 to make it possible for low-income households to use it (possibility to transfer the tax deduction to a third-party). Other provisions were added in 2018 to open it to social housing bodies. A superbonus was added in 2020 as part of the recovery plan (see below). › The National Energy Efficiency Fund, operational since 2019, provides financial guarantees for credit institutions to issue eco-loans to households or co-owners of condominiums for the energy renovation of dwellings, in synergy with the ecobonus. Which may also improve the access to it for low-income households. › Maximum eligible costs are set for each action type to limit the risk of price increase by installers. › From 2007 to 2021 (included), the Ecobonus supported about 5.5 million interventions representing investments of about 53 billion EUR and estimated savings of 21.7 TWh/year. In 2021, 59% of the savings came from the replacement of heating systems, 22% from the replacement of windows or doors, 13% from wall insulation (ENEA 2022a). It is difficult to assess what share of these results comes from interventions among households at risk of energy poverty (for more details, see ENEA 2022a; and ENEA 2022b)
Superbonus (1st of July 2020 – 31st December 2025)	› Similar scheme as the Ecobonus, with a special rate of 110% until the end of 2023, and granted in 4 or 5 instalments (instead of 10). › The higher incentive rate is related to higher energy efficiency requirements: the project must improve the buildings by at least two energy classes and include insulation of at least 25% of the building envelope (with materials meeting environmental criteria) or the replacement of the heating system. › The super bonus was also designed to facilitate the credit transfer to a third party and invoice discount, to make it possible for low-income households to use it. › It was first extended until the end of 2023 and will then continue with decreased rate (70% until end of 2024 and 65% until end of 2025). › More than 51 billion EUR of investments in about 307,191 projects were done between November 2020 and end of September 2022, for estimated energy savings amounting to about 9.4 TWh/year (ENEA 2022). 42% of the investments happened in condominiums, 39% in single-family houses, and 19% in other buildings (with a single owner and several dwelling units). As for the Ecobonus, it is difficult to assess what share of these results comes from interventions among households at risk of energy poverty (for more details, see ENEA 2022a; and ENEA 2022b).

The table above is focused on the national EE policy measures tackling energy poverty. More initiatives exist at regional or local level, or led by stakeholders such as energy companies. As illustrated by the schemes developed as part of SocialWatt.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

FOCUS ON ARTICLE 7 EED AND THE ROLE OF ENERGY COMPANIES

Italy implements an Energy Efficiency Obligation Scheme, including white certificates, since 2005. The obligated parties are the electricity and gas distributors. However, this EEOS does not include specific provisions related to energy poverty. In practice, most of the white certificates come from the non-residential sectors (mostly in industry). Therefore, energy companies are not directly involved in the implementation of energy efficiency policies for households at risk of energy poverty.

The main policy measure for energy efficiency in the residential sector is the tax credit scheme (ecobonus, superbonus and bonus casa) (see details above). It is among the alternative measures reported by Italy to Article 7 EED. Another alternative measure that can also contribute to tackling energy poverty is the Thermal Account ('Conto Termico'): it provides another type of financial incentive for energy efficiency improvement and RES systems for thermal energy in buildings.

Italy's NECP also mentioned that a large-scale programme for making social housing more energy efficient was under consideration. This could have been done for example with the special budget of the superbonus (as part of the Recovery & Resilience Plan). Social housing bodies can apply for the superbonus, but they represent a very small share of the investments supported by these incentives (it is mostly used by individual owners) (ENEA 2022a; and ENEA 2022b).

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH ALESSANDRO FIORINI (ENEA)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

All the available information brings to this conclusion. Recent trends showed that, despite the economic shock caused by the COVID pandemic, the percentage of households in energy poverty (according to the indicator chosen in the Italian NECP) has decreased (from 8.5% in 2019 to 8% in 2020). Different indicators confirm that households nonetheless experienced difficulties in securing a minimum level of energy services, as the needs increased. The percentage of households declaring to be in arrears on utility bills in 2020 (EU-SILC/Eurostat) increased by 1.5% points compared to 2019 (from 4.5% to 6%). A further increase has been registered in 2021 (to 6.5%).

From the second quarter of 2021, prices of energy commodities have started rising because of the prompt recovery of the economic activity after the relaxation of lockdown measures due to the pandemic. According to the latest OIPE update, in 2021 the share of Italian households in energy poverty rose to 8.5%. The additional instability on energy markets and the supplementary deterioration of the economic context caused by the war in Ukraine lead to expect a further increase for 2022.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

End of 2021 and 2022 have been characterised by an intense policy making activity aimed at tackling the effect of the energy crisis. Despite no measure is specifically tailored for households identified as in energy poverty, the interventions implemented are certainly coherent with counteracting energy deprivation. Law-Decrees issued between the second half of 2021 and the first half of 2022, as well as the 2021 Budget Law, have mostly targeted:

- *Cancellation/reduction of the system charge component of the electricity and gas energy bill;*
- *Reduction of the VAT to 5% for gas consumption;*
- *Strengthening of the energy social bonus;*
- *Reduction of excise duties on transport fuels.*

The overall expenditure commitments amount to approximately 60 billion EUR, half of which allocated to the reduction of households' energy bills.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

Potentially yes, because the current set-up of the eligible energy efficiency projects for buildings allows the promotion of significant improvements to tackle energy poverty (See: Table 1, Annex 2 of the Ministerial-Directorial Decree 30/04/2019). Provided that the technical and normative framework of the Scheme will be adapted to the need of prioritising vulnerable energy end-users. This would also mark a significant step ahead in the introduction of the Energy Efficiency First principle in the national EED framework, as envisaged by the recent guidelines published by the European Commission.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

As part of the white certificates' schemes, energy companies, and more specifically electricity and gas distributors, can contribute

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

with a general reduction of energy demand in final use through systemic-infrastructural interventions that they can put in place: e.g., energy network retrofitting. The establishment of collaboration with other relevant stakeholders (administrations, agencies, third sector) can reinforce the identification and diffusion of good practices on energy-saving oriented behaviours and consolidate informed consumption models.

〉 The current recast of the Energy Efficiency Directive will likely introduce an "energy poverty" ringfence or sub-target as part of the national energy savings obligation. Do you expect changes in the policy measures to meet this sub-target?

Anchoring energy efficiency measures to energy poverty reduction/alleviation outcomes certainly allows to combine positive (measurable) social impact to the energy security and the sustainable transition objectives pursued by the European Union. However, an energy poverty ringfence must be flexible, i.e., built upon the specific features of energy poverty incidence faced by each Member State (along the lines with different occupational status of household members, location, number of components, etc.). National policy makers must identify such unbalances among their populations and set-up convenient targets.

〉 Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?

A crucial challenge for Italy is shaping the measures for the development of energy efficiency in buildings (fiscal deductions) to the purpose of reducing energy poverty. Since the introduction, such measures show encouraging results (especially the Ecobonus: see ENEA's Annual Report on Energy Efficiency 2022, Chapter 3). A reorganisation of the incentive schemes ending up to a single structural measure whose support is proportional to the environmental and social benefit produced is desirable.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH DANIELE BERGESIO (eVISO Spa)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Energy poverty was already high in Italy before inflation and price rise, but with the recent events (such as the war in Ukraine) energy poverty has undergone a surge. Social services institutions have already realized, but the Government not enough.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

During 2021 and 2022, Italy allocated more than 90.7 billion EUR (5.1% GDP)[14] *mainly to cover electricity and gas invoices. Less funds were assigned for energy efficiency: most of the funds were given for the emergency and not for a proper project to solve it upstream. I am not saying this is wrong; there are households who could not pay bills before the crisis, and when the prices rose, they needed aid. However, after the emergency, energy efficiency should be considered as one of the most urgent actions among the institutions' activities.*

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

There are 50-60-90% tax deductions (before 2023, the 90% deduction was 110%) for renovating homes. But this led to higher prices for materials and manpower, and the uptake was mainly for households who could already pay for the retrofit. There is not any specific and effective directive for energy poor households by the recent Governments (electricity, gas and water bonuses are windfall measures and are not correctly addressing energy poor households).

〉 How do you see the role of energy companies or ESCos in the field of tackling energy poverty?

Utilities and ESCOs have a key role in addressing energy poor households with direct visits, energy management assessments, advice and renovations. In my opinion, though, their contribution is only partial, and they cannot be left alone at this action.

In fact, only a strong collaboration with no-profit institutions, municipalities and NGOs could alleviate energy poverty efficiently. Trust with households should be created and kept, and for-profit companies usually do not address well this task. In addition, energy poverty should be mapped, and for-profit companies usually do not work with any kind of poverty. This means they do not know nor understand poverty as much as social care institutions or municipalities do. Energy poverty could be alleviated starting with a strong partnership between public and private sectors together with direct help from central or regional Governments (for instance with specific tax deductions, direct or undirect funds, bureaucracy reduction, and so on).

〉 The current recast of the Energy Efficiency Directive will likely introduce an "energy poverty" ringfence or sub-target as part of the national energy savings obligation (either for EEOS or Alternative measures). Do you expect changes in the Italian policy measures to meet this sub-target?

As soon as the Italian authority for energy, distribution and environment regulation (ARERA) will take up the European policy and deliberate the Italian norm, there will be a change at tackling energy poverty. Nevertheless, it could take months or, most probably, years before obligated companies (at the moment, only electricity and gas

14 https://www.bruegel.org/dataset/national-policies-shield-consumers-rising-energy-prices

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

distributors) will start developing schemes to alleviate energy poverty directly. Right now, obligated parties are more interested at schemes that turn into action more easily, while energy poverty alleviation involves collaborations, trust, talking to households, public sector partnerships which is something companies usually are not looking for (as it takes more time and money to approach).

〉 Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?

European directives are more likely to succeed if European Governments' uptake will be high. In addition, for a stronger impact every country needs enough funds, especially for energy poverty, not to cause gentrification (landlords usually are not interested in renovations involving tenants who struggle to pay rents; or, in case they agree, then rents could increase letting energy poor tenants leaving the dwellings), and to address properly energy poverty efficiently. This regards not only lower cost schemes (from information up to lightbulb and appliances replacement), but higher cost ones (from photovoltaic panels and heat pumps to insulation, which is the most efficient action but more expensive), for which energy poor households should be helped more.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

8 COUNTRY FACTSHEET: PORTUGAL

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

COUNTRY FACTSHEET

March 2023

SOCIALWATT

CONNECTING OBLIGATED PARTIES TO ADOPT INNOVATIVE SCHEMES TOWARDS ENERGY POVERTY ALLEVIATION

Portugal

BACKGROUND

- The National Long-Term Strategy for the fight against Energy Poverty 2022-2050, (under public consultation from 20 January to 3 March 2023) includes the following **definition** for energy poverty: "*inability or difficulty to obtain an adequate level of essential energy services, due to a combination of several factors, such as income, housing energy performance and energy prices*"
- According to the 'energy poverty' strategy, around 1.8 to 3 million people (**17 to 29% of the population**) live in energy poverty in Portugal, i.e. without ability to keep the house adequately warm, or being in a situation of poverty with energy expenditure representing more than 10% of their total income. Among them, 660 to 680 thousands (about 6.5% of the population) are in extreme energy poverty (due to combination with economic poverty).
- The consultation document for the 'energy poverty' strategy includes proposals for **goals to reduce energy poverty until 2050**:

Indicator	2030	2040	2050
% of the population **unable to keep home adequately warm** (baseline: 17.4% in 2020, i.e. 1.8 million people)	10	5	1
Population in households whose energy expenditure represent **more than 10% of the total income** (1.2 million households, i.e. about 3 million people in 2015/2016)[15]	700,000	250,000	0
Population in households with **infiltration, humidity, or rotten elements problems** (baseline: 24.4% in 2019, i.e. 2.5 million people)	20	10	< 5
% of the population **unable to keep home adequately cool during the Summer** (baseline: 35.7% in 2012, i.e. 3.7 million people)	20	10	< 5

- Currently, there are two main entities in charge of policies to monitor or tackle energy poverty: **ADENE** (national agency for energy) and **DGEG** (General Directorate for Energy and Geology) are responsible for the development, promotion and evaluation of the energy policies. DGEG will coordinate the Strategy Coordination Group created for the supervision, monitoring and bi-annual evaluation of the new 'energy poverty' strategy, with the technical and operational support from ADENE. This group may also include other public and private bodies.
- The **Social Tariff for Energy** is presented in the National Energy and Climate Plan (NECP, December 2019) as having the highest impact among the measures to support vulnerable consumers:
  - The social tariffs for electricity and natural gas were initiated in 2010 (Decree-Law no. 138-

[15] Goals in number of households. In number of people this would represent 1.75 million in 2030 and 625000 in 2040.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

A/2010) and 2011 (Decree-Law no. 101/2011), respectively. They were revised in 2016 to be **automatically applied** to vulnerable consumers eligible to certain social benefits and to low-income households (also expanding the scope of eligible households). In the end of 2020, the government decided again to broaden the access to these tariffs, to all situations of unemployment. However, customers still need to meet certain requirements to be eligible, which can be a barrier for energy poor customers.

- The tariff applies to power subscription limited to 6.9 kVA (electricity), and to annual consumption of maximum 500 m^3 (natural gas). From January 2022 (Decree-Law no. 15/2022), the discount is of 33.8% on the electric bill, excluding taxes, and an average discount of 31.2% on the gas bill. Vulnerable households are also exempted from the "special consumption tax" (IEC) and (partially) from the audiovisual tax (CAV) that are both included in the electricity bill (even if not directly linked to electricity consumption).
- The share of households benefitting from the social tariffs in 2022 was about 19% for electricity (14% in 2020) and 1.25% for natural gas (2% in 2020). The figure below shows how the revision done in 2016 strongly increased the number of beneficiaries.

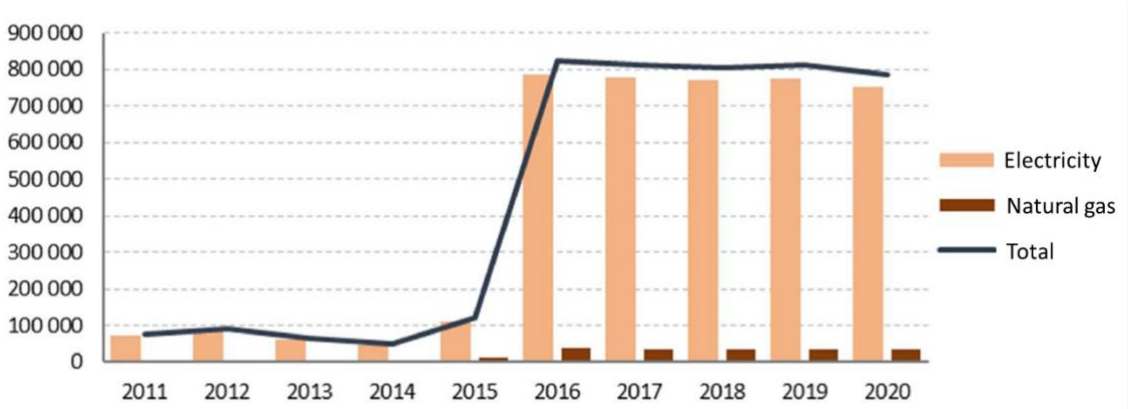


Figure 1 – Evolution of the number of beneficiaries of the social energy tariffs (DGEG data, source: consultation document)

- The low number of beneficiaries for natural gas can be explained because 'network' gas only represents 10% of the final energy consumption in the residential sector (vs. 15% for LPG and 36% for biomass).
- In addition to the Social Tariffs, a decree of May 2019 reduced the VAT from 23 to 6% on the fixed part of the electricity and gas bills, for consumers with a power subscription of less than 3.45 kVA and a gas consumption smaller than 10,000 m^3 per year, which benefitted overall to 2 million consumers (including some SMEs).
- The 'energy poverty' strategy acknowledges that the social tariff is important to support vulnerable consumers, but that it is not a long-term and sustainable solution to combat energy poverty, nor the most effective from a financing viewpoint. The long-term strategy then highlights the importance to promote energy efficiency, sustainability in homes and energy transition. The NECP indeed mentioned as one axis of action the development of programmes to promote and support energy efficiency and the integration of renewable energies to alleviate energy poverty (see below details of the 'energy poverty' strategy).

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

- The proposed **National Long-Term Strategy for the fight against Energy Poverty 2022-2050** is structured on four main principles:

i. To **increase the energy and environmental performance of housing**: this is for example one of the main areas of the **Recovery and Resilience Plan** (as well as for the Operational Programmes using EU Structural Funds for the period 2021-2027):
   - Allocation of 300 million euros for **energy efficiency in residential buildings** over 2021-2025. First schemes have started in 2021, some of them with a focus on low-income households. See for example, the programme '**Vale de Eficiência**', a programme the objective to grant 100,000 energy efficiency vouchers of EUR 1.300 by 2025 (see details in table later on).
   - More than 1.2 billion euros to support access to housing, with a special focus on **social housing** and including the objective of high energy efficiency and increased comfort levels.

This part of the strategy also includes the promotion of electrification of the end-uses and RES, to substitute the use of fossil fuels (especially LPG).

ii. To strengthen the conditions for **access to essential energy services**:
   - measures for **consumer protection**, especially as regards disconnection by suppliers in case of bill arrears: this point is highlighted as increasingly important with the increasing frequency and intensity of extreme weather phenomena.
   - measures to support the participation of vulnerable consumers in **energy communities** and **collective self-consumption**.

iii. To **reduce the costs of energy consumption** (in a context of energy crisis):
   - continuation and improvement of the Social Tariff (see above) and the current crisis measures (see below).
   - evaluating the creation of extraordinary support mechanism(s) for energy bills directed at families in energy poverty, specifically to deal with the occurrence of adverse and extreme phenomena (notably cold or heat waves).

iv. To strengthen **knowledge and access to information**:
   - This includes on short term the development of a **national system to monitor energy poverty** to collect, process and make available information to promote the development of **local structures** for the support and monitoring of families in a situation of energy poverty.
   - This is related to the development of local strategies to combat energy poverty, and therefore the need for support to the municipalities and local energy agencies in this field.

- 85% of the dwellings are single family homes. Owners-occupiers represent 72% of the main residences, while social housing is only 2%. 3.8 million dwellings were **built prior to the first energy requirements** for buildings (1990) and represent **65%** of the 2018 national housing stock (Long Term Renovation Strategy – LTRS 2020). From the data of Energy Performance Certificates issued by 2020, about **23% of the dwellings** were in the **worst efficiency classes** (14.7% with E, and 8.4% with F).

- Preliminary results of the latest Household Energy Consumption Survey (ICESD, 2020) show that **space heating** only represent about **19% of households' energy consumption**, while cooking is the first end-use (about 35%), followed by domestic hot water (22%), and electrical appliances (about

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

21%) (cooling is about 1%) (consultation document). This can be explained because only 7% of the dwellings are located in the climate zone having the coldest conditions in winter. According to the previous survey (2009-2010), 22% of the households had no heating equipment (and 77% had no cooling equipment). 61% of the heating systems were stand-alone electrical heaters, while gas boilers were only 11% (LTRS 2017). These shares from the 2009-2010 survey have likely changed.

- **Energy prices** in Portugal have increased during the last couple of years, although generally lower than the increases in the rest of Europe. This happened mainly due to the Iberian mechanism, which was officialised in May 2022, in which a maximum price for the natural gas to produce energy was set, below the liberalized market value, and which translated into a lower energy price than the European average.

Figure 2 - Electricity prices in Portugal since 2021 (source: OMIE)

Several contingencies were already in place as part of the measures to face the COVID pandemic, and then further complemented to deal with this sudden increase of energy prices and to help mainly the population in energy poverty.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

MAIN RECENT MEASURES TO HELP HOUSEHOLDS FACE THE ENERGY CRISIS

MEASURES FOCUSED ON VULNERABLE OR LOW-INCOME HOUSEHOLDS

Measures adopted to face the impacts of the COVID pandemic:

- **Extension of the Social Tariff** (from March 2020 on): extension to all those who are in conditions of unemployment, beginning in March of 2020 and throughout the year 2020 included in the National Budget. Later in November 2020, the eligibility criteria were broadened to include more people in unemployment.
- **Monthly updates of the application of the Social Tariff** (from March 2020 on): the automatized identification and validation for the Social Tariff went from being a quarterly process to being a monthly process, expediting help for those who need it quicker.
- **Guarantee of supply** (March 2020 – March 2022): measures guaranteeing the continued supply of essential services of energy, for customers who had arrears on bills were created, permitting the creation of a payment plan with no interest attached for all bills from March 2020 onwards. About 5% of the households had utility bill arrears in 2021 (Eurostat/SILC data).
- **Special discount for heating** (January 2021): due to the rapid decrease in temperature in January 2021 and the lockdown, a discount per diem for 15 days was offered to all customers, with customers who benefit from the Social Tariff being given that discount for 30 days.

Further measures adopted to face the current energy crisis and inflation:

- **Monthly support for users of LPG** (April-June 2022 then from September 2022): reimbursement of 10 euros per bottle of gas and per month, to beneficiaries of the social electricity tariff. This has been financed from the Environmental Fund, with a budget available of 4 million euros for April-June 2022 and 2 million euros for September-December 2022. This is now continued in 2023 with a budget allocation of 3 million euros.
- **Special support to vulnerable households** (April-May and July-August 2022): initially, the support of 60 euros was paid at the end of April 2022 to the 762,320 households benefiting from the social electricity tariff. This one-time support was then extended in May 2022 to further 280,000 households entitled to minimum social benefits and who did not have access to the social electricity tariff. The support was indeed meant to counter the effects of inflation in general, and especially on food (so not specific to energy, even if initially linked to an energy benefit). The same payment of 60 euros was done again in July 2022 to beneficiaries of the social tariff and in August 2022 to the households with minimum social benefits but not benefitting from the social tariff. A new payment of 240 euros per household was decided in December 2022.

MEASURES BENEFITTING TO ALL HOUSEHOLDS

Measures adopted to face the impacts of the COVID pandemic:

- **Decrease in the regulated tariff for electricity** (April 2020): due to the decrease in energy prices in the Iberian Electricity Market, ERSE, the regulatory entity of energy services, approved the decrease of the regulated tariff by EUR 5/MWh, i.e. a reduction of 3% on the electricity bill for its consumers.
- **Extension of the VAT reduction on electricity for basic consumption** (from September 2020): this

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

applies to households with contracted power of up to 6.9 KVA (i.e. 87% of households, 5.3 million beneficiaries), complementing the reduction adopted in May 2019 for households with subscription up to 3,45 kVA. The measure decided in September 2020 reduced the VAT rate from 23% to 13% in continental Portugal (and 9% and 12% in the Archipelagos). This reduction is limited to the first 100 kWh per month (or 150 kWh for large families). This reduction was reinforced (from 13 to 6%) in October 2022 (see below, as part of the 'Family First' package).

- **Access to the regulated electricity market** (2021-2025): Since January of 2021, customers with contracts with the free market are allowed to ask for similar rates to the regulated market from their suppliers until the end of 2025

Further measures adopted to face the current energy crisis:

- "**Autovoucher**" (November 2021 – April 2022): benefit to help with increasing prices in transport fuels. It was first 5 euros per month (discount of 10 cents per litre of fuel, for a total of 50 litres/month) from November 2021 to early March 2022. It was then increased to 20 euros per month in March and April 2022. By March 2022, 1.6 million persons had registered to the online platform to receive the voucher. A total of about 125 million euros was paid to the beneficiaries[16]. It was then replaced by a reduction on the fuel tax (see below).
- **Reduction of the tax on petroleum products (ISP)** (October 2021 – on-going?): the ISP was first temporarily reduced in October 2021. Then the government introduced in March 2022 a mechanism for revising weekly the ISP rates, to compensate the variation in VAT revenues due to changes in fuel prices. From May 2022, the adjustment is calculated to be equivalent to a reduction of the VAT on transport fuel from 23% to 13%, with an estimated cost at that time of estimated cost of about EUR 85 million per month[16]. This further reduction replaces the autovoucher. In March 2023, this for example meant a tax reduction of 34 cents per litre.
- **Suspension of the increase of the carbon tax** (from December 2021): this measure is equivalent to a discount of about 15 cents per litre, compared to the rate of carbon tax that would have applied in 2023 otherwise.
- **Iberian mechanism** (from May 2022): a price cap for gas (wholesale market) for Spain and Portugal agreed upon by the European Commission, acknowledging the geographic situation of the Iberian Peninsula. This results in decoupling the price of electricity from gas, enabling lower electricity prices. The impact might be limited for most households, as only a few thousands of households have their electricity prices indexed on the wholesale electricity market. However, the government announced that this could make that, in 2023, prices on the liberalized market could become more advantageous for households compared to the regulated prices.
- **"Family First" package** (September 2022): package adopted by the government to help households with the effects of inflation. The government estimated that altogether the measures taken in 2022 to counter inflation effects amounted to 4 billion euros (1.8% of the GDP). The package of September 2022 includes two measures related to energy:
    - **Further reduction of the VAT on electricity** to 6% for the basic consumption (October 2022-December 2023): this applies to households with contracted power of up to 6.9 KVA (i.e. 87% of households, 5.3 million beneficiaries) and in the first 100 kWh of consumption per

[16] https://eco.sapo.pt/2022/04/30/autovoucher-acaba-hoje-desconto-de-20-euros-substituido-por-baixa-no-isp/

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

month (or up to 150 kWh for large families). This comes after the decrease in the VAT rate from 23% to 13% in place from December 2020 (also limited to the first 100 kWh per month; the consumption beyond 100 kWh per month is with a VAT rate of 23%)[17]. The savings can be about 30 euros per year per household. The cost for the State was estimated to 22.5 million euros in 2022 (due to the start in October) and about 90 million euros for 2023 (full year).

- **Possibility to return to the regulated gas tariff** (from October 2022): possibility for consumers with annual gas consumption less than or equal to 10,000 m^3 (i.e. around 1.3 million households and SMEs that are currently with contracts under the liberalized market). The switch back to the regulated tariff is expected to bring consumers with at least 10% savings on their gas bill (in the context of the gas prices in the last quarter of 2022).

MAIN NATIONAL ENERGY EFFICIENCY MEASURE TACKLING ENERGY POVERTY

Vale Eficiência (energy efficiency voucher) (August 2021-on-going)

- **Vouchers of EUR 1,300** pre-VAT (1,600 with VAT) for energy poor households to improve the thermal comfort of their home. The eligible actions include the thermal insulation of the **building envelope** (wall, roof and floor insulation, replacement of windows or entrance doors), **RES systems** for space heating and/or cooling and domestic hot water (heat pumps, solar thermal, biomass boilers), and PV panels or other RES system for self-consumption.
- The target group is economically vulnerable households in energy poverty (based on the **eligibility to the Social Tariff**) and who are **homeowners** living permanently in their dwelling (in Continental Portugal), so that they can improve the energy performance of their home. Every household can only receive the voucher once.
- The programme is decided by DGEG, funded as part of the **Recovery & Resilience Plan** (RRP, NextGenerationEU funds), and operated by the **Environmental Fund**, with the support from ADENE. The total budget for 2021-2025 is **165 million euros**.
- Households have to contact an installer registered with the Environmental Fund. The installer then submits the application and receives the amount of the voucher once providing the proof of the works completion. The households have to cover the remaining cost when needed.
- The budget of the first year of the program was EUR 31.98 million for 20,000 vouchers. However, the results have been lower than expected, as acknowledged by the government in its recent review of the implementation of the RRP[18]: **by February 2023, only 12,000 vouchers were allocated and 4,000 were discounted** (i.e. with works completed).

[17] The reduced rate of 6% was already in place for the consumers with a power subscription for less than 3.45 kVA.
[18] At the same time, the Support Programme for More Sustainable Buildings, open to all homeowners, exceeded its intermediate target: it already supported works in more than 10 million m^2, with grants amounting to 122.6 million euros by March 2023 (i.e. 91% of the total 135 million euros planned until 2025).

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

- Many **barriers** are identified when analysing the program, namely the small amount of the voucher, which does not incentivize contractors to accept these works when they have other opportunities.
- The measure is currently being analysed and some solutions have been identified: expanding eligibility to rented dwellings; attribution of more than one voucher to the same application (i.e. the same household could get more than the initial estimated budget). The new version of the program was expected by the end of March of 2023.

The table above is focused on the national EE policy measures tackling energy poverty. More initiatives may exist at regional or local level, or led by stakeholders such as energy companies. As illustrated by the schemes developed as part of SocialWatt.

FOCUS ON ARTICLE 7 EED AND THE ROLE OF ENERGY COMPANIES

- The majority of Portugal's energy efficiency policies and measures are triggered by EU Directives, legislation and funds (e.g. National Energy and Climate Plan, National Long-Term Renovation Strategy).

In this context, Portugal has decided not to develop an Energy Efficiency Obligation Scheme (EEOS) under Article 7 of the Energy Efficiency Directive (EED)[19] setting an energy savings obligation to the Member States. Instead, it has designed and implemented alternative policy measures to achieve tha national energy savings target among end consumers.

In the period 2014-2020, none of the alternative measures reported by Portugal to Article 7 EED included provisions related to alleviating energy poverty. It is however very likely that Portugal will now report the new programme Vale Eficiência (see above) to Article 7 EED for the period 2021-2030.

While the energy companies are strongly involved in the implementation of the Social Tariff, the guarantee of energy supply and handling of households' energy debts, there is no legislation or programme yet to involve them in energy efficiency schemes for households.

[19] https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficiency-targets-directive-and-rules/obligation-schemes-and-alternative-measures_en#schemes-and-alternative-measures-by-country

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH ANTÓNIO BELLO (head of Energy Poverty Flagship Programs – EDP)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

In Portugal, the number of households at risk of energy poverty will increase due to the number of people in poverty in general increasing due to the current economic situation.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

This problem is becoming a hot topic and it seems to be in the government agenda, however previous policies have been disappointing, namely Vale de Eficiência, which is explained above.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

Energy efficiency schemes should be a very important part of the national strategy since energy poverty should be tackled, first and foremost, through the reduction of energy consumption. Reducing energy waste in our households should be one of the main priorities. In a country that is nearly 100% electrified, energy efficiency becomes paramount.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

Energy companies should be fair and play fairly in the energy market without artificially increasing the energy prices to increase margins and increase hardship on consumers.

Also, through their internal policies of Social Responsibility, they should align their actions with the main market that the company works on. As there is a clear problem of energy poverty, energy companies should support those who cannot maintain their energy services through the liberalized energy market with their resources and knowledge.

The investment in Renewable Energy Generation is also important because it leads to independence from the global supply market, which combats the volatility of the energy prices and introduces stability to the energy market.

Finally, using their role to influence national legislation so that policies are well designed and implemented and target those who need it the most.

〉 Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?

There is a lot of buzz surrounding energy poverty, and rightly so, however there is a clear lack of workforce in the construction and in the energy business. Europe has already identified this lack of workforce as an issue to reach its goals in carbon neutrality.

Even with very good planning and design of energy efficiency measures the ultimate bottleneck will be both human and material resources and the current trend shows that this will continue to be a problem.

In the specific case of Portugal, this has already been identified as an issue in one of the programs that EDP runs called Energy Inclusion Portugal[20].

[20] https://www.edp.com/en/EDP-YES/Energy-Inclusion/Energy-Inclusion-Portugal

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH DR. JOÃO PEDRO GOUVEIA (CENSE, FCT-NOVA University of Lisbon)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Portugal was already, before the Covid19 pandemic and lockdowns, the war in Ukraine and the current energy crisis, very vulnerable to energy poverty. So, the fluctuations in energy prices, and high inflation rates, coupled with other existing socio-economic conditions, have for sure exacerbated existing vulnerabilities and led to an increase in energy-poor households.

〉 Have there been recent changes in the policy measures to tackle energy poverty in Portugal?

Portugal has two measures that we can consider targeted to vulnerable consumers in energy poverty: 1) an automatic social tariff discount for electricity (33.8% reduction) and natural gas (31.2%) bills, and support to those who use LPG bottles with 10€; and 2) an energy efficiency voucher giving 1300€+VAT for energy efficiency measures investment. The efficiency voucher has several problems related to communication to the most vulnerable and in need, the low value amount, delays in early evaluation phases of the application process, and contractors-related issues.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

We have at least 70% of the building stock with low energy performance ratings, a high share of the population uses inefficient equipment such as fireplaces or individual electric heaters, and a huge decentralized solar PV potential is still untapped. So, buildings' energy renovations, energy efficiency improvements in HVAC systems, and integration of renewable energy should be key strategies of the national approach to address energy poverty. These are referred to both in the "Long-term Renovation Strategy of Buildings" and on the draft version of the Long Term Strategy for Energy Poverty Mitigation 2022-2050.

〉 How do you see the role of energy companies in the field of tackling energy poverty?

Currently, energy companies bear the payment of the social tariff, which is a topic of discussion and potential change. But since energy poverty is, as well, an energy prices-related issue, and this is a very impactful and successful measure for the most vulnerable families, energy companies should be always contributing. Furthermore, they can continue providing flexible payment options, raising awareness for energy efficiency, and supporting the integration of renewable energy communities supporting vulnerable consumers.

〉 Could an "energy poverty" ringfence or sub-target in Article 7 EED change the way energy poverty is tackled? (or could it make that energy efficiency measures would better include a social dimension?)

Energy inefficiency and lack of thermal comfort are cross-cutting problems in most dwellings, so energy efficiency should be a national priority for all homes; a ringfence would encourage Portugal to prioritize energy efficiency measures specifically targeted at low-income households and other vulnerable groups.

〉 Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?

We need in Portugal to go beyond income-based identification as the main eligibility criteria for energy poverty support. As even the definition considers, energy poverty is driven also by the low performance of dwellings, and with the increasing availability of energy performance certificates, this needs to be brought into the equation.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

9 COUNTRY FACTSHEET: ROMANIA

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

COUNTRY FACTSHEET

February 2023

SOCIALWATT

CONNECTING OBLIGATED PARTIES TO ADOPT INNOVATIVE SCHEMES TOWARDS ENERGY POVERTY ALLEVIATION

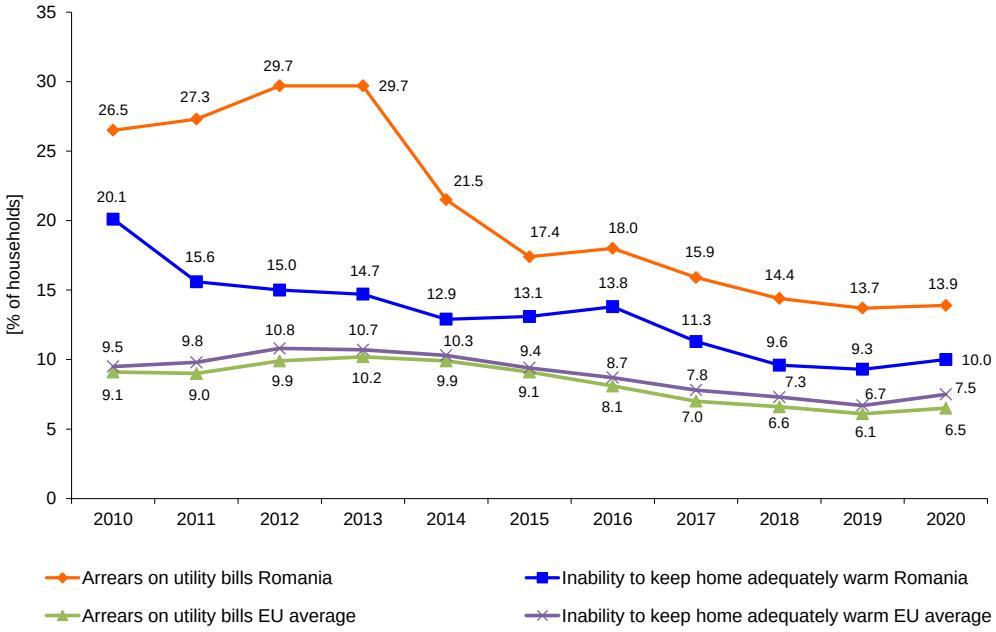
Romania

BACKGROUND

- The concept of energy poverty has often been used alongside the concept of vulnerable consumer outlined in several normative acts. The Law 226/2021 regarding the establishment of social protection measures for vulnerable energy consumers (Sept.2021) includes a **new definition of energy poverty** as "*the impossibility of the vulnerable energy consumer to cover its minimum energy needs*", with the related definitions:
  - **vulnerable energy consumer**: single person / family who, due to health, age, insufficient income or isolation from energy sources, needs social protection measures and additional services to ensure at least their minimum energy needs;
  - **minimum energy needs**: the minimum energy consumption of an individual / a family for lighting, optimal home cooling and heating, cooking and hot water preparation, for using communication means that need to be plugged-in or for powering medical devices used for life support or for improving people's health.
- The GEO 130/2022 (Sept.2022) revised Law 121/2014 on energy efficiency to comply with the Directive (EU) 2018/2002. It states for the first time that the programs or measures financed under the **National Fund for Energy Efficiency** must be implemented as a **priority**, directly or indirectly, **among vulnerable households**, including those in a situation of energy poverty, and, as the case may be, among social housing. This can be seen in the new renovation programmes (see below).
- **87% of the buildings have been built before 1990** (of which 56% between 1960 and 1990) with a **very low degree of energy efficiency** measures (without thermal insulation or with minimal thermal insulation, double wooden windows with reduced standards) and structural deficiencies, with little (or no) maintenance after decades of use (National Long-Term Renovation Strategy 2020).
- The indicators about energy poverty reported in the National Energy and Climate Plan (NECP) are the rate of **arrears on utility bills** (14.4% in 2018; 13.9% in 2020) and **inability to keep home adequately warm** (9.6% in 2018; 10.0% in 2020).

Analysing the EPOV household-reported indicators during 2010-2020 period (see Figure 3 below) the share of households facing difficulties in keeping an adequate home heating level followed a downward path with small fluctuations throughout the period. However, compared to the situation at European level, Romania was always above the average European values. The same situation can be seen in the case of households having recurring arrears on utility bills, where in the same reference period, Romania was above the values recorded at the European level.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905



Source: (Eurostat, 2022) Arrears on utility bills - EU-SILC survey [ilc_mdes07], Inability to keep home adequately warm - EU-SILC survey [ilc_mdes01]

Figure 3. Energy poverty over the last 10 years in Romania (Eurostat, 2022).

- Although the primary electricity and natural gas law of 2012 has required the drafting and implementation of a **national action plan for energy poverty**, by 2022 this has **still not been elaborated**. However, few policies with impact on energy poverty have been adopted:
  - The **National Strategy on Social Inclusion and Poverty Reduction 2022-2027** (Apr.2022) and the related Action Plan 2022-2027 aims at reducing energy poverty, through two types of measures: (1) setting-up **public programs for thermal insulation of buildings** in communities affected by energy poverty by subsidizing the rehabilitation works, and (2) providing a **monthly aid** to cover part of the expenses related to the home **heating** during the cold season in collaboration with ANRE (regulatory agency) (which was previously a heating benefit paid once a year) and electricity suppliers for identifying people at risk of energy poverty. A social tariff for electricity that was in place from 2006 to 2018, ended due to the process of market liberalization.
  - The **National Long-Term Renovation Strategy** (LTRS, Nov. 2020) mentions the existence of energy poverty both in relation to single-family housing and apartment units. A section is dedicated to energy poverty in buildings and potential solutions. The preferred interventions are both in the field of energy efficiency and heating aid. The LTRS suggests that a better national legal framework is needed to alleviate energy poverty. The implementation of the strategy requires sound government programs, attracting EU funds and other financial schemes to be accessed on the private market. The **role of EU funding** mentioned in the Renovation Wave could be an important source. The LTRS highlights at the same time the **important role of local governments** in accessing these grants and in integrating energy poverty into their local renovation programs.
- The recent sharp rise in all energy prices, consequence of the energy crisis from mid-2021, is already putting a high pressure on the capacity of all energy consumers to pay their energy bills and it proves particularly challenging for vulnerable consumers in Romania. In response to this situation, the Romanian government took a series of direct support measures.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

MAIN RECENT MEASURES TO HELP HOUSEHOLDS FACE THE ENERGY CRISIS

- Law 226/2021 regarding the establishment of **social protection measures for vulnerable energy consumers** (**November 2021 – on-going**): financial measures including subsidies for home heating assistance (district heating, natural gas, electricity, solid or liquid fuels), part of other energy consumption, purchase of energy-efficient equipment necessary for lighting, cooling, heating and hot water supply, or of products and services to increase the energy performance of buildings, or for connection to the power grid; and non-financial measures: facilitating access and connection to the available energy sources necessary for ensuring minimum energy needs, ban on disconnecting vulnerable consumers from the grid, in the event of an energy crisis.
- **Compensation for electricity and gas bills** for people living in some localities in the Apuseni Mountains and in the "Danube Delta" Biosphere Reserve (**November 2021 – March 2022**): max. 0.291 lei/kWh (€0.06/kWh) calculated to the electricity consumption billed in the stipulated period and 40% of the natural gas consumption billed in the stipulated period. To benefit from compensation, Romanians from these localities had to fall within a consumption limit of 1900 kWh for electricity or 1200 m^3 for natural gas for the entire period.
- **Price ceiling scheme for electricity and natural gas** (**April 2022 – March 2023**) extended with small changes for stimulating consumers to save energy (**September 2022 – August 2023**): the final price charged by electricity suppliers is limited to a) max. 0,68 lei/kWh (€0.14 /kWh) for domestic customers whose average monthly consumption was less than 100 kWh during 2021; b) max. 0.80 lei/kWh (€0.16/kWh) for customers whose average consumption was between 100-300 kWh per month in 2021 (from September 2022, the price ceiling was limited to monthly consumption up to 255 kWh). For natural gas, the price charged by gas suppliers is max. 6 cents/kWh for domestic consumers.
- **Extension of capped prices for vulnerable customers until 2025** (**September 2022 – March 2025**):
  a) the cap of €0.14/kWh will be continued until March 2025 for vulnerable customers such as: customers with a max. monthly consumption of 100 kWh, domestic customers that use electrical medical equipment or devices, households that have at least 3 children, single-parent households;
  b) the cap of €0.16/kWh will also be continued until March 2025 for the domestic customers whose monthly consumption is between 100-255 kWh; all consumption that exceeds 255 kWh/month will be charged with 1.3 lei/kWh (€0.26/kWh).
- **Energy vouchers** **(2023)**: temporary support granted during 2023 to vulnerable people for compensating the energy prices regardless of its nature (electricity, district heating, natural gas, gas cylinder, wood, fuel oil, wood pellets and other heating materials). This amounts to 1400 lei (about €280), delivered in two stages and can be used until the end of December 2023.

It can be noticed that, except for Law 226/2021 that was passed specifically for vulnerable energy consumers, the compensation, the energy vouchers and the social criteria taken into account in the extension of the cap of €0.14/kWh until 2025, all the other measures presented above apply the same way for all consumers, whatever the income, provided that they meet certain consumption criteria.

Romania has no specific provisions for energy poverty actions, but there are a few national programmes for the renovation of residential buildings that can benefit energy-poor households (see below).

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

MAIN NATIONAL ENERGY EFFICIENCY MEASURES TACKLING ENERGY POVERTY

National Multiannual Programme for the Improvement of Energy Performance in Blocks of Flats (2009 –on-going)	〉 Eligible buildings: **multilevel blocks of flats** constructed before 2005, including public social buildings. Rehabilitation actions: **building envelope and heating system**. 〉 Grant rate **before 2019**: **80%** grant from the State (Ministry of Development, Public Works and Administration) and local budgets, remaining 20% covered by the flat owner-associations; 〉 Grant rate **after 2019**: **60%** grant from the State budget, remaining 40% covered by the flat owner-associations or from local budget approved annually for this destination. 〉 The target group is the flat owner associations. If the association cannot pay their share, the **local authority can partially or fully take over the remaining costs** and then decide how to recover the investment. **The following categories are exempted from payment**: disabled people or families with dependent disabled people; low-income single persons or retired people; war veterans and their surviving spouses[21]. 〉 Compared to the energy savings of about 573 GWh (49 ktoe) obtained by implementing energy efficiency measures in the residential buildings included in the National Program during 2011-2017, 4.3 GWh (375 toe) of savings were recorded in 2018.[22] A total budget of about €22.5 mill. from local funds is planned to be spent for the implementation period 2022-2024.
National recovery and resilience plan, Component 5 - Renovation wave, Axis 1 - Grant scheme for energy efficiency and resilience in multi-family residential buildings, Operation A.2 - Moderate energy renovation of multi-family residential buildings for communities at risk of poverty and social exclusion (2022)	〉 Call for projects covering **100% of investment costs** for moderate energy renovation of multi-family blocks of flats in the rural and urban regions, located in a **marginalized urban or rural area** geographically delimited (as defined in national mapping), or validated/declared as a marginalized area in the Integrated Local Development Strategies. 〉 Targeted buildings must be built before year 2000. Maximum eligible value of the project corresponds to a unit cost for moderate renovation works of 200 Euro/m^2 (deployed area), excl. VAT. 〉 The call targets rural and urban **areas with population at risk of poverty and social exclusion**, for the local authorities to implement renovation projects in these areas through their Local Development or Integrated Urban Development Strategies. 〉 Total budget: €219 mill. In 2022, 29 submitted projects amounting around €100 mill have been registered.
National recovery and	〉 Call for projects covering **100% of investment costs** for increasing

[21] https://legislatie.just.ro/Public/DetaliiDocument/103284

[22] Raport de monitorizare a implementarii Planului National de Actiune în domeniul Eficientei Energetice (PNAEE), ANRE 2019: https://www.anre.ro/ro/eficienta-energetica/rapoarte/rapoarte-de-monitorizare-a-implementarii-planului-national-de-actiune-in-domeniul-eficientei-energetice-pnaee

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

resilience plan, Component 5 - Renovation wave, Axis 1 - Grant scheme for energy efficiency and resilience in multi-family residential buildings, Operation A.2 - Moderate or deep energy renovation of multi-family residential buildings (2022)	the energy efficiency of **multi-family blocks of flats**. Maximum eligible value of the project: unit cost of 200 Euro/m^2 (deployed area) for moderate renovation works, and 250 Euro/m^2 (deployed area) for moderate renovation works, excl. VAT. 〉 The call targets areas from rural and urban regions where local authorities can apply for funding **at the flat-owner associations request**. 〉 Total budget for moderate energy renovation: €745 mill. Total budget for deep energy renovation: €83 mill. In 2022, 451 projects amounting around €733.5 mill. have been submitted for moderate renovation, and 121 projects amounting around €635 mill. have been submitted for deep renovation.
Call for projects for thermal rehabilitation of blocks of flats under the Regional Operational Programme (2014–2020)	〉 Call dedicated to financing investments for improving energy efficiency in public or residential buildings, and public lighting. 〉 **279 multi-family residential buildings**, respectively 19,596 flats, were thermally rehabilitated in 2018 resulting in final energy savings of about 149 GWh.[23]
Photovoltaic systems for isolated households (2018-on-going)	〉 Non-refundable financing, granted by the Environmental Fund, to cover **100%** of the eligible costs, but not more than €5000, including VAT, for each **photovoltaic system** serving a household located at a **distance of at least two kilometres from the national electricity distribution grid** (measure for access to electricity) 〉 The program is dedicated to physical persons. 〉 In 2020, about 55 projects (160 households) have been approved.
Action Fund for Sustainable Energy Management (2020-2025)	〉 Grant covering 85% of the total eligible value of projects supporting sustainable energy management in poor/underdeveloped localities. 〉 Local authorities from the targeted localities can access these funds and cover the remaining 15% for specific infrastructure projects. Specific works that could include vulnerable people are those related to connection to district heating and energy supply (including renewable energy). 〉 Total budget from the Ministry of European Funds is 8 mill. Lei (approx. €1.6 mill.).

The table above is focused on the national EE policy measures tackling energy poverty. More initiatives exist at regional or local level, or led by stakeholders such as energy companies. As illustrated by the schemes developed as part of SocialWatt.

[23] Raport de monitorizare a implementarii Planului National de Actiune în domeniul Eficientei Energetice (PNAEE), ANRE 2019: https://www.anre.ro/ro/eficienta-energetica/rapoarte/rapoarte-de-monitorizare-a-implementarii-planului-national-de-actiune-in-domeniul-eficientei-energetice-pnaee

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

FOCUS ON ARTICLE 7 EED AND THE ROLE OF ENERGY COMPANIES

Romania has not opted for an energy efficiency obligation scheme under Article 7 of the EED but for a range of **alternative policy measures** to be achieved through specific energy efficiency programmes. The latest information available are from the 2020 Report on the progress made in meeting the national energy efficiency objectives of the Ministry of Economy, about energy savings achieved in 2018. The policy measures reported by Romania include **three measures focused on the residential sector**:

- Thermal renovation of multi-dwelling buildings (see above the measure "Call for projects for thermal rehabilitation of blocks of flats under the Regional Operational Programme (2014–2020)");
- Thermal renovation of single-family dwellings;
- Procurement of high-performance electrical equipment.

Romania's reports to the EED and NECP did not mention for the energy efficiency schemes any particular provision related to low income or energy poverty. But many Romanian owners are likely to have low income: **most renovation programmes in Romania could thus contribute to tackle energy poverty**. However, the households who participate in these programmes are **not necessarily the most in need**. The new programmes included in Romania's Recovery & Resilience Plan (see above) include a focus on deprived areas, which might improve the targeting of these programmes.

Regarding the establishment of an energy efficiency investment fund able to tap into private funds, structural funds, auctioning revenues under EU-ETS provisions and the State budget, the Ministry of Energy proposed in September 2022 a draft law for the establishment of the **National Fund for Investments in Energy Efficiency**, which was under public consultation until October 2022 and is expected to be approved in the beginning of 2023 by GEO.

Although in Romania, **utilities / energy companies do not have energy savings obligations** under Art. 7 of the EED, they should understand the benefits of implementing energy efficiency measures and that improving efficiency within the energy supply sector can help them deliver better service for their customers while **reducing their own operating costs and also the arrears on bills**.

On the other hand, identifying the energy poor among the energy consumers could be a barrier for local authorities in targeting the right recipients when designing and delivering the energy saving / energy efficiency schemes. Therefore, establishing good **partnerships between utilities and local authorities** could lead to better delivery of the specific schemes and actions: utilities can identify the energy poor by using the data on energy consumption or bill arrears, available in their databases at household level, so as local authorities to reach those most in need.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH PAVEL-CASIAN NIȚULESCU, State Secretary for Energy, Romania's Ministry of Energy

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Romanian Integrated National Energy and Climate Change Plan (NECP) for 2021-2030 has a great number of targets and objectives that involves important public and private investments. Romania is counting on important investments from the funds provided in Romania's Recovery and Resilience Plan (PNRR), the Just Transition Fund (JTF), and accelerating the transition to climate neutrality through the Modernisation Fund (FM).

Yet, considering the key macro-economic challenges for Romania's economy include growing fiscal and current account deficits stemming from a consumption-led growth model based on strong domestic demand, which was stimulated in recent years by expansionary fiscal policy. In addition, adverse demographic developments and shortages in the education system have led to labour and skill shortages and inequalities and regional disparities have been further accentuated by the Covid-19 crisis. An unpredictable business environment is also a challenge to the Romanian economy.

〉 Have there been recent changes in the Romanian policy measures to tackle energy poverty?

Energy poverty affects over 28% of the people of Romania. This means that 5 million Romanians have difficulties paying their electricity bills, cannot heat their homes properly, or do not have access to affordable sources of energy supply. Romania is still aiming for full electrification. 7% of all households in Romania have no access to electricity and 80% of Romanians living in rural areas rely wholly on wood for heating.

Romania must reduce Energy Poverty by half by 2030, in order not to end up with half of Romania's population in Energy Poverty in 2050.

From the financing measures mentioned above, which are directly and indirectly tackling the energy poverty issue, we must mention that eligible citizens affected by financial difficulties will receive energy cards in the period 1-28 February 2023. Payments can be made from March 1. Those who retain their status as beneficiaries will be able to use the card for the second instalment as well, starting in September. Between September 1 and 30, those arriving in the meantime who are eligible will receive the card to use the second instalment.

Emergency Ordinance no. 27 of March 18, 2022 regarding the measures applicable to final customers in the electricity and natural gas market in period April 1, 2022 - March 31, 2023, as well as for the modification and completion of some documents energy regulations approved by the Law no. 357 of December 13, 2022 regarding the approval of the Government's Emergency Ordinance no. 119/2022 for the amendment and completion of the Government Emergency Ordinance no. 27/2022 regarding the measures applicable to final customers in the electricity and natural gas market in the period April 1, 2022-March 31, 2023, as well as for the amendment and completion of some normative acts in the field of energy regulated prices to fix the inequities regarding the energy poverty.

According to article 34 from the Law no. 226 of September 16, 2021 regarding the establishment of social protection measures for vulnerable energy consumers, the Ministry of Labour and Social Protection monitors and controls, through the empowered staff and through the subordinate institutions, the application of the provisions of this law regarding the granting of heating aid and the energy supplement.

Financing schemes are also a solution, of which we would like to mention the ones managed by the Administration of the Environmental Fund,

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

offering affordable renewable energy by "Casa Verde" program with a 90% aid intensity for PV systems for the population or vouchers for energy efficient cars, electronics and many other efficient products.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

Yes, energy efficiency schemes are an important part of the national strategy or approach to tackle energy poverty, indirectly and directly. The "Rabla" program is an example by which the State offer support through vouchers for energy efficient cars.

There is an abundance of financing solution on the market right now, and our efforts are to grow the absorption for these funds.

ElectricUp for example was one of the first measures that offered the SMEs and HoReCa a great support to overcome the COVID and the energy crisis - 100% aid intensity, supporting these 2 pillars-solution in the energy poverty actions. Keeping employment figures stable is also a key solution for Romania.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

As I said before, strong SMEs and HoReCa, a stable economy and predictable legislative measures are good response to the energy poverty. Energy companies must be able to hire staff and engage in social responsibility measures. This year, the Energy Efficiency Directorate will start information campaigns at the national level together with partner companies, to increase energy efficiency by informing about the benefits it brings.

〉 The current recast of the Energy Efficiency Directive will likely introduce an "energy poverty" ringfence or sub-target as part of the national energy savings obligation. Do you expect changes in the policy measures to meet this sub-target?

Yes, we expect the current recast of the Energy Efficiency Directive that might introduce an "energy poverty" sub-target as part of the national energy savings obligation, to produce notable changes in the policy measures to meet this sub-target. Romania is constantly adapting its legislation to be in line with the European efforts.

〉 Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?

We are constantly adapting energy efficiency measures to tackle energy poverty. We expect greater rates of absorption for the current and future programs carried out through Romania's Recovery and Resilience Plan (PNRR), the Just Transition Fund (JTF) and accelerating the transition to climate neutrality through the Modernisation Fund (FM), ElectricUp 2, AFM's "Rabla" and other sources like the EEA and Norwegian grants that represent Iceland, Liechtenstein and Norway's contribution to reducing economic and social disparities and strengthening bilateral relations with 15 countries in Central and Southern Europe and the Baltic countries, or the Swiss Funds to reduce social and economic disparities, without limiting to these.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH CORNELIA SZABO (CEZ VÂNZARE, energy supplier)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Yes, we expect an increase in the number of households at risk of energy poverty, due in part to the current energy crisis, but also due to the rise of the cost of living in Romania. At the moment, for most households we have a price cap for both electricity and natural gas.

Another effect of the current energy crisis is that the price cap for natural gas has gone up greatly. Although the price is capped, the price cap is three times larger than the gas price just a few years ago. Keeping in mind that natural gas is the most widely used means of heating in Romania, this will most likely contribute to an increase in the number of households at risk of energy poverty.

The earlier mentioned capped prices also come in a time when we have a general high cost of living in Romania. We currently have an estimated 15% inflation rate for the first quarter of 2023 and expect increases in interest rates this year to counterbalance this effect.

〉 Do you think the newly adopted Government Emergency Ordinance 130/2022 for amending and completing Law no. 121/2014 on energy efficiency will contribute to making energy efficiency schemes an important part of the national approach to tackle energy poverty?

I believe that GEO 130/2022 will help with making energy efficiency schemes a priority, but we need to acknowledge the fact that energy efficiency is still a new concept in Romania and people might be skeptical at first. The current legislation facilitates energy efficiency measures but leaves the implementation of these measures to other entities. Due to the addition of "Smart financing for smart buildings" initiative, we will surely see an increase in government grants and schemes aimed at financing energy efficiency although the implementation comes down to central and local public authorities and regional development agencies.

〉 What should be the role of energy companies in the schemes to tackle energy poverty?

The main role of utilities, in my opinion, should be to accurately inform customers about their consumption. For example, if you do not have an accurate reading of utilities usage, you cannot make adjustments in time to make significant savings. Another important role would be to educate consumers on how to be more efficient in their use of energy. Another way utilities / energy companies can help tackle energy poverty is by providing customers with energy efficiency products. For example, we at CEZ Vanzare have given out LED lightbulbs to energy poor customers, offer smart thermostats in monthly instalments with the energy bill and also provide RES solutions for both home and business.

〉 Could an "energy poverty" ringfence or sub-target in Article 7 EED change the way energy poverty is tackled? (or could it make that energy efficiency measures would better include a social dimension?)

Well, it would definitely have an impact in the way stated in the EU policy for tackling energy poverty, by being adopted in the national legislation, but I do not believe it would definitely lead to the inclusion of a social dimension in the energy efficiency measures. I believe energy poverty should be tackled on its own and be given a strong EU backing if we are to eradicate it by 2050. Although a large percentage of households could be considered energy poor or at risk of energy poverty, in my opinion we cannot assume a specific social category of people to be energy poor, and more in-depth analyses are needed to truly identify energy poor consumers. We currently have a clear definition of energy poverty but I believe we are lacking ways of identifying the households that are truly energy poor.

〉 Would you like to add a comment on the

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

topic of energy efficiency measures to tackle energy poverty?

I believe energy efficiency to be only one part of the solution towards ending energy poverty. To eradicate energy poverty by 2050, we need to fully commit by making sure all new buildings from now on are built as energy efficient as possible and teach people how to keep energy efficiency in mind in everything they do. I strongly believe in educating consumers to more energy efficient behaviours and contribute to a more sustainable future.

INTERVIEW WITH ANDREEA VORNICU-CHIRA (Center for the Study of Democracy and ORSE)

› **Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?**

There is a high chance to observe an increase in the percentages of households affected by energy poverty. However, we cannot estimate precisely how many households will be affected. Using various indicators for measuring energy poverty, we know that for 2020, 33% of the households were spending more than 10% of their income on paying the energy bills and 10% of the households fall under the poverty line after paying their bills which are higher than the national median (HBS, 2020). This means that one third of the households were already vulnerable in 2020, with a higher percentage in the first deciles of income. When it comes to the LIHC (low income, high cost) indicator, the most affected households are the ones from the first three deciles of income. Another important discussion for the Romanian context is nuanced by the M/2 indicator which indicates forms of hidden poverty or underconsumption. Basically, households use less energy than needed for their daily activities and heating because they cannot afford to pay more. For 2020, the first three deciles of income are highly affected. While the heating benefits reach only the households with very low incomes that manage to navigate the bureaucratic system, leaving behind other households in need, the compensation and cap mechanism are expected to limit the impact of high energy prices. Moreover, these measures have the potential to lower the impact of high energy prices not only on low income households, but also on the medium income households that might have been highly impacted by the energy crisis. But even with these measures, the number of households in risk of energy poverty is expected to rise.

› **Have there been recent changes in the policy measures to tackle energy poverty?**

If we look at the changes from the last 2-3 years, there are several laws and governmental decrees that try to address the question of the vulnerable consumer. Firstly, the Vulnerable Consumer Law, adopted in 2021, offers a definition of the vulnerable consumer, introduces the concept of „minimal energy needs" and presents a list of mechanisms to address the phenomenon of energy poverty. Among the measures presented, a high importance is given to the financial schemes (heating benefits and energy supplements) which are designed as yearly social interventions, mainly for heating, for the low income households. Because the heating benefits are granted based on an income threshold and the bureaucratic process is quite complex, many vulnerable households are left behind. Moreover, the legislation has limited procedures for the implementation of non-financial schemes or other mechanisms listed as potential solutions for the vulnerable consumer. Therefore, this law enacts rather short term and dependency mechanisms for tackling the energy poverty.

Other important measures address the immediate effects of energy poverty and were issued as a reaction to the energy crisis: the

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

compensation and cap measures adopted by the Government. The cap mechanism for the final consumer and the various compensation schemes for the suppliers represented immediate responses for the high energy prices (both gas and electricity, with the mention that a cap mechanism was enacted for the wood market, as well). While these measures have their own logic in times of crisis (protecting not only the energy poor households, but also the ones that may become vulnerable), they cannot be considered viable long term solutions, as they have a very high cost on the budget and do not address the root causes of the problem.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

The energy efficiency schemes should be drafted, implemented and communicated as important national strategies for tackling energy poverty. In Romania, there are several programmes designed for the thermal rehabilitation of the national building stock. Specially designed for the urban areas are: a. the governmental programmes (implemented through the Ministry of Development and Local Administration and the local authorities), where usually the households need to financially contribute to the renovation (20% of the cost, but local authorities may decide to cover this percentage for the energy poor households) b. the Renovation Wave scheme, part of the NRRPs (only 15% of the funds will be allocated to marginalized multifamily buildings and will cover the entire costs of the renovations) and c. other European Funds (like Cohesion Funds and other schemes) that may be administered by the government or the local authorities. For the rural areas the most important schemes are the ones administered by AFM (the Environment Fund Administration) and the funds go directly to the beneficiaries through various mechanisms. While these schemes are important, they do not include energy poverty as an important objective that needs to be addressed. The importance of national energy efficiency schemes (be it thermal rehabilitation in rural and urban areas or other schemes) has been widely discussed during the Romanian Observatory of Energy Poverty (ORSE) meetings. Because these schemes have the potential to tackle one of the root causes of energy poverty, the reduced energy efficiency of the Romanian residential building stock, the ORSE experts recommended the inclusion of vulnerable households into these schemes. While in urban areas, energy poor households may be included in these programmes through the financial support of local authorities, for rural areas, the programmes are directly designed for the medium and high-income households leaving the vulnerable ones with no support. In conclusion, energy efficiency schemes should be an important component of the energy poverty strategy, but now they only marginally address this phenomenon.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

Energy vulnerable households are consumers of energy like any other households from Romania and from this perspective, but not only, the companies should be directly involved in addressing the phenomenon. Following the principle of offering a service for a client, utility companies should adapt their packages and services for this type of consumer. Another important aspect related to energy poverty, among the low incomes and the reduced energy efficiency of the buildings, is given by the consumption patterns a household has. The companies have data about consumption patterns, data that are vital for researcher and policy makers for both better understanding energy poverty in its complexity and for tailoring adequate policies for different households. Because there are so many aspects conducive to energy poverty, a better mapping would allow clustered profiles and better solutions. Therefore, ORSE insisted on the importance of better and functional partnership between supplier and distribution companies, research institutions and authorities, with the objective to

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

ease the access to consumption data and increase the collaboration for finding better solutions for the vulnerable consumer. Under the argument of GDPR, utility companies are very reluctant to give access to consumption data for both local and national authorities and research institutes which leads to a limited mapping of energy poverty and fractured policies that cannot address all the root causes of the problem. Moreover, it is in the direct interest of the companies to better understand the criteria that may exacerbate the vulnerabilities of a household and design personalized packages for these consumers.

〉 You have done a lot of research on energy poverty in Romania: can you give some policy recommendations for its alleviation?

The policy recommendations are the ones already listed on the Romanian Observatory of Energy Poverty. I will summarize the most important aspects and I will give you the link of ORSE for more details.

1. Local authorities can play an important role in both mapping and addressing energy poor households by implementing One Stop Shop schemes. Local authorities already have a better understanding of the local realities and vulnerabilities and have the potential to better collect local data and tailor solutions adapted to the local needs. This instrument would also increase the trust mechanisms between citizens and authorities and would enhance the democratic participation.

2. There is a need for better access to data to have a better mapping of the phenomenon. Most of the energy poverty indicators are calculated based on the income of the household and the expenditures with the energy bills. Some data may be triangulated with variables related to heating types and other households' characteristics, but there is a clear need for access to consumption data. In addition, a National Register of the Building Stock, a programme started several years ago would offer a better perspective of the status quo, the types of the buildings that are in dire need for thermal rehabilitation and would allow the generation of solutions.

3. The thermal rehabilitation programmes, be it for the urban or the rural areas, but especially the ones designed for the rural areas, need to include in their targets the energy vulnerable households. Accessible programmes (reduced bureaucracy, extended subsidies for rehabilitation, etc.) for the vulnerable categories would offer a long-term solution for the problem of energy poverty.

4. In connection to point 3, policy makers should extend their focus from short term interventions (heating benefits, energy supplements, etc.) to long term solutions that address the root causes of vulnerability.

5. Because energy poverty has multiple manifestations, there is a need for coordinated response from various stakeholders. One of ORSE's proposals was to either create an inter-ministerial body or another mechanism that would encourage the collaboration among various ministries and decision makers. This would lead to clear institutional leadership, better articulated policies and would increase the administrative capacity to tackle the phenomenon.

6. There is a need for increased administrative capacity, both at national and local levels for absorbing European Funds designed for energy poverty and implementing the projects locally.

For more details see the ORSE website.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

10 COUNTRY FACTSHEET: SPAIN

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

COUNTRY FACTSHEET

February 2023

SOCIALWATT

CONNECTING OBLIGATED PARTIES TO ADOPT INNOVATIVE SCHEMES TOWARDS ENERGY POVERTY ALLEVIATION

Spain

BACKGROUND

- The National Strategy against Energy Poverty (ENPE) approved by Spain's government in April 2019, includes an official **definition of energy poverty**: "*Energy poverty is the situation in which a household cannot meet its basic energy needs, as a result of insufficient income, and which, if applicable, may be aggravated by having an energy-inefficient dwelling*."
- The ENPE also defines **vulnerable consumers** as follows: "*A vulnerable consumer is a consumer of electricity or thermal energy who is in a situation of energy poverty and who may benefit from support measures established by the administrations*"
- The ENPE set the **target** to reduce each indicator by at least 25% by 2025, with the further ambition of a 50% reduction (both vs. 2017 levels). The ENPE is an integrated approach structured in **four axes**: (1) Improving the knowledge on energy poverty; (2) Improving the subsidy mechanisms; (3) Reducing energy poverty structurally thanks to energy efficiency; and (4) Protecting consumers and raising social awareness.
- Axis 1 of ENPE includes the yearly assessment of official energy poverty indicators defined from the **four main indicators of EPOV** (European Energy Poverty Observatory) (latest data in MITECO 2022):

EPOV indicator	2017	2018	2019	2020	2021
Disproportionate energy expenses (2M): % of the households with a share of energy expenditure in income higher than twice the national median	17,3	16,9	16,7	16,8	16,4
Hidden energy poverty (M/2): % of the households whose absolute energy expenditure is less than half the national median	10,7	11,0	10,6	10,3	9,3
% of the population **unable to keep home adequately warm**	8,0	9,1	7,6	10,9	14,3
% of the population with **arrears on utility bills**	7,4	7,2	6,6	9,6	9,5

The indicators are adjusted for variables such as climate, the size of the household, the income quintile per consumption unit, the activity situation and the type of household. The annual report provides detailed analyses (e.g. per climate zone).

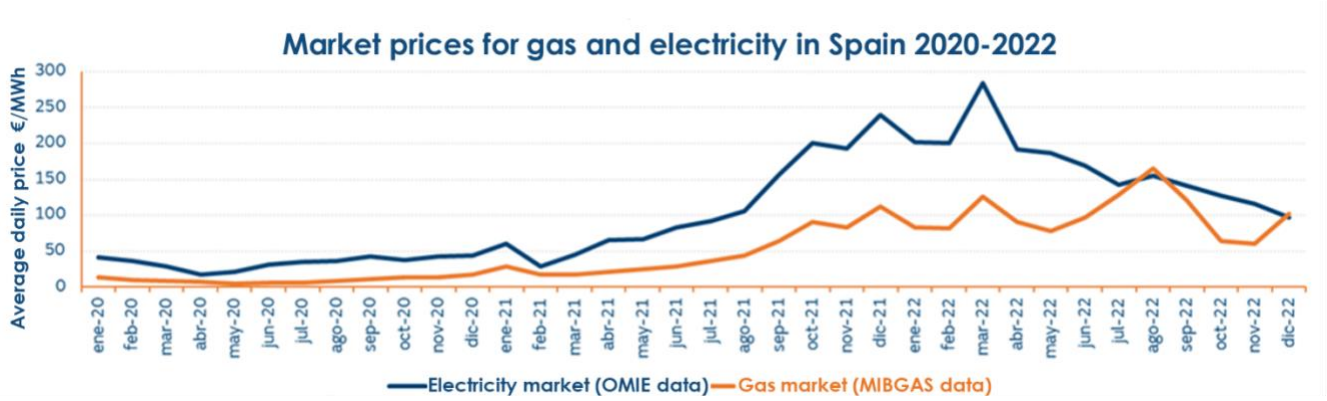
A complementary study on measuring energy poverty has just been launched by IDAE (Spanish energy agency).

- About axis 2, the main measure of protection for vulnerable consumers is the Social Bonus for electricity, was introduced in 2009 and revised several times. It is currently a 25% or 40% discount on the electricity rate for customers who meet certain requirements, based mainly on income level but also on personal circumstances. The latest change was through Royal Decree-Law 15/2018 (October 2018) that complemented it with a Social Bonus for thermal energy, that is a single annual payment to those customers who already received the social electric bonus on 31 December 2018 (the bonus for thermal energy is about reducing costs for heating, cooking and domestic hot water).

WWW.SOCIALWATT.EU

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

- About axis 3, social criteria have been integrated in the **building renovation programmes**: the current main programme (PREE) offers a higher grant rate for renovations of condominiums for vulnerable households eligible to the social bonus. A new sub-programme (PREE 5000) is focused on municipalities facing a demographic challenge.
- About axis 4, initiatives to tackle energy poverty are also developed at **regional or local level**. Many **municipalities** have created energy poverty offices to provide tailored support to vulnerable households. The first one was set up in Barcelona with Energy Advisory Points (PAE – Puntos de Asesoramiento Energético).
- **NGOs** are also very active, including the Alliance against energy poverty, Red Cross, Cáritas, Ecodes, Ecoserveis, Energia Justa, Alliance for renovations with no one left behind. An increasing number of initiatives cover from awareness-raising, information up to retrofitting. For example, the Naturgy Foundation has a Vulnerability Energy Plan that has undertaken 3600 low-cost retrofits and more than 276 training workshops on energy bills and habits having more than 200.000 beneficiaries since 2017.
- Compared to other European countries, the Spanish stock is relatively young (44% of the main residences built between 1981 and 2007). 67% of the dwellings are in multi-family buildings (high share of condominiums), and 77% of the dwellings are owner-occupied. However, according to the ENPE, the **highest rate of energy poverty** is in the **private-rented sector** and in **rural areas**.
- **Energy needs vary greatly** among regions according to the **6 climate zones**: for ex. heating degree days range from <1000 (Balearic Islands, exclaves of Ceuta and Melilla) to almost 2500 (region of Castile and Leon) (Insight-E project). However, energy poverty can also be found in milder climate zones, due to poor housing insulation.
- **Energy prices** are **higher in Spain** than in most other EU countries (20% above the EU average for electricity and gas prices for households in 2019, Eurostat). All energy prices have known a strong increase from mid-2021 in Spain, as shown in the figure below about wholesale prices.



Source: Naturgy's figure using data from OMIE (Spanish and Portuguese electric market) and MIBGAS (Spanish and Portuguese gas market)

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

MAIN RECENT MEASURES TO HELP HOUSEHOLDS FACE THE ENERGY CRISIS

MEASURES FOCUSED ON VULNERABLE OR LOW-INCOME HOUSEHOLDS

- **Increased Social Bonuses for electricity and thermal energy** (October 2021 – December 2023): discount on energy bills for about 1.2 million eligible households in 2021 and now about 1.9 million

From October 2021 (Royal Decree Law 23/2021, MITECO 2021)

- bonus for electricity: increase of discounts from 25% to 60% (vulnerable consumers) and from 40% to 70% (severely vulnerable).
- bonus for thermal energy: budget doubled for 2021 (up to 202.5 million euros), equivalent to an aid of 90 euros per beneficiary on average (different according to the climate zone)

From April 2022 (MITECO 2022a)

- bonus for electricity: further 600 000 households eligible (+50%), and further increase of discounts from 60% to 65% (vulnerable consumers) and 70% to 80% (severely vulnerable), and possibility for consumer eligible to the "minimum vital income" (social benefit for very low income people) to apply automatically for the Social Bonus (with automatic renewal of social Bonus after two years),
- bonus for thermal energy: increased budget from 202.5 to 228 million euros (to help the households newly eligible).

From October 2022 (Plan for more energy security "Plan +SE", MITECO 2022b)

- new category of temporary social bonus for energy justice (Bono social Justicia energética) to help further 1.5 million households (low-income households but not meeting the criteria for the social bonus for electricity), with discounts of 40% on their electricity bills until the end of 2023. This makes that altogether the four lowest income deciles can receive a direct aid.
- increased limits of annual energy consumption eligible to the discounts of the social bonus
- social bonus for thermal energy doubled for 2023 to an average of 375 euros per beneficiary (total budget of 453 million euros)

- **Minimum Vital Supply** (March 2020 – on-going): in March 2020, cutting supply of gas and electricity of people with debt became prohibited for a new category for people affected economically speaking by Covid. This was then extended in October 2021 (and then again in April 2022) to households eligible to the social bonus, as part of the Minimum Vital Supply measure planned in the ENPE. At times of "normal" electricity prices, the Minimum Vital Supply is to ensure that households keep a minimum level of power (2 kW) at homes that are cut off for debts, enough to have a minimum quantity of energy for 6 months. In practice, this has not been used so far, because the government has extended the prohibition of cutting household with social tariffs.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

MEASURES BENEFITTING TO ALL HOUSEHOLDS

- **Reduced taxes on electricity** (June 2021 – on-going): from June 2021, reduced VAT from 21% to 10% for small consumers, suspension on the 7% IVPEE (levy on the sale of electricity production) on the wholesale energy sales (equivalent to a 12% discount on bills for domestic consumers) (Royal Decree-Law 12/2021), complemented with further fiscal measures from October 2021(Royal Decree-Law 17/2021): Special Tax on Electricity reduced from 5.1% to 0.5% (minimum allowed by EU regulations), and the funds obtained from CO2 auctions increased to 2 billion euros to reduce electricity bills (MITECO 2021). Overall the fiscal measures were equivalent to a 60% tax reduction, estimated to amount to 10 to 12 billion euros per year (MITECO 2022a). The VAT was then further reduced to 5% from October 2022.
- **Cap on the increase in the regulated natural gas tariff** (TUR) (October 2021 – on-going): increase limited to 4.4% in the last quarter 2021, for families and SMEs with individual boilers (vs. 35% increase without this cap). The cap has been maintained since then. In practice, this means that the regulated price is about half the market prices. Cap measures on gas prices are progressively extended to cover all gas consumers. The price of a butane bottles (LPG) has been capped at 19.55 euros since June 2022. Then the cap on TUR will be extended to collective boilers at the end of 2023, with up to 1.7 million households who could benefit for a reduction up to 50% on a reference consumption (average of the past 5 years), if the condominiums install individual meters or cost allocators before October 2023, unless they are exempted due to technical unfeasibility. Otherwise, a surcharge of 25% will be applied to the variable term on gas consumption when the condominium subscribe to the TUR. Overall the cost of the cap on TUR for the State budget is estimated to 3 billion euros in 2023 (MITECO 2022b).
- **Reduced VAT on gas and biomass prices** (October 2022 – on-going): VAT of gas and biomass was reduced from 21% to 5% (MITECO 2022c)
- **Discount on fuels for transport** (April 2022 – June 2022): discount of 20 eurocents per liter of fuel from April to 30 June 2022 (15 cents from State budget, 5 cents from the oil companies)
- **Information on electricity and gas bills for households and SMEs**: information on average consumption in the district and advice on how to make savings (announced in October 2022)

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

MAIN NATIONAL ENERGY EFFICIENCY MEASURES TACKLING ENERGY POVERTY

Programme for Energy Renovation of Buildings (PREE) (since 2020 ; revision of previous renovation programmes, PAREER, in place since 2013)	〉 Coordinated by IDAE and implemented by the Regions (Autonomous Communities) 〉 Eligible actions: insulation, space and water heating systems (including RES), lighting 〉 Grants with base rate of 15% to 35% (depending on the type of action and dwelling) for achieving at least 20% energy savings, with bonus rates of 5 to 20% for higher energy efficiency ambition, 10 to 20% in case of combined actions on building envelope and heating system, and **15% for households eligible to social bonus**. 〉 First budget of 300 million euros in 2020, plus 102.5 million euros in 2021. 〉 As part of its Recovery & Resilience Plan, Spain has developed from August 2021 a new programme (PREE 5000) focused on municipalities facing a demographic challenge (less than 5000 inhabitants). It includes a **bonus grant rate for households eligible to social bonus**. Budget for August 2021-December 2023 is 50 million euros.
Neighbourhood retrofitting programme (2021-2026)	〉 Part of the 'Building renovation and urban regeneration plan' included in Spain's Recovery & Resilience Plan adopted in 2021 (with NextGenerationEU funds), and more specifically, part of the 3.42 billion plan for renovating dwellings 〉 A share of the budget will be allocated to energy rehabilitation actions that prioritise an integrated approach in **neighbourhoods with poor energy performance or very low purchasing power**. In those deprived areas, the **public contribution could be 100%** (vs. 40 to 80% otherwise, depending on the savings achieved), with grant amount of 8100 to 21400 euros per dwelling (depending on the savings achieved), to achieve **average energy savings of more than 30%**. 〉 The submission of applications for grants will be closed by the end of 2024, and the works have to be completed by mid-2026.
Programme for energy-efficient social housing buildings (2022-2026)	〉 Part of the 'Building renovation and urban regeneration plan' included in Spain's Recovery and Resilience Plan adopted in 2021 (with NextGenerationEU funds) 〉 Promotion of the construction or rehabilitation of **20 000 dwellings** not currently used for social housing, and to be delivered by mid-2026 with **high energy efficiency standards** (primary energy consumption at least 20% lower than the current building regulation) (aim of increasing the stock of social or affordable housing) 〉 Dwellings meant for households meeting certain social criteria, for at least 50 years 〉 **1 billion euros** in total (500 million allocated in 2022 and 500 million in 2023, both to the Autonomous Communities). Maximum grant amount: 50 000 euros per dwelling.

The table above is focused on the national EE policy measures tackling energy poverty. More initiatives exist at regional or local level, or led by stakeholders such as energy companies. As illustrated by the schemes developed as part of SocialWatt.

FOCUS ON ARTICLE 7 EED AND THE ROLE OF ENERGY COMPANIES

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

Spain reports to Article 7 EED a combination of an Energy Efficiency Obligation Scheme (EEOS) and alternative measures. The EEOS was created in 2014 when transposing the EED (Ley 18/2014). Up to now, the EEOS has required energy suppliers to pay to the National Energy Efficiency Fund (FNEE) a financial contribution whose amount is set every year. In January 2023, the Spanish government approved the addition of a white certificates scheme to the EEOS, allowing obligated parties to meet part of their obligation by doing or contracting energy efficiency programmes, or buying white certificates to other obligated parties (Real Decreto 36/2023). No specific provision related to energy poverty has been announced yet. Spain's implementation of Article 7 EED has thus not yet involved energy companies in the development of energy efficiency measures to alleviate energy poverty.

The Institute for Diversification and Energy Saving (IDAE), attached to the Ministry for Ecological Transition (MITECO), operates the FNEE. IDAE designs and coordinates energy efficiency programmes financed from the FNEE and other funds such as the European Regional Development Fund (ERDF). This includes the renovation programmes such as PREE (see above), that have been reported to Article 7 EED. However, for the period 2014-2020, Spain did not mention a share of energy savings that would be achieved with measures aimed at alleviating energy poverty or with other social aims.

Spain's NECP presented a set of about 30 policy measures grouped in 10 policy packages, including one focused on energy efficiency in the residential sector, making a link with the ENPE. Measures related to the ENPE could include support for the replacement of appliances, as well as higher grant rates for building renovation.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH ESTER SEVILLA (Director of Social Programs, Naturgy Foundation)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

Naturgy Foundation has regular contact, through the initiatives of its Energy Vulnerability Plan, with vulnerable groups and a worsening of their situation has been observed. With the current energy crisis and the rise in prices together with an unemployment rate above 13% in Spain, an increase in energy vulnerability is expected. It is also observed that people either reduce their energy consumption to maintain spending or consume the same but spend much more (even sacrificing other essential goods). In the latest energy poverty indicators published by MITECO in December 2022 that show the situation for 2021, the indicator of "inadequate temperature at home" has suffered an increase of almost 4 points compared to 2020. This indicator reflects the perception of how you feel at home from an energy point of view.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

Recently, the measures carried out by the Administration have been related to short-term and emergency measures, aimed to mitigating the impact of the energy crisis on the group of vulnerable people, basically increasing the discount percentage of the social tariffs and expanding the categories eligible. It can be said that these mechanisms have contributed somewhat to retaining the impact of the pandemic and the current price crisis.

In recent years, energy rehabilitation programs promoted by the IDAE (Agency within the Ministry of Ecological Transition) and the rehabilitation aid granted by the city councils do provide for an increase rate in subsidies for vulnerable groups (i.e. those who have the social bonus). There is a growing awareness that these groups should be helped. However, this help is still insufficient. Given that energy poverty is one face of poverty in general, it must be considered that these families cannot afford an investment in rehabilitation or an advance payment even if they later receive a subsidy. One solution would be for the Ministry to consider the possibility of financial aid for these people coming through some intermediate body, such as social entities, which can act as a bridge, helping to identify the people who need it, as well as accompanying the procedures to ensure that the help actually arrives.

In relation to the prices of energy supply, more long-term measures should also be adopted such as establishing regulated social tariffs exclusively for truly vulnerable customers and charged to State's general budgets, within the framework of social policy said in the Directive on common rules for the internal market for electricity.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

Energy companies have an important position to alleviate energy poverty and develop specific schemes. However, it is necessary that the schemes that are proposed and the regulation that develops them generate incentives for energy companies to dedicate special attention to these groups, without imposing obligations in a discriminatory manner. Energy companies can contribute very effectively to building capacity and awareness about energy poverty and its relationship with energy efficiency. On the other hand, it is essential to establish strong alliances and collaborations with key stakeholders (for example, social services) to be able to

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

effectively target energy-poor households and design customized schemes.

› **The current recast of the Energy Efficiency Directive will likely introduce an "energy poverty" ringfence or sub-target as part of the national energy savings obligation. Do you expect changes in the policy measures to meet this sub-target?**

Energy efficiency objectives in actions carried out on the group of vulnerable people is good for promoting housing rehabilitation measures; however, special incentives are necessary to promote actions for these groups, since it must be taken into account that, on occasions, these people use less energy than necessary. There must be specific schemes of energy efficiency as they can emanate from the EED, and also specific lines to help alleviate energy poverty. Cost to the consumer remains a barrier, so the schemes must cover the entire costs or facilitate blending financing.

› **Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?**

Undoubtedly, improving energy efficiency at homes of vulnerable families is one of the basic lines to alleviate energy poverty. Perhaps the financing of such measures is the most important barrier to their implementation. For this, incentives must be proposed to companies so that they promote measures for these groups and also their design must have characteristics that are somewhat different from other groups, such as: financing must reach 100% because these people in general do not have accumulated savings to invest; the aid should go through the NGOs that accompany these families since the direct granting of monetary aid for these lines of efficiency can make them lose other subsidies; the management of the implementation and verifications must be reduced in bureaucracy; the measurement of the impact as well as the management process should not cost more than the measure itself; should be encouraged as a medium-term measure the "express rehabilitation" when it is not possible to carry out an integral rehabilitation of the dwelling; it should be sought solutions and mediations for housing rental cases so that vulnerable people can remain long time in the house with a reasonable rental cost after improving energy efficiency of the dwelling.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH ROBERTO BARRELLA, JOSÉ CARLOS ROMERO AND EFRAIM CENTENO (Chair of Energy and Poverty – Comillas Pontifical University)

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

According to indicators assessed from the latest data available from the Spanish National Institute of Statistics (INE), published in 2022 and corresponding to 2021, and analysed by the Chair of Energy and Poverty, several million people meet some of the indicators that point to energy poverty. For example, arrears on utility bills (4.5 million) or inadequate housing temperature (6.7 million). The former is consolidating its value compared to 2020, but the latter is worsening very significantly. If the disproportionate expenditure is taken into account (2M and MIS indicators; when what is paid for energy is a very important part of income) energy poverty affects around three million households, while two million households are severely under-spending, i.e. consuming much less than they need, according to the Hidden Energy Poverty indicator proposed by the Chair.

It is therefore clear that 2021, from an energy poverty perspective, was a year of some light and a lot of shade. Compared to 2020, fewer households spent a disproportionate share of their income on energy costs, but, in contrast, many more households entered the dark abyss of severe hidden energy poverty.

There are no official statistics yet to be able to talk about the impact of energy prices on Spanish households during the last winter (2022/2023). The price increases have been slowing down since November 2022 and the winter has been mild, which has led to a decrease in heating needs. These conditions, together with the measures implemented by the Government could have mitigated energy poverty.

From a theoretical perspective, the Chair has simulated the bills of an average family in the regulated market over the course of 2022 and these have risen by 21% compared to the previous year.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

Multiple mitigating policies have been introduced by the National Government to tackle the impact of the energy crisis on households, especially vulnerable ones.

The main measures can be summarised as follows [see the first pages of this factsheet]*:*

- *Social Tariffs:*
  Electricity social tariff: Increase of the discounts and new categories of consumers benefitting from them.
  Thermal social allowance: increase of the aid amount.
- *Electricity bill:*
  Reduction of VAT from 21% to 10%, then 5%;
  Reduction of electricity tax from 5.11% to 0.5%;
  Reduction of demand charges;
  Reduction of price in the regulated market tariff for the Iberian exception.
- *Natural gas bill:*
  Cap on the regulated price of natural gas (TUR) for 2021, 2022 and 2023;
  Reduction of VAT from 21% to 5%.

The Chair of Energy and Poverty report points out that without measures such as the reduction of VAT, electricity tax or charges, the hidden energy poverty indicator would have increased by 200,000 households in 2021. In the following year, the increase in the discounts for the electricity social tariff was probably the real lifeline for vulnerable consumers benefitting from it (around 1,3 million at end of 2022), as their bills in 2022 were even lower than in 2021.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

Concerning structural measures, Action III – Line 6 of the National Strategy against Energy

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

Poverty (SNSEP) proposes energy efficiency interventions for three timeframes, as follows:

- *Short-term measures: it suggests low-cost 'express' energy retrofitting of housing.*
- *Medium-term measures: these include a broader replacement of household equipment (both thermal systems and electrical appliances) with more efficient ones and the promotion of public housing stock for social renting.*
- *Long-term measures: it proposes 'Integrated Building Retrofitting' – deep energy retrofitting.*

Moreover, all the suggested energy efficiency measures would require the design of ad-hoc financing schemes for vulnerable households.

These interventions would have to be implemented in line with the Spanish Long-Term Strategy for Energy Renovation in the Building Sector (SLTRS), which is the national roadmap for advancing towards the objective of decarbonisation and improving the efficiency of buildings.

Moreover, this strategy aims to contribute to the Spanish National Energy and Climate Plan 2021-2030 (SNECP), which, among many other strategic objectives, is committed to the energy retrofitting of the existing building stock. Both roadmaps include a special mention of households in energy poverty which, in the case of the SLTRS, translates into a specific action plan for them.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

Companies play a crucial role in the fight against energy poverty. First of all, they share with the rest of society the responsibility of finding ways of minimizing energy poverty. Besides they have access to information about vulnerable consumers and so its cooperation with the administration and also, with third-sector organizations is important in order to share the information (for example consumption patterns or arrears on payments) that may help to locate and characterize vulnerable households. The coordination of this kind of initiative lies with the public administration, at the national, regional and municipal levels, but energy companies may also be proactive through internal actions. In this context is especially interesting the proposal of creating a special position in the companies (social intrapreneurship) specifically devoted to these tasks.

Finally, companies can also leverage energy retrofitting funds to improve the energy efficiency of vulnerable households, such as the one promoted by Naturgy Foundation in Spain.

〉 The current recast of the Energy Efficiency Directive will likely introduce an "energy poverty" ringfence or sub-target as part of the national energy savings obligation. Do you expect changes in the policy measures to meet this sub-target?

The Spanish government already introduced special conditions for vulnerable households in energy efficiency subsidy programs, such as the PREE one. However, this new obligation might further boost this practice by, for example, introducing programs only for low-income households to narrow the funds to the ones that more need them.

〉 Would you like to add a comment on the topic of energy efficiency measures to tackle energy poverty?

These efficiency measures are crucial, as pointed out in the SNSEP. If energy poverty is to be tackled at its structural causes, it is necessary to address the source of the problem: the energy demand. The lower the demand, the less vulnerable households are.

That said, there are multiple strategies to improve energy efficiency in the residential sector. They could be divided into three main blocks:

1) Micro-efficiency measures: These are very low-cost actions that can be carried out by households themselves. These include the

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

installation of weather stripping on doors and windows, changing incandescent bulbs for LEDs, etc.

2) Express-retrofitting measures: These include all those actions that can be carried out from inside the home. The main ones would be: changing windows and installing insulating panels.

3) Deep renovation measures: These involve acting on the building envelope.

Researchers from the Institute for Research in Technology of Comillas Pontifical University quantified the savings related to the first two kinds of measures in Spanish households. However, it is necessary to use a wise combination of all these measures to improve the building stock in our country, always giving priority via public subsidies to the most vulnerable households.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

11 COUNTRY FACTSHEET: UK

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

COUNTRY FACTSHEET

February 2023

SOCIALWATT

CONNECTING OBLIGATED PARTIES TO ADOPT INNOVATIVE SCHEMES TOWARDS ENERGY POVERTY ALLEVIATION

United Kingdom

BACKGROUND

- In the UK 'fuel poverty' is used instead 'energy poverty', that was **officially defined** as early as in 2000 (Warm Homes and Energy Conservation Act 2000): "*fuel poverty is expressed in the form of a person [who] is a member of a household living on a lower income in a home which cannot be kept warm at reasonable cost*". The way to define and assess fuel poverty in practice has evolved over time. The current **official indicators** used to monitor fuel poverty are updated annually(Bolton et al., 2022):
  - In **England** the **Low-Income Low Energy Efficiency** (**LILEE**) metric is used: A household is energy poor (fuel poor) if their "fuel poverty energy rating" is below a specified level (Band D) and if their disposable income after housing and fuel costs is below the poverty line (Government of the UK, 2022b).
  - In **Scotland** a household is considered energy poor if they are required to spend **more than 10% of their net income** (after housing costs) for 'reasonable' fuel bills and if their remaining income is below 90% of the UK Minimum Income Standard (Bolton et al., 2022).
  - In **Wales** a household is in energy poverty if "they would have to spend **more than 10% of their income** on maintaining a satisfactory heating regime" (Bolton et al., 2022).
  - In **Northern Ireland** a household is defined as energy poor if it needs to spend **over 10% of their income** on fuel maintain a "satisfactory level of heating (21C in the main living room and 18C in other occupied rooms)" (Bolton et al., 2022).
- **In 2020, 3.16 million English households (13.2%)** were in energy poverty using the LILEE metric. Using this metric, the government estimates this number to have declined slightly for 2021 despite rising energy prices due to increasing energy efficiency of homes and slight increases in incomes (UK fuel poverty statistics). An estimated **613,000 households** were in energy poverty in **Scotland in 2019 (24.6%)** (Scottish House Condition Survey). In **Wales 196,000 households** were estimated to be in energy poverty **in 2021 (14%)** (Wales' fuel poverty estimates). (Bolton et al., 2022)
- The UK has one of the **oldest housing stocks in Europe** with over a third of homes built before 1945 and less than a quarter built since 1980. One of the key targets of the fuel poverty strategy is therefore to improve the energy performance of the dwellings. The UK fuel poverty statistics monitor the **distribution of energy efficiency rating of low-income households's dwellings**: the share of low-income households living in a dwelling with a **E rating or worst** was **reduced from 35.4% in 2010 to 9.9% in 2020**. Whereas the share of low-income households living in a dwelling with a **C rating or better** was **increased from 14.6% in 2010 to 52.1% in 2020** (Annual Fuel Poverty Statistics in England, 2022 (2020 data)).
- All nations in the UK have **strategies** in place to reduce energy poverty. With the first strategy dating back to 2001. The **devolved administrations / nations** are the key government bodies in charge of setting and monitoring the fuel poverty strategies. The current national strategies are

WWW.SOCIALWATT.EU

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

as of 2021 for England, Scotland and Wales, 2011 for Northern Ireland.

- The **Committee on Fuel Poverty**, a non-departmental body, advises the UK government on fuel poverty. Similarly, the **Scottish Fuel Poverty Advisory Panel** and **Partnership Forum** advise the Scottish Government. The **Energy Saving Trust** and various **NGOs and charities** are very active in providing information and support to energy poor households. **Energy companies** are also involved, especially through the Energy Company Obligation (see further below).
- In addition to the energy efficiency schemes (see table further below), the measures to alleviate energy poverty also include aids to the energy expenses:
  - **Winter Fuel Payment** (since 1997, Great Britain): tax-free annual automatic payment (from €115 to 350) to help older people with their heating bills (11.4 million beneficiaries in 2019/2020).
  - **Cold Weather payments** (since 1992, Great Britain): special payments during periods of very cold weather Made (€29 for 7 days) to certain recipients of social welfare support (3.8 million eligible recipients in 2018/2019).
  - **Warm Homes Discount** (since 2011, Great Britain): rebate of €164 for the electricity bills provided by electricity suppliers to about 2.2 million eligible customers.
  - **Energy tariff cap** (since 2019, Great Britain): tariff cap for the 11 million customers for electricity and gas on default tariffs.

Following the energy crisis in 2022 the number of households in energy poverty has risen significantly. Despite the price guarantee instated by the UK government (see below), the charity National Energy Action estimates that up to 6.7 million UK households are in energy poverty. When the price guarantee ends in 2023 this could increase further to 8.4 million households (National Energy Action, 2022). In response to the crisis the national government has implemented a set of direct support measures, these include:

MAIN RECENT MEASURES TO HELP HOUSEHOLDS FACE THE ENERGY CRISIS

- **Energy Price Guarantee** (October 1st, 2022- October 1st 2024: reduction of unit cost of gas and electricity so that a 'typical' household in Great Britain pays on average £2500 (€2909[24]) per year (electricity £0,34 (€0,4) per/kWh & gas £0,10 (€0,12) per kWh + fixed costs). From April 2023 this will be increased to £3000 (€3490) per year. The energy price guarantee is a temporary replacement for the existing dynamic price cap (Ofgem, 2022a).
- **Help to Heat Funding** (2022): an extra £1,5 (€1,75) billion in budget for the renovation of over 130.000 homes of low-income households through the Social Housing Decarbonisation Fund and other home renovation grant schemes (Government of the UK, 2022c).
- **Alternative Fuel Payment** (2022): £100 (€116) one-off support payment to households not on the gas grid (Government of the UK, 2022d)
- **Energy Bills Support Scheme** (Alternative Fund)/Northern Ireland Energy Bills Support Scheme (2022): £400 (€465) one-off support payment to households for winter 2022/2023(Government of the UK, 2022d), another tranche will be provided in spring 2023.

[24] All prices have been converted using December 2022 price levels.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

- **Council Tax Rebate** (2022): all households living in a home within EPC bands A-D got a £200 (€ 233) rebate on their municipal taxes (Robinson & Simcock, 2022).
- **Cost of Living Payments** (2022): all people receiving the Winter Fuel Payment (pensioners) received a one-off £300 (€350) payment, all eligible welfare recipients received a one-off £650 (€ 756) payment, all people receiving disability benefits received a one-off £150 (€175) payment (payments are stackable) (Robinson & Simcock, 2022).
- **Household Support Fund** (2021 – 2023): three tranches of £500 (€582) million have been distributed in small payments to vulnerable households through municipal governments (Government of the UK, 2022d)

MAIN NATIONAL ENERGY EFFICIENCY MEASURES TACKLING ENERGY POVERTY

Energy Company Obligation 4 (ECO 4) (2022 – 2026; continuation of previous energy efficiency obligation schemes since 1994)	› The ECO 4 operates in **England and Wales** and **requires obligated energy suppliers to deliver energy efficiency and heating measures to households**. Households get the upgrades **for free**. Measures include heating system (gas boiler & heat pump) and envelope (wall/window/roof) upgrades. › ECO 1 was launched in 2013. Between 2018 and 2022 the scheme was **100% targeted at low income & vulnerable households**, with sub-targets for rural areas. The same will be the case for 2022-2026. › Between 2013-2018 ECO (2t) delivered 2.4 million improvements in around 1.8 million homes, 70% of which in low-income/vulnerable households (1.26 million homes). In the period **2018- 2022** ECO (3) delivered **1.04 million measures**, saving households over 8 billion on their energy bills. For **ECO 4** a **yearly budget** of **£1 (€ 1,16) billion** will be available. Total savings for all schemes amounts to up to 59MtCO2 and 221.800 GWh (Government of the UK, 2022a).
Social Housing Decarbonisation Fund Demonstrator (2020 - ongoing)	› The **£3.8 (€4.43) billion** support innovative whole house and at scale **retrofit projects in social housing**. › Targets: Local authorities (with partners) can send in applications › £179 (€208) million has been invested in 69 projects for the first phase of the fund, allowing 20.000 social housing units to be renovate to EPC band C.
Domestic Minimum Energy Efficiency Standard (MEES) (2018 – ongoing)	› In **England and Wales**, the MEES sets a minimum energy efficiency level for domestic private rented properties **as of April 1st 2020** (Government of the UK, 2020). › The regulations target **all rented properties** that are required to have an EPC or are rented out using specific types of contracts. Properties with an EPC of **F or G can no longer be rented out**. › Property owners are required to make an **investment in energy savings of up to £3500 (€4072)** (including VAT). As lower income households tend to live in the worst performing homes, the MEES supports alleviation of energy poverty.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

Warmer Homes Scotland (2015 – ongoing)	〉 Scheme that offers **partially or fully funded (grants/loans) energy efficiency measures**, including heat pumps since 2015. 〉 Targets: eligible homeowners and private tenants on welfare/that cannot afford to heat their home. Rural and island homes can get extra support. 〉 **Over 29.000 households** have received support, on average £5000 (€5818) worth of measures per household. 8 out of 10 households do not have to provide co-funding. Most common measures installed since 2015 have been **new gas boilers and insulation**, but in 2022 targeted funding has been made available for **heat pumps** (Warmer Homes Scotland Funding & Support · Home Energy Scotland).
Home Energy Efficiency Programmes for Scotland (HEEPS) (2013 – ongoing)	〉 An **area-based scheme** that funds local authorities to design & deliver energy efficiency programs in **areas with high levels of fuel poverty**. 〉 Targets: all property types / ownership models in targeted fuel poor areas. Mainly funds **solid wall insulation**. 〉 Since 2013, **over 100.000 households** have received energy efficiency measures as part of this scheme, and a total of **£482 (€ 600) million** has been made available to local authorities. This is complemented with funding through the Energy Company Obligation and investments by the building owners.
Affordable Warmth Scheme Northern Ireland	〉 Scheme that offers **grants to homeowners and private tenants** to address fuel poverty and energy inefficiency. It is delivered through the local councils 〉 Targeted at low-income households in **areas where levels of fuel poverty are highest**. It only supports people living in **privately rented housing**. 〉 The supported energy efficiency measures must be completed in the **order of priority** set in the scheme: 1) Insulation / Ventilation / Draught-proofing; 2) Heating; 3) Windows; 4) Solid Wall Measures. 〉 Northern Ireland also has a boiler **replacement scheme** that supports the replacement of gas/lpg/oil **boilers older than 15 years**. The grant amount depends on the households income.
Warm Homes Programme Wales – NEST Scheme (2009 – on-going)	〉 Offers **advice and support to lower income households** to improve thermal comfort and energy efficiency of their homes 〉 Targeted to private tenants and homeowners living in **energy inefficient homes** and receiving specific benefits 〉 Up to 2021 **over £394 million** has been invested benefitting **more than 67.100 homes** and 160.000 homes have received advice. To supplement the scheme the Welsh government has an "**discretionary assistance fund**" that also supports minor repairs on boilers and oil and lpg purchases. 〉 This programme previously included the area based Arbed scheme, which

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

	ended in November 2021 and the demand led Nest scheme expected to end in March 2023 (Welsh government 2021)

The table above is focused on the national EE policy measures tackling energy poverty. More initiatives exist at regional or local level, or led by stakeholders such as energy companies. As illustrated by the schemes developed as part of SocialWatt.

FOCUS ON ARTICLE 7 EED AND THE ROLE OF ENERGY COMPANIES

Through the ECO, energy companies in the UK play an **important role in delivering energy efficiency measures for energy poor households**. Especially as in England there are limited direct funding schemes from the government for energy savings measures. Since the beginning of the system in the 1990's there has been an indicative **ringfence for energy poor households** (around 40%). Over time specifications to ensure a good geographic spread and deeper retrofits were added. **As of 2018 the entire ECO scheme targets energy poor homes**, albeit with a reduction in funds.

Before leaving the EU, UK was reporting ECO (and the previous energy efficiency obligation schemes) to Article 7 EED, as well as other energy efficiency schemes aimed at alleviating energy poverty and described above, including Scotland's Home Energy Efficiency Programmes, and Wales' Warm Homes Programme.

In addition to the ECO, obligated domestic energy suppliers need to deliver support to low income, vulnerable, and energy poor households through the **Warm Home Discount**. Households receive a £150 (€175) rebate (Ofgem, 2022b). Energy suppliers have also to keep a dedicated fuel priority register to provide vulnerable customers with non-financial services (Priority Services Register).

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

INTERVIEW WITH PETER SMITH (Director of Policy and Advocacy, National Energy Action) in November 2022

〉 Do you expect an increase in the number of households at risk of energy poverty due to the current energy crisis?

All European countries are struggling with the gas prices. But the UK is particularly exposed due to its dependency on gas for both heating and electricity. Both bills have absolutely sky rocketed… With harrowing effects on energy poverty, at NEA we provide frontline support to people living without energy in their home, and the mental and physical effects this has. For example, we see people foraging for wood and fuel and theft of energy and heat is going up. People are really in a bad situation, and winter is only just starting.

〉 Have there been recent changes in the policy measures to tackle energy poverty?

The UK has mostly responded with ad-hoc measures and provided little targeted support for those in energy poverty.

Initially the response was awful, with a £200 loan to households and a council tax rebate. Luckily this has improved somewhat, with limited energy efficiency measure instated, benefit and entitlement checks and fuel debt relief provided, and advice & training given.

The instability in the UK government has slowed the response and policies keep changing. Early 2022 £400 grant was instated (energy bill reduction) and some local crisis funds to help worst off households through councils. And a price guarantee was instated to ensure average annual bill would be £2.500 over the 2022-2023 winter. However, the new government has already watered this down to limit costs. As targeted support, low-income households will receive another £400 in 2023.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

The previous governments focused mainly on supply side policies, but with the current crises they have recognized that energy savings are also very important to bring down prices (due to EU integrated markets).

In the UK policy on energy poverty is devolved to the nation level. In England we have seen a move from price and income-based interventions towards more energy efficiency measures to tackle energy poverty. There used to be quite good national efficiency programs for all households, but this was flipped around to focus all resources on households in fuel poverty or at risk of fuel poverty (but with reduced budgets). There are also statutory fuel poverty targets based on efficiency (see MEES above). Also, some schemes to get homes with oil heating and solid walls off the gas network have been announced.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

The statutory fuel poverty targets are connected to the Energy Company Obligation (ECO). Previously, the ECO supported all homes but now it is focused on those in energy poverty. National spending through the ECO expanded to £1 billion a year, and is fully focused on fuel poor until March 2026. Moreover, companies face prescriptions around targeting E-F-G label homes and minimum efficiency levels to achieve for each measure implemented. So, the statutory target has channelled funding to those people at greatest risk of energy poverty.

But, in England alone reaching the target means renovating over three million homes, that would take 150 years on current progress (80.000 homes/year). The government relies on

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

ECO to meet the target, there are no supplemental schemes. But although the ECO system works quite well for single renovation measures and shallow retrofit, it struggles to deliver meaningful improvements to the worst housing stock.

To improve this, the system should encourage co-funding by private or social landlords to have the costs under the ECO scheme go down (proportionally). Moreover, to make sure hard to retrofit homes (e.g. with solid walls) also get some efficiency improvements suppliers should be able to deliver equivalent support up to what a solid wall insulation would have delivered in savings.

〉 The ECO system in the UK has developed considerably over the years and has moved from a ringfence for energy poor to solely targeting those in energy poverty. What lessons can be drawn from this development?

Initially, we were very concerned about companies having the incentive to cherry pick the cheapest measures. At NEA, we wanted them to support people that needed it the most, but the companies would focus on keeping the cost down. By now the companies have now recognized that they must deliver this support. For the bigger suppliers it has also switched around, they now see it as a business opportunity to offer energy services and start developing the market for home retrofits. So overall there is a positive story around the development of the ECO and it is supporting the development of a functioning market and service models for home retrofit.

Of course, there are still challenges to resolve, especially around co-payments, as the requirement for self-investment by households still limits helping the households that have zero capacity to invest themselves. There should also be more transparency on how the obligated companies spend the money. We also need more prescriptions to ensure the E – F – G homes are renovated to at least C level.

〉 Do you have any policy recommendations to governments wanting to instate a ringfence for energy poor households as part of their EEOS?

The ringfence should be aimed at getting support those who need it the most and be balanced between prescribing the outcome, the people that should benefit, and having some flexibility for the obligated parties:

- *Make sure through prescription that the system goes beyond low-cost and easy to install measures*
- *Have buy-out mechanisms to ensure an obligated party that does not want to be involved the energy poor market can get their share to other suppliers that are interested.*
- *Ensure good reporting on what measures are being delivered, by which obligated parties, and in what household/home types. This helps better targeting schemes and prevent interpretation problems.*
- *Focus on outcomes and showcase successes. There can always be negative sentiment because obligated parties are forced to do something. But good things are being achieved: money and energy saved, health benefits, savings on grid reinforcement.*

INTERVIEW WITH GILLIAN CAMPBELL (Communication and Public Affairs Lead, Existing Homes Alliance Scotland) in December 2022 – Focus on Scotland

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

〉 Do you expect an increase in the number of households at risk of energy poverty in Scotland due to the current energy crisis?

Undoubtedly there is a significant increase in fuel poverty. The last statistics on fuel poverty in Scotland go back to 2019, then we had around 25% of households living in fuel poverty (>10% of income on energy costs). Estimates now are that around 900,000 households or 36% of Scottish population live in energy poverty. And this is even a conservative estimate, in rural areas it can be much higher with up to 57% in some remote areas where houses are large, old, and not connected to the gas grid.

Generally, people most at risk of energy poverty due to low energy efficiency of their home live in privately rented properties or are homeowners. Most households in social rented homes are in energy poverty due to low income, not bad energy efficiency, because the regulation is much stricter there.

〉 Have there been recent changes in the Scottish policy measures to tackle energy poverty?

The emergency measures implemented by the UK government are short term and a drop in the ocean. It will not do enough to support people throughout this crisis. There are limitations on what the Scottish government can do as not all energy policy is devolved. They have increased some welfare payments where these are devolved but many are reserved to the UK government. Scotland does have more control over the energy efficiency/building side of things. They increased the amount of funding going into advice services and energy efficiency/fuel poverty programs. Including increasing grants and relaxing grant conditions for installing heat pumps and energy efficiency measures.

〉 Are energy efficiency schemes an important part of the national strategy or approach to tackle energy poverty?

The Scottish government has as goal to end fuel poverty, and published a fuel poverty strategy last year. The Fuel Poverty Act from 2019 set targets that, by 2040, no more than 5% of households should be in fuel poverty and no more than 1% in extreme fuel poverty. The Act also set interim targets, including no more than 15% and 5% by 2030. In their approach the government recognizes that the main factors of energy poverty are the income side, energy prices, and home efficiency. They explicitly take a fabric first approach in their strategy.

Scotland has relatively been in quite a good place over the past years when it comes to improving energy efficiency in homes. A key pillar is the area-based scheme where the government passes funding to local councils. They target funding to areas with high levels of deprivation for energy efficiency works. This is done in partnership with social landlords, homeowners, and private funders. They pool all the funding from the government, the energy efficiency obligation, and the co-payments by owners to large renovation works. Although these projects can be complex and time intensive, they do deliver deep(er) renovations than e.g., the ECO system by itself could deliver.

Warmer Homes Scotland is another key energy efficiency programme. In most cases it provides fully funded energy efficiency measures for people that are on welfare benefits. The government is also very much aware that they need to make it easy for people to access the information on doing works and installing heat-pumps. The umbrella energy efficiency body Home Energy Scotland provides information on home renovation and available support for households. And everyone can access that info, but it is still very complex for households to access the support they need, and many people do not know about it. Ideally, this should evolve towards an accessible one-stop-shop service, but for now it is still focused on advice. In remote areas it is even more difficult for households to access this information and support.

The government also developed a Heat in Buildings Strategy in 2021 that set out a target of more than 1 million households to be

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

decarbonised (energy efficient & zero emissions heating) by 2030. This is just under half of the 2.5 million Scottish households. Over 80 percent of them currently using gas for heating. As part of this strategy, they are planning a large public engagement strategy and have set up a taskforce on financing. I am also expecting policy on boiler phase-outs where possible within the devolution framework.

So, the government is really aiming high but with only 8 years left much more needs to be done much more quickly.

〉 What is or should be the role of energy companies in the schemes to tackle energy poverty?

It is not entirely clear yet how the new ECO plus is going to work in Scotland. But in the past councils would try to maximise the amount of ECO funding being accessed to reduce how much each homeowner would need to invest themselves in the area-based schemes. I do think energy companies should be playing more of a proactive role in enabling their customers to reduce their energy consumption through improving the energy efficiency of their homes and switching to zero emissions heating.

〉 Any policy recommendations you could give based on the experiences in Scotland?

The Scottish government is trying hard, and its approach does feel a bit ahead of some other countries as it is trying to be holistic, by looking at communications, regulation, advice and financial support.

One of the big barriers in the area-based approaches is the level of owner contributions to the investment costs. There is a clear ceiling above which it becomes just unaffordable or undesirable for a lot of households to participate. So, you need to watch closely the level of self-funding required and have some flexibility built in to make sure affordability does not prevent area based renovations from going ahead.

The SocialWatt project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 845905

References

Bolton, P., Kennedy, S., & Hinson, S. (2022). *Fuel poverty in the UK*. https://commonslibrary.parliament.uk/research-briefings/cbp-8730/

Government of Scotland. (2021, October). *The Energy Efficiency (Private Rented Property) (Scotland) regulations 2020: BRIA*. http://www.gov.scot/publications/business-regulatory-impact-assessment-bria-private-rented-sector-regulations/

Government of the UK. (2020, May). *Domestic private rented property: Minimum energy efficiency standard - landlord guidance*. GOV.UK. https://www.gov.uk/guidance/domestic-private-rented-property-minimum-energy-efficiency-standard-landlord-guidance

Government of the UK. (2022a). *Household Energy Efficiency Statistics*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1056548/HEE_Stats_Release_-_February_2022.pdf

Government of the UK. (2022b, February). *Fuel poverty trends 2022*. GOV.UK. https://www.gov.uk/government/statistics/fuel-poverty-trends-2022

Government of the UK. (2022c, September). *£1.5 billion to improve energy efficiency and slash bills*. GOV.UK. https://www.gov.uk/government/news/15-billion-to-improve-energy-efficiency-and-slash-bills

Government of the UK. (2022d, October). *Government introduces new Energy Prices Bill to ensure vital support gets to British consumers this winter*. GOV.UK. https://www.gov.uk/government/news/government-introduces-new-energy-prices-bill-to-ensure-vital-support-gets-to-british-consumers-this-winter

National Energy Action. (2022, December). 8.4 million UK households will be in fuel poverty from April, says National Energy Action. *National Energy Action (NEA)*. https://www.nea.org.uk/news/8-4-million-uk-households-will-be-in-fuel-poverty-from-april-says-national-energy-action/

Ofgem. (2022a). *Energy price cap explained*. Ofgem. https://www.ofgem.gov.uk/information-consumers/energy-advice-households/check-if-energy-price-cap-affects-you

Ofgem. (2022b). *Warm Home Discount (WHD)*. Ofgem. https://www.ofgem.gov.uk/environmental-and-social-schemes/warm-home-discount-whd

Robinson, C., & Simcock, N. (2022). *How can policy protect fuel poor households from rising energy prices?* https://www.liverpool.ac.uk/media/livacuk/publicpolicyamppractice/jo/PB216,FINAL,COMBINED.pdf

Warmer Homes Scotland Funding & Support · Home Energy Scotland. (n.d.). Home Energy Scotland. Retrieved December 6, 2022, from https://www.homeenergyscotland.org/funding/warmer-homes-scotland/