POWERPOOR

Empowering Energy Poor Citizens through Joint Energy Initiatives

POWERPOOR – Estonia's policy roadmap to alleviate energy poverty (Part of D5.9)

Working on the ground with energy-poor households and policymakers on mitigating energy poverty levels.

July 2023

www.powerpoor.eu

Introduction

In the POWERPOOR project, partners are actively assessing causes of energy poverty and suggest short-term and collective energy action solutions to mitigate this problem. A highly diverse network of Energy Supporters and Mentors has been trained and is being engaged to further support energy poor households to implement solutions. The project also sets up Local Energy Poverty Mitigation Offices in engaged municipalities. POWERPOOR strives to trigger high-impact change, not only on the local and regional level, but also on the national and European level. Such a multi-level governance approach will result in long-lasting impact and coordination between local needs and national (e.g., National Energy and Climate Plans) and supra-national enabling frameworks.

The aim of the national roadmaps is then to build on current project activities and to enable the application of the POWERPOOR approach to promote integrated energy poverty mitigation policies across all regions and cities within the pilot countries. This roadmap template is a synthesis exercise based on several outputs of the Work Packages and is to be used by project partners and Energy Supporters & Mentors during the last year of the project and beyond its lifetime (also possibly to be incorporated into future Horizon projects).

Next to the project national partners, stakeholders out of the network of Energy Supporters and Mentors, especially those at the National Liaison Groups, should be invited, to take ownership of the national roadmaps and take the process forward. This work will result in lessons-learned, which, in turn, generate policy recommendations on how the national regulatory / incentive framework should be adapted to mitigate energy poverty in the first place.

The key content defined in the national roadmaps will input the POWERPOOR exploitation plan as well as the POWERPOOR EU Policy Roadmap.

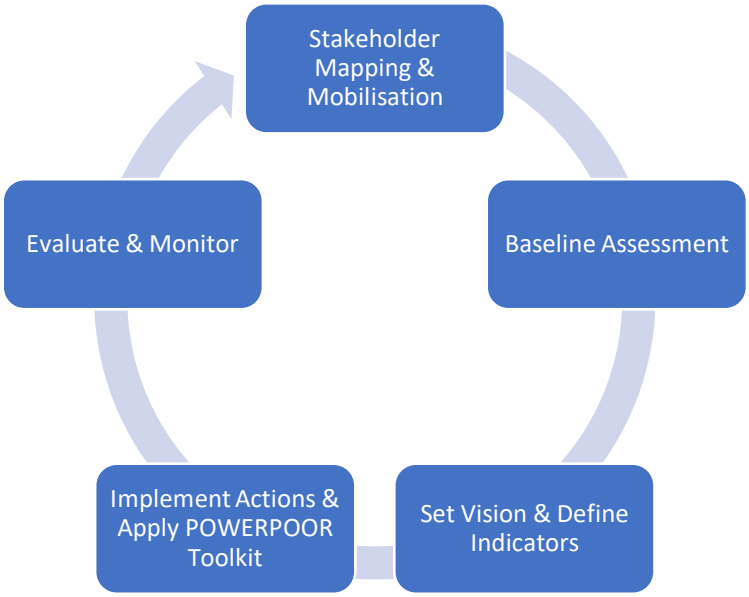
What is the methodology for the national roadmaps?

The development and adoption of the national roadmap is subdivided into two phases, which each encompasses specific steps on an integrated management cycle (adapted from ICLEI Green Climate Cities Programme). The cycle has been chosen as a basis for the roadmap since it promotes a holistic approach to policy making.

Phase 1 takes place until the end of the POWERPOOR project and includes steps which shall be carried out by partners and Energy Supporters and Mentors until then. Phase 2 takes place within one year after the project, or on any other timeline decided by the

partners and stakeholders. Once the cycle has been completed a first time, the process can be repeated (and could potentially serve as a basis for future projects).

Figure 1 Roadmap Methodology



Adapted from ICLEI Green Climate Cities Handbook 2016

National Roadmap Development

Phase 1

The following three steps correspond largely to the activities carried out within the POWERPOOR project and rely strongly on the findings of Deliverable 4.2 "Baseline Assessment Report". They will form the basis for the national roadmaps and for the subsequent steps of Phase 2.

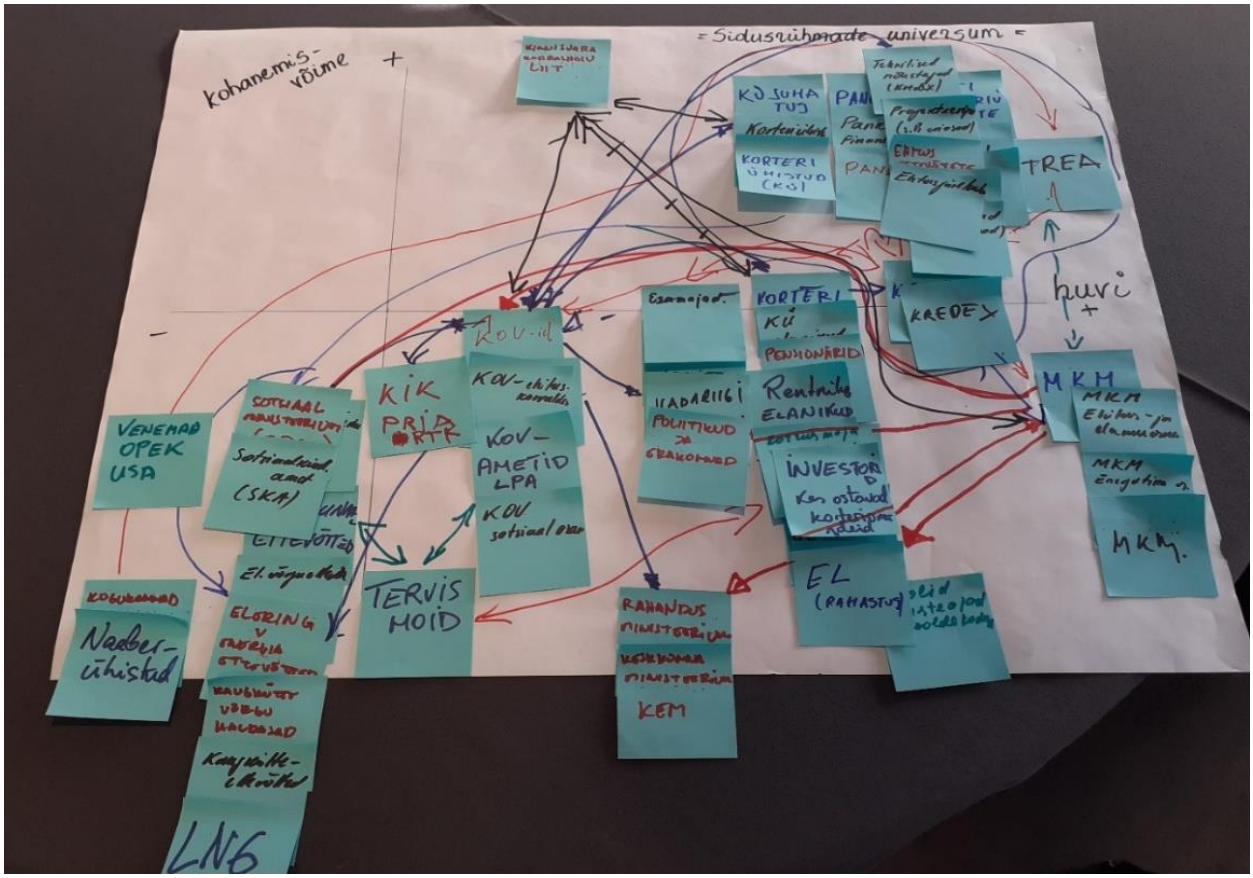
Step 1: Stakeholder Mapping

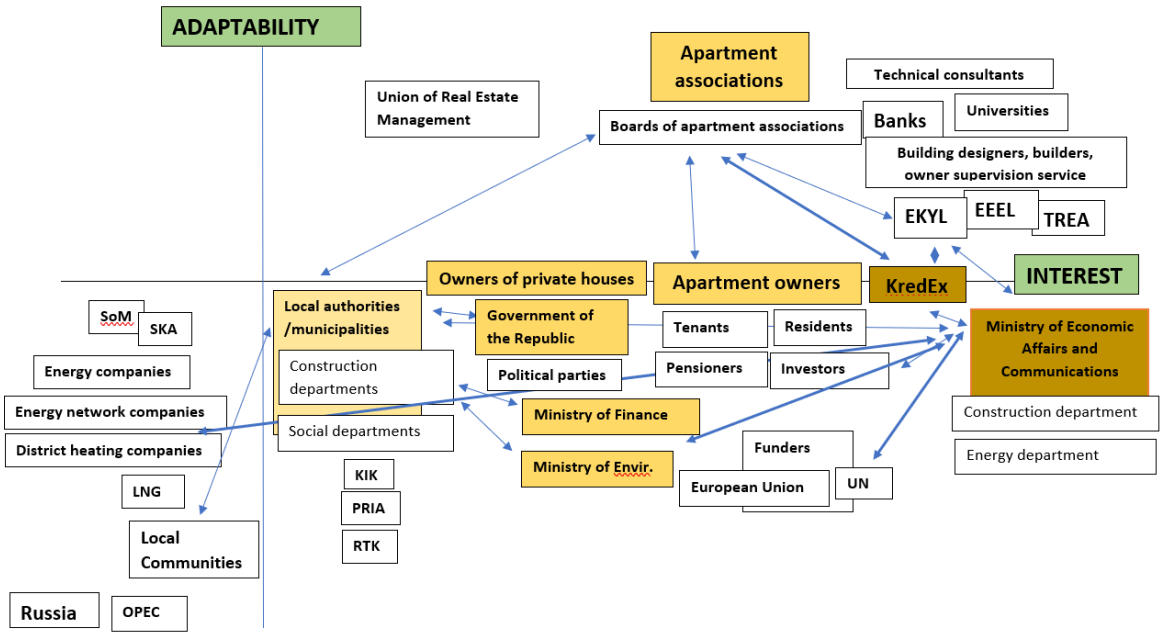
As part of D4.1, project partners have carried out an initial assessment of stakeholders who are part of the National Liaison Groups, have created an overview of the expectations the different stakeholders have towards the project as well as their influence and level of expertise. As part of the roadmapping process, it becomes important to identify the relative importance of particular stakeholder groups vis-a-vis energy poverty mitigation and to identify how flexible stakeholders are to adapt their everyday (business) practices and what kind of networks exist between them. The stakeholder universe methodology, as presented in Module 4 lends itself well for this.

This exercise was done together during the stakeholder consultations and is aimed at understanding stakeholder relations, to identify possible disconnection, flows of knowledge/resources and power. “Tackling energy poverty” is the main star, stakeholders with the highest interest (to mitigate energy poverty), are closer to it. Flexible stakeholders are placed above the x-axis, non-flexible stakeholders beneath. Stakeholders placed closer to each other have a closer working relationship. Once this is mapped out, connect stakeholder to depict fluxes of resources, money or others. Spot potential clusters of interest and identity as well as critical stakeholders, which link clusters and act as “gatekeepers” or knowledge brokers. Then the network was analysed.

During the workshop, together with the participants, add new stakeholders, or consider where to place already identified ones on the stakeholder universe canvas.

Figure 2 Estonia Stakeholder Universe





Description of the stakeholder universe:

The analysis of the stakeholders tackling energy poverty highlighted 3 most important groups of stakeholders:

- **State authorities**, where the **Ministry of Economic Affairs and Communications** was marked as most interested, most responsible, and most influential in this field. The ministry works closely with other state institutions (fund KredEx, other ministries, etc.), municipalities, universities, civil society organisations and have consultation competence with private companies, banks, and funding bodies in EU and beyond. It means the ministry have the means to engage and mobilise all the other stakeholders for mitigating energy poverty.

- **Local municipalities,** which has the obligation of creating sustainable living environment. Although the municipalities have not had much role of an initiator of energy efficiency in Estonia, they still have much potential to be a facilitator for energy efficiency renovation and establishment of energy communities in cooperation with local apartment associations and

- **Apartment associations** - non-profit organisations established for collective management of the apartment buildings, which are uniting home-owners and making decisions about mitigating energy poverty in apartment buildings. As around 70% of population are members of apartment associations in Estonia, the apartment associations, more than 23,000 across the country, were considered as **the central stakeholder group and target group when it comes to planning and implementing new measures for mitigating energy poverty** through renovation of building stock or implementing solutions of renewable

energy for self-consumption. As Estonia has still a quite few energy communities, the apartment associations, which are already working with collective investments for renovation and renewable energy solutions of buildings, can be seen as a first step towards energy communities as well.

During the stakeholder mapping task, the participants of the workshop emphasized the importance of outside factors and players having an impact on the mitigation of energy poverty on a national level. Therefore, outside and international stakeholders were added to the stakeholder universe to give a wider picture.

As a result of the national roadmap development, a joint statement to commit to the goals and activities mentioned in the roadmap is planned to be made by the stakeholders that were involved in the roadmap development process.

Once the most important stakeholders have been identified as a core group, they need to be mobilized and their commitment to this national roadmap needs to be secured. The way the commitment is secured is up to the project partners. One way to do this could be to already include mention of the roadmap development process as part of the MoUs which are signed as part of the stakeholder liason groups. Alternatively, consider a simple joint statement communicated through project partner channels following the stakeholder consultation for this national roadmap.

Step 2: Baseline Assessment

The state of play / baseline for what concerns energy poverty in the overall country has already been analysed at the beginning of the project and captured in D4.2. As part of the roadmap process, it is recommended to revaluate the baseline parameters (subject to available capacities of course) to see if any changes have occurred since the last baseline assessment. The baseline assessment should then be presented during the meeting with the stakeholders of the National Liaison Group. Key policy areas to be, at least, presented as part of the baseline assessment are the following. Consider how energy poverty mitigation is addressed in the following areas and fill out the table below.

This overview in the Table below was drawn up by EKYL according to the best current knowledge, with provided information based on public data. Due to rapid changes in the energy sector, the overview or the information contained therein are not final and may not correspond to future situations or the joint statement that is planned to be made by the stakeholders that were involved in the roadmap development process.

Table 1 Estonia Baseline Assessment Revision

National Energy and Climate Plans (NECPs)	In the final NECP (https://energy.ec.europa.eu/system/files/2019-03/ec_courtesy_translation_ee_necp_0.pdf Estonia reports the number of households affected, recognising the relationship between energy poverty and energy efficiency in buildings. The approach to address energy poverty issues has not been further developed. The NECP only includes a reference to ongoing preparatory work to better define objectives and corresponding policies and measures. The NECP brings out that, according to the statistics of the European Energy Poverty Observatory, Estonia does not stand out as very problematic. For example, 2.9% of households had a problem with heating and 6.3% of households have arrears in paying energy. The share of Estonian families' energy payments from income is very close to the EU average (16.3%) at 16.2%. The only issue is cooling, where keeping the living space cool is more problematic than in many other countries (Estonia 23.3% compared to the EU average of 19.2%). In summary, it can be said that in terms of energy purchasing power, Estonia's situation is slightly better than the EU average. *Comment: However, energy poverty was described as a serious issue in 2021. Estonia will update the NECP in 2023.* The NECP declares, that by 2030, 80% of the heat produced in Estonia will be produced on the basis of renewable energy sources. *In October 2022, Estonia's parliament adopted a new renewable electricity target of 100 per cent by 2030, and the additional energy should come largely from wind and solar power plants. The amendment to the law obliges both the current and future governments to quickly eliminate the barriers to the development of renewable energy. Creating additional grid connection opportunities, establishing a wind energy benefit scheme for local governments and*

	residents, and speeding up the planning process are examples of positive steps that have already been taken or are currently being prepared. (Source: https://bankwatch.org/blog/100-per-cent-renewable-electricity-is-a-realistic-and-necessary-target-for-estonia-and-europe)
Social care	Welfare Development Plan 2016-2023 does not handle the energy poverty as an independent issue. It focuses on poverty reduction and pursues reduction of the absolute poverty rate to 5.8% and reduction of the relative poverty rate to 15% by 2023. Household subsistence is observed completely on the national as well as local government level.
The building sector - renovation efforts	Estonian long-term strategy for building renovation (https://www.ekyl.ee/wp-content/uploads/Long-term-strategy-for-building-renovation-in-Estonia.pdf) brings out that energy poverty is not currently a widespread problem in Estonia. According to the European Energy Poverty Observatory data, 2.9% of households reported problems with heating their homes and 6.3% of households had energy bill debts. The strategy states (p. 86) that when planning full renovation of existing buildings, it must be remembered that some households are not capable of carrying out renovation. Renovation of a building requires the owner to make a financial contribution even if there are support measures available and households with lower incomes are not able to provide that. Vulnerable households need additional support for participating in energy saving measures. The main goal of this long-term renovation strategy is the full renovation, by 2050, of buildings erected before 2000. The total floor area of the buildings needing renovation is 54 million square metres. According to the strategy, the percentage of this total area to be renovated by 2030 is 22%, by 2040, 64% and by 2050, 100%.

	Broader use of local renewable energy along with renovation of buildings is foreseen. The best technical solution for densely populated areas is the installation of solar panels for producing electricity. The strategy also foresees (p.69) that the electricity consumption of buildings previously without ventilation systems that are fitted with mechanical heat recovery ventilation systems will increase as a result of the renovation. The CO2 emissions of private houses where stove heating is replaced with a heat pump will also increase as a result of the renovation, because previously emission-free woodfuel is replaced by specific emission-intensive electricity. The increase in electricity use can be set off by installing solar panels. The Estonian regional economy scenarios point out the vulnerable regions of the country and emphasise that in addition to giving an advantage to regions outside the capital in support measures, extra measures, such as state guarantees for home loans and renovation loans outside larger cities and greater inclusion of the local government level in measures supporting renovation of buildings, should be taken.
Energy policy/Social Care Policy	The "Energy Sector Organisation Act" (https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/528102022001/consolide) uses definition from the Social Welfare Act: person suffering from energy poverty' means a person living alone, or a family who has, at least once during the last six months, received a subsistence benefit and whose income per family member in the last month does not exceed the minimum wage. The Act states, that the long-term renovation strategy (see the previous point) must include an overview of the support measures that have been elaborated to alleviate energy poverty. Special rules must be applied concerning persons suffering from energy poverty and vulnerable energy consumers or concerning

	providers of services intended for such persons or consumers. *Comment: The Act doesn't specify the possible special rules but just indicates that there is a possibility to apply special rules in the implementation process of the law.* The Act declares setting up a support framework for renewables self-consumption, that will address: 1) access of final consumers and end users, including those experiencing energy poverty as well as those that are part of a group that is at risk of energy poverty, to renewables self-consumption; 2) unjustified barriers to the financing of projects in the market and measures to facilitate access to finance; 3) other unjustified regulatory barriers to renewables self-consumption, including for tenants; 4) incentives to owners of buildings to create opportunities for renewables self-consumption, including for tenants; 5) the granting, to renewables self-consumers, with respect to self-generated renewable electricity that they feed into the grid, of access to relevant non-discriminatory support schemes as well as to all electricity market segments; 6) the obligation of renewables self-consumers, when feeding electricity into the grid, to contribute in an adequate and balanced way to covering the overall costs of the system.
Policy to promote community-ownership of energy	Energy Sector Organisation Act gives a definition for the "renewable energy community" but no clear target numbers are set in national strategies. 'Renewable energy community' means a legal person controlled by shareholders or members who are a natural person, small or medium-sized undertaking or municipality, whose residence or seat is in the vicinity of the renewable energy projects that are owned or developed by such a legal

	person and whose primary purpose, instead of financial profits, is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates. The definition doesn't mention vulnerable consumers but the Act still states under another paragraph that 'vulnerable energy consumers' means persons living alone or families whose monthly income per family member during the last six months does not exceed the minimum wage. The long-term strategy for building renovation promotes broader use of local renewable energy along with renovation of buildings. The best technical solution for densely populated areas is the installation of solar panels for producing electricity.
Policy to promote (collective) finance / crowdfunding	The collective financing is promoted through grants for solar panels of apartment building and apartment building renovation loans. (https://kredex.ee/en/services/ku-ja-kov/Apartment-building-renovation-loan) The apartment building renovation loan is directed towards apartment associations that have received a negative response to their renovation loan application from a bank or an offer with unreasonable terms. With the help of the loan it is possible to finance renovation works and to combine the loan with reconstruction grant offered by KredEx. Works that can be financed by the loan are all co-ownership-related renovation works that ensure the structural stability of the apartment building, increase the energy efficiency of the residential building or improve the living conditions of the apartment building's residents. Only apartment associations can be recipients of the loan (It's not possible to apply for the loan as a private person or energy community). The minimum amount is EUR 15,000, and the maximum is EUR 3

	million per apartment association, including if it manages several apartment buildings. Self-financing starting from 5%. The security is the apartment association's claims against its members for the payment of management costs. Grant for solar panels of apartment building supports the capacity of apartment owners to invest in activities that promote energy efficiency in buildings and local renewable energy. If the grant can be used to purchase the energy production and storage installation. The power of the installed energy production installation should not exceed 200 kW. Only apartment associations can be recipients of the grant. (It's not possible to apply for thegrant as a private person or energy community). The energy production installation should be installed on the roof or façade of the apartment building. The maximum grant per applicant is EUR 150,000, covering up to 30-40% of the project costs. If state funding (reconstruction grant) is used for full-scale renovation, apartment association is obliged to use a certified professional called "technical consultant" in the renovation process. Using the services of a technical consultant is not required for partial reconstruction. The technical consultant advises the beneficiary on the budgeting of design and construction works, procurement of design and construction works, preparation of time schedules and carrying out other necessary processes. The main task of the technical consultant is to advise the apartment association on technical issues, in particular before the start of the renovation works, but also in the later stages of the renovation process.
The energy market (e.g. social tariffs / tax incentives)	Several actions have been taken to minimise the impact of price increases on energy poverty. On October 2021, 50% of the electricity network service fee was deducted from the electricity bill of all

	private and business consumers. Households whose income is below the median received 80% refund for the price increase of electricity, gas, and district heating. On January 2022, 100% of gas network fees were reimbursed to all private and business consumers from January to March 2022 and a price cap was set on electricity and gas for private consumers. Any excess was deducted from the household's monthly bill from January 2022 to March 2022.
Consumer protection	See the previous point
SECAPs	SECAP of Tallinn points out that there is a need to develop local energy production, thanks to which residents of the city can also participate directly through energy cooperatives. Energy cooperatives allow people to produce and consume green energy themselves flexibly and by spreading risks, thereby offering an alternative to individual small-scale production and dependence on large producers. By the example of SECAP of the city of Tartu, the following measures should be taken on the local government level to mitigate energy poverty: • support the establishment and promotion of renewable energy communities (energy associations); • provide technical, legal and economic counselling; • raise awareness and educate the residents on the topics of energy efficiency and energy poverty; • establish a working group on renovation capacity; • support the preparation of design documentations for renovating apartment buildings.

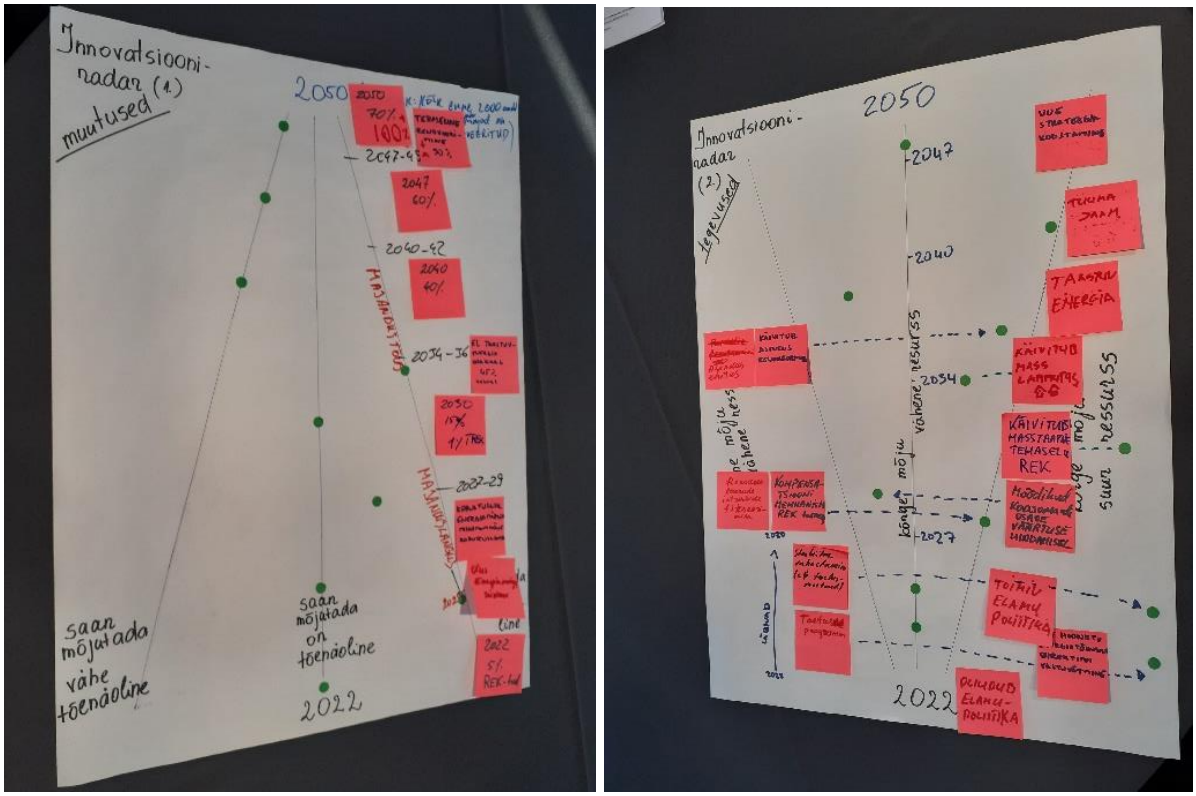
Step 3: Set Vision, envision Actions and define Indicators

Now that the stakeholders have been gathered, committed and the national regulatory context reassessed, it is time to foster a common understanding on what alleviating energy poverty actually means for the different stakeholder groups. During the

stakeholder consultation, a concrete vision for energy poverty mitigation should be created. The future radar methodology lends itself well for this purpose.

By applying this tool, we planned policy actions equipped with a global overview of the milestones to achieve, coupled with their feasibility and the influence you can put on them to happen. The second "cone" will present a detailed plan of actions to implement to achieve the changes envisaged in the first "cone". Be as specific as possible when it comes to assigning dates.

Figure 3 Estonia Future Radar



The discussions emphasized the importance of long-term solutions to energy poverty. Providing financial support for vulnerable households can't be a sustainable solution. Instead, there is a need to focus on the renovation of the housing stock so that all homes are energy efficient and have low energy costs for all consumers. Therefore, the change foreseen in the roadmap development was the renovation of all housing stock built before 2000 by 2050.

Table 2 Estonia Actions

Policy Sector	Actions to be implemented	By when?	By whom?

Energy communities	New legislation and supportive legal framework developed for the creation and management of energy communities	2023	Ministry of Economic Affairs and Communications, Ministry of Justice
Buildings	New program of financial support measures developed for apartment associations and owners of small residences, including new grants for renovation and renewable energy solutions	2023	Ministry of Economic Affairs and Communications
Housing	New housing policy – currently the energy poverty is targeted through energy policy or social policy, leaving out the aspects of housing issues that brings these two sides together. This cap should be filled with new housing policy.	2025	Ministry of Economic Affairs and Communications, Ministry of Social Affairs, municipalities
Buildings	New system of energy certificates in force	2025	Ministry of Economic Affairs and Communications
Buildings	New training programs for apartment associations and homeowners on renovation, energy efficiency and energy communities	2025	EKYL; Ministry of Economic Affairs and Communications

For each of the co-identified actions, indicators should be defined to enable monitoring progress at regular intervals.

Table 3 Estonia Action-Specific Indicators

Indicator	Baseline (2022)	Target (date dependent on action.
New/updated legislative acts	o	1-3 (2023)
New programme of financial support measures	0	1 (2023)
New housing policy	0	1 (2025)
New system of energy certificates	0	1 (2025)
All residential buildings built before 2000 are renovated at least to energy label C	10%	100% (2050)
Training programmes	1	4 (2025)

Phase 2

The previous first three steps of the management cycle laid out the basis for the national roadmaps. The content of those steps will have been discussed during various stakeholder consultations. The results will inform the next two steps which take place within one year following the closure of POWERPOOR (or any other timeline decided upon during stakeholder consultations).

Step 4: Implement Actions and apply POWERPOOR Toolkit

This is where the concrete actions, defined previously, are implemented according to the established timeline.

Table 4 Estonia Action Elements

Action : New legislation and supportive legal framework developed for the creation and management of energy commuities	
The responsible entity and leading person	**The Ministry of Economic Affairs and Communications, The Ministry of Justice**
The target group for the action	**Apartment associations, homeowners, municipalities**
Project design and documentation	**Steps of legislative process**
Scheduling	Ready by 2023
Budget	Not enough information
Drivers	The need for more clear legal acts in this field, obligations from EU directives and pressure from the stakeholders
Barriers	Organisational aspects Low priority for legislative bodies

Action : New programme of financial support measures for apartment associations and owners of small residences	
The responsible entity and leading person	**The Ministry of Economic Affairs and Communications**
The target group for the action	**Apartment associations, homeowners, municipalities**
Project design and documentation	1. **Preparations for the new financing tools (2023)** 2. The first open call to participants (2023)
Scheduling	50-100 buildings supported/year
Budget	Not enough information
Drivers	High energy costs that motivate homeowners to act Available demo cases and best practice projects that showcase the achievable results with previous financing measures

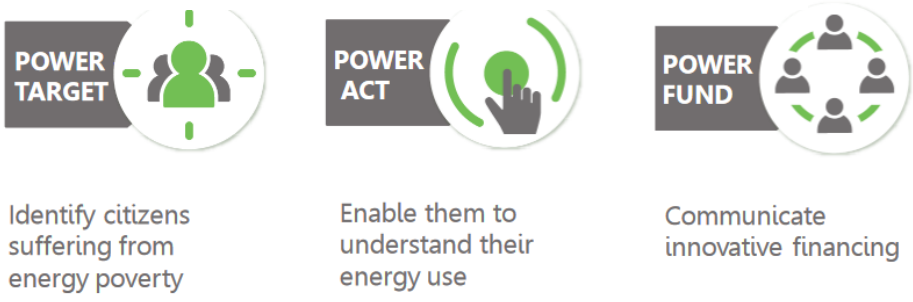
Barriers	Organisational aspects Lack of funds for sustainable financing Low awareness of participants to attend the calls
Action : New housing policy	
The responsible entity and leading person	**The Ministry of Economic Affairs and Communications, The Ministry of Social Affairs, municipalities**
The target group for the action	**Apartment associations, homeowners, social housing providers**
Project design and documentation	**Steps of legislative process**
Scheduling	2025
Budget	Not enough information
Drivers	The actual need from everyday life
Barriers	Organisational aspects Financing
Action : New system of energy certificates	
The responsible entity and leading person	**The Ministry of Economic Affairs and Communications**
The target group for the action	**Apartment associations, homeowners, municipalities**
Project design and documentation	**Not enough information available for detailed project design**
Scheduling	2025
Budget	Not enough information
Drivers	Obligations from EU directives
Barriers	Organisational aspects Financing Low awareness
Action : Renovation of all housing stock built before year 2000 to be energy efficient	

The responsible entity and leading person	**The Ministry of Economic Affairs and Communications**
The target group for the action	**Apartment associations, homeowners, municipalities**
Project design and documentation	1. **Preparations for the renovation programme (2023)** 2. Providing new financing measures (2023-2025) 3. New digital tools for renovation (2025-2030) 4. Start of the renowation vawe (2030) 5. Renovation and monitoring (2023-2025)
Scheduling	The percentage of total area to be renovated by 2030 is 22%, by 2040, 64% and by 2050, 100%.
Budget	According to the Long-term strategy for building renovation the total financing need by 2050 will be €8.4 billion.
Drivers	High energy costs that motivate homeowners to act Available demo cases and best practice projects that showcase the achievable results
Barriers	Organisational aspects Financing Low awareness
Action : New training programmes for apartment associations and homeowners	
The responsible entity and leading person	**The Ministry of Economic Affairs and Communications, EKYL**
The target group for the action	**Apartment associations, homeowners, municipalities**
Project design and documentation	1. Preparation of training programs, development of the curriculum

	(2023) 2. Pilot trainings (2024) 3. Beginning of the training period (2025)
Scheduling	The percentage of total area to be renovated by 2030 is 22%, by 2040, 64% and by 2050, 100%.
Budget	Not enough information
Drivers	High energy costs that motivate homeowners to act Need for new knowledge and skills
Barriers	Organisational aspects Financing Low awareness

The POWERPOOR toolkit is incremental to the implementation of the individual actions and should be used actively by whichever stakeholder (e.g. municipality or POWERPOOR partner) has been identified, in the previous steps, as being responsible for implementation.

Figure 4 POWERPOOR Toolkit



Step 5: Monitor & Evaluate

One year after completion of the POWERPOOR project (or any other timeframe decided upon during the stakeholder consultations), the first monitoring & evaluation process should take place to see whether the roadmap's actions, and ultimately its vision, are being met.

Table 5 Estonia Action-Specific Indicators

Indicator	**Baseline (2022)**	**Target (date dependent on action.**	**Target Achieved?**
New/updated legislative acts	o	1-3 (2023)	
New programme of financial support measures	0	1 (2023)	
New housing policy	0	1 (2025)	
New system of energy certificates	0	1 (2025)	
All residential buildings built before 2000 are renovated at least to energy label C	10%	100% (2050)	
Training programmes	1	4 (2025)	

This table tracks the progress of general energy poverty indicators leaning on the categorization provided by EPAH.

Table 6 Estonia General Energy Poverty Indicators

Indicator	Baseline (2022)	Target and Date (Vision)	Target achieved?

Inability to keep home adequately warm	2%	0% (2030)	YES/NO (further details)
Arrears in paying energy bill	3.9%	1% (2030)	
High share of energy expenditure in income	16.8%	10% (2030)	
Dwellings with presence of leak, damp or rot	10%	0% (2050)	

Recommendations on how to implement the national roadmap

The above process will have resulted in a national roadmap which has been co-created with a diverse group of stakeholders from the POWERPOOR National Stakeholder Liaison Groups. Following the national policy dialogues and consultations, partners will reflect on the roadmap drafting process and can suggest additional recommendations to specific stakeholder groups on HOW the above-listed actions can be implemented. Recommendations should be aimed at the following groups and be included below:

For Municipalities

Provide technical, legal and economic counselling to apartment associations, homeowners and persons who are interested in establishing or joining energy communities;

Raise awareness and educate the residents on the topics of energy efficiency and energy poverty

Provide financial support measures for energy efficiency solutions

Facilitate district level renovation to support large-scale energy efficency renovation with lower costs for homeowners through joint procurement process

Participate in energy communities together with other local stakeholders

For National Governments

Support the establishment and promotion of renewable energy communities;

Raise awareness and educate the homeowners on the topics of energy efficiency and energy poverty so that they will be able to make independent decisions about the renovation of buildings or joining an energy community.

Support the preparation of standard model project documentations for renovation of apartment buildings.

Secure the long-term sustainability of financing measures, like grants and loans for apartment associations and homeowners, for renovation and the implementation of renewable energy solutions.

Develop sustainable housing policy which would bring together the different aspects from energy policy and social policy concerning mitigation of energy poverty

Support new grid networks for renewable energy production in energy communities

For Civil Society

Raise awareness and educate the residents on the topics of energy efficiency and energy poverty

Engage residents in community activities and round-tables to discuss energy efficiency and energy saving issues

Establish energy communities

For The Private Sector

Contribute to the development and implementation of the new technical and digital solutions for renovation like renovation of buildings with pre-fabricated panels, or using the digital twin of Estonian housing stock in the designing process.