

2-111-24 Bottom-up initiatives for co-designing energy efficiency policies to address energy poverty

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Purpose

The paper presents the role of stakeholder engagement in the redesign of ten energy efficiency policies within the framework of the ENPOR project. The ENPOR project "Actions to Mitigate ENergy POverty in the Private Rented Sector" aimed to make energy poverty in the private rented sector (PRS) visible and quantifiable.

The PRS is broadly defined as a classification of housing whereby a landlord, who is not a local authority, some type of housing association or registered social landlord, leases a property to a tenant, for more than six months.



Overview of Energy Poverty in the PRS

- Energy poverty is widespread in the EU, but **the issue is pronounced in the PRS**, which accommodates 30% of the EU's citizens.

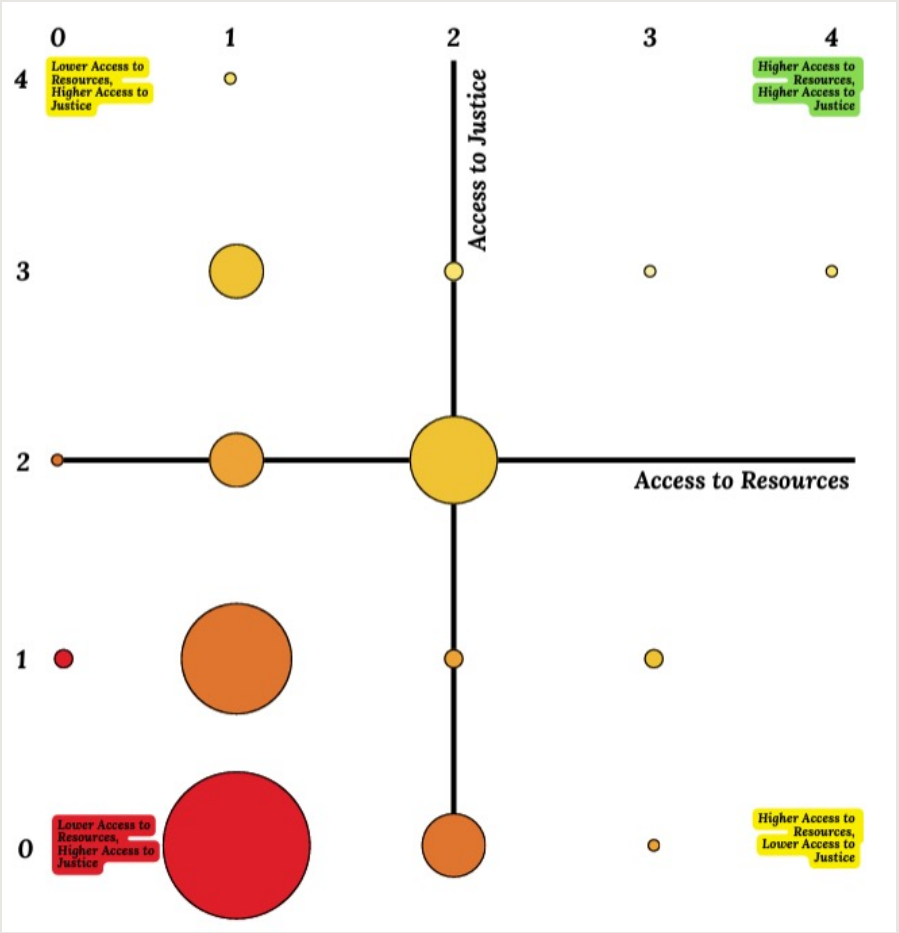
- Households in the European PRS struggle with energy-related costs more than the overall population.

An overview of vulnerable groups in the PRS across Europe

Primary axis of vulnerability	**Secondary Axis of Vulnerability**		
	Socio-demographic	**Housing**	**Energy supply**
Socio-demographic		• Single parent tenants • Ethnic minority tenants • Tenants with unemployed or older family members • Tenants with small children • Elderly tenants	Tenants suffering from other vulnerabilities beyond the home (e.g., high transport costs)
Housing	Households in short-term lets		• Tenants in unaffordable and inflexible energy pricing arrangements (e.g., all utility payments wrapped in one) • Tenants that live in areas with high energy costs from available suppliers
Energy supply	Tenants living in energy inefficient homes	Tenants in homes with an expensive energy supply (e.g., electric only)	

Research

ENPOR conducted an **in-depth investigation of 114 policies and measures focused on energy poverty in the European PRS**, and discovered an overall absence of specialised PRS energy support, especially for vulnerable PRS tenants or that address **split incentives**.



Identified Categories	Identified Barriers
Financial	• Split incentives • Lack of direct financial incentives to landlords • High upfront costs • Lack of funding schemes that target the PRS • Expected return on investment • Inability to pay increased rents (leading to renoviction following housing renovations) • Energy efficiency doesn't increase the sale or rental value of the property
Technological	• Lack of information (for example on available technologies) • Lack of technological knowledge for implementing effective solutions • Complex tenure patterns in • Use of technologies
Political/ Regulatory	• Political invisibility of the PRS, lack of political interest • No definition of energy poverty/not a political priority • Lack of data on energy poverty amongst PRS tenants • Lack of targeted policies/best practice schemes to follow • Lack of energy labelling and mandatory efficiency schemes • Regulation vs Deregulation debate • Differing levels of political devolution with responsibility for energy efficiency policy • Complex tenure patterns in apartment buildings
Social	• Stigmatising and time-consuming, complex processes and procedures to access funding • Tenant and landlord mistrust in governmental policies • Prevalence of small-scale, low-income landlords • Broader social vulnerability in the sector (prevalence of low-income groups, single parents, ethnic minorities) • Lack of adequate skills and training in the workforce, or a lack of workers more generally
Geographical	• Climatic difference • Varying housing legacies between national, regional, and local contexts

We investigated the structural factors that work as barriers to the successful implementation of EE policies to alleviate energy poverty in the PRS.

So what?

Address the literature gap to ensure that both landlords and tenants are involved in the design and implementation of energy efficiency and energy poverty policies for the PRS.

Methodology

- We sought to increase assistance to landlords and tenants facing barriers to renovation.
- The main characteristic of the approach is the conduction of a **co-creation procedure**.
- **Regional Energy ACTion (REACT)** groups were created for bottom-up collaborative policy development across seven EU countries (**AT, HR, DE, EL, EE, IT, NL**).
- Instead of having energy poor tenants directly participate in the REACT group meetings, **Target groups** were made.



REACT groups

- Charitable and social work associations
- Energy agencies or consultant
- Municipal/regional /national policymakers
- Citizen groups/NGOs
- Utilities



Target groups

- Tenants
- Landlords
- Homeowner associations

1

REACT group members received a brief **analysis of the selected policies** to be further developed and **the main challenges** to be addressed by the co-creation. Participants presented the main elements they believed were needed to tackle policy re-design.

2

The actual **co-design process** was kicked-off.

- ENPOR partners presented **best practices and insights**
- **Tenant and landlord perspectives** were shared
- The group provided **feedback and highlighted potential flaws in the design**, barriers in policy implementation, and possible solutions.

3

The last meeting **fine-tuned the policy for implementation** based on the tenants' feedback. **Policy monitoring** was defined, setting the stage for impact evaluation to inform adjustments via further REACT groups.

Country	Name of Scheme
Austria	Low-threshold, target group-specific consulting (training, soft measure)
Austria	Development of a concept for structural energy poverty mitigation measures (structural policy framework)
Germany	Heating-related energy advice (training and information)
Germany	Pre-paid metering EnergieRevolte (training and information)
Estonia	National reconstruction grant (grant for renovation)
Greece	Energy Efficiency Obligation Scheme (EEOS)
Greece	Energy upgrade of buildings (grant for renovation)
Croatia	National Programme for Renovation of Buildings (grant for renovation)
Italy	Training and Information Campaign (training and information)
Netherlands	Energy Box (programme support)

Co-creation Results



Austria

- **New energy saving informational materials designed** with figurative language, short clear texts, focusing on illustrations. These were translated into 10 languages.
- The **concept for structural energy poverty alleviation emerged** and several activities were defined to alleviate energy poverty.
    - Decentralized advisory service
    - Quality assurance of advice services
    - Training of advisors, etc.



Croatia

- The "National Programme for the Renovation of Buildings for the period 2014-2020" was modified and 2 new programs were launched. These included the **definition of energy poverty** and recognized its relevance in Croatia, while one of the programmes specifically **targeted the renovation of energy-poor households**.



Estonia

Proposals to improve the *National Renovation Grant* included:

- emphasising the importance of **renovation capacity** in regulations and legislation and increasing it
- **enhancing the role of tenants** in the renovation and decision-making processes
- creating additional measures for supporting buildings in the process of full renovations



Germany

- The REACT group identified and developed novel **approaches to engage households** about energy efficient heating and ventilation and increased the effectiveness of "StromSparCheck" consultations and heating advice with **visual aids**.
- The EnergieRevolte pre-paid metering app was amended to display the live consumption of users, **improving transparency on electricity consumption and costs**. Additional information about electricity conservation, external financial support and advice offers were added.



Italy

Two concise handbooks have been published and distributed through "*Italia in Classe A*" campaign.

- One targets building managers and provides guidance on structuring **communication campaigns to incentivize building owners to adopt renovation measures** that enhance energy efficiency and reduce consumption.
- One for tenants and owners, offering a series of good practices and **advice on improving energy usage**, comfort, safety, and health at home.



Netherlands

The Energy box was improved with:

- A tool for neighbourhood analysis
- More choices for energy saving products
- Practical help
- More languages for the consultations
- Promotion of the box via social networks
- A focus on students



Greece

- The Greek REACT group included **tenants as decision-makers** in the national "*Energy upgrade of buildings*" programme and ensured that **public aid considers landlords and tenants**. A dedicated portion of the foreseen public budget will be allocated to energy poor households and a special provision for rented buildings was introduced, foreseeing a 40% subsidy to landlords. Finally, reference to ***split incentives*** was added into the Greek Action Plan for the Confrontation of Energy Poverty.
- Following the co-creation of the EEOs and financial support measures:
    - **Specialised information material and interactive tools** are promoted
    - Dedicated **training programmes** are organised to enhance PRS knowledge
    - **Simplified energy audits** can be carried out to identify the most cost-effective energy efficiency interventions.

Evaluation of co-creation effectiveness

Measures	Score			
	Policy design	Capacity building	Outcomes	Total
Austria (low-threshold, target group-specific consulting)	5/13	4/7	3/5	13/25 = 52%
Croatia (National Programme for Renovation of Buildings)	6/13	2/7	2/5	15/25 = 60%
Estonia (National Reconstruction Grant)	6/13	5/7	3/5	14/25 = 56%
Germany (Heating Related Energy Advice)	5/13	6/7	4/5	15/25 = 60%
Germany (Pre-Paid Metering Energie Revolte)	3/13	3/7	2/5	8/25 = 32%
Greece (Energy Upgrade of Buildings)	9/13	5/7	3/5	17/25 = 68%
Greece (Energy Efficiency Obligation Scheme (EEOS))	9/13	5/7	4/5	18/25 = 72%
Italy (Training and Information Campaign)	7/13	5/7	4/5	16/25 = 64%
Netherlands (Energy Box)	8/13	5/7	3/5	16/25 = 64%
Total	58/117 = 50%	40/63 = 63%	28/45 = 62%	132/225 = 59%

Evaluation of co-creation effectiveness

The greatest variance of effectiveness was present in the capacity building aspect

- Lowest-scoring policy did not include tenants and landlords within the co-design process, while 6 of the policies that scored highly did.

The common weaknesses amongst the lowest scoring measures in the policy category were that they:

- Included PRS tenants but did not explicitly target energy poor renters, or did not explicitly target the PRS.
- Did not address split incentives as the measures were not structural, but rather behavioural.

Policies scoring high in the policy category:

- Addressed split incentives, integrated or underpinned by local, national or EU energy poverty strategies, or offered financing.



The co-design process could have been improved (capacity building & policy aspects) by specifically targeting *energy poor renters* and including these (to a greater degree) in consultations and policy development processes.

Evaluation of co-creation effectiveness

The majority of the policies scored positively under the outcomes category:

- Increased knowledge of EE measures
- Improved thermal comfort
- Reduced energy consumption
- Improved the structural energy efficiency of dwellings through renovation and training

Policies scoring lower within this category did so:

- Due to the lack of measures specifically targeted towards the energy poor in the PRS



A common issue was that **the co-design process failed to sufficiently include energy poor renters in the development of the measures and as explicit beneficiaries of the policies.** This led to another shortcoming, where REACT groups were unable to fully address split incentives during policy redesign.



All policies helped to **improve the understanding of the energy demand concept** at the minimum, with most **facilitating reduced energy demand and increased renovation opportunities** by renters, when aligning with multi-level strategies to combat energy poverty and increase energy efficiency.

Best Practices

There is a critical need to engage PRS tenants in designing energy poverty and energy efficiency policies. The REACT groups' discussions underscored that engaging PRS tenants is not only one of the **most challenging aspects** but also one of the key factors for crafting policies that can **truly address energy poverty** and enhance energy efficiency. Our learnings suggest to:

1. Directly involve energy poor PRS in the pilot for testing materials
2. Consider that willingness to accept support services is based on trust
3. Engage and use intermediaries (civil society organisations, energy advisors, etc) to disseminate learning materials
4. Emphasise comfort and health while using visual aids and translating materials
5. Involve relevant policymakers to strategically increase the chances of their acknowledging and including relevant materials in advisory offers nationwide



Policy Recommendations

- Establish **decentralised consulting services**
- **Social Energy Advice**
- Energy saving **measures** distributed **in combination with coaching and repeat visits**
- **Training and further education** for both energy and social advisors
- **Data collection and monitoring**
- **Tackling split incentives**

Further considerations and questions for the audience

Mechanisms to connect with tenants to involve them in any co-design process vary widely, the success of which depends on the type of tenant being targeted, as well as the region that they live in. **Are you aware of any success stories that you would like to share?**



ANNEX – Policy design KPIs

Indicator	Specification / Operationalisation	Yes	No
Does the policy allow tenants in the PRS to participate/benefit?			
Does the policy explicitly target the PRS?			
Does the policy explicitly target energy poor households in the PRS?			
Has the design of the policy been informed by input from the PRS?	Yes, from (representatives of) owners,		
	Yes, from (representatives of) residents,		
	Yes, from other relevant stakeholders		
Is the policy part of wider legislative, regulatory and/or programmatic commitments to address energy poverty?	Is it implemented by more than one agency?		
	Has it been publicly challenged?		
	Does it refer to other policies and/or legal acts?		
	Is the policy documented as an element of an overarching energy poverty strategy?		
Does the policy explicitly address the split incentives issue?			
Are the policy's target groups specified with view to criteria derived from an official energy poverty definition?			
Is the policy underpinned by clear mechanisms to identify energy poor households in the PRS?	I.e., there is a distinct procedure/process on how to identify an energy poor household applying specified criteria.		

ANNEX – Capacity building KPIs

Indicator	Specification / Operationalisation	Yes	No
Does the policy help improve decision-making capacity (in terms of skills, co-operation and/or resources) by state organisations at the national or local level to address energy poverty in the PRS?	Does the policy promote the formation of new co-operations between state organisations and relevant stakeholders to better address energy poverty in the PRS?		
	Does the policy help improve relevant skills (e.g., with view to the administration of support programmes, the identification of and outreach to energy poor tenants, …) in state organisations to better address energy poverty in the PRS?		
	Does the policy generate new insights/data to inform the implementation of energy poverty policies/programmes targeting the PRS?		
Does the policy help improve wider policy making (in terms of existing or future programme implementation) by state organisations at the national or local level, working on energy poverty alleviation?	E.g., does it generate new insights/data to inform the design of energy poverty policies/programmes?		
Does the policy help improve energy poverty alleviation - related knowledge and skills to address energy poverty among stakeholders relevant to the PRS?	Based on survey results from REACT group participants / capacity building events		
Does the policy help improve energy poverty alleviation - related communication and collaboration opportunities among stakeholders relevant to the PRS?	E.g., does it establish virtual or physical fora dedicated to promoting exchange / collaboration between stakeholders		
Does the policy help improve energy poverty alleviation – related resources (financial or otherwise) available to stakeholders working in the PRS?	E.g., via funding for energy efficiency renovations of dwellings		

ANNEX – Outcome KPIs

Indicator	Specification / Operationalisation	Yes	No
Has the policy reached energy poor tenants in the PRS?	Based on output/monitoring data/estimates		
Is there evidence to suggest that the policy has led to a decrease in energy poverty prevalence in terms of improved thermal comfort among vulnerable groups?	Based on output/monitoring data/estimates		
Is there evidence to suggest that the policy has enabled energy poor households to increase their consumption of energy services to fulfil their basic needs?	Based on output/monitoring data/estimates		
Is there evidence to suggest that the policy has led to improved energy efficiency in dwellings occupied by energy poor tenants?	Based on output/monitoring data/estimates		
Is there evidence to suggest that the policy has led to improved understanding of energy bills and conservation options among energy poor households?	Based on output/monitoring data/estimates		