

RECONNECTING CITIZENS: EUROPEAN SOLUTIONS TO ENERGY POVERTY

EVROPAEVM Policy Report

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Executive summary

Over 57 million people throughout Europe live in energy poverty, meaning that they cannot meet their fundamental energy needs such as heating, cooling, cooking and lighting, at an affordable cost (Dobbins *et al.*, 2019). Hitherto, the EU and Member States have tackled the issue in a fragmented manner. The objectives of this report are to explain why the EU must tackle energy poverty comprehensively, to provide analysis of existing policy measures, and to develop recommendations for a European energy poverty policy. To achieve this, we conducted data-driven analysis of existing policy measures at the national and EU level, as well as on-the-ground fieldwork with local initiatives who tackle energy poverty every day. We conclude that energy poverty is a preventable social problem, and that the EU can contribute more to alleviate the harm it causes to individuals and societies. Our recommendations are: (1) Prohibiting power disconnections for vulnerable households; (2) Creating mechanisms to identify vulnerable households; and (3) Expanding EU funding for local initiatives.

Defining the problem

Energy poverty kills

Living in a cold home carries grave health hazards. For example, cardiovascular diseases are directly linked to long-term exposure to low temperatures. Consequently, Europe witnesses 250,000 "excess winter deaths" yearly (Mercer, 2003)¹ of which an estimated 30% are due to cold homes (Rudge, 2011).

Energy poverty also leads to using unsafe means of heating or lighting in homes, such as candles or illegal connections to the electricity grid. This can cause fires and deaths, as experienced in Catalonia.

Three people died and thirty were injured in a fire in a poor neighborhood of Badalona on 5th January 2019. The fire was caused by an illegal connection to the electricity network (CatalunyaDiari, 2019).



Energy poverty harms individuals and society

Drawing on critical work in criminology, we argue that energy poverty should be viewed as "social harm". This perspective highlights the ravages of energy poverty and shows that the harm experienced by individuals profoundly affects society as a whole. Three forms of harm are associated with energy poverty: harms to physical and mental health, harms to individual autonomy, and relational harms.

"People coming to our assembly for the first time arrive feeling shame, stigma. They know they cannot afford to pay their bills and they blame themselves for that, like *'I'm not able to provide for my family, I'm a loser'*, you know? What they feel is shame. Collective spaces such as our assembly help them to realize that they are not alone, that there are more people going through the same, and learning in which ways they can change things. The meetings are also kind of therapeutic because... their selfesteem increases, they see that they are supported, then you don't feel alone anymore, and you also see that you can get through your personal situation, you know? These people... they are voiceless in many social spheres but here... here they feel part of a family. Our assemblies are homely, they provide care." (Xavi, Adviser in Barcelona)

Beyond its potentially deadly physical impact, energy poverty is closely associated with severe mental health problems, due to the stress, anxiety and feelings of helplessness frequently experienced by energy poor individuals, unable to pay their bills and hounded by utility companies.

¹ The Excess Winter Death index (EWDi) tends to underestimate cold-related deaths in most European countries as it uses a fixed definition of 'winter' as occurring between December and March, and fails to take into account the number of days in a year that a house needs to be heated to reach an acceptable temperature (Liddell *et al.*, 2015; Hajat and Gasparrini, 2016).

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Energy poverty impairs personal autonomy, depriving people of control over their lives. Lacking light, heating or the means to cook severely limits domestic activities, especially at night. It also limits the ability to maintain social relationships because the shame associated with an energy-deprived home can lead to avoidance of social interactions. Keeping up personal hygiene also depends on a number of energy services, and failing to do so can lead to marginalization.

In all these ways, energy poverty obstructs "the spontaneous unfolding of human potential" and hinders full participation in society (Tifft and Sullivan 2001; Schwendinger and Schwendinger, 1975; Doyal and Gough, 1991). This is how energy poverty harms society.

Energy poverty is not a natural phenomenon

The social harm perspective frames energy poverty not as an inevitable natural problem, but as a *social* problem emanating from the actions and inactions of people, individually *and* collectively. This is an antidote to the "long-standing tendency to stereotype the 'energy poor' and their 'inefficient' use of scarce energy and monetary resources" (McCauley *et al.*, 2013). Blaming the energy poor for their situation alienates them and limits policy solutions to those targeting individual households (subsidies and incentives to renovate homes and acquire more energy-efficient appliances) (Jenkins *et al.*, 2016). Most of all, blaming individuals obfuscates the responsibility of governments and energy companies.

The term "winter excess deaths" (EWD), illustrates the tendency to "naturalize" the deaths caused by energy poverty, thus placing them beyond society's control. However, people lacking access to energy because of unpaid bills is anything but natural. *Markets* set the prices and *governments* are their accomplices when they fail to provide for their citizens' basic needs (Rivera, 2014). A harm is social when it stems from human

action or inaction (Yar, 2012). Energy poverty clearly fits the bill.

The EU can and must do more

Competences and existing policy measures of the EU

The EU tackles energy poverty through directives and providing funds for national policies. It addresses the issue indirectly, mainly through energy efficiency policies (Kyprianou *et al.*, 2019) and market regulations for gas and electricity.²

The EU highlights energy poverty in a number of publications³ and has established the Energy Poverty Observatory (EPOV), a web portal for sharing knowledge and best practices. But a comprehensive EU strategy on energy poverty remains elusive, as it ties into many policy areas subject to the subsidiarity principle such as energy, climate, environment, consumer protection⁴ and economic and social policies⁵ Action at the EU level is thus somewhat restricted and needs to be complemented through action at the Member State level. Our recommendations take heed of these constraints and seek to push the EU and Member States towards greater commitment.

With climate change taking centre stage, it is vital that the transition to cleaner energy leaves no one behind. This requires continued attention to energy poverty as part of a *just* transition. The Clean Energy Package includes measures addressing energy efficiency, information about disconnection and improved monitoring at the national level. Such measures are highly relevant, but they fail to address the social factors behind energy poverty and the responsibility of governments and corporations. The EU must move beyond a consumer-based approach to the issue and recognize the structural, systemic causes of energy poverty.

² Energy Performance of Buildings Directive (EU) 2018/844 and Energy Efficiency Directive (EU) 2012/27, amended by Directive (EU) 2018/2002.

³ European Commission, DG Energy, Vulnerable Consumer Working Group, Working paper on Energy poverty 2016; European Commission, Energy Union Package 2015.

⁴ Shared competences, Art. 4 (2) (e), (f), (i) TFEU.

⁵ Coordination of Member State policies, Art. 5 TFEU.



This is why the EU was created

Europe must adopt a comprehensive approach to energy poverty because the welfare of its citizens is its original *raison d'être*. Through two World Wars and the Great Depression, European states had failed to protect their citizens, who had suffered and sacrificed, and now demanded that states accept greater obligations towards them. European integration was thus undertaken because cooperation was the only way to provide citizens with prosperity and security. (Milward, 2000; Judt, 2005). European leaders understood that energy was vital for the comfort and health of the people.

"The tragic experience of the past seven years reminded us that mortality, and in particular infant mortality, the average life-span and therefore the importance of the population, depend directly on its conditions in terms of food, *heating*, lodgings and clothing". (Jean Monnet, 1946)

The post-war period saw the worst energy crisis in modern European history, and coal shortages contributed to dreadful living conditions that threatened social stability. The first generation of European leaders sought solutions in cooperation: this is why they came together in the European Coal and Steel Community (Kapstein, 1990).

Methodology

Because energy poverty is caused by a web of structural factors; because it has a variety of consequences on individuals and society; and because any single research method can be deemed partial and incomplete, we opted for an interdisciplinary approach, whereby different research questions were addressed from different perspectives. This resulted in two broad research axes.

Analysis of existing policy measures

The first approach sought a systematic understanding of the various policy measures in different member states in order to identify gaps that could be addressed by the EU: What are the common characteristics of existing policy measures and their predominance? And how does the portfolio of policy measures vary by member state and wealth levels?

The analysis was predominantly based on information from the EU Energy Poverty Observatory, which we aggregated into datasets, in order to group energy poverty policies from different member states. The Observatory's definition of energy poverty uses indicators such as arrears on utility bills, share of energy expenditure in household income, inability to keep home warm, and low absolute energy expenditure. Secondary indicators focus on changes in energy prices (e.g. household electricity prices). However, as it depends on reporting at the national level, the Observatory's information is scarce and merely descriptive, and does not allow us to infer anything related to the effectiveness of each initiative.

To meet these challenges, we divided the analysis into two steps reflecting our two research questions. First, we conducted a social network analysis (SNA) and mapped out the links between individual policy measures and their common characteristics as defined by the Observatory. This provided a general overview of existing policy measures and allowed us to group them into similar bundles, but not to assess their effectiveness. Therefore, in a second step, we changed the unit of analysis from policy measures to the individual member states. Here, we qualified each member state based on the scope of policy measures already in place.

Qualitative study of local initiatives

The second approach was based on the conviction that because the welfare of citizens must be the *raison d'être* of European policymaking, energy poor citizens should be at the heart of our research. Our main questions were: How do citizens experience and cope with energy poverty? And how can those experiences inform policy making?

We understand local initiatives as grassroots organizations that are directly assisting energy poor citizens. In Barcelona, the Alliance against Energy Poverty helps enforce disconnection bans and social tariffs through biweekly assemblies, community organizing and activism. The South East London Community Energy tackles energy poverty alongside community energy projects, conducting weekly "energy cafés" where citizens can discuss their bills over tea and biscuits. North Rhine Westphalia fights Energy Poverty provides one-on-one consultation mainly around disconnection, budgeting and legal consultation. The German national charity, Caritas, that we investigated in Munich, organizes house visits with vulnerable consumers to give advice on energy efficiency measures.

To answer these questions, we interviewed thirteen participants, including employees, volunteers, and affected citizens (see Annex 1). We also conducted participant observation during house visits, energy cafés, door-knocking actions and community assemblies. Listening to the experiences and expertise of the people directly concerned provided a rich account of the challenges in fighting energy poverty. We subsequently coded the interview transcriptions according to their most prominent themes and complemented the policy suggestions that emerged from our data with in-depth research on existing policy measures.

Although we expected the results from these two axes to exhibit gaps and potentially tensions, our respective findings were largely complementary, even coalescing around certain points, in particular a strong focus on banning disconnections for vulnerable households.

Findings

1. Disconnection causes the greatest harm

Power disconnections are the greatest cause of harm related to energy poverty, with potentially deadly consequences. Indeed, the local initiative in Barcelona emerged partly in response to deaths directly linked to energy poverty, in particular the death of Rosa Pitarch Vicente, aged 81, who died in a fire caused by the candles she used after having been disconnected (El Mundo, 2016).

Juan (Barcelona), lost his job during the economic crisis:

"In the middle of 2013, they cut my supplies of light, water and gas [...] I spent all of 2014, until the middle of 2015 without water, light and gas. And so, I had help from friends [...] I showered in somebody's house, washed my clothes, [...] I couldn't go to external washing salons either, because I couldn't pay for it. [...] in August 2015, I was in a situation where I just couldn't take it anymore [...] being without light, without gas, using candles, not having water, I couldn't [...]this is a situation that leads to desperation, that leads to nights without sleep, that leads us to cry all that you have in you to cry".

2. Disconnection prohibition is an underutilized policy tool

Banning disconnection is often overlooked in policy making. Based on our SNA, we categorize policy measures according to organizational type (whether it is designed and implemented at the national or local level) type of the policy (housing improvements, energy bill support, etc.), target group (vulnerable or nonvulnerable), geographical scope, and aims and objectives of those initiatives (see Annex 2). We found that most policy measures a) were designed and implemented by national governments, with or without the collaboration of another sublevel authority; b) had no specific target group; and c) focused more prominently on housing improvements (insulation and heating) with the aim of providing various means-tested financial support to consumers (direct financial support, vouchers, appliances, allowances, supplements, and fund-raising).

By adding a modularity analysis to our SNA, we detected clusters of policy measures, each of which reflects an overall policy approach towards energy poverty. Some of these clusters reflect measures oriented towards energy efficiency aiming to mitigate energy poverty by reducing energy-related expenses, others comprise knowledge dissemination, budget burden minimization, consumer protection, advice provision, housing improvements, and income-related support. However, prohibition of power disconnection does not constitute a significant part of these approaches. This was also confirmed by the country-bycountry analysis. Out of twenty-nine countries, ten apply such measures,⁶ three do so at a regional level,⁷ and sixteen do not prohibit disconnections at all⁸ (see Annex 3). Furthermore, those who prohibit disconnections do so only for a limited part of the year and/or only under very particular circumstances (Dobbins et al., 2019). In sum, both analyses indicate that protection from disconnection as a policy tool has been neglected.

⁶ The UK, Belgium, the Netherlands, Sweden, France, Italy, Slovenia, Cyprus, Finland, Romania.

⁷ Spain, Germany, Hungary.

⁸ Luxembourg, Slovakia, Czech Republic, Denmark, Ireland, Greece, Croatia, Lithuania, Latvia, Malta, Bulgaria, Estonia, Austria, Poland, Portugal.



3. Isolated national approaches

The SNA shows that both the design and outreach of most policy measures are strongly linked to the national level, whereas the EU's role has thus far been limited to providing funds to national authorities, and the implementation takes place on a sub-European level. The salience of each policy approach toward energy poverty fluctuates when considering countries with different wealth levels, as measured by GDP per capita. We categorised all EU-28 countries on the basis of their GDP per capita (2018) within three groups: low-wealth countries (0- 29,000 PPP), medium-wealth countries (30,000-39,999 PPP), and high-wealth countries (40,000 and above PPP).⁹



Source: Authors

Note: Purple (Income enhancement), sky blue (Housing conditions), light green (Advice provision), dark green (Budget burden minimization), orange (Consumer protection), red (Knowledge dissemination).

Figure 1 shows a pattern of dynamic change of dominant policy approaches across different levels of national wealth. In low-wealth countries (Graph A), policy measures are less diverse,¹⁰ and are highly

skewed towards income enhancement and housing improvements (indicated by the colour purple). By contrast, medium and high-wealth countries show significantly more diversity. While national policies are driven by national specificities such as the wealth of each country, poorer countries are clearly underutilizing a broad range of policy tools available to them. The most critical omissions are the lack of disconnection prohibitions, of power limiters and of local, bottom-up initiatives informing citizens about existing support measures. A large amount of funds goes to subsidizing utilities and equipment suppliers under the umbrella of household energy efficiency.

4. Local initiatives are key to supporting vulnerable citizens on the ground

Policy alone cannot address energy poverty comprehensively because vulnerable citizens frequently slip through the gaps. More attention needs to be paid to *how* vulnerable consumers can leave energy poverty behind. In this process, local initiatives are a crucial complement to policy approach.

Implement already existing energy poverty policies

Local initiatives help implement existing policy. Most countries support measures addressing energy poverty, through warm home discounts, social tariffs, and support for energy efficiency. Despite these measures, the number of energy poor households is only increasing. Our fieldwork with local initiatives showed that implementation issues are crucial to energy poverty policy, but often depend on the vulnerable citizens themselves, who may lack knowledge about energy bills and systems, the concept of energy poverty, and relevant policy measures.

Connecting stakeholders

Vulnerable citizens often exhibit a high level of mistrust, scepticism and fear towards political institutions (including local councils) and energy corporations. By contrast, local initiatives are in a unique position to garner trust because they are perceived as "apolitical", free from official government bodies, political interest groups, or energy companies. Recognizing these reservations are vital to successful implementation of policy.

⁹ Data was extracted from the European Central Bank (ECB) statistics (ECB, n.d.).

¹⁰ Measured by representation/frequency of colors (different policy approaches to energy poverty).



"They're talking to us because of the sort of organization we are, because they sort of perceive it as a bit more informal." (Hannah, Adviser in London)

"We are not an energy supplier, and I believe that this is [...] on the minds of many households. When an energy supplier comes to your home and says you should save energy [...] many are afraid [...] They know how things work in a charity." (Patrick, Adviser in Munich)

Local initiatives have therefore helped to connect relevant stakeholders. In North Rhine Westphalia, the local initiative organised round tables in several cities, connecting local energy suppliers, charities, job centres, municipalities and local politicians to enable crossover communication. Similarly, the Barcelona initiative was in regular contact with social services, whereas the London-based group provided tailored advice, even directly calling energy suppliers.

Education and empowerment

Local initiatives also protect energy consumers through education and empowerment. Even generally informed citizens may not know they are eligible for assistance, or may have been misdirected by energy companies.

"Hearing about energy poverty on TV, she 'didn't understand the language that was being used [...] I mean when they talk about per watts, per kilowatts, so if you are not ok with that, you might end up getting lost about that, and not getting the support you need." (Linda, London)

This form of education has a significant impact on selfesteem and mental well-being. Group and peer-to-peer learning was found to be particularly effective. It also reduces costs as it functions on a voluntary basis, and was considered an excellent way of dealing with emotional difficulties, including low self-esteem, shame, and fear.

"I explained my case, [...] and well, that's what I was talking about the other day, the empowerment. [...] I took notice of something like an energy that empowered me, they explained to me, from there to there, you mention this, you ask for this [...], and I felt like I was filled up with energy.[...] I was done with, I was had been in a bad state [...], but like very bad, eh? But I left the meeting, full, full of energy." From this position of empowerment, Juan committed to helping others through the local initiatives. (Juan, Barcelona)

Through learning-by-doing, citizens become more selfreliant and confident, and thereby better able to navigate markets and social services.

5. Getting out of energy poverty is a journey: multiple vulnerabilities make the issue even more complex

Understanding energy bills and energy markets can be challenging for anyone, but vulnerable consumers are faced with a host of aggravating circumstances: lack of information, lack of internet access, language issues, general financial issues, deteriorated mental well-being and self-esteem, chronic illness. These make it harder to take steps to alleviate energy poverty. To overcome this web of issues, regular and repeated engagement is necessary. Though more time and resource intensive, successful implementation of energy policy measures requires that these vulnerabilities are considered.

"I think about people having repeat appointments [...] a lot of people will come back and it's when they come back a second time, that they then actually change their energy company or apply for a warm home discount or a debt relief or something - so - you planted the seed, they thought about it [...] then they come back and that's when they actually change their behaviour." (Hannah, Adviser London)

"It's a bit of therapy, because—you listen to the problem of one, then of the other, you identify yourself [with their issues], there are people who end up crying, there are people who come frightened, that's normal, especially at the beginning [...] It's half as bad, but at the beginning it seems like the world is falling on top of you, but there is really a solution." (Nina, Barcelona)

Recommendations

1. Prohibiting disconnections for vulnerable households

Given that disconnection causes the greatest social harm and has so far been a somewhat underutilized policy tool, the EU should fully prohibit (or encourage the Member States to prohibit) disconnections for vulnerable households.

Prohibiting disconnections for vulnerable household is an obvious and rapid response to energy poverty, that is proportionate to the severity of the situation. The EU has largely focused on energy efficiency measures and information provision, locating responsibility for action



on individuals, leaving vulnerable households in the cold. Addressing disconnections is a critical supplementary measure directly and immediately beneficial to those unable to pay. Prohibiting disconnections does not require the households to be aware of the policy measure, thus removing one obstacle to implementation.

This recommendation is in line with EU Directives (2009/72/EC and 2009/73/EC) regarding market regulations for natural gas and electricity, which stipulate the need for Member States to protect citizens against electricity and gas disconnection.

Specifically, we recommend an all-season prohibition of disconnections for vulnerable households. The increasing number of heatwaves and ensuing summer deaths (D'Ippoliti *et al.*, 2010) create a growing need for cooling, especially for physically vulnerable citizens. According to the Energy Poverty Observatory, 11.2 % of the population within the EU cannot cool their homes adequately during the summer.

We recognize that disconnections, or the threat thereof, constitute powerful leverage for energy suppliers. Nevertheless, disconnection bans will have positive effects on the health and well-being of individuals, leading to savings in the health sector and to economywide gains in terms of increased productivity and positive impacts on educational attainment, fewer missed school days and improved wellbeing for children (Impact Assessment of the European Commission, 2016).

Art. 114 TFEU in conjunction with Art. 169 TFEU on consumer protection might provide justification for legislating a disconnection ban at EU level. Whilst this may be the most effective way to ensure a common minimum level of protection for vulnerable consumers (principle of subsidiarity, Art. 5 (3) TFEU), the measure should not condition the Member States' primary competence on social policy. Member States should preserve, in line with the proportionality principle (Art. 5 (4) TFEU), some flexibility in defining vulnerable households, following a guiding definition of a minimum standard of protection set by the EU.

2. Vulnerability tests *prior* to disconnections in order to protect vulnerable households

The implementation of the ban into national law will require coordination with social services. The EU should emphasize the need for mechanisms to identify vulnerable households and share best practices among Member States.

The prohibition of disconnections for vulnerable households can only be effective if vulnerability is required to be refuted *before* disconnection. Households in default of payment should be assumed vulnerable until verified otherwise. This is necessary to prevent severe social harm. For the vulnerability test to work effectively, it is not enough to impose an obligation on energy companies alone to carry out this test, as the German example illustrates: energy suppliers frequently do not take vulnerability into account and disconnect regardless of their formal obligation (Position Paper Verbraucherzentrale 2011; Paulus et al., 2018). Member states should decide which actors carry out the vulnerability test (social services, independent agencies, energy companies or municipalities).

In order to effectively identify vulnerable households, taking into account not only income-related criteria, but also health data and housing energy efficiency data, cross-sector data sharing needs to be facilitated, though simultaneously abiding by data protection laws (in particular Art. 5 ff. GDPR and Art. 9 GDPR for data concerning health), for example by following the "Saarbrücker 4-Punkte-Modell" (see Bleckmann *et al.*, 2016). Based on a declaration of consent of the social benefit recipient, this model enables data exchange between energy company and job centre or social benefit provider.

The Energy Poverty Law passed by the Catalan government in 2015 is an example of best practice.¹¹ This law imposes the obligation to check for vulnerability on the government and the energy suppliers and forces energy providers to consult with social services prior to disconnection. Social services, in turn, must then give out information on whether or not a household is vulnerable.

¹¹ LLEI 24/2015, del 29 de juliol, de mesures urgents per a afrontar l'emergència en l'àmbit de l'habitatge i la pobresa energética (DOGC núm. 6928). The law was unanimously adopted in the Catalan Parliament after a citizen initiative brought about by civil society groups including one of the groups studied here.



Oxford, September 2019

32.000 disconnections were prevented in Catalonia within the first 9 months of implementation of the Energy Poverty Law in 2015 (Observatori DESC, 2016).

In case of non-payment, but lacking proof of vulnerability, power limiters should be installed. Energy being an essential service, a minimum amount must be available to all households, regardless of their vulnerability. Power limiters are physical devices installed on the electricity meter that limit the amount of electricity that can be used.

Power limiters are already in use in cities like Cologne and Brussels. In Cologne, 660 households were provided with smart meters that reduced the power to 1000W in case of non-payment. Similarly, in France, disconnections are forbidden from November to March, but reductions of energy are allowed as long as the output is less than 3 KwH.

Whilst banning disconnections prevents the most severe harm caused by energy poverty, power limiters provide companies with leverage over those unwilling to pay energy bills, by limiting the supply of electricity to the bare minimum necessary to keep critical appliances running. Power limiters may function as a safety net when the definition of vulnerability used by social services excludes some vulnerable households or if the data collected by social services is imperfect.

3. Long-term funding for a more diverse set of local initiatives

Even if power disconnections are banned and vulnerability tests implemented, energy poverty will not disappear. Consumers face multiple vulnerabilities, lack knowledge and resources to educate and empower themselves. Local initiatives fill this gap. However, they have hitherto mostly been funded by the EU to focus on energy efficiency measures.

We recommend broadening the scope of EU funding programs, to include initiatives that provide the following services:

• Assisting vulnerable citizens to access existing social support measures (warm home discounts, social tariffs etc.)

- Connecting stake holders (local councils, energy corporations, vulnerable citizens)
- Free legal advice and debt counselling
- Independent advice on switching energy providers and the functioning of energy systems
- Energy saving advice

Furthermore, preference should be given to projects incorporating peer-to-peer and group learning.

These measures pertain to key European competences such as consumer protection 12 as well as environmental protection.13 They could also be funded by the Just Transition Fund, as energy poverty alleviation is an objective of a just transition, or through the European Social and Innovation Fund.

Furthermore, funding must be continuous. Funds at the national level are often allocated to projects on a shortterm basis, limiting their long-term effectiveness. For example, energy cafés in London only run through the winter months, although it is considerably more useful to receive advice on switching energy suppliers before winter comes. Similarly, initiatives on energy advice and audits for vulnerable consumers in Germany are often rolled out as temporary projects only. This makes it difficult to offer repeat appointments.

Conclusion

The causes of energy poverty are too complex to be solved strictly by consumer-based measures. The consequences of energy poverty for individuals and societies are too dramatic for the EU to be satisfied with the current situation. To mitigate the harm caused by energy poverty, we recommend that the EU push all Member States to ban power disconnections for vulnerable consumers, either through legislative action or recommendations to member states. We also recommend that the EU help member states develop mechanisms to identify vulnerable households, that power limiters be used for those households not identified as vulnerable, and that the EU expand its support to local initiatives working to alleviate energy poverty on the ground.

¹² Art. 169 TFEU

¹³ Art. 192 TFEU

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Annex 1 – List of interviews

INTERVIEW	ORGANISATION	LOCATION	ENERGY POOR OR ADVISER	
Interview 1	Alianza contra la Pobreza Energética	Barcelona	Adviser	
Interview 2	Alianza contra la Pobreza Energética	Barcelona	Energy poor citizen	
Interview 2	Alianza contra la Pobreza Energética	Barcelona	Energy poor citizen	
Interview 4	Alianza contra la Pobreza Energética	Barcelona	Energy poor citizen	
Interview 5	Alianza contra la Pobreza Energética	Barcelona	Energy poor citizen	
Interview 6	South East London Community Energy	London	Adviser	
Interview 7	South East London Community Energy	London	Adviser	
Interview 8	South East London Community Energy	London	Energy poor citizen	
Interview 9	South East London Community Energy	London	Energy poor citizen	
Interview 10	Caritas	Munich	Adviser	
Interview 11	Caritas	Munich	Adviser	
Interview 12	NRW bekämpft Energiearmut	Düsseldorf	Adviser	
Interview 13	NRW bekämpft Energiearmut	Düsseldorf	Adviser	

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Annex 2 – Codebook for social network analysis (SNA)

VARIABLE NAME	DESCRIPTION	CODE/FEATURE	ELABORATION	
Policy initiative/measure	names of all the energy related measures (n=263) designed and implemented in the EU member states on all levels (EU, national, regional, local and mixed); listed in alphabetical order (A-Z)	/	/	
		NGO+	nongovernmental organization and another entity	
		NGO	nongovernmental organization only	
		EU	European Union	
	(administrative) level on which	Natgov+	national government with another entity (e.g. energy supplier, region, local government)	
Organization		natgov	national government only	
type	initiatives/measures were designed	regulator	regulator	
		ensupplier	energy supplier	
		locgov	local government	
		reggov	regional government	
		regulator+	regulator with energy supplier and/or business industry	
		Business	business industry	
		enaudit	energy audit	
		info	information and awareness	
		enbill	energy bill support	
Type of		disconnect	disconnection protection	
initiative/measure	type of policy initiative/measure	enstorage	energy storage	
mitiative/measure		socsupp	social support and social tariffs	
		housing	insulation, heating, renewable energy	
		multitype	multitype (combination of the individual types)	
		nospec	no specific target group	
		lowincome	low income households only	
Target group	specific social group(s) targeted by policy initiatives/measures	multigroup	low income households + households on social benefits + unemployed + pensioners + disabled	
		vulhouse	+ families with children + diseased vulnerable households (e.g. indebted	
		advica	aducation training audit	
		auvice	income support (means tested financial	
		income	support to consumers: direct support, vouchers, appliances, allowances,	
			supplements, fund-raising)	
Aim	aim and objectives of policy initiatives/measures (information extracted and categorized from initiatives/measures' brief descriptions)	funding	subsidies to companies, loans for building renovations, investments	
		budgetmin	budget burden minimization (expenses cut, tariffs, grants, favourable loans (zero-interest), VAT reductions, discount on bills)	
		infoaim	raising awareness, dissemination of helpful energy related content (e.g. energy prices) to households	
		consuprotec	consumer protection (laws, protection from disconnection, social housing)	
		ensaving	energy saving (applies to producers, suppliers and consumers)	
		research	finding solutions and financing mechanism for energy related topics, placing energy related topics on the policy agenda	
		European	European	
		national	national	
Geographic scope	geographic scope of policy initiatives/measures	local	local	
		regional	regional	
		multiscope	combination of individual scopes	



Country	Disconnection prohibition	Pay bills to the vulnerable	Lower bills	Price transparency	Information and advice	Not targeted to the vulnerable
UK	4	4	10	1	13	3
Belgium	5	3	9	1	9	6
Netherlands	1	2	2	1	4	1
Sweden	1	2	2	1	1	3
France	1	6	6	0	12	6
Italy	1	2	2	0	12	0
Slovenia	1	4	2	0	6	0
Cyprus	1	1	2	0	3	4
Finland	1	2	0	0	1	0
Romania	1	3	3	0	0	0
Germany	1	4	2	0	10	3
Spain	1	3	3	0	6	4
Hungary	1	1	0	0	1	2
Luxembourg	0	2	1	1	2	2
Slovakia	0	2	0	1	1	3
Czech Rep.	0	2	0	1	1	5
Denmark	0	2	0	1	1	4
Ireland	0	4	4	0	1	3
Greece	0	3	3	0	1	3
Croatia	0	5	2	0	2	3
Lithuania	0	1	2	0	1	0
Latvia	0	3	1	0	1	0
Malta	0	1	1	0	2	1
Bulgaria	0	4	1	0	4	2
Estonia	0	1	1	0	0	3
Austria	0	2	5	0	8	0
Poland	0	3	0	0	3	1
Portugal	0	1	0	0	0	2
Total	20	73	64	8	106	64

Annex 3 – Frequency of type-specific energy poverty policy measures across the EU

Note: Description of the categories used to classify the existing policy measures across the EU.

· Disconnection prohibition: Measures prohibiting power cuts in any shape of form.

• Pay bills to the vulnerable: Measures entitling vulnerable citizens to subsidies to their energy bills.

· Lower bills: Measures entitling vulnerable citizens to special energy prices below market prices.

• **Price transparency**: Publicly available websites offering easy price comparison among energy suppliers in order to facilitate identification of the cheapest alternatives.

• **Information and advice**: Broad range of measures which aim at offering information and advice about means available to mitigate energy poverty, such as visits to households, support in applying to subsidies. Local initiatives which aim to connect with the actual fuel poor individuals are included in this category.

 \cdot Not targeted to the vulnerable: All measures which related to energy efficiency or renewable energy in general, focusing more on energy transition, and typically consisting of subsidies to energy or equipment suppliers.