



Working on the ground with energy-poor households and policymakers to mitigate energy poverty



December 2021 www.powerpoor.eu



























Universal access to secure, sustainable, and affordable energy services for all, thus enhancing quality of life and improving energy security

United Nations Sustainable Development Goals, Goal 7, https://sdgs.un.org/goals/goal7



Table of Contents

Table of Contents4		
1.	Foreword - How to use the guidebook	5
2.	Energy poverty mitigation through joint energy initiatives	6
	The phenomenon of energy poverty	6
	The role of local authorities in tackling energy poverty	6
	The POWERPOOR approach	9
3.	Preparing the bottom-up approach	11
	Baseline assessment	11
	Engaging with stakeholders and involved parties	12
	Capacity building and multi-level knowledge creation	.14
	Bringing forward the local heroes	16
	The POWERPOOR certification scheme	19
4.	Energy poor citizens support programmes	22
	The home visits	22
	The Energy Poverty Alleviation Offices	22
	Spreading the word	25
	Formalising the impact and sustaining the results	27
5.	TARGETing the problem	29
	Identifying energy poverty	29
	The POWER TARGET tool	30
	Enhancing the targeting	32
6.	ACTions to tackle energy poverty	34
	Promoting actions	34
	The POWER ACT tool	35
	Enhancing incorporation of the actions in SECAPs	36
	Use <i>co-creation</i> in actions' planning and decision-making	38
7.	FUNDing joint energy initiatives to tackle energy poverty	39
	Funding the actions	39
	The POWER FUND tool	40

1. Foreword - How to use the guidebook



Municipalities and individuals can be part of the just energy transition to secure, clean, and affordable energy for all, including tackling energy poverty. This guidebook has been developed to help to this end, including all the related information of the POWERPOOR approach in tackling energy poverty through joint energy initiatives. The guidebook aims at informing relevant stakeholders ranging from interested individuals to municipalities and decision makers on how they can follow the proposed bottom-up collaborative approach in alleviating energy poverty through joint energy initiatives leveraging innovative financing schemes and enhancing the local energy planning to that direction.



2. Energy poverty mitigation through joint energy initiatives

The phenomenon of energy poverty

"Adequate warmth, cooling, lighting and the energy to power appliances are essential services needed to guarantee a decent standard of living and citizens' health."

EU Energy Poverty Advisory Hub, 2022 (<u>https://energy-poverty.ec.europa.eu/energy-poverty-observatory/what-energy-poverty_en</u>)

Energy poverty is defined as a set of conditions where: "individuals or households are not able to adequately heat, cool, or provide other required energy services in their homes at affordable cost"¹. It is "the inability to realise essential capabilities as a direct or indirect result of insufficient access to affordable, reliable and safe energy services, and taking into account available reasonable alternative means of realising these capabilities"².

Energy poverty is linked to low household income, high energy costs and energy inefficient homes, and is known to have severe impacts on the health of EU citizens, including increased numbers of winter or summer deaths, detrimental effects on mental health, respiratory and circulatory problems³. Existing approaches for the definition of the phenomenon are based on quantitative indicators, such as the proportion of household expenditure on energy bills in relation to their income or the latter's relation to the poverty line after subtracting the cost for energy services (the 10% approach, 'low income – high costs', 'minimum income limit'), and qualitative indicators (consensus approach).

The role of local authorities in tackling energy poverty

The role of the local authorities in the transition towards a more sustainable future is clearly recognised in the UN Sustainable Development Goals, setting the goal for clean and affordable energy for all⁴. The European Commission has also adopted these goals and, promotes policies and initiatives to empower

⁴ United Nations Sustainable Development Goals, Goal 7,

¹ Thomson, H., & Bouzarovski, S. (2018). Addressing energy poverty in the european union: State of play and action. EU Energy Poverty Observatory, Manchester.

² Day, G.Walker, N.Simcock, Conceptualising energy use and energy poverty using a capabilities framework, EP93 (2016)

³ Bouzarovski, S., & Petrova, S. (2015). A global perspective on domestic energy deprivation: Overcoming the energy poverty–fuel poverty binary. Energy Research & Social Science, 10, 31-40.

https://sdgs.un.org/goals/goal7https://sdgs.un.org/goals/goal7

cities and communities in taking local climate and energy actions⁵.

The importance of involving local authorities in tackling energy poverty is high, as they can:

- better target the energy vulnerable citizens and measure the magnitude of the problem;
- conduct a detailed mapping of the local needs and the complexity of local factors that impact the phenomenon in their region;
- prioritise types of actions and areas of intervention;
- design a set of effective actions that best suit the specific local context and the citizens' needs;
- bridge the distance between upper-level policies (national governments, EU) and the local communities;
- combine forces in local level from different actors, stakeholders, initiatives;
- ensure the sustainability of the actions and up-scale them with cities' networks and initiatives;

The capacity of local authorities to tackle Energy Poverty effectively varies across EU, as there are various governance structures and different levels of technical expertise, available funds, and commitment to address the problem.

POWERPOOR recognises the limitations but also the opportunities of the role of local authorities, proposing an innovative approach in taking actions on a local level through joint energy initiatives such as energy communities and cooperatives. This, along with the Covenant of Mayors' target that refers to signatory cities pledging action to support the implementation of the EU 55% greenhouse gas-reduction target by 2030⁶ and the adoption of a joint approach to tackling mitigation and adaptation to climate change, can prompt local authorities to promote the issue and take effective actions in service of energy vulnerable citizens.



⁵EU Report. 2015. Energy poverty and vulnerable consumers in the energy sector across the EU: analysis of policies and measures Policy Report

⁶ European Commission, 2030 Climate Target Plan, <u>https://ec.europa.eu/clima/eu-action/european-green-deal/2030-climate-target-plan_en</u>

KEY INITIATIVES

Covenant of Mayors (www.covenantofmayors.eu)

The Covenant of Mayors in Europe is the leading initiative in the EU for signatories who pledge to mitigate climate change as well as adapt to its consequences. Its vision is that, by 2050, all citizens will be living in decarbonised and resilient cities with access to affordable, secure, and sustainable energy. This includes, amongst others, alleviating energy poverty. Therefore, the Covenant of Mayors provides several relevant resources for incorporating the Energy Poverty pillar in municipalities' Sustainable Energy and Climate Action Plans (SECAPs) along with a framework for measuring energy poverty, and monitoring and reporting relevant mitigation actions.

Energy Poverty Advisory Hub (https://energy-poverty.ec.europa.eu/index_en) The Energy Poverty Advisory Hub (EPAH) is the leading EU initiative aiming at alleviating energy poverty and accelerating the transition to a just energy future for local governments. EPAH's mission is to be a central node of expertise and information related to tackling energy poverty in Europe targeted at all relevant stakeholders who are interested in taking action to combat energy poverty in Europe. The EPAH is providing direct support, online trainings, and research results as well as aims to build a network of stakeholders interested in taking action to combat energy poverty in Europe.

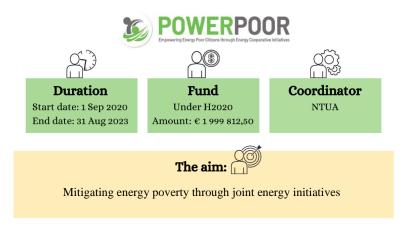
The POWERPOOR approach

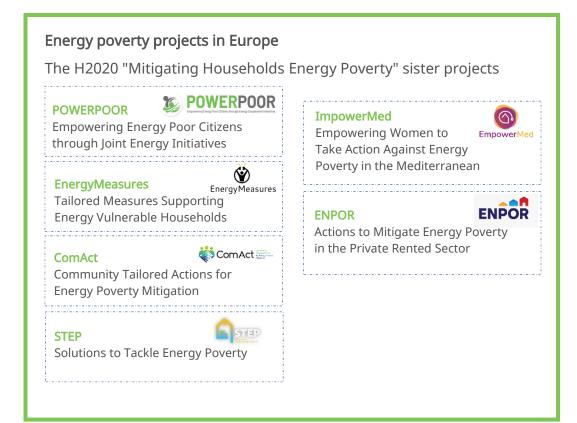
The main objective of the POWERPOOR project is to develop support programmes for energy poor citizens and to encourage the use of joint energy initiatives leveraging alternative or innovative financing schemes (e.g., establishing energy communities/cooperatives, using crowdfunding). POWERPOOR will facilitate experience and knowledge sharing, as well as the implementation of behavioural changes and small-scale no regret energy efficiency interventions as well as the installation of renewable energy sources, increasing the active participation of citizens.

Pilot energy poverty support programmes are designed, developed, and implemented in eight countries across Europe (namely in Bulgaria, Croatia, Estonia, Greece, Hungary, Latvia, Portugal, and Spain), led by a network of certified Energy Supporters and Mentors. The Energy Supporters and Mentors support energy poor households to implement behavioural changes and lowcost, no regret, small-scale energy efficiency interventions, as well as participate in joint energy initiatives or leverage innovative financing schemes. Energy poor citizens are engaged through various planned activities, e.g., Info Days. At the same time, Local Energy Poverty Alleviation Offices are established in engaged municipalities staffed by POWERPOOR trained and certified energy Mentors. The offices serve as a One-Stop-Shop of all the POWERPOOR related information.

An ICT-driven toolkit i.e., the Energy Poverty Mitigation Toolkit is also developed to complement the support programmes. National Stakeholder Liaison Groups are established in the national pilot countries to facilitate the engagement and be a focal point of the POWERPOOR activities and results. The bottom-up POWERPOOR approach can be part of Sustainable Energy and Climate Action Plans (SECAP), or any other action plan developed by municipalities.

Based on the experience gained and the lessons learnt from implementing POWERPOOR, EU policy recommendations and eight National Roadmaps will be developed, so that policy makers at all governance levels can be informed on the results of the project. The project results are broadly disseminated, and synergies are pursued with global and EU initiatives, such as the EU Energy Poverty Observatory and the (EU and Global) Covenant of Mayors on Energy and Climate. The participation of networks in the Consortium strengthens the dissemination and exploitation of POWERPOOR outputs across Europe during and beyond the project implementation. The solution will be sustained through the establishment of the POWERPOOR Alliance on Energy Poverty.



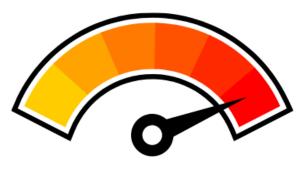




3. Preparing the bottom-up approach

Baseline assessment

Currently in Europe, about 57 million people cannot keep their homes adequately warm during winter; 104 million people cannot keep their homes comfortable enough during summer; 87 million live in poor quality dwellings and 52 million people delay paying their energy bills⁷. The EU Commission considers vulnerable citizens in its planning



and aims at addressing energy poverty through the EU Green Deal and the new Fit for 55 package, which includes significant measures to strengthen energy efficiency laws to help tackle energy poverty⁸. In this respect, guidance, and financial support to energy poor citizens for implementing energy efficiency interventions and setting up or joining energy communities/cooperatives could facilitate their social integration and help them escape energy poverty. In the eight POWERPOOR pilot countries an in-depth analysis of the status of energy poverty, the current legal framework, the ongoing alleviation measures, and the enabling environment has been prepared.

In general, the POWERPOOR pilot countries present vast differences in various aspects i.e., how they view and define energy poverty and the proposed legal framework and alleviation measures. Energy poverty is a complex issue, which cannot be tackled solely using a uniform approach on an EU level, although common issues are detected in respective countries. For instance, a common European definition for energy poverty does not exist, and only in Latvia and Spain, out of the 8 POWERPOOR pilot countries, there is an official definition for the term "energy poverty". For more information on the pilot countries, check the POWERPOOR "Baseline assessment report available <u>here</u>.

Information for all countries across EU can be found <u>here</u>.

⁷ EU Energy Povert Observatory, <u>https://www.energypoverty.eu</u>

⁸ European Commission, EU Green Deal <u>https://ec.europa.eu/info/strategy/priorities-2019-</u> 2024/european-green-deal_en and 2030 Climate Target Plan

Engaging with stakeholders and involved parties

Stakeholder engagement is essential when implementing change following a bottom-up approach. This is especially true for POWERPOOR, that is based on and structured around a co-creation model, as collaborative activities are foreseen and implemented throughout the project, and multiple interdependent external stakeholders are engaged accelerating the project's development process. Stakeholders that are identified and engaged in the project have different backgrounds and include: representatives from local and/or regional authorities, housing providers, social workers, health practitioners, experts on alternative financing schemes, representatives from energy communities, civil society representatives i.e. non-governmental organisations, institutions, and associations, and other stakeholders linked to energy planning or providing services, as well as representatives from academia and technical universities.

The stakeholder engagement process includes:

- 1. Identification of the relevant stakeholders followed by mapping and analysis of the results.
- 2. Development of an engagement plan based on the results' analysis.
- 3. Implementation of the engagement plan.
- 4. Reporting and implementation of follow up processes.
- 5. Feedback and re-consideration of the approach where necessary.



National Stakeholder Liaison Groups

For the eight POWERPOOR pilot countries National Stakeholder Liaison Groups have been established. The members of the Stakeholder Liaison Groups are focal points in the national countries, experts in various relevant domains that both provide feedback to all the POWERPOOR activities on a national and European level. They serve as nodes of information for the project results and activities, and communicate these results to a wider audience. The members of the Liaison Group meet regularly to be aligned about any local, national, or European developments on energy poverty. They embody a diverse group of stakeholders, including but not limited to representatives from: municipalities, regions, energy agencies, universities, social services, non-governmental organisations, utilities and media.

If interested in participating in or getting more info about your National Stakeholder Liaison Groups click <u>here</u>.



Joining forces – the Energy Poverty Advisory Hub, the POWERPOOR project, and the City of Zagreb



The City of Zagreb has officially decided since 2016 to take action to reduce the risk-of-energy-poverty rate to 9.8% via the

programme "Energy poverty Mitigation Program for city of Zagreb", which is foreseen to be prepared by the end of November of 2022 and initiated in 2023. The Programme will directly contribute to the decrease of energy poor households in Zagreb, an increase of energy savings and energy efficiency, and a decrease in carbon emissions which will contribute to the fulfilment of the national climate goals.

The POWERPOOR Centre for alleviating energy poverty in Croatia, run by DOOR, will educate at least 20 energy supporters and mentors who will contribute to collecting the required data to map the current energy poverty status. A sample of 500 households will be supported by energy supporters and mentors and face-to-face interviews will be conducted within the administrative area of the City of Zagreb. POWERPOOR activities will assist the city of Zagreb to benefit by the "EPAH technical assistance" programme that can provide support in preparation of the analysis and data collection for the programme.

Though this collaboration, City of Zagreb expects are expected to have a multi-faceted understanding of the energy poverty impacts on local level, which will allow the municipality to design effective energy poverty alleviation policies.

Capacity building and multi-level knowledge creation

The POWERPOOR partners, experts in different fields, gathered all the relevant information on how to tackle energy poverty through joint energy initiatives in four different modules (see more info in the following box). The partners shared their different expertise and held a train-the-trainers session followed by a workshop to further delve into all the POWERPOOR related topics. The modules contain information suitable for interested individuals and also for representatives of municipalities. In particular, Module 4 addresses mainly the needs of municipalities that strive to address energy poverty.

Module 1 (ENPOV): Energy poverty concepts, policies, and multilevel governance; Global and EU scope. Includes the concept of energy poverty, existing policies, the POWERPOOR approach and the POWERPOOR Toolkit developed, especially the POWER-TARGET tool.

You can find module 1 <u>here</u>.

Module 2 (ACTIONS): Energy poverty alleviation policies and practices; Includes low cost/no regret measures that energy poor citizens can implement to reduce energy consumption; behaviour changes and best practices that can be followed to implement energy efficiency measures and energy interventions. And the POWER-ACT tool.

You can find module 2 <u>here</u>.

Module 3 (FUND): Energy communities / cooperatives, crowdfunding and other joint initiatives; Includes best practices, methodologies, and innovative approaches for establishing joint energy initiatives, emphasising the strengths, opportunities, and benefits of these joint ventures, as well as lessons learnt; Exemplary sustainable energy projects, in terms of technological innovation, implementation, financing, impact and replication potential; Impact assessment of energy poverty projects in urban/national sustainability. Tools and methods to make the joint energy initiatives accessible to citizens facing energy poverty. The POWER-FUND tool.

You can find module 3 <u>here</u>.

Module 4 (PLAN): Planning Energy Poverty Actions at the Local Level; Integration of energy poverty in sustainable energy and climate action planning and urban sustainability policies. This module also presents Climate System Innovation Tools for systems thinking and stakeholder engagement within the city context. The Energy Poverty Guidebook for Energy Planning is also presented in this module.

You can find module 4 <u>here</u>.

Useful resources

POWERPOOR partners shared their knowledge to create the Online Trainer Library equipped with documents that can be utilised by municipalities and individuals alike. The Online Trainer Library is accessible <u>here</u>.

The Library is also equipped with a filtering option and users can filter their preferred language, format of the materials (e.g., document, publication, book, etc.), type of publication (e.g., methodological, theoretical etc.), the audience the material is referred to (e.g., housing providers, social workers, etc.), and the module they want to further explore.



The English version of the trainings can be found here.

Supportive training tools

To effectively train and support all the interested individuals, especially during the Covid-19 pandemic, online tools were used to enhance participation and make the trainings interesting. For this reason, the 4 modules were also complemented with material dedicated to facilitation and soft skills development customised for the training of Energy Supporters and Mentors, available <u>here</u>.

Tip!

Online training sessions should include:

- A well-structured and audience friendly agenda (e.g., with coffee breaks), shared with the audience prior to the training
- Stable internet connection for the presenters/trainers
- Online tools that can enhance participatory processes (e.g., Slido, Mentimeter)

When training individuals or representatives of municipalities it is important to be GDPR compliant. Find out more information <u>https://gdpr.eu/.</u>

The four different modules contain information mainly on an EU level. However, they have been designed to be flexible enough so they can be easily customisable to the national circumstances, but this requires some additional work by the local organiser. With time it may also need to be updated. The POWERPOOR training sessions take approximately 7.5 hours to be completed. The trainings can be customised according to the audience needs.

Bringing forward the local heroes

Apart from engaging with the stakeholders and gathering the available information, POWERPOOR aims at bringing forward interested individuals as POWERPOOR Energy Supporters and Mentors that are the local heroes implementing the bottom-up approach of tackling energy poverty on a local level. Motivated individuals are trained and certified by the POWERPOOR trainers through face to face online and onsite training seminars and webinars. The network of Energy Supporters and Mentors are at the heart of the energy poor citizens support programmes. The role of the trained and certified Energy Supporters and Mentors differentiates. A list of the Energy Supporters and Mentors from the 8 POWERPOOR pilot countries and also across EU.

The role of Energy Supporters and Mentors

Energy Supporters engage directly with energy poor citizens and advise them on implementing behaviour changes or small-scale no-regret energy efficiency interventions as well as assist them to plan, secure funding and implement large-scale energy efficiency interventions.

Energy Mentors provide support and expertise in all the key areas associated with the operation and/or creation of an energy community / cooperative, comprised of energy poor citizens. They know how to leverage innovative financing schemes (e.g., crowdfunding) and provide support in a city level staffing the Energy Poverty Alleviation Office.

Play your part in Alleviating Energy Poverty

Find the relevant infographic here.



Check out the <u>video</u> with our Local Heroes describing their experience!

The Energy Supporters' and Mentors' background varies, they may comprise of public authorities (employees of local and regional authorities), members of

existing communities/cooperatives, social workers, local consultants, professionals, and entrepreneurs in the field of sustainable energy, health practitioners, university graduates, and young scientists, or any other interested individual aiming at enhancing the circumstances of their region.

The "Energy Box": mobilizing the local heroes

For the POWERPOOR project to make progress in alleviating energy poverty the Energy Supporters and Mentors

need to be actively engaged in a local level. This requires exact and well communicated incentives regarding what is to be expected in the home visits and what tangible results can be reached through them.

Therefore, the certified Energy Supporters and Mentors are given a giftpack, called the "energy box". Each box contains:

- o 1 piece of Power (consumption) Meter with LED display,
- 1 piece of Mechanical Outlet Timer,
- o 1 piece of Power Strip with 4 Ft Extension Cord,
- 1 piece of 6-meter-long seals (insulation strip) for windows and doors.

Everything the box contains can be used to lower the energy expenses in a household or to increase its energy efficiency.

This approach (energy efficiency gift rewards) can be also applied to encourage energy-poor citizens to take part in POWEPROOR actions. e.g., let Energy Supporters and Mentors in their homes or book an appointment at the local Energy Poverty Alleviation Office. This useful giftpack can be used during further home visits as a demonstration tool and it also brings tangible energy-saving potential.



Engaging younger people in alleviating energy poverty



Engaging younger people is key in alleviating energy poverty

as they are eager to learn, have a stronger consciousness in matters of sustainability and wish to make a change. In Bulgaria SOFENA, the local partner, realised the role younger people can play when trained as energy supporters and mentors in their local communities.

They reached out to the <u>Vocational School of Electronics and Automation</u> and they presented the POWERPOOR project. Any students that were interested could take the training as part of the extracurricular activities at the end of the school year. 60 students from the last grades and some of their teachers participated.

After each lecture, the participants had an opportunity to ask questions and receive more detailed information on topics that interested them. The

training ended with a certification test for POWERPOOR energy supporters, and 56 students successfully passed the test and received certificates.

As a summer holiday activity, the students were asked to do up to 5 visits to households in their community, many of them did and came back with filledin questionaries and more questions about energy poverty and the POWERPOOR project and they are still engaged today.

The Hungarian POWERPOOR partner Energiaklub is closely cooperating with Hungarian universities BME, ELTE. Corvinus). (e.q., Durina the implementation of the project students have been engaged in the project activities in four different ways:



1. Cooperation with ELTE University 1.0

There is an energy and geography faculty at ELTE. BSc students after the 4th semester are obliged to do a 6-week-long professional practice. The students were offered to do this trough the POWERPOOR project activities. Students were actively recruited and trained as Energy Supporters and Mentors. This process was successful as many of them attended the training sessions and got certified. Then the most motivated Energy Supporters (i.e., with the most home visits) was given the opportunity to do their obligatory 6-week-long professional practice at partner municipalities (namely Józsefváros, Ferencyáros). Those municipalities also host an Energy Poverty Alleviation Office. Currently students are working there and around 150 home visits have been done so far.

2. Cooperation with ELTE University 2.0

This one is similar to the action described above. In this case, students have been engaged during an obligatory 5-day-long field practice for the needs of their BSc degree.

Currently 10 students have been trained and around 220 home visits have been implemented in the municipalities of Bükkszentkereszt and Répáshuta.

3. Cooperation with Corvinus University

A semester-long cooperation agreement was signed by Energiaklub and Corvinus University. The aim of this collaboration is that during a special course based on the POWERPOOR training modules, students gain practical information on energy poverty. Therefore, students follow the energy supporter training and then follow up with home visits. So far 30-40 home visits have been done in Józsefváros by this initiative.

4. Targeted recruitment

The Youth Department of the Hungarian Energy Association which is closely working with the BME University was directly invited to the Energy Supporters

and Mentor trainings and many of the members have followed the training and certification process.

The POWERPOOR certification scheme

The Energy Supporters and Mentors are certified under the POWERPOOR certification scheme. Apart from the practical benefits of a certification scheme that verifies the knowledge in a particular topic, the POWERPOOR certification scheme comes with some other benefits. You can find the POWERPOOR certification scheme <u>here</u>.



Mobilizing the Energy Supporters and members in Portugal



It can be challenging to keep the Energy Supporters and

Mentors engaged, and thus Coopérnico developed some strategies to effectively do so. Providing information is the first step which is why Coopérnico created a national POWERPOOR newsletter to reach out to the national stakeholders. It is also important to connect people with each other, creating a network to share challenged and success stories. To create this sense of belonging, Coopérnico organizes monthly virtual meetings between the Energy Supporters and Mentors from all over the country, which has the additional benefit of gaining continuous feedback and improving the project practices.

The main challenge raised by the Energy Supporters and Mentors is how to start, reach out to people, find people to visit and make them feel comfortable doing a home visit. For that, Coopérnico is using the POWERPOOR tutorial videos, and tries to cultivate the necessary soft skills to the energy supporters and mentors to better prepare them to get in touch with energy poor households.

Benefits for the Energy Supporters and Mentors

General

- Gain a sense of accomplishment when supporting people suffering from a multidimensional phenomenon assisting them to enhance their living conditions.
- Participate in a well-structured learning process, which combines theory, practice, and formal testing.
- Gain expertise and knowledge on a phenomenon that affects many people across Europe.
- Gain expertise on innovative financing schemes and on joint energy initiatives.
 Learn how to set up and support energy communities/ cooperatives and how to set crowdfunding campaigns.
- Learn how to use ICT-driven tools that can facilitate the process of supporting energy poor citizens.
- Promote personal development, enhancing the soft skills required in the fieldwork.
- Understand the role of local governments to support the development of energy poverty alleviation actions together with local stakeholders.
- **D** Acquire a certified proof of competence.

Networking

- Become a member of an extended EU-wide network of mentors and supporters.
- Cooperate/ interact with experts and recognised professionals in a national and European level.

Professional

- Gain visibility in the area.
- **D** Enhance CV and professional credibility.
- **Gain working experience, especially valuable for newcomers in the job market.**
- **D** Encourage life-long learning and professional development.
- □ Improve career opportunities.

The test comprises of multiple-choice questions so as to limit the costs, be easy to conduct, be adjusted to the schedule of the participants, not be subjected to geographical limitations and also be simple to use, have a user-friendly interface, and be supported by different languages. The assessment process is governed by the following principles

Objectivity

The assessment methods incorporate widely adopted practices, the evidence is documented and clear, and the evaluation uses subjective criteria and processes for all participants.

► Transparency

The transparency of the certification process is of high importance, as all the participants should have a clear view about all the parts of the scheme, such as the selection criteria, the training process, the assessment framework, the costs, the benefits, and the obligations.

► Fairness

The process needs to be fair for all participants, safeguarding equality and non-discrimination enabling participants to take part in the training and certification under equal conditions.

The assessment tools employed follow the proposed European guidelines for validating non-formal and informal learning (CEDEFOP, 2015), i.e., Validity, Reliability, Fairness, Cognitive range, and Fitness.

Find out more <u>here</u>.

After the completion of the project, the POWERPOOR certification scheme will be sustained by the POWERPOOR Alliance for Energy Poverty that will be developed. The members of the Alliance need to keep the training material upto-date and the network of the Energy Supporters and Mentors up and running.



4. Energy poor citizens support programmes

The home visits

The Energy Supporters are at the heart of the energy poor citizens support programmes as they visit homes within their networks or neighbourhoods to directly identify those that experience energy poverty and provide them with practical behavioural tips and tricks that can enhance their energy efficiency and/or lower their energy bills as well as enable them to implement small scale no-regret energy efficiency interventions. The Energy Supporters and Mentors use the POWERPOOR toolkit to directly diagnose and help the energy poor. Complementary material is also available to help them make the most out of the home visit.

Find the <u>tips and tricks</u> the Energy Supporters and Mentors share!

Mobilising the home visits

The POWERPOOR network of Certified Energy Supporters and Mentors gathering in Thessaloniki, Greece, organised by INZEB,



was seen as a chance to meet in person with the members of the network coming from northern Greece, to get to know them better, boost the interaction within the network, briefly update them on project developments, answer questions and share experiences. This activity aimed at further mobilising the house visits of this region of Greece and keeping the interest about the project alive. During this meeting interest for establishing an energy community was showcased and the INZEB is following up to further support them through the POWEPROOR project.

The concept behind this idea was that since due to Covid-19 pandemic, all training activities and follow-up contacts were implemented virtually, now it is a good opportunity to reap the benefits of in-person interaction, encourage the most motivated energy supporters and mentors of the group to keep up with the good work and inspire the less motivated ones to start/re-start being active and engaged to project activities.

The Energy Poverty Alleviation Offices

For municipalities to implement bottom-up change and be part of the solution in tackling the multi-facet phenomenon of energy poverty, a multi- and interdisciplinary approach must be followed. The Energy Mentors can be municipal employees, social workers, or interested individuals who can lead the way in such an approach. They will staff the Energy Poverty Alleviation Offices that are established across the eight pilot countries.

The local energy poverty offices will provide support to energy poor households both by directly proposing behavioural measures and no regret, lowcost energy efficiency interventions and by guiding them towards setting up or joining an existing energy community or cooperative and how to leverage innovative financing schemes.

In the Energy Poverty Alleviation Office, the benefits of implementing energy efficiency interventions and installing renewable energy sources will be communicated, more energy efficient behaviours, practices and habits will be The main objective of the **Energy Poverty Alleviation Office** is to be a one-stop shop that provides information to citizens. It can directly support them to actively participate in planned activities, familiarize them with the problem of energy poverty, propose behavioural measures and no-regret low-cost energy efficiency measures, and guide them in participating in or setting up an energy community. It can even explain about leveraging innovative financing schemes to achieve energy efficiency



encouraged, and the use of the Energy Poverty Mitigation toolkit will be promoted also as a practical way of monitoring and guiding the progress.

Best practices will be brought forward as well as innovative financing schemes (e.g., crowdfunding) as a viable financing option. Through the office, local authorities will be able to build their capacity, experience, and skills on how to include and finance energy poverty actions in a SECAP. Finally, other local and regional authorities, as well as other key actors (e.g., social services) will have the opportunity to follow by example and also establish a local Energy Poverty Alleviation Office.



Overcoming challenges that energy poverty alleviation offices face

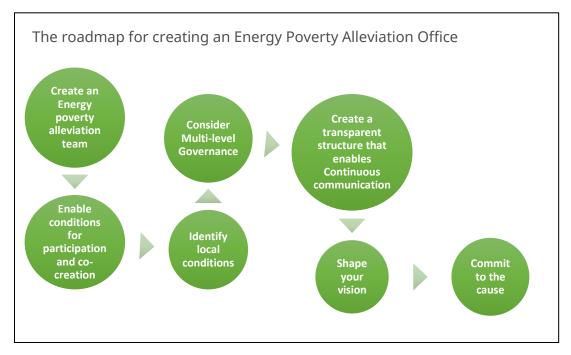
The establishment of an energy poverty alleviation office can be a challenge for municipalities in Greece due to lack of personnel and technical equipment. One of the 3 Greek POWERPOOR partners, SUSTAINABLE CITY Network of municipalities, equipped two of the Energy



Poverty Alleviation Offices with multi-functional environmental testers (Sound Level meter, luminometer, Relative Humidity Meter, Temperature Meter and anemometer).

This equipment can be used by the POWERPOOR certified Energy Supporters and Mentors, and the energy poverty alleviation office staff, during the home visits to enable them to do check various parameters. The equipment enables them to measure factors such as temperature and humidity, which are directly linked to the concept of energy poverty, as well as other parameters such as light and noise in the homes of their citizens. Doing so, it is expected that more energy supporters and mentors will be motivated to conduct a large number of home visits and engage many citizens, while obtaining valuable data and actually helping energy poor citizens.

The purpose of providing the equipment, in combination with the dissemination material (banners, leaflets etc.), is to organise the operation of the energy poverty alleviation offices properly within the services that a municipality already provides so they can build capacity and be well equipped to continue their activities even after the end of the project.



In municipalities where similar offices or teams are already established and running, working well with the public (e.g., a SECAP team), the Energy Poverty Alleviation Office can work within the existing structure. Synergies and collaborative work can only enhance the range and impact of activities. The Energy Mentor staffing the office can cover a wide range of needed expertise and come from different departments such as the social, the financial, the technical, the environmental and the public procurements. Thus, the Energy Mentor can either be part of the existing structure and understand the local context and how the POWERPOOR approach can work within the existing framework, or the Energy Mentor can be part of another team within the municipality and in this case proper cross-departmental cooperation is required.



Tips for successful cross-departmental cooperation

- Define clear roles so everyone knows what to do.
- Actively engage all the members in relevant tasks (both in planning and implementation) to gain a high sense of ownership of the plan.
- Encourage consistent and transparent communication sharing the information and goals associated with different departments.
- Support feedback to ensure that everyone is on the same page is needed.
- Gather the team regularly to stay in touch with its goals and help members build team spirit.
- Introduce accountability and tracking of progress.
- Get to know other departmental processes to understand barriers and challenges.
- Build a culture of mutual understanding and trust.

Spreading the word

The impact of the POWERPOOR approach is enhanced by numerous planned activities. On a municipal level, several info days are planned and implemented across the pilot countries attracting interested individuals and spreading the word both about the issue of energy poverty and the proposed POWERPOOR approach. For this reason, informational material has been produced, is available to all, and has been translated to all the pilot country languages.

Find the brochure and poster <u>here</u>. Find all the POWERPOOR news and events <u>here</u>.



Actions of the Energy Poverty Alleviation Office

The energy poverty alleviation office in the premises of the local partner Coopérnico organised the first session of Energy Initiatives entitled "How to reduce energy



consumption and increase thermal comfort in our homes" with *Mais Proximidade Association* users in Lisbon, Portugal. *Mais Proximidade Association* is an institution supporting the elderly population of Lisbon downtown (Baixa) and Mouraria neighbourhood aiming at reducing loneliness and isolation of elderly people as well as contribute to improving their quality of life.

The initiative included interactive sessions about energy poverty and how to mitigate it through the POWERPOOR approach and a game that was designed to inform the attendees of several behavioural changes they can follow to enhance their condition.

This was the first session and three more are planned to follow throughout the year. The interactive nature of the initiative enabled the attendees to get answers and familiarise with the issue of energy poverty as well as gave them advice on how to enhance their energy efficiency.

Engaging the Local Communities - a series of Info-Days across the country

In 2021, The Estonian Union of Co-operative Housing Associations organised, in cooperation with local municipalities engaged in POWERPOOR activities as pilot cities and with members of the National Liaison Group, a



series of info-days across Estonia to spread the word about the POWERPOOR approach and to provide local communities with a platform for discussion on challenges related to energy poverty in multi-apartment houses. The info-days took place in person in Tallinn, Tartu, Pärnu, Kuressaare, and Rakvere, covering all the regions across the country.

Because more than 70% of the country's population lives in apartment buildings, the target group was identified as members of the communities in apartment residential areas and other local stakeholders who had the potential to become Energy Supporters and Mentors. The info-days lasted half a day and included introduction to the POWERPOOR project by the project team and Liaison Group members, an overview from the municipalities of the plans for the alleviation of energy poverty at local level with social and economic measures, and interactive sessions with energy experts and the public on energy efficiency issues. The event provided potential Energy Supporters and Mentors with specific information on the POWERPOOR Training Programme calls and timelines.

The series of info-days had 3 goals: (1) to introduce the POWERPOOR approach and the opportunities to become certified Energy Supporters and Mentors to the community leaders with the first insight into the POWERPOOR tools and plans for establishing an Energy Poverty Alleviation Office; (2) to support public discussion on energy poverty issues in the country, with a special focus on the local region, where the info-day took place; and (3) to facilitate direct contact for further enable the cooperation between the local communities, representatives of the municipalities, and members of the POWERPOOR National Liaison Group.

The series of info-days provided participants with practical knowledge and skills for mitigating energy poverty in their communities. Around 200 local community members attended the info-days, from which many of them decided to attend the POWERPOOR trainings for energy supporters and mentors. The energy poverty alleviation ideas collected from the participants of the info-days were later discussed in the meetings of the POWERPOOR Liaison Group in Estonia and were taken into account for planning the POWERPOOR activities in the pilot cities.

Formalising the impact and sustaining the results

To formalise the approach and to sustain the impact, a set of policy recommendations will be produced to inform decision makers and policy makers on energy efficiency and sustainable energy and how the issue of energy poverty can be tackled through joint energy initiatives and innovative financing schemes. National Roadmaps to eliminate energy poverty in the pilot countries will be developed, in order to achieve a gradual transition from social policies, based on benefits, to innovative green policies based on grass roots investments and energy efficiency measures in a medium- and long-term perspective. Moreover, EU Policy recommendations will be developed that will summarise key findings from implementing POWEPOOR that can inform policy makers at EU level and help them formulate policies to alleviate energy poverty considering a multilevel governance approach.

The network of municipalities and Energy Supporters and Mentors can be part of the POWERPOOR Alliance on Energy Poverty. The Alliance will be a vehicle for joint exploitation of the results, as a not-for-profit entity tailored to empower energy poor citizens through joint energy initiatives. In this context, an exploitation plan will be developed to better define the replication and exploitation activities of the project.



Existing relevant policies

The <u>Clean energy for all Europeans package</u>: aims at transforming the EU into a modern, resource-efficient and competitive economy, ensuring zero net emissions of GHG by 2050, economic growth and inclusivity in the transition.

National Energy and Climate Plans of EU countries: 10-year integrated national plans for the period from 2021 to 2030, to meet the EU's energy and climate targets for 2030. Introduced under the <u>Regulation (EU)</u> 2018/1999.

<u>The renovation wave package</u>: Commission's strategy to boost renovation in the EU in the next 10 years. Its main focus is on tackling energy poverty, upgrading underperforming buildings, and decarbonising heating and cooling.

<u>'Fit for 55%' package</u>: a set of proposals with revisions to existing laws and new ones (more are expected) to advance Europe's climate policy for a 55% reduction in carbon emissions by 2030, and net-zero emissions by 2050.

5. TARGETing the problem

Municipalities are the first governance structure tackling energy poverty and dealing with its impacts. Energy poverty is a multi- dimensional problem that is difficult to be measured precisely. The need for valid identification methods of energy poor citizens is the first step in the process of tackling energy poverty through policies and actions, ideally included in the municipalities' SECAP.

Identifying energy poverty

Local authorities can choose from a variety of relevant indicators that can assess whether a household is considered energy poor or not. There are expenditure-based and consensual indicators to choose from, stand alone or in combination, based on data or self-evaluation. Each indicator may be relevant to a specific aspect of the energy poverty, identifying some part of energy poor households. The final selection of the indicator(s) must be based on the availability of the corresponding data, the local characteristics,

More

Indicators to measure energy poverty on a local level are provided by:

- the <u>Covenant Of</u> <u>Mayors initiative</u>, and
- the <u>Energy Poverty</u> <u>Advisory Hub</u>

the scope of action and the capacity of the personnel to use them successfully but most importantly they should be aligned to the national context and the national policies.

It is important to clarify that the selection of the indicator can be a critical factor for the next step of planning actions against energy poverty, as the analysis of the findings may define patterns and areas of priority where actions need to be taken.

-Ò_ Tip!

To focus efficiently on groups and areas affected by energy poverty, keep in mind that it is common to find vulnerable citizens that may also be energy poor when one or more of the following conditions are present:

- low energy efficiency ratings in heating, cooling and appliances;
- bad insulation of walls, terrace, roof and bad housing condition (e.g., mould);
- rural households that may be deeper affected by energy poverty;
- low-income households and areas;
- off-grid (gas) properties having higher costs.



How the Covenant of Mayors measures Energy Poverty?

The Covenant of Mayors 2050 vision for Europe aims at decarbonised and resilient cities with access to affordable, secure, and sustainable energy. Therefore, CoM and its signatories commit to tackle energy poverty as one key priority to ensure a just transition.

To enable signatories plan and successfully implement energy poverty alleviation strategies, the Covenant of Mayors Europe Office, in cooperation with other institutions (JRC, EPAH) and experts, developed the energy poverty pillar, including the relevant reporting and monitoring framework. In addition to this, signatories are provided with knowledge material, capacity building and hands-on support by EPAH, to complement Covenant framework on energy poverty.

A transition period until the end of 2024 is predicted to allow enough time for planning activities.

The Energy Poverty Pillar In The Covenant-Europe

The energy poverty pillar in the Covenant – Europe consists of: (i) goal; (ii) assessment; (iii) actions and its framework for reporting and monitoring is flexible enough to be used in different local contexts.

Each signatory, having set its goal and chosen the relevant base- and targetyear, can select a number of proper measuring indicators to monitor progress. An extensive list of diverse energy poverty indicators is provided to signatories to choose from, while being encouraged to use more than on indicator, if relevant, to shed light on as many aspects of energy poverty as possible, so as no energy poor left behind. Finally, they choose a set of actions to implement, giving details about the foreseen activities, the vulnerable groups targeted, the outcome (with selected indicator) etc.

EP Indicators

The provided list contains over 50 proposed indicators, grouped in six macroareas: climate, facilities/housing, mobility, socio-economic aspects, policy and regulatory framework, participation and awareness raising. Each indicator is accompanied with its definition and the unit of measurement⁹.

The POWER TARGET tool

POWERPOOR provides a simple to use tool, the POWER TARGET, to identify energy poor citizens using a data-driven approach. The tool facilitates the identification of citizens, communities, neighbourhoods, or districts based on an enhanced 10% indicator. This approach is based on the expenditure-based

⁹ More information here:

https://www.eumayors.eu/index.php?option=com_attachments&task=download&id=1358

indicator of 10%¹⁰, but modified to adjust energy spending and annual household income from actual to notional amounts, according to contextual qualitative factors e.g., "I feel cold inside my home".

The POWER TARGET tool uses qualitative and quantitative data to overcome data flattening and simplification in energy poverty assessments. To do so, a survey must be filled out with information about income, electricity consumption in kWhs and cost and heating fuel consumption also in unit of measurement and cost coupled with a self-assessing question on how the user experiences thermal comfort. The POWER TARGET tool uses the data filled in the survey to calculate a score that corresponds to the extent at which the household is energy poor. The score can take different values between 0-100 (0 for insignificant impact, 100 for absolute energy poverty) for the household's classification under one of the 4 categories of severity (Red -Orange-Yellow-Green).



POWER-TARGET tool is available in 10 languages via

- the POWERPOOR website <u>https://powerpoor.eu/toolkit</u>
- the standalone POWERPOOR TOOLKIT page <u>http://powerpoor.epu.ntua.gr/powerpoor-toolkit/</u>

More info

- A guide on the functionalities of the POWER-TARGET tool along with the methodology employed to develop it can be found <u>here</u> in Deliverable 2.2.
- Step by step instructions on how to use the POWER TARGET tool can be found <u>here</u>.

POWERPOOR Encouvering Energy Foor Citizans Straugh Energy Cooperative Initiatives



Recommended

To utilise in the Energy poverty alleviation offices

The Energy Poverty Alleviation Offices can act as a node between different municipal departments that can help the targeting of energy poor citizens, combining forces, expertise, initiatives, and networks. In addition to that, the

¹⁰ Boardman, B. Fuel poverty: from cold homes to affordable warmth, London; New York: Belhaven Press, 1991.

offices are a contact point for energy poor citizens where they can use tools such as POWER TARGET to assess their energy vulnerability.

\bigotimes

Synergies with stakeholders to identify energy poor households in Križevci



The Red cross of Križevci already works with households that are in a difficult social situation through various projects, i.e., "Active Aging for the period 2021/2022". They have pre-mapped the vulnerable households so they will conduct a survey of 220 households in the area of the city of Križevci using the

conduct a survey of 220 households in the area of the city of Križevci using the POWERPOOR toolkit which will provide information on energy performance of building. This is expected to provide valuable complementary data to map the areas with high risk of energy poverty for the city of Križevci.

The above action can be combined with the activities of another sister project, the ENPOR H2020 project. The ENPROR experience about energy poverty in the private rented sector is expected to be combined with the findings of the Red Cross and POWERPOOR joint action, to provide insights about energy poverty in rented sector. This combined action can prove important for designing future Public calls for energy renovations on buildings, such as the Energy renovation programme for multi-apartment buildings and the Energy renovation programme for single family houses, taking into account the needs of landlords and tenants and to include them in the wider political context.

Enhancing the targeting

From the local authority point of view, the issue must be approached in a way that will make sense when planning relevant successful actions. Therefore, targeting the energy poor via a selected tool, can be further enhanced considering the local specific conditions where the tool is used.

The following steps can enhance the targeting:

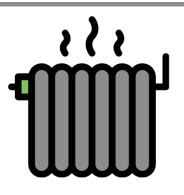
- Data gathering: Gather as much data as possible. Use the existing networks and selected tools.
- Data analysis: Look for possible emerging patterns, target groups, spatial distribution, any other fact worth mentioning. In this step, the data will be sliced and diced to extract meaningful insights. Using data analytics techniques and methods, hidden patterns and relationships will emerge, and fruitful insights can be brought forward to make educated predictions.
- Results interpretation: turning data into a meaningful form, like charts, mapping, or storytelling.

• Analysis validation: Discuss the findings with experts and stakeholders to get new perspectives.

! Keep up to date: Review periodically the conclusions, by taking into account the updated findings.

Important

The POWERPOOR network of trained and certified Energy Supporters and Mentors is a valuable pool of people who can support Local Authorities through the Energy Poverty Alleviation Offices in tackling energy poverty. **Find** a certified Energy Supporter or Mentor <u>here</u>!



6. ACTions to tackle energy poverty

Local authorities need to support energy poor citizens and promote relevant actions via their energy and climate plans to address the challenges and reach the sustainability goals of 2050. Incorporating the energy poverty dimension in their plans is not an easy task, as a strategy is needed to be developed, including a number of actions based on how energy poverty is defined and identified as well as the local needs. The POWERPOOR approach is designed in such a way that it can be used by local authorities and their personnel to support in that direction.

Promoting actions

Alleviating energy poverty includes a strategy with actions that can address the needs and challenges that energy poor citizens face. The formulation of a successful strategy starts with shortlisting all the possible measures or actions, continues with the selection of the actions most appropriate to the local context, incorporates them into the energy and climate plans, and ends with the implementation phase and monitoring of the actions.

The actions must be planned according to the results of the identification stage, as described above. Having analysed the gathered data to depict the current energy poverty state on a local level, municipalities can outline the problem in relation to the local conditions, which may be unique, thus demanding a specific mix of measures and specialised forms of implementation approaches.

The proposed by POWERPOOR, Energy Poverty Alleviation Offices in municipalities can be of great support regarding the energy poverty alleviation policies and actions. Except for their role in the identification of energy poor citizens, they can also provide support in planning and promoting actions. With properly trained personnel, as the POWERPOOR Certified Energy Supporters and Mentors, the Energy Poverty Alleviation Office can create energy profiles using the POWER ACT tool to define target groups and propose appropriate measures. Such measures can be low-cost no regret, and easy to implement, such as behavioural changes, energy carrier selection etc, or more substantial such as building renovation, upgrading in heating system etc.

Tips and tricks to reduce energy poverty

If you want to have some easy tips and tricks to reduce costs and usage in heating, hot water usage, lighting, building insulation, electricity, appliances, you can check <u>this infographic</u> and <u>Module 2</u>.



Raising households' engagement with POWERPOOR face2face consultations

ZREA runs the energy poverty alleviation office in Jelgava in close collaboration with other municipal social service providers to directly reach the affected households, increase the households' engagement in POWERPOOR activities and enable them to act against energy poverty. Latvia Jelgava city, Dobele county, Jekabpils county

Considering the Latvian context, they focus on achieving effective direct communication with the poverty-affected households. They perform home visits or provide a consultation over the phone or in person in the office, as the most effective way of reaching out to people and engaging the energy poor to act. This approach provides a real human to human interaction, and it makes a greater impact on the actual change of the habits or implementation of small-scale energy efficient interventions in households. Booklets, videos, and other informational materials that are available enhance the experience.

As an extra incentive to motivate citizens during the info-days to apply for the POWERPOOR consultations, they give out small energy efficient gifts. The gift consists of an energy efficient LED lightbulb and a power extension cord with a switch to which citizens can connect devices that consume electricity while in stand-by mode to conveniently power them off with one switch.

In addition, those households engaged in the consultation sessions by POWERPOOR certified Energy Supporters and Mentors will have a chance to participate in a lottery with gifts such as an energy efficient refrigerator or a bicycle- as an environmentally friendly and CO2 free transport vehicle.

The POWER ACT tool

The second tool included in POWERPOOR Toolkit to enable energy poverty alleviation is POWER ACT. POWER ACT includes the energy behaviour of the users and proposes a set of low-cost no regret behavioural measures to improve their energy performance and to empower energy poor citizens to understand their energy use, the benefits associated with energy efficiency interventions and encourage them to look for renewable power generation capacities e.g., through joining an energy community.

POWER ACT is based on a data-driven approach that evaluates users' thermal comfort, creates energy profiles, and predicts benefits of energy efficiency actions. To do so, a survey must be completed with information on behavioural patterns, electricity usage data and heating and cooling consumption data coupled with self-assessing questions on energy behaviours. The POWER ACT tool uses the data filled in the survey to calculate a score that corresponds to the extent that the household is energy poor.

Scores range from 0-100 with a score equal to zero achieved when a user submits responses that indicate the least efficient behaviours possible while a score equal to 100 is achieved when responses indicate the most efficient behaviours possible given the available responses in the structured questions. Low scores indicate margin for improvement in terms of energy behaviour while higher scores indicate more efficient behaviours and limited room for improvement with behavioural changes. According to the score calculated, the household's behaviour is classified under one of the 4 categories (Red-Orange-Yellow-Green). Users with red and orange classifications can take immediate, low-cost steps to improve their energy spending behaviour (new LED bulbs, maintenance for their heating system, etc.). Users with Yellow and Green classifications usually need to proceed with more substantial upgrades that are associated with higher costs (insulation, windows upgrading, new heating systems).



POWER-ACT tool is accessible in 10 languages via

- the POWERPOOR website <u>https://powerpoor.eu/toolkit</u>
- the standalone POWERPOOR TOOLKIT page <u>http://powerpoor.epu.ntua.gr/powerpoor-toolkit/</u>

More info

- A guide on the functionalities of the POWER ACT tool along with the methodology employed to develop it can be found <u>here</u> in Deliverable 2.3.
- Step by step instructions on how to use the POWER ACT tool can be found <u>here</u>.

Enhancing incorporation of the actions in SECAPs.

To enhance the successful planning and implementation of energy poverty alleviation actions via Sustainable Energy and Climate Action Plans (SECAPs), the next 4 steps can be followed.

\rightarrow Explore measures

Explore all the available measures and shortlist the most appropriate of them according to the identification process findings. The areas where an energy poor household typically needs to be supported are the heating and cooling systems, hot water supply, appliances, lighting.

More

A number of possible actions can be found in

- "Best practices" chapter of this guidebook.
- Powerpoor Deliverable D5.4 Report on actions for energy poor citizens in SECAPs

\rightarrow Define your strategy

The local authority having on the one hand the shortlisted measures and on the other the insights of energy poverty analysis in local level, such as the spatial distribution, the patterns, the target groups, the needs, and the causes, can shape its strategy. For better results, list the target groups, make dialogue between the Energy Poverty Alleviation Office, the SECAP team, and the involved municipal departments about the proposed measures, make public consultation with local society and stakeholders about the strategy.

\rightarrow Implement the actions

Local authorities are ready to move on to the next phase, the implementation, when a strategy is defined. The energy poverty alleviation office, local actors/ stakeholders and energy communities must be recruited, where needed, in the process of implementation. If a SECAP is present or planned to be developed, the decided actions will be included as the third pillar of the SECAP and will be implemented according to the Covenant of Mayors procedures. The Stakeholder Universe and Future Rader, explained in Module 4, are useful tools to foster stakeholder identification and strategy/vision-building in order to incorporate energy poverty alleviation into SECAPs.

More info

Find out more in Module 4.

→ Monitoring

To measure how successful the implementation of actions is local authorities need to monitor the process via the selected indicator(s). This will help them to

More info

You can access the Covenant of Mayors methodology for introducing Energy Poverty alleviation actions in SECAPS <u>here</u>.

make better decisions, or even adjustments if needed. Those who participate in the Covenant of Mayors, will be able to use the CoM M&R framework to get support in Monitoring & Reporting.

Use *CO-Creation* in actions' planning and decision-making

To effectively implement the POWERPOOR bottom-up solution a cocreative approach is needed, as the actions impact or may get facilitated both by citizens and various stakeholders. The authority's capacity to decide the best suitable actions may be limited, thus needing support in planning and decision making, or even in the development of the actions. Therefore, stakeholders need to be invited in a co-creative process from the very beginning, contributing to the exploration of the local needs, the challenges and the expectations.

Some practical tips include:

- Begin with stakeholder mapping, to identify all target groups, public and private stakeholders and other key local actors.
- Prepare an efficient engagement strategy so all actors are included in the relevant activities, get motivated and keep interested.
- Disseminate accordingly so that all stakeholders are in the loop and engaged with.
- Elicit feedback and review when necessary.







7. FUNDing joint energy initiatives to tackle energy poverty

Local authorities need to find sufficient funds to finance their strategy, so as to implement energy poverty alleviation actions. To do this, they can use a number of available financing tools from a variety of sources depending on the local context and the national instruments. POWERPOOR provides them with a toolkit that includes opportunities related to joint energy initiatives (such as energy communities) and innovative financing schemes (such as crowdfunding), to support them in that direction.

Funding the actions

Introducing energy poverty as a new dimension in the local authorities' action plans, is associated with new challenges: who will fund the actions? Is there a unique approach for all? Which financing tool is better? etc. To successfully achieve and sustain the selected actions, diversity in financing instruments is needed. That means that the municipality must map thoroughly all the funding sources and the relevant financing tools to create a bouquet of solutions to choose from. This will help the municipality to use the proper funding source for each of the planned energy poverty alleviation actions. It is important to build inter-departmental collaboration within the municipality, for instance between accounting, technical, and procurement departments, to achieve collective expertise on the issue. Having found the source of funding, transparent procedures should be followed, and business models need to be feasible and economically viable.

POWERPOOR puts in the centre of the solution the use of joint energy initiatives and leveraging innovative financing tools. Therefore, the POWER FUND tool has been developed to facilitate the process of adopting the POWERPOOR approach in Energy Poverty actions. Innovative Collective Initiatives are chosen as they are powerful tools to improve energy-related conditions and accessibility, while at the same time, they can be a good alternative to individual or traditional financing methods. Moreover, the collective approach fostered by energy communities and/or crowdfunding initiatives is particularly appropriate to address the enormous challenges faced by energy poor citizens who wish to take action to reduce their energy consumption or improve the energy efficiency of their households.

An extensive repository of Financing opportunities for Sustainable Energy & Climate Action Plans can be found <u>here.</u>

Recommended

to utilise in Energy Poverty Alleviation Offices

Municipalities can have a lot of benefits by combining the Energy Poverty Alleviation Offices, who can be at the core of their energy poverty alleviation actions implementation, with the extended network of certified POWERPOOR Energy Supporters and Mentors who have the capacity to contribute in the decision making, the implementation and the facilitating of the innovative fiancing solutions.

The POWER FUND tool

POWER FUND, the third tool of the POWERPOOR toolkit, is a web-based tool aiming at familiarising energy poor citizens and local authorities across Europe with Collective Innovative Actions to tackle energy poverty. POWER FUND provides the users with an Online marketplace for Collective Energy Initiatives, such as energy communities and cooperatives, as well as an open space to learn about innovative financial schemes like crowdfunding, and how to use the potential of Collective Finance to overcome the economic and financial barriers hindering energy poor citizens from taking part in the energy transition. For instance, some of the actions that POWER FUND could facilitate include:

- Support house owners to pay the large up-front costs of Renewable Energy installations and/or Energy Efficiency investments.
- Help lower the costs of Renewable Energy installations and/or Energy Efficiency renovations thanks to bulk purchases and economies-of-scale
- Assist off-grid households and communities to pool together the resources and capital required for capital-intensive off-grid energy projects investments
- Aid individuals in combining their buying power to purchase energy at better prices on the wholesale market.
- Support citizens and key organizations to develop energy communities, with the energy poverty focus.
- Provide existing communities/cooperatives with resources to tackle energy poverty.







Leveraging available schemes – The social voucher for covering energy costs

Vitoria-Gasteiz City Council, through its participation in the POWERPOOR project activities, have promoted the social voucher for the energy vulnerable people of the municipality to further help them alleviate energy poverty.

The social voucher is given to people that are identified to be energy poor and can cover a share of their energy costs.

Vitoria-Gasteiz City

To assure sufficient funding for this measure, the Vitoria-Gasteiz City Council used versatile sources of available funding. However, this measure to be successful long-term, strong commitment by all political parties and continuous monitoring of the relevant indicators for the coming years are needed.

Social voucher is one of the measures of the energy poverty alleviation strategy that has been developed and officially incorporated in the city's SECAP with the help of POWERPOOR project.



The POWER FUND tool is accessible in 10 languages via

- the POWERPOOR website <u>https://powerpoor.eu/toolkit</u>
- the standalone POWERPOOR TOOLKIT page <u>http://powerpoor.epu.ntua.gr/powerpoor-toolkit/</u>

More info

- A guide on the functionalities of the POWER FUND tool along with the methodology employed to develop it can be found <u>here</u> in Deliverable 2.4.
- Step by step instructions on how to use the POWER FUND tool can be found <u>here</u>.

Section "Collective Energy Initiatives"

Collective Energy Initiatives can be seen as tools that are able to provide users, i.e., individuals, including energy poor citizens, local and regional authorities, and communities / cooperatives, with three types of services:

Join a community: A list of energy communities / cooperatives per country, with information about their pricing and management policies, the services provided to energy poor citizens, and the process to join and become an active member;

- Create a community: Guidelines on how an energy community can be established and operate by energy poor citizens and in close collaboration with local stakeholders, especially for the participating countries;
- Operate a community: Tips and tools to help users in managing and operating their energy community, including tools for monitoring data on energy consumption / production, and evaluating the performance of a city/community/buildings, in terms of energy efficiency);

Section "Innovative financing schemes"

POWER FUND's section of Innovative financing schemes provides the users with detailed information on crowdfunding and how to use it, through three main components:

- Invest Citizens: An introduction to crowdfunding providing information on what it is (types of crowdfunding, a brief explanation of how the process works, finding the right crowdfunding platform, namely the differences among platforms according to field of specialization, allocation of funding, costs, etc.) and how to pursue financing opportunities in order to implement sustainable energy interventions, such as energy efficiency measures in their house/ apartment.
- Funding Assistant: A detailed guide on how to create a Crowdfunding campaign, including how to choose your model (objective, funding target, incentives), how to prepare a campaign (target audience, marketing video, social media), how to manage a campaign (monitoring, audience engagement), and how-to follow-Up
- Raising Capital: A repository of relevant Investment opportunities (Crowdfunding campaigns) for citizens to examine and/or invest in, with all relevant info such as technology deployed, participation type (reward, lending and equity-based), location, and link to the hosting platform.

