



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&Ieq' 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&Ieq, 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](#)).



- › 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** for covering energy needs (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).

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 ¹	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 ²	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.

¹ 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).

² 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.

- › **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 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.

<p>Savings at Home (<i>Exoikonomisi kat' Oikon</i>; 2011 – 2016)</p>	<ul style="list-style-type: none"> › 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).
<p>Savings at Home II (<i>Exoikonomisi kat' Oikon II</i>; 2018 – 2021)</p>	<ul style="list-style-type: none"> › 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).

<p>Saving Autonomous (<i>Exoikonomo Autonomo</i>; 2020 – on-going)</p>	<ul style="list-style-type: none"> › 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).
<p>Save 2021 (<i>Exoikonomo 2021</i>; December 2021 – on-going)</p>	<ul style="list-style-type: none"> › 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 <u>ranked and selected</u> 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 <u>August 2022</u>. › Part of the Recovery and Resilience Plan, with a total budget progressively increased to about €1.2 billion. 87,578 households beneficiaries by <u>August 2022</u> (exceeding the initial objective of 50,000).
<p>Save – Renovate for young people (<i>Exoikonomo – Anakainizo</i>; to start later in 2023)</p>	<ul style="list-style-type: none"> › 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.

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.

<p><u>Recycle - replace my appliance</u> (2022-2023; guide for applicants)</p>	<ul style="list-style-type: none"> › 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.
<p><u>Recycle - Change Water Heaters</u> (from April 2023)</p>	<ul style="list-style-type: none"> › 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).

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.



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 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 additionality 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.



SOCIALWATT

CONNECTING

OBLIGATED PARTIES

TO ADOPT INNOVATIVE

SCHEMES TOWARDS

ENERGY POVERTY

ALLEVIATION

SocialWatt is a Horizon 2020 project that develops and provides **utilities** and **energy suppliers** with appropriate **tools** for effectively engaging with their customers and working together towards **alleviating energy poverty**.

SocialWatt also enables obligated parties under **Article 7** of the Energy Efficiency Directive across Europe to develop, adopt, test and spread **innovative energy poverty schemes**.

SocialWatt contribute to the following three main pillars:

- 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 and alleviate energy poverty.
- 3 **Implementing** and **replicating** innovative schemes to alleviate energy poverty.



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