



# Community Energy for Energy Solidarity: Evaluation of the CEES pilot projects

## Green Energy Cooperative (ZEZ)

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**August 2024**

**[www.energysolidarity.eu](http://www.energysolidarity.eu)**



CEES has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101026972.



# Introduction

## The CEES project and the CEES evaluation

In the Community Energy for Energy Solidarity (CEES)<sup>1</sup> project, six energy communities implemented six pilot projects to alleviate energy poverty, including projects to diversify sources of funding for this work. Knowledge exchange and mutual support between the energy communities was a key component of the six pilots. Within CEES, such projects are referred to as a form of energy solidarity. Led by the University of Birmingham, the CEES team implemented a comprehensive evaluation of the six pilot projects.

## Evaluation materials

The following evaluation materials are available at [www.energysolidarity.eu/evaluation](http://www.energysolidarity.eu/evaluation):

- A short summary of the evaluation findings
- The Full evaluation report (232pp)
- The Executive summary (15pp)
- Individual documents of each of the evaluations of the six CEES pilot projects, plus an additional project that was evaluated through CEES.
- The full Evaluation framework (60pp)

## About this document

This document contains the evaluation of the pilot project that was implemented by Green Energy Cooperative (ZEZ), Croatia. In the Full evaluation report, this is Chapter 8 and begins on p121.

## Key terms in this document

### Energy poverty

*The situation in which households are unable to access affordable energy services (such as adequate warmth, cooling, lighting, and energy to power appliances), which underpin*

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<sup>1</sup> The CEES project received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101026972. The project commenced in June 2021 and ran to the end of August 2024.



*elements of human flourishing (such as health and wellbeing, relationships, social inclusion, employment, recreation and education). (Day et al.,2016)<sup>2</sup>.*

### **Energy communities**

*Local collectives of individuals that tend to share values and ambitions relating to: supporting equitable, democratic and fair transitions towards more local, sustainable and efficient energy systems; establishing renewable and decentralised energy systems; assisting local community members with energy efficiency, demand reduction and energy poverty; or economic activity on energy for social and community benefit. These organisations are diverse in structure, size and scope.*

### **Energy solidarity**

*Actors willingly working in ways that align, on a shared goal of overcoming energy-related adversity that is experienced by one or more of the parties. Energy solidarity is inspired by empathy and / or a sense of justice, and may, but does not have to, involve reciprocal obligation. Stronger solidarity involves a more sustained commitment, and / or a willingness to incur a higher personal cost in pursuit of the shared goal. (Day and Burchell, 2023)<sup>3</sup>*

### **Fund mechanism**

Fund mechanisms are employed to raise funds or income to fund work on energy poverty alleviation.

### **Identify mechanism**

Identify mechanisms aim to seek out and identify households in energy poverty, recruit them to projects and assess their eligibility for projects.

### **Alleviate ('soft' and 'hard') mechanism**

Alleviate mechanisms aim to alleviate energy poverty. 'Soft' alleviation mechanisms do this through household engagement, provision of advice about energy poverty, energy efficiency measures, the provision of energy kits consisting of a variety of small energy efficiency measures (such as window insulation material) and support applying for financial support. 'Hard' alleviation mechanisms alleviate energy poverty through building renovation, retrofitting and refurbishment. In CEES, hard alleviation was undertaken in one pilot project. Several of the CEES pilot projects include recruitment and training for energy advisers. These activities have been included as part of the Alleviate mechanisms.

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<sup>2</sup> Day, R. et al (2016) Conceptualising energy use and energy poverty using a capabilities framework, Energy Policy, 93: 255–264.

<sup>3</sup> Day, R. and K. Burchell (2023) Energy solidarity in Energy Communities: alleviating energy poverty and supporting just energy transitions through solidarity approaches. European Sociological Association RN12 mid-term and Energy and Society Network 6th international joint conference, 'Energy, Environment and Societies in Crises', 6-8 September 2023, Trento, Italy.



# Green Energy Cooperative (ZEZ)



**Zelena  
Energetska  
Zadruga**

## 1. Summary

The evaluation report addresses the following mechanisms.

### New CEES mechanism

1. **FUND:** test and adapt micro-donations approach (inspired by Energie Solidaire)<sup>4</sup> and investigate other approaches to fund-raising, as appropriate.

### Expansion/improvement of existing mechanisms

2. **IDENTIFY:** working with local partners (with inspiration from Allenergy) to identify candidates for home visits.
3. **ALLEVIATE:** a first phase of home visits, with energy kit delivery, by the project manager and a trained volunteer; followed by training of further volunteers and a second phase of home visits plus energy kit delivery by the volunteers.

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<sup>4</sup> The Energie Solidaire microdonations approach allows energy customers to make microdonations as part of their energy bills.



## Evaluation summary

### Fund

The core objective of Green Energy Cooperative's (ZEZ's) CEES pilot project was to diversify its portfolio of funding sources for work on energy poverty beyond grant funding, with the specific objective of funding the purchase of 250 'energy kits' (around €70 each = around €17,500) to be used in a programme of home visits. The programme was publicly promoted with the title, 'Ease Their Troubles'. Inspired by Enercoop's Energie Solidaire microdonations approach, ZEZ began by exploring microdonations. Since ZEZ is not an energy supplier and does not have customers, it approached several local and national energy suppliers in Croatia; however, the energy suppliers were not able to explore a microdonations approach.

Nonetheless, this work inspired ZEZ to work with local fundraising specialist, Solidarna Foundation, to investigate and seek funding from public donations and corporate donations. Public donations were sought through a creative public campaign. Corporate donations were solicited through a targeted campaign, offering a choice of three levels of donation with corresponding reciprocal benefit packages from ZEZ. Between October 2022 and the end of 2023, ZEZ received a total of €16,371 in donations (compared to an ambitious target of €17,500), €11,055 from corporate donations and €5,316 from public donations. This can be considered a success as ZEZ's first foray into fundraising. In practical terms, ZEZ was able to purchase the 250 energy kits with these funds. ZEZ noted that these approaches to fund raising are time-consuming to investigate and implement. This success can be attributed to a strong partnership between the ZEZ 'Ease Their Troubles' team, the ZEZ communications team and Solidarna Foundation.

### Identify

Inspired by ALLenergy, ZEZ also developed a local referral network of professional organisations that would refer potential households to ZEZ. The evaluation shows that the local partners had strong positive views about the ZEZ programme. While this network worked effectively, ZEZ encountered mistrust among households. This mistrust was overcome in two ways. First, through a combination of personal or 'word-of-mouth' referrals by a woman who had benefited from the home visit programme at an earlier stage and was very active in her local community and neighbourhood council. Second, by a local breakfast TV appearance by the ZEZ project manager. The TV appearance attracted so many households that ZEZ easily completed its recruitment of 250 households and needed to implement a waiting list. ZEZ employed a set of eligibility criteria (based largely around income) that was relatively straightforward to implement. However, there is evidence in the evaluation data that some participants did not feel they had problems affording their energy bill, despite being on low incomes. This, or another energy related criterion such as having a cold home, could be considered as an additional eligibility criterion in future work. We note also that evidence from elsewhere suggests that older people may not readily admit to having difficulties managing money, even when experiencing some hardship.



## Alleviate

The ZEZ 'Ease Their Troubles' home visit programme was implemented in two phases with the objective of reaching 250 households. The first phase, in spring 2023, was implemented by the ZEZ project manager and a single volunteer, who was completing the 'professional practice' element of her studies; 79 home visits were completed in this phase. In preparation for the second phase of home visits, ZEZ recruited and trained around 7 volunteer energy advisors to implement the home visits. Although the volunteers reported positive experiences of this work, there were challenges because the volunteers were unable to do as much work as they had hoped. Phase 2 took place in the late autumn of 2023 and 43 home visits were completed. Given the target of 250 households, this left 108 home visits outstanding. ZEZ reverted to the approach used in Phase 1, i.e. working with students who are completing their 'professional practice' and aimed to complete these home visits in the summer of 2024.

The home visits consisted of an assessment process, the provision of tailored energy advice and explanation and sometimes installation of the items in the 'energy efficiency kits' and completion of the 'baseline' survey for the evaluation. The ZEZ approach to home visits emphasised empathy and care; there is evidence in the comments of householders that this approach was highly valued. The evaluation shows that the householders had very positive experiences of the home visits. In addition, although it is not always possible to attribute impacts wholly to the ZEZ programme, the evaluation suggests that the 'Ease their Troubles' programme had several positive impacts on aspects of energy poverty, including increased knowledge of energy matters, increased ability pay energy bills and decreases in the negative impacts of energy poverty. The ZEZ approach has been featured in a European Commission [video](#).

## Legacy

The legacies of the ZEZ pilot project are: robust knowledge, experience and approaches for the successful and impactful implementation of processes for fundraising, recruiting suitable households and implementing energy poverty alleviation programmes. In addition, a key legacy of this work is that the ZEZ project manager has been invited to join a City of Zagreb working group on energy poverty that is tasked with producing an energy poverty strategy.

## 2. Introduction

### About ZEZ

Based in urban Zagreb, in Croatia, Green Energy Cooperative (ZEZ) assists citizens in the development of, investment in and use of renewable energy sources. ZEZ had previous experience of operating a team of energy advisors to offer energy advice to people in hardship.

## The ZEZ pilot project

As noted above, the evaluation addresses three elements in the ZEZ pilot: a Fund mechanism, an Identify mechanism and an Alleviate mechanism.

### Timescales

The timescales for the ZEZ pilot project are shown in Table 11.1.

	2022			2023				2024	
	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2
<b>Fundraising</b>									
<b>Referral system and other Identify activities</b>									
<b>Volunteer training</b>									
<b>Home visit programmes</b>									

Table 11.1. Timescales for the ZEZ pilot project.

### Organisational structure

The ZEZ pilot project was initially managed and delivered by a team of two, a more senior manager and a more junior manager. In April 2023, the more senior manager went on maternity leave and the more junior manager took over the overall management of the project. This did not appear to affect the project delivery. Throughout the project the 'Ease Their Troubles' team was able to operate flexibly and relatively independently of other departments within ZEZ. Delivery of the project to householders took place in two phases. In the first phase, the project manager undertook the home visits with the support of one person who volunteered as a component of her studies and was trained as an energy advisor. For the second phase of home visits, the project manager recruited and trained a team of further volunteers to deliver the project.



## 3. Fund (EO2)

### Introduction

The objective of the ZEZ work on funding was to raise sufficient funds to purchase 250 energy kits that would be used as part of the ZEZ Alleviate mechanism (the energy kits and the Alleviation mechanism are described later). This required approximately €17,500 (approximately €70 per energy kit)<sup>5</sup>.

### Microdonations

#### Process

ZEZ began its work on fundraising by exploring options for setting up a microdonations scheme along the lines of the Energie Solidaire model<sup>6</sup>. Since ZEZ is not an energy supplier and does not have customers, it approached five of the national energy suppliers in Croatia (including the largest one, known as HEP) and secured meetings with them.

#### Challenge

The process of setting up meetings with the appropriate people in the energy companies was time-consuming and ultimately fruitless. This was because the suppliers were unable to collaborate with ZEZ in this way. The challenges for the suppliers are summed up by ZEZ (in the context of HEP, in particular) as follows:

*'Unfortunately, they were not interested in implementing this model because their systems are too traditional, too rigid and too big for them to change for a limited period of time. Maybe they will think about this option in the long run. Also, I think that this microdonations financial model is great for renewable energy communities that are coming up soon in Croatia, we hope.'*

#### Response

In response to this setback, ZEZ decided to implement programmes for fundraising in the form of public donations and corporate donations, with targets of around €8750 for each. To implement its public and corporate donations campaigns, ZEZ worked in partnership with the [Solidarna Foundation](#), which 'creates new opportunities for all citizens to act in solidarity, in our joint effort to protect human rights

<sup>5</sup> Croatia adopted the Euro on 1 January 2023. All amounts are shown in Euros.

<sup>6</sup> This model allows energy customers to make microdonations as part of their energy bill.





and meet basic human needs, reduce inequalities and expand freedoms in all social spheres.<sup>7</sup> As such, Solidarna Foundation is an expert in fundraising in these contexts and was a trusted partner for ZEZ. Solidarna Foundation's role was also significant because it was able to accept public donations (which ZEZ was not). Solidarna Foundation's fee for this service was 5% of the donations collected.

## Public donations

### Process

ZEZ worked on its public donations campaign intensively from October to December 2022. To implement the public donations campaign, the [Ease Their Troubles](#) name and branding for their pilot. The project delivery team also worked closely with the ZEZ communications team to develop and implement the campaign. To begin, ZEZ set up webpages for the campaign featuring: bank details and a QR code for donations; a video about energy poverty, the public donations campaign and the delivery of the project to householders (hosted on the project website and on YouTube); and text about the same issues. The website was updated as the campaign progressed. This material was also featured on the Solidarna Foundation website. The campaign and the campaign website were then promoted through a range of 'no-cost' channels, such as: ZEZ, Solidarna Foundation and other websites, apps, newsletters and social media feeds; speaking opportunities in public settings; advertisements on the city lights at tram stations (these were provided free of charge); and at a ZEZ-organised a flea market / clothes exchange event named "Solidarity Shopping" in a coffee shop in the city centre (the funds that were collected at this event through renting out the display tables to sellers were added to the donations to fund the 'energy efficiency kits').



The 'Ease their Troubles' promotional video. [Link to video.](#)

<sup>7</sup> Solidarna Foundation had become well-known in Croatia following its work collecting donations in response to the earthquake in Croatia in 2020.





City lights at the tram station



Donations at the 'Solidarity Shopping' event.





Using the QR code to make a donation at the 'Solidarity Shopping' event.

## Challenges

ZEZ did not report any specific challenges with this work, beyond it being time-consuming to implement.

## Outcomes

The outcomes from this work are discussed below, jointly with the outcomes from the corporate donations work.

## Corporate donations

### Process

The ZEZ Ease Their Troubles team also worked with Solidarna Foundation and the ZEZ communication team on the corporate donations aspect of its fundraising activities, which took place in the autumn of 2022.

The corporate donations phase of the campaign had the following characteristics:

- Whereas the public campaign was a universal campaign, the corporate donations campaign was targeted and selective. In particular, ZEZ focused on companies with whom it already had a relationship and/or who had strong records of Corporate Social Responsibility (CSR) and contacted them individually. ZEZ took care to approach named individuals via their unique email address, rather than writing to general email addresses, such as 'info@.....'.

- The corporate campaign made use of the same materials as the public campaign, such as the video. In addition, the campaign communicated what had been done so far; this included the amount of money gathered through the public campaign, the number of households visited and photos from the visits.
- Organisations were invited to make donations in the form of either cash or volunteering time of their employees (who would be trained and receive a certificate).
- Developed with advice from Energie Solidaire, the corporate campaign featured reciprocal packages of publicity and services provided by ZEZ, corresponding to two donation levels:
- Level 1: Smaller donation of €2,000 to €3,000 and/or volunteering  
Reciprocal package: Mention of the donating company on social networks, in the ZEZ newsletter and in the sponsor category on the Ease their Troubles website
- Level 2: Larger donation of €3,000 to €4,000 and/or volunteering  
Reciprocal package: All of the above, plus workshops for the company's employees on energy efficiency and solar energy for households.

In addition, the ZEZ project manager contacted a car rental company with a proposal whereby ZEZ would rent a car to use for the home visits and the rental company would donate the fuel that would be used. However, the rental company did not take up this proposal.

## Challenges

ZEZ reported that securing corporate donations was more challenging than securing public donations. As indicated in this quote, ZEZ conjectured that one reason for this could be that it is more challenging to inspire solidarity and empathy among senior directors (who are more likely to be well off) than among the public (who will have a much broader range of incomes):

*'We tried to induce the same empathy feeling and the same solidarity spirit. But I think a lot more effort went into contacting firms and getting their response and getting their donations. I think you can't have the same expectations from citizens and from directors of firms in this way. I think that the citizens generally are not wealthy, so the bigger part of them can relate to energy poverty, to high bills.'*

While this may be the case, it is also worth noting that the corporate donations work would have reached relatively few companies compared to the universal public campaign, and so it is hard to compare success rates. In addition, securing corporate donations was challenging in other pilot projects.



### Outcomes (public and corporate donations)

ZEZ's objective was to collect a total of €17,500 in donations (€8,750 in public donations and €8,750 in corporate donations). As shown in Table 11.2, ZEZ received a total of €16,371 in donations between October 2022 and the end of 2023, with the majority of this coming in October and November 2022. A total of around €5,316 was received in public donations from around 180 individuals and around €11,055 was received in corporate donations from around 22 organisations<sup>8</sup>.

Month	Public donations		Corporate donations	
	Number of donations	Value of donation	Number of donations	Value of donation
Late October 2022	41	€893	5	€729
November 2022	132	€4,185	12	€2,720
December 2022	1	€36	1	€1,326
January 2023	1	€15	1	€15
February 2023	-	-	-	-
March 2023	-	-	-	-
April 2023	-	-	-	-
May 2023	1	€50	-	-
June 2023	-	-	-	-
July 2023	-	-	1	€3,000
August 2023	-	-	-	-
September 2023	1	€4	1	€265
October 2023	-	-	1	€3,000
November 2023	1	€25	-	-
December 2023	2	€108	-	-
<b>TOTAL</b>	180	€5,316	22	€11,055
<b>GRAND TOTAL</b>				€16,371

Table 11.2. The outcomes of the ZEZ public and corporate donations campaigns.

<sup>8</sup> Some of the donations were received by Solidarna via a third party platform whose name appeared on Solidarna's records instead of the name of the donor. This means that it was not possible to know for sure in some cases whether the donation was from an individual or a company. Therefore, the figures here are, to some extent, estimates in terms of the split between public and corporate donations.



In the phase of fundraising that is reported here, ZEZ received €16,371 on donations, compared to an overall target of €17,500. Although ZEZ did not quite reach its target for donations, this can be considered to be a success as a first foray into this area. The reasons for this success can be attributed to the three partners in the campaign – the ZEZ Ease Their Troubles team, the ZEZ communications team and the Solidarna Foundation – worked to a high standard and working very well in partnership with each other.

In practical terms, ZEZ reported that the energy kits proved to be less expensive than had been predicted. This meant that ZEZ was able to purchase 250 energy kits, for use in the home visit programme, as planned.

## 4. Identify (EO3)

### Process

The ZEZ Identify process started by analysing Eurostat data in order to identify the Croatian demographic group that is most socially and economically vulnerable. This analysis led ZEZ to focus on people aged over 65 years:

Having made this decision, ZEZ began to recruit households into the two phases of its pilot project, in a number of ways. Inspired by ALLenergy, ZEZ set up a small network of third sector organisations that work with people over 65 years to contact and refer households to ZEZ; this included Red Cross Initiative (which runs a social shop for people in need), the Zagreb Register for Pensioners, the local authorities in Zagreb and the Centre for Social Welfare. A woman that ZEZ met through one of the neighbourhood councils in Zagreb, who is very active organising events for older people in her neighbourhood, signed up for the pilot project and then undertook successful recruitment activities among her extensive social network. ZEZ also placed leaflets and posters in suitable locations, such as public libraries, public health centres, public kitchens, pharmacies, Centres for Social Welfare and other spaces for public notices. During the winter of 2022, ZEZ rented a stand on a local market and demonstrated articles in the energy kit to encourage registrations. Also, at the end of each home visit, the delivery team took time to ask the householders to recommend the project to her or his friends. Also, in August 2023, during recruitment to the second phase of home visits, ZEZ secured a slot on the most popular Zagreb breakfast TV show.

When householders contacted ZEZ, they were taken through a relatively simple eligibility test. Householders were required to be aged 65 or more and be residents of the City of Zagreb or Zagreb County. In addition, to be eligible, households needed to fulfil one or more of the following criteria:

- Being a beneficiary of the National Benefit for the Elderly (available to those who have not made sufficient pension contributions during their working life).
- Being a recipient of the allowance for vulnerable energy buyers granted to single persons or households who meet the criteria for being considered vulnerable energy buyers).

- Being a recipient of the minimum guaranteed compensation (a top-up payment for those on very low incomes).
- Being a beneficiary of a monthly pension of less than €400.



Filming Good Morning Croatia TV show

## Challenges

ZEZ encountered two key challenges during these processes. First, ZEZ reported that they received fewer referrals from Red Cross Institute and Centre for Social Welfare than had been envisaged. ZEZ understood that this was because levels of trust among householders were low for two reasons. First, previous negative experiences, and a mistrust of institutions. Second, elderly people are afraid to allow people in their homes:

*'Not a lot of them are open to receiving help. People are not that trusting, especially those that are very vulnerable and that are used to being promised some kind of help, and then not getting it from other institutions, from the state especially and from the city. Also, especially the elderly, they are afraid. They often live alone in too big apartments (which is why they are energy inefficient most of the time). I wouldn't recommend my mum to just let two people into her home without any kind of legitimacy. We hope that we will be able to maybe up the trust when we start visiting the households, through word of mouth from end users to their friends, to their peers.'*

On this topic, it is notable that this was a less significant challenge in the case of the woman who contacted her social networks. It would appear that, among the 65+ age group, this more personal or word-of-mouth style of communication is more trusted than communication from organisations, even organisations who they are familiar with and who provide valuable services to them.



The second challenge was the opposite to the first. Following the appearance on the Zagreb breakfast TV show, ZEZ was overwhelmed by applications to participate in the ‘Ease Their Trouble’s project (second phase). This was a positive thing because it overcame the earlier trust-related recruitment problems, possibly because the person running the project could be seen and was able to directly introduce the project in a very personable way. However, this was also a challenge because the ZEZ telephone lines were overwhelmed by callers and because ZEZ had to turn people away as the scheme became rapidly oversubscribed. After completing the necessary recruitment, ZEZ implemented a waiting list for future programmes.

## Outcomes

Unfortunately, ZEZ did not monitor the number of referrals that did not meet the eligibility criteria. Table 11.3 shows the responses, of the 106 households that met the eligibility criteria, received a home visit and completed the ‘baseline’ survey, to the question, ‘Thinking about the past year, how much difficulty have you had with affording your energy bills?’ The responses to this question indicate that, although 78% of respondents indicated that they have some or great difficulty affording energy bills, 23% appear to have little or no difficulty. Although it is important to remember that affordability is just one element of energy poverty, it is possible that some or all of this 23% should have been ineligible for the programme. At the same time, the participants did need to be on very low incomes in order to be eligible. Findings in other contexts show that older people can be reluctant to admit difficulties with money, or may have low expectations of living standards, so these could be other reasons for them not indicating problems with paying bills. In addition, ZEZ noted that some of the participants were supported by their adult children. ZEZ could consider including a question about energy bill affordability in future eligibility assessments but would need consider these issues carefully.

	Number (%)
<b>1 - No difficulty</b>	18 (17%)
<b>2</b>	6 (6%)
<b>3</b>	19 (18%)
<b>4</b>	24 (23%)
<b>5 - Great difficulty</b>	39 (37%)

Table 11.3. Baseline responses to the question, ‘Thinking about the past year, how much difficulty have you had with affording your energy bills?’ (n = 106).





The demographic characteristics of the 106 households that responded to the 'baseline' survey are shown in Table 11.4.

	Number of households (%)
<b>Number of people in household</b>	
1	52 (49%)
2	29 (27%)
3	14 (13%)
4	4 (4%)
5 or more	7 (7%)
<b>Number of children (aged 17 or less) in household</b>	
0	100 (94%)
1 to 3	6 (6%)
<b>Number of older people (aged 65 and above) in household</b>	
0	1 (1%)
1	77 (74%)
2	28 (26%)
<b>One or more person with a disability or long-term illness</b>	
Yes	87 (82%)
No	19 (18%)
<b>One or more person in paid employment</b>	
Yes	25 (24%)
No	81 (76%)
<b>One or more adult male in the household</b>	
Yes	60 (57%)
No	46 (43%)
<b>Type of property</b>	
House	40 (38%)
Purpose built flat or apartment	60 (57%)
A flat or apartment that was converted	6 (6%)
<b>Tenure</b>	
Owner occupier	85 (80%)
Social tenant	9 (8%)
Private tenant	6 (6%)
Part owner/part tenant	6 (6%)

Table 11.4. Demographic characteristics of households that completed the 'baseline' survey in Phases 1 and 2 of the ZEZ home visit programme (n = 106).



## 5. Alleviate: processes in Phase 1 (EO4.1)

### Energy kits

#### Process

ZEZ used the funds that were raised in both phases of fundraising to purchase the 250 energy kits that would be used in the corresponding two phases of home visits. As mentioned earlier, each ZEZ energy saving kit cost up to €70 (prices of items fluctuated during the project). Each energy kit included:

- 6 x LED bulbs
- 1 x door brush
- 2 x window seals (12 m)
- 1 x 6 metre reflective film for radiators (these can be cut to size and used for multiple radiators around the home)
- 1 extension power cord with switch
- 2 x water and energy saving tap aerators.
- A booklet with written advice for room-by-room energy savings and useful contacts (Red Cross, Centers for Social Welfare, DOOR's Centre for energy poverty, The Croatian Pension Insurance Institute, Caritas, and ZEZ).



A ZEZ energy efficiency kit.

## Challenges

ZEZ reported similar challenges with energy kits that were highlighted in other pilots: it is time-consuming to purchase the materials, storage space is required and a car (and fuel) is necessary to transport the energy kits to the home visits.

## Home visits: phase 1

### Process

In the first phase of home visits, ZEZ aimed to visit 120 registered and eligible households (out of a target total of 250). The ZEZ project manager originally hoped that a team of volunteers would undertake this work; however, it was not possible to recruit and train a team in time for Phase 1. Thus, the Phase 1 home visits were undertaken by the ZEZ pilot project manager herself and a single volunteer. Importantly, this was a master's degree student in energy and energy efficiency who undertook the work with ZEZ as the unpaid 'professional practice' part of her studies. Phase 1 of the home visits began in January 2023.

Each visit was arranged by telephone a week in advance. Participants were informed that the visit would take around 45 minutes. The day before the visit, ZEZ checked once again that it was okay to come. In some cases, the visit needed to be rescheduled. Energy kits were prepared at the ZEZ office for the day and travel to the visits was by car. For security reasons, home visits were always undertaken in pairs; this also helped with the efficiency or speed of each visit. To reassure the householders, the team had distinctive identification lanyards showing their name



A householder in Phase 1 of the home visits.

The visits usually followed this structure:

1. Introductions.
2. Introduction to the contents of the energy kit and suggestions for the small measures that could be installed.
3. After approval from the householder, one of the team started to install the small measures from the energy kits, while other commenced with the 'baseline' survey.
4. After completing everything, the team introduced the booklet, reassured the householder that they could contact ZEZ if they had any questions and ask them to recommend the programme to friends and neighbours.

## Challenges

ZEZ reported that although it was time-consuming, the process of carrying out the Phase 1 home visits was undertaken relatively smoothly. Nevertheless, the ZEZ project manager commented:

*'Not all the situations are nice. Most of them are, but some are quite hard emotionally to handle.'*

## Outcomes

Phase 1 of the home visits took place between January 2023 and April 2023. 79 home visits were conducted in this phase. A breakdown of home visits per month is shown in Table 10.5.

Month	Number of home visits
January 2023	24
February 2023	21
March 2023	21
April 2023	13
<b>Total</b>	<b>79</b>

Table 10.5. Numbers of home visits per month in Phase 1.

The ZEZ project manager highlighted a number of benefits and positive outcomes from the Phase 1 home visit process:

- The value of having conducted home visits herself before training more volunteers to do the same. With respect to the emotional challenges of visiting some of the more desperate households, the ZEZ project manager reported:  
*'I will give the trainees some firsthand knowledge, to know exactly what they can expect and not to be too frazzled, and I think they need to be prepared for that.'*
- The strength and mutual benefits – to the volunteer, the project manager and the project – of the working relationship between herself and the student volunteer.



- The very rewarding nature of the work for both her and the volunteer.

The ZEZ project manager summed up these points, as follows:

*'The work will be very good information for her to incorporate in her master's thesis. So yes, it was a very good match. She also loved talking to the householders and helping them. It was very, very heartwarming for me and for her. So, as much as I am not as pleased that the energy advisors didn't do this part of the job alone, as we envisioned, and I am glad that I got the chance to do the fieldwork also, because it really made me understand the problem a lot more.'*

## 6. Alleviate: processes in Phase 2 (EO4.1)

### Introduction

Phase 2 of the ZEZ home visits had two main elements, which are discussed below:

1. Recruitment of volunteer energy advisors.
2. Training and induction of the volunteers.
3. Implementation of the home visits (with delivery of 'energy kits') by the volunteers.

### Recruitment of the volunteers

#### Process

Recruitment of the volunteer energy advisors took place during the spring and summer of 2023, with ongoing recruitment beyond that. Recruitment took place via the following communication channels: ZEZ website, newsletter and social media channels; Friends of the Earth Croatia; a Croatian volunteering platform called [Volunteka](#); and academic contacts in the Sociology and Social Work departments in the University of Zagreb (where the ZEZ project manager studied) and the Geotechnical Faculty in City of Varaždin.

Potential volunteers were invited to apply to join the team via a form on the ZEZ website. The information about the role emphasised: the nature of the work; the training that would be provided; the certificates that would be provided at the end of the training and at the end of the home visit programme; and the provision of expenses for travel and subsistence.

#### Challenges and outcomes

ZEZ reported that, throughout the volunteer phase of the 'Ease their Troubles' project, applications to be volunteers were more limited than had been hoped. In addition, many of the applicants who were accepted as volunteers had to drop out during the home visit phase due to changes in their availability, or because they did not have access to a car.



## Training and induction of the volunteers

### Process

The ZEZ energy advisor training was designed and delivered by the ZEZ project manager and lasted around four hours. Eight volunteers underwent training and other induction activities in autumn 2023.

The training covered the following topics:

1. Energy poverty (in general, in the EU and in Croatia).
2. Energy efficiency
3. The CEES project (aims, objectives, structure, process).
4. Step-by-step through the home visit process.

Another key part of the induction process was to provide each volunteer with a contract that described what was expected of them as volunteers and what ZEZ would do to support them (for instance, in terms of looking after their health and safety, and well-being, and the provision of expenses/allowances for travel and subsistence). In addition, volunteers were provided with all the necessary tools for installing the small measures in the household - pliers, sandpaper, scissors and scalpel, as well as the materials for recording information about the visited households.

### Outcomes

Seven (out of eight) trainee energy advisors completed the 'training' survey at the end of the training. Table 10.6 shows that high levels of satisfaction with the training was universal in terms of learning and developing confidence, as well as with the way in which the training was run and the suitability of the training.

	Agree	Neither	Disagree
At the training event I learned practical information and skills to help me to support householders to reduce their energy consumption and costs.	7 (100%)	0 (0%)	0 (0%)
Following the training event, I feel MORE confident than before that I can support householders to reduce their energy consumption and costs.	7 (100%)	0 (0%)	0 (0%)
Following the training event, I intend to take action to reduce my own energy consumption and costs.	6 (86%)	1 (14%)	0 (0%)
The training event was well-run.	7 (100%)	0 (0%)	0 (0%)
The training event was tailored to my needs.	7 (100%)	0 (0%)	0 (0%)

Table 10.6. Participant perceptions of the ZEZ training days (n = 7).



The responses to the open-ended, qualitative questions in the ‘trainee’ survey provide further detail about the high levels of satisfaction. In addition to positive mentions of the content and structure of the training, the trainees also commented on the relaxed atmosphere in the training, and the ‘kindness’, ‘energy’, ‘eloquence and ‘expertise’ of the ZEZ project manager who delivered the training. The ZEZ training was clearly developed to a high standard.

## Home visits: phase 2

### Process

The Phase 2 home visits were conducted by the volunteer energy advisors. The process for the Phase 2 home visits was largely the same as the Phase 1 home visits.

### Challenges

Delivering the home visits through the volunteer energy advisors was very challenging. This is an important finding. A number of challenges were experienced:

Delivering the home visits through the volunteer energy advisors was very challenging:

- Very often, volunteers were not able or willing to commit as much time as they had stated at the outset. ZEZ reported that, despite the contracts that had been prepared and signed at the outset, since they were volunteers, it was not in practice possible to apply any pressure on them to do more work.
- The circumstances of some volunteers changed during the work, for example, they got a new job, so that they were not able to continue.

### Outcomes

The Phase 2 home visits were conducted between October 2023 and December 2023. 43 home visits were conducted in this period. A breakdown of home visits per month is shown in Table 10.7. Taking into account the 79 home visits that were undertaken in Phase 1, a total of 142 home visits were conducted in Phases 1 and 2. As discussed above, the approach that was used in Phase 2 did not yield as many home visits as had been hoped; this left 108 further home visits to achieve the target of 250.

Month	Number of home visits
October 2023	14
November 2023	22
December 2023	7
<b>Total</b>	<b>43</b>

Table 10.7. Numbers of home visits per month in Phase 2.





In response to this challenge, ZEZ returned to the approach that was used in Phase 1 by recruiting and training a new team of student volunteers, who will undertake the work as the ‘professional practice’ element of their studies. The plan was that the ZEZ project manager and the volunteers will complete the remaining 108 home visits during the summer of 2024.

## 7. Alleviate: short term householder impacts and experiences in Phase 1 (EO4.2)

### Short term householder experiences

Short term household experiences of the ‘Ease their Troubles’ programme were evaluated through three questions in the CEES ‘engagement’ survey. This survey was completed by 106 participating households at the end of the home visit. Of these 106 responses, 70 were collected in Phase 1 (89% of the 79 households in Phase 1) and 36 were collected in Phase 2 (84% of the 43 households in Phase 2). A Mann-Whitney test confirmed that the responses in Phase 1 and Phase 2 are not significantly different in statistical terms. This means that the data from Phases 1 and 2 can be examined together.

Table 10.8 shows that household experiences of the ZEZ home visits were very positive. The level of agreement with all three of the statements is almost 100%, with no disagreement at all.

	Agree	Neither	Disagree
<b>The home visit today was well-run</b>	104 (98%)	2 (2%)	0 (0%)
<b>The home visit suited my needs</b>	105 (99%)	1 (1%)	0 (0%)
<b>The home visit today was conducted in a respectful way</b>	105 (99%)	1 (1%)	0 (0%)

Table 10.8. Household experiences of the ZEZ home visits (n = 106).

Turning to the responses to the open-ended, qualitative questions in the ‘engagement’ survey, four features stand out:

- The very positive experiences of householders are further reflected in these comments.
- Many respondents referred positively to one or more items in the ‘energy kit’.
- Respondents used terms such as: ‘company’, ‘kindness’, ‘care’, ‘benevolence’, ‘gift’, ‘decency’ and ‘taking care’ to describe the visit and the energy advisors.



- One respondent lamented that the energy advisor ‘didn’t even want juice’. This is an interesting comment with possible implications about the value of accepting hospitality and the social connections that this helps to create.



Fitting draught excluder at a home visit.

### Short term householder impacts

The short-term impacts of the home visits were examined in three further questions in the ‘engagement’ survey. Although the results shown in Table 10.9 are not quite as strong as those above, levels of agreement around 90% still make it clear that the ZEZ home visits had very positive short-term impacts for the recipients.

	Agree	Neither	Disagree
<b>I have learned practical information and skills today to help me reduce my energy consumption and costs.</b>	96 (91%)	7 (7%)	3 (3%)
<b>I feel more confident than before that I can reduce my energy consumption and costs.</b>	96 (91%)	8 (8%)	2 (2%)
<b>I intend to take further action that I hope will reduce my energy consumption and costs.</b>	94 (88%)	9 (9%)	3 (3%)

Table 10.9. Immediate impacts on households of the ZEZ home visits (n = 106).

## 8. Alleviate: longer term household experiences and impacts (EO4b)

### Longer term experiences

The ZEZ 'follow-up' survey contained four questions about household experiences of the ZEZ programme. The 'follow up' survey was completed by 53 participating households, three to six months after the home visits that were discussed above. Of the 53 responses, 51 were from households in Phase 1 and just 2 from Phase 2. The implication of this is that these results apply to Phase 1 only.

The findings from this survey are shown in Table 10.10. The findings in this table show that longer term householder experiences of the ZEZ home visits were very positive. Almost all of the respondents agreed that the programme was well-run (98%) and suited their needs (91%) and was delivered in a respectful way (98%). Further, almost all of the respondents agreed that they would recommend the programme to other people who struggle with energy bills (98%).

	Agree	Neither	Disagree
<b>I think that the programme was well run.</b>	52 (98%)	0 (0%)	1 (2%)
<b>I felt listened to and respected by the people who were delivering the programme.</b>	52 (98%)	1 (2%)	0 (0%)
<b>I feel that the programme was adaptable to suit my needs.</b>	48 (91%)	4 (8%)	1 (2%)
<b>I would recommend the programme to other people who struggle to pay their energy bills.</b>	52 (98%)	0 (0%)	1 (2%)

Table 10.10. Longer-term household experiences of the ZEZ Phase 1 home visits (n = 53).

## Longer term impacts: comparing the ‘baseline’ and ‘follow up’ surveys

### Introduction

As described in more detail in Chapter 2, longer term impacts of the pilot projects were examined by comparing each household’s responses to a ‘baseline’ survey to their responses to an identical ‘follow-up’ survey. In Phase 1 of ZEZ’s pilot, the ‘baseline’ survey was conducted face-to-face during the home visits and the ‘follow-up’ survey was conducted by telephone between three and six months after the home visits. Matched pairs of survey responses (‘baseline’ and ‘follow-up’) were achieved by attributing a unique ID number to each household. Once the ZEZ ‘baseline’ and ‘follow-up’ data had been cleaned and integrated, 49 matched pairs of households were available for analysis. As above, only two of these matched pairs were from households in Phase 2, implying that this analysis relates to Phase 1 only. Differences between the ‘baseline’ survey data and the follow-up survey data were examined using the Related-samples Wilcoxon signed-rank test, with a confidence of 90% required for reporting as statistically significant. As discussed earlier, 90% was used due to the relatively small sample sizes.

The results from this analysis are shown below. These tables show all of the survey items from the ZEZ pilot ‘baseline’ and ‘follow-up’ surveys (with the number of households included in the analysis shown alongside the item). The survey items where a statistically significant change between the ‘baseline’ survey responses and the ‘follow-up’ survey responses was found are highlighted in green. For each survey item, the means from the ‘baseline’ survey and the ‘follow-up’ survey are indicated, as well as the difference between the means. In the case of the green shaded items, where a statistically significant change was identified, the change is described.



When considering the results in these tables, it is important to note that it is not possible to attribute any changes to the pilot project with certainty. This is because it was not possible to control for other factors such as seasonality and the cost of energy, both of which might also shape the findings.

### **Paying energy bills**

As indicated in Table 10.11, the ZEZ analysis showed a statistically significant difference between the responses to the 'baseline' survey and the 'follow-up' survey. In this instance, the mean has decreased. This is a positive result that indicates that households reported *less difficulty* paying their energy bills three to six months following their home visit than they did at the time of their home visit. Whilst we should consider the possible role of other factors, this finding suggests that the ZEZ home visits had a positive impact on participants' ability to pay their energy bills.

### **Self-restriction of energy services**

Table 10.11 also shows the results with respect to the self-restriction of access to energy services by householders. The analysis shows a statistically significant difference in the 'baseline' survey and follow-up' responses with respect to three survey items: heating, refrigeration and lighting. That said, the results are somewhat contradictory. With respect to heating and lighting, the results suggest that the respondents have implemented *less* self-restriction in the three to six months after the home visit than they did at the time of the home visit. This might be a positive reflection of the greater ease with which householders were able to pay their energy bills in the period after the home visit. In contrast, the results with respect to refrigeration suggest that householders have implemented *more* self-restriction. It is possible that this finding is the result of the discussion of refrigeration during the home visit, which could have prompted householders to pay more attention to this issue through self-restriction (for example, this might involve switching off a second fridge or freezer, although we have no evidence for this).

### **Negative impacts of energy poverty**

Table 10.12 shows the findings with respect to the negative impacts of challenges with paying for energy. The analysis shows a statistically significant difference in the 'baseline' survey and 'follow-up' survey responses with respect to the ability to have visitors in the home, the ability to access online communications (such as websites, messaging and telephone calls) and recreation in the home (such as TV and hobbies). More specifically, the results suggest that householders experienced greater negative impacts in these regards in the period following the home visit than at the time of the home visit. We can't be sure of the reasons for this: it may be because the home visits encouraged them to think about the issues more, or effects may have accumulated over time, or other reasons.



Survey items	Baseline survey mean	Follow-up survey mean	Difference between means	Description of change
<b>How much difficulty have you had with affording your energy bills? 1: No difficulty; 5 = Great difficulty (n = 48)</b>	3.71	2.85	-0.86	Less difficulty
<b>In each case, I would like you to tell me the extent to which you have restricted your use of these things, <i>in ways that you did not want to, in order to be able to afford your energy bill.</i> 1: Not restricted at all; 5: Restricted to a great extent</b>				
Heating (n = 39)	3.89	3.29	-0.60	Less restriction
Cooking (n = 41)	2.58	2.57	-0.01	
Refrigeration (for example, maybe you have switched off your fridge or freezer) (n = 37)	1.92	2.50	0.58	More restriction
Cooling your home (n = 26)	3.43	3.43	0.00	
Doing laundry (n = 42)	3.55	3.31	-0.24	
Heating hot water (n = 39)	2.92	2.94	0.02	
Lighting (n = 48)	3.67	2.83	-0.84	Less restriction
Running electronic devices (for example, TVs, computers and phones) (n = 46)	2.43	2.68	0.25	

Table 10.11. Longer-term impacts on households of Phase 1 of the ZEZ home visit programme (paying bills and self-restriction). The green shading indicates variables where statistically significant findings were observed at 90% confidence.

Survey items	Baseline survey mean	Follow-up survey mean	Difference between means	Description of change
<b>To what extent have challenges paying for energy had a negative impact on these things in your household? 1: No impact at all; 5: A lot of impact</b>				
Physical health or well-being (n = 48)	2.90	3.44	0.54	Greater impact
Mental health (n = 47)	3.06	3.42	0.36	
Ability to study at home	Insufficient responses			
Ability to work at home	Insufficient responses			
Ability to have visitors in your home (n = 45)	1.96	2.48	0.52	Greater impact
Feeling of pride in your home (n = 46)	2.02	2.27	0.25	
Feeling comfortable in your home (n = 48)	2.17	2.46	0.29	
Feeling safe and secure in your home (n = 47)	2.19	2.35	0.16	
Ability to access online/digital communication services ... (n = 33)	1.74	2.55	0.81	Greater impact
Ability to enjoy recreational activities ... in your home (n = 47)	1.55	2.35	0.80	Greater impact

Table 10.12. Longer-term impacts on households of Phase 1 of the ZEZ home visit programme (negative impacts). The green shading indicates variables where statistically significant findings were observed at 90% confidence.

### Energy literacy and know how

Table 10.13 shows the findings with respect to the energy literacy and know-how of the householders. The analysis shows a statistically significant difference with respect to understanding of energy bills, knowledge of how to save energy, and knowledge of how to manage energy bills online. More specifically, the analysis indicates that understanding and knowledge of these three important issues was greater in the period after the home visit than it was at the time of the home visit. The results show that the increase in knowledge of how to manage energy bills online was particularly great. Given that it is unlikely that householders would have gained this understanding and knowledge elsewhere, it appears highly likely these three changes are the direct impact of the ZEZ home visit programme. Table 10.13 also indicates that respondents felt that their community is more understanding three to six months after the home visit than at the time of the home visit.



Survey items	Baseline survey mean	Follow-up survey mean	Difference between means	Description of change
<b>To what extent do you agree or disagree with the following statements? In each case, please could you give an answer between one and five, where one means 'I don't agree at all' and five means 'I strongly agree'. If the answer is No answer/Don't know/Not applicable, please do not enter a response.</b>				
I know my approximate monthly energy consumption or costs (n = 46)	3.98	4.06	0.08	
I understand my energy bills (n = 47)	3.70	4.27	0.57	Greater understanding
I know that I am on the best energy tariff for me (n = 45)	4.13	4.06	-0.07	
I know how to manage my energy bills online (n = 31)	1.70	3.34	1.64	Greater knowledge
I know how to contact my energy supplier (n = 47)	3.98	4.31	0.33	
I know how to save energy in my home (n = 47)	3.98	4.25	0.27	Greater knowledge
I know if my home is well insulated or not (n = 47)	3.89	4.04	0.15	
I am confident that I am receiving all welfare/benefits payments that I am entitled to (n = 43)	3.84	3.83	-0.01	
I think that my local community is supportive of people who struggle to pay their energy bills (n = 42)	1.86	2.60	0.74	Greater sense of support
I feel a sense of stigma or shame because of my struggles with energy bills (n = 47)	2.32	2.81	0.49	

Table 10.13. Longer-term impacts on households of Phase 1 of the ZEZ home visit programme (energy literacy and know how). The green shading indicates variables where statistically significant findings were observed at 90% confidence.



## Longer term impacts: the ‘follow-up’ survey

The ZEZ ‘follow-up’ survey contained five questions that retrospectively asked households about changes or impacts during the period since their participation in the home visit programme. This data is useful because, unlike the ‘baseline’ and ‘follow-up’ matched pairs analysis, the changes that are indicated can be directly attributed to the ZEZ home visit programme. The results are shown in Table 10.14. This survey was completed by 55 respondents (again, just two respondents from Phase 2). The findings from these questions provide further indications of the strengths of the ZEZ home visit programme. More than 90% of respondents agreed that they had learned about how to use less energy (93%) and reduce energy costs (91%), and that participation in the programme had improved the physical health (91%) and mental health (93%) of their household. Further, 85% agreed that they expected their energy bills to be lower as a result of participation.

	Agree	Neither	Disagree
<b>I have learned more about how to use less energy through participation in the project.</b>	49 (93%)	3 (6%)	1 (2%)
<b>I have learned more about how to save on the cost of energy through participation in the project.</b>	48 (91%)	4 (8%)	1 (2%)
<b>I think my energy bills will be lower through participation in the project.</b>	45 (85%)	6 (11%)	2 (4%)
<b>Participating in the project has improved the physical health of my household.</b>	48 (91%)	4 (8%)	1 (2%)
<b>Participating in the project has improved the mental health of my household.</b>	49 (93%)	3 (6%)	1 (2%)

Table 10.14. Longer-term household impacts of Phase 1 of the ZEZ home visit programme (n = 53).



## 9. Energy advisor experiences and impacts (EO4.2)

The 'energy advisor' survey was sent several times to eight of the volunteer energy advisors. However, only two responded. Table 10.15 suggests that these two respondents did not have any negative views about their participation in the project. It is interesting to note that the two respondents agreed with the positive statements about the way in which the project was run and the ease of working with the project manager (as well their connections with the local community). Responses to the questions about the impacts of their participation on themselves are a little more ambivalent.

	Agree	Neither	Disagree
<b>I have learned a lot and developed new skills through participating in the project delivery.</b>	1 (50%)	1 (50%)	0 (0%)
<b>My confidence has grown through participating in the project delivery.</b>	1 (50%)	1 (50%)	0 (0%)
<b>Participation in the project delivery has enhanced my CV and employability.</b>	1 (50%)	1 (50%)	0 (0%)
<b>The project was well-run</b>	2 (100%)	0 (0%)	0 (0%)
<b>The project management team was easy and flexible to work with.</b>	2 (100%)	0 (0%)	0 (0%)
<b>I feel more connected to my local community through participating in the project delivery.</b>	2 (100%)	0 (0%)	0 (0%)

Table 10.15. Experiences of the ZEZ volunteer energy advisors (n = 3).

The responses to the open-ended, qualitative questions mentioned further positive aspects of volunteering on the programme: meeting other volunteers, helping people who need it, reassuring people in need that there are people who care, and working with the project manager. Although no negative points about the programme were raised, one of the respondents mentioned the trust issue that was raised earlier; in one case, the householder did not let the energy advisor into the house but accepted the 'energy kit' on his doorstep. Another comment by an energy advisor emphasised the value for many of the home visit recipients of having a visitor; this raises broader questions about social isolation and loneliness.

## 10. Impacts on local partners

The ZEZ 'local partner' survey was shared with ZEZ's key local partners, both of which referred potential households to ZEZ. Both completed the local partner survey. The quantitative results from this survey are shown in Table 10.16. These findings speak for themselves and provide further evidence of the robustness and quality of the ZEZ approach.

	Agree	Disagree
<b>The project has had a positive impact on energy poverty in participating households.</b>	2 (100%)	0 (0%)
<b>The project has had a positive impact on my own or my organisation's ability to work on energy poverty.</b>	2 (100%)	0 (0%)
<b>The project has enhanced my own or my organisation's appreciation of and respect for the challenges faced by households in energy poverty.</b>	2 (100%)	0 (0%)
<b>The project was well-run by ZEZ.</b>	2 (100%)	0 (0%)
<b>The project has created and/or supported local networks of organisations and individuals working on energy poverty.</b>	2 (100%)	0 (0%)
<b>I would be keen to collaborate on future energy poverty work with ZEZ.</b>	2 (100%)	0 (0%)

Table 10.16. Feedback from the ZEZ local partners (n = 2).

The qualitative comments from the two local partners provide further insight into the value that they place on the ZEZ approach. One of the respondents commented that the 'Ease their Troubles' programme had done a lot to raise awareness and understanding of energy poverty among participants and in their own organisation; the respondent added that 'everything was done very professionally' by ZEZ. The other respondent highlighted the range of immediate benefits for households but also the longer-term and widespread impact that the project will have on policy and practice. Emphasising the importance of partnerships, this respondent also noted that the ZEZ project provides a win-win outcome for organisations that have shared objectives.



## 11. Legacy

The CEES project has produced the following legacy for ZEZ:

1. ZEZ now has established and proven practices and systems for campaigns to collect donations from the public and from corporations to support work on energy poverty (to the extent of purchasing 'energy kits').
2. ZEZ has developed approaches through which it can attract older people in energy poverty, or at least older people on low incomes, to its programme. This includes taking referrals from a local network and making a TV appearance.
3. ZEZ has also developed an approach to home visits for older people in energy poverty that has been shown in the evaluation to have produced positive impacts on a range of aspects of energy poverty and energy know-how.
4. In addition, although this was not as productive as had been hoped, ZEZ has learned a lot about recruiting, motivating, training and managing volunteer energy advisors.
5. As a direct result of the work in CEES, the ZEZ project manager has been invited to participate in a City of Zagreb working group on energy poverty. She put it like this:

*'In December 2023, I was invited to be a part of the City of Zagreb working group along with social workers, the regional energy agency, to implement a policy programme to 2030 for alleviating energy poverty, and now it has several measures in it, and a budget and everything. This all comes from CEES. I think we have a real chance to implement the knowledge that we gathered from all of our pilots, whether it's the Croatian one or the other ones. And the toolkit and everything that will be an output of CEES will surely be an input for this programme.'*

6. During the implementation of the Ease Their Troubles project, in May 2023, a short video about the project, called People Saving Energy, was included in the European Commission's Audiovisual Service website (see below).





The People Saving Energy video. [Link to video.](#)

## 12. Key learning in the ZEZ pilot

### Preparing for energy solidarity work

1. The ZEZ pilot demonstrates the value of an organisational structure that allows work on energy poverty to be planned and implemented relatively independently of the need for approvals from other internal departments.
2. The ZEZ pilot shows that it can be challenging to keep accurate records of large numbers of households' progress through a project. A Customer or Client Management System (CMS), such as that used by Allenergy, would probably help with this.

### Fund

1. While micro-donations following the Energie Solidaire model are appropriate for energy generating communities that have their own customers, this is a very challenging approach for organisations that do not have customers.
2. Although these are time-consuming undertakings, programmes to support public and corporate donations have the potential to provide valuable income. The ZEZ model for both of these activities provides useful guidance for other energy communities.

## Identify

1. The ZEZ referral network approach is valuable but household mistrust of organisations makes this process challenging and time-consuming.
2. The word-of-mouth efforts of an early participant in the home visit programme and an appearance by ZEZ on a popular local TV breakfast programme brought many households to the pilot.

## Alleviate

1. Working as an energy advisor is highly specialised work, requiring a blend of social skills and technical skills. As such, it is important to implement specific processes to recruit and train suitable people.
2. The work of an energy advisor can be emotionally challenging. To address this concern, it is very helpful to develop processes to take care of energy advisors' well-being and resilience.
3. The ZEZ home visit approach (with 'energy kit' delivery) provides a robust and effective model for energy poverty alleviation activities. The approach relies on the value of the 'energy kit', bespoke energy advice and an understanding and empathetic approach that recognises the challenging circumstances of many households in energy poverty.
4. The evaluation indicates that the ZEZ home visit approach has been effective in alleviating energy poverty in some respects.
5. The experiences of ZEZ highlight both the benefits and challenges of working with young volunteers. While volunteers can bring additional and relatively cost-free resources to a project, working with volunteers is less reliable and predictable than working with employed staff.