POWERPOOR

Empowering Energy Poor Citizens through Joint Energy Initiatives

Report on the training activities for Energy Supporters and Mentors

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

April 2023

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Work Package 3: Capacity building and multilevel knowledge creation

Deliverable D3.6 Report on the training activities for Energy Supporters and Mentors

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Abbreviation	Explanation
ES	Energy Supporter
EM	Energy Mentor
OSS	One-Stop-Shop
EPAO	Energy Poverty Alleviation Offices

1. Introduction

The POWERPOOR project aims to develop support programmes for energy poor citizens through joint energy initiatives and leveraging innovative financing schemes. It promotes experience and knowledge sharing by encouraging citizens' active involvement in 8 pilot countries: Bulgaria, Croatia, Estonia, Greece, Hungary, Latvia, Portugal, and Spain.

One of the key elements of the project is training interested individuals to become Energy Supporters (ES) and Mentors (EM). Energy supporters engage directly with energy poor citizens and advise them on improving their energy efficiency. Energy Mentors provide support and expertise related to energy communities and crowdfunding in a local or regional level and staff the Energy Poverty Alleviation Offices (EPAO) that have been established in municipalities. Certified by the POWERPOOR certification scheme, both ES and EM act as local heroes by supporting energy-poor households to implement behavioral changes and low-cost, small-scale energy efficiency interventions, help them to identify their energy needs, and encourage the uptake of renewable energy sources by promoting energy communities and cooperatives while leveraging innovative financing schemes. At the same time, Energy Mentors are further trained to support municipalities and staff the Energy Poverty Alleviation Offices that act as a one stop shop of information in alleviating energy poverty using the POWERPOOR approach. The work of ES and EM is complemented using the Energy Poverty Mitigation Toolkit, a data-driven ICT tool that facilitates the identification of vulnerable citizens or neighbourhoods, develops their profile, and contains information on joint energy initiatives.

1.1 Purpose& Scope

The project pilot countries carried out in total 66 trainings to skill 1174 Energy Supporters and Energy Mentors. All this effort is a great opportunity to engage with enthusiastic individuals and create a broad network to support energy poverty alleviation. At the same time, challenges, such as the Covid-19 pandemic arose, that required coordinated and creative online solutions from the pilot countries.

This document aims to summarise both the opportunities and challenges the pilot countries faced when training interested individuals. It contains a general overview of the training process of each pilot country, containing a description of country specific adjustments, if any. A qualitative and quantitative assessment of the training attendants and their feedback is included. Finally, the key lessons learned per country during the delivery of this activity are included. Summarised takeaways of the pilot countries are part of the conclusion of the document.

1.2 Objective of the trainings

The POWERPOOR project applies a bottom-up collaborative approach to alleviate energy poverty. Energy Supporters (ES) and Energy Mentors (EM) were trained to tackle energy poverty on local level. The training consists of 4 Modules giving a comprehensive overview on energy poverty, the POWERPOOR energy poverty mitigation toolkit and

mitigation options. The details of the training modules and the training material can be found in D3.4.

Table 1: Overview of the training modules

	MODULE 1	MODULE 2	MODULE 3	MODULE 4
Part I	Introduction to energy poverty	EU energy poverty alleviation policies	Collective Innovative Actions for Energy Poverty – Introduction	Energy poverty challenges and opportunities in cities
Part II	The POWERPOOR project	Energy poverty alleviation actions	Crowdfunding & Innovative Finance	Tackling energy poverty in cities' SECAPS
Part III	The POWERPOOR Toolkit	Household Energy Performance	Collective Energy Initiatives	Climate and social innovation tools to drive energy poverty actions at the local level
Part IV	POWERPOOR Toolkit exercises			

The modules contain information suitable for interested individuals and for representatives of municipalities. In particular, Module 4 addresses mainly the needs of municipalities that strive to address energy poverty. To effectively train and support all the interested individuals, especially during the Covid-19 pandemic, online tools (e.g., Miro, google jamboard) were used to enhance participation and make the trainings more interactive and 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.

Trained Energy Supporters and Mentors are essential for the energy poverty alleviation. ES engage directly with local citizens and advise them on how to increase their energy efficiency through behavioural changes and small-scale energy efficiency interventions, they help them build their energy profiles and encourage the use of reneweable energy through joitn energy initiatives. EM can do what an ES does but they also master expertise in key areas associated with the operation and/or creation of energy communities and innovative financing schemes. They also can staff the Energy Poverty Alleviation Offices.

The aim of the trainings was to involve enthusiastic individuals from various backgrounds, such as employees of public authorities, social workers, consultants, professionals in the field of energy poverty, entrepreneurs, health practitioners, university graduates, etc.

The POWERPOOR partners in all the pilot countries used a transparent and objective

certification scheme as a guide to facilitate the progress of training, assessing, and certifying the potential ES and EM. After attendees absolved the training session, they became eligible to participate in the assessment part. In case the training participants passed the knowledge assessment, they were nominated with "Energy Supporter/Mentor Certificate" depending on the training they received. More information on the certification scheme can be found in Deliverable 3.3: POWERPOOR Certification Scheme and Obligations.

1.3 Structure of the doucument

This report is structured as follows:

- **Section 2** presents the evaluation of the training activities for the energy supporters and mentors in the eight pilot countries and in an EU level.
- **Section 3** concludes the report

2. Evaluation of the training activities for the Energy Supporters and Mentors in the eight POWERPOOR pilot countries

The training sessions took place in 8 countries over 22 months. This section of the report is dedicated to a more detailed description and a quantitative and qualitative assessment for each pilot country. The assessments and key takeaways are summarised in the conclusion of this report.

2.1. Bulgaria

As part of the Capacity building Programme for Energy Supporters and Mentors in Bulgaria Energy Supporters and Mentors have been trained by the project partner SOFENA in a sequence of training sessions and seminars. All seven training sessions were held in person as F2F meetings in an especially allocated time and place.

Since June 2021, 7 trainigns were held in Bulgaria with a total of 243 participants, 213 of them proceeded with the certification and became Energy Supporters and Mentors, exceeding the provisional KPI for Bulgaria of 145 certified Energy Supporters and Mentors.

The first training was a session held on June 30, 2021, in a local vocational school, i.e., the Professional high school of electrical engineering and automation. The participants were students in their final two years (11th and 12th grade) and some of their teachers. Due to the COVID-19 restrictions, only a selected number of students were invited to the training. It took part outside of the ordinary curriculum during an entire school day where all the training modules were presented, and after every presentation there was time allocated for questions, followed by a short break. The session was attended by 58 participants, all students completed the test successfully and were certified as Energy supporters (50). The teachers were invited to an additional session in the afternoon, completed a questionnaire and received certificates for Energy Mentors (8). All participants were very active during the training and were enthusiastic about the topic of alleviation of energy poverty. Some of them shared their own experience when trying to help people to manage their energy consumption.

The second training was an extended seminar, held on July 5th and 6th, 2021, in Hotel Infinity, in the town of Velingrad. For the training SOFENA had invited experts from other agencies working on energy efficiency and green energy solutions, mostly engineers with many years of experience in the field. On July 5th there was a morning session presenting briefly the POWERPOOR project, providing training for all the modules in separate 1-hour sessions, and offering time for questions. The afternoon session took place in the form of a workshop, discussing the POWERPOOR tools, and the possibilities for tackling energy poverty through joint energy initiatives. Afterwards all participants were invited to take the test and to get certified as Energy Supporters. On July 6th there was a morning F2F training for Energy mentors, giving the opportunity to receive a certificate for Energy Mentors to those who took the test at the end. The training was attended by 37 participants, out of which 12 were certified as Energy Mentors and 17 as

Energy Supporters. The attendees were all very active, as some of them were already members of the Liaison Group, while others expressed interest in joining it.

The third training was held in Hotel Flamingo, Albena resort, on August 26th and 27th, 2021. The programme was the same as in the previous training, the first day focusing on presenting the project and providing the training for Energy Supporters, while the morning of the second day was dedicated to the F2F for training Energy Mentors. For this session SOFENA had also invited colleagues from the agencies in the Black Sea region and authorities from some of the local municipalities. The attendees were in total 38, the certified Energy Mentors were 14, and the certified Energy supporters were also 14.

The fourth training was held in Hotel Rila, Borovets resort, on September 3rd and 4th, 2021. It was jointly held with the Bulgarian partner of the EU Energy Poverty Advisory Hub, and it aimed at attracting the attention of more stakeholders from the local authorities of provincial cities, as well as other citizens from different background but with extensive networks. The programme was nearly the same as in the previous two seminars, only the sessions on energy cooperatives and on collective funding opportunities were extended, since it was clear that these are new topics for the audience and needed further explanation. The event was attended by 33 participants, and 19 certified as Energy Mentors and 10 as energy Supporters. The attendees were of various backgrounds, thus while some were supportive of the POWERPOOR concept, others were sceptical if it is going to be successful. It was very useful for us, at SOFENA, to hear people's objections and concerns.

The next training was held in the city of Smolyan, on September 24th and 25th, 2021. It was part of the nZEB Roadshow activities and was attended by employees of the local municipalities and experts from local agencies working in the field of energy. The training sessions were attended by 17 people, and 3 Energy Mentors and Energy Supporters were certified. The event gave us an opportunity to discuss with the Energy Agency Plovdiv the establishment of a Local Energy Poverty Alleviation office in Plovdiv.

On July 13th and 14th, 2022, together with the mayor's office of Vidin, SOFENA organised a special POWERPOOR training session as an F2F for the employees of the Municipality of the city of Vidin. The event was attended by 20 participants who work for different departments and are responsible for various aspects of the city's administration. All attendees were very active during the discussions and expressed interest in establishing a Local Energy Poverty Alleviation office in Vidin. (This is still to be done after the elections in Bulgaria.) As a result of the training 19 Energy Supporters and 1 Energy Mentor (the deputy Mayor Dessislava Todorova) were certified.

As a last effort in the Capacity building Programme for Energy Supporters and Mentors in Bulgaria in the months of January – March of 2023 the SOFENA office in Sofia provided several "walk in" training sessions as F2Fs for small groups of 3 to 5 participants at the time. The format intended to offer an opportunity for training and certification to university students at the New Bulgarian University, and also to employees of different

municipal administrations, who had different work/study schedules. The training sessions were attended by 40 participants in total, and as a result 22 Energy Mentors and 16 Energy Supporters were certified.

Results of the training evaluation

The overall results of the training evaluations were decisively positive. Most of the participants were very satisfied with the training provided; they evaluated the content as highly relevant, the POWERPOOR Toolkit as very useful, and expressed interest in participating in further POWERPOOR activities, or in similar courses.

During the training sessions the participants remained focused and very active until the end of the session. Discussions were lively and productive.

As a further indication of the effectiveness of the trainings must be considered the high percentage of participants who have chosen to take the test and to obtain one or both certificates: out of 243 attendees in total, nearly all were motivated to go through the testing and 213 (88%) of them completed the test achieving results that satisfied the requirements for obtaining a certificate.

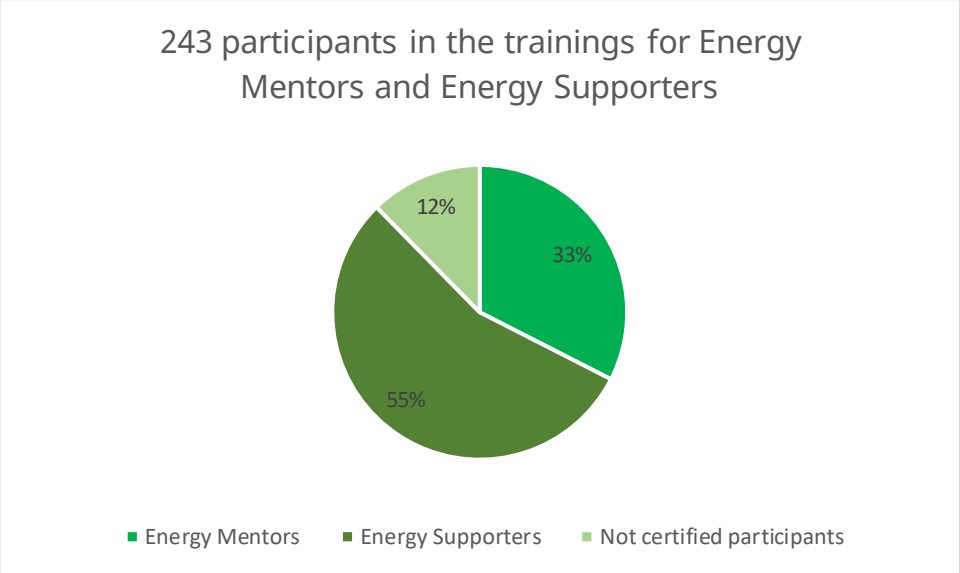

Figure 1: Participation rate of the trainings in Bulgaria

Experiences and lessons learnt

As the trained Energy Mentors and Supporters went on to work with municipalities and to visit energy poor households, a few issues became apparent.

The first one was that while the Energy Supporters were happy to visit the houses of citizens from their own circles of family/ friends/ neighbours, knocking on the doors of strangers was not a good thing to do. Bulgaria has a relatively high crime rate, and people are extremely reluctant to let strangers into their homes, making “cold calling” virtually impossible. A way around this situation was to “couple” the POWERPOOR home visits with another activity, which is more familiar to the citizens. The ongoing projects

of Sofia Municipality for replacing old and inefficient heating appliances with environmentally friendly alternatives provided such an opportunity. Thus, visits to (potentially) energy poor households were carried out as part of the monitoring process of the municipal projects.

Secondly, in Bulgaria the energy poor households are usually inhabited by people with little education and nearly no exposure to modern technologies. Asking them to work with the POWERPOOR Toolkit in many cases was just impossible, even requesting information from them, so the Energy Supporter could enter it personally into the PowerTarget or PowerAct appeared to be making them suspicious, thus ending the conversation. So, the Energy Supporters in Bulgaria had no other option but to print the questionnaire and to invite the energy poor citizens to fill it in themselves, or to fill it in on their behalf.

2.2 Croatia

As part of **Capacity Building Programmes for Energy Supporters and Mentors** - Energy Supporters and Mentors in Croatia have been trained locally by the project partner DOOR, using the following tools:

1. Training seminars for Energy Supporters and Mentors (5 seminars)
2. Webinar for Energy Supporters and Mentors (1 webinar)
3. Face to Face (F2F) tailor-made seminars for Local Energy Poverty Offices (2 F2F)

As part of Capacity Building Programmes for Energy Supporters and Mentors DOOR has held 8 trainings with 107 participants, 91 of them took tests and were certified as Energy Supporters and Mentors achiving the KPI of 90 certified Energy Supporters and Mentors for Croatia.

In 2021, 3 trainings were held (2 F2F and 1 training) with June 6th, 2021 being the first online training seminar that was held and 4 Energy Supporters and Mentors were certified. The first F2F training was held online due to COVID-19 with the city of Zagreb (the social welfare office in Zagreb) and the second F2F training was in person with local authorities from city of Križevci. The focus in the two F2F meetings was not only the certification of Energy Supporters and Mentors but also exploring the possibility of opening a Local Energy Poverty Alleviation office at the premises as well as presenting the POWERPOOR approach and how it can be applied locally.

In 2022, 4 trainings took place (1 webinar and 3 training seminars). DOOR and the Red Cross in Križevci held the second training seminar in Križevci on March 31, 2022, where 54 Energy Supporters and Mentors were certified, while the third training seminar was held in Zagreb on September 30, 2022 where 8 Energy Supporters and Mentors were certified, and the fourth training seminar was held on December 1, 2020 in Zagreb, where 7 Energy supporters and Mentors were certified. The focus of the webinar was on energy community, energy cooperative, crowdfunding and the POWERFUND tool since these concepts are quite unknown and new.

In 2023, 1 training was held on January 19, 2023. The fifth training seminar was held in Zagreb where 18 Energy Supporters and Mentors were certified.
From the 5 training seminars participants proceeded with the certification for Energy Supporters and Mentors but for both F2F meetings and the webinar they did not. After the F2F meetings, the municiapalities decided that a Local Energy Poverty Alleviation office will be established one in the city of Zagreb and one in the city of Križevci.

In *D3.7 List of Energy Supporters and Mentors & online registry* the background of the participants is described in more detail, but a couple of interesting data that emerged from the analysis is that women have been more interested in becoming Energy Supporters and Mentors. There is a greater number of Energy Supporters and Mentors among both employed and students and it is noticeable tendency that as the level of education increases, so does the ratio of certified Energy Supporters and Mentors increase in favor of Mentors.

It is a positive thing that DOOR did 3 out of the 5 trainings as physical trainings, while only 2 were held online and those that were online were for DOOR employees who already worked in the field. Notable observation is that personal training encouraged greater engagement of the participants encouraging discussion and experience sharing.

The certification process was conducted immediately after the seminars as a way of "practice and repetition of Modules". Those who visited households and performed simple energy audits and who worked on counseling citizens in Local Energy Poverty Offices were also given the opportunity to become Mentors.

As for the modules, they were adjusted according to the data and the situation in Croatia. The most significant changes took place in Module 2 in part Croatian policies - in 2022 in comparison to the 2021 analysis in *D4.2 of the Baseline Assessment Report* there was an introduction of the concept of energy poverty in policies (but not yet the national definition of energy poverty) and passing policies that promote community-ownership of energy and collective finance / crowdfunding. Another factor was the energy crisis where Croatian government's response in 2022 was changing existing policies and the introduction of new measures. Another important change in Module 2 for the last seminar (fifth seminar held on 19/01/2023) is the change in prices from the Croatian kuna (HRK) to euro (EUR) because Croatia entered the eurozone on January 1, 2023. Because of all of this, Module 2 often had to be adjusted. Module 3 was a little bit shortened, but that's why the POWERPOOR webinar was dedicated to be held with focus on topics of energy community, energy cooperative, crowdfunding and the POWERFUND tool - practically Module 3. In Module 4, s list of all created SECAPs in Croatia and examples of SECAP that have measures of energy poverty in Croatia was added.

Results of the training evaluation

General impression of the training (organization, lecturers, modules, duration of training) was rated with the highest score (100% participants rated it with 5).

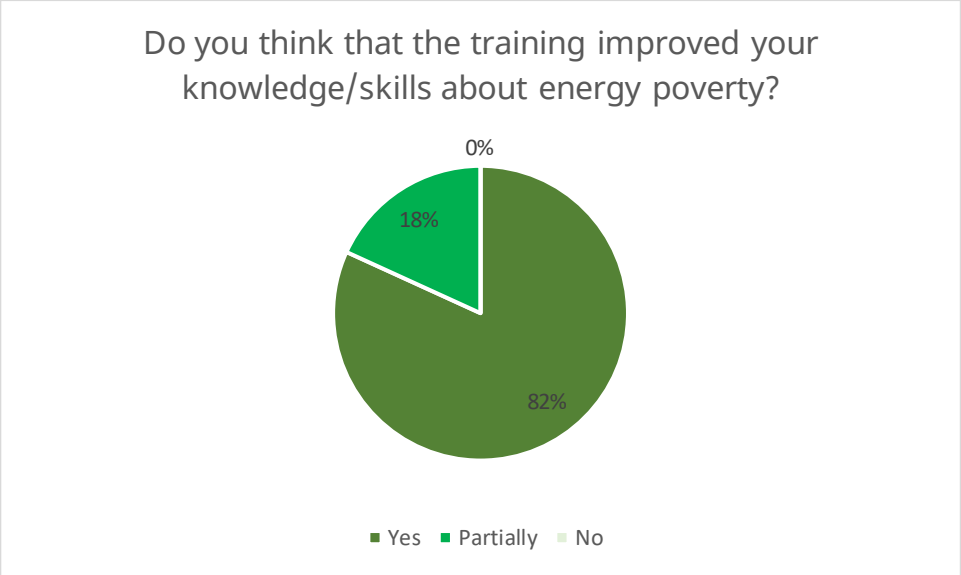

Figure 2 Answers to the questions from the training questionnaire.

To the question „D*o you think that the training improved your knowledge/skills about energy poverty?*" 82% participants said *yes* and 18% *partially* (Figure 1). The comments of those said *partially* was that they would like an additional course on crowdfunding. This is reason why the focus of one of the POWERPOOR webinars was on energy communities, energy cooperatives, crowdfunding and the POWERFUND tool- practically Module 3 .

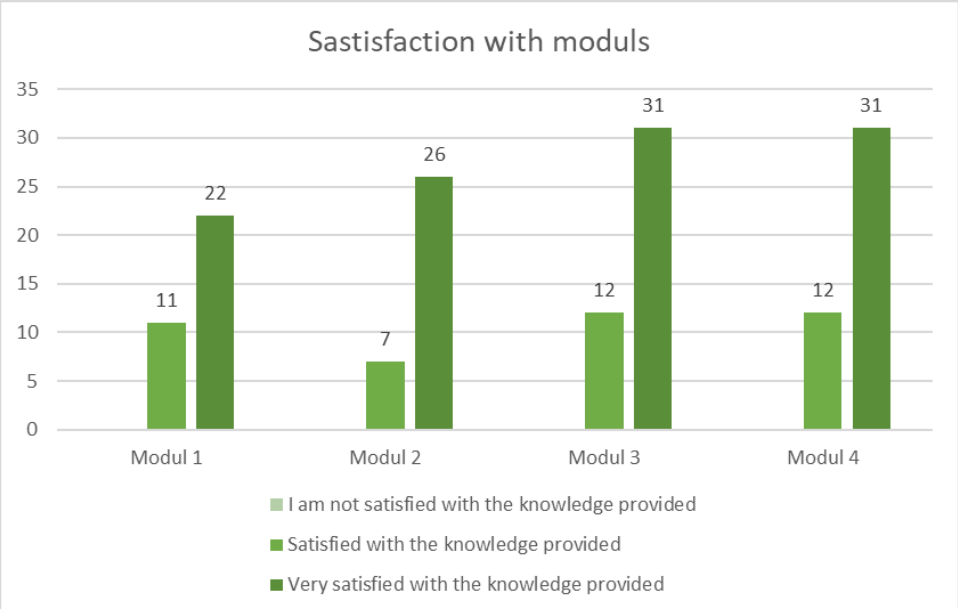

Figure 3: Answers to the questions from the training questionnaire

In the questions *„Which module was most interesting?"* 55% of respondents said that they liked A*ll Modules equally*, and 45% of respondents preferred *Module 2* as interesting. On Figure 2 it can been see an individual opinion for each of the modules - most of the

examinees declared that they were *Satisfied with the knowledge provided* and/or *Very satisfied with the knowledge provided.*

Experiences and lessons learnt

The most significant lesson learnt is that in Croatia due to the high demand for workers, it was difficult to motivate volunteers, especially students, to set aside some of their time and do the home vistis when they could work during that time and earn the much-needed money.

Also cooperation with the Red Cross and similar organisations proved to be the most successful approach for household visits. Organisations such as the Red Cross already have some projects with which they work directly with beneficiares so they were able to help in reaching out to the energy poor. They are also more successful in reaching out since they have developed trust with citizens.

2.3 Estonia

In Estonia five trainings were organised between May 2021 and September 2022. Two trainings were held online; the other three were held on-site. Two trainings out of five were organized as a 1-day training, including all training modules in one working day: training of energy supporters in the morning and training for mentors in the afternoon. Three trainings were organized as 2-day training, where training modules were divided between 2 afternoons: one day of training for supporters and one extra day of training for mentors. Overall, 241 participants took part in the trainings, from which 101 successfully passed the test and received a certificate of energy supporter or mentor, fulfilling the Estonian KPI of 100 energy supporters/mentors.
Almost all participants decided to go through both training sessions (for energy supporters and mentors) and became energy mentors. Only 5 participants decided to become only energy supporters. There may be several reasons for that:

- at first, the information about the two sessions were always disseminated together to show to the potential participants how the training of energy mentors builds on the training of energy supporters;
- secondly, the discussion on the possibility of establising an energy community became more active in Estonia the last years and participants found it useful to hear more about that at the training for mentors;
- thirdly, many participants found the training for energy supporters so interesting that they decided to continue also in the session for energy mentors, even if this was not their initial plan.

Interested participants were recruited through open calls. The information about the trainings was disseminated through the network and online lists of the EKYL Training Center, social media channels, and direct contacts in the POWERPOOR pilot cities in Estonia. The most popular was the 2-days training organised online in webinar format, as it allowed participation all over the country especially during COVID-19. It was also

the training that was recorded and popularly revisited by participants after its completion.

As a background, the majority of the participants were managers or active community members of non-profit apartment associations, which is the most common form of housing management in Estonia. In most cases, it meant that they had some prior experience working with energy-poor households but lacked formal training in energy management in housing as well as hands-on expertise resolving energy poverty in multi-apartment houses. The background was taken into consideration when customising the POWERPOOR training modules for the Estonian setting.

The trainings were held by experts from EKYL in cooperation with members of the POWERPOOR Stakeholder Liaison Group in Estonia, who joined the trainings as lecturers with their specific competences. For example, national financing institution Fund KredEx provided the part of the trainings introducing financial solutions for improving energy efficiency and reducing energy costs, and the Tartu Regional Energy Agency shared practical tips for households on how to save energy and use renewable energy solutions.

The POWERPOOR training modules were adjusted to the needs of the local target group in Estonia. As the focus of the POWERPOOR project in Estonia was on the risk of energy poverty in multi-apartment buildings, specific local information was added to the training programme that was necessary for energy supporters and mentors working with households in non-profit apartment associations. Adjustments were made mainly in Module 2 and Module 3. It included information on the legal aspects and management structure of this type of housing. In addition, the financing scheme of bank loans and guarantees was added to the training module on financing, as this is a more common solution in Estonia for collective financing of energy-efficiency improvements than crowdfunding. Also, extra time and group work were planned for the trainings to help the participants interact and get to know each other. It was seen as a part of the network-building to help the work of energy supporters and mentors after the training.

The testing was organised online, using a Google Form, that was send out after the training, with a different set of questions prepared for energy supporters and mentors.

During the sessions, the participants were highly motivated, participating actively in discussions and using online training tools in the webinar. Nevertheless, many decided not to take the test to get the certificate. In their feedback, they explained that for them, the most important thing is the valuable knowledge they gained from the training, not the certificate.

Results of the training evaluation

The feedback from the participants was gathered with a Google Form Questionnaire, sent to participants after the training. 40 responses were received together. The figures below describe the opinion of the participants on different aspects of the training.

How satisfied are you with the organisational aspects of the training?

Participants found the organisation of trainings mostly excellent or good. Nobody answered that the organisation of the training did not meet their expectations. It can be considered a very positive result as most of the participants attended the trainings online, which did not allow for as much interaction between participants as planned.

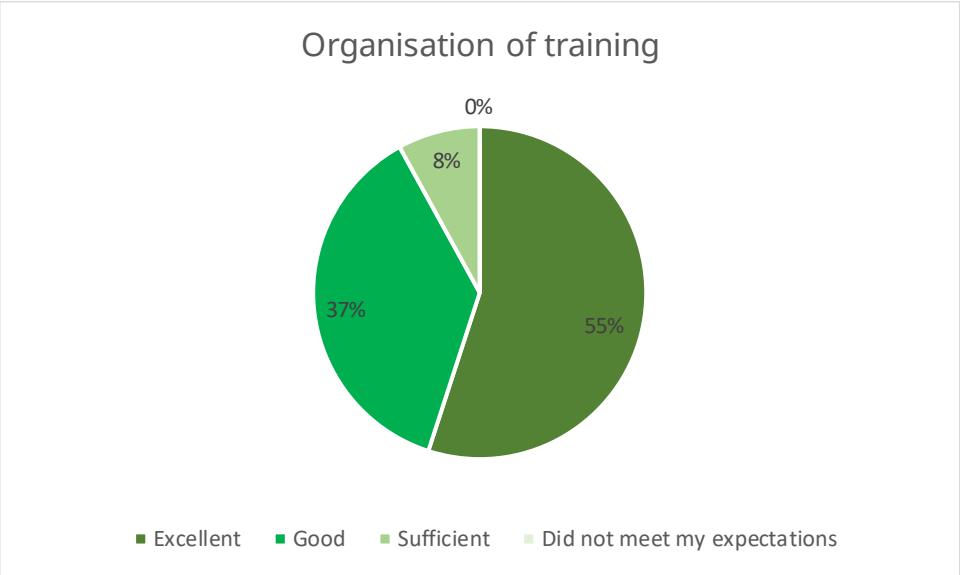

Figure 4: Organisation of training.

How satisfied are you with the choice of topics?

97% of the respondents found that the choice of topic for the training was "excellent" or "good". It confirms the interest of the target group in energy poverty in Estonia and shows that the adjustments to the training modules were made according to the local needs.

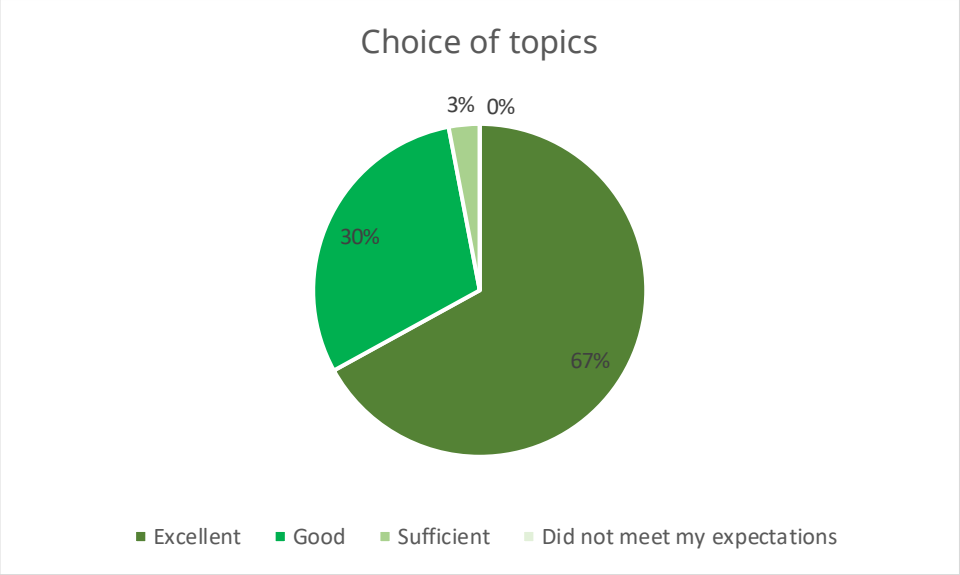

Figure 5 Choice of topics

Which module did you find the most interesting/useful?

The participants found the most interesting/ useful the Module 2, which gave information about energy poverty alleviation actions, and the Module 3, which shared solutions for collective financing.

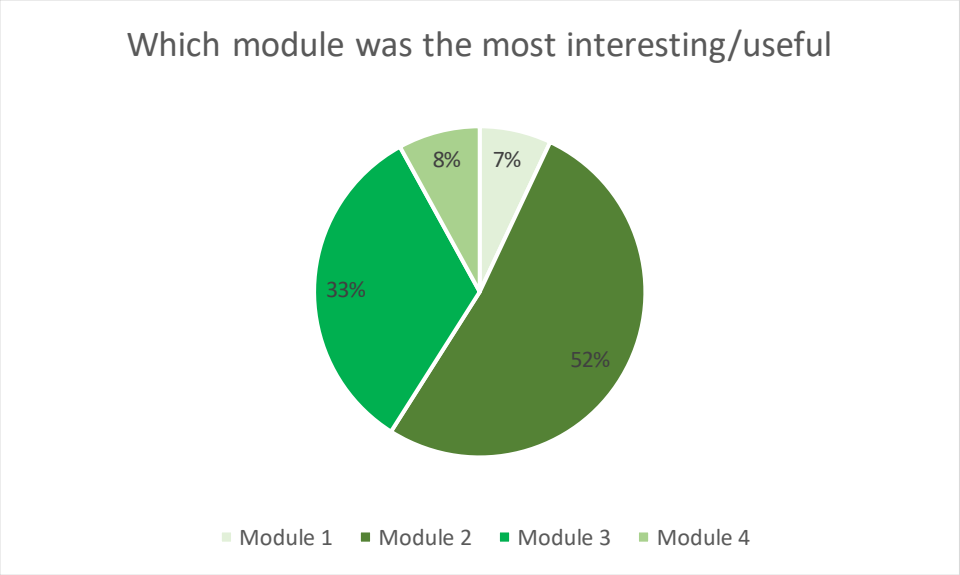

Figure 6: Which module was the most interesting/useful.

Which topics would you like to learn more about?

The participants were also asked to name the topics that they find useful to learn about but were not part of this training.

Most mentioned topics in the feedback:

- Practical tips for energy refurbishment of the residential buildings
- Feasibility of investing in solar panels in the apartment association
- Practical training on communication skills for home visits

Are you ready to use the POWERPOOR tools in the future?

The participants were also asked to estimate how ready they are to use the POWERPOOR tools in the future. Most of the respondents confirmed that they want to use at least some of the POWERPOOR tools in the future.

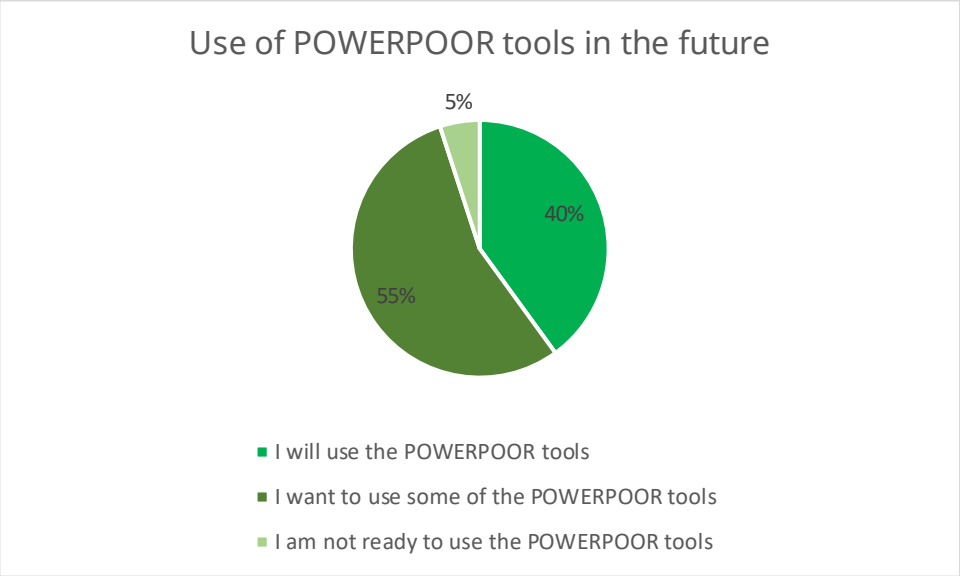

Figure 7 Use of POWERPOOR tools in the future.

Experiences and lessons learnt

The training process was evaluated continuously and feedback from the first trainings was already considered and embedded in the next training sessions.

Lessons learnt:

- Overall, the training sessions were very successful. Participants were very interested and motivated in alleviating energy poverty in their local community but preferred practical skills and tips to theoretical and policy lectures.
- Some technical issues were experienced as one session was postponed due to the technical problems with online platform and technical problems of the participants. The solution was found in recording one full training which provided the opportunity for participants to use the recording later at the time suitable for them.
- Energy poverty, although quite universal in the core concept, is still very much country-specific and influenced by many local circumstances. Therefore, much effort was needed to adapt the training modules according to the needs of energy consumers in Estonia. The feedback later showed that the adapted parts of the training program were also the most popular topics of the training.
- Preparation for energy supporters and mentors requires, in addition to technical lectures, practical lessons in communication with energy-poor households. For that, the training must be longer than planned in the pilot version.
- When considering the feedback of the pilot training participants, there is a great

potential to use the training programme in the future as a part of the professional training curriculum of housing managers in apartment associations in Estonia.

2.4 Greece

In Greece the trainings under the supervision of INZEB and SUST, were successful and all the relevant KPI's were achieved and exceeded. In each engagement cycle several training seminars, webinars, and F2Fs were held either physically or virtually. INZEB mainly led the training seminars and webinars that were opean to a wider audience and SUST the F2Fs that were mainly held for people working in municiaplities. In total, 9 training sessions were organised, 1 physical presence and 8 virtual. A total of 323 people participated in the trainings 243 of which completed the Energy Supporters and Mentors' certification process.

Prior to the launch of the first engagement cycle, an online information event was organised to introduce the purpose of POWERPOOR and to encourage people to actively participate in the project and the future training activities. Interested indivicuals were also informed about the training format and the overall certification process (mandatory attendance of all the modules and completion of the assessment). Moreover, in order to inform potential participants about the upcoming training activities and the F2F seminars, various means of communication were chosen. For the training activities various posts on the partners' websites, and on social media were made, along with reaching out to INZEB's network of stakeholders and collaborators, specifically, the regional chapters of the technical chamber of Greece, members of energy communities, and university students. For the F2Fs in addition to the aforementioned means of engagement, direct communication with municipalities was achieved through SUST's network, as well as with posts on local media especially for the municipalities interested in hosting an energy poverty alleviation office.

The background of the attendees varied. There were participants from the engineering sector (energy inspectors and auditors, mechanical and electrical engineers, property valuers, engineering consultants etc.). Furthermore, there were municipal employees, with a wide range of age, profession, or study level, working in the Technical Department, Social Department, as Special Advisors or in other Public Utilities of municipalities. Some of them had prior experience working with energy-poor households (e.g., "Aid at Home" programme), while others had experience in energy-saving projects. There were also people from various backgrounds from across the country.

The training sessions were held by the qualified staff of INZEB, SUST, and NTUA. Sometimes guests were also invited to share their experiences and knowledge. The quests were from the research field, or representatives from regional authorities, or members of energy communities. The guests made the training sessions more interactive presenting tangible examples. Upon the completion of each training programme, a discussion took place, mainly to answer questions and concerns shared by the participants. At the end of each presentation, a few questions were asked, in the

context of understanding the topic raised by each speaker, in the form of multiple choice. This enabled the participants to engage and made the training sessions interactive.

The approach and goals of the POWERPOOR project and enhance the role of Energy Supporters and Mentors was also demonstrated. Presentations were also made on the role of local authorities in tackling energy poverty, how to incorporate energy poverty in SECAPs and how to address the phenomenon in local energy planning by leveraging the POWERPOOR approach, as well as the role that Energy Poverty Alleviation Offices can play in municipalities. During the sessions, all of the POWERPOOR modules, the POWERPOOR project, approach and objectives and the role of Energy Supporters and Mentors, the POWERPOOR toolkit (POWER-TARGET, POWER-ACT, POWER-FUND tools), energy saving measures, behavioural changes, visits to vulnerable households, energy communities and innovative financing schemes to tackle energy poverty and the role of local authorities in tackling energy poverty (energy poverty in the SECAPs and Energy Poverty Alleviation Offices in municipalities) were addressed.

Results of the training evaluation

Upon the completion of each training course, an evaluation was conducted. The participants were asked questions concerning the content of the modules, and the capacity of the trainers while an overall evaluation of the training course (organisation, expectations, etc.), was also included. The figures below reflect the opinions of the participants regarding the overall organisation of the training activities, if the training activities covered the participants' expectations and if the participants are willing to recommend the POWERPOOR training programme to their colleagues and network.

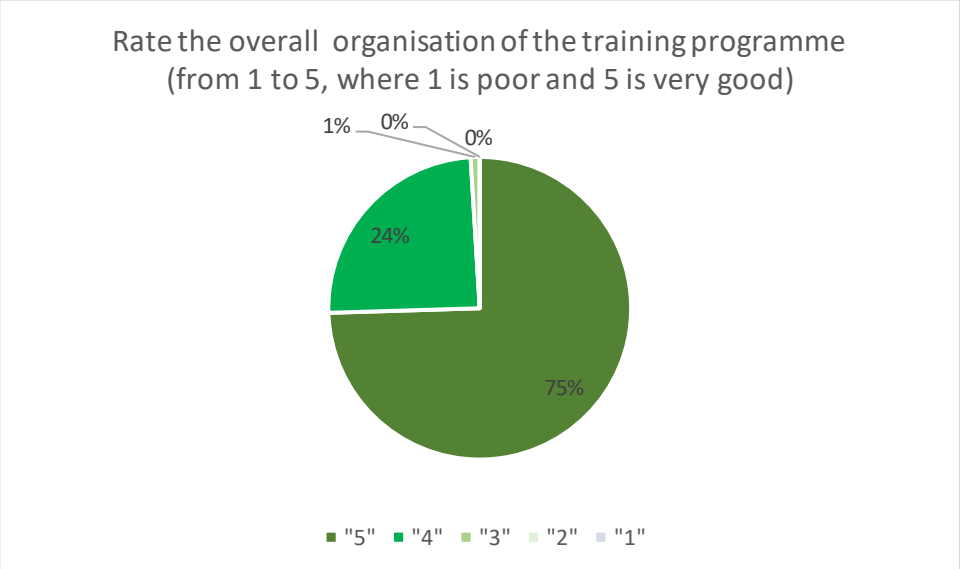

Figure 8 Organisation's training programme rating.

Figure 9 Recommendation of the training programme.

Figure 10 Expectations of the training programme.

Experiences and lessons learnt

Overall, there were no major difficulties in the implementation of the trainings, and the process was smooth. The following findings, lessons, and experiences can be summarised:

- Synergies with local actors, e.g., energy communities, NGOs etc, are important to attract those training candidates that are interested in the domain that the project works on.
- Physical training programmes are more efficient. The live interaction helps to establish better communication and engagement. One the other hand physical training activities require more effort in terms of organisation and cost while limiting the geographical scope of the participants as it needs to be organised in a local level.

- Online trainigns are more efficient in terms of organisation resources and cost, they promote wider participation since there aren't distance barriers but the interaction with the participants is a bit limited.
- Training modules need frequent updates to follow the EU and country developments. For example, the training materials have been developed prior to the energy crisis that Europe faces, thus this information needs to be included as the fact also reflects energy poverty rates. A second example concerns Greece, the energy communies' law was in place when the modules where developed. During the past months the law changed, a public consultation was in place, thus the modules need to be updated to follow the new legislative framework.

- The presentation of best practices during the trainings helped the Energy Supporters and Mentors to better support energy poor households and provide them with tailored advice.
- Module 2 proved to be more difficult to grasp for participants who had no technical background (e.g., social workers), as it included many details and technical aspects for energy retrofit interventions.
- An essential incentive for participation to the trainings was the acquisition of a certificate.
- One of the main findings and challenges was that most of the civil servants in municipalities did not feel comfortable enough to carry out home visits but also since Greek municipalities are understaffed, it was difficult for them to dedicate time to implement home visits within their working day.
- Overall, it is captured that citizens and society are aware of the phenomenon of energy poverty and they are keen to be engaged in activities to support themselves and their families and society as a whole.

2.5 Hungary

Overall, the Hungarian training pilot was smooth and effective and all relevant KPI's were fulfilled. In summary, 13 trainings were organised between June 2021 and April 2022, mostly in online form. The time slot was from 4pm to 7pm to facilitate joining after work or school. Trainings were mostly held by experts of Energiaklub, involving an external expert for particular topics, e.g., for energy communities.

132 persons took part in the trainings, 103 of whom became certified ES or EM fulfilling the pilot country KPI of 80 ES/EM. The EM training appeared to be less popular, only 19 from the 103 certifications are for EM. A reason for this might be the lack of energy community initiatives in Hungary.
The registration pace for the trainings varied, in some cases quickly filling attendance requirements, on others, however, an extensive promotion of the training was needed. Interested individuals were recruited through open calls, which were widely disseminated on social media platforms and municipal contacts.

The background and professional qualifications of the participants were very diverse, while the curriculum, which was adapted to Hungarian conditions and always updated, was useful for most participants.
The motivation of the participants also fluctuated. Interestingly, it was the municipal professionals who were less motivated. This might have been due to their extreme overburden by COVID-19 and the daily work. At the same time, the attitude of the professionals in Józsefváros and Ferencváros (POWERPOOR associated partner municipalities) was exemplary in terms of their proactivity, also the Energy Poverty Alleviation Offices were opened in these districts.
Many university students participated in the event, their level of engagement varied, but overall, the involvement of students was successful.
The training sessions were held primarily online, which made interactive communication difficult. Online tools, videos and polls were used to keep the sessions interactive, even though the course material was dense and the time available was limited. However, many useful links were shared on the slides so that everyone had the opportunity to deepen their knowledge.
Approximately 75% of the participants completed the assessment, indicating that a large proportion of them were highly engaged.
Certain parts of the training modules were adjusted to fit the online version, or to be specific to the Hungarian context. All topics were covered, however, energy communities and crowdfunding were less relevant and interesting for participants, since they are practically non-existing in Hungary.

Results of the training evaluation

The feedback gathering method was a google sheet questionnaire, which was sent to the participants to fill out. 27 responses were received altogether, which were used to visualize the quality ratings.
The below figure states that 74% of the respondents thinks that the trainings improved their overall knowledge about energy poverty. The remaining 26% thinks the content could have contained more.
It is important to mention that in Hungary, people are generally reluctant to give negative feedback. In this question, there was a possibility to select answers “not really” and “not at all”, but no one selected these options.

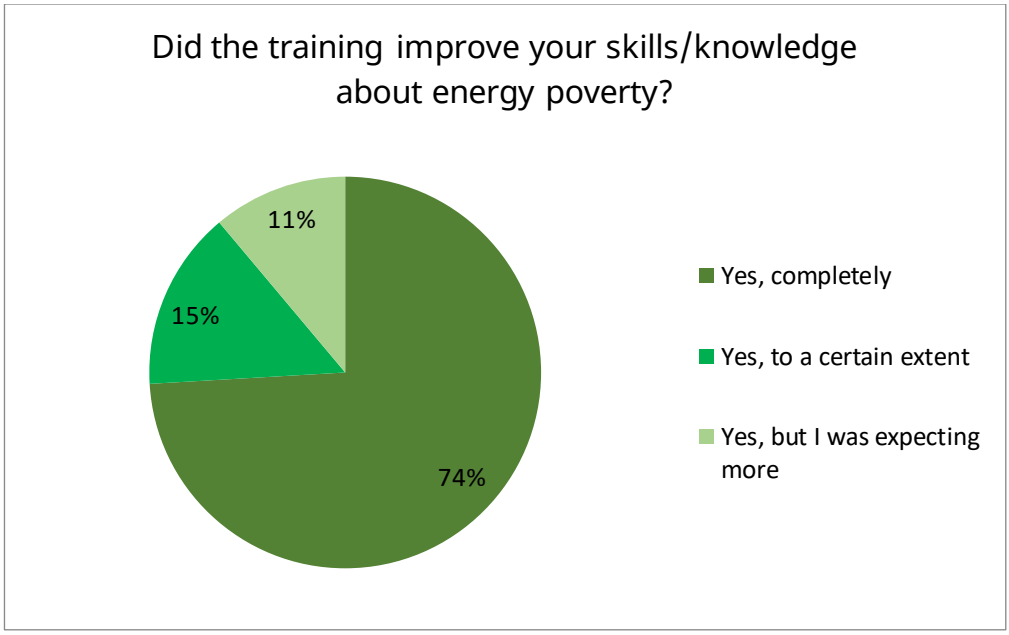

Figure 11 Skills/knowledge about energy poverty improvement by training.

The interests among the 4 modules varied. Module 3 containing information about crowdfunding and energy communities might have containted new information for the participants, since these initiatives are lacking in Hungary.

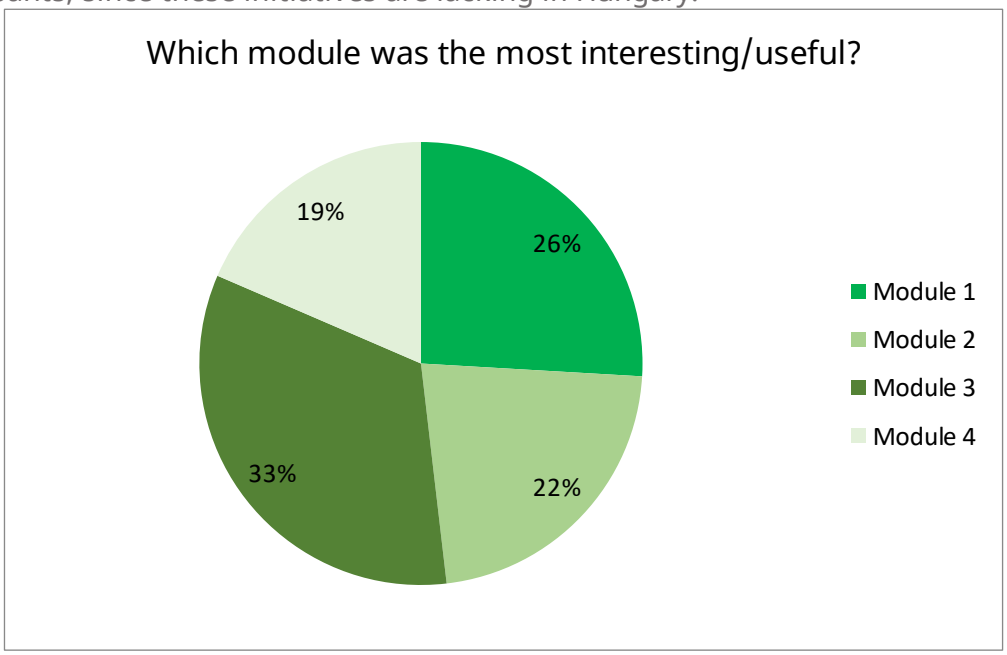

Figure 12 Interesting modules.

The participants were asked to rate the trainings compared to their expectations, the amount of interactivity and their overall quality. The scale was from Excellent (best option) to Sufficient (worst option). 66% of the respondents rated the overall quality of the trainings as excellent, 26% as good and 8% only as sufficient. The expectations of the participants were generally met. Interactivity rating of the trainings is split between 2 values – good and excellent, however, this was difficult to achieve due to COVID-19 restrictions. As mentioned earlier, no attendees indicated the worst option of not meeting any of their expectation.

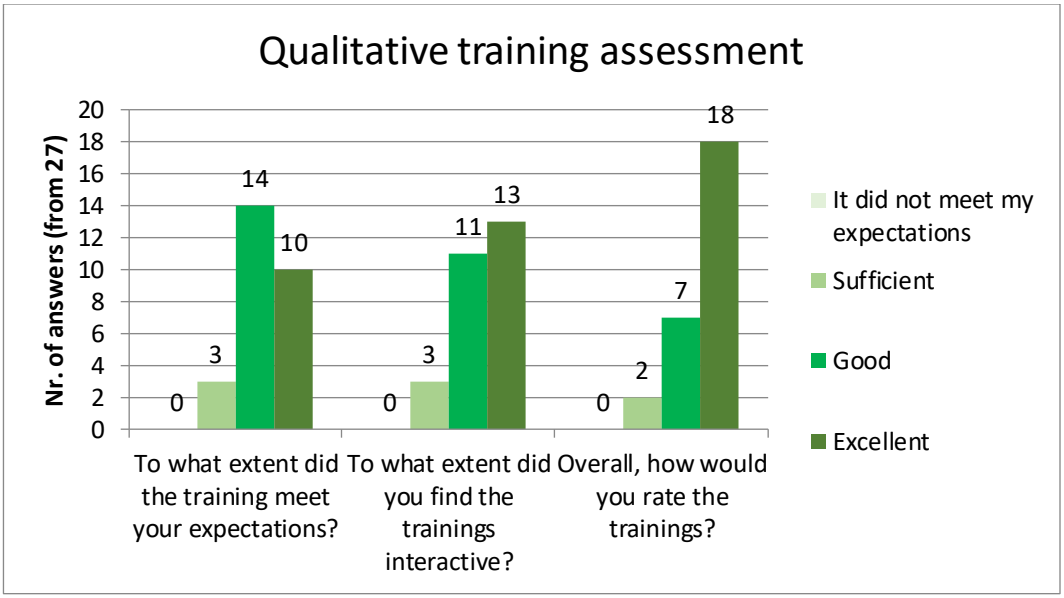

Figure 13: Qualitative training assessment.

Due to the fact that restrictions and lock down's prevented personal meetings, the trainers needed to adapt, and use zoom and other online tools to deliver the presentations. This was often difficult and a process of adapting to the conditions. Therefore, it was important to dedicate a feedback section focusing on the virtual nature of delivered trainings.

Most of the respondents found the PowerPoints, videos and polls presented online excellent or good. Overall, the online preparedness was rated as smooth and positive.

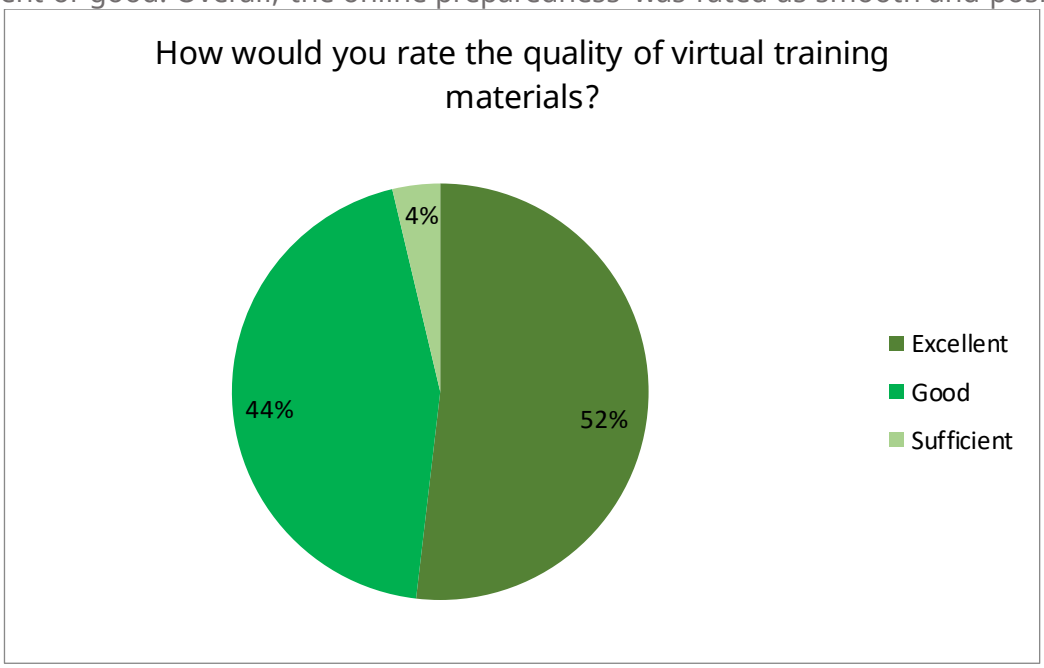

Figure 14 Quality rating of virtual training materials.

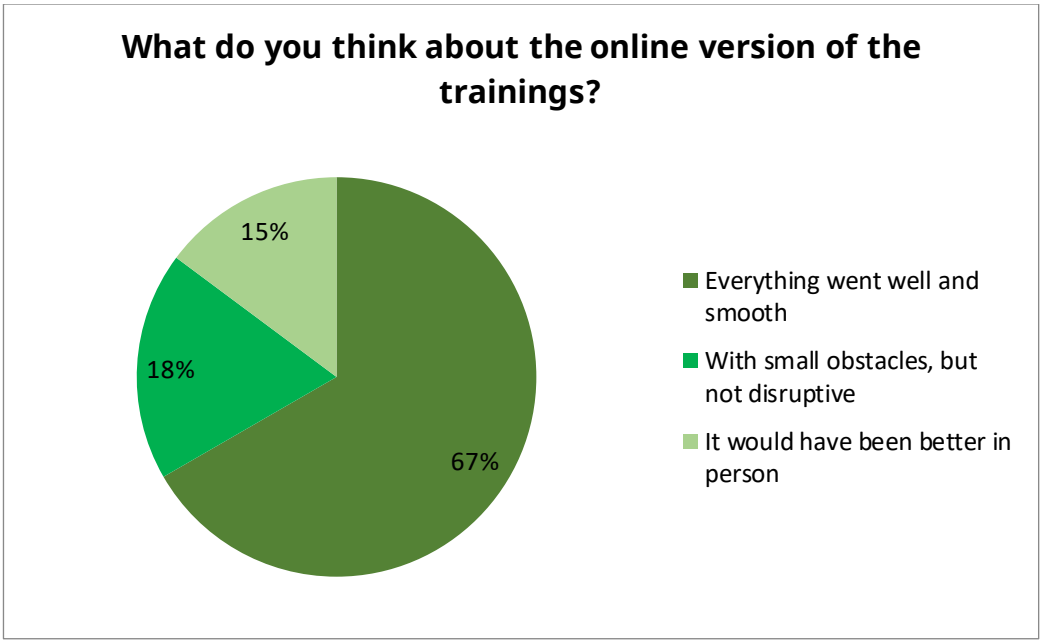

Figure 15: Online version of the trainings review.

An option for free text feedback was provided in the google form, which are not suitable for visualisation. 93% of respondents included their thoughts for the following questions:

Which topic would you like to hear/learn more about?
Most answers were about the POWERPOOR tools, practical examples and situations of home visits, as well as energy efficiency. 3 to 4 of the respondents also mentioned energy communities and crowdfunding.

What 3 things did you liked the most during the training?
Most of the answers here were mentioning jamboard as an online interactivity tool. Most of the respondents liked the online method, the quality of presenters, the concepts as a whole and the POWERPOOR tools. Responses were long and varied in this case, which indicates the overall positive judgement of the sessions.

What were the 3 things you liked the least during the training?
As well as the previous ones, these answers varied. Many mentioned the lengthy speaking and dense material, others were expecting rather specific and new information rather than well-known facts. The long hours of sitting and not enough breaks was common feedback from the participants.

Experiences and lessons learnt

Evaluating the training process as a whole, several take-aways were formulated. In the beginning of the process, translation of the modules into national language was work-intensive and burdensome. Many topics needed to be adjusted to be country specific, which required additional effort.
The most significant lesson learnt is that that the training sessions did not provide enough motivation for people interested in reducing energy poverty to take action. The length and depth of the training may not have given the participants enough confidence

and knowledge to carry out 'counselling' and home visits. With offline implementation, the trainings might have ended up with fewer participants, but with more dedication and confidence to perform home visits.
A very positive outcome is that participants from the Józsefváros municipality were really enthusiastic with the approach. As part of a further collaboration, Energiaklub shortened and tailored the materials to the municipality's needs, taking into consideration the building conditions, the SECAP plans and the audience receiving the training. This training was held with 42 employees of the municipality, most of them being interactive and engaging to open discussion about energy poverty.

2.6 Latvia

The training for energy supporters and mentors aimed to equip participants with the necessary skills and knowledge to support individuals and communities experiencing energy poverty in Latvia bearing in mind local specifics. Participants included individuals with a background in social work, community development, housing maintenance, energy policy etc.
All the set goals and KPIs were achieved including the main KPI of training at least 25 certified energy supporters and mentors. The total attendance of the 4 training sessions that were organised was 99 participants, excluding the speakers and organisers. The low certification rate can be attributed to the fact that energy poverty is a novel concept in Latvia, and many participants attended the training sessions also for informational purposes. The training sessions took place starting from June 2021 till February 2022. The ages of the participants ranged from 24 to 60 years. The gender distribution of supporters and mentors is 15 females and 10 males which corresponds to 58 female trainees and 41 male trainees.
Recruitment was primarily done through partner organisations, liaison groups and social media. Participants were generally proactive and engaged during the training, demonstrating a strong commitment to addressing energy poverty.
The training was conducted online, using a combination of video lectures, group discussions, and individual assignments. Challenges during the online training included minor technical issues for one or two users. Yet, doing the trainings online provided more benefits than difficulties since more people were able to attend from across the country.
In adapting the training for Latvia, country-specific challenges related to the country's energy infrastructure and social welfare system were addressed. The training also incorporated local examples and case studies to enhance the relevance and applicability of the training to Latvian participants.

Results of the training evaluation

Feedback on the training sessions was gathered by collecting questionnaires prepared in MS Office Word which were filled in by trainees and sent in. Supporters and mentors received different questionnaires that resulted in more detailed review of the participant opinions and will be described accordingly in the following paragraphs.
In the following figure below it can be observed that 24 trainees (from total of 25) responded that the training improved their knowledge of energy poverty and one

respondent (4%) stated that training improved his/her knowledge on energy poverty to a certain extent.

Figure 16 Skills/knowledge about energy poverty improvement.

The next question depicted in the following figure is Supporter specific, and its aim was to find out the most interesting topic for the supporters. The data collection method for this question was ranging the curriculum topics starting with the most interesting topic with assigned value of 1 up to the least interesting topic assigned with value 7. Thus, the higher the percentage the less interested participants were in the topic leading to a conclusion that two most interesting topics for trainees were *Energy efficiency measures and practical tips for households to reduce energy (electricity) consumption* closely followed by the topic of *Using PowerTarget and PowerAct tools in practice.* Topic of *Analysis of electricity and heat bills* was the least interesting.

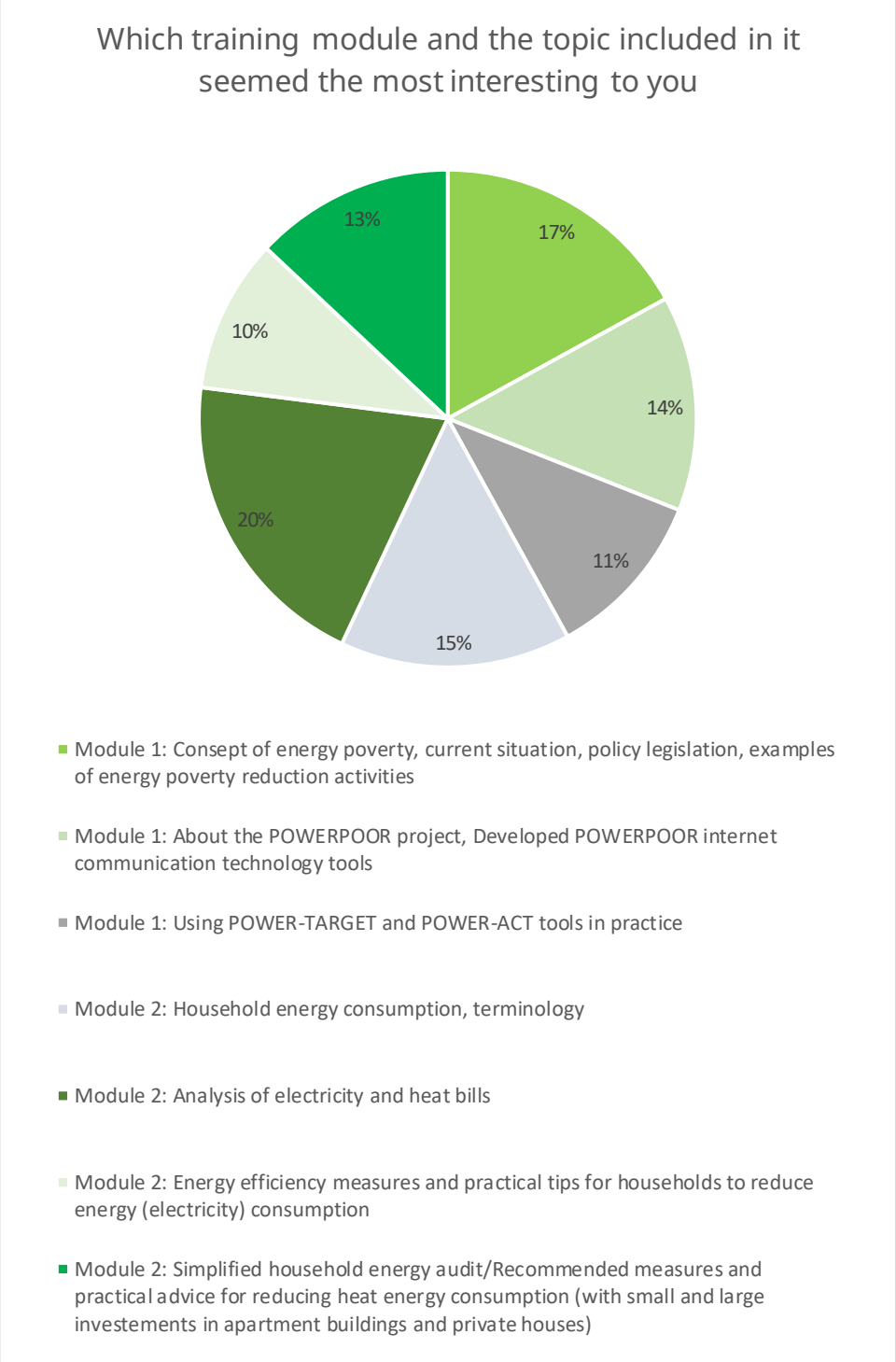

Figure 17 Interesting modules&topics.

The next question (Figure 18) is mentor specific, and its aim was to find out the most interesting topic for the mentors. The data collection method for this question was ranging the curriculum topics starting with the most interesting topic with assigned value of 1 up to the least interesting topic assigned with value 5. Thus, the higher the percentage the less interested participants were in the topic leading to a conclusion that the most interesting topic for mentor trainees was *Example of energy community initiatives: example of Co2mmunity project in city of Marupe* and the least interesting was *Regulation of energy communities and planned support programs in Latvia.*

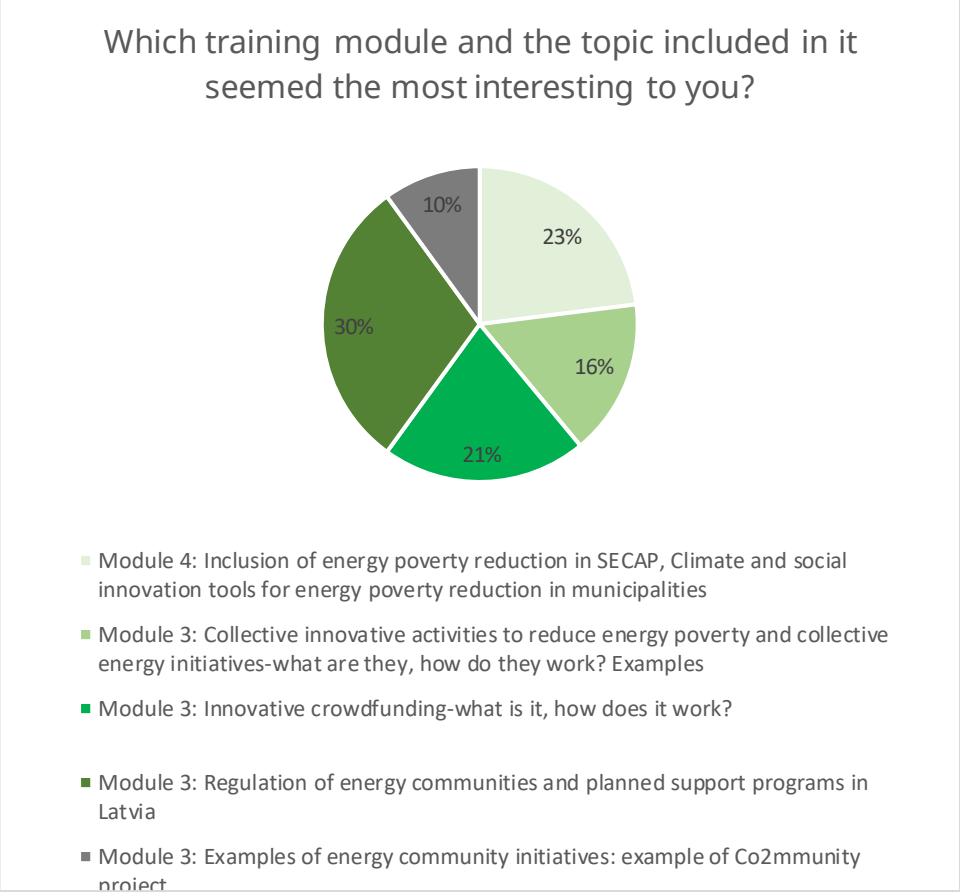

Figure 18 Interesting module&topic.

The data chart below shows the results of qualitative evaluation of virtual training materials in terms of their quality, as well as the presenting skills of the speakers. The quality of the materials and presenting skills were evaluated on a four-point scale: excellent, good, sufficient, and bad.

In the quality of virtual training materials category, 20 respondents rated the materials as excellent, 5 rated them as good, and no respondents rated them as sufficient or bad. In the presenting skills category, 23 respondents rated the speakers' skills as excellent, 2 rated them as good, and no respondents rated them as sufficient or bad.

Overall, the respondents rated the quality of the virtual training materials and the presenting skills of the speakers positively, with a majority rating them as excellent.

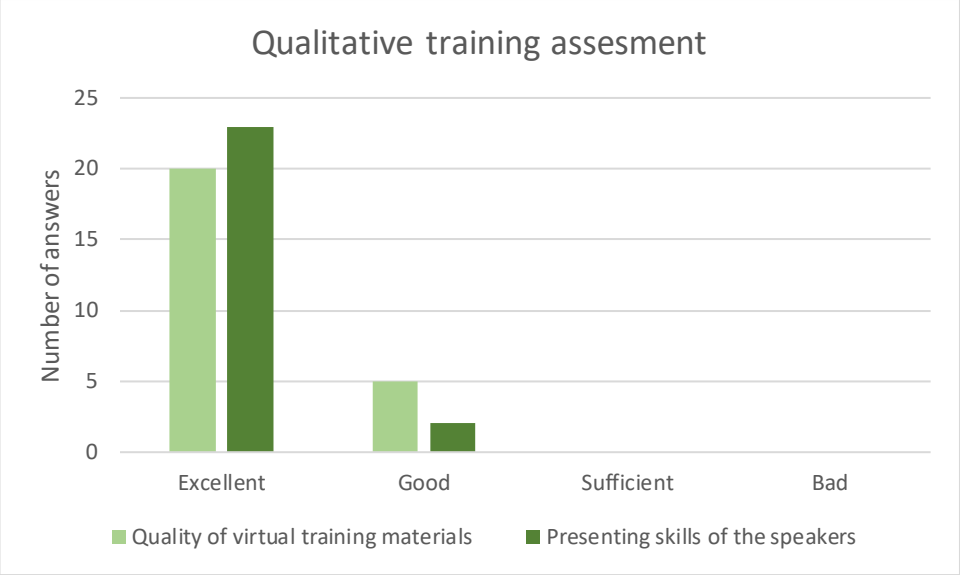

Figure 19 Qualitative training assessment.

The figure below shows the duration of the training as perceived by the participants. There were three categories: "Too short," "Too long," and "Appropriate duration." One participant thought that the training was too short, while five participants thought it was too long. The majority of the participants (19) thought that the duration was appropriate.

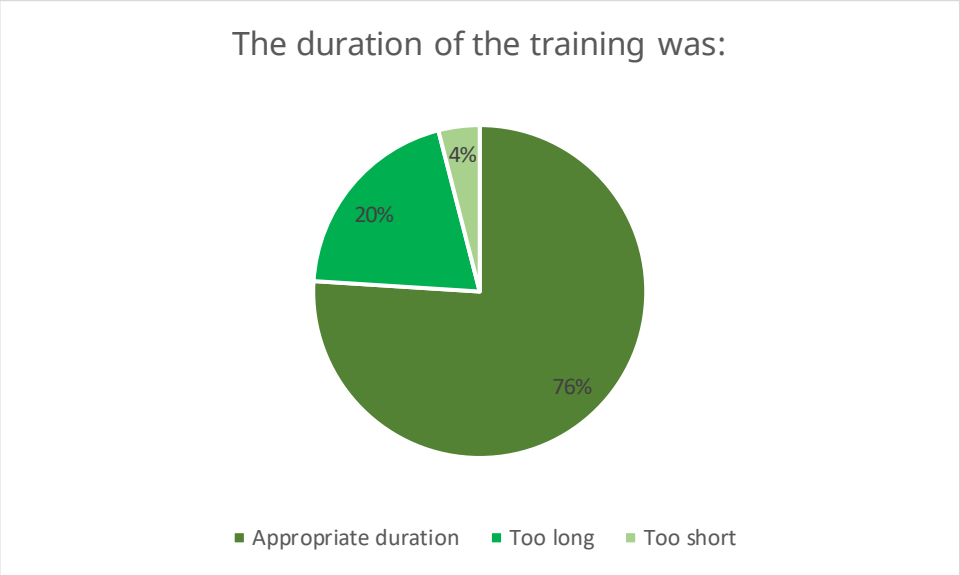

Figure 20 Training duration rating.

What 3 things did you like the most during the training?

The feedback from the training seminars highlighted the presentations by the energy auditor on technical aspects of energy efficiency and energy auditing, presentation by *Elektrum* Energy efficiency centre and detailed explanation on legislation in Latvia on energy communities by representative from Ministry of Economics. Also, POWERPOOR partner GOIENER and COOPERNICO presentations, which shared their experience about energy cooperatives, were highly valued. Participants appreciated the practical examples provided by the speakers and the fact that they were able to learn both theoretical and practical aspects of energy efficiency. The training was well-organised,

with a good schedule and breaks. The positive attitude of the organisers and presenters towards the audience was also noted. The quality of the webinar and the practical tips and examples provided were particularly appreciated, as was the lack of technical difficulties although some participants experienced some. The presentation of the energy audit and the way it was delivered were also highlighted as positive, with no unnecessary complexity or confusion.

What were the 3 things you liked the least during the training?

The trainees suggest that it would be best to have in-person meetings for better engagement in discussions, which was unfortunate not to be possible due to Covid-19 restrictions. One recipient also mentioned that the training could have been more concise. Many participants left this question unanswered or stated that everything was good.

Experiences and lessons learnt

There were no content-related issues in the training process, as at the preparatory stage ZREA spent a lot of effort to adjust the training material to the Latvian context. Participants highly valued that the training material was relevant to the specific context of the country, such as local policies, regulations, and energy infrastructure. Some participants with no energy background found certain sections of the training material to be quite technical and additional explanations was provided to ensure they fully understood the concepts presented.

No technical issues were experienced, the online platform was successfully used for delivering the training and by providing technical support where necessary and proved to be very efficient for providing trainings, especially the feature to record the trainings allowing multiuse of them and train supporters and mentors by training recordings. This way ZREA was able to organise, record and dedicate each training session to new and relevant information to add to the Latvia training library.

Overall, the training programme was designed and prepared to address these issues and provide participants with a comprehensive understanding of the complex challenges associated with energy poverty, while equipping them with the skills and knowledge needed to support individuals and communities in need, to reduce their bills and energy poverty.

Also, it was useful to record the training sessions and train the supporters and mentors, who joined POWERPOOR after the training events, by training recordings thus allowing ZREA to dedicate each training session to new and relevant information to add to the Latvia training library. Additional benefit of this approach is the ease of accessibility of the training materials, each trainee, who joined POWERPOOR project after the training events, could access the materials and do the training process at the time most convenient for them. If there were any questions, trainees which did not join the live trainings, contacted ZREA personnel individually.

2.7 Portugal

Coopérnico performed three types of training for Energy Supporters and Mentors (ES&M).
The first, which had only one edition, was in the form of a webinar aimed at technicians from local and regional Energy Agencies which had received training before under the European project H2020 STEP (Solutions to Tackle Energy Poverty). The aim there was to not only to train them for home visits but also for the possibility of managing in the future a Local Energy Poverty Office in their institution.
In this webinar modules 3 and 4 were given more attention as the contents of Modules 1 and 2 were also included in the STEP trainings.
The second type of training was the seminar model, where all the modules developed by the POWERPOOR consortium were given attention, modules 1, 2, 3 and 4 for Supporters and Mentors, plus an exclusive module for Mentors.
The first two modules were given in a morning or afternoon session, and modules 3 and 4, in another morning or afternoon session. The additional Mentors' module was given in a third morning or afternoon session seperately. Five online sessions took place, the last one in February 2023.
Coopérnico gave mostly online training activities to enable reaching audiences all over Portugal.
The third training model used was face-to-face (F2F). The two online sessions were both requested by the European Anti-Poverty Network (EAPN), one from city of Porto branch and the other from Setúbal branch whose both audiences were employees of social institutions.
In both face-to-face seminars the POWERPOOR project was presented.
In addition a dedicated training to employees of Porto took place and the subjects taught were based mainly on module 2: Energy Efficiency in housing.
In Setúbal a dedicated training took place and the first part of the training was focused to energy poverty and Coopérnico talked about all the information that comes in an electricity bill, electricity tariffs, tips and tricks to save energy and Recovery and Resilience Plan's supports in force for energy renovation of houses.

To recruite potential Energy S&M and disseminate the trainings, various channels were used, i.e., POWERPOOR's newsletter, a Portuguese version created by Coopérnico; Coopérnico's website and social networks; direct communication with institutions that Coopérnico has contact/relationship/partnership, namely RNAE (Association of Energy and Environment Agencies); dissemination in public events where POWERPOOR was presented; existing supporters' and mentors' network's contacts; through the Stakeholder Liaison Group members; via press articles prepared by Coopérnico's communication agency; and with direct e-mail to all Portuguese municipalities and Parishes.

The background of the Energy Supporters and Mentors varies. In the first training seminars a lot of data was not requested. We changed the rules in the following

seminars. At the moment of training subscription some data were compulsory, others were not. And only in the last two seminars, because we realised that many people did not fill in the data requested, we started to put in more compulsory data. All these circumstances made it more difficult to analyse the context of our Energy S&M.

The evaluation method for the Supporters was to sent the evaluation questionnaire that could also be filled in later. The training modules were also sent in a later stage by e-mail in pdf format with a reminder to take the evaluation test through Google form link. The evaluation method of the Mentor module followed after the training and included different exercises, namely prepare the steps for the creation of a Renewable Energy Community or what is needed for the establishment of a Local Energy Poverty Office.

In every session a group of people stood out, posed more questions and talked about the potential of implementing the POWERPOOR approach in their town/village.

In the training modules, Portuguese case studies were introduced, as well as European ones, Portuguese legislation was presented and several videos in Portuguese were used to give support. The Portugal's Energy Poverty indicators were compared next to the EU ones.

Coopérnico felt the need to extract the slides on POWERPOOR toolkit and form an exclusively dedicated module to give it more emphasis.

A few weeks after the training seminar, those who successfully completed the training received their certificate in a personalised e-mail and became part of a network boosted by monthly meetings and national POWERPOOR newsletter. Coopérnico made a tutorial video on home visits that was also shown during the training sessions and was available to, after the training and certification, individually practice the use of POWERPOOR toolkit. Coopérnico team provided accompanying to Energy S&M on their first home visits to gain confidence and also encouraged more experienced A&M to accompany those going for the first time.

Results of the training evaluation

After the Energy Supporters and Mentors completed the training they were asked to anonymously evaluate the training seminar on a Google form. More than once participants were reminded by e-mail to fill in it. In total, one hundred and sixteen (116) people answered the questionnaire, and the results are depicted in the graphs below.

Has your knowledge on energy poverty improved?

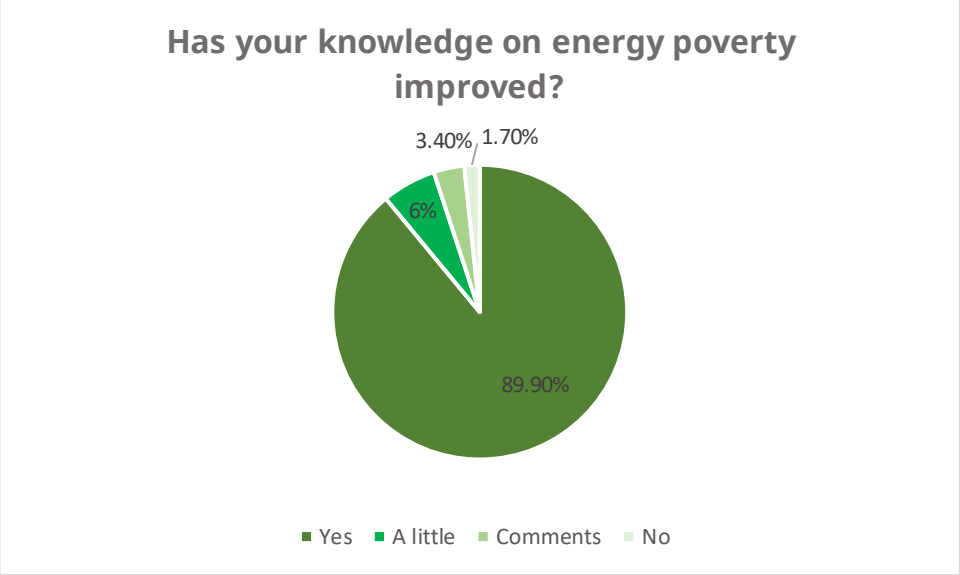

Figure 21 Knowledge improvement on energy poverty.

Duration of training

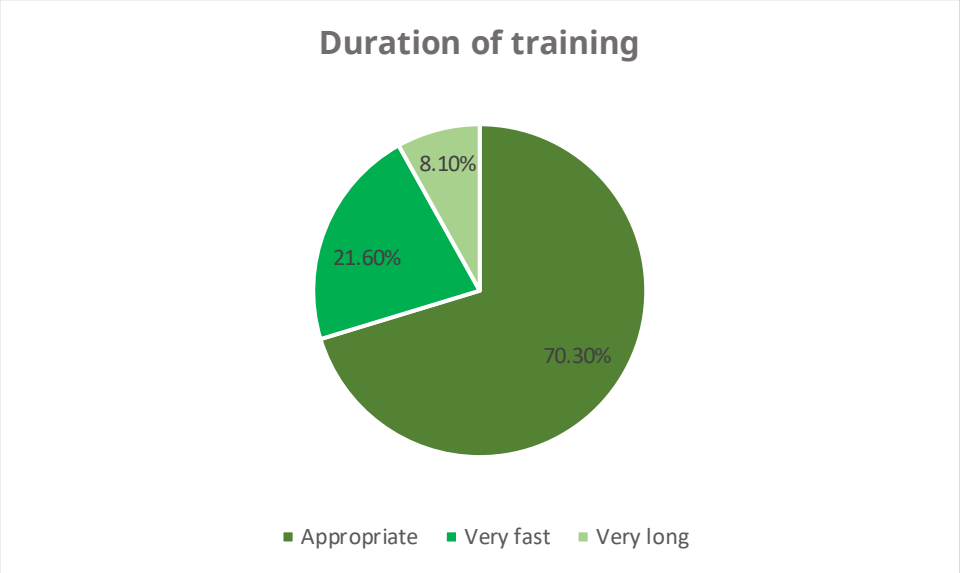

Figure 22 Training duration.

Material made available in the trainings

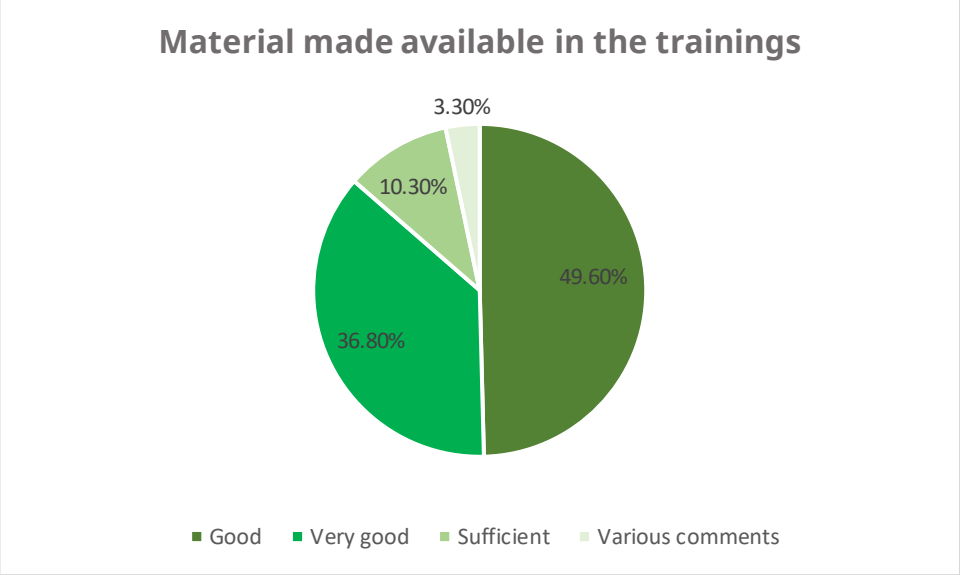

Figure 23: Training material.

The presentations (slides + oral explanation) were:

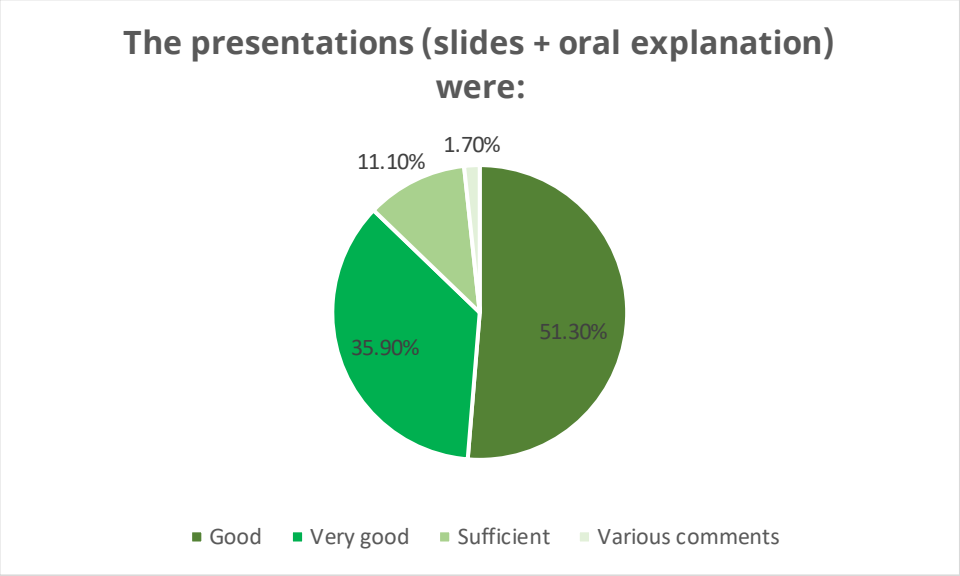

Figure 24 Presentation's sufficiency.

Did it correspond to your expectations?

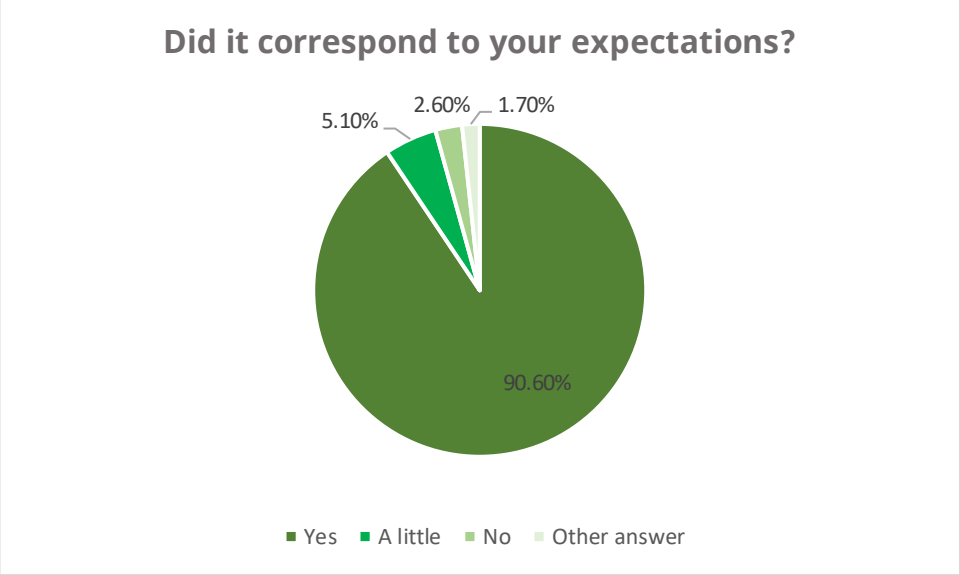

Figure 25 Corresponding to expectations.

Overall rating of the training session

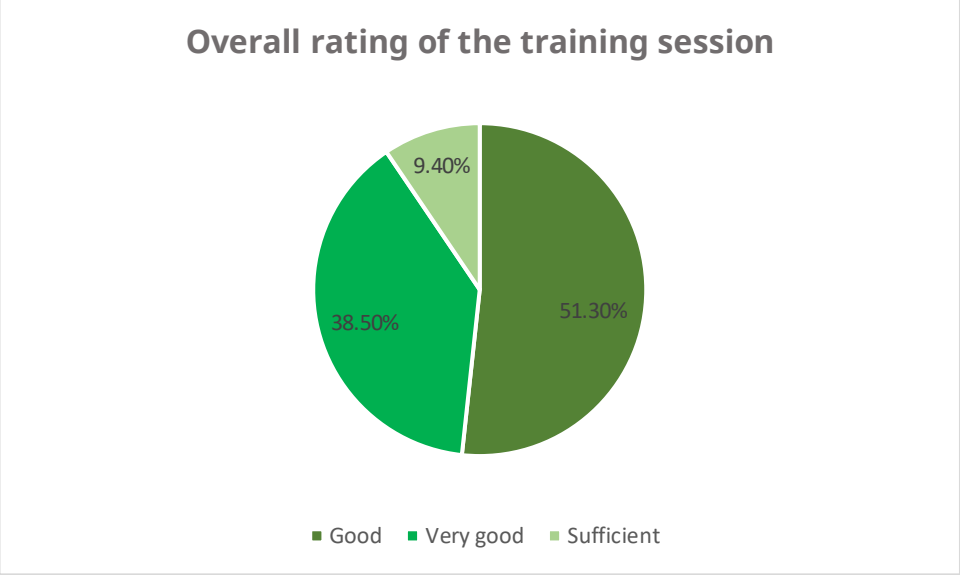

Figure 26 Training session rating

In general, the training seminars received a positive evaluation. Below there are some specific comments from attendees on the trainings:

- "I found this training very useful, and I appreciated the commendable commitment of the trainers";
- "Only with energy literacy can change come";
- "The holistic approach that the training seeks to instil is key to energy sustainability".

Experiences and lessons learnt

The training seminars for energy supporters and mentors was divided into 3 sessions of approximately 3 hours each. Coopérnico thinks this is a good model to allow time for assimilation as each module includes a lot of content and information. We noted that online format allowed the energy supporters and mentors' network to be dispersed throughout the Portuguese mainland and islands.
During the trainings and in comments of the evaluation of trainings it was said that trainings should be carried out during off office hours and weekends.
Other people asked if we could send them the recorded training seminars. As we understand that following a recorded training without having the opportunity to participate and pose questions, would not be beneficial we did not send the recording to anyone but we proposed that they participate in the following training sessions.
Observing the current dynamics of Energy Supporters and Mentors one can conclude that most of the people who took the training and even the certification did so to increase their personal and/or professional knowledge of the energy sector.

2.8 Spain

In the context of Spain, POWERPOOR organised in total 9 trainings through the local partner Goiener. All the trainings have been carried out online, between June 2021 and February 2023. It was foreseen to organise in total 8 trainings, including two face-to-face tailor-made training seminars, 4 training seminars and two webinars, but it was decided to organise an extra training to reach the objective number of certified Supporters and Mentors and to give the opportunity to the interested people who could not participate in the previous trainings to attend.

The method of recruitment for the trainings was through open calls. The information about the trainings was centralised in Goiener's web page, inside the site about the POWERPOOR project, including the explanation about the Supporters and Mentors, the content of the trainings, the link to the registration form and other relevant information. An email with the open call was distributed among the Stakeholder Liaison Group members and other interested stakeholders, and social media was used in the dissemination of the trainings, namely twitter, Facebook, LinkedIn and Goiener's Telegram channel and newsletter.

Participants with different backgrounds have participated in the trainings, with a wide range of age, profession, or study level. Most of the participants have university studies (bachelor's or master's degree) or professional education, but there are also participants with elemental studies as well as doctoral degrees. Many university students have been trained, mainly students of renewable energy engineering. For example, in one of the trainings participated a group of students who were working on the topic of energy poverty as part of the project management subject. Regarding the profession or current employment position of participants, there are mainly two types of profiles: on the one hand technicians of the public as well as private environmental and energy sectors, and on the other hand technicians of the social education and

integration areas. Besides, there were participants in different kind of situations and professions such as architects, consultants, teachers, retired, unemployed, project coordinators or sociologists.

When it comes to the gender of the participants, out of the 262 participants 139 were male and 123 were female, meaning that slightly over the half of participants were male. But counting the participants that obtained the certification, 173 in total, 84 were male and 89 were female, meaning that slightly over the half of the certified Supporters and Mentors are female.

As already mentioned above, all the trainings have been carried out online, using the Zoom platform. Even if it was foreseen that most of the trainings would be carried out physically and only few online, due to the COVID-19 pandemic it was decided to deliver the trainings online. Later the pandemic situation improved, and it was again possible to organise face-to-face trainings, even if with some limitations, but Goiener decided to continue with the online trainings as it was seen that in that way more people would be reached and that it also offers more flexibility to the participants. This is related to the geographical distribution of the population in the different regions, as in many of the cases the population is spread among many small and medium-sized cities instead of being concentrated in big cities. That makes it more difficult, in this case, to gather 30-40 people in one city/place to carry out the trainings. Also from the flexibility perspective, online sessions made it easier to participants having less restrictions with the calendar and the scheduling of the sessions, removing the logistics barriers. In this way, keeping all the sessions online, more interested people from different regions in Spain had the opportunity to participate in every training session.

The main communication channel with the participants was the email. After the registration and before the trainings, an email was sent with some notes about the trainings, including the agenda and the Zoom link to participate. Another email was sent after each session to share the material, some relevant notes related to the session and the link to the feedback questionnaire. Following that, another email was sent with the link to the test and the information about the next steps. All sessions were recorded, so the participants who could not attend a concrete session could see the video afterwards, and the videos were also used in the cases that a participant wanted to refresh their memomy about a certain topic. The interaction with participants during the sessions varied, but in general there were always participants who raised questions, asked about concrete issues, and made contribution to certain topics.

Differing with the rest of the trainings, the last one was carried out through the Google Classroom platform, instead of live online sessions. In this case, all the training materials were uploaded to the platform together with the videos of the sessions, recorded in the previous trainings. Participants had access to the material and videos at any time, so they could work on them at their own pace and do the test when they had gone through all the content. The period to do the training and the test was established to be between the 6th and 17th of February 2023, and in some cases the period was extended in demand of the participants. With this new method, more participants than usually signed to the

trainings, and 72 out of the 85 registered persons used the platform. In the end, 43 participants obtained the certificate, more than the number of certificated Supporters and Mentors in the previous trainings. One negative aspect of the new method was the lack of live discussions with the participants, and therefore two live sessions were organised for the ones that wanted to ask questions live, but the participation in these live sessions was quite low. However, the Classroom platform has the option to chat publicly as well as privately with the participants, and some of them were very active making question and contributions to the training.

When it comes to the testing and certification process, 262 persons participated in the trainings in total, and 173 of the participants did the test passed it and obtained the Supporter or Mentor certificate. In most of the cases, the reason of no finishing the process was that the participant quit during the training or that they finished the training but then did not take the test. The several reminders to take the test worked in some cases, but in many other cases participants dropped for unknown reasons. In this regard, some of the participants informed that for different reasons they could not continue or finish the training, mainly due to the lack of time or changes in their private/professional situation.

One of the main challenges of the trainings was to deliver all the training content to the participants in the established time. In this way, even if the planned duration of each training was established to be 7,5 hours, Goiener decided to extend it to a total amount of 9 hours per training. Each training was distributed into three sessions of three hours, and each session was formed by the theoretic part, some time for discussion, exercises, and small breaks. Nevertheless, in many of the cases the training and material provided has not been sufficient for the participants to feel comfortable to support energy poor citizens and to do the home visits. In general, the trainings have been evaluated positively, as interesting, and practical, and many participants thanked for the opportunity, but they have not served as expected when it comes to the objective of the home visits.

Regarding the content of the trainings, some changes were made to the modules every few months, mainly to adapt them to the local context and the changing situation of the energy sector. In short, these have been the main changes for each of the module:

- Module 1: Data about the energy poverty indicators in Spain and different regions. Presentation about the electricity bill.
- Module 2: Adaptation of the plans and strategies in Spain. Information about the relevant initiatives and organisations that work on energy poverty across Spain. Information about the most common economic support schemes. Exercises about the theoretic content, in the form of question and answer.
- Module 3: Adaptation of the content to make it simpler and shorter. Addition of real cases about collective initiatives (Nafarkoop, La Energía del Cole). Exercises about the theoretic content, in the form of question and answer.
- Module 4: Adaptation of the content to make it simpler and shorter for the public.

Results of the training evaluation

The feedback about the trainings was gathered anonymously with the Google Forms tool, through the link to the form that was sent after each session. In general, the responses have been very positive, and for some participants the content was too simple while for many others it was too much or too technical. As it can be seen in the following chart, considering the 247 responses about the different training sessions, the level of satisfaction of the participants that provided feedback was very high:

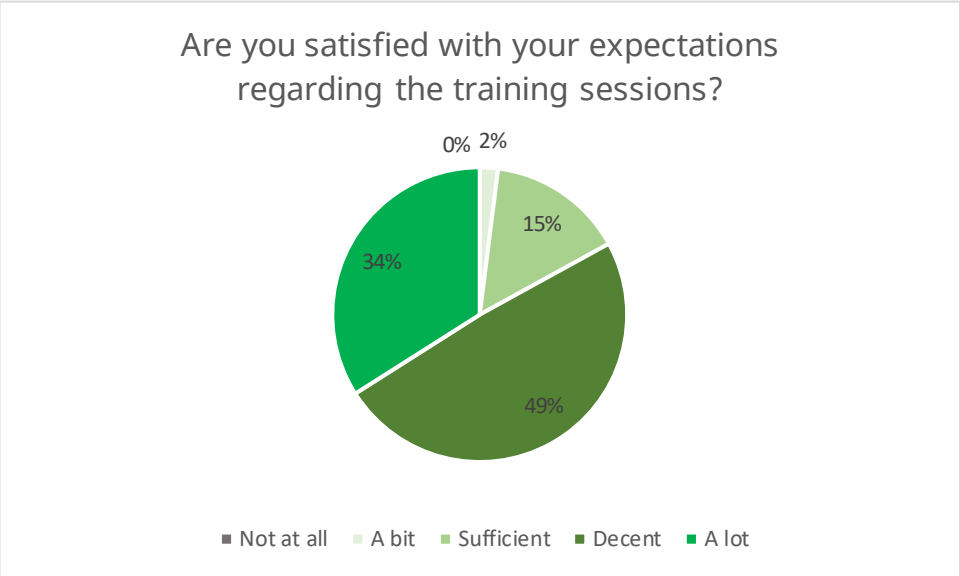

Figure 27 Satisfaction of the training

To the question of what participants think about the training or about a concrete session, there were 229 answers and 96 % of them indicated that the training or session was good or very good:

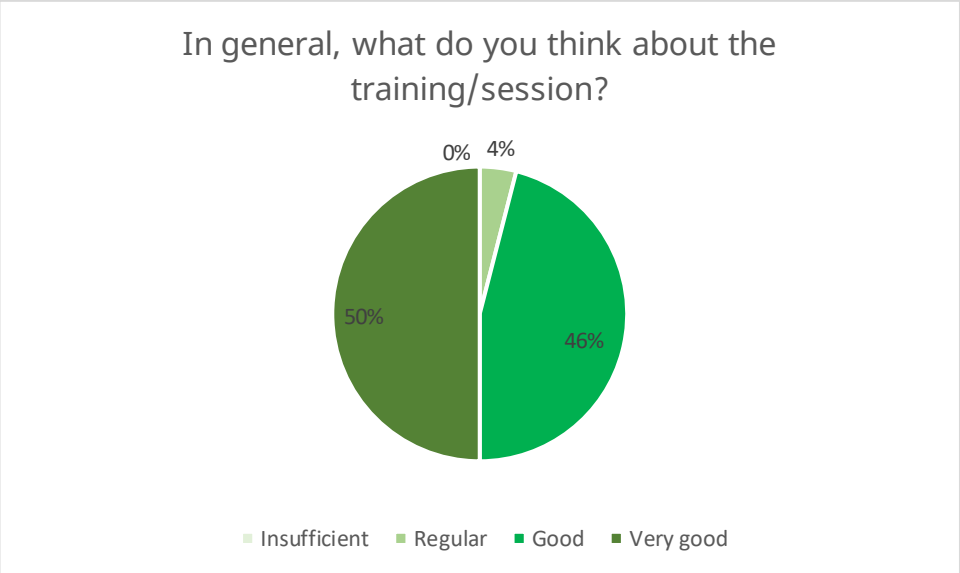

Figure 28 Opinion about training session.

Similarly, to the question about the satisfaction level, more than three quarters of the responses (129 in total, in this case) indicated that the training has helped them to understand better the phenomenon of energy poverty more than sufficiently:

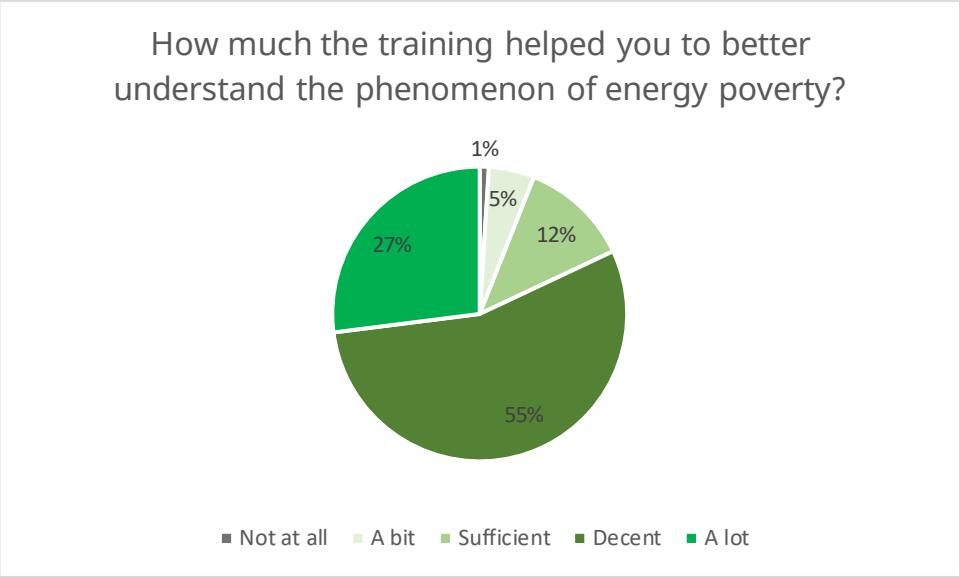

Figure 29 Training's sufficiency.

When it comes to the perception of how much participants think that the trainings will help them to alleviate energy poverty, more than the half (out of 106 responses) indicated that the trainings will help them decently or a lot:

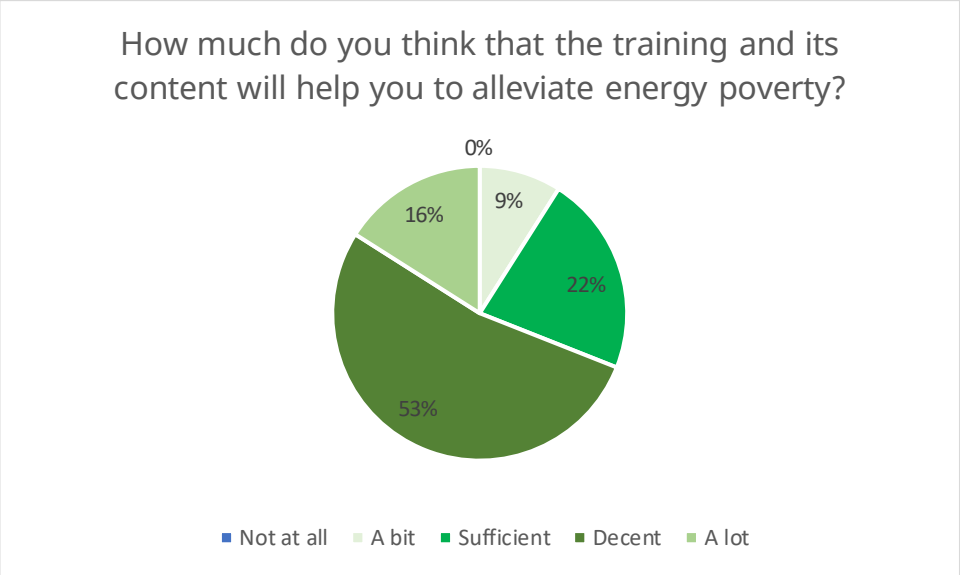

Figure 30 Opinion on training and its content to alleviate energy poverty.

When asking about how to improve the training, the most common answers have been, in one hand, the need for more time to explain and discuss about each of the themes, and in the other hand to use real case examples, especially in the second module. About what participants would like to know more about, the most common answers have been the energy bill and the simple energy audit, including concepts about energy efficiency. Even if there have been very different answers, in average the second module has been evaluated as the most relevant module, and the fourth module as the less relevant one.

Experiences and lessons learnt

Generally, there has not been any important problem when delivering the trainings, and being able to adequate to each situation has helped to advance properly with the plan, even if part of the initial plan has been modified. When it comes to the objective of the trainings, one of the main conclusions has been that most of the participants have not felt enough comfortable and capacitated enough to carry out the home visits on their own, because of the short training time among the main reasons. Related to that, extending even more the trainings, using the same content, would help to deepen in the different topics and the participants would learn more and better about the key topics of the trainings, helping them to feel more confident with the contents.

Also, as seen in the evaluations, using more practical examples in the trainings would help Supporters and Mentors to manage better in different situations when supporting energy poor citizens. In conclusion, the trainings have received very good feedback, but they may not be enough to put them into practice as expected, considering the ambitious objectives of carrying out a large amount of home visits.

Regarding the sustainability of the trainings, the option of the online training platform can facilitate to offer the training to more people and in a more prolonged time, using relatively less effort. Considering that, it could be interesting to explore that opportunity in the future.

2.9 EU level

A total of 5 training sessions were organised at EU level by Housing Europe, which brought together participants from the pilot countries, the broader European context (e.g., Georgia), and even from a different continent (a few participants from Mexico). ICLEI, INZEB, DOOR, NTUA, Goiener and ECN have contributed to the organisation by participating as trainers. These sessions were foreseen to be organised online, in order to reach as many participants as possible. The first three sessions were organised throughout 2022, with the last two ones taking place in the first part of 2023.

The target number was established to measure only the certification rate and not the number of participants. By the end of Month 32, i.e., April 2023, the target of 100 certified Energy Supporters and Mentors has been almost achieved, with 95 participants having taken and passed the test (while the process is still ongoing, and more people are expected to take the test). Most of the certified supporters and mentors are active professionals, with students or interested individuals also representing an important minority. The professional background was also very interesting and varied, from lawyers to energy professionals working in local agencies. Out of the 95 certified Energy Supporters and Mentors in EU 45 (47%) of them were women while 50 were men (53%). And all of them were certified as Energy Mentors.

The targeting of potential participants to the training sessions was done mostly through the POWERPOOR social media channels, with partners resharing this information. Other means were direct invitations of mentions included in external newsletters.

Results of the training evaluation

The feedback from participants was mostly positive. This could be seen in the comments sections of the webinar, and via the last section of the post training session test. The graphics presented below represent the impressions from the first edition of the training sessions. The results from the other four ones are mostly similar.

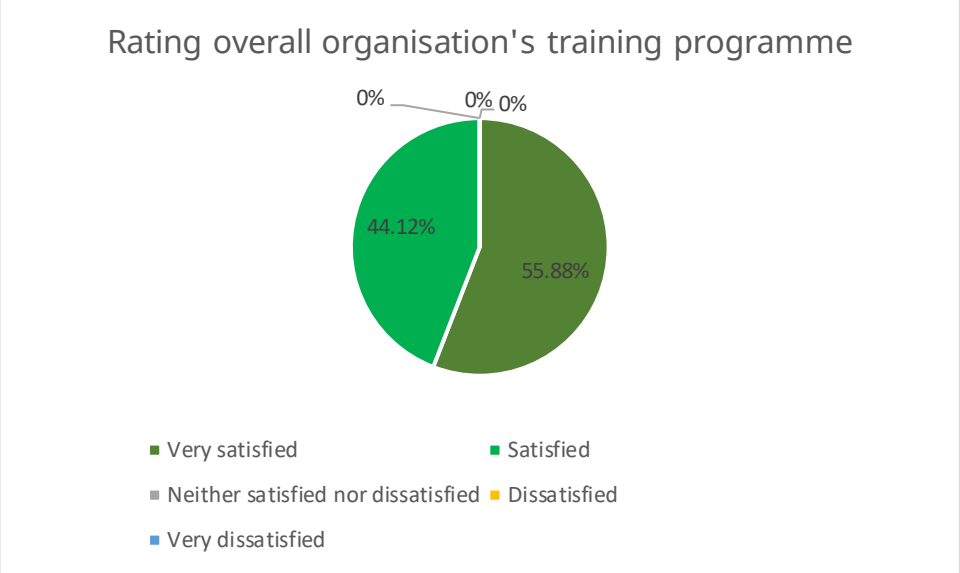

Figure 31 Rating overall organisation's training programme.

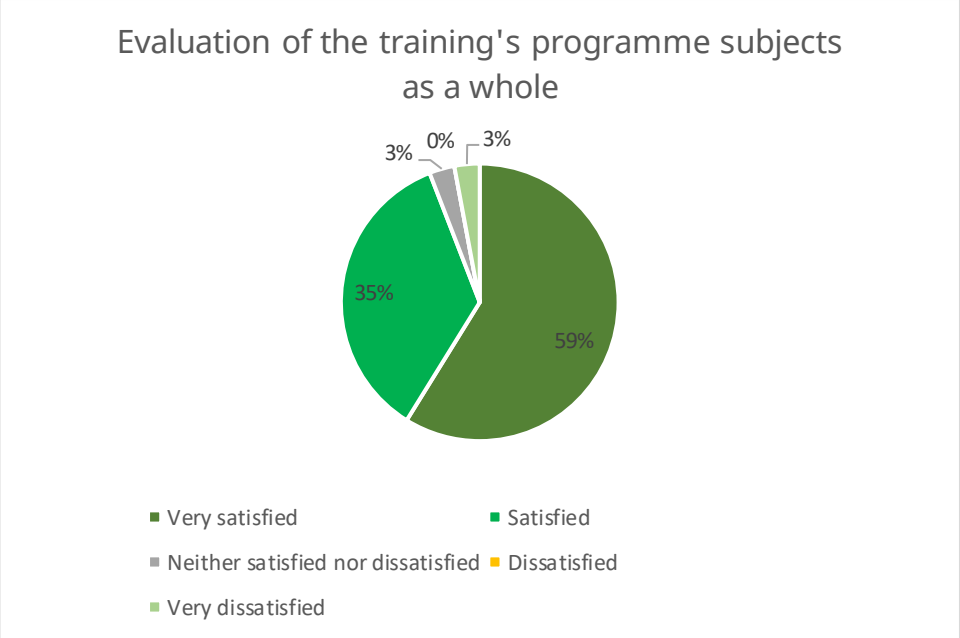

Figure 32 Evaluation of the training's programme subjects as a whole.

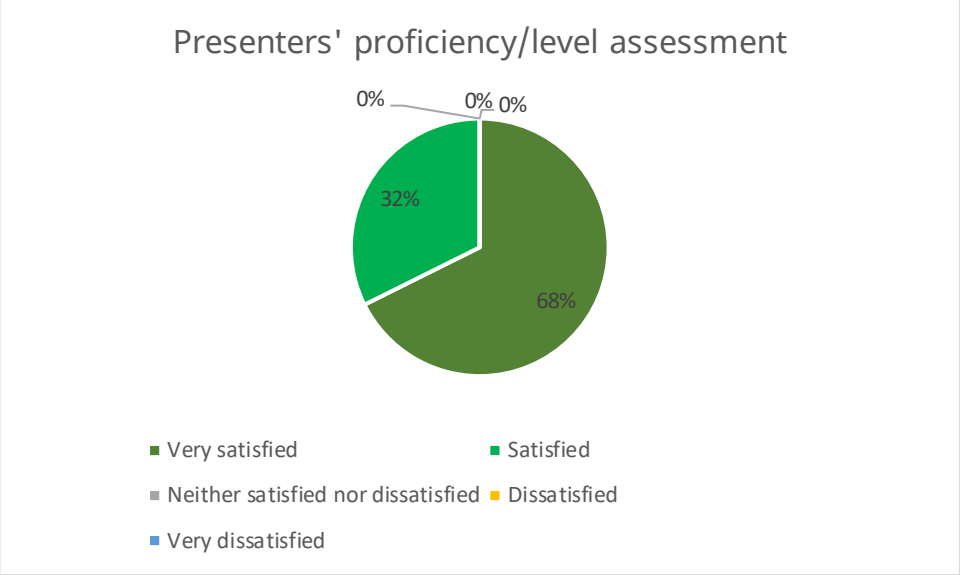

Figure 33 Presenters' proficiency/level assessment.

Experiences and lessons learnt

There were no major obstacles in the implementation of the trainings. All the sessions took place without important incidents. The fact that the training sessions took place online might have discouraged certain participants from joining or following the sessions in its entirety. This aspect was fully balanced by the fact that an online event allows for a higher reach in terms of participants. Lessons were learned by the organisers throughout the five sessions. Some of the most notable are the following:

- Reminders are useful and necessary (both pre and post event), especially to remind participants to take the certification test.
- The reminder to take the test should be sent 1 week later. Several people were very motivated and took the test immediately.
- For the first training a warm-up session was organised, to get to know the trainers and the trainees, but the turnout was very low (three participants), so the idea was discarded.
- Having at least two persons to manage the logistics is ideal.
- It is important to have more participants registered that the target number needed, as not everyone will follow up on an online invitation.
- The issue of energy poverty is so broad that people across and outside of Europe participated.
- Allowing some time for discussion is important, especially when the audience is to diverse, to enable experience and knowledge sharing.

These results will be more detailed in the deliverable D5.7 Minutes of the EU Webinars and European conferences proceedings.

3. Conclusions

This report summarises the feedback on the 66 Energy Supporter and Energy Mentor trainings carried out in 8 pilot countries and in an EU level. The trainings consisted of 4 Modules, summarising the latest information on energy poverty in general, mitigation options, small scale behavioral measures, data gathering and the POWERPOOR toolkit usage, how to conduct a simple home visit, the notion of energy communities and cooperatives, how to leverage innovative financing schemes, and the role municipalities can play in alleviating energy poverty. Completing the first stage of the trainings meant that the participant could become Energy Supporter, certified to help alleviating energy poverty on the field.

All participants who were interested in expanding their knowledge beyond the first stage of trainings were given the opportunity to attend further sessions and to become Energy Mentors. This qualification allowed the Energy Mentors to provide advisory service in the Energy Poverty alleviation offices.

The certification process was transparent and straightforward. After finalising the sessions, participants were given the opportunity to take an assessment questionnaire and receive the official certification.

Training participants were also requested to give feedback on the quality of the trainings. The questions were related to the level of knowledge value added, satisfaction with each Module of the trainings and quality of organisation. The feedback questionnaires were either sent online to the participants or some questions were posed directly after the completion of the training and the results were summarised by each partner.

In this report, partners describe their experience with holding the training sessions as well as share lessons learnt from the whole process. The outline of the report was developed by Energiaklub, and the project partners had to add their input in the following topics: background and proactivity level of participants, experience with online and on-site version of the traingins, the Certification process, country specific adaptation of the training materials, summary of the feedback received, challenges faced and lessons learnt from the process.

Key takeaways of the pilot countries are summarised, focused rather on qualitative description rather than numerical. The detailed report on the number of trainings, number participants, certification process completion, certified Energy Supporters and Mentors and other statistics can be found in D3.7 List of Energy Supporters and Mentors & online registry.

Background and proactivity level of participants

The trainings attracted people from several backgrounds. Some of the partners indicated that a willing pool of training participants were students. It seemed to be a win-win type of collaboration between universities and the POWERPOOR project. The

profile of the students varied from renewable energy engineers to social and economic studies. Many completed the training and followed up with the homevitsits, gaining valuable knowledge and field experience. In Croatia, seemingly the interest and proactivity of the participants was rising with the level of their education. However, Croatia reported high demand for student work, therefore less motivation for the volunteer work required by the Energy Supporters.

Many pilot countries also reported that social workers working in municipalities who are already in close contact with vulnerable households attended the trainings. In Hungary, many of the social worker attendants enriched the trainings with discussion about their field experience, crating interesting conversations.

Overall, the background of the participants varied from architects, engineers, project managers, teachers, social workers, consultants, and retired people. This can be considered as a success of reaching many types of people and creating a diverse network of Energy Supporters and Mentors.

Experience with online vs. on-site trainings

This section closely relates to the proactivity level of the trainings. In general, the pilot countries reported that the participants were mostly proactive, however, the sessions held face-to-face seemed to increase the engangement level.

Interestingly, the online version of the trainings continued even after improvement of Covid-19 situation. Both the project partners and the attendants found it a more flexible and a convinient way of successfully following a training seminaro. This allowed a wider geographical coverage, too.

Certification process

The ratio of successfully completing the assessment and receiving the certification after the trainings was quite high, around 70% considering each pilot country. The participants were fascinated by the opportunity of receiving an official certificate. However, many indicated in their feedback that the trainings were lengthy, some Modules too much detailed and burdensome.

Country specific adaptation of the training materials

The most adjustments needed by the pilot countries in the training materials occured in Module 2 and Module 3, mainly including country specific conditions for collective and innovative actions on energy poverty alleviation. In Estonia, for instance the financing scheme of bank loans and guarantees was added to the training module on financing, as this is a more common solution than crowdfunding. In some other cases, like in Hungary, Module 3 was shortened and simplified because the concept of energy communities is unknown.

These changes, however, were positively reflected in the feedback, as many participants welcomed the country specific adaptations. Given that crowdfunding and energy

communities are relatively new concepts, participants reportedly wanted to hear more about them. They marked Module 3 together with Module 2 as the most interesting part of the trainings in Estonia, Hungary, and Croatia.

Summary of the feedback received.

Overall, the trainings were evaluated positively. The participants predominantly reported that the trainings met their expectations and improved their knowledge in the field of energy poverty. In Greece, partners inquired if they would recommend the training to others, receiving positive answer in over 95% of respondents.

Interestingly a very low number of respondents gave feedback of not meeting their expectations at all, not being satisfied with the organisation or expressing their dissatisfaction in general. This is very much appreciated and considered as success of the training and certification process however, it is important to acknowledge that in some countries, people are reluctant to give any negative feedback due to cultural reasons.

Challenges faced and lessons learnt.

Every pilot country has its unique experience with the trainings and valuable takeaways. A very common takewaway from the pilot countries is the positive experience with the online version of the trainings, even though the personal might have iniciated more discussions. The online version proved to be flexible, efficient, and welcomed even despite small technical disruptions that arose.

Another very significant lesson seems to be the lack of motivation of Energy Supporters to perform the house visits. Almost all pilot countries mentioned this in their section of lessons learnt. Even though the possibility of obtaining the certification was a strong driver to complete the certification process, it seems to be a challenge to motivate Energy Supporters to take further action especially in a voluntary basis.