ComActivate

Enabling community action for energy sufficiency

EU AND NATIONAL LEVEL

POLICY ANALYSIS AND MONITORING

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1. Reaching energy sufficiency in the EU

1.1 Introduction

"'Energy sufficiency' is variously defined as a level of energy service consumption that is consistent with equity, well-being and environmental limits and as a strategy for reducing energy service consumption to achieve that goal" [1]

With the European Green Deal and the 'Fit for 55' package, the EU and its Member States have set many gears in motion to address fossil fuel energy consumption, decarbonise energy production systems and reduce energy consumption through energy efficiency. Meanwhile, with the COVID-19 pandemic having increased economic vulnerabilities and the Russian invasion of Ukraine in 2022 having led to significant energy price surges, the topic of energy poverty has risen on the political agenda. Actors such as the Right to Energy Coalition advocate for access to affordable, clean energy as a basic human right (a topic central to Sustainable Development Goal 7.1 "universal access to affordable, reliable, and modern energy").

The topics of energy poverty and energy provision and consumption have long been treated in silos. Energy sufficiency can be seen as a policy goal that has a dual dimension, addressing both political agendas:[2]

- EU policies aimed at energy sufficiency **put citizens' energy needs at their centre.** The goal is a decent energy standard for all, meaning access to a level of energy service consumption that is in line with fairness, well-being and health.
- EU policies aimed at energy sufficiency **put planetary boundaries and climate commitments at their centre.** The goal is an absolute energy demand reduction in the EU, recognising that overconsumption depletes finite resources and drives harmful greenhouse gas emissions.

This means energy sufficiency policies promote measures and strengthen enabling regulations that alleviate energy poverty while also promoting an absolute energy demand reduction – for example through avoidance of energy use, energy efficiency, or expansion of renewable energy sources. Measures might have an obvious benefit to both policy goals, such as energy efficiency, or only one of them (e.g. switch to renewables).[3] This dual focus means environmental considerations do not have to compete against social justice, or vice versa. Instead, it takes a systemic approach towards changing our relationship with energy.

[1] https://www.sciencedirect.com/science/article/pii/S2214629620300165#:~:text=%E2%80%98Energy%20sufficiency%E2%80%99%20is%20variously%20defined%20as%20a%20level,service%20consumption%20to%20achieve%20that%20goal%20%5B1%5D%2C%20%5B2%5D.

[2] Energy sufficiency fits under the umbrella of sufficiency defined in the Summary for Policymakers of the IPCC Assessment Report 6 from 2022: 'Sufficiency is defined as avoiding the demand for materials, energy, land, water and other natural resources while delivering a decent living standard for all within the planetary boundaries.'

[3] Switching to renewables, while reducing greenhouse gas emissions, does not necessarily lead to a reduction in absolute energy demand, so is seen here as a measure to address energy poverty.

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The long-term vision is to optimise energy use, reduce waste, foster cultural and behavioural shifts, and heavily reduce our reliance on gas, oil and coal. Ideally, measures are embedded in a broader sufficiency policy strategy aimed at the overall buildings sector beyond just energy in the user phase, as was recently conceptualised by the European Commission.behavioural shifts, and heavily reduce our reliance on gas, oil and coal. Ideally measures are embedded in a broader sufficiency policy strategy aimed at the overall building sector beyond just energy in the user phase, as was recently conceptualised by the European Commission.[4]

The buildings sector consumes 43% of energy in the EU and is therefore well suited as a target of energy sufficiency policy.[5] Furthermore, 75% of EU buildings built before 2000 are still energy-inefficient with 15% of the EU population living in dwellings with leaks, damp or rot.[6] The buildings sector is crucial as interventions can have a direct impact on the life realities of people experiencing energy poverty while also leaving room for smart design and material choices for renovations, the establishment of communities to share renewable energy, and structural energy efficiency interventions.

What you can expect from this report

In this report, we assess EU and national-level policies in the three partner countries, Lithuania, Bulgaria and Hungary. This assessment, conducted after the first year of the ComActivate project, provides a baseline for the final policy evaluation in 2026. ComActivate aims to institutionalise one-stop shops (also referred to as resource centres) in pilot neighbourhoods in the three countries and develop Neighbourhood Energy Sufficiency Roadmaps (NESR) for homeowner associations. These roadmaps outline steps to energetically renovate multi-family apartment buildings, including the potential for renewable energy in the form of solar energy. Both concepts and the project are explained in more detail in Section 1.4 below. Developing neighbourhood energy sufficiency roadmaps (NESRs) and resource centres does not happen in a vacuum but is influenced by higher-level policy frameworks. The reality on the ground is specifically informed by policies related to renovation (in particular targeted at multi-family apartment buildings – MFABs) and the alleviation of energy poverty. Readers with expertise on the issues at hand are welcome to share their reactions, feedback and additions with the authors.

Who this report is for

This report is designed for policymakers on EU, national and local level. It combines the mapping of policies relevant for renovation and energy poverty with insights about their implementation and impact, and key priorities for policy framework adjustments.

[4] https://op.europa.eu/en/publication-detail/-/publication/da276a27-b2b7-11ef-acb1-01aa75ed71a1/language-en
[5] https://www.odyssee-mure.eu/publications/policy-brief/buildings-energy-efficiency-trends.pdf
[6] https://energy-poverty.ec.europa.eu/modules/custom/epah_indicator/pdfs/pop_living_in_dwelling_with_presence_of_leak_damp_and_rot_EPAH_indicators_June24.pdf

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1.2 The dual dimension of energy sufficiency

Energy poverty alleviation

Where we are - Energy poverty is a prevailing issue in the EU

Energy poverty is a pressing issue in the EU, affecting millions of households. It occurs when people cannot afford essential energy services, such as heating, cooling or lighting, negatively impacting health, well-being and social inclusion. In 2022, more than 41 million Europeans (9.1% of the population) could not keep their homes adequately warm.[7] This number increased to 10.6% in 2023.[8] Yet numbers depend on the indicators used;[9] education and employment are said to have an impact on energy poverty levels, but only 30% of energy-poor households are also income-poor (under the general poverty threshold). Furthermore, Member States differ largely depending on the indicator used. There is also a gender dimension; the proportion of women in the EU who are late in paying their energy bills increased sharply in spring 2022, while single women and mothers were more likely to face difficulties in paying their energy bills.[10]

Energy poverty is driven by several key factors. Households with low incomes are primarily affected, as individuals and families with limited financial resources struggle to afford necessary energy services. High energy prices further intensify the issue, with elevated costs for electricity and heating fuel placing an additional financial strain on consumers. Another significant driver is poor energy efficiency, as inefficient buildings and appliances result in higher energy consumption, ultimately increasing costs for households.[11] Often a combination of these factors causes energy vulnerability, embedded in a socioeconomic context where households might already face economic hardship. Beyond economic implications, energy poverty adversely affects health and well-being, as inadequate heating or cooling can lead to respiratory illnesses and other health issues. In Central and Eastern Europe (CEE), energy poverty is especially prominent in MFABs built during the Soviet Union era when very cheap gas was available, reflected in often very energy-inefficient building design.

Where to go - Access to enough energy

While there is no universally accepted definition, the International Energy Agency (IEA) defined energy access in 2020 as "a household having reliable and affordable access to both clean cooking facilities and to electricity, which is enough to supply a basic bundle of energy services initially, and then an increasing level of electricity over time to reach the regional average".[12] At the EU level, what is meant by access to 'enough' energy to live a decent life is not defined. However, regarding pure access, in the European Union, citizens are entitled to electricity and to have their house connected to the local electrical grid (the same does not apply to gas). Vulnerable households which cannot pay their bill cannot be disconnected from the electricity system.[13]

[7] https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733583/EPRS_BRI(2022)733583_EN.pdf
[8] https://energy.ec.europa.eu/news/focus-protecting-and-empowering-energy-consumers-2024-06-18_en
[9] https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/whos-energy-poor-eu-its-more-complex-it-seems-2024-09-25_en
[10] https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/739349/EPRS_ATA(2023)739349_EN.pdf
[11] https://energy.ec.europa.eu/topics/markets-and-consumers/energy-consumers-and-prosumers/energy-poverty_en
[12] https://www.iea.org/articles/defining-energy-access-2020-methodology
[13] https://europa.eu/youreurope/citizens/consumers/energy-supply/access-use-energy-services/index_en.htm#:~:text=In%20the%20EU%20you%20have,does%20not%20apply%20to%20gas

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What is being done – Energy poverty is increasingly recognised in EU policy

The issue of energy poverty has moved up the political agenda since the Russian invasion of Ukraine led to a surge in energy prices across countries. In response, the EU's legislative framework has reinforced protections for vulnerable consumers; the revised Energy Efficiency Directive (2023/1791) (EED) and the Energy Performance of Buildings Directive (2024/1275) (EPBD) recast in 2024 mandate specific measures to alleviate energy poverty alongside broader energy efficiency goals. Those households experiencing energy poverty are also among the primary recipients of the Social Climate Fund established in 2023, which provides financial support to help vulnerable households and small enterprises reduce their energy consumption through energy efficiency upgrades. To access this fund, EU countries must submit social climate plans by mid-2025. For more about the EU framework relevant to energy poverty, see chapter 2.1.

Reduction of absolute energy consumption

Where we are – current energy consumption in the EU

In 2022, EU primary energy production was 5.9% lower than in 2021. Although solid fossil fuel production increased, oil, natural gas, renewables and biofuels all decreased. In 2021, renewables made up 43.2% of primary energy production.[14] This needs to more than double to 87–89% by 2030 to be compatible with the 1.5˚C global warming scenario.[15] Households accounted for 25.8% of final energy consumption in 2022. Space heating is the predominant energy use in residential buildings at 63.5% of final energy consumption. One-third of space heating was through renewables. The primary energy sources for space heating in the EU are 38% natural gas, 32% electricity, and 10-13% oil.[16]

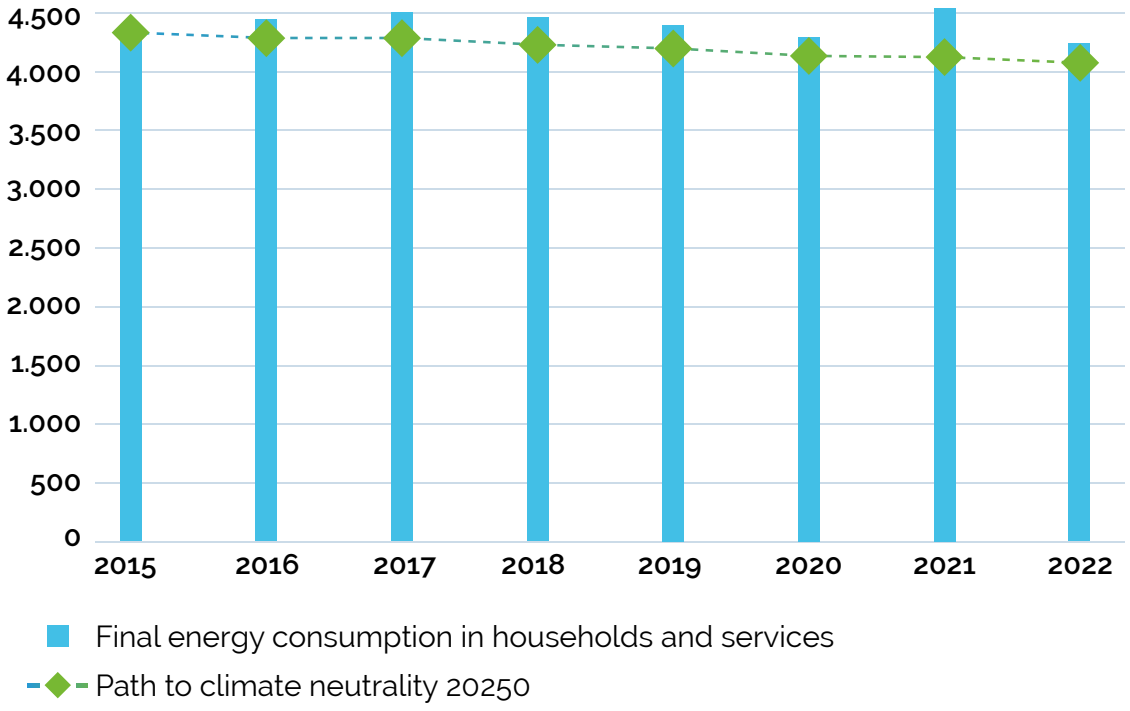

Figure 1: Final energy consumption in households and services 2015-2022.

[14] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_statistics_-_an_overview
[15] https://climateactiontracker.org/countries/eu/policies-action/
[16] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_consumption_in_households

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Around 75% of the EU's total greenhouse gas emissions are from energy consumption (excluding emissions from land use, land-use change and forestry). In 2023, final energy consumption had been reduced by 10% since 2005 and primary energy consumption by 19%. For buildings specifically, the Buildings Climate Tracker revealed that final energy consumption in buildings in the EU by 2022 had only dropped by 2.8% since the Paris Agreement in 2015 while the target was a 6.5% reduction.[17] This means the reduction is happening at less than half of the required pace.

Where we want to go – Staying within 1.5 degrees

Efforts for energy sufficiency are part of the EU's responsibility towards the global community (intragenerational justice) as well as future generations (intergenerational justice). Current EU energy demand is approximately 40 EJ/year, with per capita final energy consumption averaging 3.5 MWh. According to a Low Energy Demand scenario in a nature energy study, EU consumption would need to decline closer to 2 MWh per capita/year or lower (assumes a 40% reduction in global energy demand by 2050 to meet climate targets).[18]

What is being done – EU policy trends

The EU has a final energy consumption reduction target of 11.7% by 2030 (based on the 2020 reference scenario). While the aim is to reduce energy consumption throughout the life cycle of buildings, the focus of ComActivate is operational energy use. EU policies addressing the renovation of MFABs centre primarily on energy efficiency and decarbonisation goals, driven by the EPBD which focuses on reducing energy consumption during a building's operational phase.. The updated directive in force since May 2024 needs to be transposed into national law by 29 May 2026. The updated EPBD outlines targets to reduce the energy consumption and carbon footprint of buildings across the EU; it mandates that all new building owned by public bodies must be zero-energy from 2028, and all other new buildings from 2030, and requires Member States to develop National Building Renovation Plans. One of the key tools is a mandatory national trajectory for the progressive renovation of the residential building stock, prioritising the worst-performing buildings: 55% of savings are to come from the worst-performing 43% of residential buildings (by number or floor area). The EPBD and the EED require Member States to outline targeted plans in their national energy and climate plans (NECPs), due for revision in 2024 (most submissions were made in October). Additionally, the Renovation Wave initiative, part of the European Green Deal, specifically targets the energy renovation of buildings, including MFABs. It aims to double the renovation rate across the EU. Finally, financial support for these renovations comes through various EU funding mechanisms, including the Horizon Europe and LIFE programmes, which provide resources for energy-efficient renovation projects.

[17] https://www.bpie.eu/wp-content/uploads/2024/11/EU-Buildings-Climate-Tracker_Final.pdf
[18] https://www.nature.com/articles/s41560-018-0172-6

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1.3 Measures and enablers of energy sufficiency

There are a number of measures that can address energy poverty alleviation, absolute energy demand reduction or both, as can be seen in Figure 2:

- Energy use avoidance: including interventions that incentivise or encourage behaviour patterns that save energy.
- Energy efficiency: including interventions such as building renovations to reduce the energy intensity (energy used per square metre or per person).
- Renewable energy sources: Solar PV on the roof, potentially shared within an energy community, or heat pumps can be part of a strategy to alleviate energy poverty, although renewable energy expansion is not in line with energy sufficiency per se. Since the goal is to reduce overall energy demand, the focus should be on avoidance and efficiency, with renewables used to decarbonise the remaining energy needs.
- Direct financial aid: governmental aid to energy-poor households or other financial mechanisms to alleviate energy poverty.[19]

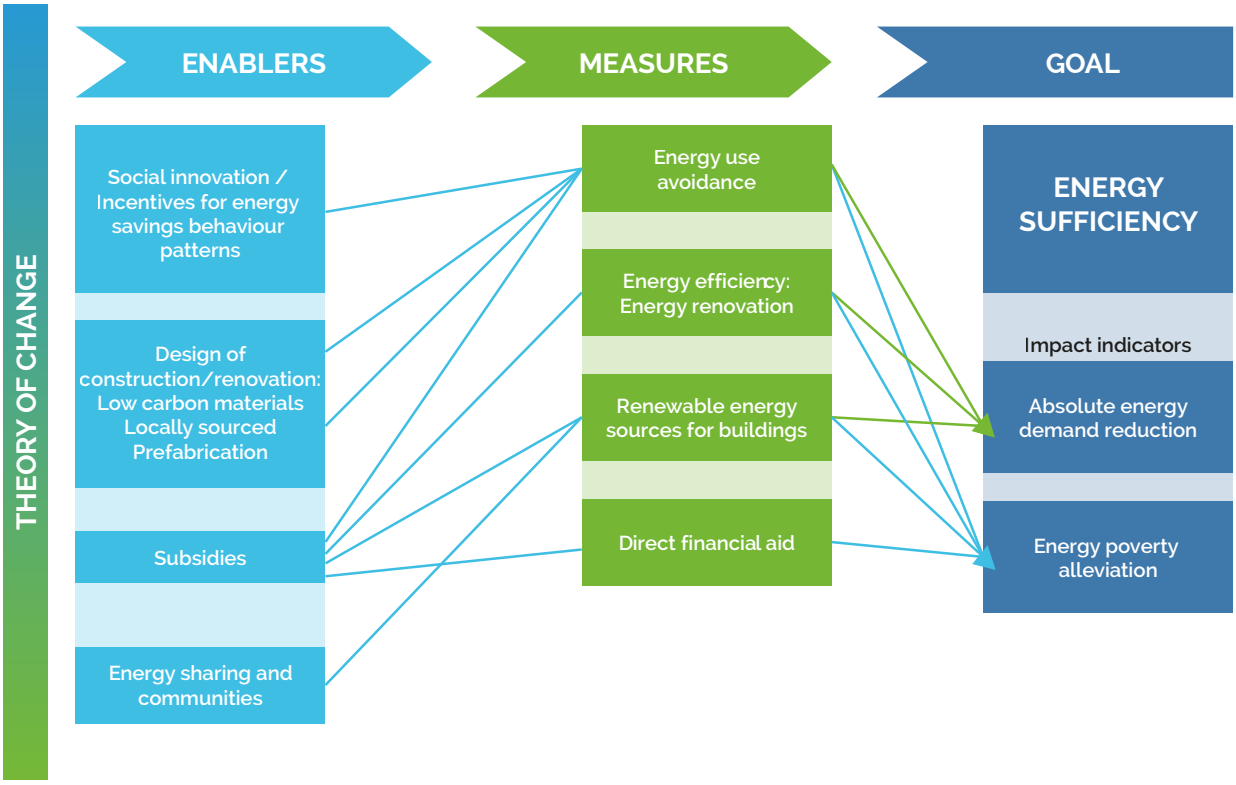

Figure 2: Theory of change ComActivate.

[19] We distinguish direct subsidies for energy poverty or energy demand from financing of measures that indirectly incentivise energy demand reduction (e.g. renovation) or energy poverty (e.g. energy communities). These indirect subsidies are covered in D5.2. [Analysis of gaps and barriers for financing HOA's and MFAB's].

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Various regulatory and policy enablers can support these measures to reach energy sufficiency. Some aim more directly at energy poverty alleviation, some are more focused on reducing the absolute energy demand and some cover both:

- Energy use avoidance can mostly be reached through social innovation, such as incentives or education to avoid unnecessary energy use. For example, in 2022, it was commonly promoted to switch to shower heads that use less hot water and thus less energy per shower.
- The design of the building or the renovation can have a significant impact on saving energy – for example in the choice of building materials, space design, or concepts for communal living and more shared living spaces and resources.[20]
- Subsidies such as renovation aid enable planned measures to be carried out, as recognised across national long-term renovation strategies (LTRS). For this report, these subsidies are not examined in detail. Please refer to D5.2 [Analysis of gaps and barriers for financing HOAs and MFABs] for a detailed analysis of financial incentives relevant for the ComActivate project.
- Energy sharing, including through energy communities, can facilitate the transition to domestic renewable energy sources. By reducing energy costs per person, this can alleviate energy poverty.

Case Study: Energy use avoidance

France Energy Sufficiency Plan 2022

In response to escalating climate concerns and energy supply challenges, France implemented the Plan de Sobriété Énergétique in October 2022, aiming to reduce national energy consumption by 10% within two years compared to 2019 levels. This comprehensive strategy targeted various sectors, including public administration, industry and households, with a strong emphasis on behavioural change to achieve its objectives. Key components included:

- Public Awareness Campaigns: The government launched extensive information campaigns to educate citizens on energy conservation practices, such as reducing heating temperatures and limiting unnecessary lighting.
- Monitoring and Feedback Mechanisms: The government implemented systems to monitor energy consumption and provide feedback to consumers, enabling individuals and organisations to track their energy use and adjust behaviours accordingly.

[20] For more information, see BPIE paper on sufficiency (https://www.bpie.eu/publication/prioritising-existing-buildings-for-people-and-climate/) and EPR (https://www.bpie.eu/wp-content/uploads/2024/06/Extended-Producer-Responsibility-in-Construction-June-2024.pdf)

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1.4 ComActivate to pioneer solutions for energy sufficiency

The ComActivate project, funded by the EU LIFE research programme, is designed to respond to growing levels of energy poverty and low renovation rates across the EU, especially in the Central and Eastern Europe region. Following the ComAct project (2020-2023), it aims to address the poor energy efficiency of buildings as a major driver of energy poverty and as a driver of climate change; 75% of the building stock in the EU is inefficient with buildings responsible for 34% of greenhouse gas emissions.[21]

The ComActivate project will be implemented in four pilot municipalities in three Central and Eastern European countries: Burgas (Bulgaria), Jozsefváros (Hungary), and Kaišiadorys and Elektrėnai (Lithuania). These locations reflect diverse regional constraints but share historical, geographical and climatic similarities, making them ideal for replication. Focusing on MFABs, which house approximately 60% of the CEE population, the project tackles the complex legislative, financial, social and technical challenges hindering MFAB renovations. It prioritises integrating renewable energy, tackling energy poverty and reducing energy demand and related emissions.

The theory of change of the ComActivate project envisions two key tools on the local level to create a real impact in the four pilot municipalities, with the potential to be replicated beyond:

Neighbourhood Energy Sufficiency Roadmaps (NESRs)

An integrated neighbourhood approach to climate and energy policy is an effective strategy for promoting sufficient access to energy. By focusing on entire communities rather than individual households, this approach encourages collective action and creates economies of scale, which can reduce costs and improve energy efficiency. It also fosters collaboration between local governments, residents and organisations, allowing for tailored solutions that address the specific needs of the neighbourhood, such as retrofitting buildings, improving insulation and implementing renewable energy systems. The community-driven nature of this approach enhances local ownership and engagement, ensuring that solutions are sustainable and equitable in the long term.

The ComActivate project will explore the development of NESRs. Their goal is to provide context-specific and adapted information on the neighbourhood (e.g. an analysis of the building stock, worst-performing building, energy poverty levels etc.), and a series of actions to realise energy renovations, change behaviour to avoid energy consumption where possible, and install local renewable energy sources to further reduce energy bills. In this pilot, the focus is only on MFABs, but in future NESRs could tackle any building type, including public or commercial buildings.

Resource Centres

Resource centres play a critical role in alleviating energy poverty and boosting building renovation efforts, particularly in CEE. They can be seen as a form of one-stop-shop, offering a local platform where residents can access comprehensive information, technical assistance and financial support for energy-efficient home renovations. This is especially important in CEE, where the ageing building stock and widespread energy inefficiency exacerbate energy poverty.

[21] https://www.eea.europa.eu/en/analysis/indicators/greenhouse-gas-emissions-from-energy

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By simplifying the renovation process, resource centres help overcome common barriers such as lack of awareness, high upfront costs and complex bureaucratic procedures. They provide tailored solutions that address local challenges, making energy-saving renovations more accessible to low-income households. Additionally, these resource centres can coordinate funding opportunities, guide homeowners through grant applications, and ensure that renovations not only reduce energy consumption but also improve living conditions.

As can be seen in Figure 3 below, the theory of change of the project is that NESRs and resource centres are efficient ways to implement energy sufficiency measures. NESRs holistically address energy poverty, while also considering that neighbourhoods are mixed and the roadmap for some districts might need to be more focused on reducing absolute energy demand; resource centres are an effective way of engaging citizens. The project's key areas of focus are highlighted in red.

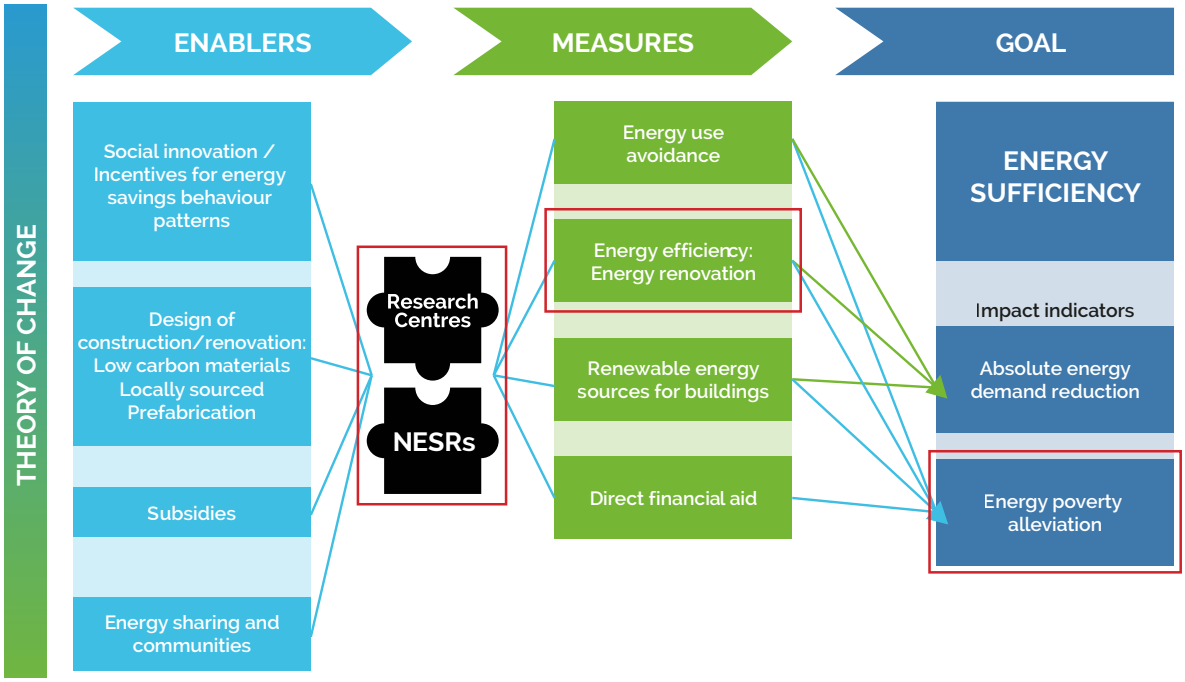

Figure 3: ComActivate theory of change.

Two blocks of multi-family apartment buildings in Kaišiadorys, Lithuania - before (left) and after (right) renovation.

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2. Towards reducing energy poverty while reducing absolute energy consumption

2.1 EU Policy Framework Assessment

Methodology

This report was written using the framework presented below. Information was gathered to understand what policy gaps exist for addressing energy poverty – either directly or via the listed measures, in particular energy renovation. The policy framework for the EU and the three partner countries (Lithuania, Bulgaria and Hungary) was examined specifically for its recognition of resource centres and NESRs. The information found in this report is based on desktop research, complemented by nine interviews with project partners and external experts. For each of the pilot countries, at least one expert was chosen from the local level and one with expertise on a more national level. Experts at the EU level were also consulted.

The graphic below shows the guiding questions of the analysis. This assessment focuses on where EU policies directly promote action for energy poverty alleviation and renovation of MFABs to support the most vulnerable. It also assesses to what extent resource centres (or similar structures like one-stop shops) and the neighbourhood or district level are promoted.

As mentioned, subsidies (green enablers) are excluded from this analysis; these can be found in D5.2. The policy gap analysis focuses in particular on the national level – with the completion of the 'Fit for 55' package, much of the EU climate and energy legislation has recently been revised and now a new implementation cycle starts. Five directives directly relevant to energy poverty alleviation in MFABs and renovation are analysed below. Where relevant the neighbourhood approach and resource centre-like institutions were included. Following the EU analysis, we analyse the respective policies on the ComActivate topics for the three pilot countries. As each country has its unique approach, they are analysed separately.

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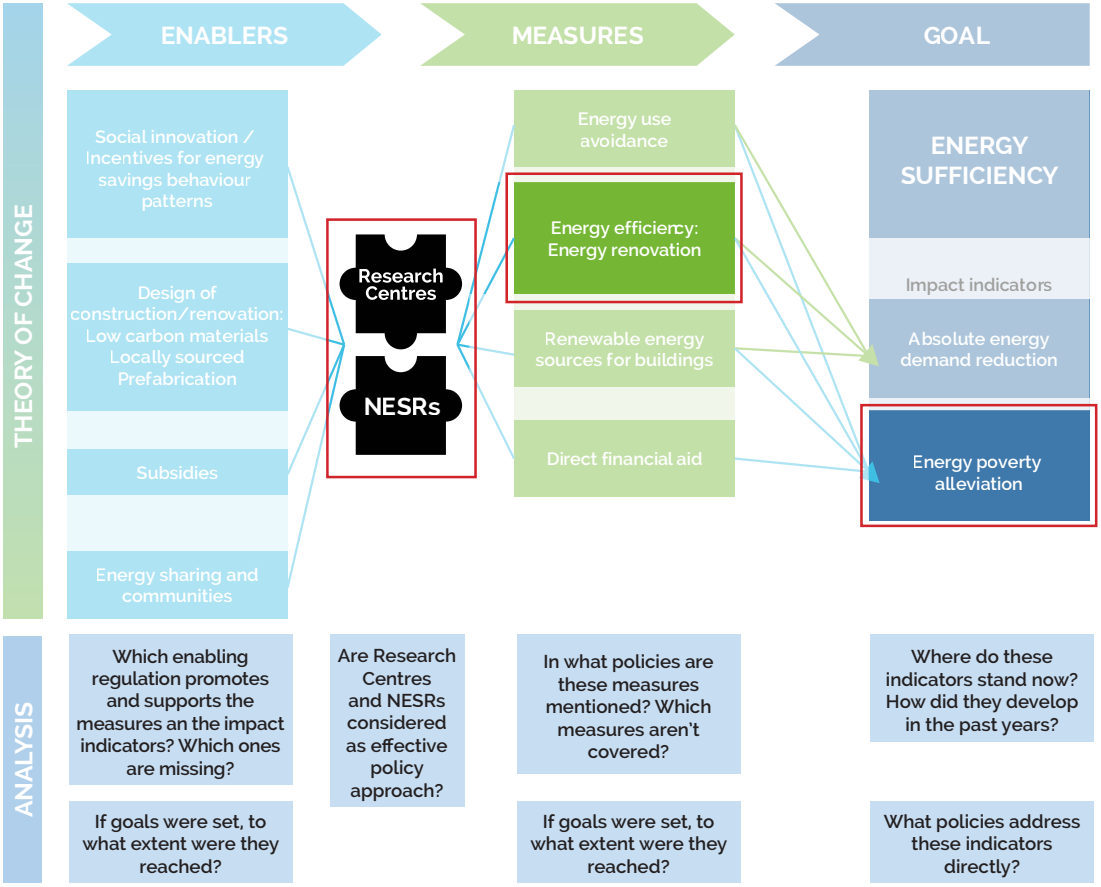

Figure 4: Theory of change of ComActivate and approach to analysis.

Context and soft policies

Energy demand reduction

Commission recommendations on the 'energy efficiency first' principle[22]

On 28 September 2021, the European Commission issued Recommendation (EU) 2021/1749, providing guidelines for implementing the 'energy efficiency first' principle in decision-making across the energy system and beyond. The recommendation emphasises considering energy efficiency as a priority in policy and investment decisions, ensuring that demand-side solutions are evaluated alongside supply.

Council Regulation (EU) 2022/1369 of 5 August 2022 on coordinated demand-reduction measures for gas

The Council Regulation (EU) 2022/1369 was agreed in response to the energy crisis after the Russian invasion of Ukraine. It introduces coordinated demand-reduction measures for gas. This regulation set a voluntary overall reduction target of 10% of gross electricity consumption and a mandatory reduction target of 5% during peak hours.

Energy poverty alleviation

Given that the topic of energy poverty has only recently been more institutionalised in EU regulation, it is important to recognise the range of soft policies without legislative or regulatory impact which have developed over time. These provide a frame to support increasingly mandatory action on energy poverty. They aim to enable Member States to identify energy poverty and to take measures to alleviate it.

[22] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX%3A32021H1749&

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Commission Recommendation (EU) 2023/2407 of 20 October 2023 on energy poverty

In October 2023, the European Commission published a document outlining its recommendations to alleviate energy poverty across the European Union.[23] Recommendations cover i) implementing a regulatory framework at the Member State level; ii) structural measures, affordability and access to energy; iii) governance; iv) trust, engagement and communication; v) energy efficiency; vi) access to renewables; vii) skills; and viii) financing. Priority should be given to renovation that aims at energy efficiency and the inclusion of renewable energy. The recommendations also include allocating financing to reduce energy poverty from instruments such as the Recovery and Resilience Facility, European Regional Development Fund and Cohesion Fund, the Just Transition Fund, the Union Emissions Trading System, Modernisation Fund and Social Climate Fund.

Energy Poverty Observatory and Energy Poverty Advisory Hub

The Energy Poverty Observatory[24] is a dashboard where national data on energy poverty is collected. The data is gathered to create a set of energy poverty indicators, used as a reference for energy poverty diagnoses and alleviation measures. All EU countries where data is available have dashboards that can be publicly accessed, with downloadable data. The Observatory can therefore be a useful guide to compare countries on specific energy poverty indicators – such as inability to afford heating costs, or household cost overburden rate – or compare individual indicators over time.

The Energy Poverty Observatory is run by the Energy Poverty Advisory Hub[25] (EPAH), a European Commission-funded hub that provides support throughout the European Union. EPAH has published a range of guidebooks useful for all kinds of stakeholders engaged in energy poverty alleviation. The latest guidebook focuses on its methodology for effective energy poverty alleviation policies. EPAH also brings stakeholders together through its annual conferences and organises a range of events to share experience and knowledge. This includes giving policy recommendations at EU and national levels.

European Pillar of Social Rights

The European Pillar of Social Rights[26] comprises 20 principles that were proclaimed by the European Parliament, European Council and the Commission at the Gothenburg Summit in 2017. The principles are supposed to be enacted through the European Social Fund Plus (ESF+), which runs until 2027. Member States should allocate funds to a range of initiatives, among them tackling child energy poverty and offering community-based services to reach the most vulnerable consumers and marginalised groups.

Energy Poverty and Vulnerable Consumers Coordination Group

In 2022, the Energy Poverty and Vulnerable Consumers Coordination Group[27] was established, to provide communication between Member States and the European Commission on the design and implementation of European legislation in relation to energy poverty and vulnerable consumers. The group comprises representatives from competent authorities within each Member State and advises the EU on policies that identify, support and protect those in energy poverty and vulnerable consumers.

[23] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202302407
[24] https://energy-poverty.ec.europa.eu/observatory
[25] https://energy-poverty.ec.europa.eu/
[26] https://european-social-fund-plus.ec.europa.eu/en/european-pillar-social-rights
[27] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022D0589

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Directive on common rules for the internal electricity market (2024/1711)

Overview

The Directive on common rules for the internal electricity market (EMD)[28] was recast in 2019. Its 2024 version amended not only (EU) 2019/944 (Electricity Directive), but also Directive (EU) 2018/2001 on Renewable Energy Sources. This was to better incorporate renewable energy sources into the electricity market and protect and empower consumers who take an increasingly active role in the electricity market through decentralised renewable energy production.

The EMD is highly relevant, as this directive introduced the term energy poverty into EU legislation back in 2009. However, it does not mention the neighbourhood approach or any form of resource centres or one-stop shops to achieve its goals. It also only deals with electricity markets, not gas markets.

Table 1: Articles in the EMD related to vulnerable consumers and neighbourhoods.

Article	Vulnerable consumers/EPA	Neighbourhood	Comment
Article 2 definition: 'Energy poverty' means a household's lack of access to essential energy services, where such services provide basic levels and decent standards of living and health, including adequate heating, hot water, cooling, lighting, and energy to power appliances, in the relevant national context, existing national social policy and other relevant national policies, caused by a combination of factors, including at least non-affordability, insufficient disposable income, high energy expenditure and poor energy efficiency of homes.	●		The EMD refers to the definition from the EED, Directive (EU) 2023/1791 – Energy efficiency and amending Regulation (EU) 2023/955 (recast)
Article 15a Right to energy sharing Promotion of energy sharing, allowing households, including those affected by energy poverty, to participate in collective energy initiatives, thereby reducing energy costs and promoting renewable energy usage.	●	●	Under point 4c, Member States must ensure that active customers participating in energy sharing are not required to comply with supplier obligations, where renewable energy is shared between households with an installed capacity of **up to 50 kW for multi-apartment blocks.**

[22] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02019L0944-20240716#M2-2
[23] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202302407

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Article	Vulnerable consumers / EPA	Neighbourhood	Comment
Article 28: Vulnerable customers Adequate safeguards by each Member State to protect vulnerable customers, especially regarding disconnections, transparency of contractual terms and conditions, general information, and dispute settlement mechanisms. Support for energy efficiency improvements to address energy poverty.	●		What constitutes vulnerable customers' needs is to be defined by each Member State, but could refer to energy poverty, income levels, share of energy expenditure of disposable income, energy efficiency of homes, critical dependence on electrical equipment for health reasons, age or other criteria. Ensures policy consistency with the EED (find in section 4.1.4) and makes reference to Regulation (EU) 2018/1999 which ensure energy poverty is included in the NECPs (article 3 (3) d).
Article 28a: Protection from disconnections Vulnerable customers and those in energy poverty are fully protected from electricity disconnection.	●		Given the EMD natures this only targets the electricity market. Links made for any policy to protect vulnerable costumers mostly using gas (e.g. in Hungary) is missing.
Article 66a: Access to affordable energy during and electricity price crisis Prices might be fixed during a period of crisis in the whole union, or in specific regions.	●		As above, this only applies to electricity prices, other types of fuel prices are not part of the EMD.

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Energy poverty

The EMD uses the definition of energy poverty provided in the EED. The EMD addresses energy poverty through means such as protecting vulnerable households from disconnection due to non-payment during critical periods and strengthening the protection of vulnerable households through regulated pricing and subsidies. Measures such as energy sharing might have positive effects on those living in multi-family apartment buildings when larger solar arrays are installed.

Support for energy efficiency improvements to alleviate energy poverty references Article 3(3) of Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action, which states that a Member State's NECP needs to include how energy poverty will be addressed – including measuring and assessing the indicators for energy poverty from the Commission guidance documents – if the number of households in energy poverty is 'significant'. However, the term significant is not clearly defined. The EMD points to the Commission recommendations (EU) 2020/1563 for a definition and again references Article 3(3) of Regulation (EU) 2018/1999. It would be helpful if the Commission could give clearer guidance on what constitutes a 'significant' number of households in energy poverty.

Directive (EU) 2024/1788 of the European Parliament and of the Council of 13 June 2024 on common rules for the internal markets for renewable gas, natural gas and hydrogen

Overview

The EU gas directive[30] was recast in 2024 following a proposal of the European Commission in 2021. It amends Directive (EU) 2023/1791 and repeals Directive 2009/73/EC. Its overarching goal is to facilitate the transition to a decarbonised energy system. This includes infrastructure development, consumer protection, market integration of hydrogen and energy security.

Table 2: Articles in the EU gas directive related to vulnerable consumers.

Article	Vulnerable consumers / EPA	Comment
Article 26: Protection of vulnerable customers and customers affected by energy poverty Member States shall protect especially vulnerable customers and those in fuel poverty regarding disconnections, transparency of contractual terms and conditions, general information, and dispute settlement mechanisms. This applies especially to those in remote areas.	●	See EMD above on defining vulnerable households.

[30] https://eur-lex.europa.eu/eli/dir/2024/1788/oj

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Article	Vulnerable consumers / EPA	Comment
Article 28: Protection from disconnection Vulnerable customers and those in energy poverty should be protected from disconnection from their gas supply.	●	Responsibility is abdicated to Member States without clear instructions, leaving vulnerable customers in countries with high household gas use at risk of being disconnected and left even more vulnerable.

Energy poverty

The directive refers to the previously mentioned Council Recommendation on energy poverty to provide more detailed guidance for the national level. While the EMD revisions have strengthened the protection of vulnerable customers and prohibit disconnection from electricity, the recast gas directive does not provide explicit provisions to prevent disconnection. Nevertheless, it encourages Member States to safeguard against disconnection.

Energy Efficiency Directive (EU) 2023/1791

Overview

The EED[31] was recast in 2023 as part of the 'Fit for 55' package to ensure consistency with updated EU climate targets for 2023 and 2050. It is a key component of the EU's climate and energy framework, designed to drive reductions in energy consumption and improve efficiency across all sectors. It sets binding energy-saving targets, prioritises the renovation of inefficient buildings, and mandates improvements within the public sector. Its primary strategy to alleviate energy poverty is to reduce energy costs for vulnerable households and improve building quality.

Table 3: Articles in the EED relating to vulnerable consumers, MFAB renovation, resource centres, and neighbourhoods.

Article	Vulnerable consumers / EPA	MFAB renovation	Resource Centres	Neighbourhood	Comment
Article 2: Definitions Definitions for "energy poverty" and "system efficiency".	●				Definitions for energy poverty and system efficiency have been revised and respectively added.

[31] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ%3AJOL_2023_231_R_0001&qid=1695186598766

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Article	Vulnerable consumers / EPA	MFAB renovation	Resource Centres	Neighbourhood	Comment
Article 3: Energy efficiency first principle The energy efficiency first principle broadened to include "demand-side resources and system flexibilities".		●			This broadened definition of the energy efficiency first principle is fundamental for a transition to a renewable-based energy system.
Article 4: Energy efficiency targets The EU's energy efficiency target is raised to a "reduction of energy consumption of at least 11.7% in 2030 compared to the projections of the 2020 Reference Scenario".		●			The tightening of the EU target puts pressure on Member States to explore all sources of energy efficiencies. NESRs can focus on delivering this.
Article 22: Information and awareness raising Member States must create a supportive framework for market actors, i.e. "one-stop shops […] for the provision of technical, administrative and financial advice" and "cooperation with private actors that provide services such as […] financing solutions and execution of energy renovations". They must also "remove regulatory and non-regulatory barriers to energy efficiency" that cause split incentives around energy efficiency improvements. Paragraph 6 also specifies: "The one-stop shops referred to in paragraph 4 shall offer dedicated services for people affected by energy poverty, vulnerable customers and people in low-income households."			●		Measures to tackle split incentives (such as energy savings between tenants and owners) are to be defined by each Member State. MFABs are explicitly mentioned as vulnerable to the negative effects of split incentives. Information for energy poor to be integrated in one-stop shops.

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Article	Vulnerable consumers / EPA	MFAB renovation	Resource Centres	Neighbourhood	Comment
Article 24: Empowering and protecting vulnerable customers and alleviating energy poverty 1. Member States must "empower and protect people affected by energy poverty, vulnerable customers, low-income households and, where applicable, people living in social housing". To this end, they should "ensure access to finance, grants or subsidies bound to minimum energy gains and thus facilitate access to affordable bank loans or dedicated credit lines". 4. Member States should establish a network of experts from various sectors such as the health, building and social sectors, or entrust an existing network, to develop strategies to support local and national decision-makers in implementing energy efficiency improvement measures, technical assistance and financial tools aiming to alleviate energy poverty.	●				Balancing energy efficiency measures with the alleviation of energy poverty is a theme present throughout the EED, and most explicitly through this article. Such a network could be highly relevant to ensure a coordinated approach to energy poverty alleviation, including policy consistency and adequate funding mechanisms.
Article 25: Heating and cooling assessment and planning Municipal heating and cooling plans should be prepared that consider the needs of local communities and the area-specific potential for energy efficiency measures. The role of energy communities in the implementation of heating and cooling projects should also be assessed in these plans.				●	This is relevant as many CEE countries still highly depend on gas, and should be integrated into NESR design. NESRs should provide guidance for prioritisation of interventions for renovation and replacement of heating/cooling sources.

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Energy poverty

The EED provides a large number of requirements for "people affected by energy poverty, vulnerable customers, people in low-income households and, where applicable, people living in social housing". Article 2 defines energy poverty as "a household's lack of access to essential energy services, where such services provide basic levels and decent standards of living and health, including adequate heating, hot water, cooling, lighting, and energy to power appliances, in the relevant national context, existing national social policy and other relevant national policies, caused by a combination of factors, including at least non-affordability, insufficient disposable income, high energy expenditure and poor energy efficiency of homes".

It also says that "improvements in energy efficiency should be implemented as a priority among people affected by energy poverty, vulnerable customers and final users, people in low-income or medium-income households, people living in social housing, older people as well as people living in rural and remote areas and in the outermost regions."

The legal EU definition of energy poverty recognises various drivers and includes both access to and affordability of housing. While the definition is acceptable, questions arise around the framework of indicators to monitor energy poverty and its alleviation progress on a national level. For example, the EU has no specifically designed dataset for energy poverty – the data is always patchy. Furthermore, challenges remain in determining who is energy-poor (e.g. France has a proxy for income, which is whether a person receives state benefits). Finally, there are risks around excluding very energy-poor households when, for example, demanding two years of proof of social security.

The EED mandates Member States to implement an energy efficiency obligation scheme (Article 7). This means a portion of energy savings under this scheme is to benefit vulnerable, low-income, and energy-poor households. This creates an indirect mechanism for prioritising energy-poor households, but it stops short of allocating specific, dedicated funding solely for this purpose.

Resource centres

The EED encourages – but does not strictly require – Member States to establish local or regional energy agencies to streamline access to information and services for energy efficiency improvement. Recital 38 specifies that these agencies can serve as one-stop shops (see EPBD below), which are similar to resource centres. Their goal is to "stimulate market development on the demand and supply sides and to promote energy performance contracting for renovation of both private and public buildings".

The EED recognises that "the contribution of one-stop shops can be very important for vulnerable customers, as they could receive reliable and accessible information about energy efficiency improvements" (119). That contribution can include providing technical, administrative and financial advice and assistance; facilitating administrative procedures or access to financial markets; and guidance on EU and national legal frameworks, including public procurement rules and criteria, and the EU taxonomy.

Multi-family apartment building renovation

Article 22 requires Member States to provide holistic support to all households, with a particular focus on households affected by energy poverty and on worst-performing buildings. MFABs are often among the worst-performing buildings. Article 24 also mentions renovation concerning empowering vulnerable customers, many of whom live in MFABs.

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Here the focus is on technical assistance and the roll-out of enabling funding and financial tools, such as on-bill schemes, local loan-loss reserves, guarantee funds, and funds targeting deep renovations and renovations with minimum energy gains.

Neighbourhood approach

The EED's heating and cooling planning and assessment mandate is highly relevant at the neighbourhood level. While the directive itself only mentions the local level, the concepts outlined – such as energy communities, energy renovations and energy poverty – are best tackled at the neighbourhood level. Plans drafted by municipalities should therefore outline how proposed measures can be implemented in neighbourhoods and be attached to existing neighbourhood renovation.

Energy Performance in Buildings Directive (EU) 2024/1275

Overview

The EPBD is the EU's main tool for tackling the energy inefficiency of buildings and driving their decarbonisation. It sets specific requirements to improve the energy performance of buildings, including minimum energy performance standards and plans to phase out fossil-fuel-based heating. A key focus is on increasing the rate and depth of renovations, particularly for existing buildings, to meet ambitious energy and emissions targets. What is new is, in particular, the definition of 'worst-performing buildings' as the 43% of buildings with the lowest energy performance in the national building stock. The directive also supports the use of digital and smart technologies to make energy use more efficient. With the recast EPBD Member States are required to submit a national building renovation plan (NBRP) by the end of 2025 (final document to be submitted end of 2016). These replace the previous long-term renovation strategies and in the long term are expected to be integrated into the national energy and climate plans.

Table 4: Articles in the EPBD relating to vulnerable consumers, resource centres, MFAB renovation, and neighbourhood.

Article	Vulnerable consumers / EPA	Resource Centres	MFAB renovation	Neighbourhood	Comment
Article 2: Definitions "Minimum energy performance standards" means rules that require existing buildings to meet an energy performance requirement as part of a wide renovation plan for a building stock or at a trigger point on the market (such as sale, rent, donation or change of purpose within the cadastre or land registry), in a period of time or by a specific date, thereby triggering renovation of existing buildings.	●				Has the potential to create an obligation for the residential sector to renovate the least energy-efficient buildings and thereby tackle a main source of energy poverty in CEE.

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Article	Vulnerable consumers / EPA	Resource Centres	MFAB renovation	Neighbourhood	Comment
Article 2: Definitions ' "Energy from renewable sources" means energy from renewable non-fossil sources, namely wind, solar (solar thermal and solar photovoltaic), and geothermal energy, ambient energy, tide, wave and other ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas, and biogas.	●				Has the potential to create an obligation for the residential sector to renovate the least energy-efficient buildings and thereby tackle a main source of energy poverty in CEE.
Article 2: Definitions "Deep renovation" means a renovation in line with the energy efficiency first principle and which focuses on essential building elements, and which transforms a building or building unit: (a) before 1 January 2030, into a nearly zero-energy building; (b) as of 1 January 2030, into a zero-emission building.			●		Increases ambition from nZEB. Relevant for NESRs to set deep renovations as key target.
Article 2: Definitions "Vulnerable households" means households in energy poverty or households, including lower middle-income ones, that are particularly exposed to high energy costs and lack the means to renovate the building they occupy.	●				Inconsistent with the EED, which asks each Member State to define the concept of vulnerable customers, and could therefore create confusion.

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Article	Vulnerable consumers / EPA	Resource Centres	MFAB renovation	Neighbourhood	Comment
Article 2: Definitions "Energy poverty" means energy poverty as defined in Article 2(52) of Directive (EU) 2023/1791 [the EED]	●				Establishes the link to the EED.
Article 3: National building renovation plan A roadmap with nationally established targets and measurable progress indicators, including the reduction of the number of people affected by energy poverty. They should include national targets for 2030, 2040 and 2050.	●	●	●	●	Having no EU-level thresholds for minimum energy performance requirements does not contribute to harmonisation, which creates barriers to finance and application of the EU Taxonomy. It can also result in different levels of ambition.
Article 5: Setting of minimum energy performance requirements The 2030, 2040 and 2050 targets contained in the Member State's building renovation plan and with the categories of buildings.	●				Having no EU-level thresholds for minimum energy performance requirements does not contribute to harmonisation, which creates barriers to finance and application of the EU Taxonomy. It can also result in different levels of ambition.
Article 9: Minimum energy performance standards and trajectories for progressive renovation National trajectory for the progressive renovation of the residential building stock in line with the national roadmap and transformation of the national building stock into zero-emission buildings by 2050. At least 55% of the decrease in the average primary energy use is achieved through the renovation of worst-performing residential buildings.	●		●		Using % rather than EPC labels may be more difficult to implement and communicate.

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Article	Vulnerable consumers / EPA	Resource Centres	MFAB renovation	Neighbourhood	Comment
Article 9: Minimum energy performance standards and trajectories for progressive renovation Financial measures for vulnerable households and those affected by energy poverty, technical assistance, integrated financing schemes for deep renovation, removing economic barriers, and monitoring social impacts.	●		●		The provisions lack concrete measures or targets in reducing fuel poverty and do not specify the percentage of social housing or vulnerable households who benefit from assistance in renovation.
Article 17: Financial incentives, skills and market barriers 16. Incentivising in particular the worst-performing buildings, such as through integrated district renovation programmes, and that result in an overall reduction of at least 30% of primary energy use with higher financial, fiscal, administrative and technical support, according to the level of performance achieved. 19. Address eviction of vulnerable households caused by disproportionate rent increases following energy renovation of their dwelling and introduce effective safeguards, to protect particularly vulnerable households, including by providing rent support or by imposing caps on rent increases, and may incentivise financial schemes to tackle the upfront costs with renovations, such as on-bill schemes, pay-as-you-save schemes or energy performance contracting.	●		●		Creates a framework to incentivise district renovation and realise energy renovations while considering especially vulnerable households.

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Article	Vulnerable consumers / EPA	Resource Centres	MFAB renovation	Neighbourhood	Comment
Article 18: One-stop-shops for energy performance of buildings One-stop shops for the energy performance of buildings shall provide independent advice on the energy performance of buildings and may accompany integrated district renovation programmes.		●			Essential legislative condition for the resource centres.
ANNEX II **TEMPLATE FOR THE NATIONAL BUILDING RENOVATION PLANS** The promotion of district and neighbourhood approaches and integrated renovation programmes at the district level, which may address issues such as energy, mobility, green infrastructure, waste and water treatment and other aspects of urban planning and may take into account local and regional resources, circularity and sufficiency. The role of renewable energy communities and citizen energy communities in district and neighbourhood approaches.				●	While the whole EPBD provides a framework for energy renovations, vulnerable household protection etc., the promotion of the neighbourhood approach is a new addition and could have major impacts on the approach to renovations in the EU.

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The 2024 EPBD pays more attention to the social fairness of its provisions. Recognition is given to the social aspects of building decarbonisation policies, with legal definitions for specific concepts such as energy poverty and vulnerable households. The new provisions and requirements put a strong emphasis on the renovation of the worst-performing buildings, which are often occupied by people in energy poverty. The EPBD not only introduces renovation requirements but also ensures Member States provide specific support to these segments of the population, whether in financing or advisory terms. Finally, Member States must introduce specific safeguards to protect citizens, in particular tenants, and monitor the social impacts of building renovation and decarbonisation policies.

Energy poverty

The EPBD aims to address the problem of upfront cost for renovations and their potential economic burden on vulnerable households by obliging Member States to take this into consideration in various policy measures. The NBRPs (Article 3) must include indicators that monitor the impact on energy poverty, and due consideration and support must be given to the implementation of minimum energy performance standards (Article 9).

Member States should include in their NBRPs as a mandatory indicator the percentage of people affected by energy poverty. They should also put in place measures to empower and protect vulnerable groups and for the alleviation of energy poverty.

The NBRPs should include a roadmap with nationally established targets and measurable progress indicators, including the reduction of the number of people affected by energy poverty. Additionally, Member States need to put in place financing measures and incentives in line with their planned reduction of energy poverty. The EPBD stresses that financial incentives should be targeted, as a priority, at vulnerable households, people affected by energy poverty and people living in social housing.

Resource centres

Resource centres ideally provide technical guidance, community engagement and administrative support to help alleviate energy poverty.

Article 18 of the EPBD, One-stop shops for the energy performance of buildings, specifies that Member States are to set up one-stop shops either per 80,000 inhabitants; per region; in areas where the average age of the building stock is above the national average; in areas where Member States intend to implement integrated district renovation programmes; or in a location that can be reached within less than 90 minutes of average travel time, on the basis of the means of transport that is locally available.

The EPBD gives one-stop shops more prominence as a key information and advisory tool for renovation. They are supposed to provide holistic support to all households, with a particular focus on households affected by energy poverty and on worst-performing buildings. Additionally, one-stop shops should offer dedicated services for vulnerable households, people affected by energy poverty and people in low-income households.

One-stop shops also play a crucial role in supporting the delivery of other provisions and linking with other tools, such as energy performance certificates (EPCs) and renovation passports.

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Multi-family apartment building renovation

The EPBD does not specifically mention multi-family apartment buildings, but they fall under the residential building segment, for which Member States will have to establish a national trajectory for progressive renovation in line with the national roadmap and the 2030, 2040 and 2050 targets in their NBRP. The trajectory should be expressed as a decrease in the average primary energy use and should comply with intermediate, five-year milestones for the decrease in the average primary energy use of the residential building stock, starting in 2030.

Member States are required to identify the number of residential buildings and residential building units or floor area to be renovated annually, including the worst-performing 43% of residential buildings. They need to ensure that at least 55% of the decrease in the average primary energy use is achieved through the renovation of the 43% worst-performing residential buildings.

The EPBD also mentions that, in their renovation efforts, Member States should not disproportionately exempt rental residential buildings and building units.

Neighbourhood approach

A novel aspect of the recast EPBD is the explicit mention of a neighbourhood and district approach, e.g. in Article 17 on financing, Article 18 on one-stop shops and Article 28 on review. Moving from a single-building perspective to seeing buildings as components in a bigger system will unleash the potential for further energy efficiency gains, renewable integration, social cohesion, economies of scale and other benefits. Though a complete switch of approach is still far away, the explicit mention of the neighbourhood approach is a step in this direction.

The EPBD recognises that "integrated district or neighbourhood approaches help to increase the cost-effectiveness of the renovations". The Commission commits itself to "examine in what manner Member States could apply integrated district or neighbourhood approaches in Union building and energy efficiency policy, while ensuring that each building meets the minimum energy performance requirements, for example by means of integrated renovation programmes and overall renovation schemes applying to a number of buildings in a spatial context instead of a single building."

In Article 3 on NBRPs, the EPBD sets out a revision of existing long-term renovation strategies. In the annex II template for the NBRP, "the role of renewable energy communities and citizen energy communities in district and neighbourhood approaches" is listed as an optional indicator. As a mandatory indicator in this template, Member States should promote "district and neighbourhood approaches and integrated renovation programmes at the district level, which may address issues such as energy, mobility, green infrastructure, waste and water treatment and other aspects of urban planning and may take into account local and regional resources, circularity and sufficiency".

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Emission Trading System 2 and Social Climate Fund

Overview

In 2023 the ETS Directive was revised, introducing ETS2 which now also includes buildings and transport.[32] It will only become fully operational in 2027, but monitoring and reporting of emissions starts in 2025. The ETS2 is expected to drive up carbon prices, making transport and use of energy services in buildings more expensive. More specifically, the new scheme targets both motor and heating fuels on the side of the fuel suppliers.[33] Since the only exception for heating fuels are wood-based fuels, prices for heating are estimated to increase for households across the EU. This poses a key risk for energy-poor citizens to become even more vulnerable.

The EU established the Social Climate Fund (2023/955) which aims to mitigate this new harm – though it is not designed specifically to alleviate energy poverty. The Social Climate Fund will be available between 2026 and 2032, with a maximum amount of €65 billion for the whole EU, with the revenue generated from both ETS1 and ETS2. Each Member State is expected to create a social climate plan, to which they need to contribute 25% of their own funds (in addition to the Social Climate Fund). Eligible measures for which the funds can be used include to:

> **(a)** support building renovations, in particular for vulnerable households and vulnerable micro-enterprises occupying the worst performing buildings, and including for tenants and people living in social housing;
>
> **(b)** support access to affordable energy-efficient housing, including social housing;
>
> **(c)** contribute to the decarbonisation, such as through electrification, of heating and cooling of, and cooking in, buildings by providing access to affordable and energy-efficient systems, and by integrating renewable energy generation and storage, including through renewable energy communities, citizen energy communities and other active customers to promote the uptake of the self-consumption of renewable energy, such as energy sharing and peer-to-peer trading of renewable energy, connection to smart grids and to district heating networks, that contributes to achieving energy savings or to reducing energy poverty;
>
> **(d)** provide targeted, accessible and affordable information, education, awareness and advice on cost-effective measures and investments, available support for building renovations and energy efficiency, as well as sustainable and affordable mobility and transport alternatives.[36]

Social climate plans are supposed to undergo a public consultation in 2025, including local authorities, social partners, civic organisations and other stakeholders. However, as a recent report by CAN highlights, they risk becoming a 'tokenised' exercise that does not benefit those in energy poverty.[37]

[32] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02003L0087-20230605
[33] https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/ets2-buildings-road-transport-and-additional-sectors_en
[34] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R0955
[35] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R0955#d1e1418-1-1
[36] Article 8: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R0955#d1e1339-1-1
[37] https://caneurope.org/content/uploads/2024/10/30.10.24-CANE-Planning-a-fair-and-ambitious-renovation-wave.pdf

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Especially worrying is the lack of coherent timing between the social climate plans and other proposed policy measures, such as NBRPs, meaning these different instruments are likely to lack coherence. CAN estimates that using the Social Climate Fund alone to cover renovation schemes for vulnerable households will fall short, risking driving people further into energy poverty due to the price increases from ETS2.

Case Study: Ireland's SEAI addresses nuances of energy poverty

Ireland adapted its renovation financing programme during the energy crisis to the exposure to extraordinarily high energy prices. The goal was to make it more affordable for homeowners to undertake home energy upgrades and lower energy bills.

Under the National Retrofitting Scheme, a special enhanced grant rate of 80% of the usual cost was made available to all homes for attic and cavity wall insulation in order to drastically cut energy use.[38]

Under the Warmer Homes Scheme, those most at risk of energy poverty were eligible to receive free energy upgrades in the form of single measures (e.g., wall insulation, heat pump). The scheme also targeted the worst-performing buildings constructed before 1993 or with an EPC E, F, or G. A key condition to eligibility was to be a recipient of a list of social welfare payments.[39]

Overall policy recommendations

In December 2024 the College of Commissioners took office in Brussels. The first ever Commissioner for Energy and Housing, Dan Jørgensen, started his mandate. In his mission letter, it says that he should "develop a Citizens Energy Package to increase citizens' participation in the energy transition and strengthen the social dimension of the Energy Union", and that he "will propose further measures to address energy poverty and contribute to the European Affordable Housing Plan".[40] The Affordable Housing Plan also includes offering technical assistance to cities and Member States and focusing on skills and investment needed. The new Commissioner on Energy and Housing is further tasked with putting forward an action plan for affordable energy prices, which is part of the Clean Industrial Deal.
This action plan is meant to bring prices down for households during the transition period to clean energy.

Each of the policy instruments can help alleviate energy poverty through the renovation of multi-family apartment buildings. If the EU and Member States develop a coherent strategy, these renovation projects can be scaled to a neighbourhood and district approach. The table below summarises the main points from the four policy instruments analysed.

[38] https://www.seai.ie/news-and-events/news/government-launches-the-n
[39] https://www.citizensinformation.ie/en/housing/housing-grants-and-schemes/grants-for-home-renovations-and-improvements/warmer-homes-scheme/
[40] https://commission.europa.eu/document/download/1c203799-0137-482e-bd18-4f6813535986_en?filename=Mission%20letter%20-%20JORGENSEN.pdf

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Table 5: Summary of main points relating to the EMD, EED, EPDB, and ETS2.

	EMD	EED	EPBD	ETS2
Relevant focus	**Market regulation and consumer protection**	**Efficiency and demand reduction**	**Energy performance of buildings**	**Buildings**
Energy poverty	Access to affordable energy and protecting vulnerable consumers	Alleviating through energy savings	Focus on worst performing buildings	Direct funds to energy renovation schemes for most vulnerable and those in energy poverty
Energy demand reduction	Not the focus but subsidies, regulating energy process and enabling energy sharing	Building renovations and efficiency programmes	National building renovation plans	Energy renovations for the most vulnerable
Renovation for MFAB	N/A	Does not specifically consider MFAB but promotes energy renovation	Through renovating worst performing buildings and NBRPs	Through the focus on most vulnerable, which often live in MFABs
Resource Centre	N/A	Member States required to provide information, technical assistance and financial schemes	Member States required to set up one-stop shops with information, technical assistance and financial schemes	Can also provide fund to establish OSS to help those in energy poverty and most vulnerable
Neighbourhood approach	N/A	N/A	Mentions cost-effectiveness of neighbourhood approach	Since not specified, can use fund for neighbourhood approach
Member State Obligation	N/A	Required to include measures addressing energy poverty in their National Energy and Climate Plans (NECPs) and report on their impact	Required to include measures in NBRPs and individual building renovation passports	Have to use own funds on top of Social Climate Fund for their national social climate plans

Table 6 summarises the main gaps and limitations from the policy analysis of chapter 2 and provides recommendations to overcome challenges.

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Table 6: Gaps and recommendations for EU policies on energy poverty alleviation and renovation projects targeting multi-family apartment buildings.

Gaps, limitation, notes	Recommendation
With the Council Recommendation, the EU has provided guidance and a lot of indicators to measure progress for energy poverty.	Ensure that Member States develop a common framework to identify energy poverty and vulnerable households, for example in the social climate plans due September 2025. Ensure there is no delay in their submission. Even though the EPBD pays more attention to the social aspects of its provisions, in their implementation efforts, Member States should make sure that they assess the social impact of the measures put in place, especially on vulnerable households.
There are examples of policy inconsistency, e.g. between vulnerable households and consumers.	Ensure coherence between policy measures, particularly between the social climate plans and NBRPs.
While the Energy Poverty Observatory collects data, Member States must improve the quality of data available.	Adopt a comprehensive calculation methodology that allows mapping of entire neighbourhoods and districts to ensure that those most vulnerable benefit from renovation programmes.
Lack of coordination and policy consistency at Member State level for energy poverty alleviation	As mandated by the EED, establish a network of experts from various sectors such as the health, building and social sectors, or entrust an existing network, to develop strategies to support local and national decision-makers in implementing energy efficiency improvement measures, technical assistance and financial tools aiming to alleviate energy poverty.
Local authorities have not been identified throughout all directives as key players. This is especially relevant as financial resources need to be ringfenced at the local level.	Enhance the role of local authorities as key players to ensure a successful rollout of renovation schemes. Ensure that funds are allocated to increasing the skills and knowledge of those who are going to run resource centres/one-stop shops at regional and local levels. Explore a variety of financial options and prioritise public funds for renovations of buildings for the most vulnerable households, for example by mandating in the EPBD the ringfencing of such funds.
While the neighbourhood approach has been recognised in the EPBD, opportunities to connect renovations to wider urban planning (e.g. mobility, green spaces etc) is not acknowledged.	Facilitate large-scale renovation projects and couple neighbourhood and district renovation with other measures, such as providing public green spaces and mobility services.[41]

[41] See also the reporty by RAP, CAN, and socialwatt on recommendations to tackle energy poverty in the EU.

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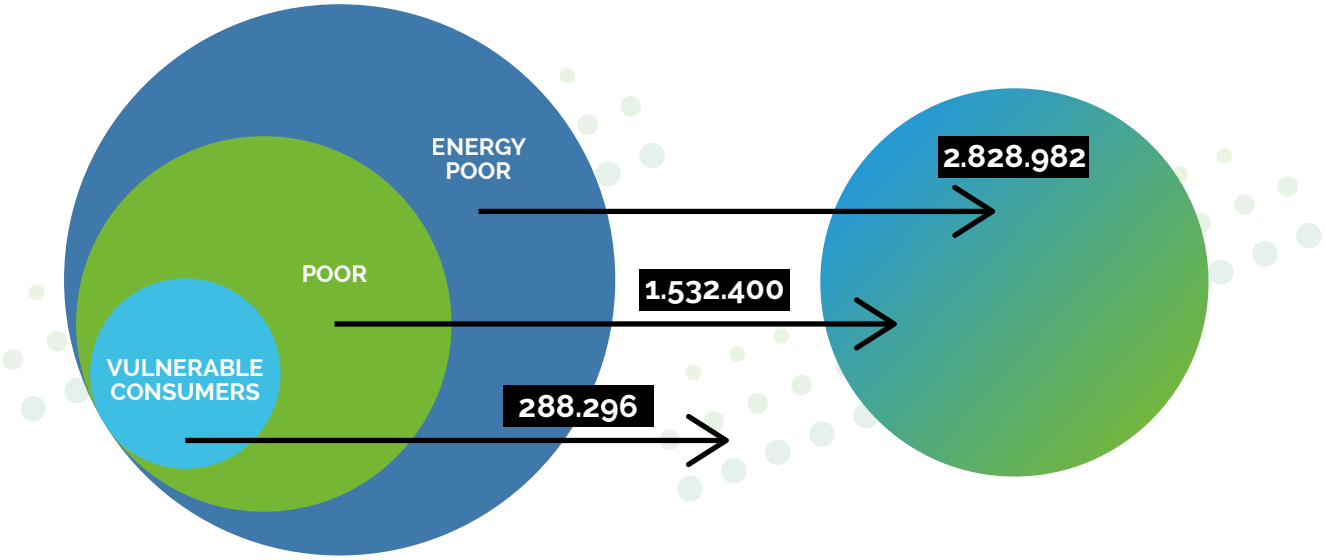
2.2 Bulgaria

Overview

Energy poverty

Bulgaria faces a severe challenge with energy poverty, with around a quarter of its population being unable to adequately heat their homes (20.7% in 2023, improved from 39.2% in 2015).[42] This is well above the average of 10.6% in the EU. Numbers on summer energy poverty[43] are largely outdated but a 2012 dataset shows levels of 49.5%. Notably, energy poverty affects many income groups, including 42.6% of households below the at-risk-of-poverty threshold and 22.6% of lower-middle-income households.[44] This issue is particularly strong among households in single-family buildings, but MFABs are also affected.[45] The analysis in the LTRS shows vulnerable owners or tenants are not necessarily concentrated in specific buildings or areas but that low-income and energy-vulnerable people often live alongside those with higher incomes in MFABs. This makes the targeting and implementation of energy efficiency measures trickier. Notably, while households pay a significant share of their budget for energy services, electricity prices were far below EU average in Bulgaria.[46]



Source.
*Vulnerable consumers: the number of beneficiaries of targeted and one-off heating aid for the 2021/2022 season (261 thousand + 27.2 thousand people)

Figure 5: Vulnerable, poor, and energy poor consumers benefiting from heating aid in Bulgaria.[47]

[42] https://ec.europa.eu/eurostat/databrowser/view/sdg_07_60/default/table?lang=en
[43] Summer energy poverty refers to a situation where people are unable to keep their homes cool, for example through the use of curtains, shutters, cooling fans, air conditioning, and bigger renovation programmes such as additional insulation. It can also be addressed on a larger, district or neighbourhood level as proposed in some SECAPs through cooling vegetation (https://www.empowermed.eu/wp-content/uploads/2023/02/Policy-recommendations-Empowermed_final-version.pdf).
[44] https://economy-finance.ec.europa.eu/system/files/2023-06/ip226_en.pdf
[45] https://openknowledge.worldbank.org/server/api/core/bitstreams/fda1d720-3b6b-496a-b254-7b08c7654761/content
[46] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Electricity_price_statistics
[47] https://emi-bg.com/wp-content/uploads/2022/11/T.-Peneva.pdf

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Energy demand reduction

Between 2005 and 2022, Bulgaria's primary energy consumption declined from 850 to 720 petajoules.[48] According to a baseline assessment from June 2024 by EnEffect, there is no published official information on the energy performance of different building types, or the number of nearly zero-energy buildings (nZEBs) (under the 2018 EPBD, all new buildings needed to meet nZEB standards from 1 January 2024).

Housing stock

About 87% of households in the country are owner-occupiers and 13% are tenants, though exact figures on the number of buildings in the country are absent. Almost 60% of the population of Bulgaria lives in multi-family buildings. The state of Bulgaria's building stock further complicates the situation, with a notably low renovation rate – 1.3% for medium renovations and only 0.1% for deep renovations, especially among multi-family buildings. Bulgaria also has one of the highest overcrowding rates in the EU (37.9% in 2021).[49] Around 7% of the Bulgarian population does not have a toilet, shower or bath. Around half of occupied residential housing is heated with electricity.

Key policies and measures and subsidies in place

A key policy is the NECP. Bulgaria has not yet submitted the final update since the last Commission recommendations for changes in summer 2024. The analysis is based on the draft update from February 2024. The second NECP draft was criticised for not having specific targets for the number of households to become prosumers[50] and for how many energy communities will be created by 2030/2050. Furthermore, it was remarked that the draft does not have quantitative targets for the number/ percentage of vulnerable households covered by building renovation programmes.[51]

The Commission also recommends further adjustments to better address energy poverty. It suggests that Bulgaria *"provide additional detail on the timeline of potential measures to address energy poverty, and on the dedicated financial resources from the perspective of both social policy (affordability) and structural energy measures. Explain how the use of energy efficiency measures in the framework of Energy Efficiency Obligations Scheme to alleviate energy poverty is planned to be deployed."*[52]

The LTRS, as required by the 2018 EPBD, mentions growing recognition that "effective actions to reduce fuel poverty must include measures to improve energy efficiency in the building stock at the same time as measures related to social policy". The whole strategy is structured around energy efficiency, recognising the multiple benefits such as improved health, impacts on household income and making a contribution to lifting people out of poverty in general. Regarding energy poverty, the LTRS recognises the role of municipalities to better design grants, especially to support those who might otherwise not have the means to participate in a renovation programme.

[48] https://www.statista.com/statistics/444887/primary-energy-consumption-in-bulgaria/
[49] https://ec.europa.eu/eurostat/cache/digpub/housing/bloc-1c.html?lang=en
[50] Prosumer refers to people who generate energy, for example through solar panels.
[51] https://www.zazemiata.org/resources/position-on-the-second-draft-updated-necp/
[52] https://commission.europa.eu/document/download/f224ece3-0a75-4939-a482-b44871a73302_en?filename=Recommendation_draft_updated_NECP_%20Bulgaria_2024.pdf

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Table 7: Overview of NECP and LTRS in Bulgaria.

Republic of Bulgaria: Integrated Plan in the Field of Energy and Climate – 2021-2030 (draft, final version not yet available)	
Energy Poverty	The Energy Act obliges the Council of Ministers to designate or establish a body (a department) to develop the national social and climate plan and, at the same time, to establish and maintain an information system on the number of households in energy poverty and vulnerable customers for the supply of electricity. Creation of a new knowledge centre to serve as a comprehensive information resource on energy poverty levels in Bulgaria and measures to tackle it, and stimulate analytical research on the causes and consequences.
Energy demand reduction	Target for final energy consumption is 8.42 million tonnes of oil equivalent (Mtoe) by 2030. This is below the 8.25 Mtoe target indicated by EU legislation, suggesting that Bulgaria's planned consumption is higher than the EU's recommended level. There is a total cumulative saving target for 2021-2020 of 6.227,39 ktoe (energy savings in final consumption).

Energy use avoidance	Energy efficiency	Renewables	Direct subsidies
Behaviour barriers are recognised for housing renovations. Behaviour measures for energy savings in final consumption are included in regulation No. E-RD-04-3 of 4 May 2016, which promotes energy-saving appliances, energy audits for consumers, training and education, and information campaigns.	Energy efficiency is set as the first priority. Much focus is given to stricter energy performance standards, renovation programmes to improve insulation, upgrading heating systems, as well as education campaigns and training programmes to better communicate the benefits of energy efficiency.	Developing renewable energy communities and accelerating the uptake of renewable energy, especially for self-consumption, are mentioned as priorities. Better conditions were said to have been created through the amendments of the Energy from renewable sources Act (ZEVI), which defines renewable energy communities and their rights and responsibilities.	Financing is foreseen to be via the Recovery and Resilience Facility and supported by the EU Social Climate Fund. The latest version of the NECP lacks sufficient detail to inform stakeholders on sectoral policies and investments, nor are there clear financial mechanisms or long-term integration into the LTRS or other strategic documents.

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Table 7: Overview of NECP and LTRS in Bulgaria.

Long Term Renovation Strategy The LTRS were mandated under the EPBD 2018 and are to be replaced by the National Building Renovation Plans by Member States in 2026. They lay out their plans for renovation.	
Energy Poverty	Energy poverty is said to be driven by a combination of low income, high energy costs as a share of household income and low energy efficiency of buildings. There is a support mechanism for vulnerable electricity consumers, improving the energy efficiency of homes. The strategy says that renovation grants should be incorporated into municipal policies to support vulnerable households lacking the financial means to participate in building renovation programmes aimed at improving energy efficiency.
Energy demand reduction	The energy savings milestone to be achieved by 2030 is 2,917 GWh/year, of which 2,477 GWh/year is expected to come from residential buildings. There are many energy efficiency measures spelt out for MFABs to achieve these savings, ranging from insulation, replacement of windows and lighting, to heat pumps which will reduce heating energy.

Energy use avoidance	Energy efficiency	Renewables	Direct subsidies
The reduction in energy savings through changes in consumer behaviour varies between 1% and 30% depending on the specific conditions. Under priority 3.3. the LTRS describes indicators to conduct national and local awareness campaigns and **one-stop-shop advisory service delivery** (including the provision of tailored advice to building owners and investors) about the process of overall renovation. However, these are more focused on the renovation itself than explicitly on any behaviour changes in energy use.	By 2030, Bulgaria aims to renovate almost 19 million m^2 of residential space to align with its LTRS, targeting over 111 million m^2 by 2050 (renovation of 60% of the residential housing stock). There is a 2030 target of 5% of MFABs to use a 'specialised intermediary' to provide expert assistance throughout the renovation process.	There is a list of measures and technologies for renewable energy and waste heat recovery systems, such as the installation of air-to-air or water-to-water heat pumps.	The LTRS has a long list of indicators for establishing a national decarbonisation fund and other ways to provide new financial instruments. To tackle energy poverty there are heating allowances to meet basic heating needs. Energy renovation grants are for low-income owners who don't qualify for heating benefits. Additionally, limited public funds will be directed toward households in buildings with established management systems under condominium law, enabling their participation in energy efficiency programmes that require co-financing from owners.

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While the NECP and LTRS both outline some overarching strategy, there were some key legislative changes to better define the term energy poverty and provide clearer ideas for how to address the vulnerability of customers: the act to amend and supplement the existing Energy Act, which updates the legal framework on energy poverty, as well as ordinances, which are more of a subordinate law and provide detailed operational procedures and specify implementation mechanisms.
See below for a summary.

Table 8: Key legislative changes and framework in Bulgaria on energy poverty.

The Act Amending and Supplementing the Energy Act (за изменение и допълнение на Закона за), adopted by the 49th National Assembly on 10 November 2023 and published in State Gazette No. 96 on 17 November 2023

The act introduces the first-ever national definitions of "households in energy poverty" and "vulnerable customers for the supply of electricity". By establishing these definitions, the act lays the legal foundation for identifying and supporting energy-poor households. It also outlines the obligations of public authorities and energy providers to address energy poverty and enhance consumer protections. Furthermore, the act enables the adoption of subordinate legislation, such as ordinances, to operationalise its provisions, ensuring a structured approach to safeguarding vulnerable populations in the energy sector.

Importantly, the act also mandates the full liberalisation of the wholesale electricity market by 30 June 2024, transitioning from a regulated framework to a competitive market structure. This means it will be easier for energy communities and prosumers to enter the market as new definitions are provided for active consumers, energy communities etc. Until the beginning of 2026, household consumers remain on regulated tariffs, with a gradual transition to market-based pricing after.

Ordinance on the Criteria, Conditions, and Procedures for Determining the Status of Households in Energy Poverty and Vulnerable Customers for the Supply of Electricity, on 29 November 2023

This ordinance specifies the criteria, conditions and procedures for determining the status of households in energy poverty and identifying vulnerable customers for electricity supply. Developed by an inter-ministerial working group, the ordinance considers factors such as disposable income, energy consumption, age, health status and reliance on life-sustaining medical devices. Eligibility is assessed by comparing a household's disposable income – after accounting for typical energy costs – to the officially declared poverty line.

Ordinance No E-RD-04-2 of 16.12.2022 on energy efficiency audit, certification and evaluation of energy savings of buildings

Establishes the procedure and rules for conducting energy performance audits for buildings or parts of buildings in operation, including the documents that reflect the results of the audit, issuing EPCs and energy saving assessments.

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Ordinance RD-02-20-3 of November 9, 2022 on the technical requirements for the energy performance of buildings

Specifies the minimum requirements for the energy performance of buildings, the methodology for calculating the energy performance of buildings and the scales of the energy classes for different building types. New indicators for renewable and non-renewable energy were introduced as well as new primary energy factors and emission factors.

Recovery and Resilience Fund Bulgaria

The establishment of a national decarbonisation fund is suggested under Reform C4.R1. It also includes provisions for setting up one-stop shops for energy efficiency in residential buildings to provide information and support to engineers, consultants, building owners and firms involved in energy renovations.

The NECP proposes an Observatory as a centralised decision-support body coordinated by the Council of Ministers of the Republic of Bulgaria to foster research, policy innovation and stakeholder collaboration – while it is not yet codified in any law, the Recovery and Resilience Facility could be used to finance it. Under Reform 4, one-stop shops are mentioned.

Neighbourhoods are not really mentioned across policies as a preferred area of intervention. Yet there are projects such as the UP-STAIRS project which promotes the formation of energy communities at neighbourhood levels. Like ComActivate, it also encourages collective action to improve energy efficiency as well as integrated renewable energy sources.

Case Study: UP-STAIRS project

Under Horizon 2020, the UP-STAIRS[53] project ran between 2020 and 2023 in municipalities in Spain, Austria, Ireland and Bulgaria. The objectives of this projects were to accelerate the creation of energy communities and facilitating energy sharing in these communities; helping citizens becoming prosumers; designing one-stop shops focused on bringing local stakeholders together; making sure the project can be replicated in other regions across Europe.

In the municipality of Asenovgard in Bulgaria, a one-stop shop to facilitate energy community development was created. The one-stop shop reached almost 20,000 people and had 7,300 people directly involved.

[53] https://www.h2020-upstairs.eu/fileadmin/UP-STAIRS/Publications/D1.5_UP-STAIRS_Final_Publishable_Summary.pdf

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Energy (to be) saved from behaviour changes as well included more than 9.6 million kWh/year with an investment of around €13.5 million.

The project generated valuable lessons on barriers related to different stages of the one-stop shop. For the **formation stage**, barriers such as legislation on collective action and energy communities can be solved by preparing business models tailored to each region and coordinating the OSS through a single platform. Lack of support from authorities can be solved by introducing comprehensive cooperation. In the **development stage**, lack of relevant legislation can be addressed by creating clear and easy-to-understand legislative frameworks around energy communities, lack of trust from citizens can be addressed by presenting success stories and benefits for citizens, and insufficient awareness can be addressed by educating and engaging citizens through information materials and events. In the **operation stage**, lack of tools that facilitate the management of projects can be solved by creating unified systems and platforms that manage several energy communities, and excessive paperwork related to getting funding or other work can be solved by preparing instructions for filing documents.

Policy implementation gap

As Bulgaria's final NECP is expected and elections have just taken place in late October 2024, further policy developments are yet to be seen. However, observations can we made about the implementation of existing policy documents and concepts, such as resource centres, and their gaps.

Renovation

In Bulgaria, municipalities have a big role to play in renovations, as recognised in the LTRS. However, municipalities lack the technical capacity to adequality implement renovation programmes. Furthermore, municipalities show limited ambition to engage with the available programmes, resulting in delays in project evaluations, which frustrates homeowners who have prepared their applications for renovation subsidy programmes and are left waiting for approvals. However, there are exceptions: in Burgas, for example, the city has been successfully supporting the process of applying for renovation grants.

Homeowners' associations are legally mandated to manage renovation financing. However, a common barrier is that they often lack the technical expertise or administrative capacity to engage in the complex financial and renovation processes. They may also struggle to obtain credit, which inhibits the renovation of MFABs – this problem has not been solved yet.

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The absence of mechanisms to provide guarantees or shared financial support for collective renovation projects remains a significant barrier. Although the qualification training for professional home managers and facility management companies is among the listed priorities (Priority 3.2 of the LTRS), so far there has been no progress, with the renovation process mostly still in the hands of municipalities, as mentioned above. Although professional home managers exist, they need further training to be fully able to support the MFAB renovation process.

There is a lack of information on the results of renovation programmes, and the need remains to better monitor and track what has been done and how renovation plans have been implemented. The number of audits conducted to date remains insufficient. The LTRS recognised that *"there is no unified digital register of buildings to support energy efficiency measures, limiting planning and implementation capacity."* The Sustainable Energy Development Agency[54] manages a building registry limited to audited properties; however, it has little power to promote an expansion. The absence of data on the existing residential buildings stock, the lack of technical building passports[55] and the dispersed nature of energy poverty makes the design of renovation programmes challenging. This has not been solved. There is a missed opportunity to not mention tools such as the iBRoad2EPC more prominently.

Mechanisms to tightly monitor and penalise poor-quality work are also missing. This leads to MFAB renovations of substandard quality, often exacerbated by inadequate procurement standards and a lack of post-renovation verification mechanisms. Procurement processes often lack transparency, leading to substandard results in MFAB renovations.

Energy poverty

The landscape for energy poverty has improved since the amendments to the Energy Act. While the new ordinance on the Criteria, Conditions, and Procedures for Determining the Status of Households in Energy Poverty and Vulnerable Customers for the Supply of Electricity, mentioned above, reflects progress, it fails to adequately define roles and responsibilities for its implementation, especially for data collection, monitoring and policy enforcement.

Energy communities have been identified consistently to play a role in energy poverty alleviation. Recent amendments to the Renewable Energy Act encourage energy communities and the involvement of public authorities in supporting organised energy sharing. However, only a few registered energy communities exist in Bulgaria – one in Gabrovo and one in Burgas, which is in the beginning phases of technical development, and, overall, implementation remains slow. Both communities were supported by EnEffect and are public-private partnerships with the municipalities and private entities. The initiative is supported by LIFE's project TANDEMS. The LTRS mentioned that "municipalities lack the financial and technical capacity to establish and maintain energy communities, and there is insufficient support for guiding residents through the process". Both administrative procedures and technical knowledge at the local level remain limited. Weak coordination between ministries hinders progress: the Ministry of Energy is tasked with guiding municipalities, but it lacks a clear framework or operational support for local actors to act effectively.

[54] The Sustainable Energy Development Agency (SEDA) is the legal successor of the executive Energy Efficiency Agency (EEA) and acts as an executive agency for the Ministry of Energy.
[55] Digital building passports are a tool that has been further conceptualised in the 2024 EPBD recast.

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It was said that there is no unified platform or inter-ministerial cooperation mechanism to ensure that municipalities and agencies work in tandem. For example, the Ministry of Finance has remained disengaged, while the Ministry of Energy and the Ministry of Regional Development and Public Works lack effective collaboration on establishing one-stop shops or local information centres.

Resource Centres

The LTRS mentions as key barrier "the lack of sufficient financial mechanisms for deep renovations of buildings and the absence of a coordinated approach to energy efficiency investments". This is explored in more detail in D5.2 [Analysis of gaps and barriers for financing HOAs and MFABs]. Despite the allocation of €1 billion for energy-efficient renovation under the Recovery and Resilience Plan, participation in the second phase of Bulgaria's renovation programme remains quite low. The introduction of a new co-financing requirement (20%), compared to the previous 100% subsidy, has deterred interest. Inconsistent media messaging has created confusion among homeowners, some of whom anticipate a return to full subsidies. Policymakers' reluctance to support the programme publicly, particularly during elections, has compounded the issue. Under priority 3.3 of the LTRS, a nationwide awareness campaign was expected to communicate the benefits of renovation, including financing information. However, the lack of coordinated communication and public information campaigns to dispel misconceptions and align expectations continues to undermine renovation programme participation.

The neighbourhood approach was not mentioned in the NECP or the LTRS.

Policy recommendations

National government

- Establish a unified building registry that includes energy performance data for all properties, not just audited buildings.
- Strengthen financial mechanisms to support collective renovations, such as guarantees for homeowners' associations.
- Improve the coordination of inter-ministerial collaboration to support energy poverty and energy community initiatives, and set more measurable goals and provide clearer descriptions of role division.
- Introduce stricter monitoring and accountability measures for renovation quality and procurement processes.
- Enable more policy consistency on energy poverty by addressing it clearly in the Social Climate Plan, due in September 2025.

National government & Municipalities

- Launch a national awareness campaign to align public expectations and increase programme participation, and address prevailing misconceptions and uncertainties about financial support.

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2.3 Hungary

Overview

Energy poverty

Hungary's energy poverty levels have risen, despite historically low energy prices between 2015 and 2020. By 2023, 7.2% of Hungarians reported being unable to adequately heat their homes,[56] while 7.3% of households had arrears on utility bills.[57] The most severe energy poverty is in the countryside. The housing costs in disposable income[58] was 13.5% in 2019 and decreased to 13.3% in 2020, the fifth lowest in the EU.[59]

Hungary has a government-mandated energy price cap, referred to as the 'overhead protection system' in the NECP, which is designed to shield households from high utility costs. It covers people falling under four key categories: those living in homes connected to a natural gas network; living in buildings in need of energy refurbishment; finding it difficult to cover energy costs despite public financial assistance; or households in the social fuel programme.

Energy demand reduction

Between 2000 and 2021, Hungary's final energy consumption increased by 16.6%, rising from 15.8 Mtoe to 18.4 Mtoe.[60] The residential sector maintained the largest share of this consumption though its proportion decreased slightly from 36.7% to 34.1% over the same period. Public campaigns to raise awareness about energy efficiency have been ongoing since 2016, contributing to cumulative energy savings. Projections by the IEA suggest that changes in residential consumer behaviour could potentially reduce heating and cooling energy consumption by up to 12% by 2030.[61]

Hungary continues to rely significantly on Russian natural gas, with around two-thirds of its gas imports sourced from Russia. However, in 2022, Hungary implemented measures to reduce reliance on imported energy by investing in domestic renewable energy production, including solar and wind.

Housing stock

According to the 2022 census, there are 4.48 million dwellings in Hungary. Most of the domestic real estate stock, 3.85 million households, is classified as 'DD' or worse – meaning it is outdated from an energy point of view and needs to be modernised. Hungary is around 92% owner-occupied.[62] The building stock remains inefficient, with one-third of homes in multi-unit dwellings primarily relying on gas and district heating (the worst-performing units are single-family buildings). Hungary's historical energy conditions and long-term access to cheap gas mean that gas is primarily used as a heating source and that buildings have low energy efficiency. Social housing constitutes less than 3% of the housing stock, highlighting a limited availability of affordable housing options. Hungary has faced some of the highest increases in home prices in the EU and has no rent regulation.[63]

[56] Eurostat, 2023: https://ec.europa.eu/eurostat/databrowser/view/sdg_07_60/default/table?lang=en
[57] Eurostat, 2023: https://ec.europa.eu/eurostat/databrowser/view/ILC_MDES07/default/table
[58] Refers to the amount of money that a person or family has left after paying their taxes.
[59] https://www.powerpoor.eu/sites/default/files/2023-07/Hungary%20policy%20roadmap.pdf
[60] https://www.odyssee-mure.eu/publications/efficiency-trends-policies-profiles/hungary.html
[61] https://www.iea.org/reports/residential-behaviour-changes-lead-to-a-reduction-in-heating-and-cooling-energy-use-by-2030
[62] https://ec.europa.eu/eurostat/cache/digpub/housing/bloc-1a.html
[63] https://dailynewshungary.com/shocking-property-price-rise-in-hungary-in-eu/

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In the ComActivate pilot site Jozsefváros in Budapest, the historical buildings from the early 19th century are now often in poor condition, due to lack of maintenance and renovation for decades. Also, there is no standardised way of renovating them yet.

Key policies and measures and subsidies in place

While the main objective of the NECP is to strengthen energy sovereignty and security and decarbonise energy, it specifies that greenhouse gas and pollutant emissions reduction in the buildings sector will be ensured through renovation programmes and awareness raising. It aims to renovate 2.6 million residential properties through energy advice and awareness, local regulation and financial incentives. While energy efficiency and deep renovation are very strongly related to energy poverty in other countries' NECPs and LTRSs (i.e. see Lithuania), this is less of a focus in Hungary. Instead, there is more emphasis on, for example, promoting energy communities to strengthen energy independence.

To understand which households are energy-poor, it is important to grasp the subsidy and energy market. Since 2013, Hungary has applied a system of caps on gas and electricity prices for households, entailing compensation to utility companies for the losses incurred. In 2022, these caps were scaled back to support only those households that consume less than the national average, with price caps phased out for most types of non-residential use. This measure is untargeted, as it is based on energy consumption, not on income. However, the 2022 modification has introduced some price signalling, leading to energy savings in the economy. In response to rising energy prices and geopolitical tensions, the Hungarian government revised its utility bill caps in August 2022.[64] The reduced energy pricing now applies only to electricity consumption up to 2,523 kWh/year and natural gas consumption up to 1,729 m^3/year, with discounts for large families remaining in place in the case of natural gas. Consumption exceeding these limits is charged at retail market prices or more.

Furthermore, the LTRS emphasises the energy efficiency obligation scheme – a scheme under the EED that requires certain energy distributors and suppliers to implement energy-saving measures among their customers. Initiated in 2021, it mandates that energy providers (excluding district heating companies) achieve annual energy savings equivalent to 1.5% of their sales. This is accomplished through energy efficiency interventions across sectors such as transportation, buildings and industry. Providers can implement these measures directly or collaborate with energy aggregators and auditors who bundle projects and trade the resulting energy savings. Failure to meet the stipulated savings results in penalties. Since penalties incentivise energy providers to achieve savings, the scheme also encourages them to implement "low-hanging fruit" efficiency projects in all sectors, including housing; these projects currently focus exclusively on insulating the attics of family houses. According to the EED, part of energy savings under the EEOS must be achieved at vulnerable, as is also outlined in the Hungarian energy efficiency law.

[64] https://economy-finance.ec.europa.eu/system/files/2023-06/ip241_en.pdf

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Table 9: Overview of NECP and LTRS in Hungary.

National Energy and Climate Plan 2024 Update	
Energy Poverty	The levers outlined in the NECP are long-term housing construction, renovation, heating modernisation and energy efficiency programmes to ensure adequate housing conditions, as well as programmes for the transition to low-cost self-sufficiency. Reference is made to the social climate plan to be submitted by September 2025. The NECP defines vulnerable customers/households are those who have difficulty meeting their household's energy needs, recognising that this includes those with difficulties in financing energy needs but also buildings with high energy consumption. There are four conditions under which the Hungarian overhead protection schemes extend to vulnerable groups: the home is connected to a natural gas network, the residential building is in need of energy refurbishment, it is difficult to cover energy costs in addition to the public financial assistance, or the household is in the social fuel programme.
Energy demand reduction	Final energy consumption of a maximum of 740 PJ in 2030. The energy use of the residential building stock is meant to be 20% lower than the 2018-20 average (195.1 PJ) by 2030 (to reach 90% nZEB buildings by 2050).

Energy use avoidance	Energy efficiency	Renewables	Direct subsidies
Smart meters (replaced when the validity of conventional meters expires), the use of less energy-intensive technologies and self-generation of renewables are promoted under the idea that energy efficiency should become an integral part of planning, supporting, funding and investment decisions. Specific consultancy is expected from the Hungarian Chamber of Engineers. **One-stop shops or advice bodies, especially on a local level for residents, are not specified.**[65]	23 building typology categories were defined and further subdivided into 54 categories considering the renovation level (5-8 options per building type, resulting in 259 renovation options).	Share of renewable energy in gross final energy consumption at least 30% by 2030. **Legislation on energy communities is planned to be streamlined by 2030, this is very late and needs to happen earlier.**	EU co-financed programmes (reforms of the Recovery and Resilience Plan) foresee reducing primary energy use by at least 30% (also for public buildings). The latest energy efficiency subsidy had some socially targeted elements but still failed to reach low-income households, who are often excluded from these programmes due to their financial or social security situation.

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Table 9: Overview of NECP and LTRS in Hungary.

Long Term Renovation Strategy 2021 The LTRS were mandated under the EPBD 2018 and are to be replaced by the National Building Renovation Plans by Member States. They lay out their plans for renovation.	
Energy Poverty	Three drivers are mentioned: income problems, high energy prices and low energy efficiency. Energy poverty is recognised as households' inability to afford necessary energy services, leading to inadequate heating, cooling and lighting. The strategy identifies vulnerable groups, including low-income families, the elderly, and those living in outdated or energy-inefficient homes.
Energy demand reduction	2.6 million residential properties need to undergo energy renovation to meet the NECP energy target. For the remaining energy use, renewable heating systems should be prioritised during renovations, depending on the characteristics of the building. Target of 20% savings in the energy use of the domestic housing stock by 2030.

Energy use avoidance	Energy efficiency	Renewables	Direct subsidies
The LTRS mentions paying particular attention to the role of training and awareness-raising with building users. This is specifically mentioned for households that need support. One-stop shops for consumers and for providing energy advisory services are mentioned.	90% of nZEB buildings by 2050, deep renovation and the possibility for staged renovation are prominently recognised. Buildings occupied by vulnerable and low-income households are prioritised for renovation.	There is a specific measure to support the establishment of renewable energy communities to promote energy independence. The 2020-3.1.4-ZFR-EKM programme supports the development and operation of energy communities (running until September 2025). Family home creation concession (CSOK) provides aid for modernisation under certain conditions; however, this subsidy scheme is not tailored to energy efficiency but covers any type of renovation for families with children.	N/A

[65] For public buildings the National Energy Network is mentioned.

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Table 10: Key legislative strategies relating to energy reduction and energy poverty alleviation in the building sector in Hungary.

National Clean Development Strategy (NCDS)
Under the national clean development strategy, Hungary aims to reduce final energy consumption to 734 PJ by 2030, assuming early action on energy efficiency, and to approximately 500 PJ by 2050. In 2020, energy demand was recorded at 753 PJ, indicating the need for substantial efficiency improvements to meet these targets.
National Energy Strategy 2030
The national energy strategy plans to introduce pre-paid meters, which would help vulnerable consumers avoid debt. The social welfare considerations subchapter includes a number of social measures.
Sustainable Energy and Climate Action Plans (SECAPs)[66]
Under the Covenant of Mayors, many cities in Hungary write a SECAP. Energy poverty has been a mandatory element of SECAPs since 2020. However, from January 2025, signatories must also report on energy poverty. Jozsefváros municipality's SECAP includes a section dedicated to energy poverty. It recommends collecting data from home visits as per the Powerpoor methodology, to develop more targeted measures. Implementation is ongoing.

Policy implementation gap

Renovation

Hungary's access to EU funding for energy transition is in a tough spot. With Recovery and Resilience Facility funds suspended, the country is left leaning on Cohesion Fund allocations, which frustratingly hardly cover energy projects. The situation for building renovations is even bleaker. Since the last substantial subsidies stopped in 2009 and the patchy rollouts of interest-free loans from 2017 to 2022, support for upgrading Hungary's ageing MFABs has been minimal. A new programme launched in July 2024, focused on renovating family homes with a goal of cutting energy use by 30% across 20,000 units. In places like Jozsefváros, the focus remains on patching up urgent issues rather than taking the chance to 'build back better'.

As outlined above the NECP aims to renovate 2.6 million residential properties, among other, through financial incentives. However, these are small compared to the renovation need and said to be inaccessible for lowest income households. In response to the price cap adjustments during the energy crisis, households with a high number of residents - who originally had a consumption over the average – were still able to access gas and electricity at subsidised rates.It was said that most households simply reduced their energy use or increased their firewood use. The consequent firewood price increase, in turn, led to a shift in energy poverty levels not yet captured in statistics. This was because the price cap reduction was not coupled with energy efficiency support schemes to identify hardship cases.

[66] Burgas in Bulgaria does not have a SECAP, neither does Kaišiadorys. Eletrėnai had a plan until 2020, which has not been updated. (https://mycovenant.eumayors.eu/docs/seap/5653_1399010935.pdf)

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MFAB renovations are challenging because of collective decision-making. Condominium managers hold a lot of power but may lack community organising skills and skills and motivation to organise energy efficiency measures. As in other EU countries in which homeowners' associations have to get organised or decisions need to be made collectively, this setup hinders renovation efforts.

Energy poverty

The absence of a clear definition or measurement standard complicates the response. Vulnerable consumers are defined by utility legislation. The energy efficiency law defines energy poverty under the term "households to be supported/eligible for support" as "a vulnerable household whose annual energy costs per household for heating the dwelling to 20°C and producing hot water in the dwelling house exceed 25% of the household's annual income, where the annual energy costs and the household's annual income are the arithmetic average of the energy costs and the average income of the household for the calendar years starting in 2020 and ending at the time of calculation". [67]

Energy poverty is not only about income but also about the state of the buildings, a dynamic made more complex in MFABs where renovation decisions depend on collective agreement. Prepaid energy systems, a widespread solution for vulnerable consumers as a response to utility debt, incentivise savings but without systemic support to reduce energy need. They risk disconnection for those unable to top up, further entrenching vulnerability.

A review of the EEOS system explained earlier after its first year in 2022 highlighted that the scheme design focuses primarily on achieving energy savings without adequately considering the specific needs of energy-poor communities.[68]

Hungary has yet to fully embrace energy communities. While a few pilot projects exist, backed by significant financial support, their scalability is hindered by the lack of a supportive regulatory framework, reliable financial incentives and technical expertise. The legal structure is rigid – energy sharing is allowed only for common areas in MFABs, with exorbitant costs for private unit energy sharing due to outdated grid infrastructure. The price disparity for buying versus selling energy further discourages decentralised production. Cultural norms are also an obstacle: a historical attachment to gas and wood stoves reflects a societal resistance to change. It was said that Hungarians are accustomed to maintaining high indoor temperatures, a norm rooted in the era of subsidised, cheap energy. In regards to heat pumps, the issue stretches beyond cultural norms and is driven more by financial constraints: Installing a heat pump without prior insulation measures can compromise its efficiency and significantly increase heating costs. However, necessary energy efficiency improvements ahead of heat pump installation are often unaffordable for many households. Over half of the population can cover living expenses for only up to two months,[69] which is insufficient for renovation costs or even the personal contribution required for subsidies.

Another major barrier to more decentralised energy production is the lack of technical updates of the energy grid, which in its current state cannot cope with an increase in two-directional energy flows.

[67] https://njt.hu/jogszabaly/2015-57-00-00 1st chapter, definitions, 28b
[68] https://mehi.hu/en/reports/first-year-experience-with-the-energy-efficiency-obligation-scheme-in-hungary/
[69] https://www.statista.com/statistics/1172959/hungary-financial-security-of-households/

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Resource centres

The concept of one-stop shops for energy efficiency support remains aspirational in Hungary. The National Energy Network provides free advice to public institutions and local governments, but its focus is narrow, targeting public buildings and regulatory advice rather than comprehensive support for homeowners or communities. The fragmented nature of governance exacerbates this gap. Following a governmental restructuring, the Ministry of Interior and the Ministry of Technology and Innovation have been replaced by three separate entities, each with distinct and sometimes overlapping responsibilities:

- Ministry of Energy, overseeing the implementation of the EPBD;
- Ministry of Economic Development, tasked with subsidy creation;
- Ministry of Construction and Transport, leading on energy communities and technical standards under the EMD.

This fragmentation leaves resource centres without clear coordination, slowing progress in rolling out one-stop shops. According to the EED, transposed into Hungarian law, part of energy saving obligations schemes should go to energy-poor households (see energy efficiency law on households to be subsidised above). There is little data yet on the implementation of the energy saving obligations; however, due to the design of the system, obliged parties are realising energy savings among industrial consumers rather than households.

Case Study POWERPOOR project

The POWERPOOR project is funded under the EU Horizon 2020 framework and operates pilot sites in countries including Hungary, Greece, Latvia, and Portugal. It develops roadmaps to summarise existing national measures, stakeholder relations and policy recommendations.

The project provides the opportunity for all those interested to become energy supporters and mentors, by taking part in various training sessions.

Through five trainings in Hungary, 97 people were trained and 74 became certified POWERPOOR energy supporters or mentors. Three districts and two municipalities were engaged, representing 293,000 people. The three districts were Jozsefváros, Ferencváros and Terézváros in Budapest, and the two municipalities were Nyíregyháza (capital of Szabolcs-Szatmár-Bereg county) and Bükkszentkereszt.

As a main result of the project, Jozsefváros established an energy poverty alleviation office, called "RenoPont". It provides in-person advice on energy saving and recommends energy specialists to clients. Its website provides general information, advice and good examples on renovation and energy saving; technical information on the renovation process; information on financing; a database of professionals; as well as tips and tricks on energy saving. The office operated nearly for four years, but in the long run faced various challenges, both financial and operational. From the end of 2024, the office can no longer operate as a standalone one-stop-shop-like service, mainly because of a lack of financing and the uncertainty of public subsidies. It will merge and continue to operate as part of the municipality's new community space "LakóTér", which will be established with the help of the ComActivate project.

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Policy recommendations

National government

- Establish a national definition for energy poverty, incorporating metrics for building quality and energy efficiency, income and energy costs.
- Revise the utility cost reduction programme by 2025 to provide protections for vulnerable
- households.
- Set up active policy measures, including public funding schemes, to improve energy efficiency and decarbonisation, targeted to vulnerable groups.
- Enable and promote energy sharing through supportive legislation and simplified administrative processes as well as upgrading the energy grid to support decentralised renewable production and improve resilience.
- Provide financial support for low-income households to make their homes ready for accessing/producing renewable energy, including rewiring obsolete electrical installations, fixing roofs to carry solar panels, etc.
- Facilitate decision-making and financing of solar projects in prefab high-rise buildings – prefabricated multiapartment building roofs have outstanding untapped solar potential.
- When renovating prefab buildings, include passive measures that reduce the summer heat pressure on buildings (e.g. smart shading in homes and common areas with windows, white roofs, etc).

Local government

- Train building managers to better support the informed decision-making of homeowners as well as support access to renovation programmes.
- Dedicate targeted support for low-income households in MFABs to enable their participation in renovation programmes.

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2.4 Lithuania

Overview

Energy poverty

Lithuania has one of the highest energy poverty rates in Europe. As of 2023, about 20% of the population in Lithuania could not adequately keep their homes warm, compared to the EU average of 10.6%.[70] The NECP[71] had set the target at 23% by 2025, since the rate had been much higher before. In the LTRS from 2021, Lithuania set some indicators to measure the level of energy poverty. In the same year, 5.5% of Lithuanian households had overdue debts for utilities, which is below the EU average of 6.4%. Approximately 13.9% of Lithuanian households allocate a high share of their income to energy expenses, indicating potential financial strain due to energy costs.[72] Conversely, 14.4% of households have unusually low energy expenditures: this may reflect efforts to reduce costs at the expense of adequate heating. In 2018, the percentage of households experiencing inadequate living conditions – such as roof leaks, damp walls or foundations, and rotten window frames – was 14.8%, with the EU average being 13.9%.

Energy demand reduction

The buildings sector, encompassing both residential and services, accounted for 40.7% of final energy consumption in 2022.[73] While from 2000 to 2022, the energy efficiency of the residential sector improved by around 1.6% per year,[74] the total residential energy consumption was 10% higher in 2022 than in 2000, despite 0.55 Mtoe of technical energy savings. Importantly, in 2022 Lithuania stopped using energy imported from Russia, committing to energy independence and an extension of domestic renewable energy sources. Renewable energy sources accounted for 15.4% of gross inland consumption in 2022.[75] Energy supply companies have been carrying out education and consultation activities for final consumers since 2017 and energy savings of more than 200 GWh are expected.[76] It is estimated that changing consumer behaviour can save up to 10% of energy.[77]

Housing stock quality

Lithuania's housing stock predominantly consists of owner-occupied multi-apartment buildings, many of which are ageing and exhibit significant quality and energy efficiency challenges. Approximately 60% of the housing units are multi-apartment buildings, a figure notably higher than the OECD average of 40%.[78] However, according to the LTRS, they just represent 7% of the total number of buildings to be renovated. A substantial portion of these structures were constructed during the Soviet era, with nearly 75% of the housing stock built before 1993.[79] Since 2005, Lithuania has had renovation and modernisation programmes in place for multi-apartment buildings.

[70] https://ec.europa.eu/eurostat/databrowser/view/sdg_07_60/default/table?lang=en
[71] https://commission.europa.eu/publications/lithuania-final-updated-necp-2021-2030-submitted-2024_en
[72] https://energy-poverty.ec.europa.eu/system/files/2024-05/epov_member_state_report_-_lithuania.pdf
[73] https://www.odyssee-mure.eu/publications/efficiency-trends-policies-profiles/lithuania.html
[74] https://www.odyssee-mure.eu/publications/efficiency-trends-policies-profiles/lithuania.html
[75] https://osp.stat.gov.lt/en/lietuvos-aplinka-zemes-ukis-ir-energetika-2023/energetika/energijos-balansas
[76] https://energy.ec.europa.eu/system/files/2021-08/lt_2020_ltrs_en_0.pdf
[77] https://enmin.lrv.lt/en/sectoral-policy/energy-efficiency-sector/energy-consumers-education-and-consultation-agreements/
[78] https://www.oecd.org/en/publications/policy-actions-for-affordable-housing-in-lithuania_ca16ff6d-en.html?
[79] https://energy.ec.europa.eu/system/files/2021-08/lt_2020_ltrs_en_0.pdf

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Key policies and measures and subsidies in place

Lithuania has developed an updated NECP, approved in October 2024.[80] Like its predecessor, it recognises that energy efficiency measures contribute both to energy poverty alleviation and energy consumption reduction. Existing policy measures outlined in the plan focus on reducing energy consumption and tackling energy poverty in three main areas: buildings, technological equipment and appliances, and consumer behaviour. In the previous version of the NECP, Lithuania already foresaw more active participation of energy consumers via decentralising energy production and enabling consumers to use energy from their renewable energy sources but also by actively encouraging behaviour change. For renovations, the neighbourhood level and MFABs are already recognised as priorities and municipal information hubs are presented as solutions for consumer information dissemination (see Table 11).

In the LTRS,[81] energy poverty is prominently recognised with measures summarised in the table below. Notably, one-stop shops or consumer service centres are fully recognised, following Article 21(3) of the previous EPBD: *"A one-stop shop should ensure that the owner of a building learns about the costs of renovation and all possible measures in one place and is able to arrange all documents (both technical and financial) in one place when he decides to implement it."* One-stop shops are specifically mentioned to tackle the problem of insufficient information on the benefits of renovation.

The LTRS foresees a stronger role for local government. It suggests formalising the role and responsibility of local self-government via amending the Law of the Republic of Lithuania on Local self-government to better integrate the LTRS into the national legislative framework. What exactly this could look like is still under discussion. Under the recently elected government, there will be a new Ministry of Regional Development which could clarify this question. Municipalities are identified as best placed to implement one-stop shops as they have the most reliable data on buildings and their owners.

[80] https://commission.europa.eu/publications/lithuania-final-updated-necp-2021-2030-submitted-2024_en
[81] https://energy.ec.europa.eu/system/files/2021-08/lt_2020_ltrs_en_0.pdf

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Table 11: Assessment of Lithuania NECP and LTRS.

National Energy and Climate Action Plan of the Republic of Lithuania for 2021-2030	
Energy Poverty	Defines four main drivers of energy poverty in Lithuania: energy inefficiency, high energy prices, low household incomes and lack of consumer awareness. It also defines the vulnerable groups that are particularly affected, such as seniors, children, people with chronic diseases, single parents and the unemployed. Target values set for the share of the population unable to keep home adequately warm: 23% for 2025 and 17% for 2030. Target values set for the share of households who spend a significant share of income on energy: 10% for 2030. Four areas of intervention are identified: improving energy efficiency, affordability of energy resources, increasing incomes of small households, and consumer information.
Energy demand reduction	The NECP envisions energy efficiency improvement measures not only as a means to help alleviate energy poverty but also as the road to energy consumption reduction. Renovation plays a key role, but it also sets heating and cooling targets to reduce energy demand in decentralised and district heating by 2030. Final energy consumption is to reduce from 5.478 ktoe in 2022 to 4.384 ktoe in 2030. The goal of consumer education is that 5% of the affected population reduces fuel consumption by 3.7% as a result of the planned measures.

Energy use avoidance	Energy efficiency	Renewables	Direct subsidies
There are planned measures in place to provide information on compensation and energy savings for hard-to-reach consumers (not using information technology tools). One planned measure is to create a hub for information on energy savings, compensations and energy communities This is foreseen to be "transferred to municipal service units" and could therefore take the form of a **resource centre like institution.**	Priority is given to integrated renovation of **MFABs** and in particular **renovation of residential neighbourhoods** to save 506 TWh of energy by 2030. The aim is to refurbish 5,000 MFABs or 750,000 m² in building area.	The NECP mentions existing measures to support electricity produced from renewable energy sources and for prosumers. Existing measures aim to facilitate the deployment of renewables and the development of **renewable energy communities** in municipalities, with a share of built power plants being allocated to the energy-poor; measures also seek to encourage people to purchase solar panels and/or replace fossil fuel heat installations.	Some measures provide direct relief for households, such as compensation for the cost of heating the dwelling, payment of credit taken out for the **renovation (modernisation) of a MFAB** and interest for people entitled to compensation for heating costs.

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Long Term Renovation Strategy 2021 The LTRS were mandated under the EPBD 2018 and are to be replaced by the National Building Renovation Plans by Member States. They lay out their plans for renovation.	
Energy Poverty	Energy poverty is assessed through six indicators: households unable to afford adequate heating; the share of income spent on electricity and heating; maintenance costs exceeding 40% of disposable income; the ratio of income to maintenance costs; overdue utility debts; and poor living conditions such as leaks, dampness or decayed windows. Targeted measures to reduce energy poverty are socioeconomic measures (e.g. compensation for heating costs for low-income earners), measures targeting a particular housing segment (e.g. multi-apartment renovation programme), energy-specific measures (energy-specific concessions) and measures targeting specific areas/regions.
Energy demand reduction	The LTRS sets goals to reduce primary energy consumption by 60%.

Energy use avoidance	Energy efficiency	Renewables	Direct subsidies
Agreements were made with the energy suppliers to better inform customers. Otherwise, recommendations are copied from the NECP. They relate to including consultations in the catalogue of social services, obliging energy suppliers to prevent energy poverty, and updating the national energy portal for consumers. **One-stop shops and a centre of excellence to centralise good practices and assist municipalities are mentioned.**	The goal is to renovate 74% of the building stock, approximately 440,000 buildings, by 2050, aiming to generate primary energy without relying on fossil fuels. Of these, **around 30,000 are foreseen to be multi-apartment buildings, which is set to result in 25% savings in primary energy and a 24% reduction in CO_2 emissions.**	Active participation of energy consumers is foreseen with enabling market-based compensation for surplus energy supplied to the grid by decentralised generation. **Energy communities are not mentioned here.**	The Ministry of Social Security and Labour is in charge of providing financial support measures for those who cannot keep their homes warm. This takes the form of **reimbursement of parts of the cost**. A more detailed analysis of the financial support infrastructure will be provided in D5.2 [Analysis of gaps and barriers for financing HOA's and MFAB's].

Besides the two key policy documents which outline measures for energy poverty alleviation and renovation, there are additional policies with targets indirectly relevant (table 12).

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Table 12: Overview of additional policies relevant to energy poverty alleviation and renovation.

The Law on Energy Efficiency
Establishes national targets for 2021-2030 to save each year the equivalent of 0.8% of the average final energy consumed during 2016-2018; to limit primary energy consumption to no more than 5,462 ktoe and final energy consumption to no more than 4,526 ktoe; and to save at least 27,280 GWh through energy efficiency improvement measures.
National Energy Independence Strategy
In 2030, the intensity of primary and final energy is 1.5 times lower than in 2017, and about 2.4 times lower by 2050. It specifies that this should be reached mainly by increasing energy efficiency in MFABs (and public buildings) to save a cumulative total of 5-6 TWh by 2030.
Law of the Republic of Lithuania on Renewable Energy
After an update in March 2022, Lithuania set the goal to reach 100% renewable electricity production in its gross final consumption by 2045 (70% for 2030). The law includes a provision to support the establishment and operation of renewable energy communities. The Lithuanian Energy agency is to prepare and publish recommendations on renewable energy communities on its website.
Recovery and Resilience Fund Lithuania
Energy communities are put forward a way to tackle energy poverty. Specific funds are reserved for energy communities that address energy poverty. The REPowerEU chapter of the Recovery and Resilience Plan earmarks €78.5 million for future financing calls dedicated to renewable energy communities aimed at alleviating energy poverty, with a target of installing 155 MW of renewable energy capacity. Additionally, €95.9 million is allocated for subsidised loans, and €36.6 million is designated for VAT coverage from the national budget, structured as 45% grants and 55% subsidised loans to assist municipalities in developing renewable energy communities.[82]

Policy implementation gaps

From the above analysis, there are some key developments which promise to impact energy poverty alleviation and related energy efficiency gains. Lithuania has broadly defined four measures to tackle energy poverty and reduce energy demand: improving energy efficiency, affordability of energy resources, increasing incomes of small households, and consumer information. Our analysis is based around these.

[82] https://www.rescoop.eu/policy/financing-tracker/repowereu-tracker/lithuania-repowereu?

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Renovation

Data on the annual renovation rate is limited. Earlier estimates suggested a renovation rate of around 1%, but this figure may have evolved with the implementation of new policies. The LTRS recognises that renovations becoming more expensive poses a significant barrier to the planning and implementation of energy efficiency projects. In terms of public funding, municipalities as key actors have historically faced legal limitations on the amount of debt they can incur. While this cap was well intended it also restricted municipalities' ability to finance larger-scale renovation. The Law on the Approval of Financial Indicators of the State Budget and Municipal Budgets now sets new net borrowing limits for municipalities, allowing for increased investment in public infrastructure, including building renovations.[83]

In terms of private funding, the other main barriers recognised in the LTRS are building owners reluctant or unable to borrow money. This relates to the lack of creditworthiness for some residents. The Lithuanian government covers the costs for the lowest-income segment, so there is no risk for the banks for this group. For other citizens, meanwhile, the government has been actively involved in providing guarantees to banks. In cases such as Vilnius, the local one-stop shop has also taken on the role of facilitating access to loans on behalf of citizens, bypassing this problem.

Another barrier mentioned in the LTRS is the split-incentive dilemma for multi-apartment buildings, which arises when the benefits of energy efficiency investments are not aligned between property owners and tenants. While this issue has not yet been directly solved, financial incentives targeting the renovation process reduce the required spending for individuals. Yet the percentage of subsidy cover has significantly dropped and with it the number of funding applications.

Energy poverty

Lithuania has measures to ensure affordable energy prices. For example, the recent deregulation of retail electricity prices for domestic consumers aims to create a competitive market, but there are protections for energy-poor consumers: *"During three phases of market liberalisation between 2021 and 2023, final electricity prices would no longer be regulated for household customers and they would have to choose an independent electricity supplier. Socially vulnerable consumers are exempted. This enables the development of a competitive market and ensures the protection of vulnerable consumers."* (LTRS).

For heating, according to the revised Law on Cash Social Assistance to Low Income Residents, apartment owners receiving heating cost reimbursements are required to actively participate in decisions and projects for renovating their buildings. Failure to comply can result in restricted access to reimbursement.[84] Additionally, buildings with socially vulnerable people are a priority for renovation projects, aligning energy efficiency improvements with support for at-risk groups. This is indirectly also a consequence of prioritising renovation of MFABs from before 1993.

Following EU law, the NECP includes a measure that ensures legal protection of vulnerable consumers, which rules that the supply of electricity cannot be restricted or discontinued. This is not true for gas on the EU level. However, this law is less relevant in Lithuania; most heat is covered by the district heating system (around 70% of MFABs are connected to a central district heating system), and individuals who cannot afford the heating costs can apply for 100% state support.

[83] https://finmin.lrv.lt/en/competence-areas/budget/the-approved-budget/
[84] https://www.oecd.org/en/publications/policy-actions-for-affordable-housing-in-lithuania_ca16ff6d-en.html

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Energy communities have been identified as a way to tackle energy poverty while also enabling other measures such as renewable energy rollout.[85] They are mentioned in the Recover and Resilience Fund, and laws have been changed to institutionalise their use. The first energy community was launched in October 2024 in Šiauliai, and at least 30% of the energy is expected to go to people in energy poverty.[86]

Resource centres – consumer information

One barrier mentioned in the LTRS is that end-users (building owners) are often unaware of the benefits of introducing energy efficiency measures, making them less interested in investing in renovation. Thanks to Lithuanian project partner Vartotojų Aljansas, over 200,000 consumers in Lithuania now see the energy advice hotline numbers printed directly on their energy bills. This allows them to get advice immediately if they have trouble with their bills.[87]

The old NECP suggested three consumer information initiatives which were produced by the STEP Horizon project. These were also picked up in the LTRS. They are relevant as they could be attached to a resource centre structure.

Good practice: one-stop shop Vilnius: AMIENTAS

AMIENTAS is the one-stop shop in Vilnius, a public company supported by the city of Vilnius. Running a renovation project requires competence in many areas such as law, tendering and construction quality, and faces significant bureaucratic hurdles, which can be challenging for ordinary citizens. Recognising this, AMIENTAS has integrated the role of project manager into its work. Rather than being just an information and awareness-raising platform, AMIENTAS also manages the whole cycle of renovation. This includes selling the idea of renovating, providing information, applying for national-level funding, organising the public procurement for the construction companies, and quality control – all activities until the very end.

AMIENTAS is currently overseeing around 160 projects and is in the process of setting up 100 more. The organisation consists of 50 people and runs on a €3 million budget, with around 70% of the funding coming from the Vilnius city government.

[85] Under EU law there are two different types of legal energy communities. Renewable energy communities, regulated under the Renewable Energy Directive, cover renewable electricity and energy, often within a geographically defined area. Citizen energy communities, defined in the Design for electricity market directive, covers renewable and non-renewable electricity with no geographical boundary to the owner. For ComActivate, only renewable energy communities are considered.

[86] https://www.siauliai.lt/news/view/siauliuose-pirmoji-energetine-bendrija-kuri-ateityje-nemokamai-aprupins-elektra-skurstanciuosius

[87] https://www.stepenergy.eu/wp-content/uploads/2022/05/STEP-National-Stories-and-Policy-Recommendations-1.pdf

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Neighbourhood

In 2016, Lithuania submitted an official decision on the development of energy efficiency improvement programmes specifically for neighbourhoods and adopted a description of the procedure for municipalities to develop and implement energy efficiency improvement programmes within urban areas.[88] Municipal actors select the neighbourhoods based on energy consumption, building conditions, socio-demographics and environmental impacts. The focus is on areas where energy efficiency upgrades can achieve optimal savings, reduce pollution and improve living standards. The holistic approach not only considers energy efficiency but also addresses issues such as accessibility, parking and adapting the living conditions to the needs of the different social groups in that area. Each programme must improve energy efficiency by at least 20%, encompassing retrofits of residential and public buildings, and upgrades to street lighting and heating systems. Complementary improvements to public spaces, accessibility and parking are integrated, with a funding cap for non-energy efficiency measures at 20% of the total budget. It is recommended that communities are engaged as early as possible to assess their needs and inform them. After the municipal programme is approved, an implementation plan is written. In the version from 2016, these are submitted to the Housing Energy Saving Agency – BETA (renamed to Environmental Project Management Agency – APVA[89]).

Policy recommendations

National government

- Provide funding for local one-stop shops to manage renovation projects, rather than just funding the actual renovation activities, so their success does not depend on the availability of funds from the city itself.
- Provide financial support for education campaigns, materials and training.

One-stop shops & national government

- Ensure the transition to clean energy resources does not reduce efforts to save energy.

Municipalities

- Implement a one-stop-shop-style structure across Lithuania with special attention to:

  1) supporting access to public funding and facilitating preferential loans with private financial institutions;
  2) supporting the cultural behaviour shift away from the habit of overheating the building.

Energy efficiency administrators (Atnaujinkime miesta - Vilnius, Elektrėnų and Kaišiadorys administrators)

- Provide more information for homeowners in newspapers, on TV, on the radio and on social media. in renovation programmes.

[88] https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/be7359a12be311e6a222b0cd86c2adfc?jfwid=
[89] https://modernizuok.apva.lt/en

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