



Deliverable 5.3

ASSIST Action National Reports



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Presentation of ASSIST Project

1.1 ASSIST overview and introduction

ASSIST is a 36-months European ‘market activation and policy orientation’ project to tackle fuel poverty and support vulnerable consumers. It intends to actively engage consumers in the energy market and positively change behaviour in relation to energy consumption and to influence design of policy at all levels to tackle fuel poverty issues.

Based on the conclusion of the Energy Citizens’ Forum and of the European Vulnerable Consumers Working Group, the project intends to combine activities addressing both energy and social dimensions as fuel poverty is not only an energy issue nor can it be tackled in isolation of the bigger issue of poverty. More specifically, ASSIST strategic objectives are to contribute to:

- tackle energy poverty;
- reduce the main barriers of the energy market faced by vulnerable consumers;
- support vulnerable consumers to be more efficient with their domestic energy consumption (electricity and gas).

To fulfil its goals, the project foresees diversified and correlated research, networking and in-field actions, consistent with the relevant national and European scenarios. Among them, ASSIST intends to create a network of innovative professional figures supporting vulnerable consumers in their domestic energy consumption: “**Home Energy Advisor (HEA)**”.

1.2 “WP5 – ASSIST2gether Action”

The fifth work package aims to design, implement and evaluate innovative support services for vulnerable consumers/energy poor on a country based level with a market-oriented and flexible approach (as recommended “projects based on behaviour change and efficiency should align with existing local initiatives”), through the implementation of pilot actions. The actions will be defined at National level with the support of the National Steering Committee and on the basis of the results of the national context analysis carried out in WP2 and of the market segmentation carried out at the beginning of the work package. The ASSIST actions will address 4,500 vulnerable consumers (750 per country). The tasks foreseen in the work package include:

- Market segmentation, that aims at assigning vulnerable consumers in market groups with common characteristics. It will act as a driver for the design of the actions;
- Designing, initiating and delivering the actions in each country;
- Evaluation of results: in order to assure reaching the set objective and performance indicators, the partners will closely monitor the development of and results achieved within the action.

1.3 Document overview and structure

This document is the final result of task 5.3. This task includes carrying out the concrete activities designed in the previous task and detailed in the ASSIST2gether Action Plan (Deliverable D5.2). The ASSIST2gether actions have been designed with the contribution of the National VCSC (WP7) and building on the results of:

- previous work packages, mainly on the evidence collected in the in-depth analysis (WP2), outcomes of the training (WP3) and managing of the VCEA network (WP4);
- market segmentation specifically carried out at the beginning of this workpackage;
- literature (i.e. EAA Report “Achieving Energy Efficiency through Behaviour Change”);
- direct experiences of the partners in energy efficient pilot actions (such as SMART-UP by AISFOR and ECOSERVEIS, “Energia su Misura” by RSE).

The design of the ASSIST2gether actions had the scope to define objectives, success criteria and foreseen activities (tasks scheduling, monitoring processes, foreseen objectives and outputs, etc.). The first activity related to tackling energy poverty is the engagement of vulnerable consumers, that not always are already involved in structured programmes. To do so, engagement strategies are a crucial preliminary step that can lead to the development of concrete pilot actions.

Moreover, some actions are implemented directly by ASSIST2gether project, but they remain closed in the domain of behavioural actions. However, since there are several programmes and projects both related to energy poverty and energy efficiency in the residential sector, when it is possible, ASSIST actions are designed in cooperation with these project, in order to achieve better results.

The structure of the activities, as shown in the ASSIST2gether Action Plan (Deliverable D5.2) is shown in Figure 1.

This deliverable constitutes the report about the implementation of the activities in the different countries up to the end of January, with a focus on HEAs involvement, reached consumers and a SWOT analysis of each of them.

Moreover, any misalignments with the actions plan presented in D5.4 are also highlighted and justified.

The final report of all the activities carried out within the ASSIST2gether project framework up the end of project, with the results of each actions in terms energy savings and other indicators, will be done in D5.5.

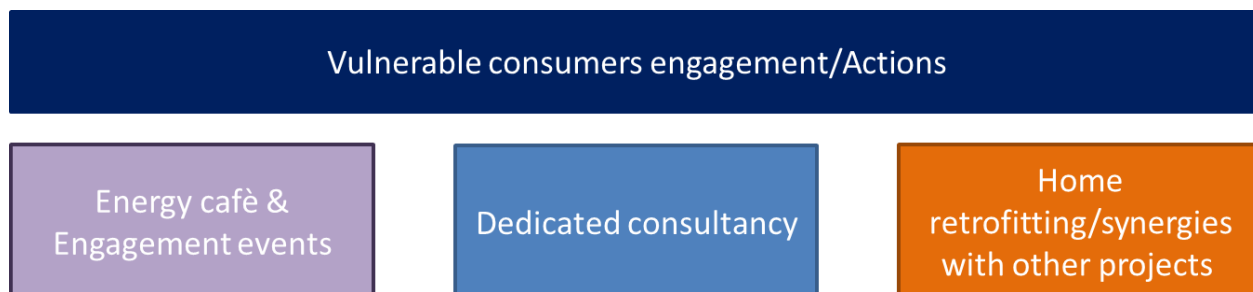


Figure 1: ASSIST activities and actions.

Belgium

2.1 Planning of ASSIST Actions

A summary of all the activities already performed or planned and currently ongoing at the Belgium level is shown below, while the details of each activity are reported in the next paragraphs:

- Soft/engagement activities:
 - *Soft/engagement activity #1* → Home visits and dedicated consultancy by Energy cutters;
 - *Soft/engagement activity #2* → Information sessions for Public Centres of Social Welfare (OCMW's in Dutch) so that they can give advice themselves when they visit vulnerable consumers;
 - *Soft/engagement activity #3* → Energyfit workshops for vulnerable consumers organized together with the Public Centres of Social Welfare (OCMW's);
 - *Soft/engagement activity #4* → Information sessions for Fluvius' meter readers so they can give advice themselves when they visit vulnerable consumers;
 - *Soft/engagement activity #5* → Flexmail with energy-saving tips to 40,000 vulnerable households during 10 weeks, with a competition to win a "woonmeter" (energy savings tips also on national facebook page and website of ASSIST);
 - *Soft/engagement activity #6* → Information sessions for the deaf and hearing impaired;
 - *Soft/engagement activity #7* → Information sessions for schools;
 - *Soft/engagement activity #8* → Energy-saving tips for Fluvius employees.
- ASSIST Actions:
 - *Action #1* → Home visits and dedicated consultancy by volunteers (HEAs);
 - *Action #2* → Help desk for vulnerable consumers.
- Synergies:
 - *Synergy #1* → Existing network of Energy cutters;
 - *Synergy #2* → multiple social organisations, already working on energy poverty (e.g. Kamp C, Samenlevingsopbouw, Public Centres for Social Welfare).

2.2 HEAs training and activities

In total, there are **77 fully-trained HEAs**, but only **43** are actively working as HEA (i.e. implementing the ASSIST action and doing home visits). In the table below, for each HEA category an overview is given of the number of HEAs that followed the HEA training and the number of HEAs that are active. Also, some arguments are given to explain the number of drop-outs.

HEA category	Trained	Active	Arguments
Public Body (OCMW)	5	4	Drop-out is limited as they can combine this with their job
Social Workers (Samenlevingsopbouw)	3	2	Drop-out is limited as they can combine this with their job
Energy Companies (Fluvius + VITO)	42	27	This large group of HEAs has a great affinity with the energy sector and can be followed up more closely because they belong to the same company as the coordinator. If the follow-up and involvement is greater, fewer people will drop out.
Charity (Energy Masters of	21	10	Energy masters are already volunteers that

Camp C)			give dedicated energy advise, but by default they do not visit vulnerable customers. In frame of the ASSIST project they followed the HEA training and extended their target group with vulnerable households. This category has the most drop-outs as there's less commitment. They did visit vulnerable consumers, but their administration was minimal.
Others (retired people)	6	0	They all stopped, mostly because of illness

2.3 Involvement of consumers through soft/engagement activities

2.3.1 Soft/engagement activity #1 (Home visits and dedicated consultancy by Energy cutters)

Home visits and dedicated consultancy by Energy cutters	
Action description	
Dates of action	January 2019 – ongoing
Action target	Vulnerable consumers
Geographic dimension	Flanders
Geographic area	Flanders
Number of involved users	2,000 households /month
Action tools	Home visits to give dedicated energy advise and distribution of factsheets with information on electricity appliances, electricity bill, low-cost energy-efficiency measures, etc...
HEAs involvement	
Type of HEA	N/A
Number of HEAs involved	N/A
Foreseen involvement	Existing network of Energy cutters in Belgium, that started in 2008. On 24/05/2019 and 07/06/2019 the Energy cutters followed 2 extra modules of the HEA training, i.e. : <ul style="list-style-type: none"> - Module 9 : Relational skills - Module 10 : Protection and prevention Energy cutters followed HEA training. They visit the vulnerable consumers, do an energy scan and give them advise on how to reduce their energy consumption and their energy bill.
Feedback from HEAs	N/A
Action monitoring	
Estimated energy savings	2%
Vulnerable consumers outreach	2,000 vulnerable households per month get a scan of energy consumption and consultancy about energy-efficiency measures.
SWOT analysis	
Strengths	It's an existing network that has already a lot of practical expertise. The energy cutters are social employed. They can better connect with energy poor households and are therefore

	more able to convince vulnerable customers to follow up the advise.
Weaknesses	N/A
Opportunities	The existing training for the Energy cutters has been extended with 2 modules of the HEA training: Relational skills and Protection and prevention. These extra modules are also included in the training program for new Energy cutters.
Threats	In the beginning the Energy cutters saw the HEAs as a threat because they were afraid that volunteers would do their job.
Lessons learned and misalignment with original planning	
Lessons learned	Working with volunteers is not evident. It is difficult to keep volunteers engaged, especially when they have to invest a lot of their personal time. The Energy cutters are more engaged as the home visits and energy scans are part of their job. It is of added value if the HEA can connect with the living conditions of the energy poor households. The energy cutters are more able to convince vulnerable consumers. By involving the existing network of energy cutters we were able to test the training material extensively as the energy cutters visit 2,000 households monthly. We learned that modules on relational skills and protection were currently missing in the training program of the Energy cutters and were considered very valuable.
Misalignment with D5.2 and D5.4	It was not foreseen in D5.4.

2.3.2 Soft/engagement activity #2 (Information sessions for employees of Public Centres of Social Welfare (OCMW's))

Information sessions for employees of Public Centres of Social Welfare (OCMW's)	
Action description	
Dates of action	November 2019 – December 2019
Action target	Employees of Public Centres of Social Welfare (social workers) (and their network/clients)
Geographic dimension	Flanders
Geographic area	Flanders
Number of involved users	6 days x 2 groups/day x 100 persons/group = 1,200 social workers
Action tools	Information session for the social workers with a workshop (e.g. how to use the “woonmeter”?)
HEAs involvement	
Number of HEAs involved	1 HEA
Foreseen involvement	HEA has given 1 presentation/advise on energy-efficient behavior (other 5 sessions were given by Ecolife based on presentation of HEA).
Feedback from HEAs	The social workers were interested and very enthusiastic.
Action Monitoring	
Estimated energy savings	2%
SWOT analysis	
Strengths	You reach a large group of people who are already working with vulnerable customers and so they can pass on energy-saving tips. The Public Centres of Social Welfare can use

	what they have learned during the sessions in their Energyfit workshops (cf. next soft action). Collaboration between social and energy sector: the Public Centres of Social Welfare know the vulnerable consumers and Fluvius has the expertise on energy related issues and the teaching materials.
Weaknesses	You don't know if the social workers put in practice what they have learned during the information session and workshop.
Opportunities	Energy cutters and HEAs often have a hard time getting in touch with vulnerable customers. The social workers already have the relevant contacts.
Threats	Social workers have already too much work. Will they have time to give energy-saving tips on top of their regular activities?
Lessons learned and misalignment with original planning	
Lessons learned	This is an interesting forum to reach out to a large group of social workers. Collaboration between social and energy sector is win-win: the Public Centres of Social Welfare know the vulnerable consumers and Fluvius has the expertise on energy related issues.
Misalignment with D5.2 and D5.4	It was not foreseen in D5.4.

2.3.3 Soft/engagement activity #3 (Energyfit workshops for vulnerable consumers)

Energyfit workshops for vulnerable consumers	
Action description	
Dates of action	November 2019 – ongoing
Action target	Vulnerable consumers
Geographic dimension	Flanders
Geographic area	Local authorities requesting it
Number of involved users	10-15 persons per session x 20 sessions = 200/300 vulnerable households.
Action tools	Interactive workshop for vulnerable consumers where energy saving tips are given by means of an interactive “game” and the “woonmeter” is explained; woonmeter distributed to the VCs after the workshop.
HEAs involvement	
Number of HEAs involved	1 HEA
Foreseen involvement	The Public Centres of Social Welfare invite the vulnerable consumers and provide a location. The teacher and the teaching material are provided by Fluvius. Fluvius and the Flemish Energy Agency financed of the “woonmeters”. HEA provides input for the teaching material and gives presentation to social workers on energy-efficient behavior (cf. previous soft action). Follow-up: HEA participates in some of workshops.
Feedback from HEAs	The Public Centres of Social Welfare are enthusiastic to organize this.
Action Monitoring	
Estimated energy savings	2%

Vulnerable consumers outreach	Up till now: 8 workshops are scheduled in January 2020–February 2020.
SWOT analysis	
Strengths	Collaboration between social and energy sector: the Public Centres of Social Welfare know the vulnerable consumers and Fluvius has the expertise on energy related issues and the teaching materials.
Weaknesses	About 20 sessions are foreseen; only the first applicants and the most pro-active municipalities can make use of these sessions.
Opportunities	Collaboration between social and energy sector.
Threats	It's an expensive workshop. The offer is therefore limited.
Lessons learned and misalignment with original planning	
Lessons learned	It's not easy to get a group of vulnerable customers together. Close collaboration with a social organization such as the Public Centres of Social Welfare helps to get into contact with vulnerable consumers and convince them to participate in a workshop. It helps enormously that they all get a nice and useful gift after the workshop (woonmeter).
Misalignment with D5.2 and D5.4	It was not foreseen in D5.4.

2.3.4 Soft/engagement activity #4 (Fluvius meter readers give advice)

Fluvius meter readers give advice	
Action description	
Dates of action	January 2020 – ongoing
Action target	Fluvius meter readers (and consumers who have difficulties to pay their energy bill and are visited by the meter readers).
Geographic dimension	Flanders
Geographic area	Flanders
Number of involved users	5 information sessions for 40 persons (meter readers) = 200 meter readers.
Action tools	Information session for the Fluvius meter readers and flyer with energy-saving tips to be distributed to households who have difficulties to pay their energy bill.
HEAs involvement	
Number of HEAs involved	1 HEA
Foreseen involvement	HEA gives presentation/advise on energy-efficient behaviour 5 information sessions for 40 persons (meter readers). Fluvius' meter readers visit people who have difficulties to pay their energy bills and give tips on energy-efficient behaviour.
Feedback from HEAs	Meter readers were very enthusiastic.
Action Monitoring	
Estimated energy savings	2%
Vulnerable consumers outreach	16,500 – 25,000 vulnerable consumers
SWOT analysis	
Strengths	Meter readers already visit households that have difficulties to pay their energy bills, so they can combine this with their job.
Weaknesses	The meter readers don't have that much time, so it will have to be a short explanation.
Opportunities	They can promote the services of the Energy cutters, who

	can do an extensive visit with an energy scan.
Threats	In case of a digital meter, the meter readers do not have to do home visits anymore.
Lessons learned and misalignment with original planning	
Lessons learned	We experienced that it is very difficult to reach our target group of vulnerable consumers and to schedule a home visit. The meter readers have less difficulties to get into contact with the target group as they already do home visits as part of their job.
Misalignment with D5.2 and D5.4	It was not foreseen in D5.4.

2.3.5 Soft/engagement activity #5 (Flexmail with energy-saving tips)

Flexmail with energy-saving tips	
Action description	
Dates of action	September 2019 – November 2019
Action target	Consumers who have difficulties to pay their energy bill.
Geographic area	Flanders
Number of involved users	40,000 households
Action tools	Marketing campaign: mail with energy-saving tips during a period of 10 weeks (1 tip/week), combined with a weekly competition to win a “woonmeter”; these energy-saving tips are also published on the national facebook and webpage of ASSIST.
HEAs involvement	
Number of HEAs involved	1 HEA
Foreseen involvement	Provide context for the flexmails and answer questions from vulnerable consumers in response to the flexmail.
Feedback from HEAs	N/A
Action monitoring	
Estimated energy savings	2%
Vulnerable consumers outreach	40,000 vulnerable households got a weekly email with energy-saving tips; each week 6,000 – 7,000 people opened the mail.
SWOT analysis	
Strengths	Fluvius has the email addresses of the vulnerable customers and can approach them directly. Through social media you have a greater outreach (large group can be targeted at once). A competition was linked to the flexmail which contributed to the success of the marketing campaign.
Weaknesses	40,000 e-mails were sent, 6,000 – 7,000 opened the email (15%). You do not know if they have put the tips into practice.
Opportunities	We can send another email with a survey asking their opinion about the energy-saving tips (e.g. were they useful? what was missing?) and promote the HEA and Energy cutters network at the same time.
Threats	None
Lessons learned and misalignment with original planning	
Lessons learned	Through social media you have a greater outreach but not necessarily greater impact in comparison to the home visits.

	It is difficult to monitor your impact.
Misalignment with D5.2 and D5.4	It was not foreseen in D5.4.

2.3.6 *Soft/engagement activity #6 (Information sessions for the deaf and hearing impaired)*

Information sessions for the deaf and hearing impaired	
Action description	
Dates of action	February 2020 – ongoing
Action target	Deaf and hearing impaired
Geographic area	Flanders
Number of involved users	40 per session
Action tools	Information sessions on energy-efficient behavior.
HEAs involvement	
Type of HEA	Energy Companies
Number of HEAs involved	2 HEAs
Foreseen involvement	Give presentation/advise during information sessions.
Feedback from HEAs	One of the HEA's is deaf and suggested to organise information sessions to this group. Deaf people seldom have a job and therefore often don't have a lot of money.
Action monitoring	
Estimated energy savings	2%
Vulnerable consumers outreach	Consultancy about energy efficiency to app. 40 persons per session.
SWOT analysis	
Strengths	We have 1 HEA who is deaf and therefore knows the deaf language.
Weaknesses	If this person falls ill, no one can replace him.
Opportunities	Extension of profile of HEA and energy cutter with specific language skills.
Threats	The active HEAs and energy cutters cannot reach this target group because they do not speak the language and do not have the contacts to reach out to this isolated group in society.
Lessons learned and misalignment with original planning	
Lessons learned	HEAs and Energy cutters do a great job, but they can't reach this target groups as they do not speak the language nor have the contacts to reach out to this specific target group.
Misalignment with D5.2 and D5.4	It was not foreseen in D5.4.

2.3.7 *Soft/engagement activity #7 (Information sessions for schools)*

Information sessions for schools	
Action description	
Dates of action	November 2019 - December 2019 (on hold)
Action target	Students and/or parents.
Geographic area	Flanders
Number of involved users	N/A
Action tools	Information sessions on energy-efficient behavior.

HEAs involvement	
Type of HEA	N/A
Number of HEAs involved	N/A
Foreseen involvement	Presentation on energy-efficient behaviour.
Feedback from HEAs	N/A
Action monitoring	
Estimated energy savings	2%
SWOT analysis	
Strengths	Fluvius already has interesting teaching material for schools available.
Weaknesses	None
Opportunities	Set up/strengthen collaboration with schools (education – energy sector).
Threats	None
Lessons learned and misalignment with original planning	
Lessons learned	We contacted some schools, they were interested in the topic but there was no time available in the current curriculum. As such, we decided to not pick up this action further in frame of the ASSIST2gether project.
Misalignment with D5.2 and D5.4	It was not foreseen in D5.4.

2.3.8 Soft/engagement activity #8 (Energy-saving tips for Fluvius employees)

Energy-saving tips for Fluvius employees	
Action description	
Dates of action	January 2020 – ongoing
Action target	Fluvius employees (and their network).
Geographic area	Flanders
Number of involved users	5,000 employees
Action tools	We have learnt from the HEAs that they often apply the energy saving tips at their own home and share these tips with friends and family as well. Fluvius is going to launch an internal campaign to raise awareness among its staff. Energy-efficiency courses will be held and all kinds of information will be made available through internal communication channels.
HEAs involvement	
Type of HEA	Energy company
Number of HEAs involved	1 HEA
Foreseen involvement	Provide content for the communication material and give information sessions.
Feedback from HEAs	Positive
Action monitoring	
Estimated energy savings	2%
Lessons learned and misalignment with original planning	
Misalignment with D5.2 and D5.4	It was not foreseen in D5.4.

2.3.9 Changes with regards to the Action Plan

None of the soft/engagement activity activities which were originally planned in D5.4 were carried out and we were able to carry out additional activities which had not been planned in D5.4.

2.4 ASSIST Actions

2.4.1 Action #1 (Home visits and dedicated consultancy by HEAs)

Home visits and dedicated consultancy by HEAs	
Action description	
Dates of action	June 2019 – December 2019
Action target	vulnerable customers who live in the neighbourhood of the HEAs.
Geographic area	Flanders
Number of involved users	750 consumers (300 households).
Success rate	100% (HEAs visited 300 households).
Action tools	All the households received: 1) Woonmeter, i.e. a simple thermo- and hygrometer with four rules of thumb for correct heating and ventilation. It promotes energy-efficient behaviour, it helps with moisture and mould and it increases comfort. This meter is developed by “Samenlevingsopbouw” (social organisation) and is designed specifically to support vulnerable households. 2) Factsheets with energy related advice on electricity appliances, energy bills, low-cost energy-efficiency measures, etc..
HEAs involvement	
Type of HEA	All (Energy Company, Charity, Public body and Social Worker).
Number of HEAs involved	43
Foreseen involvement	Home visits (and phone call/e-mail follow-up).
Feedback from HEAs	Very positive – the assisted vulnerable households appreciated the advice of the HEA and were very satisfied to receive a “woonmeter” as an instrument to monitor the comfort in their homes.
Action monitoring	
HEAs activity	Number of consumers involved.
Control group	10% of involved households providing their data on energy consumption and energy expenditure (ex ante and ex post).
Monitoring tools	Questionnaires and check of energy bills.
Large control group	Not foreseen for this action.
Estimated energy savings	7%
Vulnerable consumers outreach	750 households @7%
SWOT analysis	
Strengths	Home visits allow to see the real living conditions and to provide more dedicated advice.
Weaknesses	Time consuming: each home visit requires time to schedule the visit, to do the visit and filling in the questionnaires, to follow up (by mail, phone, extra visit).
Opportunities	Home visits create an opportunity to detect (potential) risks related to other issues (e.g. health, fire, social isolation, etc.) and give advice (or refer to other organisations) to reduce/prevent these risks.
Threats	It may lead to dangerous (or non comfortable) situations for the HEAs e.g. some of the female HEAs didn't feel so

	safe/comfortable visiting single men.
Lessons learned and misalignment with original planning	
Lessons learned	<p>In Belgium we already have a good existing network of energy cutters. With this project and the ASSIST action more specifically we wanted to investigate:</p> <p>1) whether working with volunteers could bring added value, or whether a longer follow-up gives better results. We learnt that working with volunteers is not evident. It is difficult to keep volunteers engaged, especially when they have to invest a lot of their personal time. The Energy cutters are more engaged as the home visits and energy scans are part of their job.</p> <p>It is of added value if the HEA can connect with the living conditions of the energy poor households. The energy cutters are more able to convince vulnerable consumers.</p> <p>We learned that modules on relational skills and protection were currently missing in the training program of the Energy cutters and were considered very valuable. These modules are integrated in the training program of the Energy cutters.</p> <p>2) if we could reach more people: we reached 2 additional target groups in comparison to the existing network of energy cutters, namely people who are not at home during the day (energy cutters work only during office hours) and the group who are deaf and hearing impaired.</p> <p>3) the impact of the use of the “woonmeter”: the woonmeter proved to be a very useful instrument for engaging vulnerable consumers for the home visits. Also, the woonmeter has proven to be a very useful tool for the HEAs to give advice as it is very straightforward (esp. in case of “language” barriers). For the vulnerable consumers it is an indispensable instrument to monitor humidity in their homes, increase comfort and reduce heating costs.</p>
Misalignment with D5.2 and D5.4	None

2.4.2 Action #2 (Help desks counselling for vulnerable consumers)

- 1) **Help desk HEA coordinator:** as a result of the Marketing campaign (flex mail) with energy-saving tips we received a lot of questions via the mailbox of the HEA coordinator at Fluvius. There are a few questions about energy-efficiency, but the majority of the questions concern the operation of the current budget meter, existing connections and payment difficulties. These questions were forwarded to the relevant departments within Fluvius.
- 2) **Help Desk Fluvius:** more than 100,000 calls monthly:
 - Between 2,000 and 3,000 calls about rational energy use (e.g. insulation, solar panels,...);
 - Approximately 14,000 calls from social customer, i.e customer that have problems with their budget meter, problems with their energy bills, request for discount coupon refrigerator, etc..

In the table below an overview is given for the year 2019 of the total number of monthly calls, the number of calls related to rational energy use and the number of calls from social customers.

2019	January	February	March	April	May	June
rational use of energy	3,465	3,099	3,213	3,021	3,078	2,807
social customers	14,640	12,661	13,307	12,664	13,384	12,401
TOTAL calls	130,185	117,523	127,302	119,497	116,563	114,453

	July	August	September	October	November	December
rational use of energy	2,868	2,311	2,562	2,867	2,456	2,643
social customers	13,309	13,192	14,222	15,999	14,072	18,185
TOTAL calls	98,002	95,543	119,066	134,312	112,664	117,646

2.5 Synergies

2.5.1 Synergy #1 (Existing network of Energy cutters)

Given the success of the existing network of Energy cutters, we took some specific actions for maximizing the synergies between the two networks and exchange lessons learnt.

The existing network of Energy cutters has relevant experience in visiting vulnerable customers and giving them to dedicated advice on energy related topics. The HEA coordinator made several visits together with an energy cutter as a pilot project to obtain best practices:

- How to schedule a visit with a vulnerable consumer? How to engage them?
- What information do you give and how?
- What are potential sensitivities within this target group?
- What are the success factors? e.g. gift is very important. The Energy cutters give energy saving measures such as LED lamp, saving shower head).

We organised information sessions for the energy cutters to explain the ASSIST2gether project and the added value of the project for the Energy cutters network. We invited representatives of the organisations that employ the Energy cutters to our national VCSC and/or Market Actor Dialogues. We organized HEA training sessions for the Energy cutters.

2.5.2 Synergy #2 (Multiple Social organisations, already working on energy poverty (e.g. Kamp C, Samenlevingsopbouw))

Multiple social organisations are already working in the field of energy poverty such as Kamp C, Samenlevingsopbouw, Public Centres for Social Welfare. We took some specific actions for maximizing the synergies and exchange lessons learnt.

We invited social organisations to our national VCSC and/or Market Actor Dialogues. We had bilateral meetings to explain the to explain the ASSIST2gether project and the added value of the project for their work on energy poverty. We involved them in setting up the HEA network and implementing the ASSIST action. Some examples:

- **Samenlevingsopbouw**: developed the “woonmeter” that is used as an instrument to engage vulnerable consumers and to support the HEA in giving advice. For the vulnerable consumers it is an indispensable instrument to monitor the comfort in their homes;
- **Kamp C**: has an existing network of volunteers that visit households to give them energy related advice (i.e. energy masters). The network is operational at a limited geographical scale (within the Province of Antwerp) and the energy masters do not visit vulnerable customers. In frame of the ASSIST2gether project they followed the HEA training and extended their target group with vulnerable households. 50 volunteers followed the HEA training of which 20 passed the test. 10 HEAs actually visited vulnerable consumers. The coordination of this group of HEAs was in the hands of Kamp C. We learnt that it is difficult to engage HEAs to do the visits and fulfill the administrative tasks (e.g. ex ante and ex post questionnaires) if they are not closely monitored;
- **Public Centres for Social Welfare**: we co-organise the Energyfit workshops (cf. soft action). The Public Centres for Social Welfare know the target group and Fluvius has the expertise on energy related issues and the teaching materials.

2.6 Stakeholders feedbacks

The feedback below has been captured by means of the HEA survey that was carried out within Workpackage 4 (29 out of 43 HEAs have completed the survey) and the Lunch & Learns sessions we organized periodically with the HEAs.

For the active HEAs the main driver was to help vulnerable consumers. Some of them also indicated that they were interested in the subject of "dealing with energy", while others were also professionally motivated (Fluvius employees).

The HEAs who followed the training were very satisfied with the content of the "energy efficiency and energy saving" and "social aspects" modules.

Our HEAs indicate that they apply themselves many of the energy-saving tips that they give to vulnerable consumers, especially the tips related to ventilation. By means of the "woonmeter" the impact of this tip is also very easy and very visual to follow.

Each HEA received some materials and tools to support them in giving advice, including a "woonmeter" for each household visited, a consumption meter for each HEA to measure the consumption of electrical appliances (for old fridges), a brochure with a visual summary of relevant energy-saving tips, a list of all possible energy-efficiency measures, etc. The HEAs indicated that they were most satisfied with the "woonmeter". This was a very useful tool that allowed the HEA to have an impact in 2 major areas: on the one hand heating (which represents the largest share in the energy costs of households) and on the other hand humidity. Humidity problems can result in mould (bad for your health) and higher energy costs as you have to heat more.

The HEAs indicated that the vulnerable consumers were also very satisfied with the "woonmeter" as it was really a helpful tool for them.

Most HEAs felt that they could really help vulnerable consumers to save energy. Some of the HEAs indicated that they couldn't always make a big difference in terms of savings, but they could make a difference in terms of comfort (e.g. someone who reported that he now has less headaches because he ventilates and less skin irritations because he showers less).

The HEAs also indicated that they were well-received everywhere, and that the households that they visited were very grateful. Some of the female HEAs felt uncomfortable visiting single men.

2.7 Conclusions

The existing network of Energy cutters is already operational since 2008. The Energy cutters perform more or less the same tasks as the HEAs. The majority of the Energy cutters are social employees and visit around 2,000 vulnerable households monthly. Although the existing network of Energy cutters is already successful, the ASSIST2gether project offered an opportunity to assess some specific issues that can reinforce the current network of Energy cutters and increase impact (energy saved, number of vulnerable consumers engaged), namely:

- **Working with volunteers:** we have learnt that this is not the ideal formula. Volunteers are engaged people but scheduling visits and all the administrative work takes a lot of time and is too much to ask from volunteers. The workload is reduced if they can combine the HEA tasks with their current job, e.g. OCMWs, Charity Organisations;
- Monitoring the vulnerable clients for a **longer period of time:** while the Energy cutters often visit the households only once, the HEAs monitor the households visited over a long period of time. We learnt that it helps to visit the households several times, but that the largest impact is still achieved during the 1st and 2nd visit;
- **Specific target groups that cannot be reached** via the network of the Energy cutters: by working with volunteers we managed to reach vulnerable consumers who are only available during the evenings or weekends (Energy cutters only work during office hours). As we have a deaf

HEA, we were also able to reach the deaf and hard of hearing group. This is a very isolated group in society for which it is often difficult to find a job and has financial problems as a result. We learnt that you can only reach this target group when you have someone who can speak the deaf language and has contact with this target group. We learnt that if you want to engage with specific target groups you have to align the HEA profile with those skills that are indispensable for engaging and communicating with this target group;

- **Contacting vulnerable consumers through the network of the volunteers:** the majority of the contacted vulnerable consumers starting from the addresses that were provided by the HEA coordinator. The majority of the volunteers indicated that they do not know people who live in energy poverty within their network (family, friends, volunteer organizations). The deaf HEA collected the addresses of vulnerable consumers himself. This target group is a very isolated group in society, but because he is part of it, he succeeded in collecting relevant contact details;
- **New material** that can facilitate the work of the home energy adviser: we tested the “woonmeter” as a tool that can support the home energy adviser in giving dedicated advice to vulnerable consumers. Both the vulnerable consumers and the HEAs were very enthusiastic about this tool. The woonmeter proved to be a very useful instrument for engaging vulnerable consumers for the home visits. Also, the HEAs indicated that the woonmeter is a very useful tool to give advice as it is very straightforward (esp. in case of “language” barriers). For the vulnerable consumers it is an indispensable instrument to monitor humidity in their homes, increase comfort and reduce heating costs;
- **Training material** for the Energy cutters: by involving the existing network of energy cutters we were able to test the HEA training material extensively. We learned that modules on relational skills and protection were currently missing in the training program of the Energy cutters and were considered very valuable. As a result, the training material was extended with two modules on relational skills and protection. In frame of the ASSIST2gether project we have also implemented some new activities (cf. overview of soft actions) to engage with vulnerable consumers in addition to home visits and dedicated energy advice.
- **Fluvius meter readers provide energy-saving tips** (implemented action): we experienced during the ASSIST2gether project that it is very difficult to reach our target group of vulnerable consumers and to schedule a home visit. The meter readers have less difficulties to get into contact with the target group as they already do home visits as part of their job. The meter readers participated in information sessions on energy-efficient behavior so they can share the energy saving tips they have learned with their clients. A flyer has been designed with an overview of the most important energy-saving tips, the contact details to apply for a free energy scan. These flyers will be handed out to the meter readers in February for distribution to their clients;
- **Marketing campaign targeting vulnerable customers** (implemented action): as a social supplier (energy supplier for households with financial problems), Fluvius could set up a large marketing campaign and sent an email specifically targeting its vulnerable customers. All the vulnerable customers received a weekly email with energy-saving tips. There was also a competition linked to the flexmail which contributed to the success of the marketing campaign. Each winner received an information package and “woonmeter”;
- **Energy-saving tips for Fluvius employees (5,000 employees):** (planned action) we expect that they will also share these tips with friends, family and customers. We have learnt from the HEAs that they often apply the energy saving tips at their own home and share these tips with friends and family as well. Fluvius is going to launch an internal campaign to raise awareness among its staff. Information sessions on energy-efficient behaviour will be held and all kinds of information will be made available through internal communication channels.

2.8 Executive summary in national language

- Soft/engagement activiteiten:

- #1 → Advies thuis: Energiesnoeiers;
- #2 → Informatiesessies voor medewerkers OCMW's zodat ze zelf ook advies kunnen geven aan kwetsbare gezinnen;
- #3 → Workshops in samenwerking met OCMW's voor kwetsbare consumenten;
- #4 → Meteropnemers van Fluvius geven energiebesparingstips aan gezinnen met betalingsmoeilijkheden;
- #5 → Marketingcampagne gedurende 10 weken via e-mail: energietips met een wedstrijd om een "woonmeter" te winnen naar 40,000 kwetsbare gezinnen;
- #6 → Informatiesessies voor doven en slechthorenden;
- #7 → Informatiesessies voor scholen;
- #8 → Energiebesparingstips voor Fluvius medewerkers.
- ASSIST-acties:
 - #1 → Huisbezoeken en advies door vrijwilligers;
 - #2 → Helpdesk voor kwetsbare consumenten.
- Synergieën:
 - #1 → bestaand netwerk van Energiesnoeiers;
 - Synergie #2 : maatschappelijke organisaties die al werken binnen het domein van energiearmoede (bijv. Kamp C, Samenlevingsopbouw).

In totaal zijn er **77 volledig opgeleide HEA's**, waarvan **43 actief** zijn en huisbezoeken doen.

HEA categorie	Training	Actief	Argumenten
OCMW	5	4	Deze mensen vallen het minst af, ze kunnen dit combineren met hun werk.
Samenlevingsopbouw	3	2	Deze mensen vallen het minst af, ze kunnen dit combineren met hun werk.
Energiebedrijven Fluvius + VITO	42	27	Deze grote groep van HEA's heeft een grote affiniteit met de energiesector en kan beter opgevolgd worden omdat ze tot hetzelfde bedrijf behoren als de coördinator. Als de opvolging en betrokkenheid groter is, zullen minder mensen afhaken.
Energiemeesters Kamp C	21	10	De energiemeesters zijn al vrijwilligers, maar gingen standaard niet op bezoek bij kwetsbare klanten. In deze groep vind je de meeste afvallers, er is minder betrokkenheid. Ze hebben wel klanten bezocht, maar hun administratie was minimaal.
Gepensioneerden	6	0	Ze zijn allemaal gestopt, vooral door ziekte.

Het **bestaande netwerk van energiesnoeiers is sinds 2008 operationeel**. De energiesnoeiers voeren min of meer dezelfde taken als de HEA's. De meerderheid van de energiesnoeiers zijn sociaal tewerkgestelden en ze bezoeken maandelijks ongeveer 2,000 kwetsbare huishoudens. Hoewel het bestaande netwerk van energiesnoeiers al succesvol is, bood het ASSIST2gether project de mogelijkheid om enkele specifieke topics te onderzoeken die het huidige netwerk van energiesnoeiers kan versterken en de impact kan vergroten (in termen van gerealiseerde energiebesparing en aantal betrokken kwetsbare consumenten), namelijk:

- **Werken met vrijwilligers:** we hebben geleerd dat dit niet de ideale formule is. Vrijwilligers zijn betrokken mensen, maar het plannen van bezoeken en al het administratieve werk kost veel tijd en is te veel gevraagd van vrijwilligers. De werklast wordt kleiner als ze de HEA-taken kunnen combineren met hun huidige taak, b.v. OCMW's, liefdadigheidsorganisaties;
- **Monitoring van de kwetsbare klant voor een langere periode:** terwijl de energiesnoeiers de huishoudens vaak maar één keer bezoeken, monitoren de HEA's de bezochte huishoudens gedurende een langere periode. We stellen vast dat meerdere bezoeken een positieve bijdrage hebben op de adviesverlening, maar dat de grootste impact nog steeds wordt bereikt tijdens het 1e en 2e bezoek;

- **Specifieke doelgroepen die niet via het netwerk van de energiesnoeiers kunnen worden bereikt:** door met vrijwilligers te werken, zijn we erin geslaagd kwetsbare consumenten te bereiken die alleen 's avonds of in het weekend beschikbaar zijn (energiesnoeiers werken alleen tijdens de kantooruren). Omdat we een dove HEA hebben, konden we ook de dove en slechthorende groep bereiken. Dit is een zeer geïsoleerde groep in de samenleving waarvoor het vaak moeilijk is om een job te vinden en daardoor financiële problemen heeft. We leren uit het ASSIST2gether project dat je deze doelgroep alleen kunt bereiken als je iemand hebt die de doves tool spreekt en contacten heeft binnen deze doelgroep. We leren uit het ASSIST2gether project dat als je met specifieke doelgroepen wilt communiceren, je het HEA-profiel moet afstemmen op die vaardigheden die onmisbaar zijn voor het betrekken van en communiceren met deze doelgroep;
- **Kwetsbare consumenten bereiken via het netwerk van de vrijwilligers:** het merendeel van de HEA's vertrok van de adressen die door de HEA-coördinator werden bezorgd om contact op te nemen met kwetsbare klanten. De meerderheid van de vrijwilligers gaf aan dat ze binnen hun netwerk geen mensen kennen die in energiearmoede leven (familie, vrienden, vrijwilligersorganisaties). De dove HEA verzamelde zelf de adressen van kwetsbare consumenten. Deze doelgroep is een zeer geïsoleerde groep in de samenleving, maar omdat hij er zelf deel van uitmaakt, is hij erin geslaagd relevante contactgegevens te verzamelen;
- **Nieuw materiaal dat het werk van de energieadviseur kan ondersteunen:** we hebben de "woonmeter" getest als een hulpmiddel dat de energieadviseur kan ondersteunen bij het geven van specifiek advies aan kwetsbare consumenten. Zowel de kwetsbare consumenten als de HEA's waren erg enthousiast over deze tool. De "woonmeter" bleek een zeer nuttig hulpmiddel om kwetsbare consumenten te engageren voor huisbezoeken. Ook gaven de HEA's aan dat de meter een zeer nuttig hulpmiddel is om advies te geven (in het bijzonder in geval van taalbarrières). Voor de kwetsbare consumenten is het een onmisbaar hulpmiddel om de luchtvochtigheid in hun huizen op te volgen, het comfort te verhogen en de verwarmingskosten te verlagen;
- **Trainingsmateriaal voor de energiesnoeiers:** door het bestaande netwerk van energiesnoeiers te betrekken konden we het HEA-trainingsmateriaal uitgebreid testen. We hebben geleerd dat modules over relationele vaardigheden en veiligheid en bescherming momenteel ontbreken in het trainingsprogramma van de energiesnoeiers en als zeer waardevol worden beschouwd. Als gevolg hiervan werd het trainingsmateriaal uitgebreid met twee modules over relationele vaardigheden en veiligheid en bescherming. In het kader van het ASSIST2gether project hebben we ook enkele nieuwe activiteiten geïmplementeerd specifiek gericht op kwetsbare consumenten en op die manier de energierekening te verlagen en het comfort van de woning te verhogen;
- **Meterlezers Fluvius geven energiebesparende tips** (geïmplementeerde actie): we hebben tijdens het ASSIST2gether project ervaren dat het erg moeilijk is om onze doelgroep van kwetsbare consumenten te bereiken en een huisbezoek in te plannen. De meterlezers hebben minder moeite om in contact te komen met de doelgroep omdat ze al huisbezoeken afleggen als onderdeel van hun werk. De meterlezers namen deel aan informatiesessies over energiezuinig gedrag, zodat ze de energiebesparende tips die ze hebben geleerd, kunnen delen met hun klanten. Er is een flyer ontworpen met een overzicht van de belangrijkste energiebesparende tips, de contactgegevens om een gratis energiescan aan te vragen. Deze flyers worden in februari uitgedeeld aan de meterlezers voor verdere verspreiding onder hun klanten;
- **Marketingcampagne gericht op kwetsbare klanten** (geïmplementeerde actie): Fluvius is een sociale leverancier (energieleverancier voor huishoudens met financiële problemen) en heeft rechtstreeks aan al zijn klanten een email verstuurd met energiebesparende tips, met hierin gekoppeld een wedstrijd. Elke winnaar kreeg een informatiepakket en een "woonmeter" toegestuurd.

Finland

3.1 Planning of ASSIST Actions

According to the statistic clustering analysis (see D5.2) the “households that can be considered most at risk of being vulnerable or energy poor are households that have retired, unemployed, student, unable to work, home-maker or inactive and feel that their financial situation is so weak that they cannot afford the basic needs such as food, heating and electricity or that they can just manage but are unable to afford anything more”. The segmentation of consumers is based on an analysis of a survey conducted among home-owners and elderly in 2018.

The approach in selecting ASSIST actions, as described in D5.4, was to utilize the existing Finnish energy service networks and organisations that already reach the above-mentioned vulnerable consumer groups. The HEAs would be trained among the members these organisations, which would allow the consumers to be reached in the most efficient manner.

3.1.1 Planned HEAs training and activities

Different types of HEAs to be trained, as in D5.4, are presented in the table below.

Type of HEA	Reference	Trained number of HEAs	Geographical coverage	Status	Actions
Existing professional energy advisors	Association and other organisations with existing consumer advice services relating to energy, renovations and housing	(min.20)	National	Planned	Phone advisory, content creation
Social workers	Social workers from municipalities, Social security office, diaconal workers	(min.15)	Regional	Planned	Home visits
Energy company consumer advice services	Customer helpdesk workers in energy companies	(min.5)	Regional	Planned	Phone advisory
Social degree university students	Students working on geriatry and social care programmes	(min. 20)	Regional	Planned	Home visits, content creation
Energy degree university students	Students working in energy efficiency and renovation engineering programmes	(min. 10)	Regional	Planned	Home visits, content creation, energy cafes
Representatives from vulnerable groups	Representatives of vulnerable groups; vanhusneuvoston jäsenet, different migrant groups	(5-15)	Local	Planned	Content creation,
In total		min. 75	National		

3.1.2 *Planned engagement strategies, soft actions and pilot actions*

Five types of ASSIST actions were planned to Finland to provide the energy and money saving information for the vulnerable consumer groups, as shown in the table below.

Planned Action no	Planned ASSIST action	Classification (according to D5.4)	HEAs involved
1	Energy cafés in universities	Engagement action / soft action	Energy degree university students
2	Advising via e-mail	Engagement action / soft action	Existing professional energy advisors
3	Advising via virtual community page	Engagement action / soft action	Existing professional energy advisors, Social degree university students, Energy degree university students, Representatives from vulnerable groups
4	Phone advising	Engagement action / pilot action	Existing professional energy advisors, Energy company consumer advice services
5	Home visits	Pilot action #1	Social workers, Social degree university students, Energy degree university students
6	Energy café follow-up	Pilot action #2	Energy degree university students

In the following paragraphs, each of the planned action is described according to the plan described in D5.4.

3.1.2.1 *Planned action 1: Energy cafés*

Energy cafes are events in the school campuses where the trained HEAs from the degree study programmes organize information stands to disseminate the project materials. Students are helped by providing informational leaflets and other materials according to the possibilities. Students make the practical arrangements, invent activities to attract other students to learn about energy saving and energy related service consumption money savings. HEAs get practical experience in the energy advisory work and reach out to students who according to the national statistics are considered as a vulnerable consumer group. The events last from 3 to 8 hours.

Action/event title	Energy cafes at variety of locations (planned).
Action description	
Action target	Target groups depends on location: in urban area students and minorities such as immigrants, in rural area especially elderly.
Geographic dimension	National
Geographic area	Multiple location around Finland: Capital area, Pirkanmaa, Eastern Finland.
Number of involved users (estimated)	Estimated at least 300 households.
Success rate	All participants supplied with basic energy saving information leaflets, estimated that around 20% of households will leave contact information for follow up.
Action tools	Trained student HEAs will organize energy cafes to distribute energy saving information, information leaflets and get further contact details.
HEAs involvement	
Type of HEA	University students in the fields of energy

	engineering and social sciences, Vulnerable consumers such as elderly and immigrants offering peer to peer advice.
Foreseen involvement	Estimated 3-5 University and/or Universities of applied sciences units each organizing at least one event. Estimated at least one energy café per vulnerable group (peer to peer).
Action monitoring	
HEAs activity	Organizing the energy cafés, dissemination of factsheets and other program materials, providing tutoring services for the visitors.
Control group	Estimated that 20% will leave their contact information for a follow up survey, these will act as control group.
Monitoring tools	Number of leaflets distributed, number of e-mails collected, number of regional web site visits to the targeted consumer website within a week from the event. Responses from the survey to the people leaving their e-mail addresses.
Large control group	All people receiving the energy saving information materials during the energy cafés, estimated 100 people per energy café.
Estimated energy savings	Estimates will be defined for individual actions, savings estimation will depend on control group results on applied actions.
Monitored group	People who submit their e-mail addresses during energy cafés and answer the survey sent to them after the event.

3.1.2.2 *Planned action 2: Advising via email*

Third sector assistance associations have newsletter lists that reach different segments of vulnerable consumer groups with given consent. ASSIST program materials are being disseminated through the program and stakeholder newsletters to the e-mails of the end beneficiaries. According to the previously sent surveys and their results; newsletter receivers read the messages actively and participate in the recommended actions with significant conversion rates.

Action/event title	Advising via e-mail (planned).
Action description	
Action target	Different vulnerable groups depending on contact point.
Geographic dimension	National
Geographic area	National
Number of involved users (estimated)	1200
Success rate	80%
Action tools	Providing preferably tailored advice or “Soft measures” which will include advising and sending materials with energy saving measures.
HEAs involvement	
Type of HEA	Almost all HEA groups excluding home care.
Foreseen involvement	Compilation and classification of assistance requests,

	responding to assistance requests.
Action monitoring	
HEAs activity	Gathering e-mail lists for different type of assistance requests. Providing individuals with information assistance by request. Sending energy saving advisory materials for the e-mail lists.
Control group	Preferably some portion of contacted people will respond to surveying but expected monitoring results for this group is low.
Monitoring tools	Number of contacts and materials provided, Surveying.
Large control group	Estimated 1,200 people.
Estimated energy savings	Energy savings will need to be estimated based on materials/advice provided, around 2%.
Monitored group	People responding to the attached survey. Estimated 50 people.

3.1.2.3 Planned action 3: Advising via virtual community page

A virtual community has been established to compile energy saving information to be available for the vulnerable consumer groups. This community page is an open site in Facebook, that gets updated with the relevant information for the consumers. The community page will also have a chatbox for the vulnerable consumers and other visitors to leave feedback and questions about the project. The questions and feedback will be processed and answered regularly by the site administration.

Action/event title	Advising via virtual community page (planned).
Action description	
Action target	Computer using vulnerable groups, mostly youth.
Geographic dimension	National
Geographic area	National
Number of involved users (estimated)	350
Success rate	80%
Action tools	Providing "Soft measures" which will include sending materials with energy and energy related money saving measures.
HEAs involvement	
Type of HEA	Each type of HEA.
Foreseen involvement	Content production and virtual community promotion.
Action monitoring	
HEAs activity	Production of content to be shared on the platform. Advertising the virtual community for vulnerable consumers.
Control group	350 people following the page.
Monitoring tools	Commitments and views in the community page.
Large control group	350 people following the page.
Estimated energy savings	Energy savings will need to be estimated based on materials/advice provided, around 2%.
Monitored group	People responding the shared questionnaire in the virtual community. Expected answers 35.

3.1.2.4 *Planned action 4: Phone advising*

Help desk and customer support service representatives are being trained to identify vulnerable customers during conduction of the advisory work. Remote support workers are doing their normal duties and get a larger selection of advises that can be targeted for the vulnerable consumers. Low cost and cost-efficient solutions designed especially to the vulnerable consumer groups are being provided to the clients who have very limited investment resources for energy renovations.

Action/event title	Phone advising.
Action description	
Action target	Different vulnerable groups depending on location.
Geographic dimension	Regional
Geographic area	Capital region
Number of involved users (estimated)	Estimated minimum 50.
Success rate	80%
Action tools	Providing tailored advice and solutions on energy efficiency measures and habit change, but also service and support available e.g. if person is eligible for financial support targeted at elderly.
HEAs involvement	
Type of HEA	Energy advisors working for energy agencies or utilities providing phone advising.
Foreseen involvement	Identifying vulnerable consumers and providing additional segment crafted information about further support services for improved energy efficiency.
Action monitoring	
HEAs activity	Reporting in the HEA network area the amount of customer calls identified coming from vulnerable consumers. Offering an opportunity for the VC to participate in the ex-ante and ex-post surveys.
Control group	Estimated that around 20% would give their contact information for further contact/ex-post surveying.
Monitoring tools	HEA reports on the engaged vulnerable households, ex-post surveying when possible.
Large control group	50
Estimated energy savings	Between 2% and 7%.
Monitored group	People seeking further HEA network assistance and conducting the survey, estimated minimum 10 people.

3.1.2.5 *Planned action 5: Home visits*

Pilot Action 1 – Energy degree student home visits will conduct house visits as a part of another energy survey programme HARKKA organized by Motiva and a group of Universities of Applied Sciences. Students will deliver ASSIST energy saving materials for the vulnerable households and ask for the permission from the households to conduct another survey within 6 months from their visit. This action aims at 7% savings in the households. This task will be executed during Feb-Jul of 2019.

Other home visits include social workers, renovation advisors and senior advisors conducting home visits to the vulnerable consumers during their normal duties. Among the other everyday tasks the visited vulnerable consumers are being guided by the HEAs on energy savings and energy related money saving opportunities. The HEAs also present the sources where the end beneficiaries can find more information about the home energy savings topic. The HEAs main

responsibility is to identify the VC needs and provide additional information about the sources of support. These activities take place during the time period between Feb-Dec 2019.

People visited are offered an opportunity to join the monitoring group of the pilot project. This means that their energy consumption and energy bill costs are monitored for the following 6 months to form a control group to evaluate the effectiveness of this type of advisory service. The people receiving home visit services are expected to reach the 7% ASSIST indicator level, which considers the saved energy, comfortability and energy bill pricing changes.

Action/event title	Home visits.
Action description	
Action target	Elderly receiving home care or seeking help for home improvement.
Geographic dimension	National
Geographic area	Capital region, Central Finland, Northern Ostrobothnia.
Number of involved users (estimated)	5-10 households per advisor doing home visits estimated minimum around 75 households.
Success rate	% of the involved households.
Action tools	Providing tailored advice and solutions on energy efficiency measures and habit change, but also service and support available e.g. if person is eligible for financial support targeted at elderly.
HEAs involvement	
Type of HEA	Home visits will be delivered by trained HEA that are working in organisations that do house visit as part of their daily tasks such as home care personal or renovation advisors.
Foreseen involvement	Integrated in the trained group's routine work.
Action monitoring	
HEAs activity	House visits.
Control group	Control group is aimed to be at least 10% that consumption can be verified, if consumption cannot be verified aim is to collect usage information from bills.
Monitoring tools	HEA reports on the engaged vulnerable households.
Large control group	750 households receiving services in total.
Estimated energy savings	With this group energy saving is targeted at 7%, over all will depend on measures incorporated.
Monitored group	75 households receiving advisory services and ex-ante and ex-post questionnaires.

3.1.2.6 Planned action 6: Energy Cafés follow-up

The more interested and committed energy café visitors are being offered handout materials and discussion opportunities about the ways they could save in energy consumption and energy related costs the most effective ways. HEAs will ask about the apartment type, used heating methods and consumption habits from the visitors and guide them to the most relevant information regarding to the situation.

The more interested energy cafe visitors are asked to join the pilot project monitoring group where their e-mail address is added to the program material dissemination list and their energy consumption is being monitored during the following 6 months through a questionnaire to form a control group to evaluate the effectiveness of this type of advisory services. The people receiving

home visit services are expected to reach the 7% ASSIST indicator level, which takes into account the saved energy, comfortability and energy bill pricing changes.

3.1.2.7 Planned action 7 (Synergy): Motiva Energy Advisory Network collaboration

Finnish state owned Motiva Oy has a network of subcontractors providing professional-level energy advisory to Finnish consumers. As a part of the ASSIST program; Motiva network is being consulted about the energy poverty issues and part of the advisory network will be sensitized to better identify and serve the vulnerable consumer groups that contact the energy advisor helpdesks.

3.1.2.8 Planned action 8 (Synergy) Mun Talous – My Finances network collaboration

Mun Talous – My Finances network is collective action to improve young peoples' financial literacy skills. It connects business, education, NGO and public sector actors to work together to provide youth advisory and discussion platforms to prevent young people from getting into financial troubles. ASSIST is joining the network seminars to offer information about energy related money saving opportunities and find ways of collaboration with the other network members.

3.2 HEAs training and activities

ASSIST actions were performed in Finland by 69 different HEAs with a variety of backgrounds, mainly by energy and engineering professionals and students, house renovation advisors, social workers and village assistants.

HEA ID	NO performing action	NO started training	NO completed training	HEA type	Performed actions
HEA 1-11	11	13	11	House renovation advisor	Home visits, disseminating energy efficiency material
HEA 12-18	7	7	1	Social worker	Energy efficiency counselling through helpdesk, energy cafés, disseminating energy efficiency material, home visits
HEA 19-42	15	24	15	Energy student	Home visits
HEA 43-53	11	25	11	Energy advisor (MOTIVA)	Phone advising, home visits, disseminating energy efficiency material
HEA 54-55	2	2	0	Peer advisor	Energy cafés, home visits
HEA 56-60	3	123	5	Other energy professionals and interested citizens	Home visits, energy cafés
HEA 61-80	19	19	3	Village assistants	Home visits, disseminating energy efficiency material
SUM	69	224	46		

It is noteworthy that there is a good number of people (professionals or volunteers) who did not fully complete the HEA training but were actively performing ASSIST actions. The following paragraphs present different types of HEAs, their training and their activities.

3.2.1 Types of HEAs and their training activities

3.2.1.1 House renovation advisors

Renovation counselling helps consumers and property owners in various property maintenance and repair questions. The Finnish Association of the Welfare of Older People (Vanhustyön keskusliitto, VTKL) offers renovation counselling for elderly by a network of experts. The advice is free-of-charge. The house renovation advisors make house visits and assess the situation together with the inhabitant. They also give assistance on applying for repair and renovation grants.

The house renovation advisors of VTKL were trained in a series of seminars as ASSIST HEAs. The seminars focused on the energy market and energy efficient behaviour aspects, providing energy expertise and energy communication to vulnerable people. The synergy lies in the house visits: while conducting the house visits, the house renovation advisors may also give advice on energy-related issues in the household, should their customer be in favour of accepting advice. According to HEAs, the majority of energy-related questions concern heating technology upgrades of detached houses.

Type of ASSIST action conducted by the HEA group: Phone advising, house visits, disseminating energy saving material

3.2.1.2 Social workers

The service personnel of Pääkaupunkiseudun Nuorisoasunnot ry was trained as HEAs in a series of training seminars as HEAs. Pääkaupunkiseudun Nuorisoasunnot ry is an NGO that organises independent housing, rehabilitation, life management and financial management services for low-income youth and students. The seminars for the personnel of the organisation focused on electricity contracting and energy efficiency in district heating heated apartments. The social workers are already familiar with the structure of Finnish social security sector and work with vulnerable consumers, so the training content focus more on the technical solutions. One social worker completed the full Moodle training programme.

The personnel of the NGO will utilize the achieved skills in their customer service work with low-income youth. In total, 7 people participated in the training seminars and 7 are most actively using the achieved skills and knowledge in their daily jobs. In addition, large amounts of printed energy saving leaflets were disseminated for the personnel to be disseminated for their youth customer inhabitants. Two energy cafés were organised by an HEA.

Type of ASSIST action conducted by the HEA group: Energy efficiency counselling at helpdesk (7 HEAs); Organising energy cafés (1 HEA), disseminating energy saving material (7 HEAs).

3.2.1.3 Energy degree university students

A group of energy engineering university degree students of Aalto University were trained as HEAs in a training seminar in September 2019. The seminar was integrated as part of a university course on energy. Students got some course benefit after having finished the HEA training (in other words, they needed to do less other course obligations). Energy students were professionally attracted by becoming an HEA as they may see themselves as energy consultants in their future job. Energy students have a solid background in energy, so their customized training was focused on the social and communications dimensions and energy questions in different housing types and electricity contracts. Energy students conducted household visits and collected ex-ante questionnaires (minimum three visits per student was required).

Type of ASSIST action conducted by the HEA group: House visits.

3.2.1.4 Professional energy advisors

In Finland, citizen's energy advisory services are currently provided by Motiva Oy, a government owned sustainable development company authorised by the Ministry of Economic Affairs and Employment. Motiva coordinates the network of regional energy advisors who are energy counselling companies or municipal energy offices. Energy advising of the Motiva Energy Advisory network is free-of-charge. Advising is primarily provided per phone, but some advisors also make home visits. Energy advisors also participate in the national energy efficiency and energy saving campaigns and deliver energy saving material in consumer events and stands.

Energy advisors have been part of ASSIST HEA network since 2018 when they were interviewed in the stakeholder expert survey about energy poverty in Finland. There has been no need to train energy advisors through a training course, because they are the experts of household energy saving and efficiency in Finland, and energy advisory. As a matter of fact, energy advisors have shared valuable insights for the project partner on energy poverty in Finland and especially on how it appears daily in their job at call centers. Energy advisors have also actively participated in ASSIST seminars, that have offered opportunities to expand the advisors' expertise in the social dimension and improve the quality of counselling for special groups.

Type of ASSIST action conducted by the HEA group: Phone advising, disseminating ex-antes, house visits, organising energy cafés, disseminating energy saving material.

3.2.1.5 Representatives from vulnerable groups: peer advisors

Peer advisors are vulnerable consumers who are interested to assist other people in similar situations in energy saving issues. These peer advisors possess the know-how to approach and talk about energy with their peers. At an energy café organised in collaboration with a local NGO in November 2019 attracted two retired people to become HEAs. In particular, they have actively encouraged their friends and other retired people to research their electricity invoices and find more affordable contracts. The peer advisors are actively performing ASSIST actions despite they had not completed all training modules. One of the peer advisors had even organized an energy café after two-month time.

Type of ASSIST action conducted by the HEA group: house visits, energy cafés, disseminating energy saving material

3.2.1.6 Other energy professionals and interested citizens

Remaining five (5) trained HEAs are energy professionals, currently or formerly working at VaasaETT, or other Finnish citizen who share an interest in energy efficiency matters who completed HEA training.

Type of ASSIST action conducted by the HEA group: Energy cafés, dissemination energy saving material, energy café follow-up

3.2.1.7 Village assistants

Suomen kylät ry (Villages of Finland) is an NGO connecting around 4000 local village association throughout the country. The NGO employs "village assistants" ¹ in a programme funded by the Ministry of Employment. Village assistants support people living in villages and other remote areas with their daily chores, such as household work, repair or maintenance activities. Assistance is primarily requested by people who have a lowered capacity to survive household tasks, such as elderly or single-parent households.

All village assistants and their supervisors were trained in November 2019 in a half-a-day seminar. The focus of the seminar was on practical household energy saving aspects and on energy vulnerability. To complete the training, village advisors were asked to answer two sets of questions

¹ Source: <https://suomenkylat.fi/tyollisyys-jarjestojen-palkkatuki/> (Accessed 14 January, 2020).

(pre-assignments and home exercises) and send back per post. As all trainees cannot actively use Internet, the on-paper approach offered more equal opportunities for all to complete the training than the online training platform. At the time of writing this deliverable (14 January 2020), three village advisors have completed training. However, as the trainees considered the seminar very useful, they are most probably going to use the knowledge achieved at their daily job when meeting and helping vulnerable consumers.

Type of ASSIST action conducted by the HEA group: House visits, collecting ex-antes, disseminating energy efficiency material.

3.2.1.8 Deviation from the planned HEA engagement

Overall, a good number of people joined (224) and completed (46) the HEA training and most HEA groups performed the all planned actions. As a high number of people were interested indicates that the ASSIST targets are considered important and interesting for many. However, as only 20% completed the HEA training implies that the workload may have appeared higher than expected, to be realized in one's free time. Most of those who completed training had been offered customized training in accordance with their professional obligations.

Nevertheless, it is important to note that the number of HEAs performing various ASSIST actions is higher (69 HEAs) than the number of those having fully completed the training (46). For example, due to a late identification of the fruitful collaboration opportunity, the HEA training for the village assistants could take place only in the end of November 2019, which gave the village assistants only a couple of weeks time to complete the training before season holidays. Only three assistants completed the training by the end of 2019. However, it is highly probable that all village assistants are going to use the knowledge as part of their daily job while visiting vulnerable consumers' homes.

Similarly, all social workers who joined the training are not be considered as fully trained HEAs, but they are performing action during their daily job when supporting low-income youth to live independently. Social workers are most assumingly going to use the knowledge and skills achieved in HEA training to support those who need it – to the extent they consider helpful for their clients.

Two groups of planned HEAs could not be trained. There had been a target to attract 20 students of social work, by integrating HEA training in an educational degree of a university of applied sciences. Some initial interest was demonstrated on behalf of the degree programme coordinators. Unfortunately, taking the academic calendar into account, crafting new training contents turned out to be more lengthy process than initially considered and therefore the plan could not be implemented.

In addition, five people from energy companies was planned to get trained. The top management of two large energy companies were contacted, with the offer to organise a seminar about energy vulnerability and Finnish social support system for their customer service personnel. There was some interest, but it turned out that the companies are not in a practical sense interested in the topic.

3.3 Involvement of consumers through soft/engagement activities

3.3.1 Soft/engagement activity #1 (Energy cafés among vulnerable consumers and other events for VCs)

Energy cafés organised with NGOs and schools are an efficient way reaching vulnerable consumers in their familiar environments. In total seven (7) energy cafés have been organised: three for retired people and four for secondary school pupils or low-income youth and students. In addition, several other consumer events were organised for larger audiences.

Energy cafés (stands)	
Action description	
Dates of action	28/11/2018 (Helsinki) 4/6/2019 (Helsinki) Autumn 2019 (other regions)
Action target	Organising different energy advisory stands in connection with seminars, conferences or meetings for wider audiences, such as young people, household consumers and elderly.
Geographic dimension	National
Geographic area	Helsinki, Turku, Harjavalta, Huittinen, Säkylä, Rauma, Muonio, Nummela, Vantaa.
Number of involved users	<p>Helsinki events: 11 youth surveys conducted in Talk about money fair 28/11/2018 + 100 VCs consulted at Talous tuuliajolla seminar 28/11/2018. 100 people visited in the stand at We want future 4/6/2019 (reached directly with material dissemination and discussions). Interim sum: $11+100+100=211$.</p> <p>Events in other regions: Energy advisory stands for wider public for information and printed energy efficiency information dissemination. They have reached hundreds of consumers; however their exact number cannot be estimated. Number of ex-antes disseminated in these events: 20 in Satakunta region, 105 in Turku region, 5 in Lapland region and 20 in Uusimaa region. Interim sum: $20+105+5+20=150$.</p> <p>Total: 361</p>
Success rate	100%
Action tools	Trained HEAs organized energy cafes to distribute energy saving information, information leaflets and forms to participate consumer surveys (youth questionnaire and ex-ante).
HEAs involvement	
Type of HEA	1 Other energy professional, 3 energy advisors, 1 renovation advisor.
Number of HEAs involved	5
Foreseen involvement	N/A
Feedback from HEAs	N/A
Action monitoring	
HEAs activity	Number of energy cafés organised, number of ex-antes disseminated, providing tutoring services for the visitors.
Control group	Consumers engaged to the ex-post research survey.
Monitoring tools	Number of leaflets distributed; number of ex-antes disseminated.
Large control group	All people receiving the energy saving information materials during the energy cafés, estimated 100 people per energy café.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency and available

	subsidies for vulnerable consumers.
SWOT analysis	
Strengths	Energy Cafés are useful in contacting larger energy consumer audiences. The event in 28/11/2018 was organised in connection with an event about finances management for youth, so the ASSIST stand and information dissemination about energy cost management was a natural part of the event.
Weaknesses	Does not allow in-depth energy advisory for many
Opportunities	Through targeted events, involvement of consumer groups who otherwise would be difficult to reach (such as youth).
Threats	Typical threats connected with event organisation: untimely marketing, low participation etc.
Lessons learned and misalignment with original planning	
Lessons learned	Energy advisory stands are useful in contacting larger energy consumer audiences for disseminating material and collecting survey answers.
Misalignment with D5.2 and D5.4	Instead of organizing Energy Cafés at university campuses, Energy Cafés were organized by other HEAs. The reason for the shift of focus was the delayed HEA training of university students.



Figure 2: Electricity contracting was an active discussion topic at the Energy Café on 11/11/2019 in Helsinki.

Energy cafés with pensioners	
Action description	
Dates of action	11/11/2019 (Helsinki) 12/11/2019 (Kerava) 08/01/2020 (Helsinki)
Action target	Meeting retired people in their regular social event meeting "club/coffee room where they meet weekly or bi-weekly. Discussing energy efficiency and energy cost management with a group of retired people who live alone or with their partners. The first action (11/11/19) was organised in collaboration with a local NGO ("Ikäinstituutti ry") and the second (12/11/19) in collaboration with a local NGO ("Siskot ja Simot ry"). Both NGOS organise activities

	and support for elderly people. Third (08/01/20) was organised in collaboration with the city of Helsinki by one of the peer HEAs.
Geographic dimension	Local
Geographic area	Helsinki, Kerava and Helsinki.
Number of involved users	15 + 15 + 15 = 45.
Success rate	The events were successful. The energy café (and the consequent energy café follow-up activities by HEAs) had led to at least five (5) VC participants to change their electricity contract to less expensive ones (2 consumers living in each house results in 10 involved VCs). Two people in the event on 11/11/19 demonstrated interest in becoming peer HEAs. One of them organized the second energy café in another clubhouse for elderly (08/01/2020). In the event on 12/11, participants shower genuine interest in the topics discussed, in particular in energy for cooking. One participant took along a bunch of electricity saving material and said to disseminate them at events or premises of another regional NGO. As per her request, she was also sent further energy saving material. Another participant thanked for the raised attention to floor heating as a major electricity consumer in houses. Floor heating had been installed in her apartment, but she was not sure how to use even though she is paying for the electricity. A couple of participants demonstrated lack of interest because they told they have no influence on heating which is organised by their housing company.
Action tools	Friendly and relaxed discussion with a cup of coffee about energy cost saving tips. Short but personalized teaching and energy efficiency material developed for the purpose of every event. Printed ex-ante questionnaires disseminated and collected.
HEAs involvement	
Type of HEA	Other energy professional, peer advisor
Number of HEAs involved	2 energy professionals, 1 peer advisor
Foreseen involvement	N/A
Feedback from HEAs	The interactive method of collecting everybody's own energy saving tips is always effective and makes the energy questions appear more familiar and personal. Electricity contracting raised an active debate and sharing of experiences concerning electricity suppliers, even about bluffing. One VC had taken her electricity bill to the event. Participants were very active and collaborative, however, the need to ask for written permission for GDPR purposes appeared suspicious for some participants.
Action monitoring	
HEAs activity	Number of involved people.
Control group	The two peer HEAs who got involved in the November event. Follow-up in January 2020 on the hoped completion of HEA training.
Monitoring tools	Telephone calls with the NGOs voluntary contact person (for contacting VCs and peer HEAs). Meetings with peer HEAs and other VCs in the coffee room.

Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Dedicated consultancy about: <ul style="list-style-type: none"> - Information about low-cost energy efficiency - Analysis of energy contract offers and electricity invoices.
SWOT analysis	
Strengths	<p>Collaboration with a trusted organization by VCs is powerful in involving VCs who would be otherwise difficult to reach. The event was part of a regular free-time and social activity of among a group of VCs in a neighbourhood which enabled the possibility to create a warm and friendly atmosphere for discussing energy questions, that may sometimes appear difficult and controversial.</p> <p>VCs knew each other and shared similar problems, in particular with contracting and false marketing on behalf of energy suppliers. Combined effort for awareness raising and HEA training. Fruitful discussion about energy issues in a familial environment among people who know each other.</p>
Weaknesses	Late identification of the excellent collaboration opportunity.
Opportunities	Collaborative energy café format could be easily copied to other, similar regular social activities organized by the same NGO or other, similar organisations we have identified.
Threats	Misunderstandings about the purpose of such events in advance, for example if HEAs are taken as salespeople, may lead to suspicion or negative publicity among VC groups and lack of participation.
Lessons learned and misalignment with original planning	
Lessons learned	Excellent method for reaching VCs through trusted NGOs, and as part of their regular activities. Collaboration with a trusted organization by VCs are powerful in involving VCs who would be otherwise difficult to reach. When networking with voluntary work based NGOs it is important to be flexible with means and format of (ASSIST) action. Here, the offered Energy Café format appeared the most suitable.
Misalignment with D5.2 and D5.4	Instead of organizing Energy Cafés at university campuses, several Energy Cafés were organized in collaboration with NGOs serving retired people. The reason for the shift of focus was the delayed HEA training of university students.



Figure 3: The third energy café for elderly in January 2020 was organised as part of the weekly meetings activities for family member carers at old people's service house of Helsinki city.

Energy cafés for youth and secondary school pupils (4 events)	
Action description	
Dates of action	23/10/2019 (Merilahti school, Helsinki) 20/01/2020 (Moisio school, Salo) 25/112019 (Energy café for youth, Helsinki) 28/11/2019 (Energy café for youth, Helsinki)
Action target	For secondary school pupils: To hold energy efficiency and energy saving lectures at secondary schools for classes of 15-years-olds. Interactive and discussion-based teaching method to involve students to think which activities could make sense in their own lives to improve energy efficiency and save in energy costs. The actions were organised in collaboration with local schools. For low-income youth: to hold an energy efficiency and energy saving evenings to involve students to think which activities make sense in their own lives and could improve energy efficiency and save in energy costs. The action was organised in collaboration with a local NGO ("Pääkaupunkiseudun Nuorisoasunnot ry") organising housing for youth and students.
Geographic dimension	Local
Geographic area	Helsinki and Salo.
Number of involved users	20 (23/10/2019) + 50 (20/01/2019) + 2 (25/112019) + 2 (online users, 28/11/2019) = 74
Success rate	School pupils listened carefully, and many promised to look at their energy invoices at home. School teachers gave excellent feedback on the workshops especially on their informative contents about how electricity consumptions of electronic appliances are calculated (or measured) and about global energy consumption examples. Student participants in one of the energy cafés pursued an active discussion and even developed a new energy saving slogan: "Turn off the digital devices when leaving the room!" which was published on the Facebook page

	@energiatuutorit.
Action tools	Friendly and relaxed discussion about energy cost saving possibilities, interesting energy saving material (dedicated for each event), pedagogic and presentation skills of the HEA, disseminating energy saving leaflets.
HEAs involvement	
Type of HEA	Energy professional, social worker.
Number of HEAs involved	3 energy professionals + 1 social worker.
Foreseen involvement	N/A
Feedback from HEAs	Fruitful discussion about energy issues in a familial environment among people who know each other.
Action monitoring	
HEAs activity	Number of involved people.
Control group	N/A
Monitoring tools	N/A
Large control group	N/A
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Dedicated consultancy about: <ul style="list-style-type: none"> - Information about low-cost energy efficiency - Encouragement to look at the energy invoices at home with parents or other family members and analyse which loads constitute the largest part in the total energy consumption at their home. - (For youth:) Encouragement to tender electricity contracts.
SWOT analysis	
Strengths	<p>Discussing simple and practical energy saving possibilities with school pupils may have a wide-ranging and long-term influence. When an energy café is part of a physics class, students can be given homework, such as electricity invoice assessment, or identification of energy-consuming devices at home. Through homework, school pupils conduct HEA activities for their family members. Interesting exercises may develop energy consciousness.</p> <p>Energy café concept offers a warm and friendly atmosphere for discussing energy questions, that may sometimes appear difficult and controversial. Collaboration with a trusted organization helps in reaching groups that would be otherwise difficult to reach.</p>
Weaknesses	Modest participation in the 2 energy cafés for youth despite active marketing by the NGO with posters and Facebook for the target audience.
Opportunities	<p>The now developed energy café workshop model and material could be integrated in secondary school and high school teaching. According to the teachers, there is a need for more educational approaches that might empower students to combat climate change with the opportunities they have at hand. Climate angst is experience by every second Finnish person under 18 years of old according to a youth barometer in 2018.</p> <p>Collaborative energy café format (for youth) could be</p>

	easily copied to other, similar regular social activities organized by the same NGO or other, similar organisations we have identified.
Threats	There is a certain responsibility involved when interfering with school education.
Lessons learned and misalignment with original planning	
Lessons learned	Each energy café requires careful preparation in advance which may be time-consuming, too. It is worth updating presentation and disseminating materials and especially the containing technical examples with details that are relevant for each audience which facilitates learning and impact.
Misalignment with D5.2 and D5.4	Instead of organizing Energy Cafés at university campuses, Energy Cafés were organized at secondary schools and at student housing premises. Participants were not invited to join a follow-up survey, because sufficiently large control group had already been collected among other vulnerable groups.



Figure 4: Students developed a new energy saving slogan: “Turn off the digital devices when leaving the room!” at the Energy Café in November 2019.

3.3.2 Soft/engagement activity #2 (Advising via email)

Advising via email					
Action description					
Dates of action	23/10/2017–1/1/2018, 01/05/2019–31/10/2019				
Action target	Different vulnerable consumers, particularly homeowners, retired people and youth.				
Geographic dimension	National				
Geographic area	National				
Number of involved users	24,000	people	received	digitally	preparatory

	questionnaires and energy saving tips in 2018 in an email campaign with Finnish Home Owners' Association and The Finnish Association for the Welfare of Older People. 4,661 vulnerable consumers answered the home energy survey during 23/10/2017–1/1/2018. Among these, 671 VCs agreed to receive further information from ASSIST project, and they received an invitation to the ex-ante survey per email in May 2019 and in September 2019. Also the email list of Pääkaupunkiseudun Nuorisoyhteisö (Youth Housing Association of metropolitan area offers housing services for hundreds of young people) and many regional energy advisors (hundreds of email list members at each region) have been utilized, in particular for the promotion of ex-ante in autumn 2019. The real number of people involved is higher due to challenges in the external partners' reporting process (many HEAs non-reporting of action).
Success rate	100%
Action tools	Sending energy efficiency information and energy saving tips and other interesting offers for vulnerable consumers in email lists. During the process also paper copies were included into the strategy to facilitate the needs of the target groups and especially the elderly.
HEAs involvement	
Type of HEA	Energy advisors, other energy professionals, social worker
Number of HEAs involved	11 energy advisors, 3 other energy professionals, 1 social worker.
Foreseen involvement	No future involvement is expected.
Feedback from HEAs	HEAs agreed to disseminate information as part of their job and without complaints.
Action monitoring	
HEAs activity	Third sector assistance associations have newsletter lists that reach different segments of vulnerable consumer groups with given consent.
Control group	671 consumers in the ASSIST email list, and among these everybody who agrees to participate in ex-post.
Monitoring tools	Number of contacts and materials provided, number of people answering to surveys, number of received ex-antes.
Large control group	Tens of thousands of Finnish consumers who received energy saving tips via different email lists.
Estimated energy savings	2% but not monitored. 7% among those participating in ex-post.
Vulnerable consumers outreach	Sending energy efficiency information and energy saving tips and other interesting offers for vulnerable consumers in email lists. Additionally, to facilitate the needs of the target groups and especially the elderly, the surveys and campaigns were sent in paper copies (upon request of the individual or partner organisation). Significant amount of replies was returned on paper, highlighting the importance of knowing your target audience.
SWOT analysis	
Strengths	Contacting consumers through their trusted organizations

	is effective. Tens of thousands of consumers reached. Thousands of people answered to surveys. Email campaigns are cost and resource efficient way to approach a vast number of contacts.
Weaknesses	Outreach of the most vulnerable consumers is not certain. Newsletter are sometimes ignored by recipients. Number of reached consumers is difficult to estimate especially when involving external organisations.
Opportunities	Attractive and interesting email campaigns may bring about positive change (energy saving and energy efficiency). Wide dissemination campaigns increase project visibility and may open new collaboration opportunities.
Threats	Ignorance on behalf of the recipients, or they might not remember to respond to the survey if they receive the email at busy time. The process of collecting the email addresses has to be well thought out similarly as the data management and handling of privacy issues. There cannot be gaps in the data security aspects and significant resources must be allocated to ensuring this. If too many emails are sent, it can be experienced as spam and harm the project image.
Lessons learned and misalignment with original planning	
Lessons learned	Contacting consumers through their trusted organizations is effective. Regular content posting is important to show the activity. The purpose of the contact and the nature of the project needs to be clearly explained, especially when contacting elderly people.
Misalignment with D5.2 and D5.4	No major misalignment. This action was mainly conducted by three HEA types who exchange emails with VCs, instead of all HEA types (planned). The exact number of VCs receiving newsletters or sending assistance requests cannot be accurately estimated (non-reporting HEAs).

3.3.3 Soft/engagement activity #3 (Advising via virtual community page)

Advising via virtual community page (Facebook group @energiatuutorit)	
Action description	
Dates of action	2017–2020
Action target	A virtual community is an open site in Facebook, that was regularly updated with the relevant information for the consumers on energy saving. Target was to reach vulnerable groups that use Facebook.
Geographic dimension	National
Geographic area	National
Number of involved users	37 followers of the Facebook group. 20,705 people reached through promotion campaigns.
Success rate	20,705 = Facebook campaign outreach for consumers on energy efficiency (throughout ASSIST project, by 15/01/2020, total 48 posts). The majority could be considered VCs as posting campaigns were directed to carefully segmented groups. When looking at followers,

	the success rate is 11% as there were 37 followers (status 21 December 2019) compared with 350 targeted.
Action tools	Facebook posts about energy related money saving tips and ASSIST project. Posts about the energy saving, including videos created at WP6 with interesting and topical introductory messages. For example, when the heating time started in the end of autumn, we posted about heat energy efficient ventilation and linked a related ASSIST video.
HEAs involvement	
Type of HEA	Social worker, energy professionals, energy students, VCs.
Number of HEAs involved	1 (social worker) + 11 (energy advisors) + 15 (energy students) + 2 (other energy professionals) = 29.
Foreseen involvement	Virtual community promotion.
Feedback from HEAs	Interesting videos and news.
Action monitoring	
HEAs activity	Advertising the virtual community for vulnerable consumers.
Control group	37 people following the page.
Monitoring tools	Commitments and views in the community page.
Large control group	Other Facebook users receiving energy saving tips through dissemination campaigns.
Estimated energy savings	2% but not monitored.
Vulnerable consumers outreach	20,705 = Facebook campaign outreach for consumers on energy efficiency (throughout ASSIST project, by 15/01/2020, total 48 posts). The majority could be considered VCs as posting campaigns were directed to carefully segmented groups.
SWOT analysis	
Strengths	Facebook group is an effective way of reaching different types of consumers and give general visibility of the project and ASSIST actions. Good way to demonstrate activity and expertise in the field of energy efficiency promotion for relevant stakeholders (e.g. energy advisory companies and organisations and the NGOs) for networking purposes. Additionally, we promoted through Facebook external campaigns for vulnerable consumers organised by our partnering NGOs, for example a Christmas card campaign where a card was sent to elderly people who are lonely.
Weaknesses	Outreach of the most vulnerable consumers is not certain.
Opportunities	Good media for project visibility and networking purposes which may open new collaboration opportunities. Active commenting and platform reactions (likes and sharing) may further strengthen the position of HEAs as the experts in VC advisory.
Threats	Negative comments for posts may bring negative publicity for the project – however, active debates may provide further deserved visibility.
Lessons learned and misalignment with original planning	

Lessons learned	Facebook group is a familiar way of reaching different types of consumers, using the profiling tools it provides. More regular content posting is important to show the activity. Also, the generated content should be mobile-friendly.
Misalignment with D5.2 and D5.4	HEAs actively promoted the Facebook group, but the post content was mainly produced by the project partner. Number of registered Facebook group members was 37 instead of targeted 350. The plan of building a Facebook integrated chat box was not implemented due to low number of followers and lack of resources to ensure quick replies and high response rate. Instead, the commenting option was left open for the audience to post questions and the Facebook energy advisory chat box of Motiva was being promoted as Motiva has an established presence as a consumer organisation and generated trust as a governmental agency. For the same reason, instead of distributing Facebook questionnaires for the FB group members, large dissemination campaigns were done through other means and via the existing networks of the different consumer organisations. The nature of the national actions was to support the existing organisations and create strong links with them. This also facilitated knowledge transfer and long-lasting impact on the market post-ASSIST.

3.3.4 Soft/engagement action #4 (Phone advising)

Phone advising	
Action description	
Dates of action	25/09/2019 – 15/01/2020 (also before this)
Action target	Different vulnerable groups depending on location.
Geographic dimension	Regional
Geographic area	National
Number of involved users	The national energy advisors answer Finnish consumers with their any energy related questions. The share of points of contact from vulnerable consumer groups cannot be estimated because the advisors do not keep book on the background of those who call them. However, the minimum number of users involved is definitely at least the targeted 50.
Success rate	100%
Action tools	Providing tailored advice and solutions on energy efficiency measures and habit change, but also service and support available e.g. if person is eligible for financial support.
HEAs involvement	
Type of HEA	Professional energy advisors (MOTIVA). One social worker.
Number of HEAs involved	1 (social worker) + 11 (energy professionals) = 12.
Foreseen involvement	The professional people continue energy advisory work as part of their daily duties. Through ASSIST training, they

	have more tools to identify energy poverty among their customers.
Feedback from HEAs	Energy poverty is an increasing problem in Finland through aging of the population and through aging of housing stock in remote areas.
Action monitoring	
HEAs activity	Regularly contacting HEAs per telephone to report the amount of customer calls identified coming from vulnerable consumers. Offering an opportunity for the VC to participate in the ex-ante and ex-post surveys.
Control group	N/A
Monitoring tools	HEA reports on the engaged vulnerable households, ex-post surveying when possible.
Large control group	50
Estimated energy savings	Minimum 2% but not monitored. In individual cases, savings may be up to 50% if the advisory process leads to heating system upgrades or other major house renovation activities.
Vulnerable consumers outreach	Dedicated energy advisory for whoever calls directly. Identification of vulnerable consumers.
SWOT analysis	
Strengths	The service is free-of-charge and available for any citizen. The energy consultants are energy professionals who not only share advice on technical issues but can also direct the citizen to other offices or experts, depending on their problem. Active network who shares knowledge and experiences.
Weaknesses	Outreach of the most vulnerable consumers is not certain. Those having the most need for energy advising or support may not call (for many reasons) an energy advisor even though the service is free-of-charge.
Opportunities	Energy consultants are in contact with consumers on a daily basis with their current problems. This knowledge could be better utilized.
Threats	If the funding from the Finnish government is decreased or stopped.
Lessons learned and misalignment with original planning	
Lessons learned	Professional energy advisors confront energy poverty related problems daily in their work. Types of energy vulnerabilities require more attention in Finland.
Misalignment with D5.2 and D5.4	<p>Due to practical (work-related) and sensitivity issues, phone advisors did not collect contact information of vulnerable consumers for ex-ante questionnaires at Activity #4. Instead, vulnerable consumers' contact information to the ex-ante were collected through other means (see Soft/engagement action #1: Energy cafés, Soft/engagement action #2: Advising via emails and ASSIST Action #1: Home visits).</p> <p>Energy companies could not be integrated as part of the HEA network due to their lack of interest.</p>

3.3.5 Changes with regards to the Action Plan

All four foreseen Soft/engagement activities (#1, #2, #3 and #4) were implemented and with only slight modifications.

Energy cafés (Activity #1) were organised for a variety of vulnerable consumer groups due to active networking with third sector organisations and schools. A significant number of consumers were reached. Energy cafés had been planned to be organized by student HEAs at university campuses, but due to HEA the later training schedule, Energy cafés were organized by peer advisors, a social worker and energy professionals.

Due to practical (work-related) and sensitivity issues, phone advisors did not collect contact information of vulnerable consumers for ex-ante questionnaires at Activity #4. Instead, vulnerable consumers' contact information to the ex-ante were collected through other means (see Soft/engagement action #3: Emails and ASSIST Action #1: Home visits). In addition, phone advising was conducted by energy advisor HEAs, and not energy companies.

In Soft/engagement activity #3, the popularity of the virtual community page remained modest. For this reason, other media and networking tools were given a higher importance in promoting ASSIST activities and networking with stakeholders.

3.4 ASSIST Actions

3.4.1 Action #1 (Home visits)

Home visits	
Action description	
Dates of action	01/07/2019 - 31/12/2019
Action target	To visit homes of vulnerable consumers and give energy efficiency advisory. Collect ex-ante questionnaires. Mostly elderly receiving help for home improvement from house renovation advisor HEAs, and students that are advised by student HEAs. However, also many other HEAs conduct visits but are non-reporting.
Geographic dimension	National
Geographic area	National
Number of involved users	Around 448 households (representing 1,120 consumers) were visited. The target was to involve 750 consumers, so the target was reached.
Success rate	150%
Action tools	Providing tailored advice and solutions on energy efficiency measures and habit change, but also service and support available e.g. if person is eligible for financial support targeted at elderly.
HEAs involvement	
Type of HEA	All HEA types, but mainly house renovation advisors, energy students and village assistants.
Number of HEAs involved	11 house renovation advisors, 15 energy students and 3 village assistants (= 29 active and reporting HEAs). However, also 7 social workers, 2 other professionals, 1 energy advisor, 2 peer advisors and 16 village assistants are conducting house visits (=28 active but non-reporting). Total 57 HEAs.
Foreseen involvement	Integrated in the trained group's routine work.
Feedback from HEAs	A good way of reaching vulnerable consumers.

Action monitoring	
HEAs activity	Some of the consumers will be visited by HEAs also in the future but this is not monitored.
Control group	75 consumers engaged to the ex-post research survey.
Monitoring tools	Phone interviews with VCs visited (Ex-post collection).
Large control group	Number of ex-antes disseminated during house visits = 448 which equals approximately 1,120 consumers. However, the number of house visits by those HEAs (energy students, social workers and village assistants) who started training but did not complete the training are not known.
Estimated energy savings	With this group energy saving is targeted at 7%, overall will depend on measures incorporated.
Vulnerable consumers outreach	Dedicated consultancy about: <ul style="list-style-type: none"> - Information about low-cost energy efficiency - Delivery of energy efficiency material - Heating technology assessment and identifying possibilities to upgrade heating system.
SWOT analysis	
Strengths	Excellent method for reaching VCs through trusted advisors, and as part of their regular work activities (house renovation advisors, in particular). Many HEAs meet VCs who would be otherwise difficult to reach. Furthermore, house visits allow a thorough identification and analysis of more effective energy efficiency measures that could be implemented, such as heating technology upgrades. HEAs can also share information on financial support mechanisms available for energy renovations.
Weaknesses	Energy advisory through home visits is time-consuming and often requires traveling long distances. The majority of vulnerable consumers in Finland live in remote areas, tens or hundreds of kilometres away from city centres. House visits can be conducted only by HEAs whose work is well resourced e.g. by their employer or in a government programme. The strike at the Finnish national post services in November 2019 stopped post delivery for three full weeks and caused serious delivery delays in December. The situation demotivated many VCs to fill up and send back their ex-ante questionnaires.
Opportunities	Significant energy and money savings if an HEA succeeds to support the VC to launch more fundamental energy renovation projects.
Threats	High number of energy advisory house visits among the most vulnerable in a sparsely populated country can not be conducted without sufficient resourcing. Conducting house visits requires a certain type of sensitivity when a person is allowed access a home and private property of someone who is already in a vulnerable position. Additionally, the requirements for data management and handling private information are even higher than online or phone advisory services as detailed address information is connected to the consumption, financial and other personal data.
Lessons learned and misalignment with original planning	

Lessons learned	High number of energy advisory house visits among the most vulnerable in a sparsely populated country (where the most vulnerable consumers live in remote areas) can not be conducted without sufficient resourcing.
Misalignment with D5.2 and D5.4	-

3.4.2 Action #2 (Energy cafés follow-up)

Energy cafés follow-up	
Action description	
Dates of action	11/11/2019 onwards
Action target	Interested and committed energy café (at 11 November 2019 and 8 January 2020) visitors are offered handout materials and discussion opportunities about the ways they could save in energy consumption and energy related costs the most effective ways. Discussions take place mainly at two separate spaces in Helsinki where the elderly groups meet weekly or bi-weekly. The two peer HEAs are active members in both.
Geographic dimension	Local
Geographic area	Helsinki
Number of involved users	Minimum 20.
Success rate	The two peer HEAs have actively discussed energy cost management, and electricity contracting with their peers. At least five (5) VCs have changed their electricity contracts to less expensive ones.
Action tools	Discussion.
HEAs involvement	
Type of HEA	Peer advisors, energy professionals.
Number of HEAs involved	2 (peer advisors), 2 (energy professionals).
Foreseen involvement	Peer advisors continue raising energy cost management topics with their peers and offer help for those interested in issues concerning electricity saving, invoicing and contracting.
Feedback from HEAs	HEAs find their activities very valuable because their peers have rarely investigated their own old electricity contracts and checked for more affordable ones.
Action monitoring	
HEAs activity	Number of involved families.
Control group	5 VCs who have assessed their electricity contract and changed it, if valuable.
Monitoring tools	N/A
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Dedicated consultancy about: <ul style="list-style-type: none"> - Information about low-cost energy efficiency; - Analysis of energy contract offers and electricity invoices.
SWOT analysis	
Strengths	VCs are reached effectively because peers possess the know-how to approach and talk about energy issues with their peers. Offers a simple money saving opportunity.

Weaknesses	N/A
Opportunities	According to an estimation, half of Finnish people have not tendered their electricity contract and the percentage is higher among elderly groups. Committed HEAs.
Threats	Communication problems between HEA and VC, lack of interest on behalf of VCs. Personal and physical resources of HEAs to conduct voluntary activities.
Lessons learned and misalignment with original planning	
Lessons learned	Peer advisory may take many different forms and it is not obvious in advance which (energy) issues are meaningful for each group of VCs. Therefore, it is important to listen carefully to the VCs and their peers and identify topics which appear interesting. Peer HEAs activity can be encouraged by other HEAs by providing possibilities to share experiences and report on their actions.
Misalignment with D5.2 and D5.4	The action was organised with modifications: peer HEAs did not collect contact info for ex-ante. This is because of later timing of Action #2: there would not have been the required six months time until ex-post.

3.4.3 Changes with regards to the Action Plan

Action #1 (Home visits) were organised as planned. Action #2 (Energy café follow-up) was organised with modifications: HEAs did not collect contact info of the interest people for ex-post. This is because of timing of the Action#2 and ASSIST: there would have not been the required six months time between ex-ante and ex-post. Instead, vulnerable consumers' contact information to the ex-ante were collected through other means (see Soft/engagement action #3: Emails and ASSIST Action #1: Home visits).

3.5 Synergies

3.5.1 Synergy #1 (Motiva Energy Advisory Network collaboration)

Finnish state owned Motiva Oy has a network of subcontractors providing professional-level energy advisory to Finnish consumers. As a part of the ASSIST program, Motiva energy advisory network was consulted about energy poverty issues. In particular, the energy advisors shared valuable insights for the project partner on energy poverty in Finland and how it appears daily in their job through phone advising. The energy advisors have also actively participated in ASSIST seminars which has helped them to identify and serve the vulnerable consumer groups that contact the energy advisor helpdesks:

- Number and type of HEAs implementing it: Energy advisor HEAs;
- Number of involved consumers: The same number of involved consumers is the same indicated in Soft/engagement activity #4: Phone advising and Soft/engagement activity #2: Advising via email;
- Time(s) and place(s): Active communication with energy advisor HEAs along the course of the project.

3.5.2 Synergy #2 (Mun Talous – My Finances network collaboration)

Mun Talous – My Finances network is collective action to improve young peoples' financial literacy skills. It connects business, education, NGO and public sector actors to work together to provide youth advisory and discussion platforms to prevent young people from getting into financial troubles. ASSIST is joining the network seminars to offer information about energy related money saving opportunities and find ways of collaboration with the other network members:

- Number and type of HEAs implementing it: 1 energy professional;
- Number of involved consumers: 211;
- Time(s) and place(s): 28/11/2018 (Helsinki) and 4/6/2019 (Helsinki).

3.5.3 Synergy #3 (Collaboration with third sector organisations)

Many non-governmental organisations (NGOs) reach vulnerable consumers groups, and collaboration with them have been very fruitful:

- Number and type of HEAs implementing it: N/A Collaboration is not about HEAs, but the organisations;
- Number of involved consumers: The number of VCs reached by these organisations exceeds tens or hundreds of thousands;
- Time(s) and place(s): Active communication with the organisations along the course of the project.

The associations involved are Finnish Home Owners' Association (Omakotiliitto), Suomen kylät ry (unofficial translation: "The villages of Finland"), Lämmitysenergia Yhdistys (unofficial translation: "Heating Association"), Ikäinstituutti (unofficial translation: "Age Institute"), Siskot ja Simot ry (no translation available), The Finnish Association for the Welfare of Older People (VTKL) and Pääkaupunkiseudun Nuorisoasunnot ry (unofficial translation: "Youth houses of the capital area of Helsinki"). Different collaborative activities are described in different sections of this deliverable:

- Omakotiliitto: Soft/engagement activity #2;
- VTKL: Soft/engagement activity #1, ASSIST action #1, HEA training;
- Pääkaupunkiseudun Nuorisoasunnot ry: Soft/engagement activity #1 and #2, HEA training;
- Ikäinstituutti and Siskot ja Simot ry: Soft/engagement activity #1;
- Suomen kylät ry: ASSIST action #1 and HEA training;
- Lämmitysenergia Yhdistys: Soft/engagement activity #2.

ASSIST collaborations have also supported programme work of many organisations. For example, Suomen kylät ry, an organisation connecting around 4,000 local village associations throughout the country, has a programme, funded by the ministry of employment, to employ "village assistants" among formerly unemployed people. Village assistants are local people who support other village inhabitants in their daily chores. ASSIST training was combined as part of their professional complementary training, which brought valuable work capacities for the village assistants. Finally, the synergy will benefit VCs who will be visited and assisted by the village assistants also after ASSIST project has ended.

Synergies have been found also in information dissemination, including energy saving tips, particularly through newsletter lists and Facebook pages of the organisations (see Soft/engagement activity #2). For example, Lämmitysenergia Yhdistys that represents the oil heaters in Finland published two large articles about ASSIST work, results and energy advisory and energy saving tips because their represented members are considered being under a particular energy poverty threat in Finland. Their stakeholder newsletter Oiline 4/2019 reached 1,300 readers, and in the printed magazine "Lämmöllä" issue 1/2020 was disseminated to 130,000 energy vulnerable houses. The approximated number of readers is 240,000.

3.5.4 Synergy #4 (Contributing to a household consumption assessment programme HARKKA)

The Finland's national sustainable development company MOTIVA has a household electricity consumption assessment programme called "HARKKA"². In HARKKA, Finnish households' consumption is researched through house visits by energy engineering students of universities of applied sciences all around the country. By date, five universities have participated in the programme. HARKKA includes a detailed household electricity consumption survey which shall be conducted by the energy student with a house resident. The target group of HARKKA households are electricity heated houses, and it is not limited to any social group (e.g. energy vulnerable) but

² Source: https://www.motiva.fi/ajankohtaista/julkaisut/koti_ja_asuminen/harkka-hanke_2018-2019_-_yhteenveto_harkka-harjoitustyon_kokemuksista_ja_kotitalouksista_keratyista_tiedoista.10739.shtml.

any interested Finnish household can join. Through a set of detailed questions, the programme targets to raise awareness on household's technical systems and on energy cost formation and, in parallel, contribute to energy student's learning progress.

ASSIST project ex-ante questions were integrated in the HARKKA survey in 2019. The ex-ante questions brought additional perspective on energy vulnerability identification. ASSIST project could benefit from the data collected by students at the ex-ante data collection phase.

3.5.5 Changes with regards to the Action Plan

No changes to the planned to Synergies #1 and #2. Two additional Synergies (#3 and #4) have been carried out.

3.6 Stakeholders feedbacks

Partnering organisations, especially the NGOs have been thankful for the ASSIST collaboration because an important topic of energy cost management has been made available for their VC beneficiaries in an interesting and easy-to-reach form. To begin with, energy café collaboration was conveniently integrated as part of some NGO's social activities, which made sometimes difficult energy issues appear easy and even fun. In addition, energy cafés were appraised because they offered time for discussions and sharing personal experiences. School teachers were thankful for the informative contents, interactive methods, and that they support the learning targets of school education.

ASSIST HEA training brought added value to the professional training of the employees of many organisations. Many also thanked the ASSIST energy saving materials, including The Finnish Association for the Welfare of Older People (VTKL) whose representatives also noted that providing them in printed form and with a large enough font size made them accessible also for elderly readers.

3.7 Conclusions

It is obvious that VC energy advisory work conducted by ASSIST HEAs is filling an existing gap. First of all, there is need to raise general awareness on how different technical and social activities may affect different households' energy economies. This fact does not consider only vulnerable groups, but also generally all Finnish citizen of which 47% are considered to belong to the "inactive" segment in electricity markets. The share is probably higher among vulnerable groups. HEA advisory work also combats misinformation about different energy topics (energy markets and contracts, energy technologies, amounts of energies, energy routines, housing aspects, heating) etc..

VC energy advisory work is becoming more and more important in the future, as according to the interviews with the professional energy advisors, the implications of energy poverty phenomenon are increasing in Finland through aging of population, urbanization, aging of housing stock, increasing of energy prices and connection fees especially in large but sparsely populated areas in the Northern and Eastern parts of the country.

ASSIST actions were conducted by 69 different HEAs, whose background vary from energy and engineering professionals and students, to renovation advisors, social workers, village assistants and VCs themselves. ASSIST actions in Finland reached hundreds of vulnerable consumers directly, and tens of thousands through different soft actions and information dissemination campaigns. House visits are possibly the most influential way of offering assistance, however, a high number of house visits among the most vulnerable cannot be conducted without sufficient resourcing, and by HEAs who are committed to advisory work through employment.

Collaboration with organizations and stakeholders that are trusted by Finnish consumers turned out to be an effective way of reaching many consumer groups. There is plenty of room for more collaboration with other companies and NGOs, too, especially outside of the capital area of the country. When networking with voluntary work based NGOs, it is important to be flexible with means and format of different ASSIST activities. Above all, HEA training programs shall not appear burdensome for a person who is interested in energy advisory but is working in his/her free time. Therefore, personalized approaches and flexibility are essential in motivating HEAs to start with HEA training modules or his/her advisory activities. Voluntary advisory can rarely be followed-up; and as a matter of fact, only the two peer advisors among all Finnish HEAs were conducting ASSIST actions purely on voluntary basis.

Influential energy advisory work precedes good preparation, and also updating of presentations and dissemination materials relevant for each audience. This time-consuming preparatory part in the HEA advisory work should not be overlooked. Preferably material shall be updated by professionals to ensure their quality. Good material supports learning, if they are referred by a trusted HEA.

This may be one reason that the number of voluntary HEAs remained modest and that energy professionals were well represented among HEAs. They have a certain level of technical professional confidence in the background. Other groups may have felt that being a good energy advisor is not only about completing one course, but also about regularly updating him/herself about changes in the energy market.

3.8 Executive summary in national language

ASSIST-hankkeen erilaiset tapahtumat, toiminnot ja aktiviteetit tavoittivat Suomessa satoja pienituloisia tai haavoittuvassa asemassa olevia kuluttajia suoraan, henkilökohtaisen kontaktin kautta. Lisäksi kymmeniä tuhansia suomalaisia kuluttajia tavoitettiin esimerkiksi erilaisten viestintä- ja tiedonlevityskampanjoiden avulla. Kaikki alunperin Suomessa toteutettaviksi suunnitellut tavoitteet saavutettiin pääosin. Esimerkiksi energiakahvilat menestyivät odotettua paremmin, sillä niiden kautta saavutettiin enemmän ihmisiä kuin oli odotettu. Yhteistyö suomalaisten järjestöjen, koulutuslaitosten ja muiden sidosryhmien kanssa osoittautui tehokkaaksi tavaksi sitouttaa energiatuutoreita ASSIST-hankkeen toimintaan, ja tavoittaa monia sellaisia kuluttajaryhmiä, joita voi olla muuten hankala tavoittaa.

Joidenkin toimintojen toteuttamisen aikataulu poikkesi alkuperäisestä, ennen kaikkea henkilöstön ja energiatuutoreiden vähäisen määrän vuoksi. Joidenkin ryhmien energiatuutorikoulutus viivästyi käytännön ongelmien vuoksi.

Lopulta ASSIST-hankkeessa toimi aktiivisesti 69 energiatuutoria. Taustaltaan he ovat energia-alan ammattilaisia ja opiskelijoita, korjausneuvoja, sosiaalityöntekijöitä, kyläneuvoja ja tavallisia kansalaisia. Kaikki nämä henkilöt eivät kokonaan suorittaneet ASSIST-hankkeen energiatuutorikoulutusta alkuperäisessä laajuudessaan, mikä kertoo siitä, että tarjottuja taitoja ja tietoja pidetään tärkeinä, mutta koulutuksen rakenne ja laajuus on suunniteltava kullekin ryhmälle joustavasti. Ennen kaikkea on tunnistettava kunkin ryhmän henkilökohtaiset tai ammatilliset syyt osallistua koulutukseen.

Kotikäynnit ovat erityisen vaikuttava tapa tarjota pienituloisille kuluttajille tukea energiaan liittyvissä kysymyksissä. Henkilökohtaisen neuvonnan vaikutus voi olla hyvinkin pitkäaikainen. Suurta määrää kotikäyntejä voidaan kuitenkin tehdä vain, jos neuvontatyö on kestävästi resursoitu esimerkiksi työsuhteen kautta. Kotivierailut nimittäin usein edellyttävät matkustamista ja merkittävän määrän valmistelutyötä. Onkin tarkasteltava kriittisesti sitä, että energiatuutorien oletettiin tässä hankkeessa toimivan ennen kaikkea vapaaehtoisuuspohjalta. ASSIST-hankkeessa vain kolme energiatuutoria Suomessa toimi täysin vapaaehtoisesti; suurimman osan energiatuutorointi liittyi tavalla tai toisella heidän muihin velvollisuuksiinsa.

Type of activity	Name	Involved HEAs (number and type)	Involved consumers	Where and when
Engagement activity	#1: Energy cafés among vulnerable consumers and other events for VCs	1 social worker, 1 peer advisor, 3 other energy professionals, 3 energy advisors, 1 renovation advisor	361+45+74 = 480 (minimum)	28/11/2018 (Helsinki); 4/6/2019 (Helsinki); Several others in autumn 2019 by HEA at different parts of country; 11/11/2019 (Helsinki); 12/11/2019 (Kerava); 08/01/2020 (Helsinki); 23/10/2019 (Helsinki); 20/01/2020 (Salo); 25/11/2019 and 28/11/2019 (Helsinki)
Engagement activity	#2: Advising via email	11 energy advisors, 3 other energy professionals, 1 social worker	Tens of thousands.	23/10/2017–1/1/2018, 01/05/2019–31/10/2019 per email
Engagement activity	#3: Advising via virtual community page	1 social worker +11 energy advisors +15 student + 2 other energy professionals = 29	20705	11/08/2018–15/01/2020 at Facebook
Engagement activity	#4:Phone advising	11 energy advisors + 1 social worker = 12	Minimum 50, but most probably hundreds.	25/09/2019–15/01/2020 per phone
ASSIST Action	#1: Home visits	11 house renovation advisors, 15 energy students, 19 village assistants, 7 social workers, 2 other professionals, 1 energy advisor, 2 peer advisors = Total 57 HEAs.	1120	01/07/2019–31/12/2019, VCs private homes in different parts of the country
ASSIST Action	#2: Energy café follow-up	2 peer advisors, 2 energy professionals	Minimum 10	11/11/2019 onwards
Synergy	#1: Motiva Energy Advisory Network collaboration	11 energy advisors	Hundreds	05/2017–04/2020 (ASSIST duration)
Synergy	#2: Mun Talous – My Finances network	(not applicable)	211	28/11/2018 (Helsinki) and 4/6/2019 (Helsinki).

	collaboration			
Synergy	#3: Collaboration with third sector organisations	(not applicable)	Hundreds of thousands. Minimum: 240000	05/2017–04/2020 (ASSIST duration)
Synergy	#4 Contributing to a household consumption assessment project HARKKA	(not applicable)	Unknown	2018–2019

Italy

4.1 Planning of ASSIST Actions

A summary of all the activities already performed or planned and currently ongoing at the Italian level is shown below, while the details of each activity and the HEAs who are responsible for them is reported in the next paragraphs:

- Soft/engagement activities:
 - *Soft/engagement activity #1* → Advice at home supplies shop (Leroy Merlin);
 - *Soft/engagement activity #2* → Energy cafès;
 - *Soft/engagement activity #3* → Consultancy on financial support;
 - *Soft/engagement activity #4* → Education activity at disabled pupils school;
 - *Soft/engagement activity #5* → Energy café + education activity from social worker;
 - *Soft/engagement activity #6* → Energy café at energy provider premises;
 - *Soft/engagement activity #7* → Energy café at charity premises;
 - *Soft/engagement activity #8* → Education activity at trade union premises;
 - *Soft/engagement activity #9* → Distribution of material and provision of information to targeted consumers;
 - *Soft/engagement activity #10* → Online help desk on efficient behaviour and energy bills;
 - *Soft/engagement activity #11* → Consumers' workshop;
 - *Soft/engagement activity #12* → Consumers' workshop.
- ASSIST Actions:
 - *Action #1* → Home visits and dedicated consultancy by social/health workers;
 - *Action #2* → Help desks counselling for vulnerable consumers at consumers association premises.
- Synergies:
 - *Synergy #1* → Help desks for Vulnerable Consumers through Charity organizations;
 - *Synergy #2* → Distribution of material and provision of information to targeted consumers.

4.2 HEAs training and activities

In total, there are **101 fully-trained HEAs** and 204 high-school students trained with a short HEA course. Moreover, there are also **11 HEAs** who have not completed the whole course but are in the network and have carried out some activities. A summary of the activities of which the HEA are responsible and they are carrying out is reported in the table below, while the detailed analysis of each activity can be found in the next paragraphs.

Number of Trained HEAs per type	HEA activity
204 high school students (198 Leroy Merlin, 6 RSE)	Soft/engagement activity #1
10 from trade union (FLAEL)	Soft/engagement activity #8 Soft/engagement activity #9 Action #2
23 from various Consumers Associations (Federconsumatori, Adiconsum)	Soft/engagement activity #2 Soft/engagement activity #9 Action #2
24 from various energy companies	Soft/engagement activity #6

	Soft/engagement activity #9 (Some HEAs did not perform or complete any ASSIST actions due to internal reasons of their companies)
5 from various private companies	Not completed or performing any actions at the moment due to both the difficulties of getting in touch with vulnerable consumers and the feeling to be inadequate to give solid advice and provide concrete help to vulnerable consumers (ex. They were afraid of receiving difficult questions to which they would have not been able to answer)
15 from various public bodies	Soft/engagement activity #10 (Some HEAs did not carry out any ASSIST actions due to lack of time and internal reason of their entity, in particular the lack of commitment of their top management)
3 from social housing operators	Not completed or performing any actions at the moment as they did not have enough time to dedicate to ASSIST actions due to excessive work burden of their current activities
1 unemployed (potential VC)	Not completed or performing any actions at the moment as he did not have enough time to dedicate to carry out ASSIST actions
25 social workers (students at University and operators)	Soft/engagement activity #3 Soft/engagement activity #4 Soft/engagement activity #5 Soft/engagement activity #9 Action #1
2 from a charity organization	Soft/engagement activity #7 Soft/engagement activity #11 Soft/engagement activity #12 Synergy #1 Synergy #2

4.3 Involvement of consumers through soft/engagement activities

4.3.1 Soft/engagement activity #1 (Advice at home supplies shop)

Advice at home supplies shop (Leroy Merlin)	
Action description	
Dates of action	October 2018 – December 2018
Action target	All customers of the shops
Geographic dimension	National
Geographic area	Units in different regions in whole country.
Number of involved users	1,000 households
Success rate	50% of the households taking the advice kit.
Action tools	Factsheets with advice on electricity appliance, electricity bills, low-cost energy efficiency measures, etc...

HEAs involvement	
Type of HEA	High-school students (trained with a short HEA course).
Number of HEAs involved	198
Foreseen involvement	Work in shops some days per week.
Feedback from HEAs	N/A
Action monitoring	
HEAs activity	Number of involved consumers.
Control group	Not foreseen.
Monitoring tools	Not foreseen.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency.
SWOT analysis	
Strengths	Involvement of students who can become ambassadors of the issues related to energy poverty towards their families.
Weaknesses	Limited time to implement the action in shops. Low involvement and commitment of local shop manager. Issues with direct monitoring the activities of the students inside the shops due to strict privacy regulation of Leroy Merlin. Leroy Merlin did not allow the collection of personal (anonymized) data from their customer in the shop location due to strict privacy regulation of Leroy Merlin.
Opportunities	Involvement of private enterprises and the increase of their awareness about Energy vulnerability.
Threats	Issues with training material due to the condition required by Leroy Merlin to put all such material on their own training platform (due to privacy issues), giving them the possibility to re-use and re-elaborate the material for their own purposes, without even notifying project partners.
Lessons learned and misalignment with original planning	
Lessons learned	More time should be dedicate to the actual implementation of the actions in the shops. Local shops managers should be involved since the beginning or a proper way to incentivize their participation in the action should be found. Privacy regulation should be addressed more carefully with the company before getting their employed involved in such actions.
Misalignment with D5.2 and D5.4	Due to the weaknesses listed above, the impact of such engagement activities was much more limited than originally planned.

4.3.2 Soft/engagement activity #2 (Energy caf  s at consumer association premises)

Energy caf�� at consumer association premises	
Action description	
Dates of action	2 nd July 2019
Action target	Vulnerable families supported by consumers associations.
Geographic dimension	Local
Geographic area	Brescia

Number of involved users	130
Success rate	20% of households leaving their e-mail address/phone number for a second contact.
Action tools	Factsheets with advice on electricity appliance, electricity bills, low-cost energy efficiency measures, questionnaires, etc..
HEAs involvement	
Type of HEA	Consumer association volunteers.
Number of HEAs involved	2
Foreseen involvement	Organization of 1 event.
Feedback from HEAs	Positive
Action monitoring	
HEAs activity	Number of involved families – number of households leaving their contact for a follow-up.
Control group	Not foreseen.
Monitoring tools	If possible, follow-up with families that leave their contact. Questionnaire on their consumption habits and change in them.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency and available subsidies for vulnerable consumers.
SWOT analysis	
Strengths	The role of the Energy Café is very useful to involve people who are difficult to be reached by other means. The support of consumers associations helps to identify the consumers who are more in need and could benefit of the support provided by such actions.
Weaknesses	The scarcity of people willing to be involved in the organization of Energy Cafés have limited the number of such events.
Opportunities	Involvement of people who otherwise would have never been involved.
Threats	Some people who could not be involved, might come to know about the only organized Energy Café at a later stage and thus might complain about the fact that they have not been invited, thus giving a negative publicity of such event.
Lessons learned and misalignment with original planning	
Lessons learned	At least 2 Energy Cafés in a row should be organized, in order to allow more people to participate and avoid complaints from those who were not able to participate to the first one.
Misalignment with D5.2 and D5.4	This soft/engagement activity was not originally planned in D5.4 but we managed to carry it out thanks to the collaboration and support of the consumers associations involved in the ASSIST actions (see next paragraph for the description of the action).

4.3.3 Soft/engagement activity #3 (Consultancy on financial support)

Consultancy on financial support

Action description	
Dates of action	September 2019 – December 2019
Action target	Vulnerable families seeking advice at the social municipal helpdesk.
Geographic dimension	Local
Geographic area	City of Sulmona.
Number of involved users	100 potential households.
Success rate	Consultancy on financial issues related to energy were provided to 82 households.
Action tools	Printed ASSIST factsheets with energy consumption tips, ASSIST poster with contact details and facebook community.
HEAs involvement	
Type of HEA	Social workers (University students and operators).
Number of HEAs involved	1
Foreseen involvement	Provision of consultancy on financial issues related to energy were vulnerable consumers.
Feedback from HEAs	Positive
Action monitoring	
HEAs activity	Number of addressed families.
Control group	Not foreseen.
Monitoring tools	If possible, follow-up with families that leave their contact. Questionnaire on their consumption habits and change in them.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency and available subsidies for vulnerable consumers.
SWOT analysis	
Strengths	Direct contact with consumers in energy poverty and vulnerability. Trustworthy position with respect to the consumers as guaranteed by the municipality.
Weaknesses	Low possibility of consumers bringing energy bills with them (even if continuously reminded).
Opportunities	Create regular events to share and discuss with the consumers coming at the helpdesk energy consumption issues.
Threats	Regular participation of consumers.
Lessons learned and misalignment with original planning	
Lessons learned	Consumers actually do seek for help and advice at municipal helpdesks but they do not bring their energy bills.
Misalignment with D5.2 and D5.4	None

4.3.4 Soft/engagement activity #4 (Education activity at disabled pupils school)

Education activity at disabled pupils school	
Action description	
Dates of action	June 2019 – December 2019

Action target	School students and staff – with focus on disabled people.
Geographic dimension	Local
Geographic area	City of L'aquila.
Number of involved users	40 potential households.
Success rate	Education activity at disabled pupils school were provided to 20 households.
Action tools	ASSIST videos and factsheets and slides prepared by the HEAs.
HEAs involvement	
Type of HEA	Social workers (University students and operators).
Number of HEAs involved	1
Foreseen involvement	Provision of education activities towards vulnerable consumers at disabled pupils school.
Feedback from HEAs	Positive
Action monitoring	
HEAs activity	Number of addressed families participating at the events.
Control group	Not foreseen.
Monitoring tools	If possible, follow-up with families that leave their contact. Questionnaire on their consumption habits and change in them.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Disabled people and their families.
SWOT analysis	
Strengths	The target of disabled people is a very vulnerable target and mostly in need of energy advice.
Weaknesses	The energy need of the target is not due to personal preferences but rather related to contingent physical needs.
Opportunities	Organise events and activities to increase awareness on energy needs and consumption as well as the energy market and social and energy financial support.
Threats	Low possibility to actually implement or take up general energy efficiency advice.
Lessons learned and misalignment with original planning	
Lessons learned	Families with a disabled people are most in need of advice on energy needs and consumption but rarely have the time and mind-openness to actually learn more.
Misalignment with D5.2 and D5.4	The activity within the school was not fully carried out due to the long bureaucratic work needed. Only the preliminary events were organised.

4.3.5 *Soft/engagement activity #5 (Energy café + education activity from social worker)*

Energy café + education activity from social worker	
Action description	
Dates of action	September 2019
Action target	Families with person with physical disability.
Geographic dimension	Local

Geographic area	City of L'aquila and its neighborhoods.
Number of involved users	46 households.
Success rate	35 households reached through direct participation at the event and informative/formative material.
Action tools	ASSIST videos and factsheets and slides prepared by the HEAs.
HEAs involvement	
Type of HEA	Social workers (University students and operators).
Number of HEAs involved	1
Foreseen involvement	Organization of 1 event.
Feedback from HEAs	Positive
Action monitoring	
HEAs activity	Number of addressed families participating at the events.
Control group	Not foreseen.
Monitoring tools	If possible, follow-up with families that leave their contact. Questionnaire on their consumption habits and change in them.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Disabled people and their families.
SWOT analysis	
Strengths	The target of disabled people is a very vulnerable target and mostly in need of energy advice.
Weaknesses	The energy need of the target is not due to personal preferences but rather related to contingent physical needs.
Opportunities	Organise events and activities to increase awareness on energy needs and consumption as well as the energy market and social and energy financial support.
Threats	Low possibility to actually implement or take up general energy efficiency advice.
Lessons learned and misalignment with original planning	
Lessons learned	Families with a disabled people are most in need of advice on energy needs and consumption but rarely have the time and mind-openness to actually learn more.
Misalignment with D5.2 and D5.4	This soft/engagement activity was not originally planned in D5.4 but we managed to carry it out thanks to the collaboration and support of social workers.

4.3.6 Soft/engagement activity #6 (Energy café at energy provider premises)

Energy café at energy provider premises	
Action description	
Dates of action	May 2019 – July 2019
Action target	Vulnerable families.
Geographic dimension	Local
Geographic area	City of La Spezia.
Number of involved users	2 households.
Success rate	2 households.
Action tools	Not available.

HEAs involvement	
Type of HEA	Energy provider.
Number of HEAs involved	1
Foreseen involvement	Organization of 1 event.
Feedback from HEAs	Positive
Action monitoring	
HEAs activity	Number of addressed families participating at the events.
Control group	Not foreseen
Monitoring tools	If possible, follow-up with families that leave their contact. Questionnaire on their consumption habits and change in them.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Vulnerable families clients of the energy provider.
SWOT analysis	
Strengths	Real and correct data on energy consumption.
Weaknesses	Not direct contact with vulnerable consumers and difficult to understand the level of vulnerability during a conversation on energy contracts with the clients.
Opportunities	Possibility of reaching a high number of people (clients) and of providing them with energy advice (not specifically targeting energy poverty and vulnerability).
Threats	Risk of not correct communication and stigmatisation of the person.
Lessons learned and misalignment with original planning	
Lessons learned	Ethic issues may affect the whole action.
Misalignment with D5.2 and D5.4	This soft/engagement activity was not originally planned in D5.4 but we managed to carry it out thanks to the collaboration and support of a the HEAs coming from energy providers.

4.3.7 Soft/engagement activity #7 (Energy café at charity premises)

Energy café at energy at charity premises	
Action description	
Dates of action	April 2019
Action target	Vulnerable families.
Geographic dimension	Local
Geographic area	City of Verbania.
Number of involved users	13 households.
Success rate	30% of households leaving their e-mail address/phone number for a second contact.
Action tools	Factsheets with advice on electricity appliance, electricity bills, low-cost energy efficiency measures, questionnaires, etc..
HEAs involvement	
Type of HEA	Volunteer
Number of HEAs involved	1
Foreseen involvement	Organization of 1 event.

Feedback from HEAs	Positive
Action monitoring	
HEAs activity	Number of involved families – number of households leaving their contact for a follow-up.
Control group	Not foreseen.
Monitoring tools	If possible, follow-up with families that leave their contact. Questionnaire on their consumption habits and change in them.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency and available subsidies for vulnerable consumers.
SWOT analysis	
Strengths	Energy Cafès are powerful tools to involve people whom otherwise would be difficult to reach by other means. The support of volunteer is fundamental to identify the consumers who are more in need and could benefit of the support provided by such actions.
Weaknesses	The scarcity of people willing to be involved in the organization of Energy Cafès have limited the number of such events.
Opportunities	Involvement of people who otherwise would have never been involved.
Threats	Some people who could not be involved, might come to know about the only organized Energy Café at a later stage and thus might complain about the fact that they have not been invited, thus giving a negative publicity of such event.
Lessons learned and misalignment with original planning	
Lessons learned	At least 2 Energy Cafès in a row should be organized, in order to allow more people to participate and avoid complaints from those who were not able to participate to the first one.
Misalignment with D5.2 and D5.4	This soft/engagement activity was not originally planned in D5.4 but we managed to carry it out thanks to the collaboration and support of a local volunteer.

4.3.8 Soft/engagement activity #8 (Education activity at trade union premises)

Education activity at trade union premises	
Action description	
Dates of action	October 2019
Action target	Vulnerable families.
Geographic dimension	Local
Geographic area	City of Trapani.
Number of involved users	7 households.
Success rate	7 households.
Action tools	Not available.
HEAs involvement	
Type of HEA	Trade union volunteers.
Number of HEAs involved	1

Foreseen involvement	Organization of 1 event.
Feedback from HEAs	Positive
Action monitoring	
HEAs activity	Number of addressed families participating at the events.
Control group	Not foreseen.
Monitoring tools	If possible, follow-up with families that leave their contact.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency and available subsidies for vulnerable consumers – in particular social bonus.
SWOT analysis	
Strengths	Informal environment allowed for an open debate with vulnerable families.
Weaknesses	The scarcity of people willing to be involved in the action with the questionnaire.
Opportunities	Involvement of people who otherwise would have never been involved – especially because living in an island with high absolute poverty incidence.
Threats	Low possibility to actually implement or take up any bonus advice, because of the unwillingness of follow-up.
Lessons learned and misalignment with original planning	
Lessons learned	Vulnerable families are most in need of advice on energy needs and consumption but rarely have the mind-openness to actually learn more. Need of more than just a single event, although there are difficulties to engage vulnerable families on a series of meeting.
Misalignment with D5.2 and D5.4	This soft/engagement activity was not originally planned in D5.4 but it was possible to carry it out thanks to the collaboration and support of trade union volunteers.

4.3.9 Soft/engagement activity #9 (Distribution of material and provision of information to targeted consumers)

Distribution of material and provision of information to targeted consumers	
Action description	
Dates of action	September 2019 – December 2019
Action target	Vulnerable consumers.
Geographic dimension	National
Geographic area	Italy
Number of involved users	6,000 consumers.
Success rate	Material were distributed and information were provided to 3,277 consumers.
Action tools	Factsheets with advice on electricity appliance, electricity bills, low-cost energy efficiency measures, energy providers, etc..
HEAs involvement	
Type of HEA	Consumer association volunteers.
Number of HEAs involved	6
Foreseen involvement	Distribution of material to consumers.

Feedback from HEAs	Positive
Action monitoring	
HEAs activity	Number of involved consumers and number of households leaving their contact for a follow-up.
Control group	Not foreseen.
Monitoring tools	If possible, follow-up with families that leave their contact. Questionnaire on their consumption habits and change in them.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency and available subsidies for vulnerable consumers.
SWOT analysis	
Strengths	The distribution of material is useful to get in touch with a large audience and provide them a broad spectrum of information.
Weaknesses	Due to the huge number of information which are provided to people through the course of the day, people might be annoyed and thus provide low attention to the information received by people involved in the ASSIST actions.
Opportunities	Create a regular information flow to keep consumers engaged.
Threats	A lot of consumers tend to lose interest after the first contact and therefore it is important to keep them interested with an appealing way to provide information.
Lessons learned and misalignment with original planning	
Lessons learned	A detailed plan on which information to send to consumers and how to organize them should be defined well in advance. Moreover, consumers should be divided into target groups and tailor made information should be provided to each of them.
Misalignment with D5.2 and D5.4	None

4.3.10 Soft/engagement activity #10 (Online help desk on efficient behaviour and energy bills)

Online help desk on efficient behaviour and energy bills	
Action description	
Dates of action	September 2019 – December 2019
Action target	Vulnerable families seeking advice at the online helpdesk.
Geographic dimension	Local
Geographic area	City of Parma and its neighbour.
Number of involved users	5,000 potential households.
Success rate	Consultancy on efficient behaviour and energy bills was provided to 2,958 consumers.
Action tools	Provision of consultancy about energy efficiency and energy bills issues, including available subsidies for vulnerable consumers.
HEAs involvement	
Type of HEA	Public body employee.
Number of HEAs involved	1

Foreseen involvement	Online help desk.
Feedback from HEAs	Positive
Action monitoring	
HEAs activity	Number of involved families and number of households leaving their contact for a follow-up.
Control group	Not foreseen.
Monitoring tools	If possible, follow-up with families that leave their contact. Questionnaire on their consumption habits and change in them.
Large control group	Not foreseen for this activity.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency and available subsidies for vulnerable consumers.
SWOT analysis	
Strengths	Possibility to get directly in contact with vulnerable consumers who are in need about a specific issue. Possibility to gain consumer's trust and create a long term relationship, which might also involve other people close to the consumer.
Weaknesses	Difficulty to obtain data from the bills.
Opportunities	The help desk might become a regular event to share and discuss with the consumers about energy issues.
Threats	Consumers might not be aware of the existence of the help desk, which should be advertised as much as possible.
Lessons learned and misalignment with original planning	
Lessons learned	The way to interact through the help desk should be as user friendly as possible.
Misalignment with D5.2 and D5.4	None

4.3.11 Soft/engagement activity #11 (Consumers' workshop)

Consumers' workshop	
Action description	
Dates of action	December 2019
Action target	Old people (vulnerable consumers) seeking advice on energy consumption.
Geographic dimension	Local
Geographic area	City of Grassano and its neighbour.
Number of involved users	25 potential households.
Success rate	Consultancy to more than 25 participants was provided on household energy consumption and financial support.
Action tools	ASSIST factsheets and slides prepared by HEAs.
HEAs involvement	
Type of HEA	Operator of AUSER (association for elderly people).
Number of HEAs involved	1
Foreseen involvement	Presence help desk.
Feedback from HEAs	Positive
Action monitoring	

HEAs activity	Number of ex-ante questionnaires collected and feedback from consumers.
Control group	Not foreseen.
Monitoring tools	If possible, follow-up with families that leave their contact. Questionnaire on their consumption habits and change in them.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Direct contact with old people very interested on household energy consumption and contracts issues.
SWOT analysis	
Strengths	Direct contact with vulnerable consumers and direct advice answering to specific information and problem needs.
Weaknesses	Organisation of events are time and money consuming and allow to reach a small target (50 participants).
Opportunities	Advice and support in the future through direct contact and/or other events and through word-of-mouth possibility to address and engage more vulnerable consumers.
Threats	Participation in similar events may be due not only to interest in the topic but also to do something during the day and may not lead to reducing energy poverty.
Lessons learned and misalignment with original planning	
Lessons learned	Events addressing consumers must be local and must be organized by actors working directly on the field.
Misalignment with D5.2 and D5.4	Not foreseen initially but emerged during the course of the project development.

4.3.12 Soft/engagement activity #12 (Consumers' workshop)

Consumers' workshop	
Action description	
Dates of action	23 January 2020
Action target	Vulnerable consumers.
Geographic dimension	Local
Geographic area	City of Rome.
Number of involved users	50
Success rate	Direct consultancy to 50 participants was provided on household energy consumption and financial support.
Action tools	ASSIST factsheets and videos and slides prepared.
HEAs involvement	
Type of HEA	Operator of social association.
Number of HEAs involved	1
Foreseen involvement	Not foreseen.
Feedback from HEAs	Very positive.
Action monitoring	
HEAs activity	Number of ex-ante questionnaires collected and feedback from consumers.
Control group	Not foreseen.
Monitoring tools	If possible, follow-up with families that leave their contact. Questionnaire on their consumption habits and change in

	them.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Direct contact with (socially) vulnerable people very interested on household energy consumption and contracts issues.
SWOT analysis	
Strengths	Direct contact with vulnerable consumers and direct advice answering to specific information and problem needs. Creation of new contacts for future events.
Weaknesses	Organisation of events are time and money consuming and allow to reach a small target (50 participants).
Opportunities	Advice and support in the future through direct contact and/or other events and through word-of-mouth possibility to address and engage more vulnerable consumers.
Threats	Participation in similar events may be due not only to interest in the topic but also to do something during the day and may not lead to reducing energy poverty.
Lessons learned and misalignment with original planning	
Lessons learned	Events addressing consumers must be local with actors very well established on the ground.
Misalignment with D5.2 and D5.4	Not foreseen initially but emerged during the course of the project development.

4.3.13 Changes with regards to the Action Plan

The following soft/engagement activity activities originally planned in D5.4 were not carried out:

Activity	Justification
Energy café at high school premises	The students were very busy with the preparation of their final exam at high school and did not manage to organize the event.
General advice for social housing households	The collaboration with social housing, even if it represents a direct and optimal channel to reach consumers in energy poverty/vulnerability, is not easy to plan and monitor. This is mainly due to the work load and working conditions of the social housing. Social housing operators are in fact usually over loaded and have to deal with many different issues. Social housing operators do actually provide advice to their consumers however they do not have the time to properly report on the work done. For ASSIST, HEAs from two social housing contexts were trained and they actually delivered advice but it was not possible for them to precisely report on the advice given. Formally therefore it results that the action from the social housing operator was not delivered but it actually is only a reporting issue.
Home visits by social/health workers	
Dedicated advice for social housing households	
Consumers' workshop	

4.4 ASSIST Actions

4.4.1 Action #1 (Home visits and dedicated consultancy by social/health workers)

Home visits and dedicated consultancy by social/health workers	
Action description	
Dates of action	June 2019 – December 2019
Action target	All households followed by social/health workers.
Geographic dimension	National
Geographic area	L'Aquila, Sulmona and Camerino (all areas in which a big earthquake occurred).
Number of involved users	Potentially 100-200 households.
Success rate	10% of the households involved in the initiative.
Action tools	Factsheets with advice on electricity appliance, electricity bills, low-cost energy efficiency measures, etc..
HEAs involvement	
Type of HEA	Social workers or health workers.
Number of HEAs involved	3
Foreseen involvement	Visit the household and phone call/e-mail follow-up.
Feedback from HEAs	Very positive, as the assisted vulnerable households appreciated the advice and the support.
Action monitoring	
HEAs activity	Number of involved consumers.
Control group	10% of involved households providing their data on energy consumption and energy expenditure before and after.
Monitoring tools	Questionnaires to the families and check of energy bills.
Large control group	Not foreseen for this action.
Estimated energy savings	7% (for those who participate to the initiative).
Vulnerable consumers outreach	28 consumers have been reached and engaged through households visits.
SWOT analysis	
Strengths	Home visits allow to see the real living conditions of the person and to provide more precise advice relative to the single state.
Weaknesses	Time consuming, each home visit requires time to organise the meeting and time to carry out the visit.
Opportunities	Home visits may represent an opportunity to reduce risks related to other issues (health, fire, social isolation, etc.).
Threats	It may lead to dangerous (or non comfortable) situations.
Lessons learned and misalignment with original planning	
Lessons learned	Home visits can be carried out when there is a pre-existing trusty relation between the operator and the vulnerable consumer.
Misalignment with D5.2 and D5.4	None

4.4.2 Action #2 (Help desks counselling)

Help desks counselling for vulnerable consumers at consumers association premises	
Action description	
Dates of action	May 2019 – ongoing
Action target	All consumers going to consumers association helpdesks for issues about their energy bills.

Geographic dimension	National
Geographic area	Several regions and provinces all over Italy.
Number of involved users	Potentially 1,000 households.
Success rate	20% of the households involved in the initiative.
Action tools	Factsheets with advice on electricity appliance, electricity bills, low-cost energy efficiency measures, etc..
HEAs involvement	
Type of HEA	Consumers associations.
Number of HEAs involved	9
Foreseen involvement	Questionnaire and energy bills reading for baseline collection, follow-up calls/e-mails. Dedicated advice based on household habits and preferences.
Feedback from HEAs	The involved HEAs were happy about their activities and the practical help they were able to provide to vulnerable consumers.
Action monitoring	
HEAs activity	Number of involved consumers.
Control group	10% of involved households providing their data on energy consumption and energy expenditure before and after.
Monitoring tools	Questionnaires to the families and check of energy bills.
Large control group	Not foreseen for this action.
Estimated energy savings	7%
Vulnerable consumers outreach	<p>Dedicated consultancy about different issues:</p> <ul style="list-style-type: none"> - Analysis of energy bills (electric energy bills and/or gas bills); - Information about available subsidies; - Analysis of energy contracts (electric energy contracts and/or gas contracts); - Information about protected energy markets; - Request of subsidies; - Request to change energy contracts (electric energy contracts and/or gas contracts); - Information about behavioural measures and low-cost energy efficiency; <p>In total, 495 consumers have been reached and engaged through at least one of the actions listed above.</p>
SWOT analysis	
Strengths	Consumers associations are strongly rooted in the local context and thus are able to identify the consumer who are more in needs to receive support.
Weaknesses	A long time is required to carry out support actions due to the difficulties that might arise in the interaction with vulnerable families, often located in a challenging environment.
Opportunities	Actions carried out by consumers associations can really be effective due to their deep integration in the territory which allows the persistence of the actions over time.
Threats	N/A
Lessons learned and misalignment with original planning	
Lessons learned	<p>Involve consumers associations since the beginning of the project, ideally as partners in the consortium.</p> <p>Allow more time to HEAs for the collection of both the ex-</p>

	ante and the ex-post questionnaire to face the difficulties of interacting with vulnerable consumers. Increase the time between the compilation of the ex-ante questionnaire and the ex-post one, in order to monitor a longer period.
Misalignment with D5.2 and D5.4	Less vulnerable consumers were involved with respect to the original plan due to the difficulties found during the course of the activities, in particular during the collection of the ex-ate questionnaires.

4.4.3 Changes with regards to the Action Plan

The following actions activities originally planned in D5.4 were not carried out:

Activity	Justification
Dedicated advice for social housing households	The collaboration with social housing, even if it represents a direct and optimal channel to reach consumers in energy poverty / vulnerability, is not easy to plan and monitor. This is mainly due to the work load and working conditions of the social housing. Social housing operators are in fact usually over loaded and have to deal with many different issues. Social housing operators do actually provide advice to their consumers however they do not have the time to properly report on the work done. For ASSIST, HEAs from two social housing contexts were trained and they actually delivered advice but it was not possible for them to precisely report on the advice given. Formally therefore it results that the action from the social housing operator was not delivered but it actually is only a reporting issue.

4.5 Synergies

4.5.1 Synergy #1 (Help desks for Vulnerable Consumers through Charity organizations)

Help desks for Vulnerable Consumers through Charity organizations	
Action description	
Dates of action	September 2019 – December 2019
Action target	All consumers going to charity associations premises for issues about their energy bills.
Geographic dimension	Regional
Geographic area	Lombardia Region
Number of involved users	Potentially 100 households.
Success rate	20% of the households involved in the initiative.
Action tools	Factsheets with advice on electricity appliance, electricity bills, low-cost energy efficiency measures, etc..
HEAs involvement	
Type of HEA	Charity organizations
Number of HEAs involved	1
Foreseen involvement	Questionnaire and energy bills reading for baseline

	collection, follow-up calls/e-mails. Dedicated advice based on household habits and preferences.
Feedback from HEAs	The involved HEAs give a positive feedback about their activities to support vulnerable consumers.
Action monitoring	
HEAs activity	Number of involved families and number of households leaving their contact for a follow-up.
Control group	Not foreseen.
Monitoring tools	If possible, follow-up with families that leave their contact. Questionnaire on their consumption habits and change in them.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency and available subsidies for vulnerable consumers.
SWOT analysis	
Strengths	Charity organizations are already involved in projects supporting vulnerable consumers, thus making ASSIST action more effective as it part of a wider action already put in place by the charity organizations.
Weaknesses	It is necessary to plan carefully and in advance how the ASSIST actions might fit in the already existing workplan of the charity organization: this requires time which might not be available due to some constraints.
Opportunities	Synergies with actions already carried out by charity organization can be very effective due to their deep knowledge of the vulnerable consumers in the territories in which they operate, allowing also the continuation of the ASSIST action after the end of project.
Threats	N/A
Lessons learned and misalignment with original planning	
Lessons learned	Charity organizations should be involved since the beginning of the project, with the role of partners in the consortium, in order to have enough time at disposal to plan the integration of the ASSIST actions with the activities already in place by the charity organization.
Misalignment with D5.2 and D5.4	This synergy activity was not planned in D5.4 but we managed to implement it out through the involvement of a charity organization which very interested in the ASSIST action and in the possibility to use some of ASSIST outcomes in their activities to support vulnerable consumers already in place.

4.5.2 Synergy#2 (Distribution of material and provision of information to targeted consumers)

Distribution of material and provision of information to targeted consumers in synergy with other EP projects	
Action description	
Dates of action	November 2019 – December 2019
Action target	Vulnerable families in social housing.
Geographic dimension	Local

Geographic area	City of Milan and neighbourhood.
Number of involved users	200 potential households.
Success rate	Material and information were provided to 45 households.
Action tools	Factsheets, slides prepared by HEAs.
HEAs involvement	
Type of HEA	Charity organizations.
Number of HEAs involved	1
Foreseen involvement	Provision of material to households.
Feedback from HEAs	Positive
Action monitoring	
HEAs activity	Number of involved families participating at the event.
Control group	Not foreseen.
Monitoring tools	If possible, follow-up with families that leave their contact. Questionnaire on their consumption habits and change in them.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency and available subsidies for vulnerable consumers.
SWOT analysis	
Strengths	Energy caffè organised by social charities operator enable to reach the target and to have an high impact.
Weaknesses	Energy technical issues may not be properly discussed.
Opportunities	Synergies with different HEAs coming from different background would enable to combine the competencies and the experience of the two sides of energy poverty.
Threats	Problems faced by vulnerable consumers cannot be solved and are more socially serious.
Lessons learned and misalignment with original planning	
Lessons learned	It is important to organise these events with people and in context that are well known and are secure.
Misalignment with D5.2 and D5.4	This opportunity had not been planned but was built during the action delivery of the HEA.

4.5.3 Changes with regards to the Action Plan

The following synergies originally planned in D5.4 were not carried out:

Activity	Justification
Synergy with social housing support in energy bills	Due to strategy reorientation related to the internal reorganization of the partner's organization (MM in Milan, main manager organization of social housing in the city of Milan) there was a loss of interest in the activities and thus it was impossible to stipulate the agreement to carry it out.
Synergy with social housing refurbishment	The collaboration with social housing, even if it represents a direct and optimal channel to reach consumers in energy poverty / vulnerability, is not easy to plan and monitor. This is mainly due to the work load and working conditions of the social housing. Social housing operators are in fact usually over loaded and have to deal with many different issues. Social housing operators do actually provide advice to their consumers however they do not have the time to properly

	<p>report on the work done.</p> <p>For ASSIST, HEAs from two social housing contexts were trained and they actually delivered advice but it was not possible for them to precisely report on the advice given. Formally therefore it results that the action from the social housing operator was not delivered but it actually is only a reporting issue.</p>
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4.6 Summary of misalignment with the original ASSIST action plan

The table below show the misalignments between the original action plan and the activities which were actually carried out:

Soft/engagement activity	PLANNED IN D5.2/D5.4	CARRIED OUT
Energy Cafè at high school premises	x	
Advice at home supplies shop (Leroy Merlin)	x	x (Soft/engagement activity #1)
General advice for social housing households	x	
Home visits by social/health workers	x	
Help desks counselling for vulnerable consumers	x	x (Soft/engagement activities #3, #9, #10)
Dedicated advice for social housing households	x	
Synergy with social housing support in energy bills	x	
Synergy with social housing refurbishment	x	
Synergy with help desks for Vulnerable Consumers through Charity organizations		x (Synergy#1)
Synergy with distribution of material and provision of information to targeted consumers		x (Synergy #2)
Energy Cafè		x (Soft/engagement activities #2, #5, #6, #7, #11, #12)
Education activity at disabled pupils school		x (Soft/engagement activity #4)
Education activity at trade union premises		x (Soft/engagement activity #8)
Actions	PLANNED IN D5.2/D5.4	CARRIED OUT
Home visits by social/health workers	x	x (Action #1)
Help desks counselling for vulnerable consumers	x	x (Action #2)
Dedicated advice for social housing households	x	

Synergy with social housing support in energy bills	x	
Synergy with social housing refurbishment	x	

4.7 Stakeholders feedbacks

The HEAs who participated in the different ASSIST activities (soft/engagement activities, actions and synergies) gave a positive feedback about involvement; they appreciated, in particular, the ASSIST training program and courses, which allowed both to learn new things and to update their knowledge about the issues related to energy poverty, and the creation of the European networks, which allowed them to get in contact with other HEAs belonging to different organizations in other countries, with mutual benefits. The only complaints were about the limited time available to carry out ASSIST actions (due to short duration of the whole ASSIST project, which forced a rapid pace for all the activities) and low amount of money to cover expenses in which they occurred, which had to be financed by other sources.

The involved consumers also gave positive feedback about the activities and the actions in which they were involved. In particular, the dedicated consultancy and the related material received by them were appreciated because they were tangible tools to be used, almost immediately, in their daily lives to improve their life conditions.

4.8 Conclusions

The overall output of the ASSIST activities implemented so far can be considered successful: although it was not possible to implement some activities originally planned in D5.4 due the difficulties and the challenges encountered during the course of the project, they were replaced by some other successful activities.

This was possible thanks to the engagement activities carried out at the Italian level which has led to the creation of a large stakeholders network with many actors willing to cooperate with the ASSIST2gether project partners and implement activities in the field.

The timing of the ASSIST project (and of EU funded projects in general) requires a detailed planning which does not leave much room to face potential unexpected events and difficulties: such elements, unfortunately, have a large probability to arise for sure when dealing with challenging environments such the ones in which vulnerable consumers live.

The strong involvement of stakeholders dealing with vulnerable consumers in their daily activities helps to partly overcome this problem, although it would be better to involve such stakeholders since the beginning of the project, with the role of partners.

All the actions detailed in the previous paragraphs, will continue in the next months, in order to reach the required target of engaged consumers by the end of the project. The final results will be presented in D5.5, with the achieved results.

4.9 Executive summary in national language

Si riporta di seguito, un riepilogo in italiano delle varie attività che sono state effettuate o sono in corso di implementazione a livello nazionale in Italia. I dettagli di ogni singola attività sono riportati nei paragrafi precedenti in inglese.

- Attività di coinvolgimento degli utenti vulnerabili:
 - #1 → Consigli sull'efficienza energetica presso il negozio Leroy Merlin;
 - #2 → Energy cafès;

- #3 → Consulenza su aspetti finanziari;
- #4 → Attività educative presso una scuola con student disabili;
- #5 → Energy café + Attività educative da parte di operatori in ambito sociale;
- #6 → Energy café presso la sede di un fornitore di energia;
- #7 → Energy café presso la sede di un'associazione di volontariato;
- #8 → Attività educative presso la sede di un sindacato;
- #9 → Distribuzione di materiale e fornitura di informazioni ad utenti vulnerabili selezionati;
- #10 → Servizio d'assistenza online su comportamenti efficienti e bollette energetiche;
- #11 → Workshop con utenti vulnerabili;
- #12 → Workshop con utenti vulnerabili.
- Azioni sul campo del progetto ASSIST:
 - Azione #1 → Visite porta a porta e consulenza dedicata da parte di operatori in ambito socio-sanitario;
 - Azione #2 → Servizio d'assistenza online per utenti vulnerabili presso la sede di un'associazione di consumatori.
- Sinergie con altri progetti:
 - Sinergia #1 → Servizio d'assistenza online per utenti vulnerabili presso la sede di un'associazione di volontariato;
 - Sinergia #2 → Distribuzione di materiale e fornitura di informazioni ad utenti vulnerabili selezionati;

In totale, ci sono **101 TED completamente formati** and 204 studenti di scuola superiore formati con un breve corso di formazione per TED. Inoltre, ci sono anche 11 **TED** che non hanno completato l'intero corso ma sono entrati a far parte della rete dei TED e hanno svolto qualche attività.

Un riassunto delle attività di cui i TED sono responsabili e che hanno completato o stanno portando avanti è riportata nella tabella sotto.

Numero di TED formati per tipologia	Attività implementata dai TED
204 studenti di scuola superiore (198 Leroy Merlin, 6 RSE)	Attività di coinvolgimento #1
10 da un sindacato (FLAEI)	Attività di coinvolgimento #8 Attività di coinvolgimento #9 Azione sul campo #2
23 da varie associazioni di consumatori (Federconsumatori, Adiconsum)	Attività di coinvolgimento #2 Attività di coinvolgimento #9 Azione sul campo #2
24 da varie compagnie operanti in ambito energetico	Attività di coinvolgimento #6 Attività di coinvolgimento #9 (I TED di alcune compagnie non ha fatto alcune azione per motivi interni, in quanto inizialmente il responsabile con cui ci eravamo interfacciati ha lasciato l'azienda ed è stato sostituito da altre persone senza che però ci fosse una chiara volontà dell'azienda di fare qualcosa).
5 da varie compagnie private	Nessuna azione implementata o in corso di implementazione al momento a causa della difficoltà di entrare in contatto con consumatori vulnerabili e a motivi personali di sentirsi inadeguati a dare consigli (ex. timore di ricevere domande difficili a cui non

	avrebbero saputo dare risposte).
15 da vari enti pubblici	Attività di coinvolgimento #10 (Alcuni TED non hanno volto alcuna azione per motivi di tempo e problemi interni, causati dalla dimissione di un assessore prima ed, in seguito, del responsabile del PAES e del progetto di avviare sportelli per i cittadini su Roma con tutto lo slittamento dei tempi (e delle volontà politiche) che ciò comporta).
3 da operatori di edilizia popolare	Nessuna azione implementata o in corso di implementazione al momento per mancanza di tempo ed eccessivo lavoro.
1 disoccupato (potenziale utente vulnerabile)	Nessuna azione implementata o in corso di implementazione al momento a causa della mancanza di tempo da dedicare per lo svolgimento delle varie attività di ASSIST.
25 lavoratori operanti in ambito sociale (studenti ed operatori in ambito universitario)	Attività di coinvolgimento #3 Attività di coinvolgimento #4 Attività di coinvolgimento #5 Attività di coinvolgimento #9 Azione sul campo #1
2 da un'associazione di volontariato	Attività di coinvolgimento #7 Attività di coinvolgimento #11 Attività di coinvolgimento #12 Sinergia #1 Sinergia #2

Il risultato complessivo delle attività del progetto ASSIST implementate fino ad ora può essere considerato soddisfacente: sebbene non sia stato possibile attuare alcune attività originariamente pianificate (come si può vedere nel D5.4) a causa delle difficoltà incontrate e delle sfide che si sono dovute affrontare nel corso del progetto, tali attività sono state sostituite con successo da altre attività.

Ciò è stato possibile grazie alle attività di coinvolgimento svolte a livello italiano che hanno portato alla creazione di una grande rete di stakeholder con molti attori disposti a collaborare con i partner del progetto ASSIST e implementare attività sul campo.

I tempi del progetto ASSIST (e dei progetti finanziati in ambito europeo in generale) richiedono una pianificazione dettagliata che non lascia molto spazio per affrontare potenziali eventi e difficoltà imprevisti: tali elementi, sfortunatamente, hanno sicuramente una grande probabilità di presentarsi quando si ha a che fare con ambienti difficili come quelli in cui vivono gli utenti vulnerabili.

Il forte coinvolgimento delle parti interessate che si occupano di utenti vulnerabili nelle loro attività quotidiane aiuta a superare parzialmente questo problema, sebbene sarebbe meglio coinvolgere tali parti interessate fin dall'inizio del progetto, con il ruolo di partner.

Tutte le azioni dettagliate nei paragrafi precedenti in inglese continueranno nei prossimi mesi e i risultati finali saranno presentati nel D5.5, con i risultati finali raggiunti in termini di KPIs.

Poland

5.1 Planning of ASSIST Actions

A summary of all the activities already performed or planned and currently ongoing at the Polish level is shown below, while the details of each activity and the HEAs who are responsible for them is reported in the next paragraphs:

- Soft/engagement activities:
 - Soft/engagement activity #1 → Helpdesk in Energy Bus;
 - Soft/engagement activity #2 → HEA's relatives;
 - Soft/engagement activity #3 → Helpdesk advice in local FK branches;
 - Soft/engagement activity #4 → Helpline – phone;
 - Soft/engagement activity #5 → Meetings with consumers.
- ASSIST Actions:
 - Action #1 → HEA's home visits by municipality advisors;
 - Action #2 → HEA's home visits by consumer organisation;
 - Action #3 → HEA's tailored desk advices and solutions.
- Synergies:
 - Synergy #1 → Energy Bus (described in Soft/engagement activity #1).

5.2 HEAs training and activities

In total, there are **150** fully-trained HEAs and 53 HEAs who actively perform ASSIST Action.

Parameter	Result
Number of HEAs subscribed to the training	183
Number of HEAs completing the training	150
Number of HEAs actively performing ASSIST action	53

Main types of involved HEAs:

- Social workers: 26 HEAs trained, 26 performing the action;
- Municipality workers: 44 HEAs trained, 20 performing the action;
- Professional Energy Advisors: 81 HEAs trained, 0 performing the action;
- Consumer Associations: 10 HEAs trained, 7 performing the action.

The above summary clearly shows that the consultancy work is carried out by institutions that were previously involved (in different areas) in activities requiring contact with an individual consumer. Nevertheless, we decided to train a group with lower potential but with a high level of substantive, professional knowledge. There is potential for return our investment in training and we suppose that Professional Energy Advisors will be active in direct consumers advising. They are not active as a member of HEA network, they do not make a reports on savings but they have knowledge and they are able to make a high level professional advice directly to consumers.

5.3 Involvement of consumers through soft/engagement activities

5.3.1 Soft/engagement activity #1 (Helpdesk in Energy Bus)

Helpdesk in Energy Bus	
Action description	
Dates of action	01/07/2018 – 22/11/2019
Action target	Consumers, Inhabitants of Małopolska Region.
Geographic dimension	Regional
Geographic area	Units in Małopolska Region.
Number of involved users	430 people.
Success rate	N/A
Action tools	Providing tailored advice and solutions on energy efficiency measures and habit change, energy tariffs but also service and support available e.g. if person is eligible for financial support (social bonus p.e). Factsheets, Checklists, equipment of The Energy Bus.
HEAs involvement	
Type of HEA	Municipality workers (Eco-Managers from Małopolska Region).
Number of HEAs involved	15
Foreseen involvement	Not foreseen.
Feedback from HEAs	It is very good way to show people ways of energy efficiency (but not only dedicate it to vulnerable consumers).
Action monitoring	
HEAs activity	Short consultancy about energy efficiency – helpdesk.
Control group	Not foreseen.
Monitoring tools	Not foreseen.
Large control group	Not foreseen.
Estimated energy savings	2%
Vulnerable consumers outreach	430
SWOT analysis	
Strengths	Energy Bus is a place where everyone could find something interesting for himself, even he is a child or adult, he does not know anything about energy efficiency or he is professionalist in these area. However this is a good place to show energy efficiency in practice.
Weaknesses	Helpdesk is inside the Bus – not everyone would like to come in – people are scared of payment etc.They do not know what they can ask about.
Opportunities	Involvement of people who otherwise would have never been involved. Energy Bus takes part in local events where everybody goes (it is for free) so everybody could come and HEA could reach vulnerable consumer to give advices for them.
Threats	If there is a lot of people and there is not enough time to talk with everybody personally there is risk that people could give up help.
Lessons learned and misalignment with original planning	
Lessons learned	The Energy Bus strengthen other local campaigns, events focuses in energy efficiency and encouraged made it easier for people to find more information about energy efficiency – more people joined to local educational action!

	If we have more small gadgets and leaflets to encourage consumers and make more attractive invitation/coming to bus. Promotion of the event could be for vulnerable consumers.
Misalignment with D5.2 and D5.4	N/A

5.3.2 Soft/engagement activity #2 (HEA's relatives)

HEA's relatives	
Action description	
Dates of action	01/07/2018 – 30/11/2019
Action target	All HEAs to give advice to their relatives, neighbours, friends.
Geographic dimension	National
Geographic area	All HEAs areas in every Voivodeship.
Number of involved users	200 households.
Success rate	N/A
Action tools	Advice on electricity appliance, electricity bills, low-cost energy efficiency measures, questionnaires, etc.
HEAs involvement	
Type of HEA	Trained HEA.
Number of HEAs involved	20
Foreseen involvement	Informal talks with their closest.
Feedback from HEAs	Very effective channel, but limited in terms of scope.
Action monitoring	
HEAs activity	Number of households leaving their contact for a follow-up.
Control group	Not foreseen.
Monitoring tools	Not foreseen.
Large control group	Not foreseen.
Estimated energy savings	2%
Vulnerable consumers outreach	200 households.
SWOT analysis	
Strengths	Easy access, without time pressure.
Weaknesses	Limited scope.
Opportunities	Follow up and evaluation much simpler than in other channels.
Threats	Involving relatives who are not energy vulnerable.
Lessons learned and misalignment with original planning	
Lessons learned	Relatives, neighbours and friends are a target group which is limited, but the outputs are very satisfactory. The level of trust (that we are not going to sell anything, but try to help) is very high, therefore consumers from this group paid attention much better than average household. We can go back to those household to evaluate action quality, savings etc. after several months. It could be very useful to empower the target group for further dissemination – to their relatives, neighbours and friends and reach more households this way.
Misalignment with D5.2 and D5.4	N/A

5.3.3 Soft/engagement activity #3 (Helpdesk advice in local FK branches)

Helpdesk advice from FK local branches	
Action description	
Dates of action	November 2018 – December 2019
Action target	Vulnerable Consumers across Poland.
Geographic dimension	National
Geographic area	Poland
Number of involved users	700
Success rate	N/A
Action tools	Giving advice on energy efficiency, energy optimization, energy habit changes, energy tariffs, low cost and non-cost advice about energy savings in households. Support in obtaining knowledge and money from possible funds (like energy supplement, social supplement and other).
HEAs involvement	
Type of HEA	Consumer organisation.
Number of HEAs involved	5
Foreseen involvement	Not foreseen.
Feedback from HEAs	Difficulties with bills and tariffs – some consumers had to visit us twice because of lack of documents during first visit.
Action monitoring	
HEAs activity	Giving advice on energy efficiency, energy optimization, energy habit changes, energy tariffs, low cost and non-cost advice about energy savings in households. Support in obtaining knowledge and money from possible funds (like energy supplement, social supplement and other).
Control group	Not foreseen.
Monitoring tools	Not foreseen.
Large control group	Not foreseen.
Estimated energy savings	2%
Vulnerable consumers outreach	700
SWOT analysis	
Strengths	Face to face interviews with possibility of giving targeted advices and collecting more data about the households.
Weaknesses	Concluding about people's problems basing on interviews with people and their situation without possibility of seeing house and its problem which could influence on the high energy usage and (implicated) high costs of energy.
Opportunities	Meeting with Eco-Managers for the first time during this kind of meeting is some kind of introduce themselves and give an opportunity to know (for the future) where to find help in another kind of problems like energy issues. This is also way of showing people from the Municipality and City Hall.
Threats	Risk of promotion – not everybody could get information about this. People have to know that they have a problem and they have to find information.
Lessons learned and misalignment with original planning	

Lessons learned	Not everyone would like to talk about their personal problems, because they are ashamed.
Misalignment with D5.2 and D5.4	N/A

5.3.4 Soft/engagement activity #4 (Helpline – phone)

Helpdesk advice from FK local branches	
Action description	
Dates of action	November 2018 – December 2019
Action target	Vulnerable Consumers across Poland.
Geographic dimension	National
Geographic area	Poland
Number of involved users	700
Success rate	N/A
Action tools	Giving advice on energy efficiency, energy optimization, energy habit changes, energy tariffs, low cost and non-cost advice about energy savings in households. Support in obtaining knowledge and money from possible funds (like energy supplement, social supplement and other).
HEAs involvement	
Type of HEA	Consumer organisation.
Number of HEAs involved	5
Foreseen involvement	Not foreseen.
Feedback from HEAs	Difficulties with bills and tariffs – some consumers had to visit us twice because of lack of documents during first visit.
Action monitoring	
HEAs activity	Giving advice on energy efficiency, energy optimization, energy habit changes, energy tariffs, low cost and non-cost advice about energy savings in households. Support in obtaining knowledge and money from possible funds (like energy supplement, social supplement and other).
Control group	Not foreseen.
Monitoring tools	Not foreseen.
Large control group	Not foreseen.
Estimated energy savings	2%
Vulnerable consumers outreach	700
SWOT analysis	
Strengths	Face to face interviews with possibility of giving targeted advices and collecting more data about the households.
Weaknesses	Concluding about people's problems basing on interviews with people and their situation without possibility of seeing house and its problem which could influence on the high energy usage and (implicated) high costs of energy.
Opportunities	Meeting with Eco-Managers for the first time during this kind of meeting is some kind of introduce themselves and give an opportunity to know (for the future) where to find help in another kind of problems like energy issues. This is also way of showing people from the Municipality and City Hall.

Threats	Risk of promotion – not everybody could get information about this. People have to know that they have a problem and they have to find information.
Lessons learned and misalignment with original planning	
Lessons learned	Not everyone would like to talk about their personal problems, because they are ashamed.
Misalignment with D5.2 and D5.4	N/A

5.3.5 Soft/engagement activity #5 (Meetings with consumers)

Meetings with consumers	
Action description	
Dates of action	November 2018 – December 2019
Action target	Municipality workers' users.
Geographic dimension	Local
Geographic area	5 towns and cities.
Number of involved users	100
Success rate	% of the involved households.
Action tools	Giving advice on energy efficiency, energy optimization, energy habit changes, energy tariffs, low cost and non-cost advice about energy savings in households. Support in obtaining knowledge and money from possible funds (like energy supplement, social supplement and other).
HEAs involvement	
Type of HEA	Municipality workers.
Number of HEAs involved	5
Foreseen involvement	Not foreseen.
Feedback from HEAs	Good way of introducing HEAs to people.
Action monitoring	
HEAs activity	Meeting with inhabitants, spreading energy efficiency gadgets with description how to use it and factsheets with energy tips.
Control group	Not foreseen.
Monitoring tools	Not foreseen.
Large control group	Not foreseen.
Estimated energy savings	2%
Vulnerable consumers outreach	100
SWOT analysis	
Strengths	Face to face interviews with possibility of giving targeted advices and collecting more data about the households.
Weaknesses	Concluding about people's problems basing on interviews with people and their situation without possibility of seeing house and its problem which could influence on the high energy usage and (implicated) high costs of energy.
Opportunities	Meeting with Eco-Managers for the first time during this kind of meeting is some kind of introduce themselves and give an opportunity to know (for the future) where to find help in another kind of problems like energy issues. This is also way of showing people from the Municipality and City Hall.

Threats	Risk of promotion of this kind of meeting – not everybody could get information about this kind of events. People have to know that they have a problem and they have to find information about the meeting.
Lessons learned and misalignment with original planning	
Lessons learned	The groups should not be bigger than 15 people. Not everyone would like to talk about their personal problems, because they are ashamed.
Misalignment with D5.2 and D5.4	Not foreseen in ASSIST Action Plan.

5.3.6 Changes with regards to the Action Plan

Advice provided by dedicated employees of energy companies were not performed. It was too complicated to implement this activity into daily companies business. Near the end of the project we still talk to companies, but the project time-frame was not enough to implement it in practice.

5.4 ASSIST Actions

5.4.1 Action #1 (HEA's home visits by municipality advisors)

HEA's home visits by municipality advisors	
Action description	
Dates of action	01/07/2018 – 30/11/2019
Action target	Welfare System's Users and Municipality workers' users.
Geographic dimension	Local
Geographic area	17 towns and cities.
Number of involved users	1-2 households per advisor doing (around 35 consumers).
Success rate	% of the involved households.
Action tools	Giving advice on energy efficiency, energy optimization, energy habit changes, energy tariffs, low cost and non-cost advice about energy savings in households. Support in obtaining knowledge and money from possible funds (like energy supplement, social supplement and other).
HEAs involvement	
Type of HEA	Consumer organisation (FK) and welfare system workers.
Number of HEAs involved	46
Foreseen involvement	House visits after initial selection.
Feedback from HEAs	Good way of introducing HEAs to poor people who are under the welfare system help.
Action monitoring	
HEAs activity	House visits, spreading energy efficiency gadgets with descriptions how to use it and factsheets with energy tips.
Control group	Not foreseen.
Monitoring tools	Ex-ante and ex post questionnaire on their consumption habits and change in them. If possible meter reading before-after.
Large control group	Not foreseen for this action.
Estimated energy savings	7%
Vulnerable consumers outreach	370 households.
SWOT analysis	

Strengths	Face to face interviews with possibility of giving targeted advices and collecting more data about the households. Showing people problems with their houses which could influence on the high energy usage and (implicated) high costs of energy.
Weaknesses	If HEA is not a social welfare worker, he does not know personally families and not everybody would like to talk with them, so in many situations HEA had to go on the visits with social worker. There is needed time before the home visit to set the right day of the meeting. There is a need of transport between place of work and households of energy poor people.
Opportunities	Meeting with Eco-Managers for the first time during the home visits give an opportunity to know (for the future) where to find help in another kind of problems like energy issues. This is also way of showing people from the Municipality and City Hall.
Threats	Energy poor could think that the help will “find them itself” without their engagement.
Lessons learned and misalignment with original planning	
Lessons learned	Not every household, which was suggested to Municipality Workers by Welfare System, was energy poor. Some of them were only under Welfare System help, e.g. because of the health issues.
Misalignment with D5.2 and D5.4	Not only Welfare System's Users but also Municipality workers' users were Action targets. It was said that will be done 1-2 households per advisor doing (around 35 consumers). This amount was bigger in real. It was said that geographic area will be 4 – 8 cities. It was made in about 17 different localisations.

5.4.2 Action #2 (HEA's home visits by consumer organisation)

HEA's home visits by consumer organisation	
Action description	
Dates of action	01/07/2018 – 30/11/2019
Action target	Consumers advisors from consumer organization.
Geographic dimension	Regional
Geographic area	7 towns and cities.
Number of involved users	100 households.
Success rate	N/A
Action tools	Dedicated excel tool for evaluating potential and then achieved savings. Tool include possibility to create personalized leaflets with potential savings (calculated) for household.
HEAs involvement	
Type of HEA	Consumer organisation advisors.
Number of HEAs involved	7
Foreseen involvement	House visits after initial selection.

Feedback from HEAs	Tool for calculating savings is crucial.
Action monitoring	
HEAs activity	House visits.
Control group	Not foreseen.
Monitoring tools	Excel tool with ex-ante and ex-post questionnaire on their consumption habits and change in them. If possible meter reading before-after.
Large control group	Not foreseen for this action.
Estimated energy savings	7%
Vulnerable consumers outreach	100 households.
SWOT analysis	
Strengths	Calculation dedicated for household.
Weaknesses	Behavior changes merely give a small financial profit for consumer.
Opportunities	Consumers obtain their dedicated calculation, vulnerable consumers leaving in social houses can use it for negotiation with the house owner e.g. applying for insulation.
Threats	Consumers see that behavior changes merely give a small financial profit, to put them into practice environmental awareness is necessary.
Lessons learned and misalignment with original planning	
Lessons learned	A substantial part of vulnerable consumers doesn't know a lot about their energy bills and home equipment energy efficiency.
Misalignment with D5.2 and D5.4	D.5.2 - The representatives of the local Federacja Konsumentów centers are a members of the Market Actor Dialogue group. D 5.4 – We include to the excel file the mechanism making the ext post interview easier.

5.4.3 Action #3 (HEA's tailored desk advices and solutions)

HEA's tailored desk advices and solutions	
Action description	
Dates of action	01/07/2018 – 30/11/2019
Action target	Vulnerable consumers.
Geographic dimension	Regional/National.
Geographic area	Units in different regions in whole country.
Number of involved users	280 households.
Success rate	N/A
Action tools	Giving advice on energy efficiency, energy optimization, energy habit changes, energy tariffs, low cost and non-cost advice about energy savings in households. Support in obtaining knowledge and money from possible funds (like energy supplement, social supplement and other).
HEAs involvement	
Type of HEA	Office workers from Regional Units of FK.
Number of HEAs involved	10
Foreseen involvement	Integrated in the trained group's routine work.

Feedback from HEAs	Reported problem of frauds in door-to-door sale of energy. Usually connected with unfair contractual terms, high prices and contractual fines in case of earlier termination.
Action monitoring	
HEAs activity	Help desk - face to face advice.
Control group	Not foreseen.
Monitoring tools	Ex-ante questionnaire on their consumption habits and change in them. Also analysis of their energy consumption (invoice, meter reading).
Large control group	Not foreseen for this action.
Estimated energy savings	7%
Vulnerable consumers outreach	280 households.
SWOT analysis	
Strengths	Good contact with vulnerable consumers' – the effect of experience in consumer advice.
Weaknesses	Difficulty to follow changes in system; market (pricing) and administrative (support schemes).
Opportunities	Possibility to help in serious problems, connected with overindebtedness, contract dispute etc. More complex set of advices in one-time-stop.
Threats	Advisors in local points shall be trained regularly after the project – founding.
Lessons learned and misalignment with original planning	
Lessons learned	Combined consumer-energy advising scheme has a huge potential. Vulnerable consumers are often affected also by problems raising from general vulnerability. Protecting them from energy exclusion goes usually together with tackling financial and social exclusion. Low level of awareness is one of the most important challenges.
Misalignment with D5.2 and D5.4	N/A

5.4.4 Changes with regards to the Action Plan

There were no significant changes that affected the achievement of project indicators and results.

5.5 Synergies

5.5.1 Synergy #1 (Energy Bus)

Energy Bus was described in Soft/engagement activity #1.

5.5.2 Changes with regards to the Action Plan

There were no significant changes that affected the achievement of project indicators and results.

5.6 Stakeholders feedbacks

The HEAs who participated in the different ASSIST activities (soft/engagement activities, actions and synergies) gave a positive feedback about involvement; they appreciated, in particular, the ASSIST training program and courses, which allowed both to learn new things and to update their knowledge about the issues related to energy poverty.

Meetings with consumers is a very good way to show people ways of energy efficiency (but not only dedicate it to vulnerable consumers). Energy Bus is a place where everyone could find something interesting for himself, even he is a child or adult, he does not know anything about energy efficiency or he is professionalist in these area. However this is a good place to show energy efficiency in practice. It was also a very good way to involve people who otherwise would have never been involved. Energy Bus took part in local events where everybody goes (it is for free) so everybody could come and HEA have could reach vulnerable consumer to give advices for them.

Home visits were very good to give personnaly advices about everything which is important for people and their houses in each examples. Face to face interviews with possibility of giving targeted advices and collecting more data about the households. Showing people problems with their houses which could influence on the high energy usage and (implicated) high costs of energy. Home visits was prepared with cooperation with Local Welfare Systems. Not every household, which was suggested to Municipality Workers by Welfare System, was energy poor. Some of them were only under Welfare System help, e.g. because of the health issues.

Moreover, we are going to ask stakeholders for feedback with the action of dissemination final results of the project.

5.7 Conclusions

The overall output of the ASSIST activities implemented so far can be considered successful. Moreover we prepared more actions (like Meetings with consumers), which were not planned in D5.4 because of active preparion of ASSIST project.

We have assumed that for many consumers, the information on the annual energy consumption is not obvious, because not everyone is invoiced for the consumption (as it is with electricity and, more recently, with natural gas), but very often for the amount of fuel purchased. Different types of fuels are characterized by different heating values, which can be briefly explained in such a way that we can obtain different amounts of energy from 1 kg of hard coal and 1 kg of firewood, so converting such values requires some knowledge and practice.

HEA in Poland must face all these challenges and this is the main reason for development an excel tool for savings counting and covered the all needed data.

In order to facilitate the work of the advisors, the tool contains the list of the majority of the most common energy carriers in Poland (natural gas, LPG, hard coal, biomass, network heat, etc.) and enables entering data in various units, and then the tool automatically converts given quantities into kilowatt-hours. It is necessary to correctly compare the consumption in a given household with "typical" consumption. The standard values were determined on the basis of the report of the Central Statistical Office (in the scope of electricity) and the study of the National Energy Conservation Agency (in the field of energy for heating purposes and preparation of domestic hot water). The reference levels have been given in the form of an average value as well as in the form of the first and the third quartile, and they depend on the area of the premises/building, the year it was built, on whether the building was thermo-modernized and on the number of users. If the consumption is between the first and the third quartile, the tool displays a message that the consumption is typical. Reaching higher and lower values described earlier, triggers the display of the message about the risk of energy poverty. Exceeding typical values indicates that the user probably spends unnecessarily much on energy purposes, while lower consumption values may indicate that the user does not live in "comfort" conditions - buildings may be, for example, under-heated.

The next stage of the survey is to answer the questions selected individually for users of apartments and single-family buildings, and on the basis of these questions, the tool examines the possibility of carrying out optimization activities as well as it estimates the potential savings in an individualized way. Activities include, separately, heating purposes and preparation of domestic hot water as well as replacement of lighting and home appliances. Each of the selected activities, triggers the completion of a personalized information brochure about the amount of savings

resulting from the modernization as well as about the things that should be taken into account by the user to maximize the effect.

One of the assumptions of the program is to evaluate the savings achieved. Another survey after the period of achieving savings is required. Correct analysis requires taking into account seasonal trends. In the case of electricity and hot water consumption, it can be accepted with satisfactory accuracy that they are not subject to such trends, but in the case of energy for heating purposes, the basic factor affecting the amount of consumption is the outside temperature. The most common auditing practice used in comparing different years is the so-called method of heating degree days with regard to standard years. The advantage of the method is its simplicity and satisfactory accuracy in the case of buildings with a uniform profile of use - such as residential buildings. In connection with the above, this method was used in the calculation tool of the ASSIST program. For all cities included in the list available in the tool, the weather data in the field of an average monthly air temperature for the years 2016 and 2017 was collected and entering the temperatures from the evaluation year was allowed, and the number of heating days was adopted on the basis of the Energy Audit Regulation. Such consumption reference allows for an absolute assessment of the savings achieved and it compares them with what has been estimated in the survey.

A computational tool has been created, which we provide to HEA, who participate in our training.

The real problem is also to find the good way to promote all of the actions to reach all of the vulnerable consumers, who's energy poverty is very deep. Not everybody could get information about different local events. People have to know that they have a problem and they have to find information about the meeting.

All of the actions, which were described in the paragraphs above, will continue to be implemented in the next months. As a result, it will be possible to reach more vulnerable consumers and engage them in energy saving and improving their living conditions.

5.8 Executive summary in national language

Działania podejmowane w ramach WP5 ASSIST Action, skoncentrowane były na wsparciu HEA, w celu dotarcia do jak największej liczby osób dotkniętych lub narażonych na ubóstwo energetyczne oraz niesienia tym osobom pomocy.

Działania ASSIST Action można podzielić na:

- Działania miękkie:
 - #1 → Helpdesk w Autobusie energetycznym;
 - #2 → Współdziałanie HEA;
 - #3 → Pomoc helpdesk w lokalnych Oddziałach FK;
 - #4 → Helpdesk telefoniczny;
 - #5 → Spotkania z konsumentami.
- ASSIST Actions:
 - #1 → Wizyty domowe – HEA z Urzędów Miast i Gmin;
 - #2 → Wizyty domowe – HEA z organizacji konsumenckich;
 - #3 → Helpdesk HEA – Dostosowane porady i rozwiązania.
- Synergie
 - Autobus energetyczny i wsparcie Ekodoradców z programu Life Małopolska.

W ramach działań w projekcie ASSIST, pomimo tego, że na szkolenie zapisało się aż 183 osoby, to końcowo udało się przeszkolić 150 osób. Spośród 150 osób, które uzyskały Certyfikat Szkolenia Domowego Doradcy Energetycznego, 46 osób działania aktywnie, organizując spotkania z mieszkańcami, chodząc na wizyty domowe itp.

HEA, którzy uczestniczyli w różnych działaniach ASSIST (działania miękkie / angażujące, działania i synergie) pozytywnie oceniali zaangażowanie; docenili w szczególności program i kursy szkoleniowe ASSIST, które pozwoliły zarówno nauczyć się nowych rzeczy, jak i zaktualizować swoją wiedzę na temat problemów związanych z ubóstwem energetycznym.

Spotkania z konsumentami to bardzo dobry sposób na pokazanie ludziom sposobów oszczędzania energii (ale nie tylko poświęcenie go konsumentom wrażliwym). Autobus energetyczny to miejsce, w którym każdy może znaleźć coś dla siebie, niezależnie od tego czy jest dzieckiem, czy dorosłym, nie wie nic o efektywności energetycznej lub jest profesjonalistą w tej dziedzinie. Jest to także dobre miejsce do wykazania efektywności energetycznej w praktyce. Był to również bardzo dobry sposób na zaangażowanie ludzi, którzy w innym przypadku nigdy by nie byli zaangażowani. Autobus energetyczny brał udział w lokalnych wydarzeniach, na które wszyscy mieszkańcy się udają (w dodatku za darmo), aby każdy mógł przyjechać, a HEA mogła dotrzeć do wrażliwego konsumenta, aby udzielić mu porady.

Wizyty domowe są dobrą okazją aby dać osobiste porady na temat wszystkiego, co jest ważne dla ludzi i ich domów. Wywiady bezpośrednie z możliwością udzielania ukierunkowanych porad i gromadzenia większej ilości danych na temat gospodarstw domowych. Wskazywanie ludziom problemów w ich domach, może wpłynąć na zmniejszenia zużycia energii i (implikowane) wysokie koszty energii. Wizyty domowe były przygotowane we współpracy z lokalnymi systemami opieki społecznej. Nie każde gospodarstwo domowe, sugerowane pracownikom gminnym przez system opieki społecznej, było ubogie energetycznie. Niektóre z nich były objęte jedynie pomocą systemu opieki społecznej, np. z powodu problemów zdrowotnych.

Ogólny wynik dotychczasowych działań ASSIST można uznać za udany. Ponadto przygotowaliśmy więcej działań (takich jak Spotkania z konsumentami), które nie zostały zaplanowane w D5.4 ze względu na aktywne przygotowanie projektu ASSIST.

Przyjęliśmy, że dla wielu odbiorców informacja o rocznym zużyciu energii nie jest oczywista, ponieważ nie wszyscy są fakturowani za zużycie (tak jak w przypadku energii elektrycznej, a ostatnio gazu ziemnego), ale bardzo często za kwotę zakupionego paliwa. Różne rodzaje paliw charakteryzują się różnymi wartościami opałowymi, które można krótko wyjaśnić w taki sposób, że możemy uzyskać różne ilości energii z 1 kg węgla kamiennego i 1 kg drewna opałowego, więc przekształcenie takich wartości wymaga pewnej wiedzy i praktyki.

HEA w Polsce musi stawić czoła wszystkim tym wyzwaniom i jest to główny powód opracowania doskonałego narzędzia do liczenia oszczędności i uwzględnienia wszystkich potrzebnych danych.

Aby ułatwić pracę doradcom, narzędzie zawiera listę większości najpopularniejszych nośników energii w Polsce (gaz ziemny, LPG, węgiel kamienny, biomasę, ciepło sieciowe itp.) I umożliwia wprowadzanie danych w różnych jednostkach, a następnie narzędzie automatycznie konwertuje podane ilości na kilowatogodziny. Konieczne jest prawidłowe porównanie zużycia w danym gospodarstwie domowym z „typowym” zużyciem. Standardowe wartości zostały określone na podstawie raportu Głównego Urzędu Statystycznego (w zakresie energii elektrycznej) oraz badania Państwowej Agencji Poszanowania Energii (w dziedzinie energii do celów grzewczych i przygotowania ciepłej wody użytkowej). Poziomy odniesienia podano w postaci wartości średniej, a także w postaci pierwszego i trzeciego kwartylu, i zależą one od powierzchni lokalu / budynku, roku, w którym został zbudowany, od tego, czy budynek był termomodernizowany oraz od liczby użytkowników. Jeśli zużycie mieści się między pierwszym a trzecim kwartylem, narzędzie wyświetla komunikat, że zużycie jest typowe. Osiągnięcie wyższych i niższych wartości opisanych wcześniej, powoduje wyświetlenie komunikatu o ryzyku ubóstwa energetycznego. Przekroczenie typowych wartości wskazuje, że użytkownik prawdopodobnie niepotrzebnie wydaje dużo na cele energetyczne, podczas gdy niższe wartości zużycia mogą wskazywać, że użytkownik nie mieszka w „komfortowych” warunkach - budynki mogą być na przykład niedogrzone.

Kolejnym etapem ankiety jest odpowiedź na pytania wybrane indywidualnie dla użytkowników mieszkań i budynków jednorodzinnych, a na podstawie tych pytań narzędzie bada możliwość przeprowadzenia działań optymalizacyjnych, a także szacuje potencjalne oszczędności w zindywidualizowany sposób. Działania obejmują osobno cele związane z ogrzewaniem i przygotowywaniem ciepłej wody użytkowej, a także wymianę oświetlenia i sprzętu gospodarstwa domowego. Każde z wybranych działań powoduje ukończenie spersonalizowanej broszury informacyjnej na temat wielkości oszczędności wynikających z modernizacji, a także na temat rzeczy, które użytkownik powinien wziąć pod uwagę, aby zmaksymalizować efekt.

Jednym z założeń programu jest ocena uzyskanych oszczędności. Wymagana jest kolejna ankieta po okresie uzyskiwania oszczędności. Prawidłowa analiza wymaga uwzględnienia trendów sezonowych. W przypadku zużycia energii elektrycznej i ciepłej wody można z wystarczającą

dokładnością przyjąć, że nie podlegają one takim trendom, ale w przypadku energii do celów grzewczych podstawowym czynnikiem wpływającym na wielkość zużycia jest temperatura zewnętrzna. Najczęstszą praktyką kontrolną stosowaną przy porównywaniu różnych lat jest tak zwana metoda stopniodni ogrzewania w odniesieniu do lat standardowych. Zaletą tej metody jest jej prostota i zadowalająca dokładność w przypadku budynków o jednolitym profilu użytkowania - takich jak budynki mieszkalne. W związku z powyższym metodę tę zastosowano w narzędziu obliczeniowym programu ASSIST. Dla wszystkich miast znajdujących się na liście dostępnej w narzędziu zebrano dane pogodowe w zakresie średniej miesięcznej temperatury powietrza na lata 2016 i 2017 i zezwolono na wprowadzenie temperatur z roku oceny, a liczba dni grzewczych wyniosła przyjęte na podstawie rozporządzenia w sprawie audytu energii. Takie odniesienie do zużycia pozwala na bezwzględną ocenę uzyskanych oszczędności i porównanie ich z tym, co oszacowano w badaniu.

Jednym z największych problemów w kontaktach z konsumentami wrażliwymi było znalezienie dobrego sposobu promowania wszystkich działań, aby dotrzeć do wszystkich, których ubóstwo energetyczne jest bardzo głębokie. Nie każdy mógł uzyskać informacje o różnych lokalnych wydarzeniach. Ludzie muszą wiedzieć, że mają problem i muszą znaleźć informacje na temat spotkania.

Wszystkie działania wyszczególnione w poprzednich akapitach będą kontynuowane w kolejnych miesiącach, aby osiągnąć wymagany cel zaangażowanych konsumentów do końca projektu. Ostateczne wyniki zostaną przedstawione w D5.5 z osiągniętymi wynikami.

Spain

6.1 Planning of ASSIST Actions

A summary of all the activities already performed or planned and currently ongoing at the Spain level is shown below, while the details of each activity and the HEAs who are responsible for them is reported in the next paragraphs:

- Soft/engagement activities:
 - *Soft/engagement activity #1* → Energy advice to the neighbours, relatives of HEAs;
 - *Soft/engagement activity #2* → Energy cafès;
 - *Soft/engagement activity #3* → Energy advice by coordinators of the Home Care Service;
 - *Soft/engagement activity #4* → Energy advice by HEAs for users who are not participating in the ASSIST actions.
- ASSIST Actions:
 - *Action #1* → Home visits and dedicated consultancy from home care professionals from public social services in big urban areas;
 - *Action #2* → Home visits and dedicated consultancy from home care professionals from public social services in rural areas;
 - *Action #3* → Home visits and dedicated consultancy from home care professionals from private charities – NGOs;
 - *Action #4* → Help desk in rural areas by tele care professionals.
- Synergies:
 - *Synergy #1* → Barcelona council and home care services management companies;
 - *Synergy #2* → Diputació of Barcelona and Maresme council;
 - *Synergy #3* → Private charities – NGOs;
 - *Synergy #4* → Tele Care Organization.

6.2 HEAs training and activities

In total, through ASSIST project, **141 professionals have been fully-trained as HEAs**, divided into 114 home care professionals from urban areas, 10 home care professionals from rural areas, 10 professionals from telecare service and 7 professionals from energy companies.

A summary of the activities of which the HEA are responsible and they are carrying out is reported in the table below, while the detailed analysis of each activity can be found in the next paragraphs.

Number of Trained HEAs per type	Number of active HEAs per type	HEA activity
114 home care professionals from urban areas 10 home care professionals from rural areas	8 home care professionals from urban areas 2 home care professionals from rural areas	Soft/engagement activity #2
114 home care professionals from urban areas	4 coordinators	Soft/engagement activity #3
114 home care professionals from urban areas	49 home care professionals from urban areas	Soft/engagement activity #4
114 home care professionals from urban areas	49 home care professionals from urban areas	Action #1
38 home care professionals from urban areas	32 home care professionals from urban areas	Action #1

10 home care professionals from rural areas	5 home care professionals from rural areas	Action #2
10 professionals from telecare service	3 professionals from telecare service	Action #4
7 professionals from energy companies	4 professionals from energy companies	Soft/engagement activity #4 Action #4

Not all HEAs that have completed the training course have participated in the whole ASSIST intervention. Some of the reasons are:

- Their users didn't want to participate in the project;
- Some HEAs considered there was too much reporting to do and they left the project just after the training;
- Some HEAs have stopped working for the employer (p.e home care service) so they did not continue with the project;
- Some HEAs from energy companies do not work directly with end users.

6.3 Involvement of consumers through soft/engagement activities

6.3.1 Soft/engagement activity #2 (Energy cafés)

Energy cafés	
Action description	
Dates of action	October 2018 – June 2019
Action target	VC not participating in ASSIST household interventions.
Geographic dimension	Urban and rural areas
Geographic area	Barcelona and Maresme
Number of involved users	Potentially 135 households.
Success rate	90%
Action tools	Factsheets with advice on electricity appliance, electricity bills, low-cost energy efficiency measures, etc..
HEAs involvement	
Type of HEA	Home care professionals.
Number of HEAs involved	10
Foreseen involvement	Organization of the event.
Feedback from HEAs	Positive
Action monitoring	
HEAs activity	Number of involved consumers.
Control group	Not foreseen.
Monitoring tools	Not foreseen.
Large control group	Not foreseen.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency and available subsidies for vulnerable consumers.
SWOT analysis	
Strengths	Energy advice to vulnerable consumers who otherwise would not have access to this information.
Weaknesses	Elderly people have difficulties understanding the information and they need a more personalized advice.

Opportunities	Possibility of replicating the activity and organizing more group energy advisory events.
Threats	Lack of commitment from part of the target audience.
Lessons learned and misalignment with original planning	
Lessons learned	In some cases, the management of energy bills does not depend on the VC but on their families due to their dependency, so we need the willingness to participate from the families (or the billing manager) instead of the VC.
Misalignment with D5.2 and D5.4	None

6.3.2 Soft/engagement activity #3 (Energy advice by coordinators of the Home Care Service)

Energy advice by coordinators of the Home Care Service	
Action description	
Dates of action	June 2018 – December 2018
Action target	Home care professionals users.
Geographic dimension	Urban area.
Geographic area	Local (Barcelona).
Number of involved users	200 potentially households.
Success rate	30% of the households taking the advice kit.
Action tools	Factsheets with advice on electricity appliance, electricity bills, low-cost energy efficiency measures, etc..
HEAs involvement	
Type of HEA	Home care professionals.
Number of HEAs involved	4
Foreseen involvement	Integrated in the trained group's routine work.
Feedback from HEAs	N/A
Action monitoring	
HEAs activity	Number of involved consumers.
Control group	Not foreseen
Monitoring tools	Not foreseen
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency and available subsidies for vulnerable consumers.
SWOT analysis	
Strengths	VC rely more on the coordinators than on the home care professionals.
Weaknesses	Coordinators do not have time to advise users in their routine work.
Opportunities	To train the coordinators to support home care professionals.
Threats	The company providing the home care service should promote the continuation of advice so that the HEAs' knowledge can be exploited by future vulnerable users.
Lessons learned and misalignment with original planning	

Lessons learned	In some cases, vulnerable consumers do not rely on home care professionals for advice on energy bills as they see them as social service to attend their social needs, not their financial aspects. They rely more on the coordinators who do not have time to carry out actions.
Misalignment with D5.2 and D5.4	Soft activity #3 has been incorporated after writing the action plan (D5.4).

6.3.3 Soft/engagement activity #4 (Energy advice by HEAs for users who are not participating in the ASSIST actions)

Energy advice by HEAs for users who are not participating in the ASSIST actions	
Action description	
Dates of action	June 2018 – December 2018
Action target	Home care professionals users.
Geographic dimension	Urban
Geographic area	Local (Barcelona)
Number of involved users	570 potentially households.
Success rate	66% of the households taking the advice kit.
Action tools	Factsheets with advice on electricity appliance, electricity bills, low-cost energy efficiency measures, etc...
HEAs involvement	
Type of HEA	Home care professionals
Number of HEAs involved	49
Foreseen involvement	Integrated in the trained group's routine work.
Feedback from HEAs	N/A
Action monitoring	
HEAs activity	Number of involved consumers.
Control group	Not foreseen.
Monitoring tools	Not foreseen.
Large control group	Not foreseen for this action.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Short consultancy about energy efficiency and available subsidies for vulnerable consumers.
SWOT analysis	
Strengths	The emotional bond created between users and home care professionals is considered a positive influence on the behavioural changes of users.
Weaknesses	Daily work routine from home care professionals already occupy all time available in the visits and it is complex to perform ASSIST actions during the time of the home visits.
Opportunities	Snowball effect from HEAs: Trained HEAs are trained forever which means they will transfer the information beyond the project reaching more users.
Threats	The employer of the home care service should promote the continuation of the actions so that the HEAs' knowledge can be useful for future users.
Lessons learned and misalignment with original planning	

Lessons learned	It is difficult to maintain the motivation of HEAs only with online tools.
Misalignment with D5.2 and D5.4	Soft/engagement activity #4 has been incorporated after writing the action plan (D5.4).

Energy advice through newsletters	
Action description	
Dates of action	January 2019 – April 2019
Action target	Electric cooperative end users many of them VC.
Geographic dimension	Urban area.
Geographic area	Alginet area.
Number of involved users	Around 1,800 emails used.
Success rate	N/A
Action tools	Factsheets with advice on electricity appliance, electricity bills, tariffs, energy power adjustments, low-cost energy efficiency measures, etc..
HEAs involvement	
Type of HEA	Energy professionals.
Number of HEAs involved	1
Foreseen involvement	Creation of newsletters.
Feedback from HEAs	N/A
Action monitoring	
HEAs activity	Newsletters.
Control group	Not foreseen.
Monitoring tools	Not foreseen.
Large control group	Not foreseen.
Estimated energy savings	2% with respect to previous situation but not monitored.
Vulnerable consumers outreach	Direct energy advice through the email.
SWOT analysis	
Strengths	Direct energy advice to vulnerable consumers through email.
Weaknesses	Elderly people may not have access to an email or may have difficulties understanding the information provided and need a more personalized advice.
Opportunities	Easy and massive end users reaching.
Threats	Lack of interest in reading the emails newsletters.
Lessons learned and misalignment with original planning	
Lessons learned	Engaging the end users is always difficult.
Misalignment with D5.2 and D5.4	Soft/engagement activity #4 has been incorporated after writing the action plan (D5.4).

6.3.4 Changes with regards to the Action Plan

Soft/engagement activity #1 has not been implemented because although the HEAs have completed the task, they have not reported the data.

Soft/engagement activity #3 “Energy advice by coordinators of the Home Care Service” has been incorporated after writing the action plan.

Soft/engagement activity #4 has been incorporated after writing the action plan and it's been carried out by HEAs for their users that are not participating in strong ASSIST actions.

6.4 ASSIST Actions

6.4.1 Action #1 (Home visits and dedicated consultancy from home care professionals from public social services in big urban areas)

Home visits in urban areas by home care professionals	
Action description	
Dates of action	June 2018 – December 2018
Action target	Home care professionals' users.
Geographic dimension	Local, urban area.
Geographic area	Barcelona
Number of involved users	Potentially 300 households.
Success rate	47% of the households involved in the initiative.
Action tools	Providing tailored advice and solutions on energy efficiency measures and habit change, energy tariffs but also service and support available e.g. If person is eligible for financial support (social bonus p.e).
HEAs involvement	
Type of HEA	Home care professionals from public social services.
Number of HEAs involved	49
Foreseen involvement	Integrated in the trained group's routine work.
Feedback from HEAs	Positive
Action monitoring	
HEAs activity	House visits.
Control group	Not foreseen.
Monitoring tools	Ex-ante and ex-post questionnaires and energy bills.
Large control group	Not foreseen.
Estimated energy savings	7% (for those who participate to the initiative).
Vulnerable consumers outreach	750 users @7% 2,000 users @2% 30,000 reached users
SWOT analysis	
Strengths	The emotional bond created between users and home care professionals is considered a positive influence on the behavioural changes of users.
Weaknesses	Daily work routine from home care professionals already occupy all time available in the visits and it is complex to perform ASSIST actions during the time of the home visits.
Opportunities	Snowball effect from HEAs: trained HEAs are trained forever which means they will transfer the information beyond the project reaching more users.
Threats	The employer of the home care service should promote the continuation of the actions so that the HEAs' knowledge can be useful for future users.
Lessons learned and misalignment with original planning	
Lessons learned	It is difficult to maintain the motivation of HEAs only with online tools.
Misalignment with D5.2 and D5.4	Yes, fewer users than expected. A second part of the pilot has been done to get more users.

Home visits in urban areas by home care professionals	
Action description	
Dates of action	May 2019 – January 2020
Action target	Home care professionals' users.
Geographic dimension	Local, urban area.
Geographic area	Barcelona
Number of involved users	Potentially 152 households.
Success rate	56% of the households involved in the initiative.
Action tools	Providing tailored advice and solutions on energy efficiency measures and habit change, energy tariffs but also service and support available e.g. If person is eligible for financial support (social bonus p.e).
HEAs involvement	
Type of HEA	Home care professionals from public social services.
Number of HEAs involved	32
Foreseen involvement	Integrated in the trained group's routine work.
Feedback from HEAs	Positive
Action monitoring	
HEAs activity	House visits.
Control group	Not foreseen.
Monitoring tools	Ex-ante and ex-post questionnaires and energy bills.
Large control group	Not foreseen.
Estimated energy savings	7% (for those who participate to the initiative).
Vulnerable consumers outreach	750 users @7% 2,000 users @2% 30,000 reached users
SWOT analysis	
Strengths	The emotional bond created between users and home care professionals is considered positive to influence the behavioural changes of users.
Weaknesses	Daily work routine from home care professionals already occupy all time available in the visits and it is complex to perform ASSIST actions during the time of the home visits.
Opportunities	Snowball effect from HEAs: trained HEAs are trained forever which means they will transfer the information beyond the project reaching more users.
Threats	The employer of the home care service should promote the continuation of the actions so that the HEAs' knowledge can be useful for future users.
Lessons learned and misalignment with original planning	
Lessons learned	It is difficult to maintain the motivation of HEAs only with online tools.
Misalignment with D5.2 and D5.4	Yes, fewer users than expected. A second part of the pilot has been done to get more users.

6.4.2 Action #2 (Home visits and dedicated consultancy from home care professionals from public social services in rural areas)

Home visits in rural areas by home care professionals

Action description	
Dates of action	February 2019 – January 2020
Action target	Home care professionals' users.
Geographic dimension	Regional, rural area.
Geographic area	Maresme
Number of involved users	Potentially 100 households.
Success rate	26% of the households involved in the initiative.
Action tools	Providing tailored advice and solutions on energy efficiency measures and habit change, energy tariffs but also service and support available e.g. If person is eligible for financial support (social bonus p.e).
HEAs involvement	
Type of HEA	Home care professionals from public social services.
Number of HEAs involved	5
Foreseen involvement	Integrated in the trained group's routine work.
Feedback from HEAs	Positive
Action monitoring	
HEAs activity	House visits.
Control group	Not foreseen.
Monitoring tools	Ex-ante and ex-post questionnaires and energy bills.
Large control group	Not foreseen.
Estimated energy savings	7% (for those who participate to the initiative).
Vulnerable consumers outreach	750 users @7% 2,000 users @2% 30,000 reached users
SWOT analysis	
Strengths	The emotional bond created between users and home care professionals is considered positive to influence the behavioural changes of users.
Weaknesses	Daily work routine from home care professionals already occupy all time available in the visits and it is complex to perform ASSIST actions during the time of the home visits.
Opportunities	Snowball effect from HEAs: trained HEAs are trained forever which means they will transfer the information beyond the project reaching more users.
Threats	The employer of the home care service should promote the continuation of the actions so that the HEAs' knowledge can be useful for future users.
Lessons learned and misalignment with original planning	
Lessons learned	It is difficult to maintain the motivation of HEAs only with online tools.
Misalignment with D5.2 and D5.4	None

6.4.3 Action #4 (Help desk in rural areas by tele care professionals)

Home visits in rural area by tele care professionals	
Action description	
Dates of action	September 2019 – February 2020
Action target	Tele care professionals' users.
Geographic dimension	Regional, rural area.

Geographic area	Manresa and Vilafranca del Penedès.
Number of involved users	Potentially 100 households.
Success rate	61% of the households involved in the initiative.
Action tools	Providing tailored advice and solutions on energy efficiency measures and habit change, energy tariffs but also service and support available e.g. If person is eligible for financial support (social bonus p.e).
HEAs involvement	
Type of HEA	Tele care professionals.
Number of HEAs involved	3
Foreseen involvement	Integrated in the trained group's routine work.
Feedback from HEAs	N/A (the action hasn't finished yet).
Action monitoring	
HEAs activity	Help desk and phone call advice.
Control group	Not foreseen.
Monitoring tools	Ex-ante and ex-post questionnaires and energy bills.
Large control group	Not foreseen.
Estimated energy savings	7% (for those who participate to the initiative).
Vulnerable consumers outreach	750 users @7% 2,000 users @2% 30,000 reached users
SWOT analysis	
Strengths	N/A (the action hasn't finished yet).
Weaknesses	N/A (the action hasn't finished yet).
Opportunities	N/A (the action hasn't finished yet).
Threats	N/A (the action hasn't finished yet).
Lessons learned and misalignment with original planning	
Lessons learned	N/A (the action hasn't finished yet).
Misalignment with D5.2 and D5.4	N/A (the action hasn't finished yet).

Help desk advice through energy professional HEAs	
Action description	
Dates of action	March 2019 – February 2020
Action target	Energy companies end users.
Geographic dimension	Local, Alginet area.
Geographic area	Alginet
Number of involved users	Around 1000 end users identified as VC.
Success rate	Between 10 to 50 end users per day attend the help desk.
Action tools	Contract analysis for power and tariff adjustments. Direct advice to end users. Direct savings in the energy bills by adjusting the contracted power.
HEAs involvement	
Type of HEA	Energy professionals.
Number of HEAs involved	4
Foreseen involvement	Integrated in the professional routine work.
Feedback from HEAs	Positive
Action monitoring	

HEAs activity	Help desk advice, contract analysis and contracted power adjusted to end users needs.
Control group	Not foreseen.
Monitoring tools	Ex-ante and ex-post questionnaires and energy bills.
Large control group	Not foreseen.
Estimated energy savings	7%
Vulnerable consumers outreach	750 users @7% 2,000 users @2% 30,000 reached users
SWOT analysis	
Strengths	The end users already know and trust the HEAs and come to the helpdesk.
Weaknesses	Sometimes it's difficult for the HEAs to identify VC.
Opportunities	End user satisfaction with the company.
Threats	HEAs may feel that this is an extra work interfering their normal work load.
Lessons learned and misalignment with original planning	
Lessons learned	The training for HEAs didn't provide them many information on how to identify VC.
Misalignment with D5.2 and D5.4	N/A (the action hasn't finished yet).

6.4.4 Changes with regards to the Action Plan

The following planned actions in D5.4 have not been implemented:

Activity	Justification
Action #3 Home visits and dedicated consultancy from home care professionals from private charities - NGOs	The participation agreement originally created between Ecoserveis and COCARMÍ has not developed since COCARMÍ decided not to participate after signing the agreement due to lack of commitment and interest from their professionals. Still, another pilot has been developed and is detailed in Action # 4 with the telecare service, a public service which gives support to vulnerable people, mainly elderly.

6.5 Synergies

6.5.1 Synergy #1 (Barcelona council and home care services management companies)

Barcelona Council and home care services management companies	
Synergy description	
Dates of synergy	June 2018 – January 2020
Geographic dimension	Urban area.
Geographic area	Local (Barcelona).
SWOT analysis	
Strengths	Social services are already involved in projects supporting vulnerable consumers. ASSIST action has allowed to work with Home Care Professional Profile for the first time.
Weaknesses	Bureaucracy becomes complex with public administrations which resulted in delays and sometimes inefficiency in the

	planned actions of the project.
Opportunities	The actions taken make easier for the public administration to continue the project once it has been completed, as part of their professionals is already trained.
Threats	The company providing the home care service should promote the continuation of advice so that the HEAs' knowledge can be used and transferred to future vulnerable users.
Lessons learned and misalignment with original planning	
Lessons learned	<p>It is essential to make a good identification and selection of HEAs so they all are aware of the whole action: training+action+evaluation.</p> <p>Strong need to increase awareness on energy poverty and empower operators with emotional bonds with the affected person. Beneficiaries are more confident with the HEA if they know them, so training professionals with relationship with the user has a bigger impact.</p>

6.5.2 Synergy #2 (*Diputació of Barcelona and Maresme council*)

Diputació of Barcelona and Maresme Council	
Synergy description	
Dates of synergy	February 2019 – January 2020
Geographic dimension	Rural area.
Geographic area	Regional (Barcelona).
SWOT analysis	
Strengths	Diputació de Barcelona (DIBA) is already involved in projects supporting vulnerable consumers, but not with home care services or telecare services. After the project, DIBA recognizes the need to empower these professionals to identify situations of energy vulnerability.
Weaknesses	Bureaucracy becomes complex with public administrations which resulted in delays and sometimes inefficiency in the planned actions of the project.
Opportunities	The actions taken make easier for the public administration to continue the project once it has been completed, as part of their professionals is already trained.
Threats	Although DIBA identifies the need to continue with the project, the prioritization of resources may affect the effectiveness.
Lessons learned and misalignment with original planning	
Lessons learned	<p>It is essential to make a good identification and selection of HEAs so they all are aware of the whole action: training+action+evaluation.</p> <p>Strong need to increase awareness on energy poverty and empower operators with emotional bonds with the affected person. Beneficiaries are more confident with the HEA if they know them, so training professionals with relationship with the user has a bigger impact.</p>

6.5.3 Synergy #4 (*Tele Care Organization*)

Tele Care Organization	
Synergy description	
Dates of synergy	September 2019 – February 2020
Geographic dimension	Regional, rural area.
Geographic area	Manresa and Vilafranca del Penedès.
SWOT analysis	
Strengths	N/A (the synergy hasn't finished yet).
Weaknesses	N/A (the synergy hasn't finished yet).
Opportunities	N/A (the synergy hasn't finished yet).
Threats	N/A (the synergy hasn't finished yet).
Lessons learned and misalignment with original planning	
Lessons learned	N/A (the synergy hasn't finished yet).

6.5.4 Changes with regards to the Action Plan

Synergy #3 was not carried out as the participation agreement originally created between Ecoserveis and COCARMÍ has not developed since COCARMÍ decided not to participate in a later stage than the writing of D5.4 (planned actions)

Still, another synergy has been developed and is detailed in Synergy #4.

6.6 Summary of misalignment with the original ASSIST action plan

The table below show the misalignments between the original action plan and the activities finally carried out:

Soft/engagement activity	PLANNED IN D5.2/D5.4	CARRIED OUT
Energy advice to the neighbours, relatives,... of HEAs	x	
Energy cafès	x	x (Soft/engagement activity #2)
Energy advice by coordinators of the Home Care Service		x (Soft/engagement activity #3)
Energy advice by HEAs for users that are not participating ASSIST actions		x (Soft/engagement activity #4)
Actions	PLANNED IN D5.2/D5.4	CARRIED OUT
Home visits and dedicated consultancy from home care professionals from public social services in big urban areas	x	x (Action #1)
Home visits and dedicated consultancy from home care professionals from public social services in rural areas	x	x (Action #2)
Home visits and dedicated consultancy from home care professionals from private	x	

charities – NGOs		
Help desk in rural area by tele care professionals		x (Action #4)

6.7 Stakeholders feedbacks

Home care professionals are in daily and/or weekly contact with vulnerable users and have a vocation to help them in their daily life and routines. In general, there has been a very positive feedback about ASSIST training as they have reported empowerment on energy billing and energy use at home not only for their users but also for themselves and their circles.

On the other hand, they have identified as weaknesses the fact that users, in some cases, did not want to show their energy bills and therefore reporting the information has been difficult. In some cases they also state that the online training does not adapt to their needs and that they would prefer that there be more hours in face-to-face training.

6.8 Conclusions

In general, the evaluation of the actions carried out in the ASSIST project has been positive. In cases where they have not been able to carry out activities, other users have been contacted in order to reach the objective of the number of vulnerable consumers advised.

It is effective to reach agreements with the employers.

The decision of reaching agreements with employers in order to ensure the involvement of the HEAs not only during the training but also during the action has been a success. However, it has not been easy to reach vulnerable consumers and involve them in the project due in some cases to their situation of vulnerability.

Home care professional has a very good profile to identify vulnerable energy consumers and it needs support to manage and give response to situations of energy poverty.

The HEA profile of home care professional has given positive results when it comes to detecting energy poverty, but is not ideal for managing it as it needs support to digest technical and billing issues. In addition, integrating energy intervention into their daily work routine (cleaning, hygienic services,...) is difficult due to the limited time they have available for home visits.

In some cases, beneficiaries identified home care professionals as social professional with no right to interfere in their financial issues (as they considered energy bills).

In some cases, vulnerable consumers do not rely on home care professionals for advice on energy bills. They rely more on the coordinators but coordinators don't have time to carry out actions.

Face-to-face follow-up has been more effective than online methodologies with Home Care professionals profile.

Online follow-up with home care professionals has been complex. The need for more face-to-face contact has been detected and, for this reason, the number of face-to-face meetings that were originally planned, has been increased. As for the online platform, Moodle has not been a useful tool for this profile, the contact has worked better through phone calls and whatsapp.

Excess of reporting has make the action more inefficient.

In many cases, reporting has been a barrier because of the limited time they have and the difficulty of accessing user information. It should be remembered that vulnerable consumers are elderly

people, with dependency or with mental health problems and the management of energy bills does not depend on them but on their families.

The added value of the emotional bond energy agent (HEA) and beneficiary.

Finally, the emotional bond already established between users and home care professionals is highly valued since it has been found that it has been useful for improving the energy use of households and the habits of vulnerable consumers.

6.9 Executive summary in national language

En este apartado se muestra un resumen de las acciones del proyecto ASSIST que han sido desarrolladas e impulsadas por las y los agentes energéticos domésticos (AEDs)

- Acciones de impacto indirecto:
 - #2 → Energy café;
 - #3 → Asesoramiento energético por parte de las coordinadoras del Servicio de Asistencia Domiciliaria;
 - #4 → Asesoramiento energético por parte de las trabajadoras familiares a los usuarios que no han participado de las acciones ASSIST.
- Acciones ASSIST de impacto directo:
 - #1 → Intervención en el domicilio en área urbana por trabajadoras familiares;
 - #2 → Intervención en el domicilio en área rural por trabajadoras familiares;
 - #4 → Asesoramiento energético en oficina en área rural por parte de las trabajadoras del servicio de teleasistencia.
- Sinergias:
 - #1 → Ayuntamiento de Barcelona y empresas gestoras del Servicio de Atención domiciliaria;
 - Sinergia #2 → Diputación de Barcelona y Consell Comarcal del Maresme;
 - Sinergia #4 → Organización Tele Care.

En total se han formado 141 AEDs. En concreto, 114 trabajadoras familiares de áreas urbanas, 10 trabajadoras familiares de áreas Rurales, 10 trabajadoras del servicio de teleasistencia y 7 trabajadoras de empresas eléctricas.

Se muestra a continuación un resumen de las actividades que ha impulsada cada tipo de AED.

Número de AED formadas por tipo	Número de AED activas por tipo	Actividad
114 TF de áreas urbanas 10 TF de áreas rurales	8 TF de áreas urbanas 2 TF de áreas rurales	Acción de impacto indirecto #2
114 TF de áreas urbanas	4 Coordinadoras SAD	Acción de impacto indirecto #3
114 TF de áreas urbanas	49 TF de áreas urbanas	Acción de impacto indirecto #4
114 TF de áreas urbanas	49 TF de áreas urbanas	Acción ASSIST #1
38 TF de áreas urbanas	32 TF de áreas urbanas	Acción ASSIST #1
10 TF de áreas rurales	5 TF de áreas rurales	Acción ASSIST #2
10 profesionales de teleasistencia	3 profesionales de teleasistencia	Acción ASSIST #4
7 profesionales de empresas eléctricas	4 profesionales de atención al cliente	Acción de impacto indirecto #4 Acción ASSIST #4

La valoración del programa por parte de las AEDs ha sido en general positiva. La formación les ha interesado por su vocación de ayudar a las personas en situación de vulnerabilidad y por los conocimientos adquiridos en ahorro y asesoramiento energético.

En general, la valoración de las acciones del llevadas a cabo en el proyecto ASSIST ha sido positiva. En algunos casos no se han podido llevar a cabo pero se han suplido por otros usuarios u otras acciones para poder llegar al objetivo de número de consumidores vulnerables asesorados.

Ha sido complejo implicar a tantos consumidores vulnerables, aunque se hayan establecido sinergias y acuerdos con los servicios sociales y otras organizaciones que sin duda, han facilitado el proceso. Aunque se haya contactado directamente con las organizaciones que trabajan con consumidores vulnerables tampoco ha sido fácil que las profesionales los involucren en el proyecto.

El perfil de AED de trabajadora familiar ha dado resultados positivos a la hora de detectar la pobreza energética, pero no es idóneo para gestionarla y requiere apoyo para resolver cuestiones técnicas de facturación y asesoramiento energético. Además, integrar los consejos de ahorro energético en su rutina de trabajo diaria es difícil debido al limitado tiempo del que disponen para realizar las visitas a los hogares.

El seguimiento online con las trabajadoras familiares ha presentado también cierta complejidad. Se ha detectado la necesidad de más contacto presencial y, por este motivo, se han aumentado el número de reuniones presenciales que no estaban previstas. En cuanto a la plataforma online, el Moodle no ha sido una herramienta útil para este perfil en concreto de trabajadora familiar y han funcionado mejor otros sistemas como el contacto a través de llamadas telefónicas y WhatsApp.

Finalmente, se valora muy positivamente el vínculo emocional ya establecido entre los usuarios y las trabajadoras familiares ya que sí se ha constatado que ha sido útil para mejorar el uso energético de los hogares y los hábitos de los consumidores vulnerables.

United Kingdom

7.1 Planning of ASSIST Actions

A summary of all the activities already performed or planned and currently ongoing at the UK level is shown below, while the details of each activity and the HEAs who are responsible for them is reported in the next paragraphs:

- Soft/engagement activities:
 - *Soft/engagement activity #1* → “Stay Warm at Winter” advice sessions for health support groups;
 - *Soft/engagement activity #2* → Advice sessions for Elderly people at Springboard Group events;
 - *Soft/engagement activity #3* → Fuel Poverty Awareness Day - information stand;
 - *Soft/engagement activity #4* → Leaflets distribution to low incomes families;
 - *Soft/engagement activity #5* → Advice sessions at CCP (Caring for Communities and People) Drop-In Centre.
- ASSIST Actions:
 - *Action #1* → Home visits by HEAs (money advisors, charity workers and energy assessors).
- Synergies:
 - *Synergy #1* → Citizens Advice – Healthy Homes project.

7.2 HEAs training and activities

In total, there are **6 fully active HEAs** with **17 HEAs** who completed the whole course and are active within the network and carrying out some soft action activities but are not reporting with ex-ante questionnaires.

The table below shows the type of activities carried out by different HEAs while the detailed analysis of each activity can be found in the next paragraphs.

Number of Trained HEAs per type	HEA activity
9 CCP (Caring for Communities and People) Community Connectors	Soft/engagement activity #1 Soft/engagement activity #2 Soft/engagement activity #3 Soft/engagement activity #4 Soft/engagement activity #5 Action #1
12 from various charities (Barnwood Trust, WECARE, Southern Brooks)	Soft/engagement activity #1 Soft/engagement activity #4 Soft/engagement activity #5 Action #1
1 Energy assessor (EPC private company)	Action #1
1 Money advisor (Citizens Advice)	Action #1 Synergy #1

7.3 Involvement of consumers through soft/engagement activities

7.3.1 Soft/engagement activity #1 (“Stay Warm at Winter” advice sessions for health support groups)

“Stay Warm at Winter” advice sessions for health support groups	
Action description	
Dates of action	July 2019 – November 2019
Action target	Vulnerable consumers with health issues. Presentation talks to members of support groups.
Geographic dimension	Regional UK.
Geographic area	Gloucestershire and South Gloucestershire.
Number of involved users	99 x vulnerable consumers at events; FOD Dementia Awareness Day x 38; Tewkesbury Mens Group x 16; NHS Health Bus x 25; Mental Health and Wellbeing Day x 20.
Success rate	75% take up of leaflets. There were a number of follow up referrals to other services, but these were not monitored.
Action tools	Informal talks and demonstrations of energy gadgets. Energy efficiency factsheets distributed with advice on electricity appliances, electricity bills, low-cost energy efficiency measures, and combating damp & condensation.
HEAs involvement	
Type of HEA	Charity and money advisors (active and non-active).
Number of HEAs involved	2 active and 3 non active.
Foreseen involvement	Informal talks, Q&As sessions and some 1 to1 sessions.
Feedback from HEAs	HEAs reported back that members of the groups and event organisers found the talks very useful and engaging.
Action monitoring	
HEAs activity	Number of involved consumers and number follow on referrals.
Control group	Not foreseen.
Monitoring tools	Number of events and numbers of attendees counted.
Large control group	Not foreseen for this action.
Estimated energy savings	2% saving of current energy consumption.
Vulnerable consumers outreach	Highly selected target audience with health issues.
SWOT analysis	
Strengths	Having the direct contact with vulnerable consumers who are likely to have high energy needs was positive. Face to face contact means that the talks could be delivered at the right level of complexity depending on the knowledge level of the audience.
Weaknesses	The talks were often fitted into the groups’ schedule which didn’t always allow for the HEAs to have time to talk to individuals about their specific situation.
Opportunities	The talks can result in a follow on request for a home visit and further support.
Threats	Due to age or impairment, some of the VCs did not have control over their own energy bills and weren’t interested in the information (e.g. “I leave all my bills to my daughter/son to sort out”).

Lessons learned and misalignment with original planning	
Lessons learned	Regarding the threat mentioned above; for very vulnerable consumers having energy efficiency leaflets to take away with them was a good way to for these people to take the message home to carers. More 'easy-to-read' leaflets would be beneficial which could also include a printed message to home carers such as 'Today we talked to(fill in name of HEA)... about energy bills and staying warm at home. Please contact(HEA name & No) ... if you would like more information.
Misalignment with D5.2 and D5.4	The original activities plan included phone and email advice carried out by Warm & Well staff. As this activity is already part of the Warm & Well core functions it has not been included in the reporting.

7.3.2 Soft/engagement activity #2 (Advice sessions for Elderly people at Springboard Group events)

Advice sessions for Elderly people at Springboard Group events	
Action description	
Dates of action	July 2019 – November 2019
Action target	Membership of elderly (60-90+ years old) social group organised under the umbrella of national charity AGE UK.
Geographic dimension	Regional UK.
Geographic area	Local community centres in Gloucestershire county.
Number of involved users	93 consumers at events at 5 events.
Success rate	80% take up of advice leaflets.
Action tools	Informal talks on energy efficiency and tariff switching, demonstration of eco gadgets, distribution of energy saving advice leaflets.
HEAs involvement	
Type of HEA	Charity and money advisors (active and non-active).
Number of HEAs involved	2 active and 3 non active.
Foreseen involvement	Informal presentations, Q&As sessions and some 1 to1 sessions.
Feedback from HEAs	Good feedback on the talks, they were well attended and good interactive responses from consumers.
Action monitoring	
HEAs activity	Number of involved consumers.
Control group	Not foreseen.
Monitoring tools	Attendees counted and number of events.
Large control group	Not foreseen for this action.
Estimated energy savings	2% saving of current energy consumption.
Vulnerable consumers outreach	The age range of Springboard groups membership is 60 to 90+ years old.
SWOT analysis	
Strengths	Members of the Springboard Group are elderly but still quite active and able to make decisions regarding their home energy improvements and tariff switching.
Weaknesses	The groups are involved in various activities throughout

	the year and they might be a tendency for the focus on energy issues to be limited to Autumn /winter season only.
Opportunities	Consumers can follow through to apply for grants for home energy improvements through existing schemes such as Warm Home Fund.
Threats	The Springboard Groups are organized by AGE UK but rely heavily on their own members of unpaid volunteers to organize the local membership groups and activities.
Lessons learned and misalignment with original planning	
Lessons learned	The Springboard group members are mainly self-organized and quite dynamic. They are still involved in their own household management and for that reason are a good target audience to engage. They often act as support to others in their community so having a good range of energy efficiency leaflets to take home will disseminate the energy efficiency message.
Misalignment with D5.2 and D5.4	This soft action was not foreseen in D5.2 and D5.4 but was developed through partnership working with Age UK and the ASSIST project.

7.3.3 Soft/engagement activity #3 (Fuel Poverty Awareness Day - information stand)

Fuel Poverty Awareness Day - information stand	
Action description	
Dates of action	November 2019
Action target	Local residents in Cheltenham High Street.
Geographic dimension	Regional UK.
Geographic area	Cheltenham City, Gloucestershire.
Number of involved users	50 consumers.
Success rate	50% take up of leaflets distributed.
Action tools	Energy advice leaflets and 1 to 1 advice.
HEAs involvement	
Type of HEA	Charity and money advisors (active and non active).
Number of HEAs involved	1 active and 1 non active.
Foreseen involvement	HEAs set up an information stand on Cheltenham High Street on a busy Friday to engage shoppers and local residents.
Feedback from HEAs	HEA reported a good level interest from consumers. More than half took the leaflets offered.
Action monitoring	
HEAs activity	Number of involved consumers.
Control group	Not foreseen.
Monitoring tools	Number of leaflets and fact sheets distributed.
Large control group	Not foreseen for this action.
Estimated energy savings	2% saving of current energy consumption.
Vulnerable consumers outreach	Shoppers on the local high street, some of which will be classed as vulnerable consumers due to age or being in low income category.
SWOT analysis	
Strengths	The consumers were able to receive advice and

	information as part of their everyday activity in their local high street. They didn't need to travel to a out of their locality to attend a specific energy event.
Weaknesses	Not all consumers had time to stop to talk.
Opportunities	A chance to engage with people who don't normally attend drop-in centres or advice centres.
Threats	Open air activities are hard to plan and can be cancelled at short notice by bad weather.
Lessons learned and misalignment with original planning	
Lessons learned	It was good to be able to be responsive to national campaigns. More could have been done to capitalize on the Fuel Poverty Awareness day in other cities.
Misalignment with D5.2 and D5.4	Not foreseen in original plan. This action was carried out in response to national NEA National Fuel Poverty Awareness Day.

7.3.4 Soft/engagement activity #4 (Leaflets distribution to low incomes families)

Leaflet distribution to low income families	
Action description	
Dates of action	October 2019
Action target	Low income households.
Geographic dimension	Regional UK.
Geographic area	IMD (Areas of Indicators of Multiple Deprivation) Gloucestershire.
Number of involved users	14,200
Success rate	100% Postal delivery to all addresses. The number of people taking up action was not able to be verified but assuming even a fairly low rate of 30-35% would mean that between 4,260 – 4,970 people taking some form of action.
Action tools	"Prepare for Winter" Top Tips leaflet with HEA contact details.
HEAs involvement	
Type of HEA	Charity/money advisors.
Number of HEAs involved	1
Foreseen involvement	Responding to request for more information/support.
Feedback from HEAs	Not available.
Action monitoring	
HEAs activity	Gathering of IMD data for mailout.
Control group	Not foreseen.
Monitoring tools	Results not able to be monitored.
Large control group	N/A
Estimated energy savings	2% saving of current energy consumption.
Vulnerable consumers outreach	The exact number of VCs within the catchment area of the IMD is not available but a high percentage of the residents will be receiving state benefits or be in a low-income household and/or with low energy rated properties.
SWOT analysis	
Strengths	Using the already identified IMD postcodes, the mailout

	was able to be targeted to those most likely to need support with fuel bills over winter. The mailout was able to reach a high number of vulnerable consumers relatively easily.
Weaknesses	The leaflet "Prepare for Winter" gives basic energy advice (top tips) but relies on the consumer to contact the HEA for more support/information.
Opportunities	The reach - out to those IMD communities will help build future communication and engagement with those communities.
Threats	Research from independent studies has shown that the uptake from literature received through the post can be quite low. It is difficult to measure the impact in terms of behavior change as a result of these actions.
Lessons learned and misalignment with original planning	
Lessons learned	The use of statistical data on geographical areas of deprivation and fuel poverty was successful and should be expanded to other areas in the south west region.
Misalignment with D5.2 and D5.4	This soft/engagement activity was not originally planned in D5.4. but was initiated at the start of the cold season (October 2019) as a way of prompting people to check the health of their heating systems ahead of winter and promoting the ASSIST project and HEA home visit service.

7.3.5 Soft/engagement activity #5 (Advice sessions at CCP (Caring for Communities and People) Drop-In Centre)

Advice sessions at CCP (Caring for Communities and People) Drop-In Centre	
Action description	
Dates of action	April 2019 – Dec 2019
Action target	Low income families and those in energy poverty/debt.
Geographic dimension	Regional UK.
Geographic area	Cheltenham City, Gloucestershire.
Number of involved users	Approximately 150 per month.
Success rate	Number of referrals to active HEA for home visits (50 plus).
Action tools	Energy savings leaflets, general energy and money advice.
HEAs involvement	
Type of HEA	Non-active HEAs.
Number of HEAs involved	8
Foreseen involvement	First stage of triage engagement for VCs entering drop- in centre. HEAs give general energy and money advice and then refer onto active HEAs for a follow up home visit for more in-depth support.
Feedback from HEAs	Not monitored at present but the results of HEA training survey carried out in Dec 2019 – Feb 2020 should show how effective the ASSIST training has been for non-active HEAs in their everyday work.
Action monitoring	
HEAs activity	Number of people seen

Control group	N/A
Monitoring tools	No formal monitoring of this action.
Large control group	None
Estimated energy savings	2% saving of current energy consumption.
Vulnerable consumers outreach	VCs seeking support on money management, fuel debt or state benefits advice.
SWOT analysis	
Strengths	Good contact with target consumers; The drop- in centre acts as an important local resource for low income households. The centre has an open -door policy so people can make self-referrals as well as being referred from other partner organisations.
Weaknesses	The lack of formal monitoring means that the numbers reached can only be estimated.
Opportunities	Because the non active HEAs are fully ASSIST trained they were able to give general 1 st stage advice, identify if there was a need for more support and refer on to the active HEA or other support organisations.
Threats	The VCs may have multiple issues and could be at a crisis point in their lives so energy issues might not be the first issue to be dealt with. This is where referrals for a home visit is important part of the action.
Lessons learned and misalignment with original planning	
Lessons learned	Partnership working can only be as strong as its weakest link. It is difficult (or impossible) to be able to guarantee ongoing involvement from volunteers and partner organisations as it is dependent on external factors such as availability and funding. SWEA has had to be adaptable to changes in CCP which effected joint working on ASSIST.
Misalignment with D5.2 and D5.4	Originally 1 to 1 advice surgeries at CCP were planned to take place twice a month. These were to be carried out by CCP staff and CCP volunteers. Due to internal changes in CCP the centre now operates a kind of triage system where consumers are given 1 st stage advice and then referred on for more in depth support. CCP volunteers are no longer used in this capacity so were not included in the actions above.

7.3.6 Changes with regards to the Action Plan

The following soft/engagement activities (1 & 2) originally planned in D5.4 were not carried out or was an addition to the plan (3 & 4):

Activity	Justification
Phone/email advice via the Warm & Well advice centre	The original activities plan included phone and email advice carried out by Warm & Well staff. As this activity is already part of the Warm & Well core functions it has not been included in the final action plan.
1 to 1 energy surgeries at CCP Cheltenham drop-in centre with CCP staff and volunteers	Due to internal changes in CCP the centre now operates a kind of triage system where consumers are given 1 st stage advice and then referred on for more in depth support. CCP volunteers are no longer used in this capacity so were not included in the actions above.

Advice sessions at Springboard Groups	This soft action wasn't not originally planned but was in response to the national campaign Fuel Poverty Awareness Day.
Fuel Poverty Awareness Day high street information stand	Although this action wasn't specified in the original plan, we had anticipated that new activities would be developed throughout the course of the project. Responding to the national Fuel Poverty campaign fitted perfectly in with ASSIST aims and remit.
Large scale mailout to households in IMD areas (Indicators of Multiple Deprivation)	This soft/engagement activity was not originally planned in D5.4 but was initiated at the start of the cold season (Oct 2019) as a way of prompting people to check their heating ahead of winter and promoting the ASSIST project and HEA home visit service.

7.4 ASSIST Actions

7.4.1 Action #1 (Home visits by HEAs (money advisors, charity workers and energy assessors))

Home visits by HEAs (money advisors, charity workers and energy assessors))	
Action description	
Dates of action	April 2019 – December 2019
Action target	In depth support for VCs at their homes.
Geographic dimension	Regional UK.
Geographic area	Gloucestershire
Number of involved users	90 households and 147 vulnerable consumers.
Success rate	100% of all households received advice from HEAs.
Action tools	Providing tailored advice and solutions on energy efficiency measures and habit change. Also, demonstration and distribution of energy fact sheets and energy gadgets; appliance monitors, smart plug timers and room hydrometers.
HEAs involvement	
Type of HEA	Active HEAs recruited from charities, consumer organisations and private energy assessor company.
Number of HEAs involved	6
Foreseen involvement	Home visits carried out.
Feedback from HEAs	Positive feedback. VCs were very appreciative of the HEAs' expertise and help which led to a rewarding sentiment for the effort among HEAs.
Action monitoring	
HEAs activity	Number of involved consumers.
Control group	10% of involved households providing their data on energy consumption and energy expenditure before and after.
Monitoring tools	Ex- ante questionnaires carried out in each household.
Large control group	Not foreseen for this action.
Estimated energy savings	7% estimated through behaviour change and access to financial instruments (grants) to install measures such as new boilers, new central heating systems, draught proofing

	or insulation.
Vulnerable consumers outreach	147 vulnerable consumers receiving help with energy bills and energy efficiency advice.
SWOT analysis	
Strengths	HEAs can assess the VCs situation in a holistic way taking into consideration; the insulation & heating standard of the property, the behaviour of the VC and other members of the household and any other risks to the consumers.
Weaknesses	Arranging the visits can be problematic if the consumers are at a crisis point in their lives (health or financially) and visits can be often cancelled at short notice.
Opportunities	HEAs can flag up potential risks to the consumer and make a referral to other services such as the Fire Service to carry out home safety checks.
Threats	HEA may enter into difficult and unexpected situations but should be able to call on support from their office-based organisations.
Lessons learned and misalignment with original planning	
Lessons learned	Having good cross referral processes in place are important (where permissible under GDP regulations) to provide background information on the persons' vulnerability or any potentially difficult situations. Eg if there are hoarding issues at the property.
Misalignment with D5.2 and D5.4	None

7.4.2 Changes with regards to the Action Plan

All the actions which were originally planned in D5.4 were carried out.

7.5 Synergies

7.5.1 Synergy #1 (Citizens Advice – Healthy Homes project)

Citizens Advice – Healthy Homes project	
Action description	
Dates of action	September 2019 – December 2019
Action target	Referral to Healthy Homes scheme to access financial advice, specifically on debt and benefits.
Geographic dimension	Regional UK.
Geographic area	Gloucestershire county.
Number of involved users	Number of referrals made x 21.
Success rate	Not currently monitored.
Action tools	N/A
HEAs involvement	
Type of HEA	Non-active HEAs.
Number of HEAs involved	7
Foreseen involvement	Referral to scheme.
Feedback from HEAs	N/A
Action monitoring	
HEAs activity	Referring onto healthy homes scheme.

Control group	None
Monitoring tools	Number of consumers referred to scheme (21).
Large control group	N/A
Estimated energy savings	2% on current energy consumption.
Vulnerable consumers outreach	Fuel poor households.
SWOT analysis	
Strengths	Severn Wye and Citizens Advice (C.A.) are both long-standing partners in the local Affordable Warmth network and have reciprocal training and referral agreements. Close ties that have resulted in good communications across the projects.
Weaknesses	Once a referral is made to Healthy Homes the outcome is not reported back to the HEAs or to Seven Wye.
Opportunities	Close working across organisations with a similar client group means that we can access the best advice package for clients to gain the maximum financial benefit.
Threats	Funding for the Healthy Homes project is time limited, due to end 2020.
Lessons learned and misalignment with original planning	
Lessons learned	It would be good to establish a process where feedback was received on the success rate of the referrals.
Misalignment with D5.2 and D5.4	None

7.5.2 Changes with regards to the Action Plan

All the synergies which were originally planned in D5.4 were carried out.

7.6 Summary of misalignment with the original ASSIST action plan

The table below show the misalignments between the original action plan and the activities which were actually carried out:

Soft/engagement activity	PLANNED IN D5.2/D5.4	CARRIED OUT
Community Events – health support groups	x	x(Soft/engagement activity #1)
Phone/email advice Warm & Well	x	
Advice sessions Springboard Groups		x (Soft/engagement activity #2)
Fuel Poverty Awareness day Information stand		x (Soft/engagement activity #3)
Leaflet distribution to IMD areas		x (Soft/engagement activity #4)
Energy advice at CCP Drop-In Centre	x	x (Soft/engagement activity #5)
Actions	PLANNED IN D5.2/D5.4	CARRIED OUT
Home visits by social/health workers	x	x (Action #1)
Synergy with Citizens Advice –	x	x

Healthy Homes Project		
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7.7 Stakeholders feedbacks

The feedback from the HEAs has been very positive. They have reported feeling better equipped to advise people on their energy issues because of the support they have had from ASSIST training not just in the technical solutions but in communications and getting the message across.

The partner organisations hosting the community events have also been very appreciative of the HEAs' expertise. The groups are mainly small membership groups of between 15-30 people based on health issues (such as memory loss or strokes) or locally based groups designed to reduce social isolation for elderly people. The host organisations felt that the HEAs' approach was sensitive and pitched at the appropriate level.

7.8 Conclusions

In the main, the activities that were carried out have followed the original plan with the exceptions already mentioned above.

The large number of vulnerable consumer events that were carried out was due to the wide network of partners that Severn Wye has developed in the county. Severn Wye has a trusted reputation, and this has helped the ASSIST programme gain access to the vulnerable consumers' membership of these organisations. Many of the events were focused on disabled consumers as research shows that disabled people have higher than average energy needs and are particularly vulnerable to energy poverty.

For targeting low income families, the geographical postcodes from Indicators of Multiple Deprivation dataset was a useful tool in focussing in on the poorest areas, street by street. Although mailouts can be quite a blunt tool, even if only a small percentage of residents responded it would mean thousands of households taking some kind of action and being more aware of energy efficiency improvements they could carry out.

CCP (Caring for People and Communities) is one of the key partners in the ASSIST project and their drop-in centre in Cheltenham was always planned to be central to the vulnerable consumers outreach. The 1 to 1 sessions did not happen which was outside of ASSIST's or Severn Wye's control but a large number of Home Visit referrals were made directly from the centre.

In the original activities plan, 60 home visits were expected to be completed by the 6 HEAs. However, the final number is now 90 home visits with over 140 people supported through this action. The increase in home visit numbers was partly due to the change from 1-1 advice sessions in the drop-in centre to more in depth support via a home visit.

All the actions detailed in the previous paragraphs, will continue in the next months and the final results will be presented in D5.5, with the results achieved.

Final considerations

This deliverable presents the current status until the end of January 2020 of the implementation of ASSIST2gether activities in the different countries involved in the project.

The partners have chosen a different path for the Action implementation in their own different countries, using different approaches in order to take into account the intrinsic characteristics of the local contexts and the specificities of the vulnerable consumers involved.

The activities carried out in each country have been described in detail in the previous chapters on a country base with a focus on HEAs involvement, reached consumers, lessons learned and stakeholders feedback; moreover, a SWOT analysis has been performed for each activity, in order to provide a critical analysis of what has been done with its strengths, weaknesses, opportunities and threats.

Finally, any misalignment with the actions plan presented in D5.4 has been pointed out and justified.

Although some of the activities which were originally planned in D5.4 were not carried out due to arisen difficulties, they were replaced by other activities, but, unfortunately, in some cases the number of reached consumers were slightly less than the expected target.

However, the overall results can be considered positive as they managed to successfully involve vulnerable consumers and implement a series of activities which supported them to be more efficient with their domestic energy consumption habits.

The countries which have not reached the required target of 750 engaged consumers will continue to carry out the activities already in place in order to meet such an objective before the end of the project.

The final results of the above described actions in each of the involved country in terms energy savings and other indicators will be presented in D5.5.



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