



Actions to Mitigate Energy Poverty
in the Private Rented Sector

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Key findings and inspiring cases

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1

INTRODUCTION

This report presents key outcomes of policy co-creation, involving various stakeholders in the design, to address energy poverty in the Private Rented Sector (PRS) within ENPOR. Its purpose is to inform the development of effective and targeted energy poverty policies for the PRS, with a focus on energy efficiency. The report summarizes results from our research in all stages of the co-creation, including the challenges faced by stakeholders, the identified opportunities in the developed strategies to overcome them, the role and relevance of different stakeholders for policy design, implementation and monitoring, as well as the lessons learned, and recommendations derived from ex-ante policy evaluation.

Although implementation settings have been diverse, the findings are clustered by policy type into “information and Training Instruments” and “Renovation Grants” to highlight commonalities across the policy cases and to provide broadly applicable recommendations for the setup of respective instruments. The presented information builds on findings from processes in stakeholder consultations, policy recommendations, and policy fiches (found in deliverables D3.4, D3.5 and D5.2), as well as an intra-consortium survey focusing on the role of different stakeholders and their contributions to the policy co-creation.

2

INFORMATION AND TRAINING INSTRUMENTS

Within ENPOR, four energy efficiency measures to alleviate energy poverty in the Private Rented Sector were developed in Italy, Austria, the Netherlands and Germany, falling under the category of information and training instruments. Specifically, in Italy, the co-creation process with relevant stakeholders included the further update of the National Energy Efficiency Training and Information Programme. Efforts took place to improve content on energy poverty, to target actions to vulnerable groups and the PR and to develop specific communication materials for landlords, tenants and building managers.

Furthermore, awareness initiatives (surveys, engagement and training sessions) were carried out at high schools to engage students in topics related to energy, its relation to climate change and energy poverty. In Austria, the Netherlands (Energy Box) and Germany (ElectricitySavingCheck), co-creation activities centred around the further development of existing energy advice offers for low-income and energy poor (tenant) households. In Austria and Germany, the focus of the co-creation process was on the development of visual and multi-language materials to more effectively convey information on energy efficient behaviour (electricity, heating and ventilation) within the respective programmes. In the Netherlands, a broader set of activities was implemented to support the Energy Box programme. This involved identifying energy poor tenants, reaching out to them and providing tailored services to address different needs.

Challenges and opportunities

As part of the policy co-creation process with stakeholders and in line with the defined targets, a list of challenges for the successful implementation of the information and training instruments was identified. This list was further amended based on the experiences gained from the actual implementation of the ENPOR measures. The challenges relate to different stages of the policy delivery, ranging from identification of and outreach to energy poor tenants over effective conveyance of information/advice content and ensuring (sustained) impacts in terms of improved understanding and behavioural changes to alleviate energy poverty.

Identified challenges

- **Identification and outreach:** due to a combination of lacking definitions, and consequently, a **lack of systematic monitoring and data**, energy poor households in general and in the PRS, in particular, are difficult to identify and hard to reach. This particularly applies to households outside the social safety nets, which closely miss income eligibility thresholds for state transfers (i.e., the working poor) or do not take advantage of them due to fear of stigmatisation or bureaucratic barriers. Consequently, targeted activities to inform energy poor households about advice or grant opportunities via a direct approach are complicated and require high personnel efforts, which implementing entities often lack. Furthermore, in some instances, **language barriers**, as well as a certain **mistrust towards the government** and its representatives, complicate the outreach to energy poor households.
- **Effective knowledge transfer:** once households have decided to receive energy advice, another commonly identified challenge is to ensure the effective transfer of knowledge on energy use of different applications as well as corresponding conservation options. Apart from smaller technical devices such as switchable connector plugs, LEDs, or water saving shower heads, advice in the ENPOR policies mostly revolves around behavioural changes towards more energy efficient routines, which requires good understanding and acceptance of advisory content by the recipients. While electricity related behavioural conservation options refer to specific technical applications and thus tend to be

more easily comprehensible, advice on energy efficient heating involves the conveyance of more complex information related to thermal comfort and its interplay with indoor climate and ventilation. Against the backdrop of limited time for the advice session and receptive capacities and/or lack of comprehension on the side of the household, knowledge transfer on the subject may be hampered. In addition, energy advice is often delivered to households faced with **diverse and multifaceted problem situations**, in which energy conservation may not be a priority.

- **Limited energy (cost) saving potential:** by design, training and information instruments have a limited energy (cost) saving potential, as the lion's share of energy cost burden often stems from inefficient appliances and buildings and thus would require structural investments to be significantly reduced. Additionally, because of financial hardship, energy poor households often already restrict their energy use, which further limits the cost saving potential of behavioural change. Furthermore, concerning heating energy expenditure, the impact of advised actions can be affected by a multitude of factors related to climate, the location of buildings/dwellings inside of buildings, energy price developments, etc., introducing an element of uncertainty.
- **Ensure and monitor (long-term) impact:** a specific challenge relating to information and training instruments is to ensure their impact in terms of lasting adaptation of behavioural routines. While people generally struggle with sustaining behavioural change over time, in the context of domestic energy use, it is further impeded by the time lag between implementation of advised actions and reward (i.e., energy cost savings). For instance, in Germany and the Netherlands, tenant households pay a monthly lump sum for electricity and heat, which is only settled at the end of the year. Accordingly, expenses remain constant until the settlement and will only then be decreased, considering the materialised reduced energy consumption. This lag also affects the necessary efforts for impact monitoring, which may be further impeded by attrition of beneficiaries and/or absent energy bills because of lacking file management.
- **Lack of common terminology and methods:** the multidimensionality of energy poverty requires a cross-sectoral approach and the involvement of different experts, encompassing both social and technical aspects, which often leads to challenges in the implementation due to the lack of common terminology and methods.

Identified opportunities

- **The co-creation approach** applied in the ENPOR countries has proven suitable to tailor practicable services and/or information material to the needs of energy poor tenants. The established forum and employed processes enabled fruitful exchanges between different stakeholders which led to the development of novel approaches and content to provide energy advice and other relevant information to the target groups. In addition, the diverse perspectives and knowledge resources from the advice practice helped to ensure the relevance and practicability of developed information material. Furthermore, in the Dutch situation, the approach proved suitable for tailoring the content of the Energy Box (the measures that were offered). This approach also enabled previously unutilised synergies to be activated, as various stakeholders from the social and energy sectors could be brought together, where this does not usually happen.
- **Inclusion of trusted intermediaries**, such as civil society organisations or other actors from the social domain, has been shown to help overcome trust related barriers and create new channels of outreach for energy advice and other information activities. In the Netherlands, for instance, outreach activities in cooperation with a church and food bank helped to engage more tenants for the Energy Box. Likewise, the success of the German Electricity Saving Check is closely linked to the trust towards the implementing charitable organisation Caritas. In Austria, social counsellors have been engaged to include energy related information in their counselling practice, thus extending the capacities for

outreach and the provision of energy advice. In the Netherlands, a similar opportunity is noticed: a more intensive collaboration of Energy Box and the social domain. This involves informing social workers about the Energy Box. Conversely, the energy coaches of the Energy Box have learned from the social domain about how to approach target groups with stress-sensitive working.

- **Uptake of materials/approach by multipliers** beyond the original implementing entity can greatly increase the outreach and, consequently, impact of energy advice activities. For instance, in Austria the uptake by social counsellors has opened new channels to deliver advisory content.
- Against the background of potentially diverse and multifaceted problem situations faced by energy poor tenants, **highlighting health, comfort, and safety benefits** of energy efficient practices holds potential for engaging households in energy advice and its application beyond cost saving incentives. For instance, drawing attention to potential health hazards of mould formation associated with insufficient heating and/or improper ventilation can provide additional motivation to apply related advice.
- **Visualisations and multi-language material** have been shown to facilitate knowledge transfer to a diverse target group in all energy advice policy cases, helping to overcome language or comprehension related barriers. Diversifying the pools of energy coaches of Energy Box who speak different languages could also be beneficial in the Netherlands.
- **Amending energy advice with funding for appliance replacement** or linking to respective programs can substantially increase achievable savings, as has been demonstrated in the German Electricity Saving Check, which has earmarked funds for the replacement of inefficient refrigerators. Similarly, in Austria, existing replacement programmes have picked up the newly developed materials to increase the impact of support activities for energy poor households. In the Netherlands, adding energy fixers that implement measures right away remove barriers to participation. There is also the value of follow-up visits by energy coaches to enhance the lasting impact on behavioural change.
- **Increased funding for (impact) monitoring** can support the identification of energy poor tenants and enable the development of more diversified outreach channels, as well as support the further development of advice through ongoing evaluation of what works. This implies the need for municipalities to gather/monitor better data on energy poverty in their municipality and insights in the location of private rental sector. Furthermore, it implies organizations to evaluate approaches continuously.

Table 1. Summary of the identified challenges for implementing training and information instruments and the opportunities to address them.

Challenges	Opportunities
Identification and outreach	Increased funding for (impact) monitoring Use of diversified outreach channels Inclusion of trusted intermediaries Uptake of materials/approach by multipliers
Language barriers	Visualisations and multi-language material Diversify pool of energy coaches
Mistrust towards the government	Inclusion of trusted intermediaries Train energy coaches in stress-sensitive working
Limited energy (cost) saving potential	Link energy advice with funding for appliance replacement

	Highlighting health, comfort and safety benefits Have measures applied by energy fixers Tailor measures provided
Effective knowledge transfer	Visualisations and multi-language material Highlighting health, comfort and safety benefits Train energy coaches in stress-sensitive working
Ensure and monitor (long-term) impact	Increased funding for (impact) monitoring Add follow-up visits to the approach

Role of different stakeholders

The collaborative engagement of stakeholders has been a cornerstone in addressing energy poverty in the PRS via information and training instruments. The following paragraphs describe the role of different stakeholders in the co-creation process and the impacts generated by their engagement in the different countries.

ENEA's initiative in Italy served as an example of leveraging stakeholder expertise to enhance communication strategies for energy poor tenants, owners, and building managers. Tenant and consumer associations, but also universities, and building manager associations participated in providing diverse inputs, ensuring that the communication campaign addressed the technical needs and the lived experiences of the target groups. Hence, this blend of technical know-how and attentiveness to tenant needs facilitated the creation of materials that effectively integrated both aspects, and so optimizing the impact of the communication campaign.

The Wuppertal Institute in Germany pushed for synergy between public utilities, consumer associations, environmental agencies, and Caritas Energy Advisors. Their joint insights and experiences in delivering energy advice helped identify practical barriers, supporting the development of practical information tools like window stickers and radiator hangers, conceptualized as persisting reminders for the advised actions. The involvement of the Caritas energy advisors, who, as former long-term unemployed, themselves have experienced financial hardship and energy poverty, was crucial in the development of these novel and practical materials to support the advice activities.

The process coordinated by AEA in Austria also highlighted the importance of inter-organizational collaboration. Working closely with entities like DIE UMWELTBERATUNG, klimaaktiv, and various ministries, facilitated the translation and widespread distribution of informational materials, ensuring they reached a broad audience. Furthermore, the collaboration led to the development of policy solutions and the establishment of the Coordination Office for Energy Poverty. The role of tenants was also emphasized through the Austrian Energy Agency and DIE UMWELTBERATUNG's efforts to enhance energy advice by developing inclusive, visual, and multilingual materials. The REACT group's input ensured these resources were tailored to a diverse tenant population, highlighting the importance of target group focused dissemination of information.

In the Netherlands, Hogeschool Utrecht's collaboration with JMA focused on the Energy Box programme. Their co-creation process included municipalities, tenant organizations, landlords and social organizations. Continuously engaging the same stakeholders proved challenging, but the diverse viewpoints contributed to the further development and diversification of the Energy box outreach materials, measures and training of coaches. The REACT groups resulted in much more targeted promotion strategies, which proved to be instrumental in

reaching and supporting tenants. This demonstrates the critical role of engaging target groups in adopting policies and measures. The collaboration also led to a follow-up project addressing energy poverty together with the local food bank.

Across these countries, the synergy of diverse actors and their collective expertise has been harnessed to develop tailored, inclusive, and accessible resources and advice for energy-poor households. Agencies like the AEA and ENEA were instrumental in operationalizing these policies, while collaborations with organizations like DIE UMWELTBERATUNG, Caritas and the REACT groups ensured that measures were inclusive and addressed the specific needs of energy-poor tenant households. The common focus on multilingual outreach underscores the importance of considering cultural diversity in policy design.

Lessons learned and recommendations

The implementation of information and training instruments can play a relevant part in an integrated strategy to alleviate energy poverty in the PRS. In the case of energy advice programmes, their role is focused on providing immediate relief to energy poor households via knowledge transfer on energy conservation and low-cost technical measures whereas broader information campaigns can help spread awareness for the benefits of efficiency improvements and existing support offers. With view to the described challenges and opportunities, the ENPOR team identified several recommendations to design or further develop new or existing instruments:

- ▶ Match energy advice (materials), outreach channels and messaging to the diverse realities of energy poor households in the PRS.
- ▶ Create **targeted informative material** that make use of visualisations and multiple languages, and that highlight connected benefits to energy saving, such as increased health, comfort and safety.
- ▶ For raising awareness and knowledge, make use of a **diverse pool of energy experts / coaches**, who are trained to communicate effectively with different target groups in the PRS.
- ▶ Secure financial basis to **fund diversified outreach activities and customized support** and to enable systematic and ongoing impact monitoring and evaluation.
- ▶ **Integrate actors in the social domain** to facilitate and increase outreach to energy poor tenants and promote interdisciplinary capacity building across different sectors relevant for addressing the different dimensions of energy poverty.
- ▶ **Link with other activities** aiming to induce structural improvements of building efficiency (e.g., renovation grants and/or appliance replacement programmes) to account for the limited agency of energy poor tenants to reduce their energy demand.
- ▶ **Set up effective measurement and monitoring systems** to gather data on energy poverty in the PRS and policy impacts to inform formative evaluations. For this, a shared definition on energy poverty should be established to be able to identify energy poor households. The monitoring could be achieved by developing suitable indicators and enhancing the cross-sectoral collaboration.

3

RENOVATION GRANTS

In ENPOR, renovation grants were developed targeting at energy poverty in Croatia, Estonia and Greece. In Croatia, the policy co-creation process with stakeholders focused on the ex-post analysis of “National Programme for Renovation of Buildings for the period 2014-2020” and creating recommendations for 2021-2030. It aimed at re-designing the programme to include energy-poor households as well. Specifically, the Croatian REACT group focused on the co-creation process of two sub-programmes, the “Energy renovation programme for multi-apartment buildings 2021-2030” and the “Energy renovation programme for single-family houses”, by involving different stakeholders to enhance the inclusion of energy-poor households living in the PRS and the monitoring of the programmes’ impact. In Estonia, the already existing “National reconstruction grant” was further adapted. The grant has been considered a good example, but still has important shortcomings that should be addressed. In this case, the co-creation process focused on identifying deficiencies and formulating relevant recommendations to better mitigate the risks of energy poverty in the PRS and reduce shortcomings in the future. Finally, in Greece, the co-creation process focused on the “Energy upgrade of buildings” programme.

Challenges and opportunities

Through the co-creation processes that took place in Croatia, Estonia and Greece, it became clear that there are several challenges related to the effective design and implementation of renovation grants for the PRS. Through these processes, opportunities to address these challenges were identified through the continuous interaction and mutual knowledge exchange with stakeholders:

Identified challenges

- **Lack of definition and corresponding mechanisms for identification and targeting** of energy poor tenants. A common trend, among the different countries involved, was the lack of methodologies and data to identify, measure, and monitor energy poverty. In addition, in the case of Croatia, another major setback was the lack of clear definitions regarding energy poverty. Therefore, targeting issues are present, meaning that policies and measures in many cases are unable to specifically target energy poor households that live in the PRS.
- **Informal tenancies.** Targeting issues are significantly compounded by informal tenancies, as they deepen the existing lack of data and the corresponding mechanisms for the identification of energy poor tenants in the PRS.
- **Complex procedures for receiving support.** Existing challenges are deepened by the fact that in the PRS several complex and time-consuming bureaucratic procedures are required to apply for support.
- **Distributed ownership** structure in multi-apartment buildings. Co-ownership of multi-apartment buildings can hinder the energy renovation process due to the different preferences, levels of awareness and opinions of owners regarding energy efficiency renovations.
- **Split incentives** refer to any situation where the benefits of a transaction do not accrue to the actor who pays for the transaction. In the case of energy renovations in the PRS, “split incentives” are identified among landlords and tenants, as the one party, the landlord, invests in energy efficiency, while the benefits produced are received by another, the tenant, who benefits from decreased utility costs and improved thermal comfort. However, tenants can also be reluctant to energy renovations as they can result in increased rent and the -so-called “renovictions”, i.e. evictions because of

- escalating rents caused by energy efficiency renovations that add value to the property.
- **Lack of awareness.** Another horizontal problem is the low awareness of households and landlords about the phenomenon of energy poverty and existing energy efficiency policy measures to alleviate it. This challenge is compounded by the fact that households are also unaware of the benefits of the implementation of energy efficiency interventions.
 - **Absence of broader** organisational and legal strategies to address energy poverty, which hampers the effectiveness of individual measures and strategies, as they remain disconnected from the national policy landscape.
 - **Lack of common terminology and methods.** Just as with the training and information programmes, the multidimensionality of energy poverty requires a cross-sectoral approach and the involvement of different experts, encompassing both social and technical aspects, which often leads to challenges in the implementation due to the lack of common terminology and methods.

Identified opportunities

- **The co-creation approach** provides a **forum for (ongoing) exchange and inclusive collaboration**. It is worth mentioning that among all the activities of the REACT groups, stakeholders suggest that it is beneficial to develop a network among different sectors. This network could enhance information exchange (e.g. available energy efficiency measures) and the identification of energy poor households and their needs, while it could also support the collection of data regarding energy poverty in the PRS in a holistic way.
- The ENPOR has generated a **split incentives quantification tool**, which can help to increase transparency to both landlords and tenants. The tool can be exploited to identify the share of the triggered benefits from the implementation of energy efficiency interventions between landlords and tenants, and, thus, quantify the appropriate allocation of costs or subsidy rates for both sides. Moreover, it can provide a just and effective method of determining the impact in the rental price due to both sides' benefits, and according to each side's participation in the investment.
- **Inclusion of tenure status eligibility criterion for grants.** Considering the absence of a definition of energy poor tenants in many cases, and the inadequate targeting of the PRS energy poor households, the inclusion of tenure status as an eligibility criterion for grants, could work as an opportunity to enhance the visibility of the sector and, thus, support efforts to alleviate energy poverty.
- **High(er) subsidies for rented dwellings** can contribute to overcoming split incentives and avoiding renovations. Providing sufficient financial support is of paramount importance to enhance the uptake of energy efficiency renovations and overcome the absence of capital and the lack of funding that is prominent in the PRS.
- **Digitalisation technologies.** Considering that in some cases, like the case of Greece, smart technologies are absent (e.g. smart meters), it would be beneficial to include digitalisation technologies to better identify energy poor households and provide adequate methods to monitor and track the effectiveness of the implemented measures.
- **Increase knowledge** through **joint activities** for the promotion of capacity building to all stakeholders involved in the field of renovations and energy poverty in the PRS.

Table 2. Summary of the identified challenges for implementing renovation grants and the opportunities to address them.

Challenges	Opportunities
Lack of definition and monitoring	Digitalisation technologies Inclusion of tenure status eligibility criterion for grants
Informal tenancies	Inclusion of tenure status eligibility criterion for grants
Lack of common terminology and methods	Forum for exchange and inclusive collaboration Increase knowledge
Complex procedures	Forum for exchange and inclusive collaboration Increase knowledge
Distributed ownership	Forum for exchange and inclusive collaboration Split incentives quantification tool Higher subsidies for rented dwellings
Split incentives	Split incentives quantification tool Forum for exchange and inclusive collaboration High(er) subsidies for rented buildings
Lack of awareness	Increase knowledge Forum for exchange and inclusive collaboration
Absence of broader organisational and legal strategies	Forum for exchange and inclusive collaboration

Role of different stakeholders

For the effective implementation of the ENPOR co-creation process, different stakeholders from various sectors were involved in the REACT group meetings, whose role and the tangible impacts of their engagement are described in the following paragraph. The renovation grants initiatives in Estonia, Croatia, and Greece provide a remarkable case study to confirm the importance of involved, active and reliable stakeholders.

In Croatia, the REACT group proceeded with various events such as meetings, information days, workshops, round tables and more. These ensured a more successful implementation period for the programme “National Programme for Renovation of Buildings in 2021-2030” compared to its previous version (2014-2020). The identified amendments included structural improvements like the increase in the number and frequency of public calls, the expansion of the types of programmes offered and the diversification of the type of calls available. The collaboration involved an extensive network of stakeholders, including multiple city governments and central state offices. DOOR implemented comprehensive questionnaires in cities like Zagreb, Križevci, and Zadar, providing critical insights into citizen trust and the challenges faced by those in both social and energy poverty. The presence of Ministries such as the Ministry of Economy and Sustainable Development, Ministry of Spatial Planning and Ministry of Labour, Pension System, Family and Social Policy was reflected in the new policy

design, particularly in the amendment of the ETS Directive and the establishment of a social fund for climate policy by 2026. The Environmental Protection and Energy Efficiency Fund's insights into public call implementation hurdles were particularly revealing, highlighting implementation challenges at the grassroots level.

Estonia's approach with the Tartu Regional Energy Agency's effort exemplifies a comprehensive approach to housing policy and renovation support. The co-design process involved representatives from various stakeholders in the renovation service chain, like co-owners' associations, energy agencies, local policymakers, regional policymakers, national policymakers, utilities and banks. Among the stakeholders, state housing policymakers and local governments, i.e., Tartu and Tallinn city governments, played essential roles as their perspectives on housing management and local government support in renovations were invaluable. The Estonian Union of Co-operative Housing Associations provided insights from apartment associations, echoing the collective voice of apartment owners on housing organization and tenant relations. Meanwhile, construction companies like BaltiVara offered practical viewpoints on the renovation process. Swedbank and other financial institutions contributed by offering financial perspectives on the renovation market. Besides, Energy Advisors from TREA were fundamental in helping to organize REACT groups and synthesizing results and in the development of more targeted and effective policies. Overall, the members of the REACT group were instrumental in pointing out the deficiencies in retrofitting policies, especially those pertaining to the national rehabilitation grant.

In Greece, a similar approach was followed, involving housing associations, research institutes, non-governmental organisations, market actors, utilities, as well as the Greek Ministry of Environment and Energy. The different stakeholders provided guidance for critical steps of the application process to maximise the possibility for an energy-poor household to receive support from the programme under study. Furthermore, they monitored the progress and assessed the effectiveness of the programme, while they supported the development of a methodology for quantifying the delivered benefits, both to landlords and tenants, to address split incentives. Lastly, the REACT group members aided in the formulation of recommendations with regard to the alleviation of energy poverty in the PRS and assisted in the dissemination of the triggered results by the implemented programme. Overall, the co-creation process of the Greek case demonstrated a layered interplay of stakeholder interests and conflicts, particularly between tenants and landlords. The Ministry of Environment and Energy, along with energy suppliers, consumer associations, and NGOs, provided a diverse range of perspectives on policy framework challenges and the implementation of energy efficiency measures in the private rented sector.

In these three countries, the stakeholder engagement in renovation grants reveals a common theme: the necessity of considering multiple perspectives and the benefits of collaborative efforts to address existing challenges for reaching energy poor tenants in the PRS. Each country's unique approach, shaped by its specific stakeholders and challenges, contributes valuable insights into the broader discourse of energy poverty in policy and social welfare.

Lessons learned and recommendations

The implementation of renovation grants to support both landlords and tenants is critical in addressing energy poverty in the PRS. Additionally, through the ENPOR co-creation process, it was indicated that the redesign of such measures with active stakeholder involvement is deemed to be essential for the effective alleviation of energy poverty in the PRS. During this process, several lessons were learned, and important recommendations were extracted:

- ▶ Develop a shared definition on energy poverty to be able to identify energy poor households. Include

eligibility criteria in the grant's design that capture different social, economic and energy-related aspects of energy poverty, including tenure status. The data that can be generated with these criteria should be used to monitor the impact of the grants on energy poverty.

- ▶ Set up effective measurement and monitoring systems to gather data on energy poverty in the PRS and policy impacts to inform formative evaluations. This could be achieved by developing suitable indicators and enhancing the cross-sectoral collaboration through the establishment of a multi-level governance mechanism (both horizontal and vertical).
- ▶ Employ and/or further develop the split incentives tool to increase transparency of shared benefits of energy efficiency renovations between landlords and tenants and tailor public subsidy programmes to differing constellations.
- ▶ Establish one-stop shops or dedicated energy agencies to provide comprehensive guidance and continuous support to landlords and tenants, aiming to address effectively the complexities of implementing energy efficiency measures in the PRS, as well as low-awareness issues.
- ▶ Provide increased and stable funding for rented buildings in combination with rent control regulation to overcome split incentives and avoid renovations. It should be considered that introducing such regulatory measures is not an easy task, due to the importance of avoiding market distortions and the difficulty of involving all responsible public authorities.
- ▶ Adapt legal frameworks on decision making in multi-apartment buildings to facilitate the implementation of energy efficiency improvements of the building envelope or heating system against the background of distributed ownership, e.g., via the introduction of qualified majority voting in combination with social safeguards to protect vulnerable owners.
- ▶ Promote the simultaneous involvement of landlords and tenants during the decision process in multi-apartment buildings to find solutions/approaches for reaching consensus on improvements and cost sharing.
- ▶ Make the process of programmes design more transparent and open to the public and relevant stakeholders, particularly landlords and tenant representatives. They should also be easy to implement and apply for, to avoid complex and bureaucratic processes.

4

CONCLUSION

The co-creative work on the different policy cases in ENPOR has contributed to identifying not only a vast array of challenges for the successful implementation of essential policy instruments for tackling energy poverty in the PRS, but more importantly has helped to develop practical solutions to overcome them. In addition, the evaluation of the implemented policies highlighted remaining shortcomings in their design or the broader policy framework and derived recommendations to inform their further development as well as the setup of similar instruments in other settings.

Across the further developed energy efficiency policies in the field of renovation grants and information and training instruments, the collaboration between various stakeholders — from government ministries, city administrations, tenant and consumer associations, to environmental agencies — was a constant that demonstrates the uniquely differentiated way of addressing energy poverty and efficiency in ENPOR. Consequently, stakeholder engagement emerged as an instrumental element in these policy designs. This synergy of different organisations and state entities on various governance levels showed the importance of comprehensive stakeholder input in policy formation. Furthermore, the co-creation underlined the value of incorporating diverse perspectives in the process, in ensuring that grants and policies fit the needs and wishes of stakeholders and most importantly of the various target groups.

The effectiveness of these collaborations varied, but the most successful cases show the great potential of this co-creation approach to develop solutions for combating energy poverty. The absence of significant conflicts across most cases indicates a cohesive and constructive stakeholder environment, which was informed by the preparatory work done throughout the development of the stakeholder engagement strategy. However, the processes also reveal the challenges inherent in balancing varied interests, particularly in landlord-tenant dynamics, underscoring the complexity of stakeholder management in policy co-creation.

In conclusion, although there is no blueprint or one-size-fits-all solution in combatting energy poverty in the PRS, the lessons learned across the cases reflect the importance of collaborative, multi-stakeholder approaches in addressing energy poverty. Each country presents unique contributions and challenges in the overall policy landscape. These lessons can be further replicated across the EU in the countries with similar energy poverty contexts and policies to address them.