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upscaling best practices**

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ENPOR - Actions to mitigate energy poverty in the private rented sector

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EXECUTIVE SUMMARY

The aim of ENPOR is to deepen the understanding of energy poverty policies for the private rented sector (PRS) and support the adaptation and implementation of 10 policies and measures in 7 Member States tailored to the specific needs of the PRS. To achieve this, the method chosen by ENPOR was a participatory approach called co-codesign, that foresees the active collaboration of a selected group of stakeholders, representing the most appropriate actors to help reshape the selected policies.

The co-design model developed by ENPOR has been successful in deepening the understanding of the issues and possible solutions related to energy poverty in the PRS in the different countries and in helping to reshape the policies.

This report presents ENPOR's replication plan, designed to provide guidelines on how to effectively implement the co-design approach, starting from the analysis and mapping of stakeholders to the engagement of the various stakeholders, including tenants and landlords. The replication plan also outlines the most useful tools adopted to carry on the co-creation process and provides the monitoring framework to assess the short and long terms impacts of the actions implemented.

Finally, it provides suggestions on how to upscale the co-design of new measures aimed at energy poor households in the PRS to both increase the participation of energy poor tenants in the decision-making process and to be able to reach them more effectively.

1. INTRODUCTION AND OBJECTIVES

Energy poverty – a situation where a household cannot meet its domestic energy needs – is poorly understood in relation to the Private Rented Sector (PRS). Yet PRS tenants in Europe are more likely to be suffering from this condition than the general population, and PRS housing has generally been found to be the least energy-efficient and least well-maintained, rendering efforts to increase its efficiency an even greater challenge.

There are many challenges towards the implementation of energy efficiency improvements in the PRS, some of which are related to the lack of interest and the lack of opportunities to be engaged in energy retrofits; while others refer to the financial and social implications that follow renovation, leading to conflict, displacement, and segregation. A key barrier regarding energy poverty alleviation is the tenant-landlord dilemma.

There can be multiple pathways for energy poverty alleviation in the PRS, including regulatory, financial, and social measures. ENPOR focused on ten diverse energy efficiency policies to alleviate energy poverty to help in their redesign, taking into consideration the specific characteristics of the Private Rented Sector (PRS), while aiming to more effectively help energy poor households. The approach chosen by ENPOR is the co-codesign of these policies through the active collaboration of a selected group of stakeholders, representing the most appropriate actors to help reshape the policies. **The co-design model developed by ENPOR has been successful in delivering results and can be considered a best practice to be replicated. In this deliverable, the necessary steps to set up and implement the co-design process are illustrated.** Moreover, best practices that emerged throughout the project, which can be reproduced to further assist energy poor households in the PRS, are highlighted.

2. THE CO-CREATION PROCESS

To carry out the co-creation process in ENPOR, partners have established, in the respective countries, a specific group of stakeholders called Regional Action (REACT) groups.

The members of the REACT groups, based on ENPOR 's objectives, are organisations involved in the energy efficiency value chain, that can contribute to the shaping of policies to be more effective in bringing forward solutions for energy poor households in the PRS These include:

- Landlords/co-owners associations
- Charitable and social work associations
- Energy agencies/energy consultants
- Municipality/regional/national policymakers
- Citizens groups / NGOs, and
- Utilities

The members of the REACT groups have been involved in:

- Co-designing the policies
- Promoting the exchange and dissemination of information and network building within and across national contexts
- Facilitating the adoption of the policies by households, property owners and related market players
- Gathering data for monitoring purposes

The implementation of the ENPOR approach with the REACT groups at its core can be divided into the following consecutive steps:



Figure 1: Co-design process

2.1 PREPARATION AND SET UP

To set up the REACT groups, the first activity to be carried out is the development of a stakeholder engagement strategy (SES) in order to identify the relevant stakeholders to be involved and to assess their roles in the process.

The SES can be structured as follow:

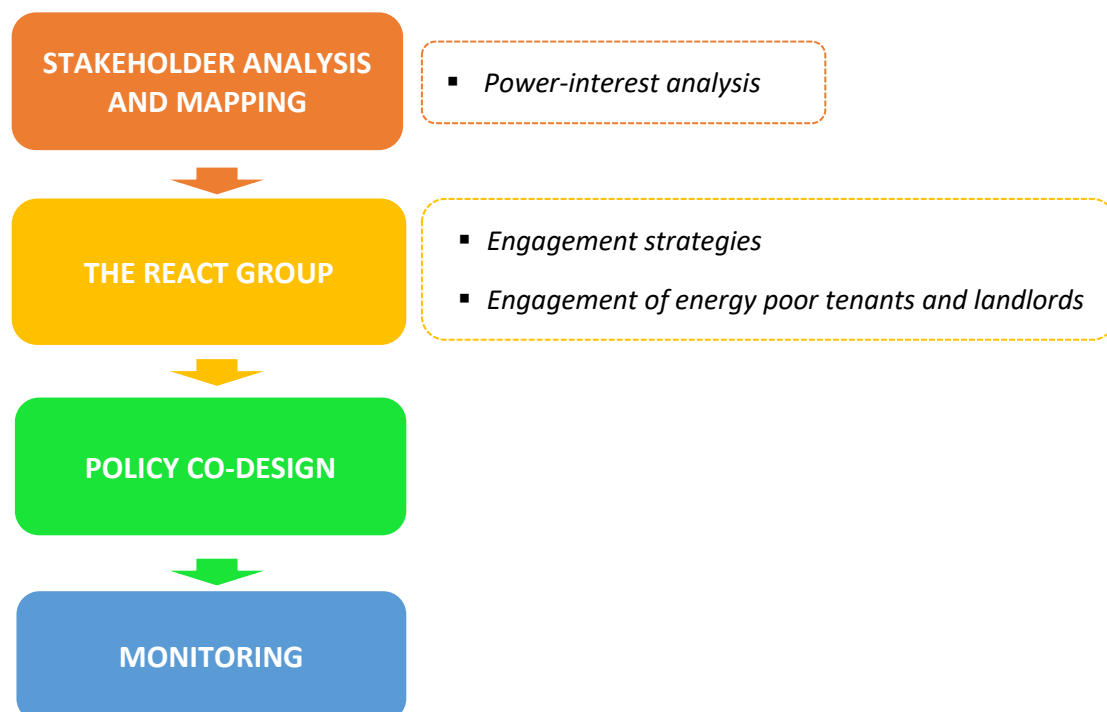


Figure 2: Stakeholder Engagement Strategy

2.2 STAKEHOLDER ANALYSIS AND MAPPING

The stakeholder analysis is an important step in the preparation phase of the co-creation process to avoid potential risks such as decreasing stakeholder engagement, a mismatch between policy design and target groups, or an imbalanced consideration of stakeholders' views.

The analysis aims to understand, assess and group the involved stakeholders, while determining their relevance to a project or policy by elaborating their positions, interests, influence, interrelations, networks as well as other characteristics regarding the envisioned issues and targets, present positions and future potential. The results allow facilitators to design adequate incentives accordingly, and carefully target communications and messaging so that the undertaking receives the expected attendance, quality contributions and feedback for the development of the selected policy proposals.

The framework for stakeholder mapping can be designed with regard to different dimensions/stakeholder characteristics (knowledge, support, time, ownership, etc.). A commonly applied option is to choose **interest and power** as categories while grouping stakeholders according to their assumed position on these dimensions. The results help to highlight possibly conflicting perspectives to be considered within the co-creation process, including opposing stakeholders and resulting adverse effects on the project.

Before starting with the power interest analysis to finetune the group of stakeholders which will participate in the co-creation process, it's important to **correctly identify the relevant stakeholders**.

This task can be guided by asking the following questions:

- ✓ Who are potential beneficiaries of a policy?
- ✓ Who could be adversely affected?
- ✓ Who would resent change and mobilise resistance against it?
- ✓ Who has which rights and responsibilities?
- ✓ Who has access to relevant resources, skills or key information?
- ✓ Who could be the voiceless groups?
- ✓ Whose behaviour has to change for success?

The ENPOR project consortium identified six key stakeholder groups in the energy efficiency value chain and the expected role they could have in the process. They are reported in the table below.

Table 1: Stakeholder groups and expected roles

Stakeholder Group	Expected role
Landlords/Co-owners associations	<ul style="list-style-type: none"> ▪ Validate the feasibility of policies from the owners' perspective and help them to renovate their stock ▪ Identify tenants at risk of energy poverty ▪ Promotion of solutions once these have been identified, sharing information with their members
Charitable and social work associations	<ul style="list-style-type: none"> ▪ Share experiences on how to identify and communicate with energy poor households ▪ Support landlords in making their stock more energy efficient ▪ Help engaging with tenants
Energy Agency/Energy consultants	<ul style="list-style-type: none"> ▪ Share insights on how to improve energy consulting and realise effective policy implementation ▪ Provide access to anonymised data/results-based evidence for different approaches; Contribute capacity-building material ▪ Connect the technical stakeholders (utilities, engineering/technical design companies etc.) with the public administration and social actors ▪ Communicate project achievements and results with key stakeholders at the national level
Municipality/regional/national policymakers	<ul style="list-style-type: none"> ▪ Provide feedback on proposed policy design ▪ Enable replicability and provide legislative and policy support and infrastructure.
Citizens groups/NGOs	<ul style="list-style-type: none"> ▪ Use their experience with the groups of people they represent to improve the chances of uptake of the newly developed measures ▪ Provide information on the acceptability of the support scheme; Provide bottom-up insight
Utilities	<ul style="list-style-type: none"> ▪ Contribute to the design, development, implementation and testing of innovative energy poverty schemes ▪ Contribute to ensure the feasibility and impact of new measures

2.2.1 Power-interest-analysis

After having identified the main stakeholders to ensure that the co-creation group will work effectively together, the power-interest analysis of the stakeholders should be performed. These stakeholders will join with very different perspectives and expectations on the issue. Limited capacities or opposing interests with other stakeholders could negatively affect the willingness to join. It is therefore important to carefully analyse and understand each stakeholder’s specific viewpoints, potential needs and interests to identify suitable messages to incentivize their participation. Moreover, identifying the stakeholders’ key interests is crucial for targeting the co-creation activities to ensure their long-term engagement in the project.

To better understand the stakeholders’ **INTERESTS**, the following questions can guide the analysis:

- ✓ What are the stakeholder's experiences with or expectations towards the policy/the co-creation?
- ✓ What are the current and potential future benefits and costs of the policy (redesign) for the stakeholder?
- ✓ What stakeholders’ interests conflict with the goals of the policy?
- ✓ What resources has the stakeholder mobilised, or is willing to mobilise?

The interests may be differentiated regarding the specific policy schemes under analysis and the engagement in the co-creation process, including the support in the implementation and dissemination activities.

Through an internal survey, the ENPOR project partners responsible for supporting the engagement strategy development provided their respective assessments of different stakeholders’ interests. The main results have been summarized in the table below.

Table 2: Potential interests of stakeholders and barriers for engagement

Stakeholder	Main interests to join the REACT group
<i>Landlords/ Co-owners associations</i>	<ul style="list-style-type: none"> ▪ Promote their interests, needs, and concerns at national level ▪ Gain new insights into renovation strategies in the PRS, including strategies to address energy poverty and support energy conservation behaviours/energy efficiency among tenants ▪ Support members with better knowledge of building retrofitting ▪ Better understanding of the correlation between energy efficiency/improving living conditions and the value of properties ▪ Provide apartments with lower utility costs; not becoming a burden to owners or tenants
<i>Charitable and social work associations</i>	<ul style="list-style-type: none"> ▪ Improve the situation of affected households ▪ Participate in the elaboration of new mitigation measures in dialogue with important stakeholders from the policy level ▪ Learn from other relevant stakeholders’ perspectives on energy upgrades in the PRS (novel forms of inclusion and participation, new financial schemes)

<i>Energy Agency/ Energy consultants</i>	<ul style="list-style-type: none"> ▪ Improving assistance to municipalities in the development and implementation of local sustainable energy plans ▪ Learn from other relevant stakeholders' perspectives on energy upgrades in the PRS (particularly novel forms of inclusion and participation, new financial schemes) ▪ Provided advice for energy poor households
<i>Municipality/ regional/national policymakers</i>	<ul style="list-style-type: none"> ▪ Development and implementation of local sustainable energy plans ▪ Combat energy poverty ▪ Opportunity to receive input from experts resulting in assistance in the development of new policy instruments
<i>Citizens groups/ NGOs</i>	<ul style="list-style-type: none"> ▪ Support their members (local citizens) on building retrofiting ▪ Strengthen energy democracy ▪ Opportunity to participate in a project that focuses on the PRS ▪ Build transnational networks and transfer knowledge
<i>Utilities</i>	<ul style="list-style-type: none"> ▪ Obligation to implement various measures to protect vulnerable customer groups ▪ Utility companies lose money and time dealing with customers in (energy) poverty who are unable to pay their bills or do it on time ▪ Interest in new policy instruments that are practical in supporting these households

2.2.2 Power analysis: stakeholders' areas of influence

The stakeholder power analysis aims to help understand how the considered stakeholders can impact the policies' development, implementation and outcomes, and to determine how relevant they are for the project's success.

It is useful for identifying who will benefit most from a policy, and the challenges that need to be faced to change behaviour, build capacities and tackle inequalities. Therefore, the power and potential roles of different stakeholders, their characteristics and operating environment as well as patterns and contexts of interactions between stakeholders should be identified and assessed. The goal is to clarify which stakeholders are particularly important and need to be kept engaged, but the analysis can also shed light on where to empower important but marginalised groups, to improve policies and institutions.

Questions that can support the **POWER** analysis¹ are:

- ✓ Who is dependent on whom?
- ✓ Which stakeholders are organised? How can that organisation be influenced or built upon?
- ✓ Who has control over which resources? Who has control over information?
- ✓ Which problems, affecting which stakeholders, are the priorities to address or alleviate?
- ✓ Which stakeholders' needs, interests and expectations should be given priority attention with respect to the policy in question?

¹ Stakeholder power analysis. Available from: https://www.researchgate.net/publication/329585973_Stakeholder_power_analysis[accessed Dec 21 2020].

After having assessed the interests and power of the different stakeholders, the results will be combined, and for each policy scheme, a power-interest grid will be developed with two axes depicting the power and interest continuum respectively.

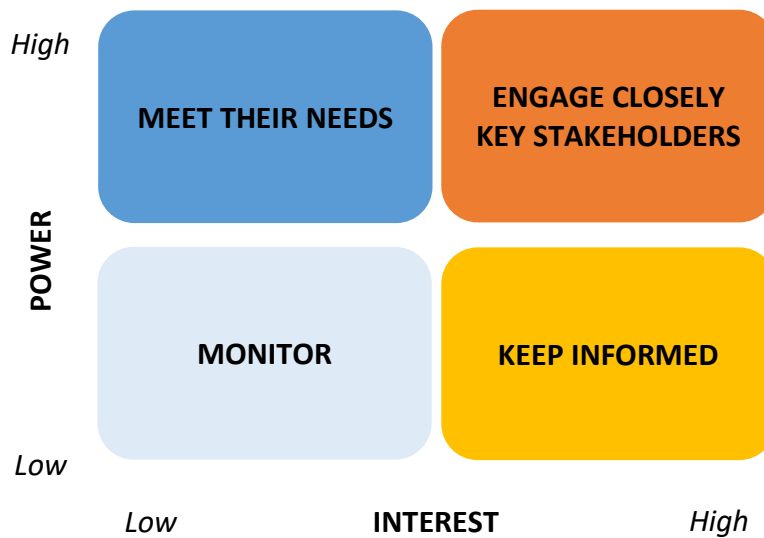


Figure 3: Power interest matrix

The resulting four quadrants summarize four categories of stakeholders. Stakeholders to the right have the highest interest in the considered issues, but their power to impact the co-creation outcome varies. Stakeholders in the upper two categories hold more power to affect or influence the project outcome, but may or may not actually be concerned about the issue.

This model helps clarify the stakeholders’ roles that would be necessary for a change, and to assess if and how this could be achieved, given the interests of the respective stakeholder. Hence, it helps in choosing the relevant stakeholders, developing adequate communication and management strategies, and moderating possible conflicts while creating a balanced, fair and fruitful co-creation process.

In ENPOR, a key challenge has been the simultaneous engagement of landlords and tenants in the co-creation process. This aspect has been a primary concern in all REACT groups, and while managing the co-creation activities, has been an aspect always taken into consideration. In most cases, the approach has been aimed at highlighting the mutual benefits that these two categories of stakeholders could achieve through energy efficiency intervention, trying to minimize possible conflicting views, while bringing the debate into the analysis of objective data. One of the results of this approach has been the development of a tool to quantify the split incentives related to renovation, creating a first assessment of which party the costs of energy efficiency interventions should be distributed to between the landlord and tenant, based on the expected benefits.

The figure below shows the ENPOR power interest analysis matrix:

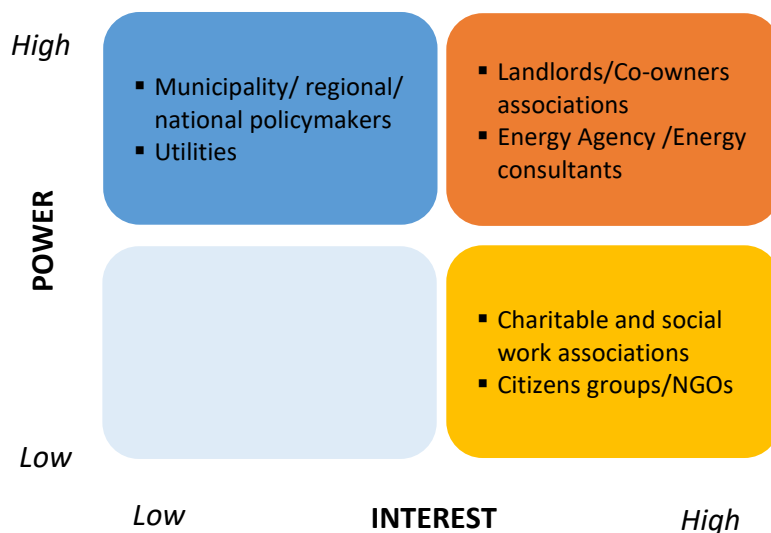


Figure 4: ENPOR power interest matrix

Since ENPOR has worked on several types of policies, the power interest analysis can be further developed by looking at the role each stakeholder can have in relation to the each type of policy. The below table summarises this analysis.

Table 3: Stakeholders' role and ability to impact the co-creation of policies (qualitative assessment based on internal ENPOR survey)

Stakeholder	Role and potential interference with ENPOR policy implementation	Policy type			
		Training and information	Grant for renovation	Programme support	EEOs
Landlords/Co-owners 'associations	Key players in ensuring that planned measures actually reach the tenants. Are responsible for the implementation of many options, over which the tenants have no control.	++	+++	o	+++
Charitable and social work associations	Can play an important role in the engagement of vulnerable tenants and the communication of ENPOR policies towards the target group.	++	o	+	+
Energy Agency/Energy consultants	Strategic participants in the REACT group both for technical issues, communication activities and to help reach municipalities and policymakers.	+++	++	++	++
Municipality/	Key players in the implementation in the	+++	+++	++	+++

regional/national policymakers	<i>development of appropriate measures and instruments. Key role in the implementation process itself.</i>				
Citizens /NGOs groups	<i>Can support policy development and shape public perception of the topic.</i>	+	o	+	o
Utilities	<i>They have direct contact with tenants and owners and access to energy consumption data. They can promote training and information activities within their customer base and facilitate the implementation of specific measures.</i>	++	+	++	+++

Note: o = no ability to impact, + = low ability to impact, ++ = moderate ability to impact, +++ = strong ability to impact

2.3 STARTING THE REACT GROUP

After these preparatory steps of having identified the right group of stakeholders that could become the REACT group members, the facilitator can begin sending the invitation to join the initiative through the most appropriate communication channel (e.g. **via a Letter of Support**) to each relevant stakeholder.

Invitations that are sent out should contain a description of the undertaking. Stakeholders need to have a clear idea of the project’s targets and their expected contributions in terms of activity and time they should dedicate to it. It’s recommendable to provide also information on the schedule, format and contents of the first meetings, so they can plan and decide on necessary preparations, and align with their other work-related obligations.

2.3.1 Communication strategies for engagement

The stakeholder analysis provides the basis for the development of targeted communication strategies. It identifies the key stakeholders for the project, elaborates in which direction these stakeholders might need to be moved, and helps to develop messages and offer incentives to attract them, to keep them engaged and to provide the necessary contributions over the entire project’s duration. Communication work can 'make or break' the co-creation process.

Well-established communication can help to reduce the friction of the engagement process and create collaborative environments for the people and organisations that usually do not meet. Communication and dissemination activities can add value to the collaborative work of the REACT groups, while well implemented communication routines can save time both for the facilitator and for the REACT group members. Considering the participation in the REACT group is on a volunteer basis, personal or professional time is the real currency that the stakeholders are investing into the participatory processes, therefore respecting the value of this time is crucial for the REACT group leaders while setting up the work schedule and communication routines for the groups.

For ENPOR, based on the power interest analysis and through an internal survey, the messages that could appeal more to the possible participants of the REACT groups to encourage them to join the co-creation process have been identified and are summarized in the table below.

Table 4: Potential incentives and corresponding messages (based on internal ENPOR survey)

Stakeholder	Interest	Messages
Landlords/ Co-owners associations	<ul style="list-style-type: none"> → Promotion of own interests → (Financial) the added value of improved energy efficiency → Knowledge exchange on renovation strategies, regular checks, financial support and behavioural approaches → Direct involvement in policy making/building efficiency policies → Meeting environmental targets/obligations → Increased understanding of the issue and problems of the tenants (social responsibility) → Improving the relationship with the tenants 	<ul style="list-style-type: none"> ▪ Chance to contribute their point of view in order to develop solutions that add value for both sides ▪ Energy poverty schemes can lead to renovation interventions that improve the energy efficiency of a property; higher energy efficiency corresponds with a higher value of properties; a chance to grant higher credits ▪ Share best practices, services and products ▪ Free access to information and knowledge on possible solutions to create additional value for yourselves and your tenants ▪ Access to new funding, financial support, retrofitting grants ▪ New insights into renovation strategies in the rented sector ▪ Increase preparedness for achieving political climate targets for the building sector ▪ Find out information about energy poverty issues and engage with topics and targets specific to their needs (how to effectively address energy behaviours and energy efficiency among tenants; how to support them) ▪ Increased understanding of landlords-tenants dilemma that can improve relations between them ▪ Energy poverty is an issue affecting both tenants and landlords ▪ The project considers property owners as part of the solution
Charitable and Social work associations	<ul style="list-style-type: none"> → Improve the situation of affected households and increase the awareness of the issue among relevant actors → Strengthen the own publicity and impact/knowledge 	<ul style="list-style-type: none"> ▪ Chance to increase awareness of the issue and transfer practical knowledge on best practices to other relevant stakeholders ▪ Opportunity to participate in a working group and to work out ways to reduce energy poverty ▪ Chance to learn from other relevant stakeholders' perspectives on energy upgrades in the PRS, particularly novel forms of inclusion and participation, as well as new financial schemes ▪ Increase awareness of their role and improve their network
Energy Agency/ Energy consultants	<ul style="list-style-type: none"> → Direct involvement in the policy-making → Facilitate a fair transition → Knowledge exchange: finance, best practice, behavioural aspects of the issue, etc. → Improving own consulting capacities → Access to energy data 	<ul style="list-style-type: none"> ▪ Opportunity of increased involvement in energy poverty-related developments ▪ Opportunity for Energy Agency to improve its capacity in the field ▪ Platform to learn and share best practices and develop a greater understanding of behavioural aspects of citizen's use of energy ▪ Learn about new tools and information to improve energy consulting ▪ Learn from other relevant stakeholders' perspectives on energy upgrades in the PRS (particularly novel forms of inclusion and participation, new financial schemes) ▪ Opportunity to access local energy data and new knowledge
Municipality/ regional/ national	<ul style="list-style-type: none"> → Overcoming energy poverty, meeting the needs of their citizens, and social 	<ul style="list-style-type: none"> ▪ Focus on the PRS and on finding the best ways to face energy poverty issues through the interaction with stakeholders more in contact with

<p><i>polymakers</i></p>	<p>responsibility</p> <ul style="list-style-type: none"> → Meeting environmental targets/obligations → Exchange with other local authorities → Increased political legitimacy → Increased capacity, effective measures → Increased access to information 	<p>energy poor households.</p> <ul style="list-style-type: none"> ▪ Opportunity to achieve urban energy poverty goals ▪ Opportunity to connect with local/regional/national authorities doing similar work elsewhere ▪ Expert engagement and public dialogue to support policy decisions ▪ Platform to learn about and share best practices within their field of expertise ▪ Chance to increase their understanding of the landlord-tenant dilemma and realise effective policy design and implementation ▪ Opportunity to communicate with other target groups • Opportunity to include the energy poverty dimension/ concerns to the building retrofitting support measures • Policy engagement, increase political legitimacy
<p><i>Citizens groups/NGOs</i></p>	<ul style="list-style-type: none"> → Raise awareness for people in need → Knowledge exchange, access to information → Improve own capacities to consult or create suitable accommodation → Direct involvement in related policy making → Strengthen energy democracy 	<ul style="list-style-type: none"> ▪ Opportunity to rise energy poverty into the focus of public discussion; a chance to speak for the groups they represent and jointly work out solutions to support affected persons ▪ Opportunity to find out information about energy poverty issues and engage with topics and targets specific to their needs ▪ Opportunity to exchange views with representatives of other groups, to cooperate and transfer knowledge ▪ Chance to gain an improved understanding of local energy issues ▪ Reduce energy consumption by promoting the use of energy-saving tips ▪ Opportunity to get in direct contact with political actors in a working group
<p><i>Utilities</i></p>	<ul style="list-style-type: none"> → Obligation to protect vulnerable customer groups → Obligation to achieve energy efficiency (in the case of EEOs) → Customer care, improving public relations and corporate social responsibility → Direct involvement in related policy making → Improve the own financial situation 	<ul style="list-style-type: none"> ▪ Opportunity to actively contribute to the relevant issue of energy poverty and to develop and evaluate mitigation concepts together at the political level ▪ Chance to fulfil their energy efficiency obligations (where applicable) ▪ Chance to improve public relations and promote Corporate Social Responsibility strategies ▪ Competitive advantage, introducing differential pricing models (dynamic billing) to the market ▪ Chance to increase financial stability by reducing the number of customers in utility debt/decreasing costs of debt management

2.3.2 Engagement of energy poor tenants and landlords

The engagement of energy poor tenants and landlords within the co-creation is crucial to ensure the development of targeted policies that match their needs and challenges. As experts in their sectors, prospective beneficiaries of policies are important contributors to transformative service design and help determine which instruments and measures can be the most appropriate as well as their likelihood to succeed in their objectives.

When engaging energy poor tenants, it has to be taken into account that this is not a homogenous group. Acknowledging differences in terms of socio-demographic characteristics (e.g., age, gender,

ethnicity, family situation, employment status), housing and energy supply conditions thus represents a suitable strategy to identify subgroups of vulnerable households in the PRS and specific aspects to consider with regard to their engagement. Table 5 displays the tentative identification of some of the most vulnerable groups in the European PRS, which have been targeted by ENPOR policies.

This classification is based on three axes of vulnerability – socio-demographic (involving factors such as income, ethnicity, gender etc.), housing (involving the regulation and structure of the housing stock in particular), and energy (concerning the efficiency and type of energy supply). The classification highlights intersections among the different types of vulnerability, and households that are more likely to be vulnerable based on one of the axes (as listed in the vertical column).

Table 5: Overview of vulnerable groups in the European PRS

	SOCIO- DEMOGRAPHIC	HOUSING	ENERGY SUPPLY
SOCIO- DEMOGRAPHIC	-	<ul style="list-style-type: none"> ▪ Single-parent tenants ▪ Ethnic minority tenants ▪ Tenants with unemployed or older family members ▪ Tenants with small children ▪ Tenants with disabled or chronically ill members. 	<ul style="list-style-type: none"> ▪ Tenants suffering from other vulnerabilities beyond the home (e.g. high transport costs)
HOUSING	<ul style="list-style-type: none"> ▪ Households in short-term let 	-	<ul style="list-style-type: none"> ▪ Tenants in unaffordable and inflexible energy pricing arrangements (e.g., all utility payments wrapped in one)
ENERGY SUPPLY	<ul style="list-style-type: none"> ▪ Tenants living in energy-inefficient homes 	<ul style="list-style-type: none"> ▪ Tenants in homes with an expensive energy supply (e.g., electric only) ▪ Households without electricity and/or gas 	-

This classification reflects the variety of constellations and multidimensional causes of energy poverty, which translate into correspondingly diverse needs and challenges to be considered within the engagement strategy. The following table displays the assumed relevance of different barriers for the socio-demographically defined subgroups and provides possible strategies to overcome them.

Table 6: Barriers to tenant engagement, relevance for socio-demographic subgroups and possible strategies to overcome them

BARRIERS FOR ENGAGEMENT	TARGET GROUP(S)	POSSIBLE STRATEGIES
Lack of trust	All; Ethnic minority tenants	<ul style="list-style-type: none"> Engagement via intermediary organisations, e.g., NGOs, etc. Privacy-sensitive design of engagement
Lack of time	All; Single parent tenants (mostly female)	<ul style="list-style-type: none"> Enable individually scheduled participation Ensure efficient implementation of engagement formats Use of digital formats
Lack of interest	All; Female tenants	<ul style="list-style-type: none"> Communication of benefits Focus on function/benefits rather than characteristics of technical solutions Provision of incentives
Low sense of self-efficacy	All; Tenants with unemployed family members	<ul style="list-style-type: none"> Transparent communication of co-creation approach (role of tenants as experts in their realm)
Lack of resources	All; Single parent tenants	<ul style="list-style-type: none"> Implementation of engagement activities in spatial proximity Use of digital formats
Lack of ICT hardware or skills	All; Tenants with older family members	<ul style="list-style-type: none"> Reliance on offline formats Bilateral training on how to tools
Language issues/low literacy	All; Ethnic minority tenants	<ul style="list-style-type: none"> Engagement via intermediary organisations Use of non-technical language Translation of material
Low visibility/low representation in citizen groups	All; Ethnic minority tenants	<ul style="list-style-type: none"> Active recruiting in specific areas based on e.g., building data, unemployment rates, proportion of migrants etc.

In addition, incentives (and barriers) for their engagement within the co-creation may also differ depending on the policy type (i.e., financial or non-financial). While the further development of, for example, an energy advice measure is tangible and promises immediate benefits to participating tenants, the improvement of a national renovation grant scheme may seem more abstract and require additional efforts in the involvement and activation of landlords.

2.3.3 Engagement strategies

The engagement of energy poor households is the main challenge for successful project implementation. Vulnerable households may not have the motivation to contribute to collaborative design activities, especially in sensitive topics such as energy poverty. In addition to a possible uneasiness about acknowledging and discussing their own disadvantages with strangers, energy poor tenants may perceive their possibilities for reducing their energy consumption and lowering their energy bills as limited. Setting up an initial contact is thus the most critical part of this process.

In order to overcome possible distrust towards the co-creation and to locate energy poor tenants in the first place, close collaboration and the development of ongoing partnerships with trusted intermediaries is a recommended approach. These intermediaries need to be ideally community-based and have a visible and long-standing presence in areas where private renting is common.

Possible intermediaries in the context of ENPOR comprised consumer associations, tenant associations, social welfare associations, quarter management, community groups, pensioner and women organisations.

In addition to using adequate channels for outreach, the second important aspect to consider within recruiting is to use the right messaging content, as anticipated in the previous paragraphs. Depending on the available resources, incentives offered by facilitators for participating in the co-design process can be the provision of practical energy-saving advice in combination with low-effort technical solutions (e.g., energy-saving bulbs, water-saving shower heads, socket strips with a switch, thermostats, etc.). Given that a part of energy poor households tends to under-consume basic energy services, an appealing message should, in general, go beyond monetary savings and place a stronger emphasis on possible health and comfort improvements.

In cases, where the co-design aims at the further development of grant schemes or other investment-related policies, tenants may only benefit from the result if their landlords can be convinced to make the respective investment decisions. In these instances, recruiting should thus aim to bring both parties on board in order to establish the relevance of the process for the tenants. In fact, given their central role, a more conducive approach here could be to initially approach interested landlords (e.g., via associations) and ask them to engage their tenants in the process. A precondition for this is an existing trustful landlord-tenant relationship and a commonly shared interest of achieving an equitable solution for both sides.

2.3.4 Gender-sensitive approach

Finally, it should be emphasized that a special focus should be given to improving the situation of women and examining the role of gender within the context of energy poverty, while including these issues in the co-creation process and within the policy conclusions. Evidence exists that there are significant gendered differences regarding energy-related practices and the relationship with the energy system, which can also affect the risk of energy poverty, the experience of being energy poor, and the capacity to overcome it.

There are increasing numbers of one-person households in the EU, the majority of which are female, moreover statistics show clearly that single parenthood is strongly gendered: many more households with a single adult and dependent children are headed by women (almost 80%) compared to men. Despite having higher educational aspirations, women still often face structural inequalities in the labour market, being employed in professional fields with lower income levels. Combined with part-

time models due to family role patterns, this can raise the risk of poverty.

ENPOR thus seek to particularly integrate women into the co-creation process in order to ensure that the developed policy recommendations and that proposed policy instruments and suggestions were gender sensitive.

Throughout the whole process, women should be especially encouraged and empowered to join the process. Therefore, in the preparatory actions for co-designing, it is important to approach and engage women through the right channels and with the right messages.

This starts with the design and preparatory materials that should be in line with gender-focused communication. The messages should invite and encourage the different female groups, assuring that the project wants to hear about their situation and underlining that the project does not only speak about technical issues, but seeks to provide benefits in the field of health, comfort improvements, and monetary savings for them and their families and children.

Places for physical meetings should be selected where women feel comfortable. A trusted and inspiring environment could be built by smaller groups to share their experience, or by creating groups consisting only of women (at least in a first step).

Finally, the engagement of these target groups is also possible via intermediary organisations and local actors that work with women.

2.4 CO-DESIGN APPROACH

The co-design approach which was developed within ENPOR consists of the following three steps:

STEP 1

Elaboration of an initial proposal by the facilitator including the requirements and the guidance on integrating PRS policies in the respective country's policy and financing framework. The formulation of the initial proposal should be accomplished taking into account various parameters, such as the priorities and needs of energy poor households and property owners, potential legal or market related obstacles, gender issues and the implementation of incumbent social and other policies in each country, ensuring the proposal of consistent policy packages to tackle the multiple dimensions of energy poverty.

STEP 2

Co-creation with the REACT groups, ensuring realistic design and buy-in for both property owners and tenants. The targeted policies should be discussed, consulted and adapted with the national REACT groups taking into consideration both the findings of the previous step and the analysis of the best practices, structural factors and conditions of energy poverty policies as resulted by the ENPOR project. In the co-creation phase, the initial proposal and guidelines prepared in the previous step should be improved and tailored to the actual needs, priorities and expectations of the REACT groups so as to result in more effective policies for the alleviation of the energy poverty.

STEP 3

Finalization of the design elements, setting in place the necessary procedures: the design of the policies is finalized following the completion of the required modifications, and the proposals from the REACT groups.

According to the proposed methodological approach, the co-design process is based on the conduction of three main REACT group meetings and follow-up REACT meetings to monitor and fine-tune the implementation of the co-designed policy. A key input to this process is the perspective of energy poor tenants (and landlords), the target group. While both groups’ interests should be represented in the meetings by representatives of tenant/landlord associations, charitable organisations or similar, direct exchange with members of the target group is deemed essential to ensure the development of practical and targeted policies. Dealing with a sensitive and personal issue, on which energy poor tenants may not be willing to talk about in a high-level stakeholder setting, ENPOR thus offers an alternative tiered approach to organize the inclusion of target group perspectives and ideas. Instead of having energy poor tenants directly participate in the REACT group meetings, a separate format of meetings specifically designed for them, called **TARGET group meetings**, can be implemented in between REACT group meetings. These TARGET group meetings are important to have direct feedback from energy poor tenants (and landlords) to assess if aspects related to the co-design of ENPOR policies are effectively shaped to respond to their needs. The process is visualised in the following figure:

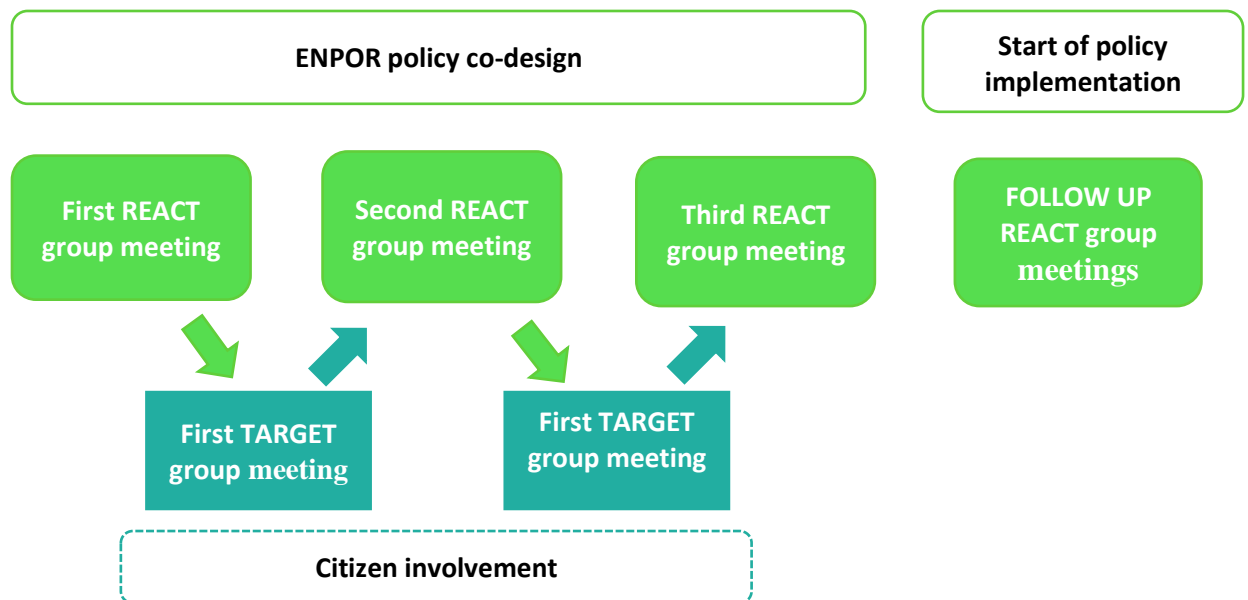


Figure 5: Visualisation of ENPOR policy co-design process

- *First REACT group meeting*

According to the proposed methodology, this meeting serves as a constituting session, in which the REACT group members should get to know each other and should be introduced to the project setup and objectives. The facilitators should provide a brief analysis of the selected policies to be further developed, including their linkages to social and other relevant policies, and highlight the main challenges to be addressed by the co-creation. Moreover, the participants should be presented with an initial mapping of the main elements, which according to the facilitator, must be adapted. Further meeting targets should be the identification of different (and possibly conflicting) stakeholder interests, expectations and perspectives, and the definition of a joint vision of the co-creation target. The collection of stakeholder perspectives should both serve to update the stakeholder analysis guiding the communication strategy as well as inform the further policy improvement co-design process. At the end of the meeting, participants should have a clear understanding of the general objective, the process towards that objective and the expectations of the facilitator regarding their contributions (such as engagement of target groups, provision of monitoring data, dissemination of results etc.).

- *First TARGET group meeting*

In a second step, the collection of energy poor tenants' perspectives can be implemented through this meeting to identify their needs and practical challenges vis-à-vis the policies to be further developed. Depending on the national context, the identified relevant sub-groups and pre-existing channels for outreach, the most suitable method/format for data collection may vary. Within this step, facilitators should carefully evaluate sub-group-specific needs and challenges, which may be multidimensional and thus require an equally multifaceted approach to address them. Accordingly, the analysis could well point to the need for going beyond improving the delivery of a particular benefit (such as behavioural advice) and to (additionally) reflect on ways to (better) integrate different services/benefits within a targeted policy package.

- *Second REACT group meeting*

The second meeting should start the actual co-design process. Within this meeting, stakeholders should be presented with different content relevant to the co-creation such as European best practices regarding the delivery of the services/benefits in question, insights on structural factors impacting energy poverty in the PRS and tenant/landlord perspectives collected in the previous step to be considered within the policy design. Following this, the initial policy proposal informed by these insights should be presented and discussed. To this end, the group should provide feedback and highlight potential flaws in the design and barriers to its implementation as well as possible solutions to overcome them. To structure this process, the facilitator should categorise the identified barriers with regard to their type (such as regulatory, economic, social, or technical), possible solutions, and the actors to be involved to overcome them. In case there are several solutions for a distinct issue, suitable tools (such as SWOT analyses, and decision trees) should be employed to identify the best approach. Particular consideration should be given to gender-related differences with regard to the perception and/or utilisation of policy-related benefits. An additional aspect to be discussed in the meeting is the monitoring framework, including minimum data requirements as well as the methods, timeline and responsibilities for their collection. Finally, the design components of the further developed policies should be agreed upon by all stakeholders and be ready for presentation to the target group for final feedback.

- *Second TARGET group meeting*

To ensure its practicality and utility to match the target group's needs, this meeting should be organised in order to collect feedback from energy poor tenants (and landlords) on the further developed policy proposal. To this end, the proposal and its inherent steps of services/benefits delivery should be described to the target group(s) by the facilitator within a dedicated session (either within another workshop/focus group meeting or a second round of bilateral interviews). Subsequently, tenants and/or landlords should be asked to point out any remaining barriers for them to benefit from the proposed policy or perceived mismatch between the provided benefits and their needs. Based on this feedback, possible practical solutions to further improve the policy utility should be discussed and documented for the following REACT group meeting.

- *Third REACT group meeting*

The meeting should aim to finalise the policy design process based on the tenants' feedback and to prepare for policy implementation and its monitoring. In case there are several (mutually exclusive) adaptation options on the table, the group should decide which option provides the greatest benefit to a previously defined target group and/or is considered to maximise the overall policy impact. Furthermore, the mode and timeline for policy monitoring should be defined while including milestones, after which the accompanying policy delivery and impact evaluation should inform potential adjustments.

- *Follow-up REACT groups*

The REACT group meetings in the second phase of the co-creation will largely serve three main purposes: monitoring of the policy implementation and possible design and delivery adjustments, (stakeholder specific) capacity-building activities for its members and dissemination of project results. As pointed out, content of those meetings will differ to some extent depending on the issues arising with the respective policies. Moreover, the composition of REACT group participants may be varied depending on the respective meeting targets.

2.4.1 Best practices for co-designing

Based on the experiences developed through the REACT groups in the different countries, when co-designing communication material or providing training to reach energy poor households, the following best practices should be followed:

- To minimise the risk of lack of acceptance by the target group, the direct involvement of energy poor households in the pilot phase for testing the materials is very relevant. Active use in the consultation and feedback from the households themselves ensures that the underlying objectives can be met, the new materials have the desired effect on energy poor people and that they represent real added value for them.
- It's important to consider that the willingness to accept support services is also based on trust. Many people fear stigmatisation when taking advantage of support services and therefore sometimes even refuse direct financial support. It is therefore very important for implementation to have **a local partner on board** which can gather a great deal of trust.
- A direct transmission of the material developed for energy poor tenants is not always possible

because of the difficulty of identifying them and then actually having access to them. There is usually a need for someone in the **intermediary role** (e.g. energy advisors, but also social aid organisations, etc.) to use and pass on these materials for assistance. It is therefore necessary to get them on board in the co-creation process. The inclusion of these stakeholders in the REACT group, where the materials are shared to gather feedback from the members and also for dissemination through their channels, proved to be very effective.

- A collaboration between energy coaches and representatives from the social domain with the right expertise is also highly desirable and necessary for proper guidance and help for residents in lowering their energy bills.
- A close cooperation with relevant stakeholders from the policy and administrative level is also strategic to ensure the acknowledgement of materials and to include them in the advisory offers nationwide.
- The inclusion of building manager associations in the REACT groups has been perceived as an important channel in helping to reach energy poor tenants and landlords, while making them understand the advantages of energy efficiency interventions.
- To reach a wider number of energy poor households, it's important to take into account linguistic barriers. Hence, the translation of the material into other languages identified as particularly relevant for counselling energy poor households should be considered the priority. To reach vulnerable target groups such as people with a migrant background, it is also important to cooperate with civil society organizations, which are in contact with them and recruit multilingual energy coaches so that the conversation and advice can be done in the language that is most easily understood.
- Moreover, to facilitate the distribution of the material, it's useful to provide professional printing in all languages, which should be made available free of charge to counselling institutes and other organisations supporting energy poor households. In particular, organisations supporting households in the private rented sector, for example, the tenants' association, should be prioritised and be the first to be provided with prints of the materials and to be re-supplied as needed.
- When choosing how to develop the communication material, it proved effective to emphasize aspects related to comfort and health benefits, as these issues are often put in second place compared to the saving of costs. Moreover, the use of visual aids to convey advice content and gamified self-experience activities to learn how to appropriately use energy efficiency devices at home has proven to be a suitable approach to facilitate knowledge transfer against the background of language barriers in a majority of non-native target group members.
- Within ENPOR, information and training activities have been conducted with high school and university students. Students have shown high interest in topics related to energy efficiency. They are keen to learn about behaviours that can be implemented in their homes to save energy, as this topic is not always extensively discussed. Many students are unaware of the concept of energy poverty and whether they fall into this category. University students can quickly benefit from advice related to energy saving at home and learn about what they can do to increase their in-house comfort. At the same time, high school students can have an influence themselves by being the ones helping to increase energy efficiency awareness and push for changes.

The development and implementation of new measures at the structural level can be a more lengthy and difficult process that also depends very much on the current political framework conditions. Access to relevant stakeholders is crucial in order to provide the impulse for new solutions.

The close cooperation in REACT groups has proven to be effective in implementing measures and also in opening up new possibilities for implementation and cooperation. The interaction in the REACT groups can be further improved if actions are complementary to existing sector-specific exchange processes. When discussing new measures, the REACT groups should include members from the federal and state level as well as the social and energy sectors. It's important to have actors who have a broader and updated view of existing support instruments for energy poverty in the REACT groups, in order to avoid working on overlapping measures or intercepting new political priorities.

2.4.2 Co-creation methods and tools

While the overall target of the co-creation process to (further) develop the design of policies is clear, the following section provides some guidelines for its operational implementation. To this end, a range of possible methods and tools to structure the REACT group meetings and to achieve the desired outcomes are outlined. To facilitate the selection of the most suitable method for the facilitator's purpose, they are sorted according to their function (i.e. the target which their application can help to achieve). Most of the below methods are applicable both offline and online, with some adaptation.

Tables 7 and 8 below provide respectively an overview of methods, tools, their fields of application and their suitability for the different stakeholder groups and of different digital tools, providers and their requirements.

Table 7: Overview of methods, tools, fields of application and their suitability for the different stakeholder groups

Field of application	Method	Necessary tools for online adaptation	Preparation	Suitable for
Collect qualitative data	<i>Focus groups:</i> qualitative research method based on group discussions	Video-conferencing	In online settings, it is useful to limit the number of each group to 4-5 participants. The sessions last about 60-90 minutes instead of the more common 2 hours for in-person focus groups.	TARGET groups
Elaborate sensitive issues	<i>Open spaces:</i> work on one aspect of the topic	Video-conferencing (break-out function) and collaboration tools	The participants come together in subgroups. Only a rough topic is agreed upon, for which the attendees are to develop ideas and proposals for solutions. There is no timetable or a fixed agenda. If a participant finds that he is better off in another group, he may change the group after a short break. One person from the group must record the ideas. The results are to be presented later on in the plenum.	REACT groups
Include all perspectives	<i>Table sessions:</i> short speeches and discussion	Video-conferencing (break-out function)	The participants are divided into small groups. In each group, one of the participants gives a short impulse lasting a maximum of 15 minutes. This is followed by a joint discussion with the entire group. If necessary, the facilitator can plan the impulses with the stakeholders before the workshop.	REACT groups

	<i>World-Café:</i> successive rounds of shorttalks	Video-conferencing (break-out function) and collaboration tools	Subgroups of 3-4 people are formed. In successive rounds of talks lasting 15-20 minutes, questions or problems are discussed simultaneously in all subgroups. In each round, the participants use collaboration tools to articulate what’s most important to them. After each round, the participants mix again. There are moderators for each topic who welcome newcomers, summarize what has been discussed so far and start the discourse again.	REACT groups
Solve conflicts	<i>Six thinking heads:</i> elaborate on different perspectives	Video-conferencing and collaboration tools	This method encourages a group to approach the issue at hand from a number of perspectives. Each participant is assigned one of six “hats” that represent different ways of thinking: process, facts, feelings, creativity, benefits and cautions. The process works best with a time limit (5 minutes maximum) for each hat. This encourages the group to ‘try on other hats’ and helps people consider the idea from different perspectives.	REACT groups
Decide	<i>SWOT Analysis:</i> evaluate and select design options	Video-conferencing and collaboration tools	In the context of policy co-design, SWOT analysis is suitable for a detailed discussion, evaluation and selection of different design options. For a given option, the 4 dimensions of strengths, weaknesses, opportunities and threats/risks are brainstormed by all participants. The perspective on strengths and weaknesses is an internal view. Opportunities and risks arise from an external perspective. The time required for the brainstorming depends on the desired level of detail of the analysis.	REACT groups
	<i>Surveying</i>	Interactive presentation tools	Interactive presentation tools allow for an ad hoc survey among all participants, which can be useful both for online and offline workshops. Participants are provided with a link for a survey and the results of their voting are instantly shown on the facilitator’s screen.	REACT groups

Table 8: Overview of different digital tools, providers and their requirements

Tool	Description	Provider	Requirements	Link
Video conferencing	These tools allow face-to-face interaction with the participants, video recording and streaming. Also, options to break out groups into subgroups or private spaces are needed for most workshop setups. This option is available with applications such as Google Meet, Zoom, Jitsi or GoToWebinar.	Google Meet	Registration of facilitator	https://meet.google.com
		Zoom	Registration of facilitator	https://zoom.us
		SpatialChat	Registration of facilitator	https://spatial.chat
		Jitsi	No registration necessary	https://meet.jit.si/
		GoToWebinar	Registration of facilitator	https://www.gotomeeting.com/webinar
Communication tools	Ad-hoc instant	Freenode	No registration necessary	https://webchat.freenode.net

	Chats ideas and other notes can be collaboratively written down	Systemli	No registration necessary	https://pad.systemli.org
Interactive presentation tools	These tools can provide the following functions: writing comments and questions and upvoting comments and questions from others, conducting surveys and graphic presentations of the results, interactive quizzes, and joint production of keyword clouds.	Mentimeter	Registration of facilitator	https://www.mentimeter.com
		AhaSlides	Registration of facilitator	https://ahaslides.com
Digital collaboration tools	These tools replace the whiteboard or flipchart that is used in the sessions. Some example exercises are collective brainstorming activities in which the participants write down ideas on virtual post-it notes, plot post-it notes in a matrix or map to prioritize items, or simply keep track of inspiration and solutions that come up during the session in a visual way.	Whimsical	Registration of all participants	https://whimsical.com
		Miro	Registration of all participants	https://miro.com
		Google Jamboard	Registration of all participants	https://jamboard.google.com
Digital work platforms	Digital work platforms, on which documents will be uploaded and shared for joint editing can facilitate the exchange of information and the collaborative work on REACT group outputs beyond the meetings.	Microsoft Teams	Registration of all participants	https://www.microsoft.com/en/microsoft-teams/free
		Google Drive / Docs	Registration of facilitator	https://drive.google.com

2.5 MONITORING FRAMEWORK

Following the policy co-design including possible capacity-building activities, REACT groups will be tasked to reflect on the performance of the redesigned policies based on information collected for monitoring purposes. To this end, a monitoring framework has to be developed to identify potential problems and ineffective design elements in the policies, ensuring early course correction and improvement. The monitoring process can also identify early successes and bottlenecks and communicate them to the policy co-design process to facilitate improvements as needed.

The monitoring framework developed for ENPOR includes key performance indicators and simplified monitoring sheets to track the effectiveness of the policies and considers the EU Governance Regulation, which foresees the monitoring of the energy poverty levels including the number of energy poor households and the reporting of the implemented policies for the alleviation of energy poverty. There are two sets of monitoring activities in ENPOR, which are presented in Table 9.

Table 9: ENPOR Monitoring sets

MONITORING SET	DESCRIPTION
SHORT-TERM IMPACTS	Monitoring the co-creation impacts in terms of the effectiveness of policies as well as the number of policymakers and stakeholders influenced. It also includes monitoring of the capacity-building activities implemented within the REACT groups.
POLICIES LONG-TERM IMPACTS	<p>Monitoring of energy savings, CO2 reduction, investments triggered, energy poverty alleviation, and other factors related to the implementation of the policy. It will include key performance indicators and simplified monitoring sheets.</p> <p>Many of the same KPIs can be applied to the monitoring of different policies; however, key metrics and parameters might have to be adjusted according to the police type and country context.</p>

2.5.1 Monitoring of short-term impacts

The monitoring methodology to assess the short-term impacts includes the collection, documentation, and analysis of data for monitoring purposes. Data collection should be realised by the facilitator, through varied methods, and saved in files dedicated to monitoring purposes.

To ensure a clear and easy monitoring process, the following monitoring files were created in ENPOR to save the collected data:

- **“Stakeholder Engagement Monitoring” file:** An Excel file in which quantitative information related to the meetings and other stakeholder engagements is gathered, from REACT Group workshops to bilateral calls. It is mainly used to assess the number of meetings and participants, types of stakeholders involved and gender aspects, amongst others.
- **“Meeting minutes template” word file:** A meeting minute template to be used by facilitators for documenting relevant qualitative and quantitative information about the meetings with stakeholders from the REACT Groups.

The set of performance indicators used in ENPOR, together with the source of data is shown in the table below.

Table 10: Short-term impacts indicators and data source

INDICATORS	MONITORING METHOD OR DATASOURCE
NUMBER OF POLICY MAKERS IN REACT GROUPS	REACT Groups-Stakeholder Engagement Monitoring file
NUMBER OF STAKEHOLDER GROUPS IN REACT GROUPS	REACT Groups-StakeholderEngagement Monitoring file
NUMBER OF IMPLEMENTED CAPACITY BUILDING ACTIVITIES	REACT Groups
QUALITY OF IMPLEMENTED CAPACITY BUILDING ACTIVITIES	Satisfaction survey to assess if the REACT Groups participants consider the planned policies to be realistic and achievable, as well as their satisfaction with the entire co-creation process.

REACT GROUP WORKSHOPS CONTRIBUTE TO POLICYMAKER'S WORK WITH COMBATING ENERGY POVERTY	Satisfaction survey Bilateral exchange with stakeholders to report country context and policy changes
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2.5.2 Monitoring of long-term policy impacts

In terms of long-term policy impacts, facilitators are tasked with the monitoring of energy savings, CO₂ reduction, investments triggered, energy poverty alleviation, and other factors related to the implementation of the policy. To this end, both suitable KPIs (cf. Table 11) as well as methodologies to capture them need to be defined.

Given that facilitated policies may refer to financial, information and market-based ones, bottom-up methodologies are recommended to calculate total energy savings. In this direction, within ENPOR the methodological framework of the multEE project² was utilised. There is a risk that the monitoring of energy savings by way of theoretical savings in kWh does not adequately reflect the effectiveness of the interventions as an intrinsic risk of all schemes that promote energy efficiency and calculate energy savings on theoretical values. Actual measurement of savings through monitoring energy consumption would of course increase the reliability of the assumptions made. Yet, their implementation cannot be guaranteed (due to cost, unwillingness to install a monitoring system, etc.). If possible, facilitators should gather information based on energy bills pre and post-renovation (in a representative sample). In the cases where energy providers are responsible for the action (e.g., under EEOs) they will provide their own data from their customers.

Table 11: List of possible KPIs for long-term policy impact monitoring purposes

KEY PERFORMANCE INDICATORS	SOURCE
PRIMARY ENERGY SAVINGS TRIGGERED BY THE PROJECT	Bottom-up calculations, household energy consumption data
INVESTMENTS IN ENERGY RETROFIT TRIGGERED BY THE PROJECT	Administrative data on policy outputs from implementing entity
REDUCTION OF GREENHOUSE GASES EMISSIONS (IN TCO ₂ -EQ/YEAR)	Bottom-up calculations
NUMBER OF INFLUENCED DOCUMENTS - STATEMENTS FROM POLICY MAKERS OR NATIONAL POLICY LEGISLATIVE DOCUMENTS	Literature review, REACT Groups
NUMBER OF (ENERGY POOR) HOUSEHOLDS IMPACTED BY THE POLICY	Administrative data on policy outputs from implementing entity
CHANGES IN ENERGY POVERTY LEVELS USING DIFFERENT INDICATORS	Own surveys, EPAH indicator dashboard
REPORTED WELFARE IMPROVEMENTS BY IMPACTED HOUSEHOLDS (E.G., IN TERMS OF WELLBEING/HEALTH, INDOOR COMFORT LEVELS, ENERGY COST SAVINGS, ETC.)	Surveys among beneficiaries/energy poor tenants

² <https://multee.eu/>

In order to keep track of the achievement of energy savings and the other impacts, the implementation of the policies must be closely monitored.

The monitoring of the policies' impacts has to be performed having in mind the following objectives:

1. To monitor the long-term impacts (explained before)
2. To monitor the energy poverty alleviation impact
3. To monitor the policy implementation for the identification of potential problems, ineffective design elements and for early course correction. The monitoring process also identifies early successes and bottlenecks and feeds them back into the policy design process to facilitate improvements.

In this process, the facilitator responsible for policies will also be responsible for:

- Providing technical support for the effective monitoring and quantification of the triggered impacts from the implementation of the policies.
- Collecting the required data for monitoring and identifying areas for improvement.
- Quantifying additional impacts (e.g., comfort level increase) based on questionnaire surveys with the involved energy poor households.
- Suggesting proposals for the potential readjustment of the policies according to the established targets and requirements.
- Proposing additional and more effective data collection procedures.

Overall, the implementation of the policies can be monitored as follows:

- **Monthly meetings:** facilitators should regularly review the status of implementation of the policies, potential challenges (e.g., related to collecting data and information), and discuss solutions and ideas to overcome challenges and/or improve the implementation of the policies.
- **Questionnaires and/or interviews:** conducted by the facilitator with the implementing bodies, to collect relevant information and data.
- **Questionnaire surveys:** For energy poor households and property owners, a baseline setting and an outcome evaluation (before-after-comparison) should be implemented based on questionnaire surveys (half yearly), which are an integral part of on-site activities such as energy consulting, funding applications or technical installations.
- **Monitoring sheet:** Excel file to gather relevant information from the policies implementation collected by the facilitator for continuous assessment and feedback loops with the policy design.

2.5.3 Split incentives quantification tool

In general, energy renovation of buildings is the most effective option for addressing energy poverty in the PRS. However, introducing regulatory measures is not an easy task due to the importance of avoiding market distortions and the difficulty of involving all responsible public authorities. The split incentive issues have been extensively discussed in the REACT groups, especially in Greece. The REACT group's contribution has been beneficial in providing technical expertise and highlighting the issue to the public authorities involved to collectively find some solutions.

To this end, ENPOR has developed a “**split incentives quantification**” tool. The main objective of the tool is to identify the share of the triggered benefits from the implementation of energy efficiency interventions between landlords and tenants to quantify the appropriate allocation of costs or subsidy rates for both sides, towards specific renovation scenarios in several geographical/national contexts.

More specifically, the “split incentives qualification” tool provides useful insights to all key actors involved in the PRS energy efficiency renovation value chain (e.g., energy agencies, construction companies, landlords, vulnerable tenants, etc.), while it also assists policymakers in quantifying the financing requirements for promoting energy efficiency investments in the PRS, and, thus, in designing energy efficiency policies that target the PRS more efficiently.

3. UPSCALING BEST PRACTICES

Based on ENPOR's experience, areas to be further improved or that should be considered as the starting point for the creation of new measures or initiatives are listed below.

- **Establishment of a decentralised consulting services:** Traditional, one-off counselling is often not enough to adequately support vulnerable households and lead to long-term improvements. Consultation for energy poor households should be seen more as a form of accompaniment that supports those affected in solving their problems. Locally based support institutions often already know who experiences social hardship and would need more support, but they lack the resources to provide this support themselves. Therefore, it would be helpful to establish consulting services at the local level and support those institutions that already have access to the target groups. For this purpose, sufficient financial resources would need to be provided sustainably and systematically. This could be done, for example, through a tendering process through which support institutions that meet the criteria receive additional resources to support energy poor households on site. In particular, smaller organisations should also be able to receive support in order to start at the local level and to enable support directly in various forms.
- **Social Energy Advice:** Social advisors are trained to provide low-threshold energy advice to vulnerable households. The focus is on topics that can help to reduce energy consumption without investments and help with problems in paying energy bills. The training participants receive introductions to the topics of electricity, heating and hot water and learn from experts the most important recommendations for households to be able to make their energy consumption as sustainable as possible. They also learn where the most common problems of energy poor households lie and what the causes are. By combining their knowledge from the social sector with new knowledge from the energy sector, they are ideally suited to support energy poor households. The Social Energy Advice, developed in Austria, offers great potential to be implemented in other countries in a similar form and should be further disseminated as a measure.
- Energy saving measures distributed in **combination with coaching and installation and repeat visits achieve the highest effects on the energy bill.** The same insight counts for reaching tenants. It is necessary to do it all: **flyers, posters, e-mails, door-to-door-visits, events and working together with the social network.** The approach should be tailor-made. As a municipality and as the executor of a project, it is important to thoroughly study the target group you want to reach. On top of that, projects should facilitate a long-term relationship with the tenants.
- **Training and further education for both energy and social advisors:** Social workers and energy advisors need new further training courses tailored to energy poor households to enable effective care and support. Training offers for different qualification levels and target groups should be developed and nationally established, to enable a targeted addressing of the problem. Here, social workers should be trained mainly on energy topics, such as energy saving in the home and energy billing, while energy advisors should gain knowledge on working with vulnerable households, as these are usually not their target group for energy counselling. An essential part of this education and training should be the involvement of representatives of the target groups. People who have an understanding of the cultures and languages of origin of relevant target groups can enrich the efforts and act as voluntary coaches. This enables a

deeper and more authentic interaction with the affected communities and can help increase awareness and understanding of energy poverty and possible solutions. In particular, women with a migration background can be empowered through this involvement and take on essential roles in advising and supporting energy poor households. This integrative and participative approach can help increase the scope and effectiveness of measures to combat energy poverty.

- **Data collection and monitoring:** To effectively combat energy poverty, a continuous monitoring system could be developed and established. This could be achieved by developing suitable indicators and cooperating with statistical institutes. The development of such indicators can also support the official definition of energy poverty in the country and make it possible to assess its manifestation in the long term and also to evaluate implemented measures. The **Energy Poverty Dashboard - EPD** (<https://www.energypoverty.info/>) realized by ENPOR created a reference point to start this activity. The EPD serves as a platform for stakeholders and policymakers to assess the success and failure of policies. It provides a platform for knowledge exchange within and between different national contexts as well as facilitates the dialogue between the REACT groups in national contexts. An information and action hub, decision-support and public engagement tool all at once, it provides customised new data in a user-friendly format while also offering affected stakeholders information on relevant initiatives, collaborations and forms of support.

In conclusion, it has to be taken into account that combating energy poverty requires a coordinated and multidimensional strategy tailored to the specific needs of the affected households.