



# **POLICY RECOMMENDATIONS**

## **FOR THE IMPLEMENTATION OF THE CLEAN ENERGY FOR ALL EUROPEANS PACKAGE**

## ABOUT THE PROJECT

Solutions to Tackle Energy Poverty (STEP) is a project to develop a simple, innovative and replicable model of measures to address energy poverty.

The project covers some of the [countries](#) with the [highest rates of energy poverty in Europe](#). These countries are Bulgaria, Cyprus, Czech Republic, Latvia, Lithuania, Poland, Portugal, Slovakia and the United Kingdom.



### Our project has three specific objectives:

- To get consumer groups and frontline organizations, that advise people on a range of issues such as financial or health-related ones, to partner up and deliver [advice](#) to energy poor consumers.
- To help energy poor consumers across the 9 countries save energy and improve their living standard. We will **advise consumers on energy consumption that is more efficient** and ways on how it can help them save money and improve their health and well-being. We will carry out information campaigns, provide tips on [how to save energy](#), demonstrate cost savings and help put low-cost energy efficiency measures in place.
- To disseminate the [best practices and policy choices](#) that can alleviate energy poverty and promote their replication in other EU countries.

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<b>Author</b>	Kęstutis Kupšys (ALCO)
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## INTRODUCTION

The main causes of energy poverty are poor energy efficiency standards, high energy prices, low incomes and how energy is used in the home. The consequences of energy poverty include poor housing conditions, poor physical and mental health, debts, difficulties affording other essential services and goods, social isolation and low educational attainment.

The multi-dimensional nature of energy poverty therefore requires action across a wide range of policy areas and multi-agency approaches.

The urgent need to decarbonise our economies to address climate change brings further challenges, since without explicit action to address the distributional impact of policies energy poverty will further deepen.

Implementation of the Clean Energy for All Europeans package can reduce energy poverty across Europe, particularly if it results in Member States introducing ambitious energy efficiency programmes that prioritise the energy poor and are integrated with complementary energy market, income, welfare and housing programmes. According to Article 7 of the revised Energy Efficiency Directive, Member States “shall take into account the need to alleviate energy poverty, in accordance with criteria established by the Member States and taking into consideration their available practices in the field”.

As the situation differs across Europe, there’s not a one-size- fits-all solution to energy poverty. This paper therefore outlines the main steps to guide Member States and provides some good practices and national examples which should serve policy makers as an inspiration when designing their policies.

The current ‘Policy Recommendations’ set is likely to be updated with new measures rather soon, as Member States proceed with practical implementation of the Clean Energy for All Europeans package. ‘European Green Deal’ sets the bar higher, making yesterday’s ‘ambitious’ targets look far too low. Energy poverty mitigation should remain in focus of policy makers, as its core measures – energy efficiency improvements – fit well with overall European climate and security goals.

# 13 steps to combat energy poverty: Policy Recommendations for Member States

## 1. Introduce a comprehensive Energy Poverty Strategy

Member States should introduce a comprehensive Strategy to tackle energy poverty, if such a strategy is not already in place, and enshrine this in legislation.

The Strategy should include a **measurable target** for achievement within a set timescale, interim **milestones**, a **set of programmes** designed to meet the target, **procedures** for monitoring progress towards the target and establishment of an independent advisory group, as recommended below (see Rec. 2).

For Member States without a formal definition of energy poverty, it may be appropriate to introduce the definition and Strategy together.

The Strategy should set out the programmes and associated funding that will be put in place to address the main factors relating to energy poverty, namely energy efficiency, energy prices, income and use of energy in the home. It should also set out the role key agencies should play in implementing the strategy, for example, national government, municipalities, energy companies, energy efficiency industry, health organisations, advice agencies, social workers and NGOs.

A senior minister within the government should be given responsibility for delivering the Strategy and for making sure all key Government ministries and departments fully contribute towards achieving the target, e.g. energy, housing, welfare, health, social care, finance.

For Member States who already have adopted measures, like energy social tariffs or house renovation incentives, it is suggested Member States review them, and rethink them with the mindset of a comprehensive energy poverty Strategy.

A comprehensive Strategy will require a suite of specific policy initiatives to address the main causes of energy poverty. Building upon our evaluation of a wide range of programmes across Member States, we set out our proposals for such initiatives below.

## 2. Ensure coherent and consistent national dialogue on energy poverty issues

Member States should set up forums or **panels for constant national dialogue on energy poverty** issues, involving governmental bodies, non-governmental organizations (including consumer organizations), industry and other relevant stakeholders.

Such panels should have a statutory responsibility to provide guidance and critiques to Member State governments on their policies to tackle energy poverty, including advice on any further actions required to meet relevant statutory targets. In the case of Member States that have yet to introduce legislation and statutory targets, panels should play a key role in shaping and driving the required legislation.

In many Member States, such panels or other forms of civil society engagement are non-existent or, if in place, inactive. Setting up an intra-institutional working group (1), chaired by an academic representative or an independent expert, with strong secretarial state support and sufficient resources to allow independent investigation of relevant matters, may form a basis for a dialogue on all aspects of energy poverty issues and help in searching for effective national or local solutions.

A major issue to be addressed concerns transparency. In many Member States, especially in Central and Eastern Europe, transparency of public decisions may be a difficult task to achieve. A forum of dialogue on energy poverty shall be based on principles of open, unbiased discussion, transparent data analysis and decision making.

### 3. Adopt an inclusive definition of energy poverty

It is essential that all Member States adopt a formal definition of energy poverty and enshrine this in legislation. Furthermore, Member States should seek to adopt **the most inclusive definition of energy poverty – one that encompasses all the key causes of energy poverty** – if such a definition is not yet in place. The definition should also provide a basis for national statistical monitoring of the impact of Member State government energy poverty policies. Ideally, Member States should also adopt an inter-related definition that can be used for assessing a household's energy poverty status 'on the doorstep'.

It is important that Member States without a formal definition of energy poverty adopt an inclusive definition. Only if and when the gravity of the problem is understood, policy makers will take appropriate action. Energy poverty should be accepted and perceived as a serious issue by policy makers on all levels: energy poverty affects 1 in 10 households, or, in total, 50 million people across the EU. Many governments in STEP consortium countries, as well as across the EU, may still underestimate the problem of energy poverty and employ 'window-dressing' while adopting (adjusting) the definition. The narrowest (and the least demanding for the politicians) definition will not solve the issue – it will only help to hide it.

For countries where a definition already exists, it is important that this is regularly reviewed to make sure it reflects any newly acquired evidence and is fully discussed and endorsed by stakeholders before the revised definition is formally adopted.

A good example of set of indicators for energy poverty measurement, in a socially fair and inclusive way, is an approach developed in Austria and recently (2018) proposed by a group of researchers from Vienna University of Economics and Business. For details, see Annex 1 'Energy poverty criteria'. STEP partners suggest that Member States without a definition could consider this approach and adapt to suit their circumstances.

### 4. Establish an Energy Advisors' Network

Energy Advisors' Networks (EANs), while effective and widespread in some EU countries, are not yet commonly and fully utilized as powerful energy efficiency drivers. Such networks, while not necessarily focusing only on solving energy poverty issues, may help greatly increase 'energy education' (or even basic 'energy literacy') level of the population. That in turn will result in lower energy consumption and better living conditions. The need for 'one-stop shops' that provide free, independent and expert advice (ideally at a local level) is clearly defined in the Energy Performance of Buildings Directive. The provision of **Energy Advisors' Network** in a country where no such network exists **is a necessity, not an option**, with public funding provided to facilitate.

Energy advisors, working under the umbrella of non-government consortiums of dedicated civil society organizations that address the full range of advice needs (e.g. housing, welfare, debt, consumer etc), will get 'the best of all worlds', as energy poverty issues are multidimensional, requiring attention from social, energy, environmental, finance, etc. areas (2) (3).

In case the networks are organized as a part of a state-led initiative, it is important to ensure accountability to the public and a constant strive for quality and effectiveness of work. This is best done by appointment of an independent supervisory body with a set of Key Performance Indicators aimed to ensure the energy poor are 'served first'.

Yearly education programmes, coordinated under EANs, can also be applied to maintain a necessary knowledge level of health and social care practitioners and other 'front-line workers', who have constant and direct contact with vulnerable consumers. Such 'front-line workers' are also best positioned to ensure energy poor households are referred to EAN representatives and receive additional advice and help if needed.

The involvement of health workers is often underestimated, and this has to be corrected by targeted knowledge dissemination action and (re)training. Health practitioners on every level of the national health system can play an important role in identifying patients' health problems related to energy poverty (4). Front line health and social care workers, particularly those who visit clients in their homes or are responsible for the discharge of patients from hospitals to their homes, should be trained to recognize energy poverty and to refer their patients to energy advisors from national EAN.

Municipal officers working on energy, environment or subsidies should also be trained by the EAN. This is important because municipalities also lack the necessary information to ensure the energy transition. Networks such as the Covenant of Mayors can also be involved.

In case Energy Advisors' or similarly named networks already exist in Member States, they have to be strengthened and equipped with specific energy poverty mitigation knowledge and techniques and be accessible to households at a local level, ideally face to face. While various national initiatives, including financial schemes, work well 'on paper', the distribution of the benefits from such schemes and initiatives may be very uneven. Therefore, a strong emphasis should be given on regions and society groups with the strongest indication of energy poverty.

Advisory network outlets should first appear where energy poverty hits the most – in regions, where the number of the energy poor in proportion to the whole population is the highest, and 'next door' of those groups that feel most excluded from other support mechanisms (like Roma people, dwellers of the poorest quality homes and similar).

The networks, naturally, may build on from where the STEP project stops (in November 2021). Actually, what STEP does and intends to accomplish, shall be effectively transformed into an institutionalised, well designed and well-funded permanent national initiative in every Member State.

## **5. Designate energy efficiency as an infrastructure priority**

Energy efficiency measures may deliver benefits to the energy sector comparable to building a large new generation plant, improving the grid or installing storage. The Energy Efficiency Directive calls for a reduction in energy consumption and thus lower energy bills for consumers. Yet, year after year the 'energy efficiency first' principle is neglected by national and local governments, grid operators and energy suppliers.



We demand **energy efficiency is put at the top of the public expenditure priorities**, assigning it the status of the most prioritized of all infrastructure spending with national significance.

As defined in the 2015 report by the UK's Energy Saving Trust (5), energy efficiency investments provide public services by reducing carbon emissions and improving health and well-being. They also provide option value in the face of uncertainty over future energy sector conditions (e.g. energy prices). Energy efficiency is a highly cost-effective way of meeting Member States' energy and climate change goals. Putting energy efficiency on a common footing with other major investment decisions allows a discussion on investment priorities, the report states.

There is now substantial evidence that energy efficiency investment is particularly cost effective for boosting economies, creating jobs and providing long term social benefits.

Macro-economic modelling shows that investment in a national energy efficiency programme compares favourably with similar levels of investment in, for example, major road building, new rail infrastructure or public services while also improving energy security and substantially reducing the need for investment in new generation (6).

While 'energy efficiency first' is designated as mandatory under the Clean Energy Package, it is yet to be seen when and how Member States implement it in their long-term and yearly public investment planning and budgeting cycles.

## **6. Provide social security support for energy expenditure of low-income households**

It is important social security support fully recognises the cost of heating, cooling and powering low income consumers' homes. Low income consumers spend a much higher proportion of their income on fuel compared to better off households. For some households, such as those with a disability, long term health condition, younger children, older people, energy requirements are even higher. For example, they may not benefit from the 'free heat/cooling' provided in the workplace or educational establishment, or their disability / health condition means they have above average heating and power needs.

**Adequate social security support for energy** is therefore essential for protecting health, encouraging social inclusion and ensuring a good quality of life. Member States should also have a system of providing additional support that is triggered during periods of exceptional cold or hot weather. This may form part of 'year-long cold/hot weather plans' that ensure key agencies, particularly health, have procedures and processes in place to make sure vulnerable consumers are protected during periods of cold or hot weather (7).

The assessment of energy requirements and their costs requires regular housing and income surveys of households. Substantial energy efficiency improvements should bring down the costs of providing the necessary support.

On a broader scale, it is important policy addresses the 'poverty' element of energy poverty. Social security, taxation, employment rights and minimum wage policies can all play an important role in this respect. In addressing energy poverty, Member States should assess the impact of such policies on mitigating energy poverty.



## 7. Enforce Minimum building energy performance standards

By 2050, in an ideal scenario, Europe will come to a point where all buildings are Nearly Zero-Energy Buildings (NZEBS). However, paths to getting there are yet to be charted. For example, the establishment of interim milestones is essential for making sure policy is not postponed to an ill-defined, distant future. With the new 'Green Deal' announced, progress towards zero-energy future should be marked by an ambitious roadmap of establishing concrete standards for energy efficiency of existing and new buildings.

Putting a 'floor' year on year in terms of **minimum required energy performance of buildings** and introducing an **effective enforcement mechanism** for 'policing' standards will create a clear signal for asset owners, landlords, energy suppliers, local municipalities, public and private financiers.

Here's an example: "Most houses in Portugal are of class 'E', and we aim for at least level 'C' [to be recognized as a legally required] by the year 2030", similar to what has been agreed in the UK (8). Such a way of action provides perfect guarantee that the least efficient building stocks are first in line for renovation, as specified in the Energy Performance of Buildings Directive.

The minimum requirement should encompass all – residential and non-residential, both publicly and privately owned, rented to a tenant or owned by the occupant – buildings.

Any change of tenancy or ownership of a building should automatically trigger a requirement that the building meets the required standard before the new occupants move in. Further regulation should require landlords to improve rented homes to the higher standards within a specified timescale regardless of whether or not there is a change of tenancy.

For this system to work and gain public trust, it is important that quality standards are introduced, accreditation systems established which renovation service providers must meet, warranties provided to guarantee long term effectiveness of measures and effective redress mechanisms employed should installers not meet the required standards.

Given the high level of standardized building practices of 1950s to 1980s in STEP countries (especially in Eastern and Central Europe), it is phenomenal how little attention is dedicated to prefabricated renovation techniques. To advance fast toward level 'C' building stock and gradually toward NZEBs-dominated building stock, standardized solutions may offer the most cost-effective way from a technological point of view.

With the help of H2020 'Transition Zero' project, the highly successful Dutch 'Energiesprong' initiative is coming to other EU countries, and prefabricated façade and roof modules are beginning to be applied to refurbish inefficient building stock in the UK and France. There are more examples of how a similar approach can be used in STEP countries and beyond (9).

Economies of scale can also be achieved by adopting area approaches to refurbishment, particularly in urban areas (10). This entails improving all homes within a specific area to the minimum standard, thereby reducing contractor travel time, allowing bulk installation of improvement measures and reducing ancillary costs such as scaffolding. It also makes possible community involvement in the delivery of the programme and 'word of mouth' promotion of its benefits. It may require bringing together schemes that target both energy poor and better off households. However, this has benefits in terms of reducing any potential stigma associated with the means testing of energy poor schemes and the promotion of the concept 'something for everyone'.

## 8. Avoid regressive effects

While designing support schemes and launching any type of financial redistribution mechanism as a part of the Clean Energy Package implementation, Member States should always first carry out a full distributional impact analysis of any proposed measures and every effort taken to avoid regressive effects.

Ideally, first the measures should not disproportionately negatively impact the poor. In addition, the Member States could design measures in such a way that they result in a beneficial impact on low income and energy poor households. If the latter is not possible, mitigatory measures should be introduced to fully compensate for any detriment.

The governments should facilitate and engage in a quality dialogue with stakeholders, consult academia and independent research groups and constantly assess the impact of support schemes on energy poverty. Indeed, any support for energy efficiency measures should only be implemented if the expected regressive effects are not significant or are easily avoidable when put in context of all available energy poverty mitigation tools. In fact, **'positive discrimination' of energy poor households should be allowed** and fostered when drafting state policies.

Even if the government of any Member State proposes, as it may seem, the 'best fit for purpose' energy efficiency support scheme, it has to be carefully inspected before adopting it into national law and before implementation. If the energy poor households cannot use the proposed scheme due to various barriers (lack of financial means for initial investments, for example), then the cost for the support are paid by all, but the benefits do not accrue to those who deserve the most support.

While supplier obligation schemes can play a useful role in improving home energy efficiency standards, particularly if targeted at energy poor households, it is essential they play the role of junior partners within wider ambitious, publicly funded energy efficiency programmes. Low income consumers pay a much higher proportion of their income on energy than better off households. Therefore, schemes that are ultimately paid for by energy consumers will have a larger detrimental impact on low income consumer finances. This can be offset by targeting scheme benefits towards low income consumers. However, some low-income consumers will still lose out. The scale of the challenge facing us therefore requires publicly funded investment, ideally paid for through progressive income taxation (rather than, for example, VAT receipts).

It is also important that Governments and local authorities concentrate their efforts to eliminate underlying social factors which limit income generating possibilities of the poorest households. Long-term unemployed rehabilitation campaigns, special programmes to integrate disabled and other socially vulnerable groups, life-long learning and re-education facilities deliver lasting results. In Germany for example, long-term unemployed persons are employed to become local energy advisors for their respective communities (11), thus creating a double impact.

## 9. Apply policies to address high fuel prices

While energy efficiency improvements should play a major role in tackling energy poverty, it is important policy addresses the contribution of energy prices to the problem, particularly in the case of discriminatory tariffs.

Tariff structures can also sometimes reward those with higher levels of consumption (generally associated with better off consumers) and penalise those with lower levels of consumption. Similarly, policy costs applied to specific energy sources can lead to differential impacts on different groups of consumers, according to their main heating source.

It is therefore important that Governments and regulators always carry out **full impact assessments of tariff structures, policy costs and energy market measures** to establish their distributional impact. This may require countervailing measures to prevent discrimination against lower income consumers. In some cases, it may require the introduction of social tariffs to mitigate long term detriment. Ideally, the cost of such tariffs should be met from public expenditure rather than from other consumers' energy bills.

The liberalisation of the energy market in the UK, for example, led to substantial differentials arising in the tariffs paid by prepayment meter consumers (predominantly used by lower income consumers) vis-à-vis those paying by Direct Debit and/or on-line (predominantly used by better off consumers). Substantial differences also arose between those who switched supplier regularly and those who seldom or never switched. The government and regulator eventually took the view that the market was not functioning properly and introduced price caps to curb such excesses.

In countries where social tariffs represent long standing mechanisms to combat energy poverty, consideration should be given to whether they are having the desired impact or represent the most effective mechanism for tackling the problem (12). However, such policies are often popular with beneficiaries and represent an important prop for managing often inadequate finances. Any changes to policy should therefore only be made in conjunction with substantial improvements in other areas, such as energy efficiency and social security.

## 10. Provide cheaper energy via district heating and cooling

District heating and ever more popular district cooling networks may prove to become good alternatives to traditional single unit heating and cooling systems. Care should be taken not to lock in fossil fuel technologies when designing and introducing such networks.

It is also important district heating and cooling network consumers are given the same protections as those available to gas and electricity consumers. For example, the UK government intends to give the gas and electricity regulator, Ofgem, responsibility for also regulating district heating networks.

District heating is increasingly transforming into a pioneering force to lead green transition. As recently mentioned in a study by a leading renewable energies platform (13), solar thermal, geothermal, bioenergy, district H&C, and ambient and excess heat recovery, complemented with renewable electricity, will provide economic benefits to the local economies and at the same time "involve end users and counteract energy poverty". Such statements are becoming true, as new energy sources have ever decreasing levelized cost values.

Part of the savings from the development of smart district networks shall find ways into **lower consumer energy bills**. It is said that, for example, already today "district cooling is 5 to 10 times more energy efficient than conventional machine cooling and can reduce cooling energy consumption by 50 percent" (14). Furthermore, regulation of district heating will make sure prices are monitored and allow action to be taken if any 'outliers', in terms of high prices, are identified.

These visions still have to be delivered by bold actions taken at the Member State level (for example, by following the examples of Denmark, Norway and the Netherlands, which are banning or plan to ban installation of new fossil fuel-based boilers), but the majority of decision making power is, naturally, in the hands of local administrations. Cities and towns, and to some extent even villages and rural communities should take an active stance and seriously consider replacing fossil fuel energy source with a renewable one (or a combination of several sources), with energy delivered via an effectively managed and democratically governed network. Pilot installations are spreading across the continent, and there is experience from which to learn (15) (16).

## 11. Strengthen protection against disconnections

Protection against disconnections is already a part of national policies in many countries. It guarantees a certain level of protection against the disconnection of the energy supply, usually regarding electricity as well as, in some cases, gas and water. However, many civil society actors, working on the energy poverty topic, suggest stronger safeguards against disconnection. For example, in some countries water disconnections are banned on the grounds that water is an essential service. There are strong grounds for treating energy in the same way.

Already identified by STEP as a best practice, **protection against disconnection during winter of households that rely on electricity or natural gas to heat their homes, and all year to vulnerable consumers** should be guaranteed by all Member States. Eventually, the need for an EU-wide definition of outside temperature conditions may arise, under which disconnection is prohibited. A similar approach should apply with respect to the need for cooling during extremely hot weather conditions.

In some countries (such as the UK) various legislative, regulatory and self-regulatory processes have led to energy disconnections being reduced to minimal levels. However, so-called self-disconnection among consumers who pay for energy through a prepayment meter remains a substantial problem. The introduction of smart meters makes it much easier for suppliers to identify consumers who have self-disconnected or are at risk of self-disconnecting. Citizens Advice, the statutory consumer body in the UK, has therefore called for the energy regulator to set a target for suppliers to end self-disconnection entirely.

Disconnections and self-disconnection are closely related to the approach suppliers take to recovering energy debts. It is therefore important suppliers apply consistent and sensitive policies to the recovery of debt. Regulatory and/or legislative action may be required to ensure this. Appropriate policies include making 'ability to pay' a central principle of setting debt recovery rates, making sure consumers have access to independent advice and encouraging consumers to take advantage of schemes designed to improve energy affordability, such as energy efficiency grants, social tariffs and welfare benefits.

## 12. Secure access to renewables, including for tenants and those living in Multi-Family Houses

People living in Multi-Family Houses (MFHs) may experience a stance of 'locked in' situation. They often lack individual tools to regulate heat supply in their apartments; they also lack necessary single autonomy to initiate building insulation projects. If the majority of neighbours are not in favour of a costly renovation project, the power of a single household is thus very limited and the household may become stranded in a difficult situation. For tenants, this situation is even more acute.

There are many obstacles that are specific to MFHs in relation to energy poverty. In response, several Member States have developed specific approaches to it, fostering dedicated subsidy programmes for renovation of MFHs.

These programmes should be expanded with a **special focus on renewable energy sources installations**. Energy cooperatives, which emerged several decades ago, are considered viable solutions for joint energy production and consumption. As the middlemen are eliminated, energy poor households can get their most needed energy without paying overhead extras to energy companies and, in many instances, without paying other energy tariff components.

In the Clean Energy Package, Citizen Energy Communities (CECs) and Renewable Energy Communities (RECs) are described as ways for consumers to engage in joint energy production and consumption, and to proceed further from where energy cooperatives stopped. We encourage Governments to fully utilize these legal instruments, specifically constructing an algorithm of hassle-free collective energy production and consumption for energy poor living in MFHs (17).

### **13. Proactively support establishment of non-profit CECs/RECs**

As already said above in the context of renewable energy for MFHs (see Rec. 12), energy poor consumers should find relief from the overhead costs and (quite often, far from just) grid tariffs, if they choose to collectively generate and consume electricity, engage in energy efficiency services and so on (as described in the revised Electricity Directive).

If consumers want to engage in this type of collective action, they should be able to count on full state support, with respect to business planning assessing feasibility and advice on the most appropriate legal form of action, whether it be RECs or CECs.

It is important feasibility studies assess the likely impact of such ventures on energy prices and energy efficiency provision, particularly with respect to how these compare with existing arrangements.

One of the most significant benefits of the new formats, yet to be transposed into national law from the Clean Energy Package, is the **possibility to engage local municipalities**, thus making them a part of the solution, and not remaining passive bystanders. Locally based state/municipal actors (municipalities or government-controlled agencies with local reach) can use their leverage to guarantee financial investments or to provide land plot for renewable installations.

Energy communities with a strong local authority support are better positioned to serve members of those communities, because state involvement guarantees security and longevity of new structures, be it CECs or RECs, or any nationally designed alternatives.

To some extent, lessons from the Consumer Stock Ownership Plan (CSOP), or renewable energy CSOP (RE-CSOP) concept can be taken into account. Being a part of the H2020 project SCORE (18) activities, this concept is now tested in three locations in Italy, Czech Republic and Poland.

In any case, proactive involvement in establishing multiple energy communities is needed to make it work for the energy poor, not for the energy companies or other profit-driven actors. State actors on national and local levels should become true drivers ('first-movers') of community setup initiatives – via dissemination, information campaigns, and sometimes outright taking initiative in connecting the willing community members and creating environment where the activist can engage in setting up their CECs or RECs. Without such proactive support, the vision of collective energy consumption, especially among energy poor households, may not become a reality.

## Afterword

In December 2019, the European Commission unveiled its 'Green Deal' – an ambitious plan to put the EU's economy on a sustainable path.

Increasing the EU's climate ambition, as defined in the Commission's communication (19), for 2030 and 2050, may lead to renegotiation of 2030 renewable energy sources in the EU's energy mix target (currently at 32 percent) and the energy efficiency target (currently at 32.5 percent). At the same time, the Clean Energy Package, adopted in 2018-2019, is yet to be implemented by Member States. With the National Energy and Climate Plans submitted to the European Commission as of the 31st of December 2019, the policy setting work now shifts to national long-term renovation strategies, due to be prepared by March 2020.

According to the Commission, for both energy efficiency and affordability, the EU and the Member States should engage in a 'renovation wave' of public and private buildings, as annual renovation rate is too low EU-wide.

Public authorities in Member States are now essentially responsible for drawing even more ambitious national policy plans than initially thought. This makes the start of 2020 a perfect time to engage in new dialogues between civil society actors and state authorities and to define what measures should be foreseen as a part of the Clean Energy Package implementation. In addition to that, measures aiming above the ambition of the Package may be needed. 'The European Green Deal' provides some guidance on what the new focal points in countering energy poverty issues in Member States can be in relation to energy efficiency:

- better integration of renewable energy sources,
- application of effective financing schemes,
- wider use of energy performance contracting,
- renovation of blocks instead of individual buildings.

Despite growing climate awareness among citizens (20), more needs to be done to shift from 'knowing' about climate change issues to actively supporting national policy actions destined to mitigate those issues. Inertia to act is not a feature that only wider public possesses, it is also prevalent among majority of politicians and other decision makers. For example, for 'energy efficiency first' principle to become truly 'first' when different policy alternatives are designed, a lot of mind-changing debates may be required on all – national, regional, local – levels.

For Member States to be in line with the EU-wide drive to combat climate change reflected in the 'Green Deal', partial measures are not enough. 2020 may require the reassessment of national policies contained in the National Energy and Climate Plans. In 2021, an even more ambitious revision of national strategies may be necessary as the Commission promises it will "review and propose to revise, where necessary, the relevant energy legislation by June 2021".



## Annex 1: Energy poverty criteria (an example)

This approach to measure energy poverty is based on Dr. Sandra Matzinger et al. work for Austrian Federal Ministry of Labour, Social Affairs, Health and Consumer Protection in 2018. Currently, S. Matzinger works as a consultant for AK – Arbeiterkammer Österreich (Austrian Chamber of Labour), in the Economic Policy Division in Vienna.

Her project was set out to elaborate on characteristics of energy poverty that derives from interviews conducted with experts from the social economy, energy providers and energy consultancies, who – as part of their job – work with clients that are energy poor. Based on interviews with experts from several regions in Austria, she and her colleagues collected experts' perceptions on the individual and household characteristics of people who they deemed as energy poor. As a result of these analyses, researchers proposed two definitions of energy poverty:

- Household members are **at-risk-of-energy-poverty** (AROP) if they are at-risk-of-poverty (according to the AROP-indicator of EUROSTAT) **and** find it difficult or impossible to utilize basic energy services (heating, hot water and electricity) within their household.
- Household members are **energy poor** if they are at-risk-of-energy-poverty **and** affected by at least three further disadvantages:
  1. These disadvantages refer to the characteristics of the living environment (a poor quality of the residence (e.g. damp walls); having access to energy; having necessary electric devices; being able to heat the household adequately). These disadvantages also refer to the financial situation of the household (high energy costs compared to the household income; high energy costs compared to other expenditures for basic needs; debts concerning energy bills).
  2. For household members to be energy poor, three of these disadvantages must apply – and at least one out of both types of disadvantage (characteristics of the living environment and financial situation of the household).

Source: *Matzinger, S. / Heitzmann, K. / Dawid, E. (2018): "Studie zur Erueierung einer Definition von Energiearmut in Österreich aus Sicht der sozialwirtschaftlichen und energiewirtschaftlichen Praxis"* performed for the Austrian Federal Ministry of Labour, Social Affairs, Health and Consumer Protection by the Research Institute "Economics of Inequality" / Vienna University of Economics and Business. Vienna. [https://www.sozialministerium.at/dam/jcr:d7d414ea-a6c5-49db-9b83-ac2e806b6e98/studie\\_energiearmut\\_endversion.pdf](https://www.sozialministerium.at/dam/jcr:d7d414ea-a6c5-49db-9b83-ac2e806b6e98/studie_energiearmut_endversion.pdf)

Based on data from the EU-SILC dataset (21), Dr. Sandra Matzinger and her colleagues conducted preliminary analyses to check whether and how far the proposed definitions may be measured with existing data. Currently, this is only partially possible. First, information on some of the criteria included in the definitions is missing. Second, the sample size of the group of people at-risk-of-energy-poverty hampers further statistical analyses.



Here's a table with the criteria of energy poverty according to Matzinger et al. explained:

Household members are <b>energy poor</b> when they are at-risk-of-energy-poverty and are affected by at least three (out of 7) further disadvantages:
i. Including at least one of the disadvantages from the group ' <u>Characteristics of the living environment and Energy use</u> '
ii. Including at least one of the disadvantages from the group ' <u>Energy costs / energy debts</u> '
<b>Group Characteristics of the living environment and Energy use</b>
<b>1. Access to energy</b> If there is interrupted access to heating or electricity, e.g. because of non-functional heating system (defective or inaccessible due to a shutdown), no electricity available, no hot water available.
<b>2. Building quality of the residence</b> If the building where the living space is located has serious defects, e.g. leaky windows and/or doors, moisture in the walls, mould growth, insufficient insulation.
<b>3. Heating</b> If no comfortable room temperature is reached in the household, e.g. 21 °C in the living room and/or 18 °C in other rooms.
<b>4. Electrical appliances</b> If a basic set of electrical equipment – refrigerator, stove, washing machine, lighting and entertainment electronics (e.g. TV and radio) – is not available in the household and/or the use of the available equipment is not suitable for the needs of the household members.
<b>Group Energy costs / energy debts</b>
<b>5. Share of energy costs in households' income</b> When more than 10 percent of the available household income needs to be used to cover the above energy services.
<b>6. Energy costs compared to other expenditures for basic needs</b> When there is not enough money left to cover other basic needs (eating, living and mobility) due to paying the energy bills.
<b>7. Arrears in energy bills</b> If, for financial reasons, at least 1x the energy bill (for the above-mentioned energy services) and/or the additional payment for an annual bill cannot be paid within one year.

The table adopted from (22), courtesy to the Austrian Federal Ministry of Labour, Social Affairs, Health and Consumer Protection.

## Notes and References:

- (1) For example, in the United Kingdom, the Committee on Fuel Poverty, an advisory body sponsored by the UK Government's Department for Business, Energy & Industrial Strategy (BEIS), advises the UK Government on any further action required to meet the statutory fuel poverty target for England. Similarly, the Scottish Fuel Poverty Advisory Panel and Partnership Forum advises the Scottish Government on its statutory fuel poverty targets for Scotland.
- (2) The major consumer organization of Germany – VZBV – is highly engaged in consulting on energy efficiency, leading a project 'Energieberatung der Verbraucherzentrale', which runs since 1978. Almost 600 energy advisors, mostly architects and engineers by background, provide independent energy advice for private households. The network involves 16 consumer associations in Germany (from all *Bundesländer*), has 800 advisory centres throughout Germany. In 2016, the network provided 107 000 consultations. It also serves as a connection point for approx. 120 projects of cooperation with municipalities, counties and energy agencies. See <https://verbraucherzentrale-energieberatung.de/> for more information.
- (3) Similarly, in the UK, Energy Advice Programme, formerly known as 'Energy Best Deal extra', is delivered by 120 local Citizens Advice offices across England and Wales. It provides advice to fuel poor and vulnerable consumers who are struggling to pay their bills, require better deals on energy, need guidance on the most appropriate payment methods or information on how to access help from energy suppliers and the Government.
- (4) See 'Excess winter deaths and illness and the health risks associated with cold homes', NICE guideline [NG6], published in March 2015, available here: <https://www.nice.org.uk/guidance/ng6>
- (5) <https://energysavingtrust.org.uk/policy-research/energy-efficiency-infrastructure-priority>
- (6) September 2017 report by "Frontier Economics": 'Affordable Warmth, Clean Growth: Action Plan for a comprehensive Buildings Energy Infrastructure Programme', available here: <https://www.frontier-economics.com/media/2248/affordable-warmth-clean-growth.pdf>
- (7) 'The Cold Weather Plan for England', [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/748492/the\\_cold\\_weather\\_plan\\_for\\_england\\_2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/748492/the_cold_weather_plan_for_england_2018.pdf)
- (8) As targeted in the UK under 'Clean Growth Strategy' (2017), where all fuel poor homes should be improved to Energy Performance Certificate Band 'C' by 2030, and the rest of building stock should be improved to 'C' by 2035 "where practical, cost effective and affordable". <https://www.gov.uk/government/publications/clean-growth-strategy/clean-growth-strategy-executive-summary>. There's clear prioritization of energy poor households, while the pace of action is still debatable. Also, as noted by National Energy Action, "Consideration does therefore need to be given to how properties that cannot be improved to Band C, or households living in properties Band C or above but who are struggling on low incomes, could be identified and targeted for bill support."
- (9) See publication by EASME 'High energy performing buildings: Support for innovation and market uptake under Horizon 2020 energy efficiency', available at <https://tinyurl.com/y9686hc7>.

- (10) For example, inspect how integrated approach to urban energy-efficient redevelopment works in Lithuania:  
[http://site08.mpstaging.ch/domains/iwoev\\_org/data/free\\_docs/EUKI-Quartiersmanager-Publikation\\_20200113\\_ONLINE\\_klein.pdf](http://site08.mpstaging.ch/domains/iwoev_org/data/free_docs/EUKI-Quartiersmanager-Publikation_20200113_ONLINE_klein.pdf)
- (11) Project name is "Stromspar-Check" (<https://www.stromspar-check.de/stromspar-check/im-ueberblick.html>) and it is run by EAD ( Bundesverband der Energie -und Klimaschutzagenturen Deutschlands e.V.), see [www.energieagenturen.de](http://www.energieagenturen.de).
- (12) In 2018, the social energy tariff represented a transfer of around 85 million Euros to more than 800 000 household consumers in Portugal (or approx. 100 euros per households on average, per year). The March 2019 study by ADENE, conducted by University of Coimbra, states: "The financial resources released by the social tariff discount can hardly help solve problems related to the quality of the building, in particular, problems of infiltration of the roof, moisture in walls and floors, or rotten window frames or floors. In this sense, it is considered necessary to adopt complementary measures to the social tariff aimed at interventions leading to the mitigation of energy poverty problems and also for the adoption of energy-efficient equipment/practices. <...> This financial instrument [social tariff] is designed to be in place for the short term.". Report concludes: "A social tariff specifically targeted at energy poverty problems should aim to promote energy efficiency, focusing on a longer time horizon." See: [https://www.observatoriodaenergia.pt/wp-content/uploads/2019/04/estudo\\_tarifa\\_social.pdf](https://www.observatoriodaenergia.pt/wp-content/uploads/2019/04/estudo_tarifa_social.pdf)
- (13) Horizon 2020 supported "European Technology & Innovation Platform on Renewable Heating and Cooling" project report: "In the vast majority of urban areas, District Heating and Cooling is technically and economically more viable than other network and individual based solutions and can be 100% decarbonised through the use of renewables (biomass, solar thermal, and geothermal energy), excess and ambient heat, and fossil-free generation." <https://www.rhc-platform.org/content/uploads/2019/10/RHC-VISION-2050-WEB.pdf>
- (14) *Ibid.*
- (15) "First large-scale solar district heating plant in the Baltics opens in Latvia": <https://bankwatch.org/blog/first-large-scale-solar-district-heating-plant-in-the-baltics-opens-in-latvia>
- (16) Warrington Borough Council in England is ready to start experience the full benefits from 34.7 MWp solar farm at York, with 30 MWh of battery storage and sophisticated technologies to maximise revenues and help balance the grid – both during the day with direct solar generation and at night with energy stored in the 30 MW battery. The project generates enough clean, secure energy to supply a town. Warrington expects this and another similar 25.7 MWp solar farm at Hull to generate millions of pounds in profits every year and generate an operating surplus of over a hundred million pounds over 30 years to invest in essential services. (Budget Book 2019–2020 of the Council shows communal Total Revenue Income at 133 million pounds, thus making solar profits not insignificant part of the income for this 200k+ people community). <http://www.climateaction.org/news/gridserve-completes-the-uks-most-advanced-solar-farm>

- (17) As a working example of renewable energy utilisation without having to engage in complex bureaucratic processes, Lithuanian distant consumption model could be replicated. While the legal changes are in place since October 1st, 2019, the real action is expected to start around 1st of April in 2020, when the new annual net-metering accounting cycle commences. In a new scheme, flat residents in MFHs will be able to consume electricity generated in renewable power plants located in remote land plots. The support system in such case works the same way as in the case of an individual solar photovoltaic installations on a single-family house or 2-flat houses (as any building with 3 or more flats is considered to be MFH). This means that the Government compensates installation costs of up to 323 Euros per kilowatt-peak of installed capacity and, in addition, grants the net-metering option. Check this June 8, 2019 press release from the Ministry of Energy of the Republic of Lithuania: "New opportunities for residents of apartment buildings to generate and consume their own green electricity", <http://enmin.lrv.lt/en/news/new-opportunities-for-residents-of-apartment-buildings-to-generate-and-consume-their-own-green-electricity>. Support scheme description: <http://enmin.lrv.lt/lt/naujienos/dar-daugiau-gyventoju-taps-energetiskai-savarankiski-saules-elekrinems-isirengti-skirti-9-mln-euru> (in Lithuanian).
- (18) More about SCORE: <https://www.score-h2020.eu/>, more about CSOP: <https://www.score-h2020.eu/csop-financing/csop-step-by-step/>. Project description declares that "SCORE ... particularly highlights the potential this democratic participation model holds for the inclusion of women and low-income households."
- (19) Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, "The European Green Deal", 11 December 2019, available at [https://ec.europa.eu/info/publications/communication-european-green-deal\\_en](https://ec.europa.eu/info/publications/communication-european-green-deal_en). In the Annex to the Communication, a Roadmap of key actions is presented: [https://ec.europa.eu/info/sites/info/files/european-green-deal-communication-annex-roadmap\\_en.pdf](https://ec.europa.eu/info/sites/info/files/european-green-deal-communication-annex-roadmap_en.pdf).
- (20) As reflected in the Standard Eurobarometer 92 survey, available here: <https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/standard/surveyky/2255>. Climate change retains second position among the most important issues facing the EU, confirming a strong increase in the last five years.
- (21) <https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions>
- (22) Bundesministerium für Arbeit, Soziales, Gesundheit und Konsumentenschutz (Hrsg.): Studie zur Erüierung einer Definition von Energiearmut in Österreich aus Sicht der sozialwirtschaftlichen und energiewirtschaftlichen Praxis, durchgeführt vom Forschungsinstitut "Economics of Inequality" (INEQ) der Wirtschaftsuniversität Wien im Auftrag des Bundesministeriums für Arbeit, Soziales, Gesundheit und Konsumentenschutz, Autorinnen: Sandra Matzinger, Evelyn Dawid, Karin Heitzmann, Wien, 2018. Online available from here: [https://www.sozialministerium.at/dam/jcr:d7d414ea-a6c5-49db-9b83-ac2e806b6e98/studie\\_energiearmut\\_endversion.pdf](https://www.sozialministerium.at/dam/jcr:d7d414ea-a6c5-49db-9b83-ac2e806b6e98/studie_energiearmut_endversion.pdf)

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