



# European Market Survey on Vulnerable Consumer Needs



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# 1 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. Its aim is to both actively engage consumers with the energy market, helping them to positively change their behaviour in relation to energy consumption as well as influence the design of policy relating to energy poverty.

Based on the conclusion of the Energy Citizens’ Forum and 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. Specifically, the ASSIST strategic objectives are to contribute to:

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

In order to fulfil its goals, the project foresees very diversified, but correlated, research, networking activities as well as in-field actions, consistent with the relevant national and European-wide scenarios.

ASSIST intends to create a network of innovative professional figures whose aim is to support vulnerable consumers with their domestic energy consumption, the **Home Energy Advisors (HEA’s)**.

## 1.2 WP2 – In depth knowledge on Consumers Vulnerability / Energy Poverty

This report is one of a series of reports produced as part of Work Package 2 of the ASSIST Project. The objective of this work package is to both gain a more in-depth understanding of vulnerable consumers and energy poverty as a problem in European society and of the possible solutions to tackle it.

The statistical data gathering, analysis and survey work that form the basis of this work package will allow for fine-tuning of the activities foreseen in the forthcoming work packages (mainly WP5 - ASSIST action). This data will also be used for the production of a “Vulnerable Consumers and Fuel Poverty Report” which will effectively be a summary of

the 4 reports in this series. It is anticipated that this report will represent an up-date to SeRENADE<sup>1</sup> on the social phenomena of consumers' vulnerability and more specifically of energy poverty and advice. It will assess how European Member States

- define the issue of energy poverty and vulnerable consumers;
- implement measures to address these issues; and
- address household energy needs and target energy efficiency measures to low-income households living in energy inefficient houses.

The analysis of the data gathered will guide the recommendations to be made by the ASSIST project for European policy changes, one that involves developing sound and efficient European policies that are also robust and effective in terms of market design. This work package will undertake a thorough analysis and mapping of consumer vulnerability and energy poverty in Europe, integrating the following aspects:

- Context of fuel poverty across Europe and the governance of the actors (who does what and how);
- Database of existing financial measures put in place in all Member States to support vulnerable consumers and alleviate / tackle energy poverty,
- Database of public initiatives carried out and on-going to tackle the problem;
- Good practices identified that can be shared across Member States;
- National market survey on vulnerable consumers / energy poverty to better understand vulnerable consumer's energy consumption, habits, knowledge and awareness on energy efficiency.

## 1.3 Document overview and structure

This report is the result of analysis of both consumer and stakeholder surveys carried out in the countries involved in the Assist project (Belgium, Finland, Italy, Poland, Spain, UK). The aim was that these surveys complement the European Union Statistics on Income and Living Conditions (EU SILC) on the perception, needs and expectations of vulnerable consumers / energy poor in relation to energy efficiency.

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<sup>1</sup> The SeRENADE project (2006-2008) brought together several experienced advice providers to: Study and review existing advice provision in Europe; Make know-how on delivering advice easily available through an online energy advice toolkit and forum for exchange of knowledge and experience between skilled practitioners and new providers; Deliver a pro-active dissemination programme to promote the benefits of advice and the resources available. In terms of advice subject matter, the project is concerned with energy efficiency, renewable energy and sustainable transportation/mobility. Three client groups are considered: households, small and medium enterprises and local authorities.

This will be carried out through a two-fold methodology: quantitative statistical data through a questionnaire addressing consumers and qualitative data through in depth interviews to selected national key actors and stakeholders. SWEA will prepare a detailed questionnaire, interview framework and partner reporting template (for their findings) to collect information on: • Individuals' perceptions and knowledge on their domestic energy consumption and energy consumption habits the correlation between knowledge and need to reduce energy consumption, • use of existing targeted services for vulnerability and suggestions for services they would appreciate if available on the market, • housing conditions to understand the real living conditions of the vulnerable consumer and energy efficiency measures implementation (who pays owner / landlord, when, why, etc.) • use (if any) of subsidies or other financing opportunities – to better understand the reasons for requesting (or not requesting even if entitled) of financial subsidies; • assess and monitor the causes and consequences of energy poverty in order to verify possible strategies and measures to face the problems of energy poverty rather than the condition itself. All partners will initially conduct in depth interviews with a relatively small group of 3 – 6 individuals per partner country. These initial interviews will address both vulnerable consumers as well as energy / social stakeholders and will aim to collect information to define the questionnaire for the surveys (both quantitative and qualitative) and, if possible, also test preliminary draft version of the questionnaire. These initial in-depth interviews are not related to the interviews carried out in the qualitative survey.

## 1.4 Methodology

### 1.4.1 Methodology for Stakeholder Surveys

The qualitative survey will address public and private key actors and will be carried out only through in depth interviews. The in-depth interviews aim to thoroughly discuss with some selected stakeholders the state in the country / Europe of vulnerable consumers / energy poverty and also discuss possible solutions. The aim of the in-depth interviews is to deepen the knowledge collected during the qualitative survey on the concerns and considerations of the vulnerable consumers. The guideline for the in-depth interview will be prepared by SWEA with the aim to collect the following data on the phenomena of vulnerability and energy poverty: • geographical dimension and distribution; • national and regional policies, supported by programmatic documents; • existing national institutional tools and services (including subsidies) and results achieved; • national key actors and main stakeholders. In each country all partners will interview selected main stakeholders, such as academics, government or public administration officials, various practitioners (indicatively 20: from regional/national authorities from the energy and social sector and private actors from the energy and social sector).

Please refer to Annex 1 for the template of the stakeholder survey

### 1.4.2 Methodology for Consumer Surveys

A representative market survey will be launched through internet (survey monkey or google forms) in order to assure a wide national coverage (the spreading of the quantitative online survey will be supported also by various national stakeholders, as reported in the LOS table). The quantitative survey will address vulnerable consumers and in each country it will reach 300 vulnerable consumers and a return rate of the filled questionnaire of 50% is expected. Each partner will collate and summarise the results in the partnership templates.

Please refer to Annex 2 for the template of the consumer survey

The consumer survey completed by Finland differs slightly to that completed by other countries due to the high number of responses collected in the country and the information still provides useful data that will inform future actions to be completed through the ASSIST program in Finland.

## 2 Analysis of Stakeholder and Consumer Surveys

### 2.1 Stakeholder Surveys

The aim of the qualitative survey for stakeholders is to:

1. Engage stakeholders in the project. The interview is a way to market the project, disseminate information about the project, and engage stakeholders in the project. This could involve using the interview as an opportunity to recruit stakeholders to the Steering Committee.
2. Assess current provision. The interview will provide the opportunity to discuss current work that is being undertaken with regard to energy poverty and specifically on support for vulnerable consumers. The discussion should include the nature of provision and comments evaluating the provision.
3. Guidance. The interview may help to inform the planning of activities for volunteers.

#### 2.1.1 Italy Stakeholder Surveys

What are the main gaps and issues surrounding energy poverty and vulnerable citizens?

#### Definition



The lack of a proper definition for vulnerable consumers and energy poverty create a puzzling scenario for the stakeholders. Even if there are academic papers and studies, they can't replace a nationally adopted definition. This issue is important because of the multilevel peculiarity of energy poverty, embracing several themes and thus requiring different actions. Among those mentioned by the stakeholders: energetic requalification of buildings, income support; training and information. Currently, it appears that energy poverty cannot be addressed as a specific issue but simply be included in the fight against overall economic poverty. However, with an absence of definition comes an absence of result: it's extremely complicated to measure the impact of any action if the target is not even identified.

### **Financial instruments**

Another relevant issue is the availability of a single instrument to fight energy poverty, the social bonus for electricity and gas, which is actually targeted at consumers with specific features (income, more than 3 dependent children, and serious health condition - in the case of disability bonus). Connected to the lack of definition, there is complexity in measuring the impact: it is hard to understand if this instrument is really tackling energy poverty. According to the Authority, only 34% of the potential target obtains the social bonus: so the majority of consumers entitled do not enjoy the discount they should have.

Furthermore, there are consumers off grid, so they are automatically excluded from the possibility to access to the bonus (for natural gas, for instance), and an high percentage of them could actually be in energy poverty.

### **Trust**

Considering the complexity of the energy markets, stakeholders raised the issue of building consumer trust. This is a twofold problem: a strong lack of trust in energy operators and their contact centres - who have direct contacts with consumers and the problem of understanding energy dynamics. Therefore, the key issue is how to engage consumers directly in the initiatives, and maintain frequent contact with them, so as to help vulnerable consumers to understand the possibility of enjoying a social bonus.

### **Costs**

Stakeholders referred to costs in different ways. Someone is concerned about the bill in the current economic context, with high level of youth unemployment, higher living costs. Moreover, decarbonisation incentives fall on the bills, and thus could worsen the situation for energy poor consumers. Other stakeholders are also considering the problem of the quality of housing and the efficiency of the building. Energy efficiency measures are expensive and out of reach for vulnerable consumers, thus again leaving them out of the real target for most of the actions.

Social and psychological barriers



It is not rare to find consumers with a lack of awareness regarding their condition of vulnerability, both in terms of a lack of information and a public shaming problem. Indeed, people perceive a high risk of stigmatization due to the fact that they could be familiar with the offices and the helpdesk employees. This diminishes the possibility of contact and help from social workers, who are not aware of the situations of many vulnerable consumers.

### **What are the initiatives/gaps/activities that need to be addressed?**

Improving policy: There should be an effort on several levels to fill in the gaps at a policy level. A methodology must be identified, in order to focus on what should be measured and how to do it. Moreover, policies on energy poverty appear to the stakeholders as spot activities, unrelated with each other, and without a clear target in their design. Thus, there is the need for a strategy (which is now under scrutiny at Government level with the National Energy Strategy) to coordinate activities and make it clear to the different actors how this problem should be addressed.

Even if there is a need for European coherency, stakeholders emphasized that every country has its own energy poverty characteristics. Thus, different strategies must be designed for different countries: it's a geographically correlated issue. Targeting and engaging a vulnerable consumer is considered one of the biggest problems to targeting some consumers out of any support scheme. In order to ensure no-one falls through the net, municipalities must be engaged: they are the closest level of authority to the consumer, and they can have a better understanding of both demographic and geographic issues. Stakeholders considered municipalities and their agents as the tool that should be engaged and specifically trained, or at least involved in the ASSIST project. Stakeholders agreed also on the importance of engaging operators from the social level: in previous projects they have found it hard to involve them. Energy poverty does not seem to be considered as relevant for social stakeholders, thus contributing to the failure of spreading information about the social bonus.

### **What is already being done?**

Most of the activities being undertaken are about networking, in order to support vulnerable customers. Projects typically regard support in order to get the social bonus: information, requirements, procedures, so that consumers within the reach of this instrument are able to benefit from it. A stakeholder has undertaken a project - Diritti a Viva Voce - together with other association, to create a network of energy helpdesk (sportelli), in order to provide information and support to domestic consumers nationwide.

A stakeholder has carried on a project on energy saving for social housing, with several problems on engaging consumers. A supplier has established a non-profit organization, with the aim of creating full recovery paths, including the distribution of essential goods and the payment of urgent expenses such as energy bills (of any supplier).

Given the absence of definition and measurement, some stakeholders have published economic research on energy poverty, in order to contribute to identifying a nationally accepted definition.

### **How can ASSIST align with the policies and activities of stakeholders?**

Stakeholders would like to share experiences and define best practices, in order to overcome some difficulties they have found in the past. Some organisations would like to have some of their personnel trained in order to support vulnerable consumers.

Most of them have emphasized the need of creating connection between organisations so that practices can be shared and used on a wider level.

### **What would stakeholders like to see from ASSIST?**

- Help vulnerable consumers understand the new liberalized market
- Real engagement of vulnerable consumers
- Increase consumers trust in the market
- Support and engage Energy helpdesks in municipalities and social entities with training courses
- Activating competences at a local level, where the relationship with consumers can be stronger
- Outreach for hidden vulnerable consumers
- Help boost the idea that efficiency is a powerful tool to tackle energy poverty
- Set up a permanent network of advisors
- Influence the political process on the importance of a specific advisor for vulnerability, poverty and efficiency
- Obtain a common EU definition
- Obtain standardization at EU level and share best practices
- Frame energy poverty within the poverty policies

## **2.1.2 Belgium Stakeholder Surveys**

**What are the main gaps and issues surrounding energy poverty and vulnerable citizens?**

**Poverty/energy poverty**

Energy poverty is a consequence of living in poverty more generally which means living in poor quality dwellings often with a high energy demand.

There are a number of structural reasons for energy poverty problems in Flanders: poor build quality (especially those buildings on the market for people with low incomes), high share of vulnerable customers on the rental market (with split incentive problems: owners have to invest in energy efficiency measures, while the tenants enjoy the benefits of those investments, and generally cannot afford a higher rental price if the owner decides to recoup the energy-efficiency investment).

About 1 million dwellings in Flanders do not comply with the minimum standards of the residential code. For most of these houses, minor adjustments are required, but for about 350.000 the problems are structural (e.g. moisture problems). Often it would be better to demolish these existing buildings and build new properties (rather than investing in renovation measures). Most vulnerable customers live in this type of property. Other (structural) problems have to be addressed more urgently than energy-related investments.

Most vulnerable customers are renting an apartment or a house of poor quality. In addition, in Flanders the private rental market is dominated by small-scale owners (i.e. owners having one or a few properties on the rental market). Compared to a situation where rental dwellings are owned by big corporations this makes it more difficult to deal with structural improvement measures in the Flemish rental market.

Poor households generally have difficulties paying monthly bills for numerous items (e.g. rent, telecommunications, food, transport, etc.). One should first understand how and why these households decide on which bills to pay first. For instance, the threat of disconnection is higher for telephone than for energy, since in Flanders there is the system of the social energy provider of last resort (i.e. the DSO). This system therefore tends to work in a counterproductive way: because the vulnerable customers know that they will not be immediately disconnected from the electricity or gas grid, when faced with budget constraints they often decide to pay the other bills first.

## **Energy costs**

Over the last few years, the average residential energy bill has been increasing. This is for a number of reasons: the transition to renewable electricity is financed via the electricity bill, the system of free kWh has been abolished, etc.

There has also been the tendency to increase the fixed part of the electricity bill (e.g. a yearly fixed surcharge on the electricity bill to pay for the debts incurred by subsidising green electricity production. Recent proposals suggest moving towards a capacity-based distribution tariff), where energy bills should be related to the amount of energy you consume (so that energy savings also pay off). Increasing the fixed part of the energy bill is generally detrimental to vulnerable customers (who generally consume less energy).

## Energy poverty policy

The financial instruments available for energy-efficiency improvements are not taken up by vulnerable customers because of numerous barriers (e.g. administrative burdens, upfront expenditure needed, etc.).

Energy poverty policy in Flanders is predominantly curative, but can also be counterproductive:

- E.g. there is a social safety net (the DSO as energy provider of last resort), but the tariff charged by the DSO is based on the average of commercial tariffs available in Flanders so the customers could in fact save money if he/she would choose the cheapest option on the market;
- E.g. the installation of a budget meter (in case the customer has debts with the DSO) stigmatizes the customers and acts as a further barrier for lifting these customers out of the poverty trap.

Energy poverty policy is the responsibility of the minister of energy and energy administration and other institutions (e.g. Flemish energy agency, the regulator VREG, the DSOs). Each of these organisations has specific tasks and responsibilities, and therefore also tend to operate in isolation.

There is no integrated policy view on energy poverty as part of the general poverty problem. Ideally, energy poverty should be addressed by the ministry of housing.

Energy poverty policy is the subject of an ideological battle in Flanders. On the one hand, there are those who believe that measures to alleviate energy poverty (e.g. zero interest on energy loans for efficiency improvements) should be an integral part of the regular economy (i.e. commercial banks providing the loans); on the other hand there are those who believe that these measures should be part of social policy. As it is now, energy poverty policy is part of social policy (e.g. energy houses providing the zero-interest energy loans, free energy scans provided by social economy organisations), but there are proposals circulating to cut back the subsidies to the social sector for energy poverty alleviation. Also, DNBs in Flanders are under pressure to focus exclusively on core activities (i.e. managing the distribution grid).

## Existing system of energy audits

The existing system of energy scans provided by energy advisors (energiesnoeiers, cf. infra) working for social economy organisations has the advantage of being very accessible to the target group of vulnerable customers. However, currently the effect on energy savings is limited because the energy audit only rarely leads to energy-efficiency investments.

Regarding the system of energy audit, the energy efficiency organisations are required now to work with target groups of vulnerable customers. Some of these targets groups

(e.g. customers at risk of being disconnected from the grid because they refuse to install a budget meter) are very difficult to reach even though an energy audit and energy saving advice could be highly beneficial to them.

Because of the focus on directing energy audits at vulnerable customers, more effort needs to be put into each individual energy review. This means that fewer audits are performed per energy advisor per year (-25% over the years), leading to less income since the energy efficiency organisations are paid per energy audit;

The work of the energy advisor is challenging because of the poor quality of information available at the start of the audit (e.g. self-reported energy consumption) and the constantly changing (complex) system of energy efficiency premiums.

### Energy advice for vulnerable customers

Policy makers are increasingly stressing that energy scans should lead to energy efficiency investments. Even though structural improvements are indeed required in most of the cases, they are often unrealistic given the barriers for vulnerable customers. These barriers can be addressed by...

- Directing more financial resources from the government budget to energy efficiency premiums for vulnerable customers;
- Ensuring a more intensive follow-up of energy efficiency renovations for customers in vulnerable situations;
- About 80% of energy audits are a one-off activity – i.e. one home visit, customers receiving a more or less standard report after the visit. Customers can only qualify for a follow-up visit based on very rigid criteria. It would be much better if all energy scans would be followed up over time (e.g. 4 separate visits, from first assessment to the actual implementation of recommended measures) and be much more targeted to specific customer situations/ requirements (e.g. practical tips on working with a budget meter).

Some of the target groups for free energy audits are known to the DNB (e.g. customers with a budget meter). In principle, candidates for an energy audit can be drawn from address lists available to the DNB, but this cold procedure is not very successful. It is better that vulnerable customers are guided towards the energy advisor to receive a free energy audit by intermediaries who are active in the field such as social workers, energy poverty organisations, or local social welfare organisations. Such intermediaries are more able to build up a relationship of trust with vulnerable customers, and this facilitates the interaction with the energy advisor. However, this approach is more resource-intensive.

### Policy-related

The problem is mainly one of having sufficient resources for (energy) poverty policy:

- Constructing more social dwellings;

- Targeting the system of energy efficiency premiums much more, to vulnerable customers and ensuring the necessary follow-up in the implementation of energy-efficiency measures.

Encouraging structural investments in better housing stock (especially in rental market).

The Flemish government has put forward ambitious long-term targets for the building stock. By 2050, 2.7 million dwellings have to be renovated to a low-energy building standard. About 200 to 300.000 of these dwellings are on the rental market. It's especially challenging to encourage deep renovations in the rental market.

Avoiding the purely curative focus of energy poverty policy. E.g. the house visits in the context of the energy audits should be broadened to visits to assess the living conditions of the vulnerable households in question, and giving tailored advice, possible solutions and follow-up if needed to improve the living conditions. This requires a close collaboration between different actors working in the field (e.g. energy advisors and social workers employed by local social welfare organisations).

Financing renovations in the social housing sector;

Creating the political will to address energy poverty;

Lowering the taxation level on energy from 21% to 6% (at least for vulnerable customers);

Involving vulnerable customers in positive projects that show that the energy transition can also be an opportunity for them.

For many local (especially in the small communities) OCMWs (local social welfare organisations), energy poverty is not a priority. In the big cities in Flanders energy poverty is a priority, but even there outreach to vulnerable customers depends on the number of social workers devoted to the issue.

## **What is already being done?**

Energy advice for vulnerable customers:

KOMOSIE (social economy umbrella organisation) coordinates all of the working of 29 organisations of energy advisors (energiesnoeiers, home energy advisor organisations working in the social economy). 20 of these organisations perform energy audits, 9 organisations are mainly concerned with implementing social home improvement actions. The fact that the employees of these organisations are recruited from people in vulnerable situations adds to their effectiveness: they can easily gain the trust of vulnerable customers. In general, the barriers during the initial contact stages (e.g. shame etc.) are lower.

About 20.000 energy audits are performed on a yearly basis. There are 6 target groups that qualify for receiving a free energy audit (e.g. customers with a social tariff, customers

with a budget meter, customers who rent at a price below a certain threshold value, customers in debt mediation who are at risk of being disconnected etc.).

In 2016, 650 social home insulation projects were implemented targeted at the rental market (home owners renting dwellings to vulnerable households - these home owners require a specific targeted approach because they are usually very reluctant to improve their properties).

Comment on effectiveness: There is no official data regarding the energy savings realised by the energy audits. A recent evaluation however found out that on average only 3,5% of the energy audits led to investments in energy-saving (insulation of roofs or walls, double glazing, and condensing boilers).

OCMWs (local social welfare organisations) are also active in the field of energy poverty. They perform many activities, e.g. organising a helpdesk, supporting people in the management of their debts (including energy debts), looking for adequate housing opportunities, etc.

### **Responsibilities of the DSOs:**

- Working together with other parties (e.g. public welfare organisations (OCMWs), poverty organisations, etc.) to push back energy poverty.
- Giving advice on rational energy use to all vulnerable customers.
- In the Flemish regulations, it is foreseen that the DSO takes the role of social energy provider as a last resort (if customers are dropped by commercial providers).
- DSOs install budget meters for customers who have difficulties in paying their energy bills.
- In case a customer with a budget meter still cannot pay the energy bills, the DNB works together with a local advisory commission (including the social worker responsible for debt mediation) to look for solutions adapted to the situation of the customer. Only after a negative advice of the LAC will the customer be disconnected from the grid.

### **Policy-related:**

- Following up on regional, national and international climate and energy policy; and formulation policy proposals towards policy makers.
- Putting the topic of a just energy transition at the centre of policy attention. Putting the fundamental issue of who pays (and should pay) for the energy transition at the forefront of the policy discussion.



## **Other:**

- Publication of the yearly energy poverty barometer (based on the EU SILC inquiry).
- Qualitative research (funded by the Belgian Science Policy Office) on the relationship between poverty in general and energy poverty in particular, looking at all possible dimension involved (e.g. health, housing conditions, life stories, etc.).
- The steunpunt armoedebestrijding formulates recommendations towards policy makers on how to make poverty reduction measures more effective. A.o., it publishes a two-yearly report. In 2015, the report was devoted to public services. It has a chapter on energy (which can be downloaded).

## **Links to Assist**

- ASSIST has to work closely with the existing network of energy advisors (about 250 are employed in Flanders).
- Because of the rising energy costs, there will be great interest in the ASSIST action.
- It would be interesting to explore the possibility of including EANDIS personnel in the action. They could be the ambassadors for the action in their neighbourhood.
- The HEAs should have experienced energy vulnerability themselves. This life experience gives them an important advantage when communicating with vulnerable customers: speaking from their own experience, they can address the concerns of the vulnerable customers, and their advice is taken more seriously (if the advice comes from someone with no experience, a gap or barrier is easily created: e.g. you don't know what it means to live with a budget meter);
- Technical competences are not the most important skill that the HEAs should possess; it is more important that they have good communication skills. After all, they enter into a private home, stay there for about 1-1,5 hours, visit all rooms and therefore get an intimate insight into the living conditions of vulnerable customers who are often ashamed of these conditions. This situation requires a great deal of empathy and social skill to gain the trust of the customer.
- Make the link to the quality of living in general.
- VEA (the Flemish energy agency) is trying to set up a specific campaign w.r.t. switching the energy provider. Research by the Flemish regulator shows that there still is a significant proportion of the population that never switches to another energy provider even though this can lead to savings of more than 100 euro on a yearly basis in most cases.

What would you like Assist to achieve?

- Energy audits with advice tailored to specific customer situations (instead of the more standardised reporting currently practiced).

- Visualise the energy savings (in kWh or Euro) to the households concerned so that they know and understand that they are making progress.
- Communicate in a really practical, down-to-earth way, showing step-by-step how energy can be saved.
- The ASSIST action should do an integrated audit of the living conditions of vulnerable customers. Beyond just the energy-related aspects of the dwelling, the home-energy advisors (HEAs) should check e.g. whether it would perhaps be better to move to another dwelling, and if this is the case, give advice on the possibilities (e.g. check whether the customers are perhaps eligible for a social dwelling, look for nearby opportunities, etc.).
- The HEAs should therefore work closely together with local social workers (OCMW).
- Tailoring the advice to different segments of vulnerable customers, e.g. the elderly, customers with a migration background, single-parent families, etc. All of these groups likely have different motivations, different comprehension of energy issues, different capabilities for action, etc., and this should be taken into account in the ASSIST action.
- Think carefully about your target audience. For instance, people with budget meters typically already are very aware about the possibilities for saving energy.
- Avoid overwhelming people with energy saving tips they get. Make up a summary sheet (one page max.) with the options that are best suited to their circumstances, and discuss these options in depth;
- Make sure that the energy-saving tips are relevant and manageable for the people concerned (e.g. that they have the necessary budget).
- Energy audits with intensive follow up (e.g. 4 visits instead of just 1). Address all possible problems and solutions (including a broad overview of possible financial measures). Implement multiple steps (house visits), e.g. first one to do the audit, second one to discuss possible solutions with the customer, third one to decide on what will be done + assist in the implementation of the solution (e.g. looking for a cheaper energy provider, switching contract).
- Evaluating the effectiveness of energy scans coupled with practical advice for vulnerable households. Make sure that you realise a lasting effect i.e. realise energy savings that do not require the continuous attention of the people involved (usually they have a lot of other things on their minds).
- Focus on the possibilities to save money by switching to a cheaper energy provider.
- Avoid any element of blame on the part of the victim (i.e. vulnerable customers are to blame for the problems they are experiencing in paying their energy bills, because of their energy-inefficient behaviour).

- Make the action part of a broader initiative to include vulnerable customers in the energy transition. Put in a negative way: the action should not be conceived of as a caritative action towards a specific group of poor people. This is a very stigmatising approach. It would be better to e.g. work on the level of a neighbourhood (including of course a high number of vulnerable customers), and discuss on this level how problems concerning energy use could be alleviated.
- Address the structural issues of the Flemish region (which cannot be addressed by the action) in the ASSIST policy recommendations. Create visibility at the European level.
- Promote the work of the energy cutters at the EU level.

### 2.1.3 Spain Stakeholder Surveys

#### **What are the main gaps and issues surrounding energy poverty and vulnerable citizens?**

##### Poor housing

Poor housing - the lack of thermal insulation, double glazing, etc. leads to higher energy consumption. There is thus a need for energy efficiency technologies that address both these issues in terms of retrofitting existing buildings.

##### Socioeconomic situation

As much as the housing situation is important, another key factor is related to the socioeconomic status of the people living inside the house. If the person living in a very inefficient house is not able to pay the required amount of money to keep the house warm, this person is considered energy poor. In fact as one of the stakeholders suggested, energy poverty is related to “the capacity of the person / family to pay the energy bills [of the house they live in]”. This lack of economic capacity to take care of the bills leads to debt which makes the socioeconomic situation of the family even worse.

##### Problem with the system

At this juncture, we need to point out that there are two possible ways in which stakeholders could refer to the system: (1) the local organizations that are working by identifying vulnerable people and helping them and (2) the macro-level system (energy price, politics, law...).

Taking into account the first way of understanding the system, the stakeholders argue that there is a big issue with regards to the way vulnerable people can be assessed because there is only one administration department (Local Social Services) that can give the vulnerability certificate - which is essential to avoid power cuts -and this slows down the system. This system also relies on institutions working together to tackle the problem.

When looking into the second way of understanding the system, the stakeholders point out that there is a need to develop more energy efficiency policies and the current high energy costs.

#### Lack of information

There is the idea that there is not enough information about energy prices. In line with this thought, there is the belief that there needs to:

- (1) spread more knowledge among citizens about what energy poverty is including the causes and impacts on health;
- (2) knowledge about bureaucracy and management (contact families...) and
- (3) consumers having knowledge about their rights.

Thus, one can argue that there are two possible ways of looking at the problem: the micro level (tackling problems from the bottom such as rehabilitation and focusing on helping the most vulnerable from the bottom-up) and the macro level (tackling the system, either politically or economically). And when doing both it is key to provide efficient and targeted information.

The stakeholders summarize the initiatives, gaps or activities that need to be addressed are:

- (1) System;
- (2) The need to develop private strategies;
- (3) Aid (financial and social);
- (4) Communication towards vulnerable consumers.

The following paragraphs explain what the stakeholders believe that needs to be addressed under these four main topics.

#### **System (law)**

The Sindic de Greuges, the Catalan Ombudsman point out that there is a need to:

- (1) change the law in order to exclude from the energy bill concepts that are not specifically linked to energy consumption; and
- (2) promote the social Tariff in order to be able to help more people.

#### **Private and Public company strategies**

Companies should incorporate within their plans Corporate Social Responsibility (CSR) programmes that are specially made to help vulnerable consumers. These programmes should be public and raise awareness. Social Services should know who are involved in

these CSR programmes in order to coordinate with the private institutions to help those that are more in need.

In addition, there should be a clear working channel between the public and the supply companies. In that sense, it is also important to strengthen the collaboration between all the companies that work in the energy poverty field. There is a need to exchange information between private energy companies such as Gas Natural or Endesa, the big suppliers (who know about energy) and social services (who know about people).

Finally, it would be a key aspect to allow health centers to issue energy dependency certificates and work with public health institutions to take into account health issues when designing interventions to tackle energy poverty.

### **Aid (financial and social)**

Aid is mentioned in two ways; as a financial or as a social help. As a financial help it is mentioned that there is the need to provide aid to:

- (1) the refurbishment of dwellings;
- (2) reduction of energy prices; and
- (3) financial assistance providing money and subsidies to those in need to do a refurbishment in their households and that want to implement energy efficiency measures as well as implementing a self-consumption mechanism.

As for social help:

- (1) identification of organizations and channels that can complement the social services on identifying vulnerable energy consumers so social services don't collapse;
- (2) assessment of citizens by allowing them to acquire energy efficiency appliances and lighting.

### **Communication towards vulnerable consumers**

It is important to have energy advisors in order to advise people. In line with this it is also key to develop communication and education tools and mechanisms such as the ones already in place called Energetic Assessment Points (PAEs from Catalan Punts d'Assessorament Energetic) in Barcelona. There is though a need to specially focus on vulnerable consumers and work towards achieving a way to easily identify people that are energy dependent.

### **What is already being done?**

Interestingly, the topics that arose from the stakeholder answers on what is already being done, do not differ much from the things that need to be done. In that sense, while the previous question argued that there is a need for more assessment, financial aid and more communication; the stakeholders also believe that there are key things already being

developed in these areas. Nevertheless, on these questions one can notice that there are initiatives that are taking place within the field of research and investigation. As such, what they argue is that the actions that are already underway include:

#### Education, Communication and Assistance:

- Answer questions via an open telephone line about energy poverty
- Developing energy saving workshops
- Working with families to tackle short-term problems that lead to short to mid-term effects.
- Review households contracted energy power
- Help process the Social Tariff
- Assist consumers by explaining how to both contract social tariffs and minimize the contracted power capacity.
- Education about sustainable consumption
- Facilitate information about solar panel management in public housing.
- Energy Assessors
- Help consumers by looking for energy efficiency and rehabilitation public/private economic help.

#### Investigation

- Conduct reports on the energy poverty situation
- Develop recommendations and suggestions
- Evaluate the impact of an interventions to tackle health issues by evaluating the effect of thermal insulation on the change of the household temperature
- Studies with neighbouring communities about alternative ways of keeping warm during winter.

#### Finance

- Direct financial assistance by Red Cross or other social organizations
- Gas Natural approved a vulnerability plan that gave 4,5 million euros to develop projects around Spain

How can ASSIST align with the policies and activities of stakeholders?

Below is a list of projects, initiatives and roles that, according to the stakeholders approached, are already in place to tackle energy poverty in Barcelona, that are in line with the ASSIST goals. The stakeholders mentioned that they could see a feasible collaboration between their organizations / projects they are developing and ASSIST. The mentioned projects are:

- Punts d'Assessorament Energètic (PAEs): Energy Assessment Points located around Barcelona where citizens can go ask questions related to energy poverty and energy efficiency. One of the main goals is to be able to detect possible vulnerable people and thus help them at home.
- Energy agents or energy advisors working at town councils that have knowledge on energy poverty.
- Project "Energia la Justa": Learn how to read your electricity and gas bills at home.
- MésEficients cooperative. Occupability programme giving assistance to create an energy cooperative.
- Social workers with knowledge on social issues that are developing similar roles within social organizations.
- CONFAVC and Agbar developed a programme to tackle energy poverty within the neighbourhoods.
- Làbora programme: "The Labora Programme links companies to a social-responsibility programme while also arranging for various economic sectors to take part in an initiative that works to promote equal opportunities for the general public. In this sense, companies in the renewable-energy sector benefit from economic incentives and bonuses for hiring people who are registered with this programme.
- Gas Natural Foundation trains people with the same goal. It has in fact started what they call the energy school with the idea of providing educational support to social services.
- Municipal Occupability programmes. Municipalities such as Figueres or Parets del Vallès have trained a group of energy agents to give support to vulnerable families.

What would stakeholders like to see from ASSIST?

From a global perspective, the stakeholders want ASSIST be able to work hand by hand with them to help them achieve their organization's goals. As such, depending on the organization's nature they see the ASSIST figures as (1) a more network coordinator agent or (2) a rather grassroots and hands-on fieldwork person. Therefore:

On the one hand, ASSIST energy agents could be used as network agents that could both coordinate different organizations working on the social and energy field to tackle energy



poverty, and also used as regulation experts. In that sense, they would be the main point of contact when someone would have questions about regulations and how to operate.

On the other hand, it is argued that an ASSIST agent could give more specialized and targeted solutions focussed on solving energy efficiency problems within households. Within this line of thought this figure could be seen as a more fieldwork person rather than a coordinator and thus be used to “identify and quantify the vulnerability situations” (Barcelona Activa).

Interestingly, the Pompeu Fabra University (UPF) argues that ASSIST experts could actually do both things: (1) help with the living conditions of those living with Energy Poverty (assessing with energy bills, housing rehabilitation...) and (2) be a link between organizations and energy users. Taking into account the stakeholder’s answers one can argue that they don’t have a clear idea on what ASSIST could achieve by itself. Nevertheless, they do have a clear idea about how beneficial it would be for the organizations to count on working together with ASSIST. For instance, Gas Natural argues that “... could work in partnership with the projects that are developed by the Gas Natural Foundation”. Similarly, Fundació Habitat 3 suggests that “it could be really helpful to count on this figures to help us develop our work of giving support to the people we are already helping”.

While the ASSIST project is perceived as a positive initiative, there is also the concern that energy poverty is not only solved taking a bottom-up approach. In fact, there are some stakeholders that raise concerns about the risk of forgetting about the larger structural problems related to the system. This somehow reminds to the idea of “systems change not climate change” (Büllard and Müller, 2012) where it is argued that while it is important to tackle the problems from the bottom level, the key problems are in the system where they belong and thus the important thing is to change the system. As such, as it is nicely putted by the University of Pompeu Fabra (UPF, one of the stakeholders), while the ASSIST agents can help tackle the consequences; the main problem is at the macro-level (i.e. energy prices). The same is argued by the organization VINCLE who suggests that “the problem of the energy price needs to be solved from an economic and political angle”. In this line of thought, the +eficients.cooperativa also argues that they give a very limited solution to the problem.

## **2.1.4 Poland Stakeholder Surveys**

No data available

## 2.1.5 Finland Stakeholder Surveys

What are the main gaps and issues surrounding energy poverty and vulnerable citizens?

Concept of energy Poverty and vulnerable consumers

On approaching stakeholders it became clear that the majority have never come across the term – energiaköyhä - (Energy Poor). Instead energy poverty is seen as part of wider poverty issue, thus the measures are not directly targeting energy poor.

### Housing costs

In Finland energy costs are seen as part of housing costs, which is partly due to the fact that a large portion of Finnish housing stock are heated with district heating and the cost is paid as part of the rent. Costs are allocated based on apartment size instead of actual consumption. According to the stakeholders this has both positive and negative impacts: It gives the tenant less opportunity of decreasing their energy costs but on the other hand, all the energy improvements are done to the entire building. And as in an apartment building, heat transfers in a way that central apartments warm up regardless of their own heating and outer apartments generally need more heating, the cost allocation is seen fairer than consumption based. Also, Housing allowance, available for small income households, covers energy costs when they are part of the rent.

### Government policy

Politically, the direction is to look at the rising housing costs and their effect on the low-income consumers. This came up in the majority of the stakeholder interviews and is seen as the biggest issue in terms of energy poverty. In Finland, Energy policy is viewed as separate from social policy and the issue of energy poverty as a social policy issue.

Virtually all stakeholders stressed that Finland has a quite comprehensive social security system that differs greatly from the majority of European countries, which should be considered when discussing social policy or poverty.

Currently the Ministry of Employment and Economy has a working group, shaping the future of the Smart Grid and grid traffic, which in Finland constitutes more than half of the overall electricity bill. Stakeholders representing consumers are worried that the issue of who pays (and should pay) for the smart energy transition is not at the forefront of the policy discussion as the possible problems of energy poverty, existing in Finland are not acknowledged. The fear is that the poorest will be the ones who end up paying for the required investment.

### Poverty in Finland

All stakeholders acknowledge the existence of (relative) poverty in Finland and in that context, the possible or likely existence of energy poverty. Around 8,7% of population live under the minimum budget poverty line in 2017 and 11,7% under the relative poverty line

in 2017. (Relatively poor or small income is someone making less than 60% of median income in Finland.)

Several stakeholders brought up the issue of housing costs and the fact that they are rising faster than income levels. Also, widening income level gap and the increasing relative poverty were of concern, as the index rates of basic social assistance has been frozen for the next years. There has been an ongoing discussion of housing allowance inflating housing costs, especially in the metropolitan area. The Government is estimated to spend 1,3 billion on housing allowance in 2017. This amount has almost doubled in last ten years.

## **Housing stock**

The majority of stakeholders emphasised that due to the cold climate, the building stock in Finland is far better insulated and more energy efficient than in many other European countries. The frequency of central heating is very high. Legislation on the energy efficiency of building stock has been in place early on.

The major issues regarding housing that stakeholders raised were lack of affordable housing in and near growing urban centres, especially in the metropolitan area. Several stakeholders stressed the importance of building subsidised housing.

The biggest concerns regarding energy poverty in Finland are the homes of small income households in the rural areas, where people are migrating to cities causing house prices to drop rapidly. Several stakeholders brought up, and almost all agreed, that the people most at risk of suffering from energy poverty and health issues related to it would be these types of households, where they cannot afford the renovations/up-keep of the buildings. Building regulation at current time sets standards for future building stock to be built and is limited in regulating privately owned older building stock.

## **What are the initiatives/gaps/activities that need to be addressed?**

### **Energy advice for vulnerable customers**

The issue that most concerned the stakeholders was actually reaching the energy poor, as no one in Finland monitors the existence of such an issue. Several stakeholders drew attention to concerns over the elderly, particularly in terms of access to technology, ability to use technology and the fact that elderly might be people particularly in need as they are generally less likely to seek assistance and benefits.

Some stakeholders also stressed, that the very poorest people in Finland are often people with multiple problems and their ability to cope with the everyday life is often low, in that regard advising them on energy behaviour might not lead to anything.

Financing

Several stakeholders drew attention to concerns that the lack of funding for energy efficiency improvements might be a bigger factor and energy advice alone, might not create the wanted results.

## **What is already being done?**

### **Social security**

In regard to poverty reduction, Finland has a reasonably comprehensive social security system. Financial assistance is available through unemployment assistance, assistance for longer term illnesses or handicap, guaranteed pension level, housing allowance and as a last resort, basic social assistance.

The effectiveness of the social security system has always been under review and continuous improvements have and are being made. Currently the whole social system is being restructured with Social and Health restructuring SOTE, which defines the social services provided by municipalities in a new way. Attention has been drawn to expenditure on Housing allowance, inflating housing prices and to the non-sufficiency of the level on social benefits compared to the minimum budget viewed adequate to live on. The Social Insurance institution of Finland KELA is conducting an investigation to determine what the actual adequate level is.

### **Energy Advice**

The Energy authority, under the supervision of the Ministry of Employment and Economy, and through Motiva (energy agency) is responsible for advising consumers on energy efficiency issues. Their advice services are country wide, with a network of advisers. The services are targeted to consumers in general, and have two focus points: Providing advice for the consumers that are very interested in energy efficiency and renewables and on the other hand, getting general public to take interest with every day tips and changing attitudes.

The Ministry of the Environment supervises the Repair Advice Network, that advises consumers on renovations, also energy and insulation renovations. These services are country wide and targeted mostly at consumers in general. Some organisations such as the Association For The Welfare Of The Elderly, have repair advice services for special groups such as elderly and handicapped.

## **How can ASSIST align with the policies and activities of stakeholders?**

Several of the stakeholders have advice services. Some organisations are keen to collaborate using their existing network of advisers and train them better in order to support vulnerable consumers. Stakeholders also saw the need for discussion and research into the existence of energy poverty in Finland.

What would stakeholders like to see from ASSIST?

- Increase discussion on the issue

- Carry out research into the issues to see if energy poverty actually exists in Finland
- Help create definitions.
- Help make consumer issues more significant in energy policy

## **2.1.6 UK Stakeholder Surveys**

**What are the main gaps and issues surrounding energy poverty and vulnerable citizens?**

### **Government policy**

Although there has been an increased focus on implementing measures and supporting those in energy poverty, the funding and investment does not go far enough. Whilst Scotland and Wales have allocated additional funding for measures, England lags behind hence the support that can be offered to those in need is far more limited. Stakeholders referred to a lack of investment both in the past and in the present which has contributed to an ongoing issue.

However, it has been acknowledged the policy is doing its best to target the most vulnerable first and attention needs to turn to making sure vulnerable consumers are positively engaged and do not feel alienated or shamed. Stakeholders would like a wider range of measures to be available and for follow up care to be provided once measures are installed otherwise the impact is limited and consumers are less engaged or aware.

The majority of stakeholders referred directly to the quality of housing and the efficiency of the private rental sector where rent costs are high, the quality of housing can be poor and both consumers and landlords are hard to reach. New legislation requiring private landlords to improve the quality of F & G rated properties from April 2018 is encouraging but does not go far enough.

The consistency of policy and support was also an issue not only between England, Scotland, Wales and Northern Ireland but also within areas where support depends on the motivations and engagement of local authorities. Whilst some make good efforts to provide support, local funding cuts limit even the best intentioned and this has a direct effect on residents.

Stakeholders praised the increasing links between energy poverty, housing and health. This has led to greater collaboration and the incorporation of housing and energy efficiency issues into health strategy: this is more poignant in some areas than others.

### **Housing tenure and stock**

Another key issue raised by stakeholders were hard to treat properties that are off grid (no access to mains gas), solid walled and rural. These consumers are isolated and not only do they have to survive on expensive energy sources such as electricity or oil, they are often hard to communicate with, lacking IT access and good transport networks.

As mentioned, the private rental market is a primary area of concern both in urban and rural areas.

### **Energy costs**

Rising energy costs continue to be an issue, particularly when set into the wider economic context of higher living costs, high rents, the falling pound and so forth. Stakeholders stated that citizens need greater support with tariff switching to ensure they get the best deal.

It should also be noted that vulnerable consumers may also have high energy needs, for example, people with illnesses may need to use the washing machine more regularly for sheets; larger families will also need regular washing and then demands on households to have IT devices is greater, leading to greater energy consumption.

### **Energy related behaviours**

A number of stakeholders highlighted the importance of raising the awareness of, and reiterating basic energy efficiency messages. Most startlingly, one stakeholder explained that some residents do not know how their house is heated; hence a basic level of education is still required. Many customers are entrenched in their behaviours and are reluctant to change, therefore support needs to be ongoing.

Additional issues included a lack of ability to access help and information, particularly about accessing funding. Vulnerable consumers often need support throughout the process. Tariff switching was regularly raised as an issue.

### **Wider social and political context**

The current wider financial situation for vulnerable consumers was the most prominent concern amongst stakeholders. Welfare reform, including changes to the benefit system, disability and child benefits, is a key concern at present. When this is combined with unstable employment, zero hours contracts, delayed benefit payments, a high cost of living and stagnant wages, an increasing number of people are facing hardship. Many believed that these financial issues need to be tackled in conjunction to increasing energy efficiency.

Some also raised the secondary effects of energy poverty, including rising mental health issues and a lack of school attendance: the impacts on children should not be ignored.

## **Targeting and vulnerable consumers**

Stakeholders in more strategic positions were pleased that more data seems to be available but now there should be a focus on making sure this is up-to-date and combining hard data with real-life case studies to have a wider impact on policy makers and the population. Many drew attention to concerns over the elderly, particularly in terms of access to technology, ability to use technology and isolation. However, others explained that the elderly should not be the only area of focus when families, particularly single parent families, are highly vulnerable. It was accepted that the elderly were less likely to seek support. It was noted that vulnerability needed to be made more explicit and research was underway in this area. Vulnerable consumers also need to be able to identify themselves and others that are eligible for support and that it was important to positively engage citizens.

**Please summarise below the initiatives/gaps/activities that need to be addressed.**

### **Improving retrofit and legislation**

There should be more effort to develop and enforce minimum standards. This includes raising the energy efficiency requirements of new build properties to include more renewables. The UK does have a housing crisis but the quality needs to be high.

There should be more investment in hard-to-treat properties and policies and strategies need to be longer terms and have confirmed investment to ensure that all properties can be energy efficient. This will encourage innovation and engender trust which was lost due to the failed Green Deal. There also needs to be clarity about the schemes on offer.

There are gaps in funding provision, particularly in England. More, stable, finance mechanisms e.g. Should be established such as 0% revolving funds. More work needs to be done to raise the profile of the links between housing, energy efficient and health. The multiple benefits of investing in energy efficiency need to be recognised by decision makers and the public.

### **Advice**

This should include a holistic approach to the consumer's finances. Support should be linked to income maximisation and tariff checking. Basic messages should be reinforced and hard to reach customers should be targeted. Support should be ongoing (including post installation) and account for the customers' circumstances including: social isolation, digital exclusion, and distrust. In one study in Northern Ireland, if more than one call was required, there was a 50% drop out rate. Generic information should be avoided. There should also be consistent and well-supported energy advice provision nationally rather than pockets of good practice. Advice and support is on offer but the initial engagement is needed.



## **Targeting vulnerable consumers**

Stakeholders raised concern about people falling between schemes so a holistic overview of provision should be completed and work needs to be well-targeted. Those in rural areas are a priority, particularly the elderly and isolated.

Those in private sector rental are high priority and general poverty support is also required.

## **What is already being done?**

It was encouraging to see that collaboration was the primary theme running through all stakeholder actions, whatever the background. This is either collaborative funding of projects or schemes, bi-lateral or multi-lateral referral mechanisms or collaborating on service delivery.

Many advice agencies include some element of training outside the organisation, for example, with doctors surgeries, and they all worked with a wide range of organisations. Training of volunteers was sometimes included and clear protocols (e.g. safeguarding) were followed.

Social landlords are also doing more to train tenants as energy champions and one stakeholder was involved with the EU funded TRIME project: they now have 5 paid advisors within the organisation.

Some organisations offered outreach work and home visits or/and consumer protection support. Regulation. Public bodies or energy companies often provide financial support to programmes or work closely on specific projects. Local stock modelling has been undertaken to target specific properties. Strategic organisations focus on advocacy or research. York University are currently researching policy pathways to justice in energy efficiency and also the use of social networks in energy efficiency.

## **Links with Assist**

Stakeholders who financially support Severn Wye's Warm & Well programme see how ASSIST can support the Warm & Well advice provision to target the most vulnerable consumers. It will also support the Home Energy Conservation Act reporting requirements for local authorities.

Some organisations are keen to collaborate using volunteers for a dual purpose or cross referrals in order to support vulnerable consumers. Many focused on making connections between organisations and sharing learning to expand or replicate work elsewhere. The work also links to health priorities and targeting hard to reach vulnerable consumers or small communities that are often missed e.g. refugees.

## **What would stakeholders like Assist to achieve?**

Real engagement of local, rural, grass roots and hard to reach communities. – This came out as a high priority and the impression given was that they want a recognised face.

Increased referrals to existing advice services, particularly from private rental or hard to reach communities.

Greater understanding and awareness of residents, particularly in how funding works.

- A reduction in energy poverty.
- Evidence of impact on vulnerable people.
- More cross-referrals between organisations.
- More consistency across areas.
- A go-to local resource for sign-posting.
- Understanding of how consumers see energy poverty, as well as official definitions.
- A wider range of well-trained advisors.
- Achieving targets e.g. no of homes/people engaged.
- Engaged and active volunteers.
- Support to create harmony between contractor and client.
- Better integration of services.
- The volunteering programme can sustain beyond the project lifespan.

## **2.2 Consumer Surveys**

The aim of the consumer questionnaire is to provide information about the perception, needs and expectations of vulnerable consumers in relation to energy efficiency. This will help ASSIST partners to gain a comprehensive understanding of:

1. The housing stock and background of vulnerable consumers across partner countries
2. The perceptions of vulnerable consumers about energy efficiency
3. The challenges faced by vulnerable consumers

4. Current actions taken by vulnerable consumers
5. Potential activities for the Home Energy Advisors

The questionnaire data will be collated across all partners and will provide a comprehensive overview of the situation for consumers. This information will be used to inform Home Energy Advisor activity and to support discussions and dissemination with policymakers and stakeholders.

## 2.2.1 Italy Consumer Surveys

### 1. Partner details

Partner name:	<b>Acquirente Unico</b>
Name of region/country:	<b>Italy</b>
Key contact regarding consumer surveys:	<b>Emiliano Battazzi</b>
Email of key contact:	<a href="mailto:Emiliano.battazzi@acquirenteunico.it">Emiliano.battazzi@acquirenteunico.it</a>

### 2. Data collection

Number of questionnaire disseminated	<b>132</b>
Number of questionnaires completed	<b>132</b>
Date of data count	<b>24 January 2018</b>
<b>Methodology:</b> Please describe how you disseminated and collected your questionnaires. Include numbers where necessary.	
Questionnaires have been spread out to consumers through different channels: online, both via partners and stakeholders websites; by means of Consumers Association's help desks.	
<b>Challenges:</b> Did you have any issues collecting your data? Please explain.	
Several issues arose during questionnaire dissemination and data collection. A lot of potentially interested stakeholders didn't want to provide the questionnaire to the consumers, thus reducing the impact of the survey. Mostly, charities and social stakeholders found irrelevant or time-wasting to disseminate such a questionnaire to their usual	

target.

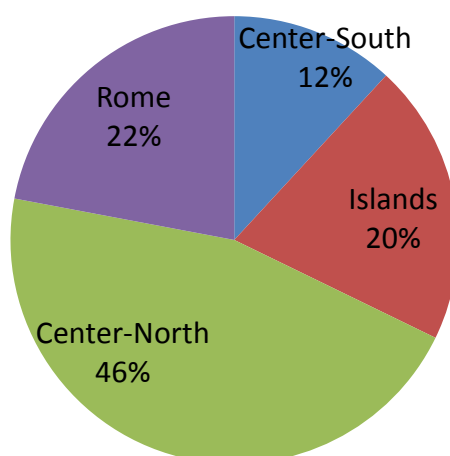
Due to the difficulties in collecting data within the project timeframe, Italian partners have decided to keep the survey open and to keep disseminating it through all possible channels (also taking advantage of the activities to be implemented within the future work packages of the project).

### 3. What type of area do your consumers live in?

- Please summarise the key differences in the areas where consumers live (Q.17).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

Consumers responding to our survey live mostly in the cities of Rome and Milan, because of the partners we engaged in disseminating - mostly based in those cities. Anyway, there's an interesting significance of answers from the island (Sardinia and Sicily) from vulnerable consumers (20%): indeed, according to Italian academic studies, living in the islands is one of the biggest driver of energy poverty.

#### Where do vulnerable consumers live?

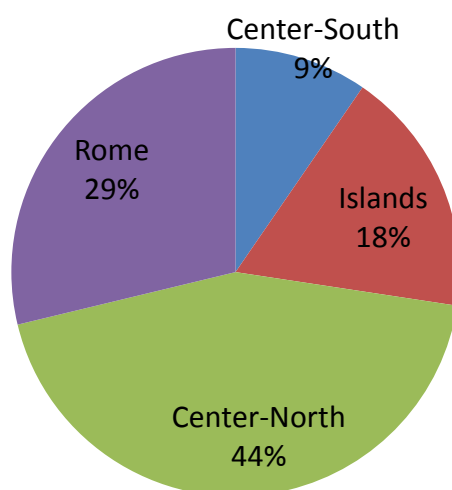


Answers from the southern regions are definitely lower than expected, but it can be mostly accounted on the lower number of dissemination

channels and the bigger social stigma attached to declaring himself vulnerable (12%).

Last but not least, there's a relevant amount of answers from the Northern regions, almost equal in declaring themselves vulnerable (46%) or not (44%). Other than proximity and easiness of access for our channels, that could also originate from a reduction of comfort during winter (trade-off between heating and other services).

### Where do other consumers live?

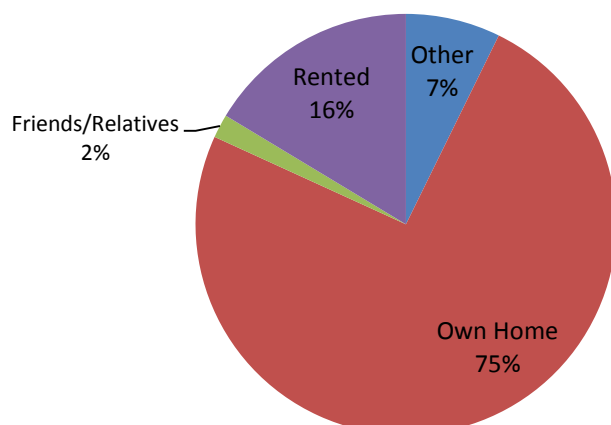


#### 4. Tenure, Property type and renovation?

- Please summarise the key differences in the tenure, type of properties and work carried out to improve the property (Q.18 – Q.21)
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

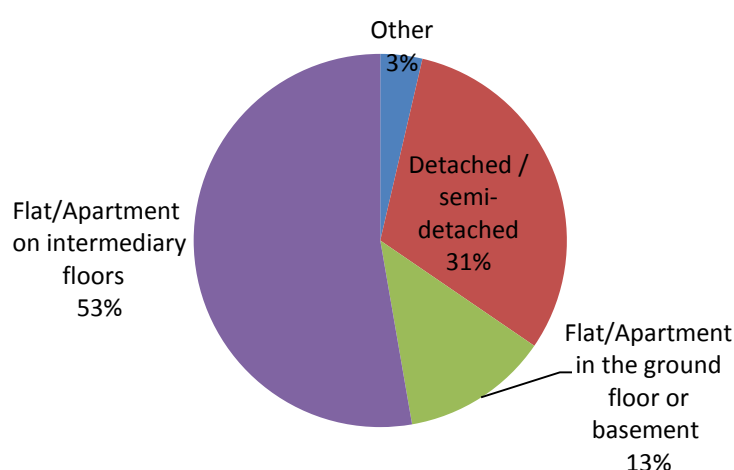
Most of our vulnerable consumers are homeowners: even though it could be counterintuitive, because renting a house can also be a driver of vulnerability, it is actually not surprising in Italy, where 80% of people own the house they live in. The percentage of vulnerable respondents homeowner (75%) is thus slight inferior to the national one.

## Where do vulnerable consumers live?



With regard to the type of housing, most of vulnerables are living in Flat/Apartment on intermediary floors (53%), as for the other group. There is a huge difference in consumers living in detached/semi-detached house: in the vulnerable group it's 31%, while in the other group is roughly 9%.

## How is your home?



The majority of homes in Italy, 64%, were built before the first law on efficiency and insulation of 1976: thus our sample is quite correspondent to this percentage, for both vulnerable (69%) and the other group (80%).

Almost half of houses has been refurnished, even if for vulnerable

consumers the percentage is slightly lower (45%) than for the other group (52%).

## 5. Behaviour Change?

- Please summarise the key differences in behaviour change to reduce energy consumption (Q.26).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

Behaviours for energy saving are quite widespread among all consumers of the questionnaire, even if areas of improvement can be identified:

- Roughly 62% of both groups switch off the heater in the rooms where they are not present;
- Almost the same percentage of both groups reduce the temperature in the living / dining room or bedrooms (64,4% for vulnerables, 63% for others)
- Vulnerables are just a bit more careful in reducing the temperature in the home if, for some days, there is nobody staying there (78% vs 74%); but they are less eager in reducing the use of air conditioning (57,6% vs 60%)
- Both groups could be more careful in reducing the use of dishwasher (59%) and in completely switch off (61% vs 66%) tv, computer, audio system, when not used (instead of putting them in stand-by mode), but they are strongly involved in switching off the lights when they are not needed (88%)

## 6. Financial Support?

- Please **summarise** the key differences in how many consumers have received financial support in order to pay their energy costs over the past 12 months (Q.29 & Q.30).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

Our survey confirms the evidence that financial support is not common between Italian consumers: only 1,7% of our vulnerables could enjoy the energy bonus. According to the answers, it is mostly because of too tight income thresholds (55%), but also for lack of knowledge of the bonus (18,6%). According to the Italian Energy Authority, only 30%



of consumers fitting the requirements obtain the energy bonus.

## 7. Interest in energy advice?

- Please **summarise** the key differences in whether energy advice would be appreciated by the consumer (Q.31).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

Vulnerable consumers are slight more interested in professional advice (90% vs 82%), for the majority in order to reduce the cost of energy bills (59,3%), an issue much more relevant for vulnerable group (14% higher than other consumers). At the same time, they don't seem to care about increasing the level of health (15%) and comfort within home (16%), thus confirming somehow that they can trade-off energy consumption for more available income.

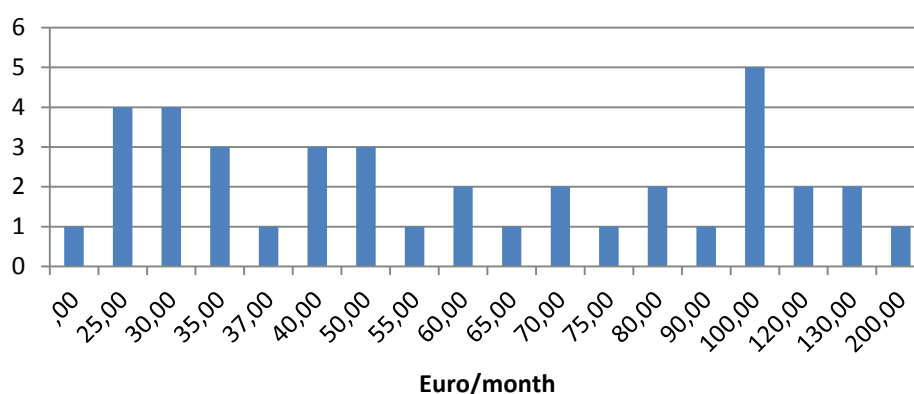
However, the idea of reducing the energy consumption without reducing the level of comfort is still intriguing for vulnerables (37,3%), also when compared with optimising the energy consumption without the need for complicated and sophisticated technologies (23,7%).

## 8. Housing summary

- Please summarise the key differences in energy consumption (Q.33).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

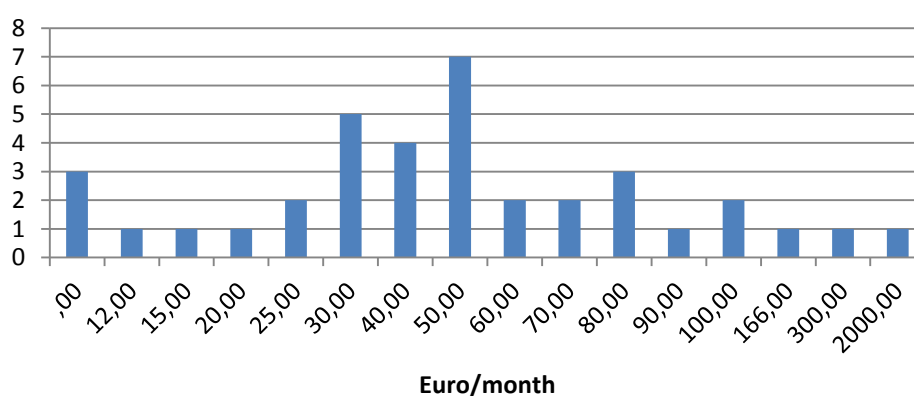
It's interesting to notice that in the vulnerable group, the average monthly expenditure for electricity is above 50 euros for the majority (51,3%). For the other group, instead, a strong majority pay 50€ or less (61,7%). Even if quite surprising, this could also open opportunities for energy saving: vulnerables are paying too much, and there's plenty of space for reducing their bills through efficient behaviour and accessing the bonus. The average yearly expenditure seems to strengthen this data (55% are paying more 750€).

### Average monthly electricity expenditure for vulnerables



For natural gas, the survey provides quite a different picture: expenditures look similar between the 2 groups (with 65% vs 63% paying below 50€), thus showing to carefully manage their own gas consumption. This could also be a result of a traditional education for the consumption of natural gas for heating and cooking in Italy, and also a result of the mandatory usage of thermostatic radiator valves, which are easy to use.

### Average monthly gas expenditure for vulnerables



## 9. Additional comments and observations unique to each country

Please add any additional comments below.

Some of the answers are not completely reliable: for instance, monthly and yearly expenditures don't correspond properly.

## 2.2.2 Belgium Consumer Surveys

The vulnerable consumers for the Belgian case turned out to be 132 out of 140 participants, even if not all older than 65 persons were automatically assumed to be vulnerable. This has to do with the selection of the questionnaire, which targeted vulnerable consumers specifically. More specifically:

- 105 of the respondents were not working
- 18 indicated not having enough money for basic needs, 54 only for basic needs,
- 98 of the respondents received some kind of social funds
- 37 had cold related health issues

### 1. Partner details

Partner name:	<b>VITO</b>
Name of region/country:	<b>Belgium – Flanders</b>
Key contact regarding consumer surveys:	<b>Pieter Vingerhoets</b>
Email of key contact:	<a href="mailto:Pieter.vingerhoets@vito.be">Pieter.vingerhoets@vito.be</a>

### 2. Data collection

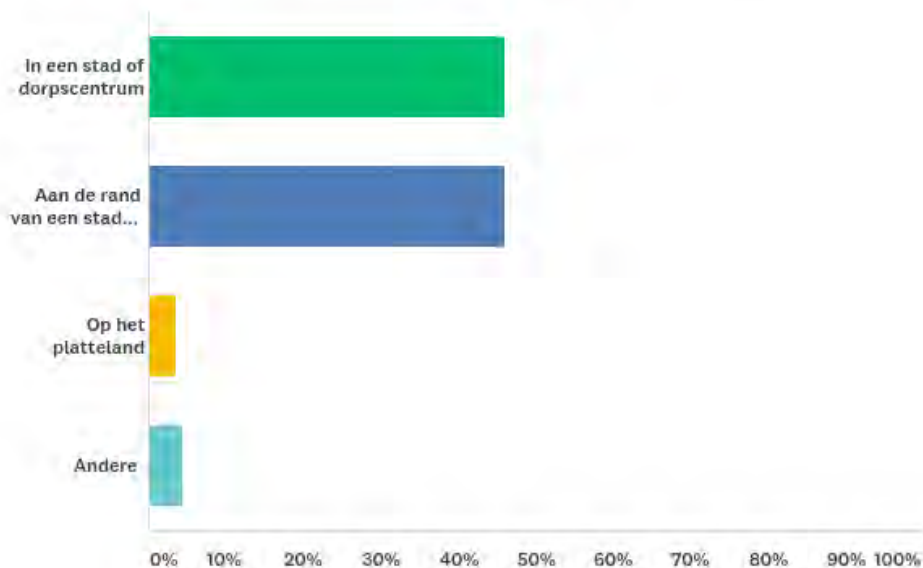
Number of questionnaire disseminated	<b>140</b>
Number of questionnaires completed	<b>140</b>

Date of data count	<b>31-01-2018</b>
<p><b>Methodology:</b> Please describe how you disseminated and collected your questionnaires. Include numbers where necessary.</p> <p>The questionnaires were disseminated under guidance of the 'Energiesnoeiers'. This is an initiative where persons or families in Flanders can invite an energy expert, who gives advice on possible energy reductions in the household. The expert filled in the questionnaires together with the families and the paper versions were scanned and processed by VITO. Around 40 responses were also retrieved online.</p>	
<p><b>Challenges:</b> Did you have any issues collecting your data? Please explain.</p> <p>Energy-poor or vulnerable customers often don't have access to internet or do not have the time to respond to an online questionnaire, therefore the responses were retrieved under guidance. The fact that an energy expert was accepted to retrieve the questionnaire with the households means that the population regarding the question 'would you be interested in inviting an energy expert' (yes/no) is not independent.</p>	

### 3. What type of area do your consumers live in?

<ul style="list-style-type: none"> <li>• Please summarise the key differences in the areas where consumers live (Q.17).</li> <li>• Add <b>comments</b> to explain patterns and how they link to the project and/or method of data collection.</li> </ul>
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### Q17 Waar is uw woning gelegen?



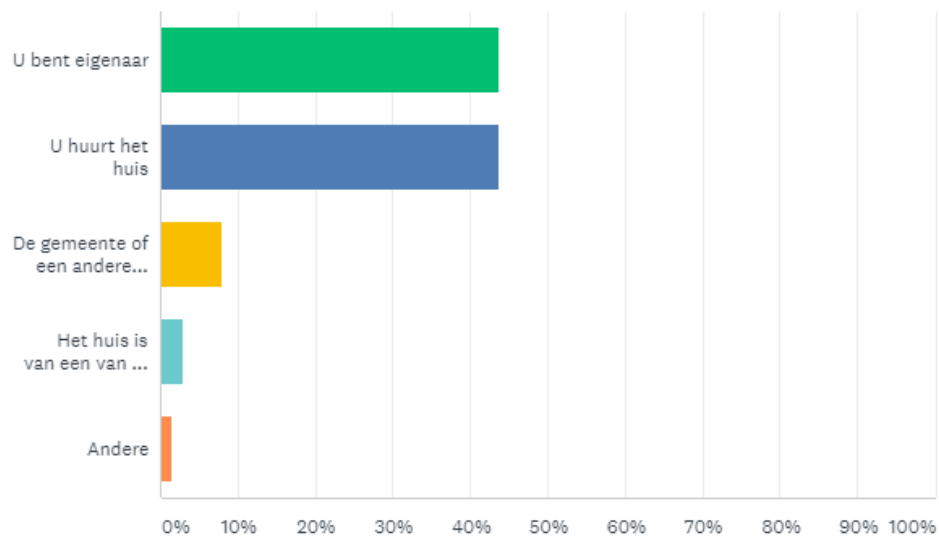
The questionnaires were collected around four different regions: Sint-Niklaas, Eeklo, Ghent and Roeselare. Most respondents were living in the city or village center (top, green) or at the edge of a city/village (blue). The few amount of rural respondents has to do with the heavily urbanized character of Flanders. Despite the heavily urbanized character 44 of 137 houses is open (no neighboring buildings).

#### 4. Tenure, Property type and renovation?

- Please summarise the key differences in the tenure, type of properties and work carried out to improve the property (Q.18 – Q.21)
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

## Wie is eigenaar van de woning?

Answered: 137 Skipped: 3

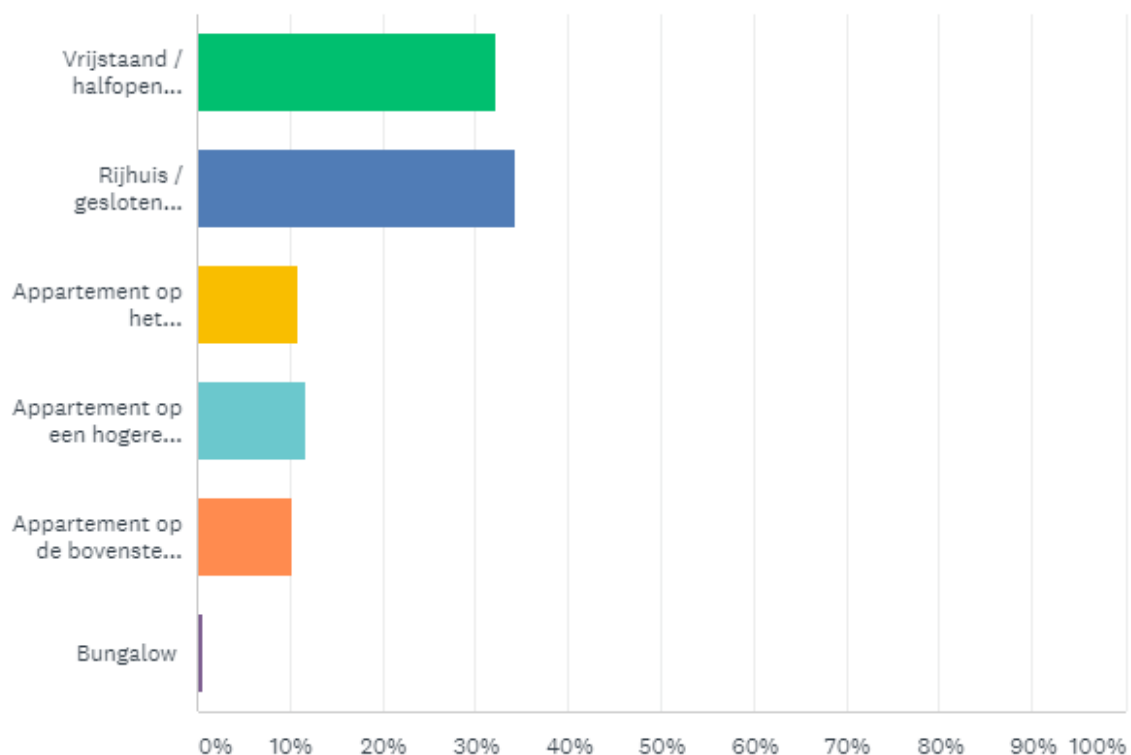


60(43,80% of the respondents owned the house, 60 were renting, 11 were living in a house owned by the city and 4 were living in the house of friends/relatives.

Is your home (choose one)...? (detached house / apartment / bungalow etc...)

## Uw woning is

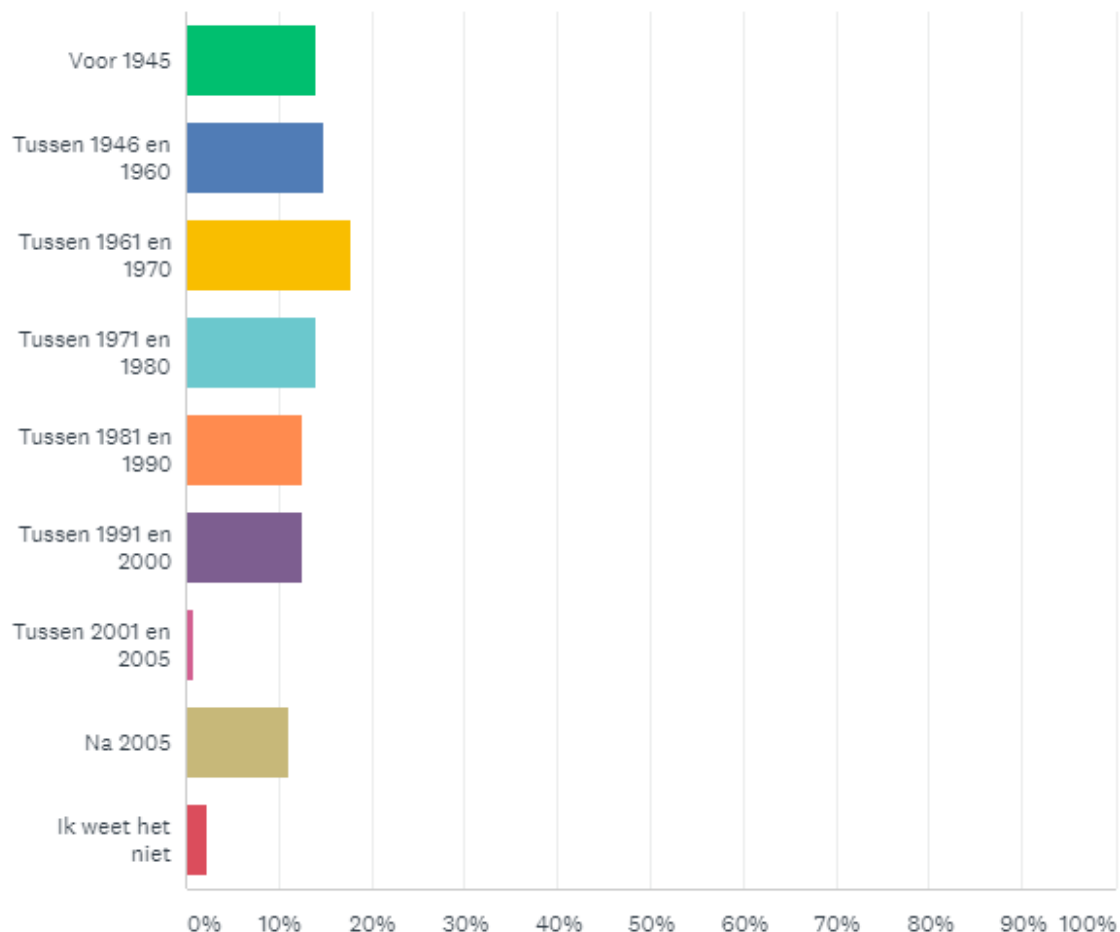
Answered: 137 Skipped: 3



44 were living in an open building, 47 in an enclosed home, 15 in an apartment on the ground floor or lower, 16 in apartment in between and 14 in an apartment on the top floor. 1 bungalow.

Roughly, when was your home built?

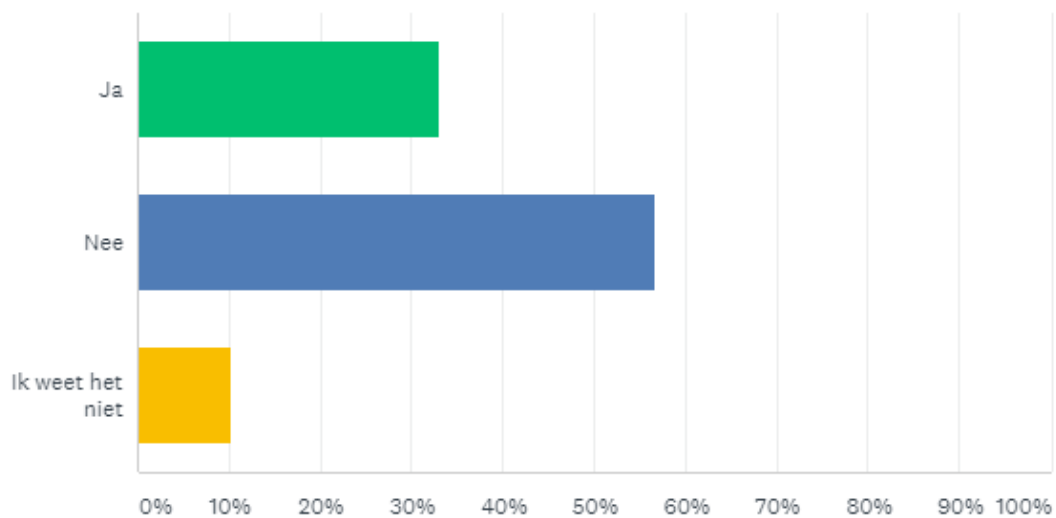
Answered: 135 Skipped: 5



Has your home been renovated?



Answered: 136 Skipped: 4



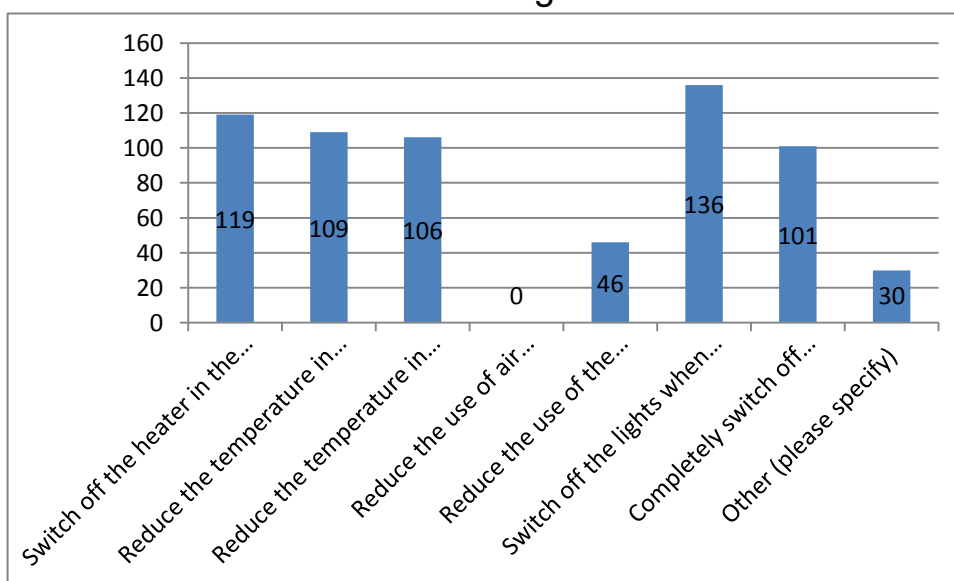
33% yes, 57% no, 10% did not know.

In general, the Belgian building stock is very diverse. Renovations of older houses are quite common.

## 5. Behaviour Change?

- Please summarise the key differences in behaviour change to reduce energy consumption (Q.26).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

Only 2 of 127 answered no, the other 125 answered yes  
The measures were the following:



Except for airconditioning, which is quite uncommon due to climate reasons, and dishwashers which are not always present, most of the typical behavioural exercises are followed by the respondents. Note that through the selection process, these numbers might present an overestimation in comparison with the total population.

## 6. Financial Support?

- Please **summarise** the key differences in how many consumers have received financial support in order to pay their energy costs over the past 12 months (Q.29 & Q.30).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

75 are receiving a social tariff for vulnerable consumers, 6 received a minimum delivery of electricity, gas or oil. 17 received financial support of the municipality, 50 did not receive financial support.

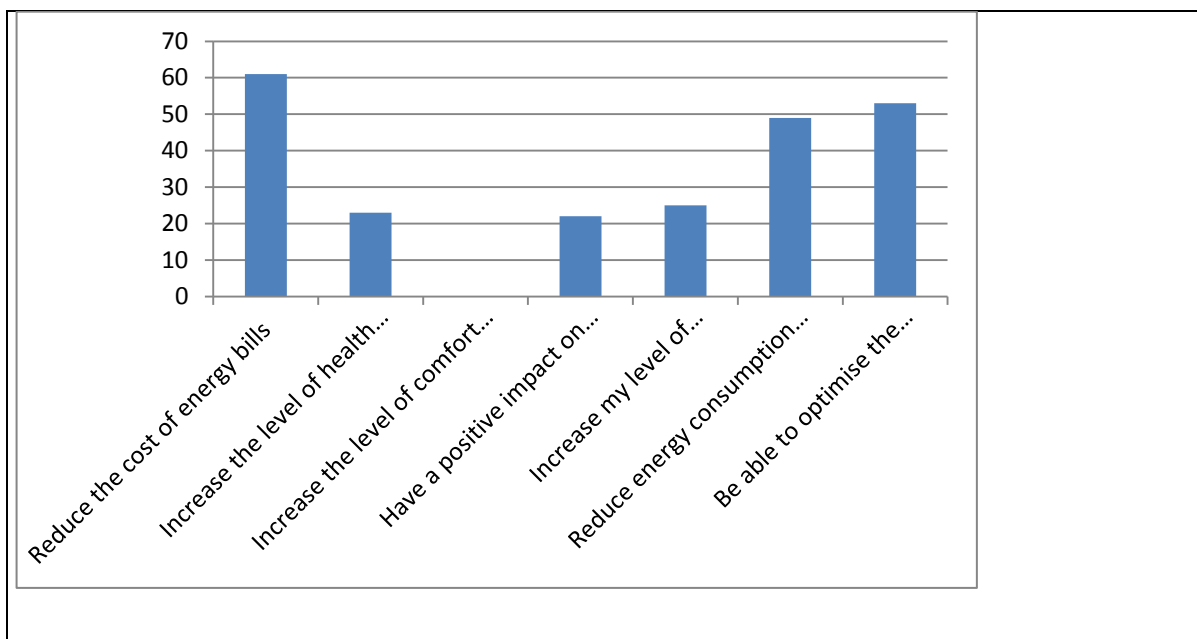
If you do not receive any financial support, please indicate why? (Select only one option, choose the one which you believe is the most appropriate):

31 of the respondents did not satisfy the criteria for financial support, 8 did not know, 2 were choosing not to request support, 1 was not interested.

## 7. Interest in energy advice?

- Please **summarise** the key differences in whether energy advice would be appreciated by the consumer (Q.31).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

70 answered yes, 63 no, however this question needs to be deleted for the Belgian case, as participants were selected in the context of an 'energy scan'. Most of the respondents care about the energy bill and comfort rather than health issues, environment or knowledge.



## 8. Housing summary

- Please summarise the key differences in energy consumption (Q.33).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

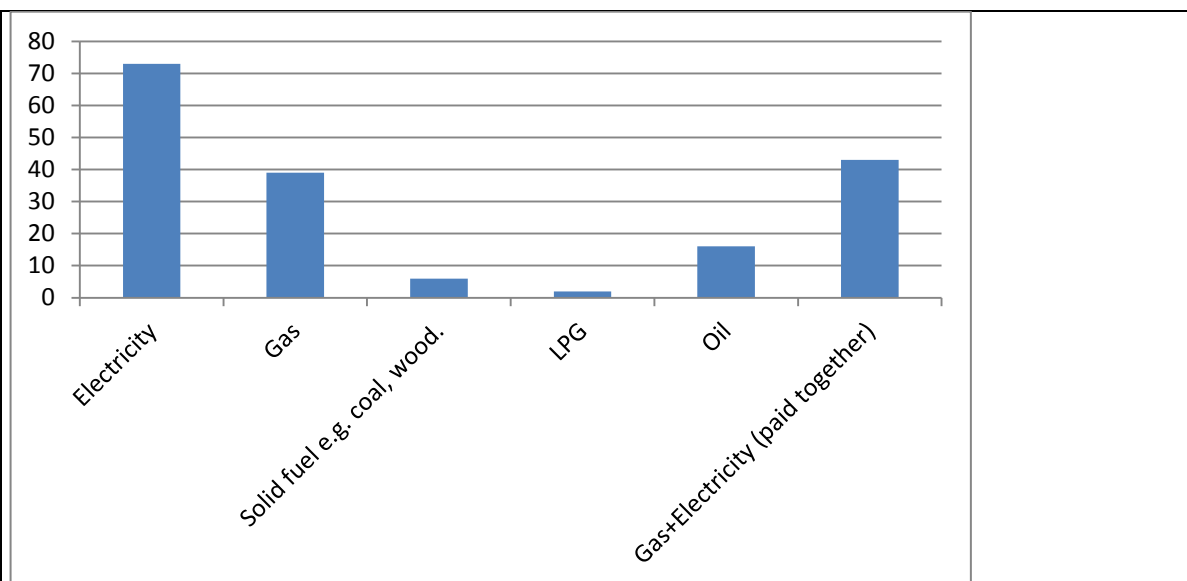
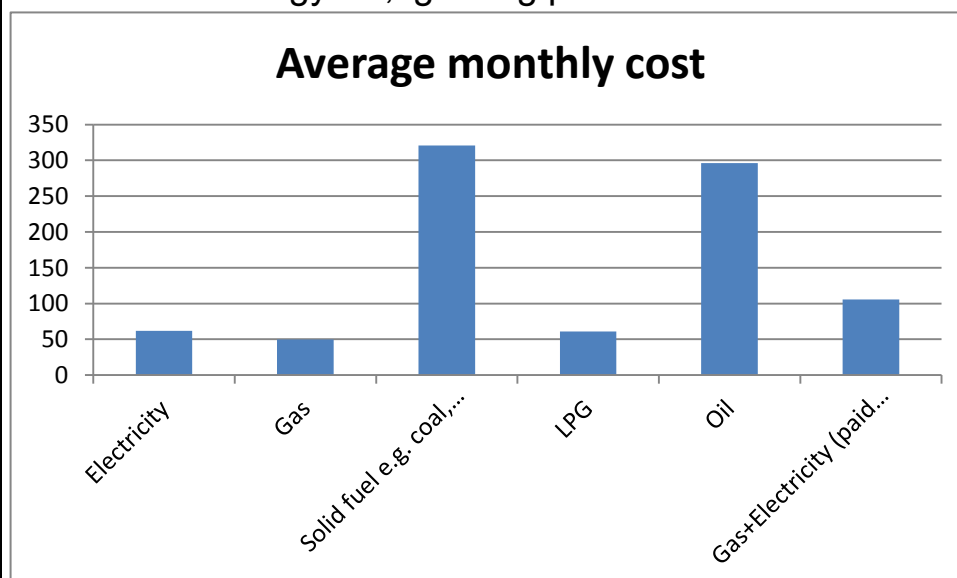


Figure 1: Number of respondents as a function of fuel

Most people in Belgium use gas for heating, followed by oil and biomass. Only very few people have a heat pump (certainly not the vulnerable customers) due to the high taxes on electricity in comparison with gas.

The price people pay is not always proportional to the consumption, as it depends on the social tariff (98 respondents are having a social tariff). Remarkable is that a lot of people added a biomass heating to save on the energy bill, ignoring possible health issues.



The average monthly cost indicates that biomass and solid fuel are more expensive. Indeed, pellets are expensive but we do not know exactly which type of solid biomass is burned. In addition, the low amount of respondents that heat with oil, LPG or biomass makes it not

statistically relevant to draw conclusions. Special comment for Belgium is that a lot of people pay gas and electricity simultaneously so they only have a common indicator.

## 9. Additional comments and observations unique to each country

Please add any additional comments below.
In Belgium, a significant amount of people are getting financial support or social tariffs and only very few of them report not being able to maintain a healthy temperature in the house. In addition with the temperate climate, vulnerable consumers will not always experience energy poverty related health issues.

## 2.2.3 Spain Consumer Surveys

### 1. Partner details

Partner name:	<b>ADE (Alginet Distribución Energía Eléctrica)</b>
Name of region/country:	<b>Alginet, Valencia (Spain)</b>
Key contact regarding consumer surveys:	<b>Alma Solar</b>
Email of key contact:	<a href="mailto:alma@electricadealginet.com">alma@electricadealginet.com</a>

### 2. Data collection

Number of questionnaire disseminated	<b>168</b>
Number of questionnaires completed	<b>155</b>
Date of data count	<b>28.12.2017</b>
<b>Methodology:</b> Please describe how you disseminated and collected your questionnaires. Include numbers where necessary.	

ADE is part of the CEA group (the Electric Cooperative of Alginet), and therefore has direct contact with the end energy consumers, through the retailer of the CEA group – Suministros especiales alginetenses -. The main purpose of the electric cooperative is to commercialize energy to its associates, but being a cooperative the group has always had a special sensitivity with the end users, especially with vulnerable families and end users in risk of vulnerability. In this line, the companies of the group have several aid programmes in place since 2008, i.e. and elderly aid programme (with direct discounts in the energy bills for people over 65), the food voucher programme (monthly food vouchers for vulnerable families) or the disconnection protection and bill financial negotiation. Thanks to these programmes, the CEA group has already identified a list of vulnerable users and users at risk of vulnerability.

ADE has taken advantage of this direct link with the end users and has disseminated and collected the questionnaires directly to the group of vulnerable consumers already identified by the CEA Group.

ADE has disseminated the questionnaires to the end users attending the different aid programmes in place, by handling them directly to the people in place and providing assistance in when any doubts about the questions arose. Therefore, we can assume that all the responses gathered in Alginet account from vulnerable consumers or consumers at risk of vulnerability.

**Challenges:** Did you have any issues collecting your data? Please explain.

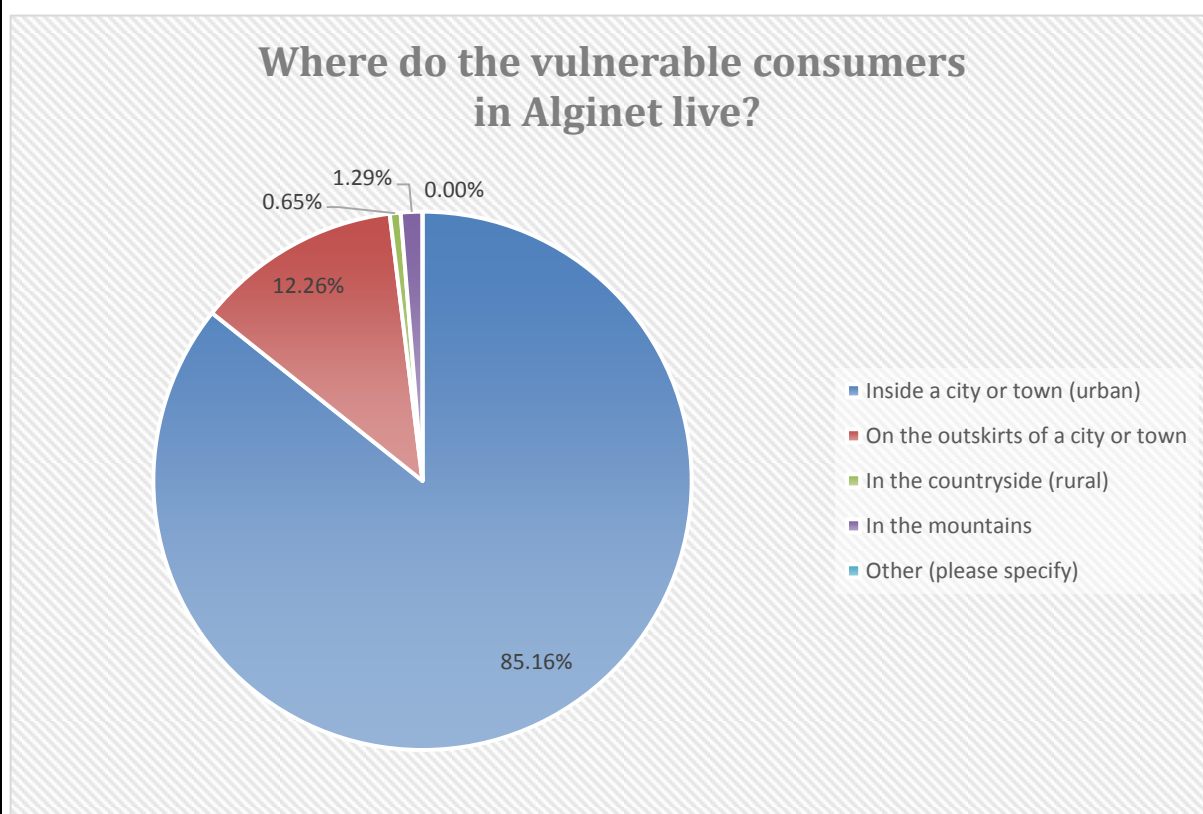
The personnel working at CEA front office where the ones handling the questionnaire directly to the respondents and the questionnaires were filled in place. The CEA personnel was instructed to answer and solve any issues that then end users might have about the questions and the purpose of the questionnaire, Therefore, no major issues where faced during the data collecting process.

### 3. What type of area do your consumers live in?

- Please summarise the key differences in the areas where consumers live (Q.17).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

As mentioned before, in Spain all the questionnaires were conducted in the area of Alginet (a 13.500 inhabitants' village located 25 km from Valencia). Therefore, all the respondents come from the same area.

Being a medium size village, most of the respondents live inside the city (specified in the questionnaire as city centre), although it is important to mention that a significant number of respondents (12.26%) live in the outskirts of the city, while only 1.94% live in the countryside or in the mountains.



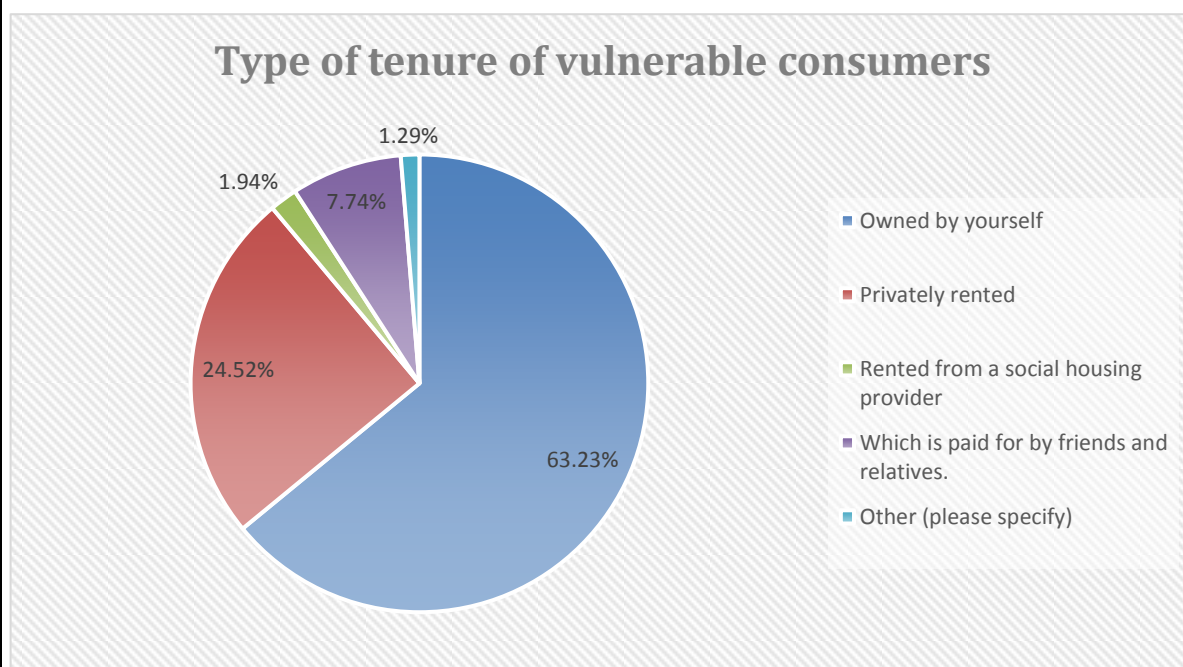


#### 4. Tenure, Property type and renovation?

- Please summarise the key differences in the tenure, type of properties and work carried out to improve the property (Q.18 – Q.21)
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

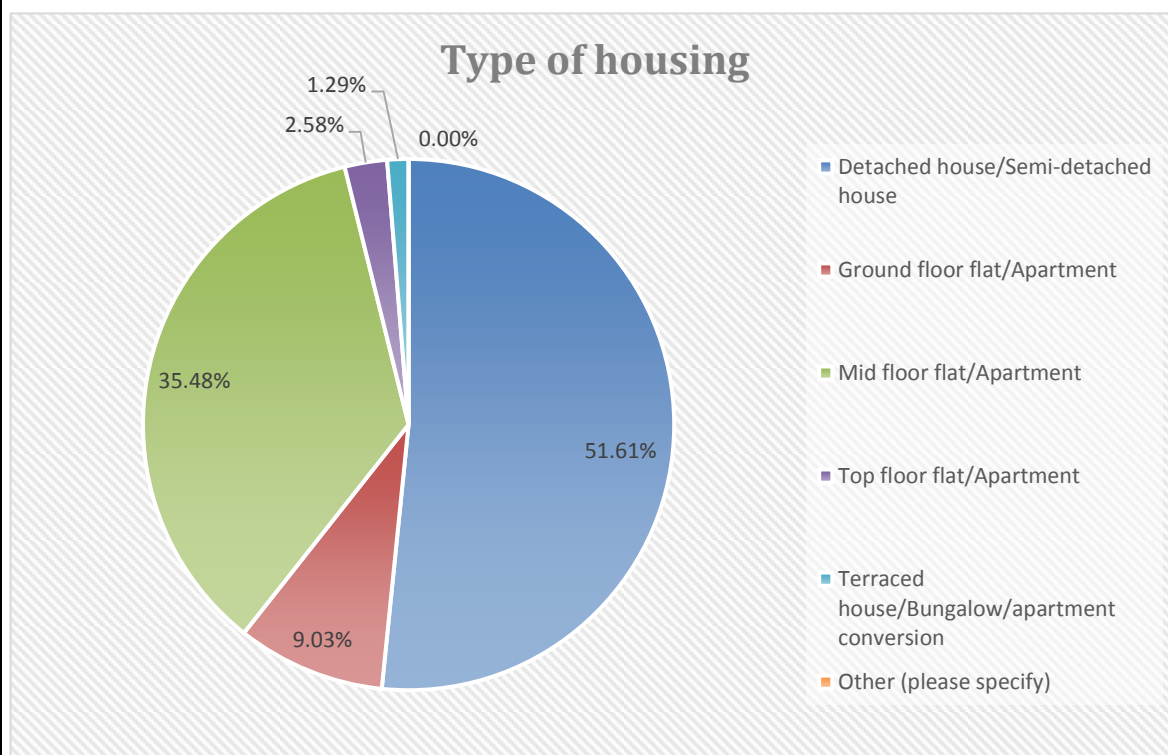
Most of the vulnerable consumers surveyed live in their own home (63.23%) or in a rented house (24.52%). These data differ from the average for the Valencian Community where, according to the INE (National Statistical Institute), 79.9% of families lived in a house of their own property during 2016 (latest data available), while 15.9% of people lived in a rented house during the same period. These differences can be founded on the fact that the questionnaires were targeting vulnerable users only, a group with more difficulties to access a house in property.

It's also noticeable the fact that nearly 8% of the surveyed people live in houses payed by friends or relatives and that nearly 2% of the respondents live in houses rented or lent by social housing providers or public administrations such as the city council.



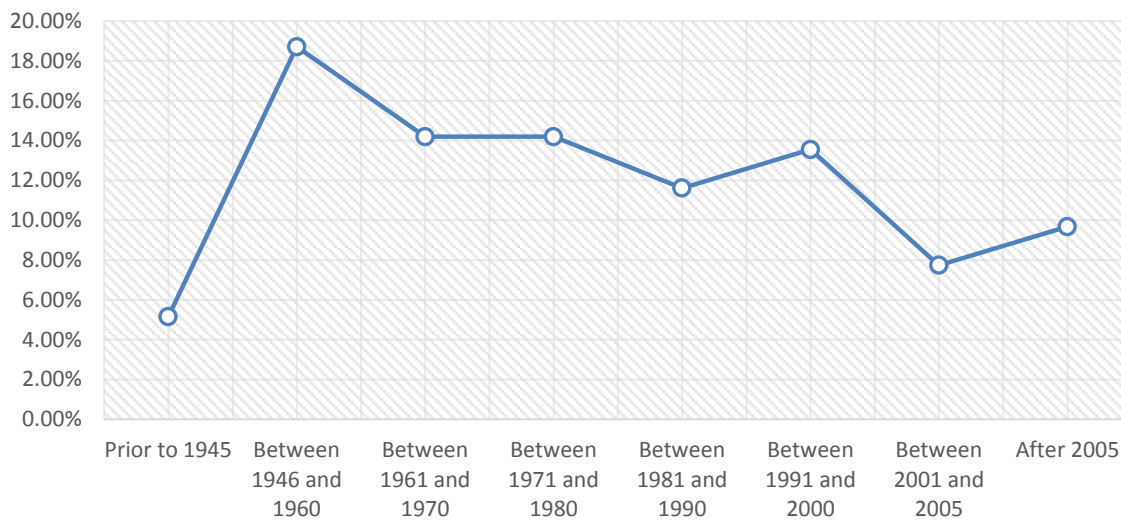
With regards to the type of housing, most of vulnerable consumers (51.61%) live in a detached or semi-detached house, while 35.48% of the people surveyed live in flats or apartments on intermediary floors.

This is typical in a village like Alginet, where half of the housing are detached or semi-detached buildings and approximately a third of the housing are apartment blocks.

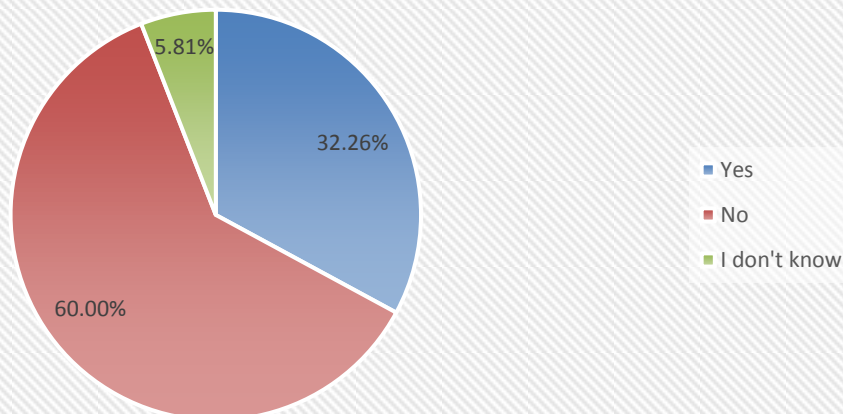


The first Regulation of thermal installations in buildings was published in Spain in 1998. Most of the buildings are thus constructed before this regulation was in place (around 75% of the buildings for the surveyed end users). Despite of that, only 32.26% of the respondents have refurnished the houses.

### Year of construction



### Has your home been refurnished?



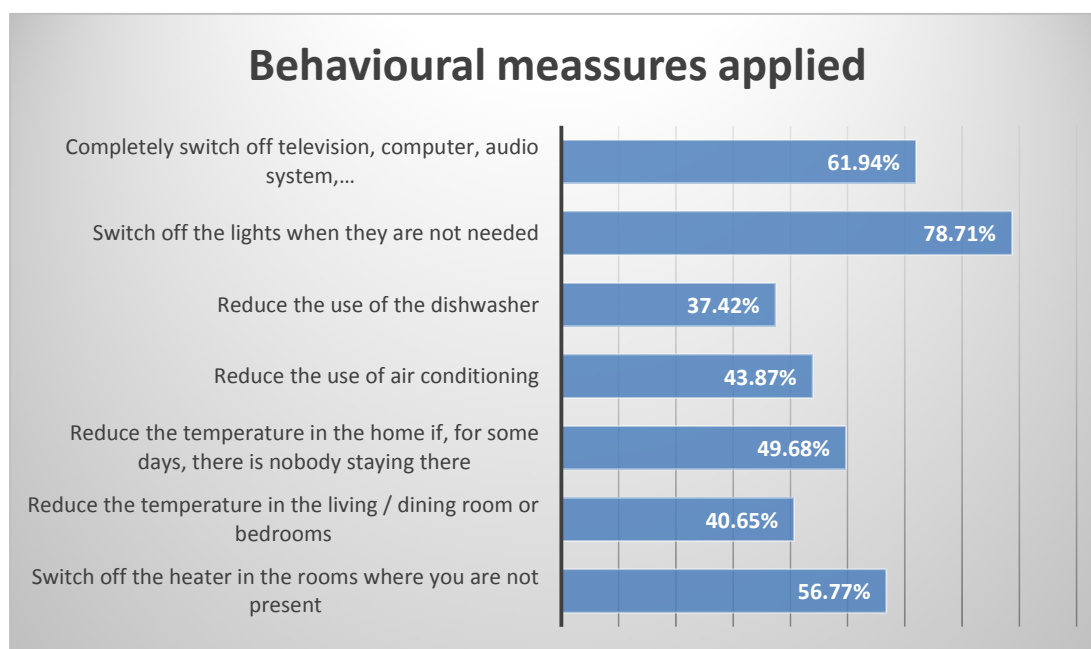
## 5. Behaviour Change?

- Please summarise the key differences in behaviour change to reduce energy consumption (Q.26).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

Energy efficiency measures are quite widespread among the questionnaire respondents and most of them (92.9%) claim to have implemented one or more changes in their behaviour in order to

reduce their energy bill.

- Switching off the lights when they are not needed, and completely switching off the electrical devices instead of putting them in stand-by mode, are the most popular behavioural changes implemented among the surveyed people, with a 78.71% and a 61.94% of positive answers respectively;
- Switching off the heater in the rooms where there is no presence and reducing the temperature at home when there is nobody in, are also behavioural changes implemented by half of the respondents, 56.77% and 49.68% respectively;
- Reducing the use of air conditioning or the dishwasher are the least popular among the respondents with a 43.87% and 37.42% respectively.



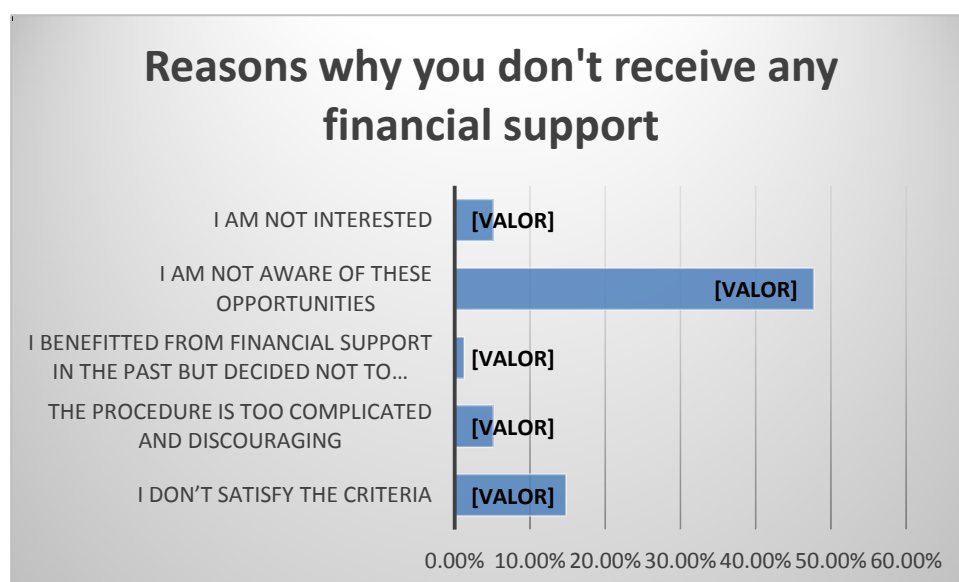
## 6. Financial Support?

- Please **summarise** the key differences in how many consumers have received financial support in order to pay their energy costs over the past 12 months (Q.29 & Q.30).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

The responses received about financial support show that only a small percentage of the end users, even if they are in situation of penitential vulnerability, are receiving financial support in order to pay their energy bills.

The first thing that surprised us was that only 29% of the surveyed people answered to question 29 (we can assume that this is due to the lack of knowledge about these type of opportunities, see comment about question 30). Among the people who did respond to the question, 26.67% were receiving financial support to pay their energy bills. On the other hand, 73.33% answered that they are receiving other type of support, this is reasonable if we take into account that the main target groups for the survey were end users identified by the CEA group as vulnerable end users or users at risk of vulnerability, participating in the aid programmes of the electric cooperative. Therefore, most of them are receiving some kind of support from the CEA.

The responses to question 30 show that nearly half of the people surveyed (47.74%) are not aware of these type of support they can claim. Only 14.84% of the respondents claim not to fulfil the criteria to access the financial support, while around 10 % of them are not interested in this type of support or think the procedure is too complicated. The exact figures can be checked within the following figure.



## 7. Interest in energy advice?

- Please **summarise** the key differences in whether energy advice would be appreciated by the consumer (Q.31).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

62.58% of the surveyed people think it would be beneficial for them to have support from the HEAs, 29.03% of the respondents are not interested.

The respondents' main interest in the HEAs advice is to reduce the cost of energy bills (56.13%). Reducing the energy consumption without reducing the level of comfort (20.65%) and increasing the level of health in the home ( 20.65%) are also interesting issues for the surveyed people.

## 8. Housing summary

- Please summarise the key differences in energy consumption (Q.33).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

Only 65.16% of people provided information about their average electricity expenditures which, from the data provided by the responses, is 60.70€/month.

For the other sources of energy, the answerers are even lower: 25.16% of people provided information about their average gas expenditures (33.87€/month); 2.58% of people provided information about their average oil expenditures (77.5€/month) and no answer was received about solid fuel or LPG. This is due to the fact that in Valencian Community most of the home energy consumption is in the form of electricity.

## 9. Additional comments and observations unique to each country

Please add any additional comments below.

Due to the specialities of the target group surveyed in Spain, we can't compare results among vulnerable and non vulnerable respondents through this questionnaire. Nevertheless, the data collected in Spain is quite valuable in the sense that all the responses gathered are coming from vulnerable end users or users at risk of vulnerability, located in the same area (with equal conditions of temperature, environment, living conditions, etc.) which can provide a detailed view of the specific conditions of this group, already pre-segmented.

## 2.2.4 Poland Consumer Surveys

### 1. Partner details

Partner name:	<b>Federacja Konsumentów</b>
Name of region/country:	<b>Poland</b>
Key contact regarding consumer surveys:	<b>Longina Lewandowska-Borówka</b>
Email of key contact:	<b>rzecznik@federacja-konsumentow.org.pl</b>

### 2. Data collection

Number of questionnaire disseminated	<b>300</b>
Number of questionnaires completed	<b>215</b>
Date of data count	<b>November 2017</b>
<p><b>Methodology:</b> Please describe how you disseminated and collected your questionnaires. Include numbers where necessary.</p> <p>We have used the PAPI research technology - Personal Assisted Paper Interviewing – we have carried out interview using a traditional method - a paper</p>	



survey, conducted by an interviewer. Thanks to the direct contact of the interviewer with the respondent, we were able to receive full and more comprehensive answers to the questions posed. The interviewer had the opportunity to deepen the respondent's answer by asking additional questions. In selected issues, this technique also allowed for spontaneous responses. PAPI interviews were carried out by social workers from Warsaw social assistance centers working with people who require systemic financial support.

**Challenges:** Did you have any issues collecting your data? Please explain.

Conducting surveys required intensive, active support from the interviewer side. Thanks to the involvement of the Office of Assistance and Social Projects, the Department of Social Assistance of the Warsaw Municipal Office, we could conduct surveys directly among people at risk of energy poverty, moreover the interviewers were qualified social workers.

### 3. What type of area do your consumers live in?

- Please summarise the key differences in the areas where consumers live (Q.17).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

We conducted the study in social assistance centers in Warsaw, so all our respondents live in the city and in the suburbs (2.8%).

### 4. Tenure, Property type and renovation?

- Please summarise the key differences in the tenure, type of properties and work carried out to improve the property (Q.18 – Q.21)
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

The flat / property is owned – this answer concerns 38.6% of respondents. This is a very low indicator for Poland, statistics show that as much as 83.5% Poles have own flats or houses (Eurostat data). If the data obtained from this question

are combined with data on the monthly income of the households, it is not surprising that the next group of respondents are residents of social premises (27%). 10.2% of the surveyed rent a flat and almost equal in size (9.8%) is the group of residents of commune properties. 36.8% of respondents live in the social housing. The conditions related to the occupation of this type of flats are specific. The residents have to meet different criteria - they are available for people in a difficult financial or life situation.

15.3% of respondents live in the flats on the ground floor, 51,6 % on the 1th and 9.3% on the top floor. A large percentage of respondents (20%) live in a house or semi-detached house.

Moreover respondents live in old or rather old properties. As many as 19.5% of respondents live in houses, which was built before 1945. It should be emphasized that 28.4% of respondents live in post-war construction (built between 1946 and 1960).

Houses built from the late 1950s to the nineties were constructed from a prefabricated large slab, characterized by low thermal insulation. 62.4% of respondents answered that the real estate they live in was created between 1946 and 1980, when other construction norms were apply, for example several times lower thermal requirements.

## 5. Behaviour Change?

- Please summarise the key differences in behaviour change to reduce energy consumption (Q.26).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

Almost two thirds of respondents try to use electricity and heating in the economical way (64.7%), however relatively large percentage of respondents (35.3%) don't try to save energy.

139 out of 215 respondents declare economical behavior and 178 declare that they turn off lighting in rooms in which no one is staying. This is the most popular

and intuitive behavior aimed at saving energy.

## 6. Financial Support?

- Please **summarise** the key differences in how many consumers have received financial support in order to pay their energy costs over the past 12 months (Q.29 & Q.30).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

Out of 215 respondents, 84 (39.1%) declare that they had not received any financial support related to the usage of electricity and gas.

The remaining 131 persons (60.9%) receive a social security, in the form of so-called energy security, which aims to compensate electricity expenses. 121 people received support from local self-government units - social assistance centers. The remaining 10 persons received assistance from various sources: an energy or gas supplier, non-governmental organizations, family.

## 7. Interest in energy advice?

- Please **summarise** the key differences in whether energy advice would be appreciated by the consumer (Q.31).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

121 respondents do not see the need to receive support from a professional Home Energy Advisor (57.6% of the respondents). But, you have to take under consideration that majority of respondents (95.3%) never used any measurements or energy efficiency calculations, because they are simply not aware of such opportunities (60.5%) and expect that it is too complicated (28.2) for them. In total, 88.7% of respondents have no knowledge on support possibilities. It is a larger percentage than those who do not need a HEA help, so one should assume that some of them want to learn something about the effective use of energy in their household.

## 8. Housing summary

- Please summarise the key differences in energy consumption (Q.33).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

The problem faced by vulnerable citizens in Poland is, on the one hand, housing without adequate thermal insulation, and second, the need to additionally heat the individual rooms with electric devices- which is both expensive and does not ultimately give a feeling of thermal comfort.

## 9. Additional comments and observations unique to each country

Please add any additional comments below.

The survey, which was carried out, confirmed that the problem is lack of knowledge. Consumers are not aware of that, how big economic effects could be brought by simple, daily, activities of energy efficiency.

To encourage residents to cooperate with HEA, it may be necessary to show the specific benefits of introducing energy-saving activities into everyday life.

## 2.2.5 Finland Consumer Surveys

### 1. Partner details

Partner name:	<b>VaasaETT</b>
Name of region/country:	<b>Finland</b>
Key contact regarding consumer surveys:	<b>Anna Sahiluoma</b>
Email of key contact:	<b>anna.sahiluoma@vaasaett.com</b>

### 2. Data collection

Number of questionnaire disseminated	<b>24484</b>
Number of questionnaires completed	<b>4661</b>

Date of data count	29.12.2017
<p><b>Methodology:</b> Please describe how you disseminated and collected your questionnaires. Include numbers where necessary.</p> <p>Previous research on energy poverty done by the Ministry of Environment in Finland (: Ympäristöministeriön raportteja 21/2013: Selvitys energiaköyhyydestä) has concluded that people most at risk of fuel poverty are of lower income households such as students, elderly, unemployed etc. with large heatable space such as detachable home. Based on the previous research the Assist survey was planned to be targeted at elderly and owners of detachable houses as e.g. most of students live on rent in apartment buildings.</p> <p>The Survey was disseminated through two channels: via the Home Owners Association (Omakoti liitto) to their members and the Association of Elderly Welfare via their repair advisors to elderly seeking home repair advice. The questionnaire disseminated via Home Owners Association was an online survey and the questionnaire disseminated through the Association of Elderly Welfare was a paper survey targeted at people not reachable by online survey.</p> <p>Total number of disseminated surveys was 24484, of which 70 where paper questionnaires through Association of elderly welfare. In total of 4661 surveys where completed. Response rate via Home Owners association was 19 % and via Association for the Welfare of the Elderly the response rate was 41%. This gives a total response rate of 19.04%.</p> <p>Survey participants have been divided into: most at risk, vulnerable and not at risk, based on their perception of their financial situation variable (the division is shown in table below). In order to limit the bias due to the fact that people's perception can be subjective, we have ensured that the identification of vulnerable and non-vulnerable groups was in accordance with the clustering results done for Work Package 5, that took under consideration multiple factors and used the share of Electricity/Heating costs as target-variable. The identification of people most at risk was done based on their perception of financial situation, in order to examine the ways that they differentiate from the vulnerable group.</p>	

CATEGORY	PERCEPTION OF FINANCIAL SITUATION
Most at risk	1. Not enough money for primary needs (food and energy bills)
Vulnerable	2. Enough money for primary needs, but not for non-basic expenses
Not at risk	3. Enough money for primary needs and sometimes for non-basic expenses
	4. Enough money for primary needs and often for non- basic expenses

Table 1: classification of the vulnerable based on their perception of their financial situation

**Challenges:** Did you have any issues collecting your data? Please explain.

The questionnaire was intended to be directed at vulnerable consumers, but as Finland does not classify specific groups as vulnerable regarding energy markets, the survey was targeted at a larger audience of people possibly at risk being energy poor/vulnerable.

Due to limitations of data available and the good response rate of the survey, the survey data was also used for the clustering analysis in Work Package 5. Comparison between the vulnerable and the non-vulnerable are represented in this document, although the work package deliverable deepens the knowledge on the attitudes and wishes of the vulnerable as the short follow up survey was sent to the vulnerable identified from this survey.

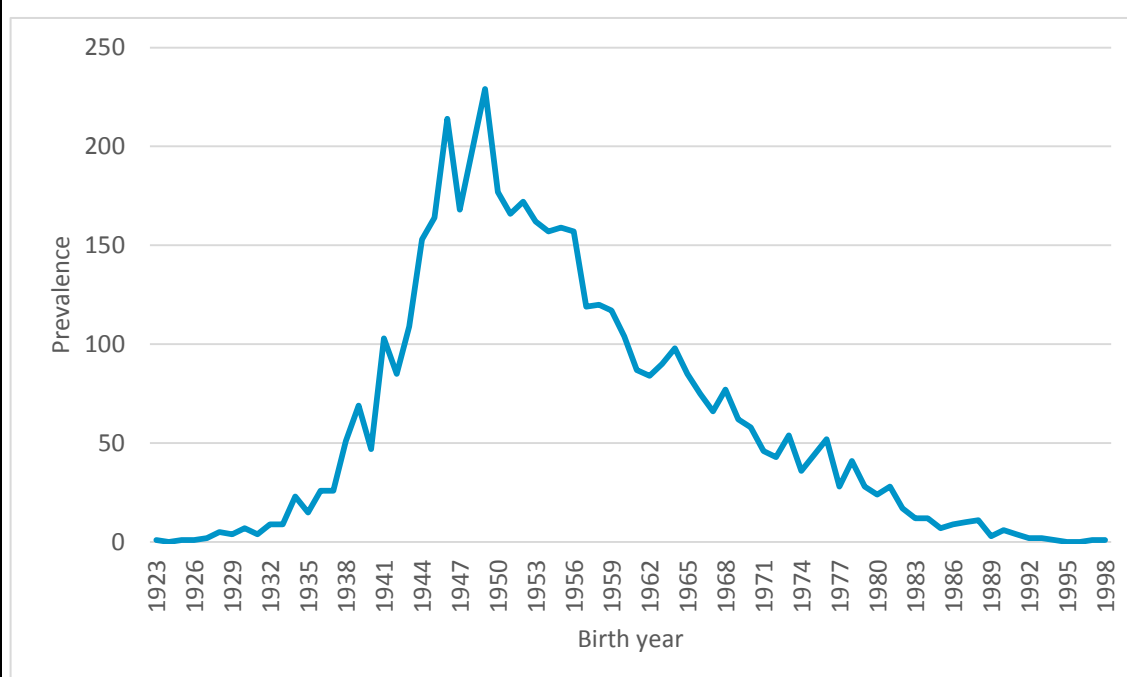
### 3. What is the demographic profile of your consumers?

- Please **summarise** the demographic profile of the consumers who completed the questionnaire. Include: sex, age, nationality, marital status (Q 1, 2, 3, 5).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

Majority of the 4661 respondents, 65,4% were male, and 34% female, 0,2% (7) were of other.

The youngest respondent was 19-year-old and the oldest 94 years. 48,3% of respondents were 65 or older and 51,7% were between 15 and 64 years. Majority of the respondents were of older age: the average age was 62 years. Although the survey through Association

for Elderly Welfare was targeted at elderly, the survey respondents through Home Owners Association were also of older age. The members of Home Owners Association are more evenly distributed in different age groups. Possible reason for a large amount of elderly people responding to the survey might be that retired people, tend to spend more time at home and have more time answering surveys. On the other hand the high portion of elderly could also signify that the issue of managing with energy costs and possible energy poverty concerns them more than others.

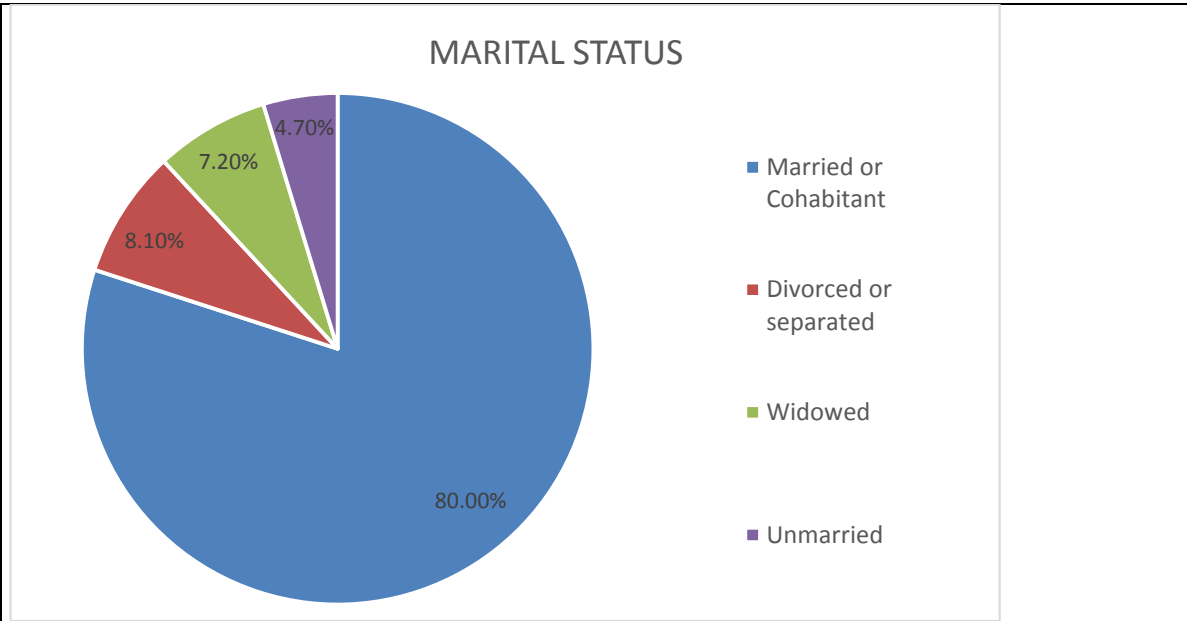


**Figure 1: the prevalence of birth year**

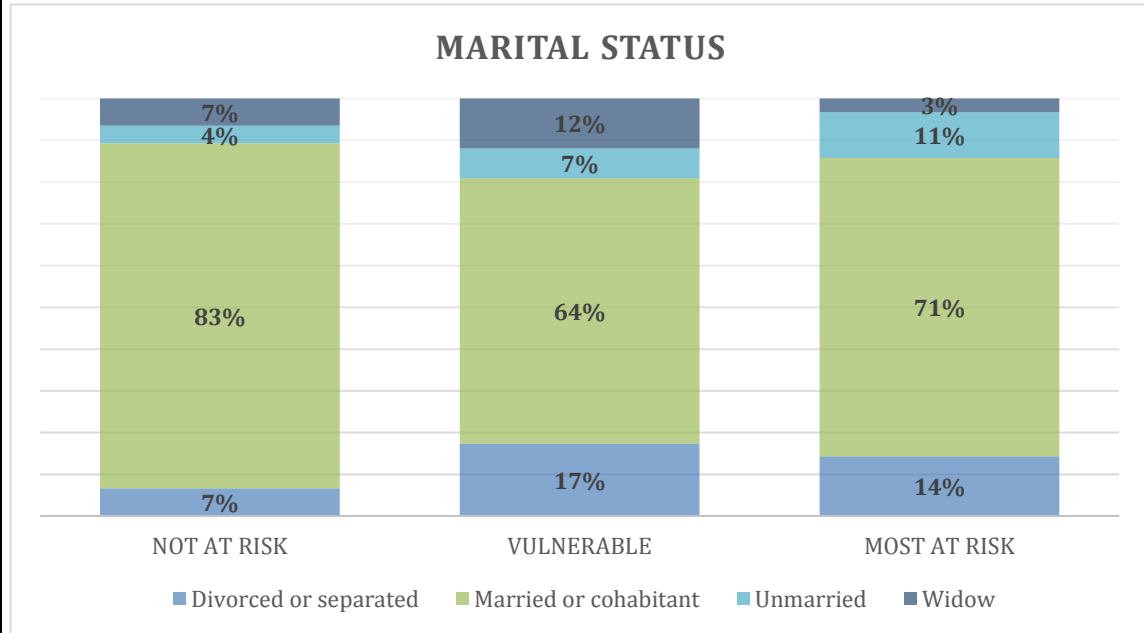
99,87% of respondents were of Finnish nationality, 0,09% were Estonians, one from Kazakhstan and one declared to be a Sami, although it is not a nationality, but an ethnic minority of aboriginals (Lapps) in northern Finland, Sweden and Norway.

Majority, 80,0% of respondents were married or cohabitant. 8,2% were divorced, 7,2% were widowed and 4,7% unmarried.





When comparing the people not at risk to the vulnerable groups, it can be observed that the most at risk group has the highest portion of unmarried, and the vulnerable has the highest portion of divorced or separated and widowed. This can be interpreted as a confirmation on, what the previous studies have also highlighted, that the people most at risk of vulnerability is higher for people living alone.



**Figure 2: Comparison of marital status between groups**

#### 4. Where did your consumers live?

- Please **summarise** the location where consumers live (Q4, 17).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

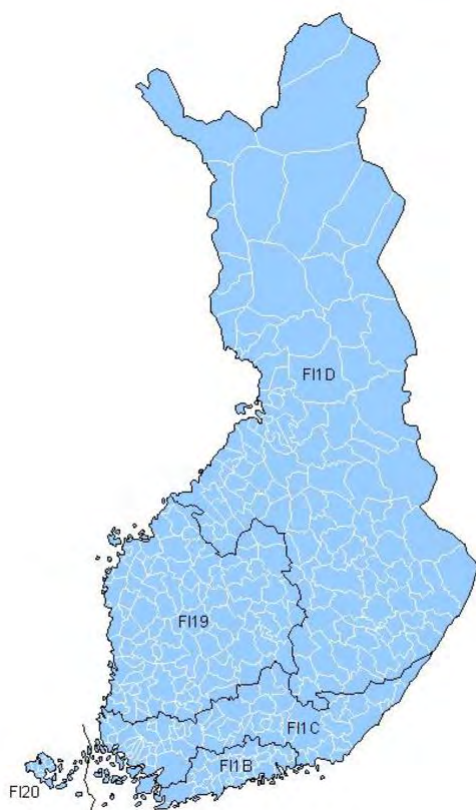
The geographical dispersion in the overall answers was wide. The respondents came from almost all regions in Finland, only Åland islands, the autonomous region of Finland was missing. 40,9% of the respondents (1783) lived in the region of Uusimaa, which is the most densely populated region in the south of Finland. This was significantly more than the share of population in that region (30.01%).

Area	%
Uusimaa	40.90%
Varsinais-Suomi	16.50%
Pohjois-Karjala	10.00%
Pohjois-Savo	5.30%
Kanta-Häme	4.00%
Kymenlaakso	3.10%
Keski-Suomi	2.60%
Pohjois-Pohjanmaa	2.50%
Satakunta	2.50%
Etelä-Pohjanmaa	2.30%
Etelä-Savo	2.20%
Pirkanmaa	2.00%
Päijät-Häme	2.00%
Lappi	1.50%

Etelä-Karjala	1.20%
Pohjanmaa	0.80%
Kainuu	0.30%
Keski-Pohjanmaa	0.10%

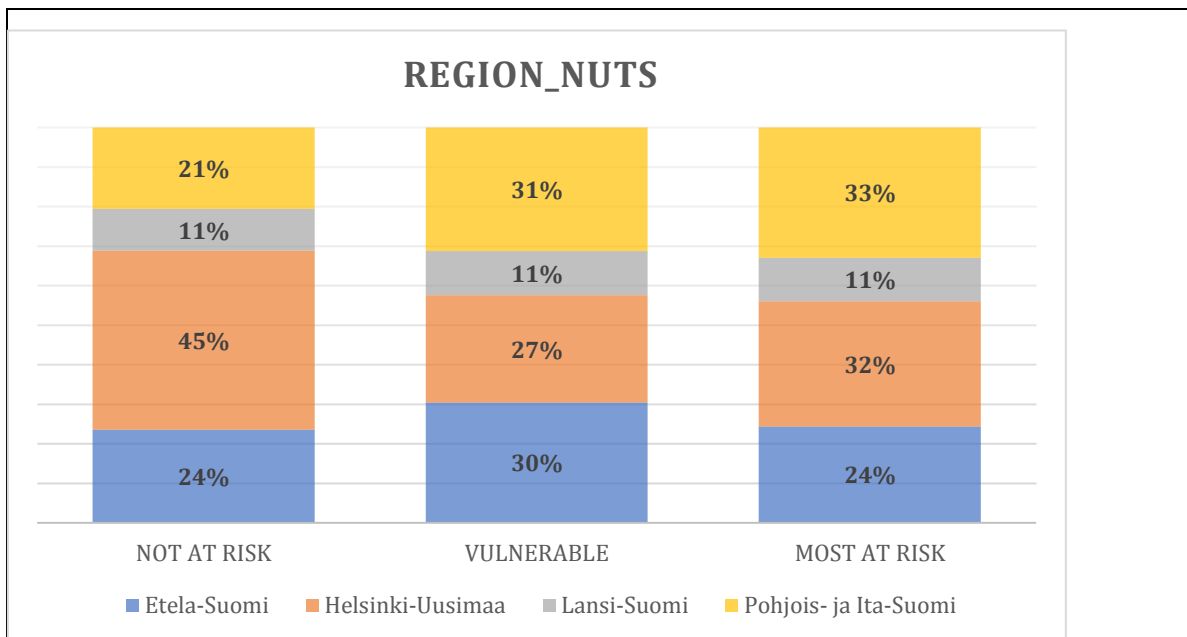
**Table 2: Portion of respondents from areas**

As several regions had very few responses, the regions were grouped to larger areas: the division was made based on the the NUTS classification (Nomenclature of territorial units for statistics) that EU uses and based on the areas of Regional State Administrative Agencies to get even more insight.



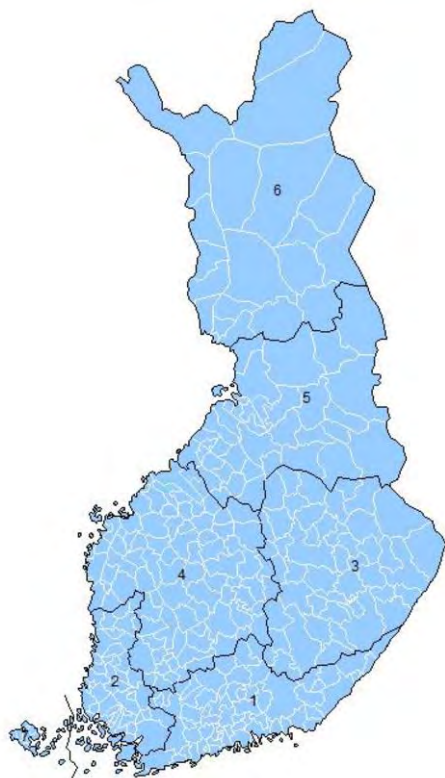
**Figure 3: Division of Finland according to Eurostat NUTS (based on population)**

Comparing the vulnerable groups with the non-vulnerable group, observation can be made that Helsinki-Uusimaa region is more represented in the non-vulnerable group. This seems to indicate what the previous studies on energy poverty in Finland have also indicated, that the risk is lower in the metropolitan area. On the contrary the vulnerable have higher portions of people living in the northern parts of Finland. As the Nuts classifies a large part of Middle, East and Northern Finland in to one area, this does not give clear picture of specific problem areas.



**Figure 4: Comparison of NUTS regions between groups**

The division based on regional State Administrative Agencies in Finland divides Finland in to six areas -two more than the NUTS classification



**Figure 5: Division of Regional State Administrative Agencies in Finland**

. The comparison between groups when division is based on the regional states, shows that

Lapland and Northern Finland in particular, but also eastern and south western Finland are areas which have larger representation in the vulnerable groups.

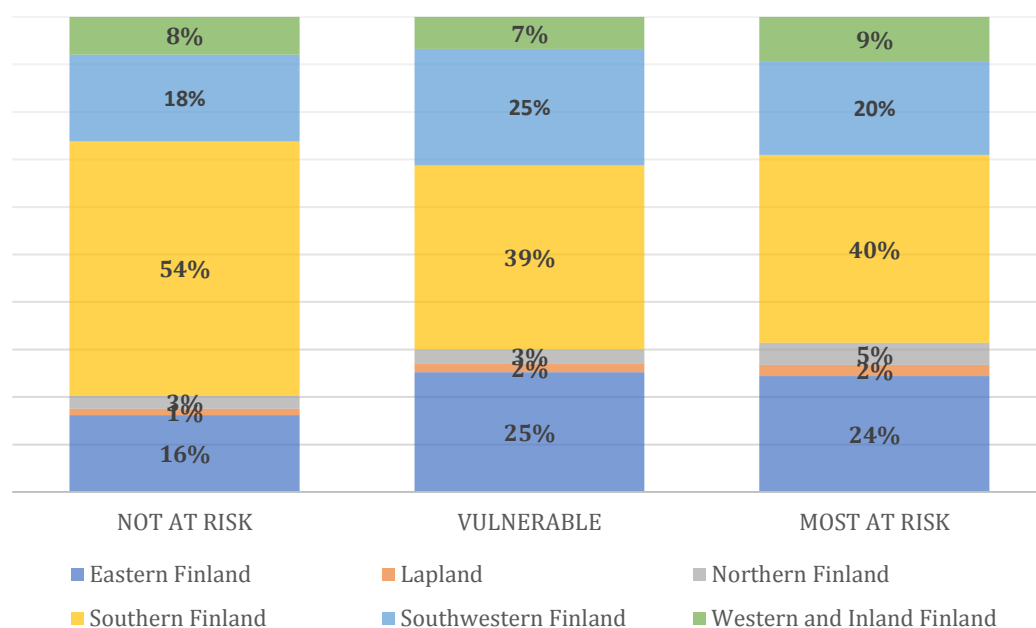


Figure 6: Comparison of Regional States between groups

## 5. Education and employment

- Please **summarise** the levels of education and employment status of your consumers (Q6, 7, 8).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

The survey respondents were from all education levels.

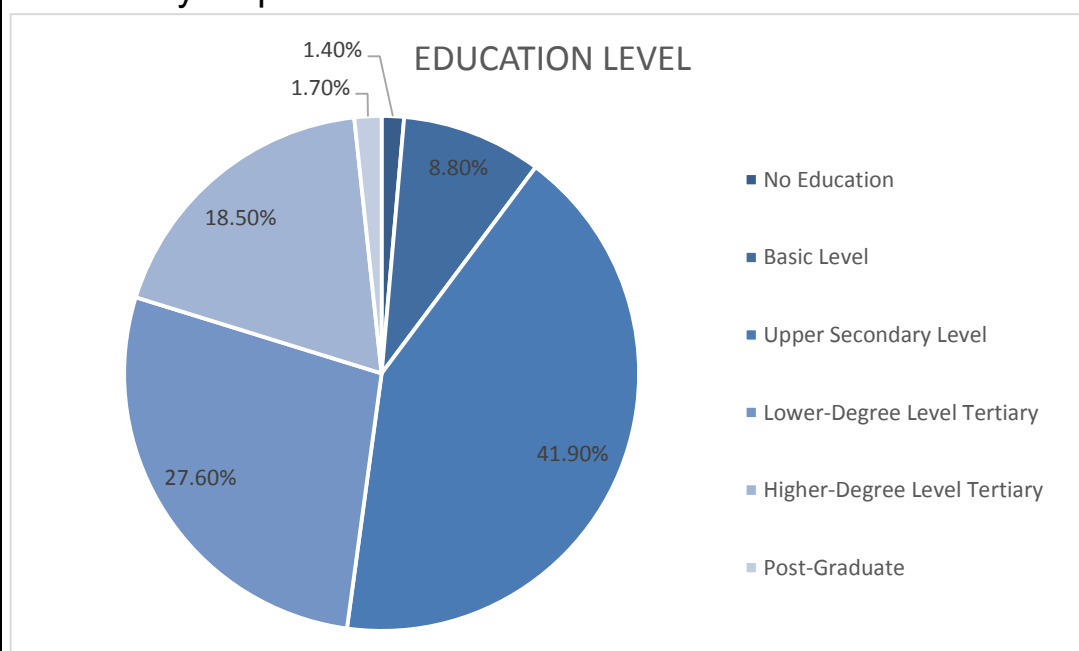
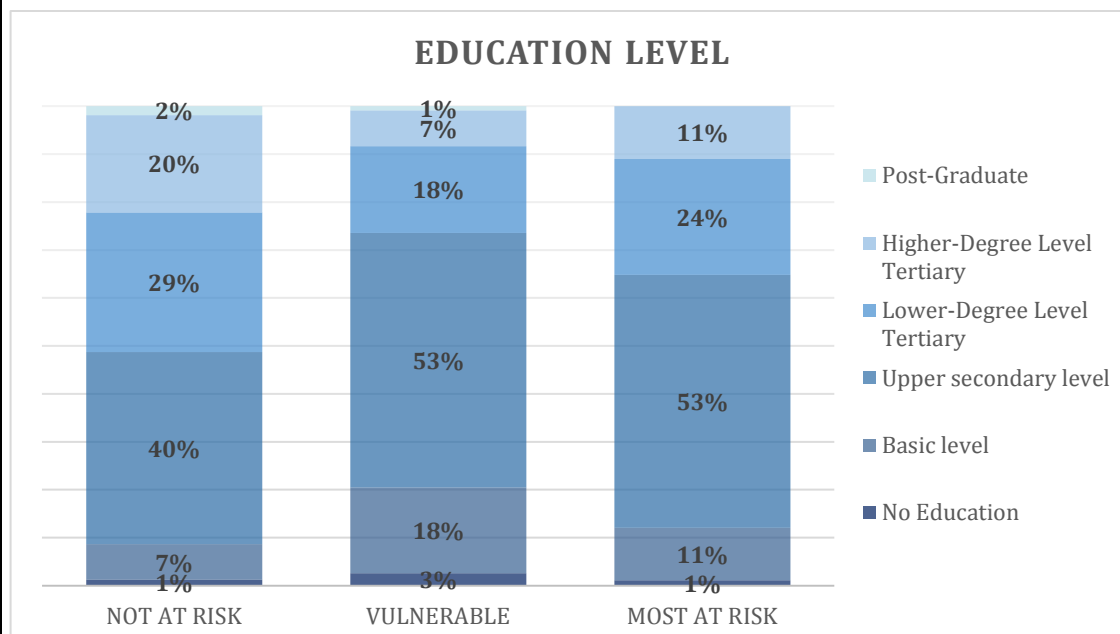


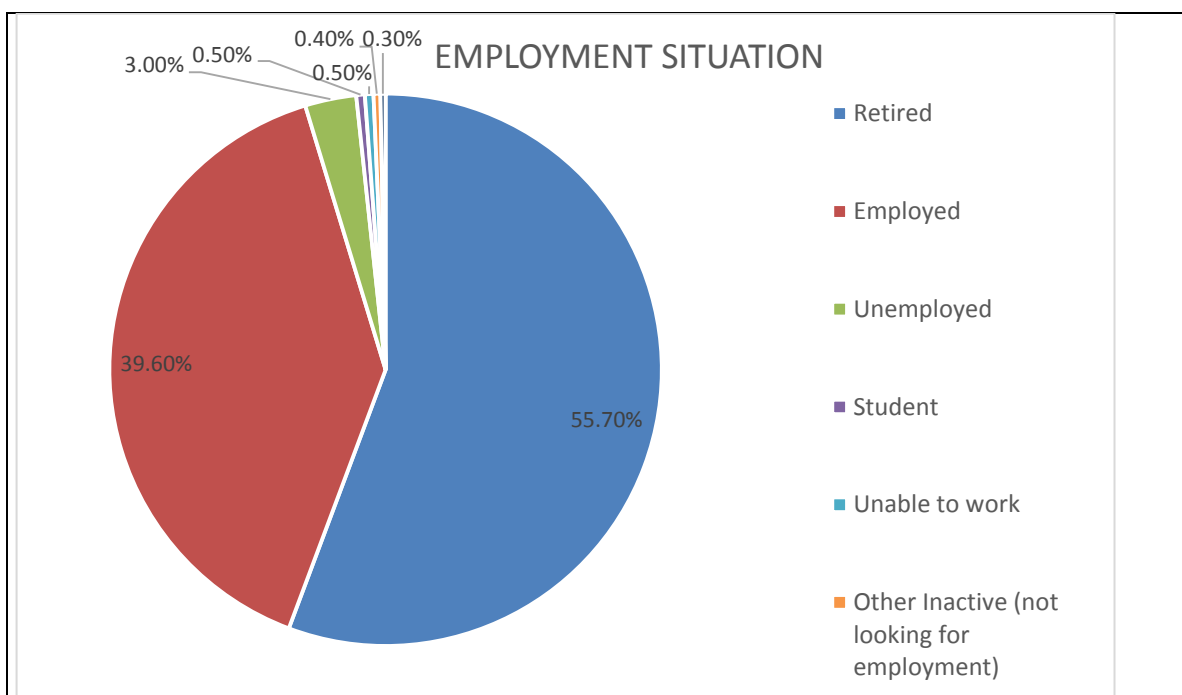
Figure 7: Education level

When comparing the vulnerable groups and the non-vulnerable, a first observation is the fact that higher proportions of people from lower education levels were in the vulnerable and the people most at risk (as seen in graph below).



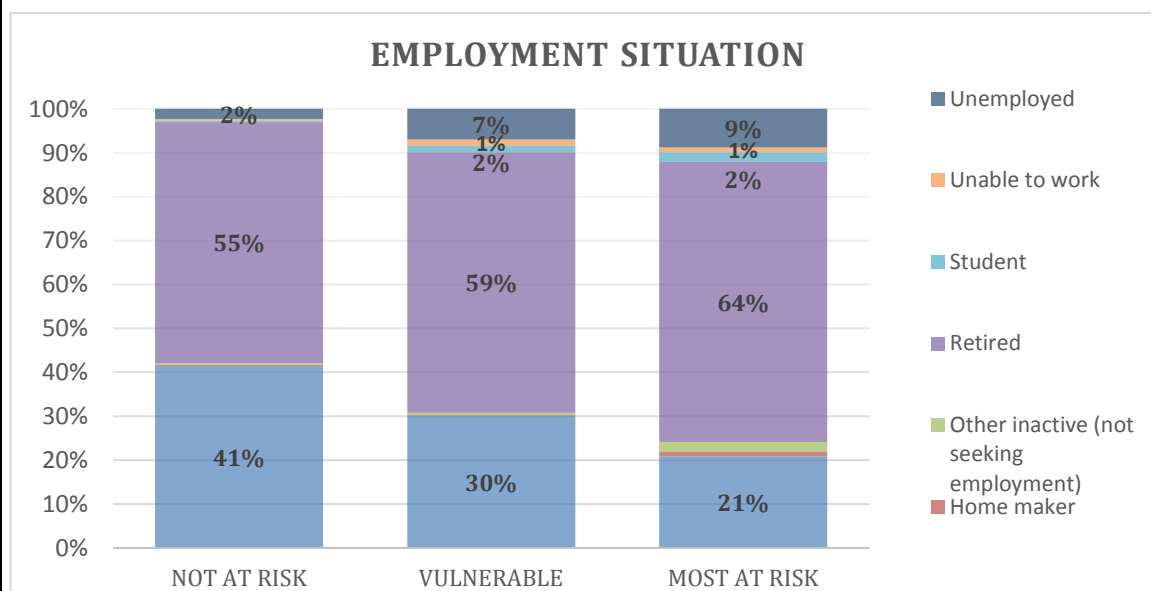
**Figure 8: Comparison of Education level between the groups**

As described previously, the survey respondents average age was high, 62 years, which means that the retired were over represented the in the survey responses: 55,7% of respondents were retired, 39,6% employed, 3% unemployed and the rest less than 2% students, other inactives and homemakers.



**Figure 9: Employment situation**

But another interesting observation comes by comparing the employment status of respondents in different groups, the vulnerable groups have larger portions of people who are not employed: unemployed, unable to work, students, retired, others inactive or home-makers.



**Figure 10: Comparison of Employment situation between the groups**

## 6. Residents

- Please **summarise** the proportion of residents of different ages in

the properties and the proportion with health conditions (Q9, 10, 11, 12, 13).

- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

As described previously, the survey respondents average age was high, which meant that the number respondent that had under 15 year old children was low: 86,2% of respondent household didn't have children under 15, the portion of respondent who had one child under 15 in their household was 5,8%, almost as many, 5,7% had two under 15 year olds and 1,8% had three under 15 year olds, the remaining 0,5% had more than 3. The average number of kids in the households was 0.2436.

When comparing the number of kids in the household between the vulnerable groups and the non-vulnerable group, it can be observed that the number of kids is larger in the vulnerable groups but slightly lower in the people most at risk. No clear conclusions can be of this as the portion of households with kids is relatively low.

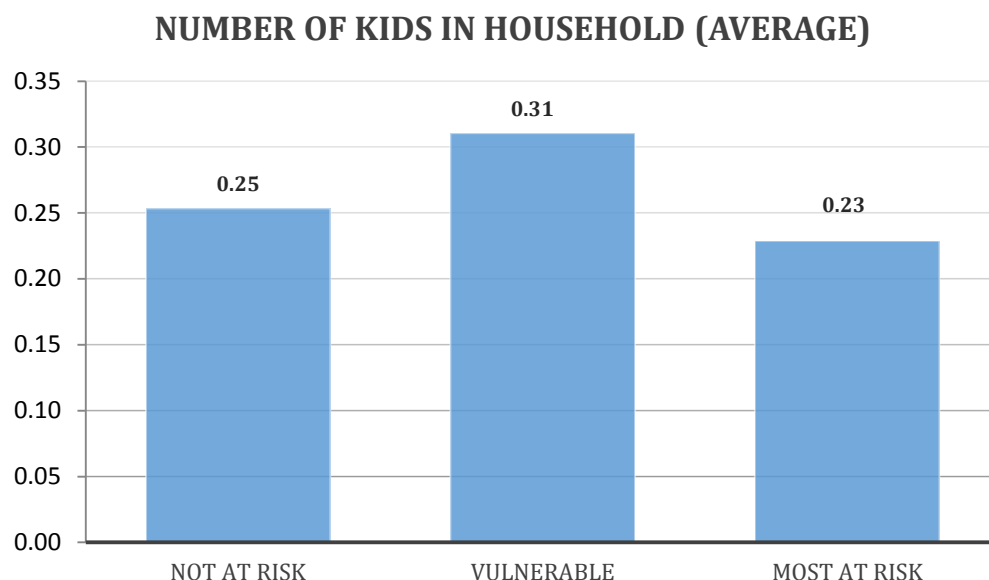


Figure 11: Comparison of number of kids between the groups

## 7. Finance and energy poverty

- Please **summarise** the financial status and amount spent of energy for the consumers who completed the questionnaire (Q14, 15, 16, 30, 33).
- What proportion of consumers who completed questionnaires do you consider to be **vulnerable to energy poverty**? Why?



- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

The survey respondents were from different income classes, highest portion of survey respondents were in the income class of 35000-70000 euros. The average income for single person in Finland was 3503 euros per month. The portions of respondents in different income classes is shown in table 3 below:

Household income per year	Percentage of respondents
Less than 7 500 euros	1.30%
7 501 - 15 000 euros	2.80%
15 001 - 20 000 euros	5.00%
20 001 - 26 000 euros	8.20%
26 001 - 35 000 euros	15.50%
35 001 - 70 000 euros	44.90%
70 000 - 100 000 euros	15.20%
100 001 - 200 000 euros	6.70%
More than 200 000 euros	0.50%

**Table 3. The portion of respondents in each income class**

The perception of their financial situation varied, majority felt that either can afford the primary needs and sometimes non-basic needs (44,80%) or that they can afford primary needs and often non-basic needs (40,80%). 12% felt that they had enough money for primary needs but could not afford anything more and 2% felt they could not afford the basics.

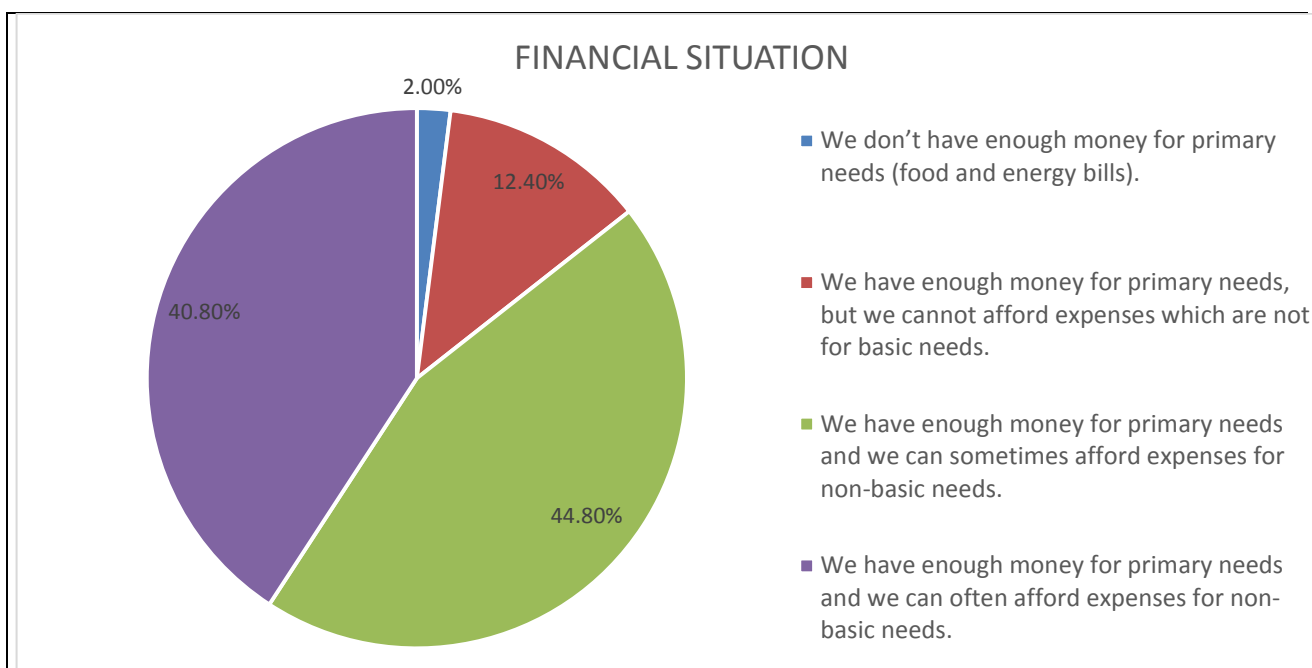


Figure 12: The portions according to perception of their financial situation

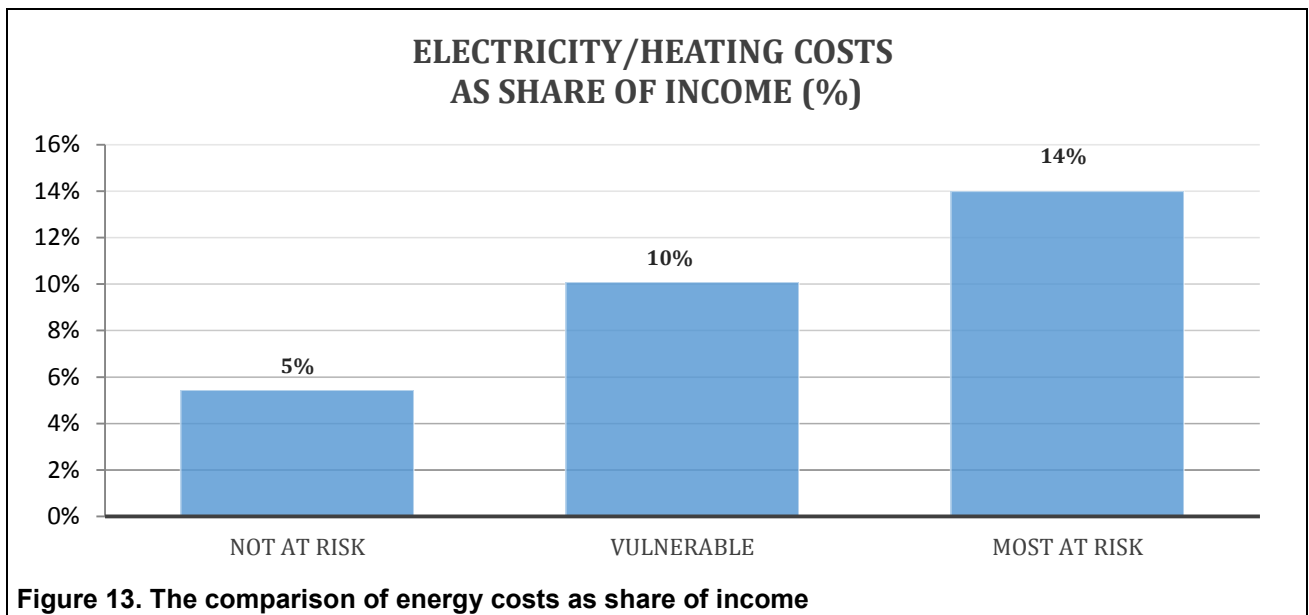
As described previously the respondents were divided into two vulnerable groups: most at risk, vulnerable and to a third groups comprising with the non-vulnerable, based on their perception of their financial situation variable (the division is shown in table 1). In order to limit the bias due to the fact that people's perception can be subjective, we have ensured that the identification of vulnerable and non-vulnerable groups was in accordance with the clustering results done for Work Package 5, that took under consideration multiple factors and used the share of Electricity/Heating costs as target-variable.

In total the two vulnerable groups had 669 people: 577 in the vulnerable and 92 in the most at risk group. The rest of the 4661 survey respondents were considered not at risk.

The amount of money the households spent on total energy costs differed from couple of hundred to thousands per year. The high dispersion is due to the fact that in people living in distinctly heated apartment buildings pay heating as part of rent, and only energy the them selves pay is electricity used for lighting and appliances. The total energy costs were also compared to household's annual income (as seen below).

$$\text{Annual Electricity and Heating costs as share of income (Electricity/Heating costs)} = \frac{\text{Cost of Electricity} + \text{Cost of oil} + \text{Cost of gas} + \text{Cost of solid fuels} + \text{Other fuel costs}}{\text{Average annual income}}$$

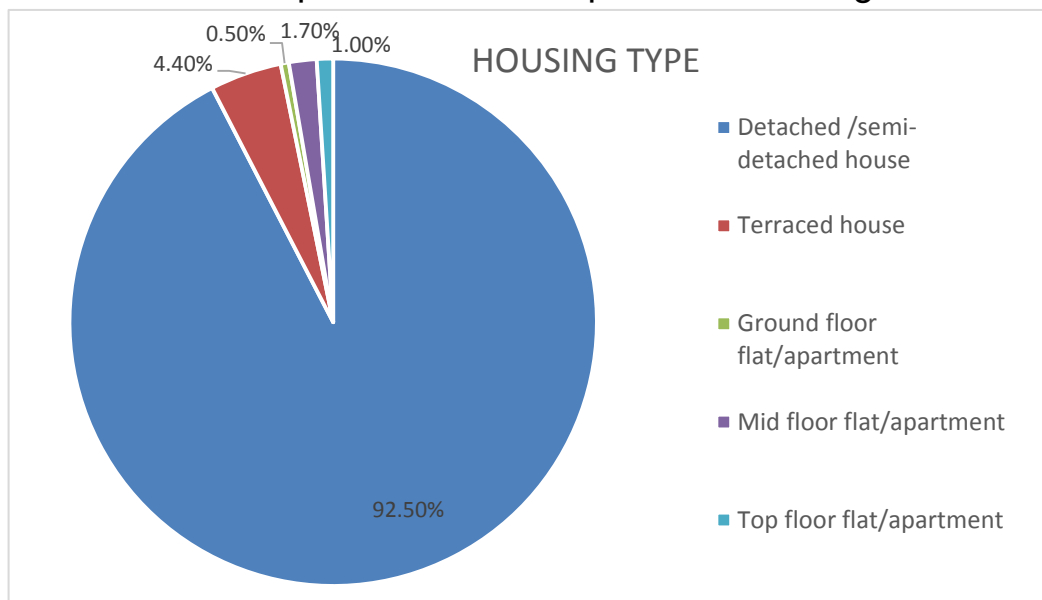
When comparing the energy costs as share of income, it can be seen that the portion is significantly higher with the vulnerable groups, but there is also significant difference between the vulnerable that think they have enough money for basic needs and the people who feel they cannot afford even the basics as seen in figure 13.



## 8. Housing summary

- Please **summarise** the nature of the housing of the consumers who completed the questionnaire (Q18, 19, 20, 22).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

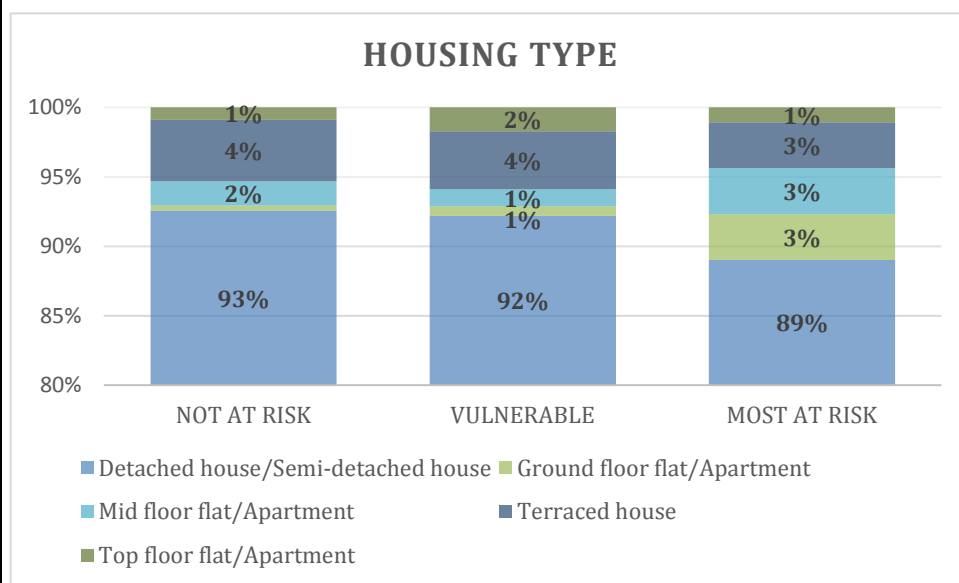
Due to the fact that the survey was sent through Home Owners Association the portion people living in detached /semi-detached houses is large. Less than 5% of all respondents live in apartment buildings.



**Figure 14. Portion of housing types**

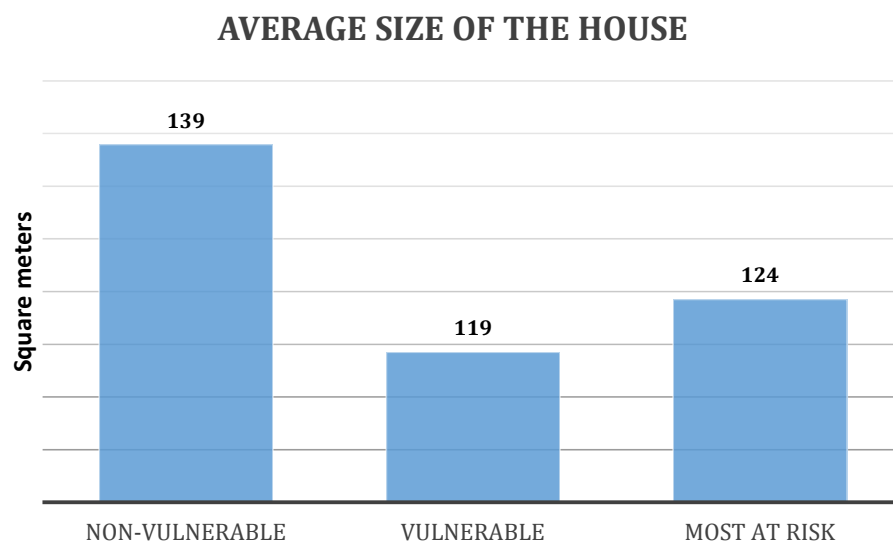
Interesting observation is that, unlike the previous studies suggest, the portion of people living in apartments is higher in the vulnerable group than in the non-vulnerable group. This is an interesting observation that most likely, especially in the most at risk group, tells more about the very small income

that the households have, as the total yearly energy costs are relatively small.



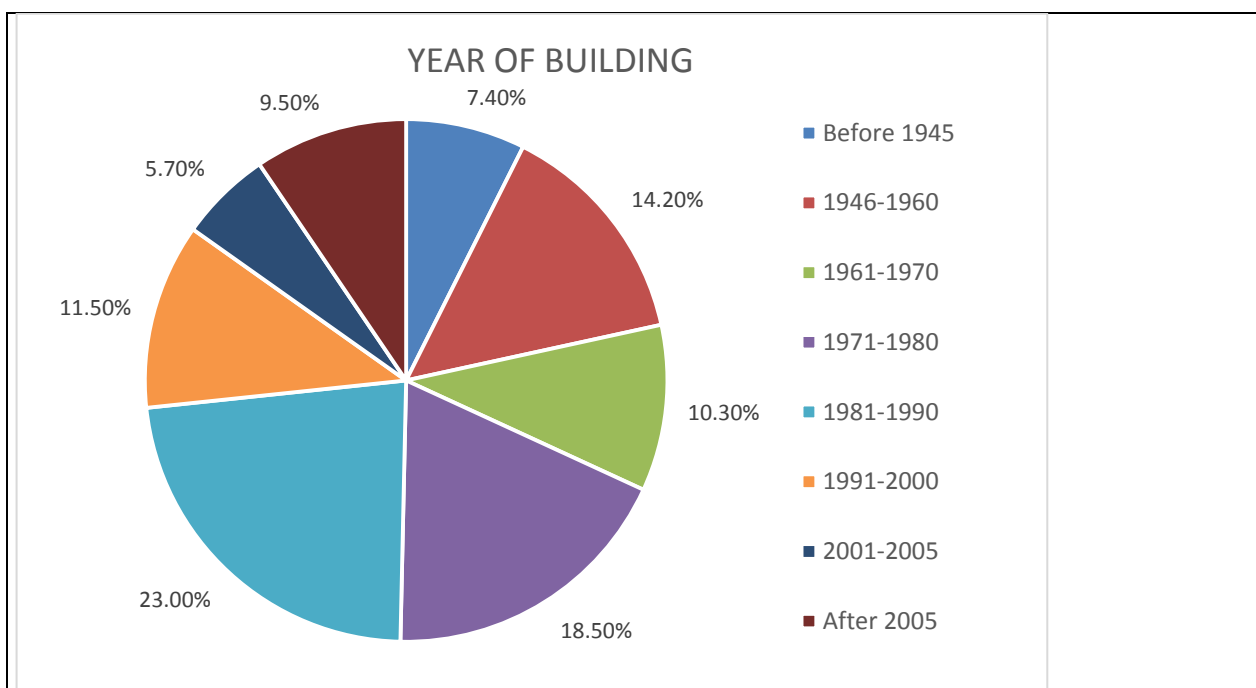
**Figure 15. Comparison of housing types between the groups**

When comparing the average house sizes, the Non-vulnerable group has the largest average square meters. But there does not seem to be a clear trend between the two vulnerable groups.



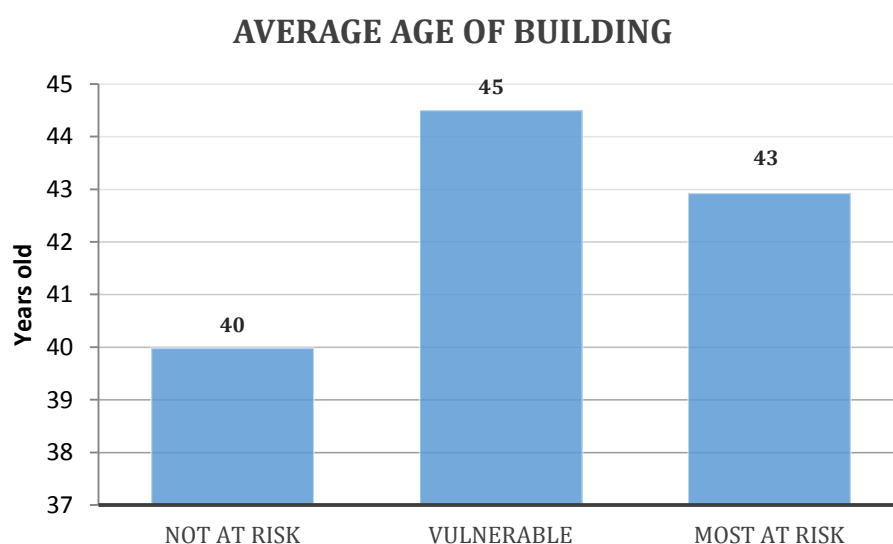
**Figure 16. Comparison of average house size between the groups**

The buildings, where the survey respondents lived, varied a great deal in building year. Generally the building constructed between 1950-70 are the least energy efficient. In houses built in the 1950s and 1960s, the insulation material used were mostly industrial by-products such as peat, sawdust, moss and coat. The portion of these buildings in the responses, was almost a quarter.



**Figure 17. The portion of building based on the construction year**

It is worth also noticing that although the non-vulnerable group has the newest housing stock when comparing the average age of the building, there is no clear trend with the two vulnerable groups.



**Figure 17. Comparison on average house age between the groups**

When comparing the location types, no clear trend was found. This is likely due to the fact that in the more rural parts of Finland even the city/Town areas are suffering from people moving the larger cities in the south and thus the location in a town does not necessarily signify a desirable location.

And on the other hand, living in the outskirts of the capital area, does not make the location undesirable. The house prices in the south, especially in Uusimaa area, are manifold compared to the rest of Finland.

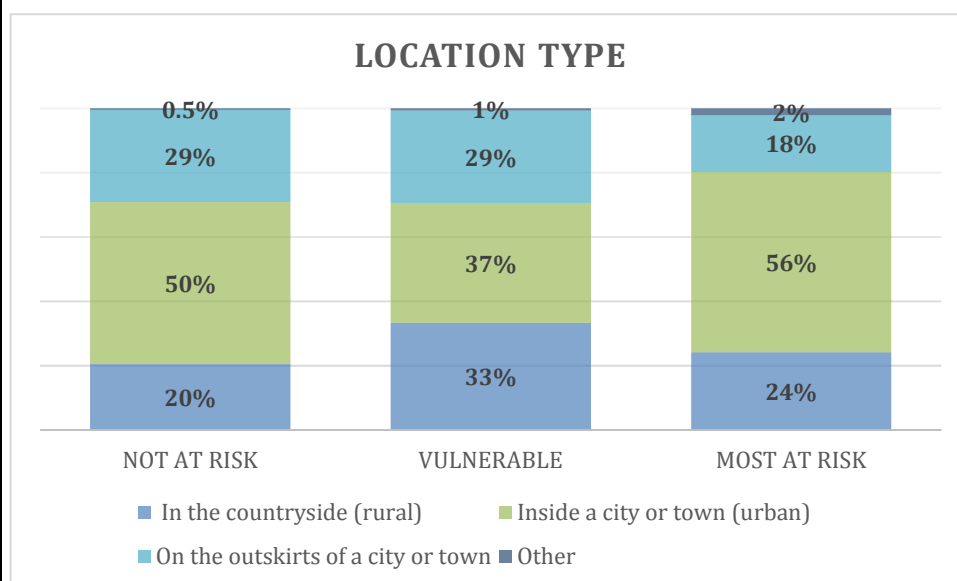


Figure 18. Comparison of location type between the groups

## 9. Housing modifications

- Please **summarise** the modifications made to housing by the consumers who completed the questionnaire (Q21, 25a, 25b, 27, 28).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

Another interesting observation comes by comparing renovations done to improve energy efficiency between the groups: the portion of the non-vulnerable that have done renovations, is higher than the vulnerable groups, even though the average house age was lower (as seen in Figure 17). Significantly smaller proportion of people in the vulnerable groups have done renovations, which indicates that the vulnerable groups might not have the means to invest in energy efficiency.

### RENOVATION TO IMPROVE ENERGY EFFICIENCY

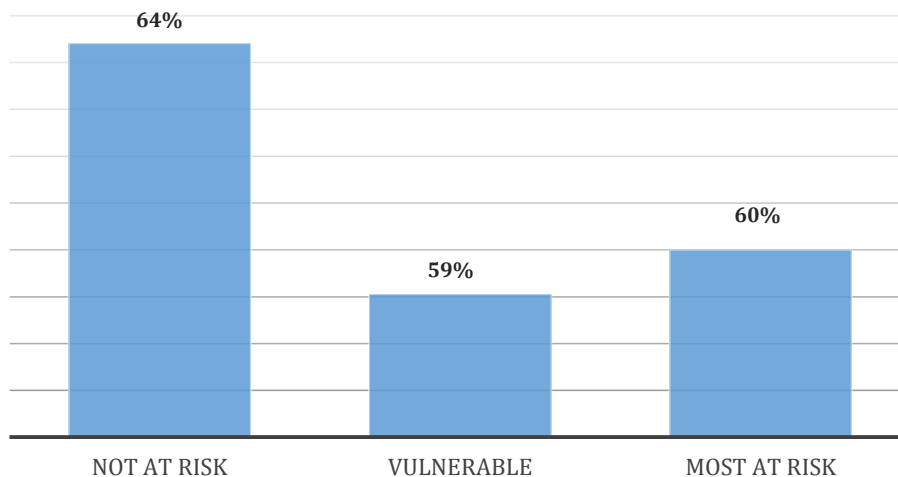


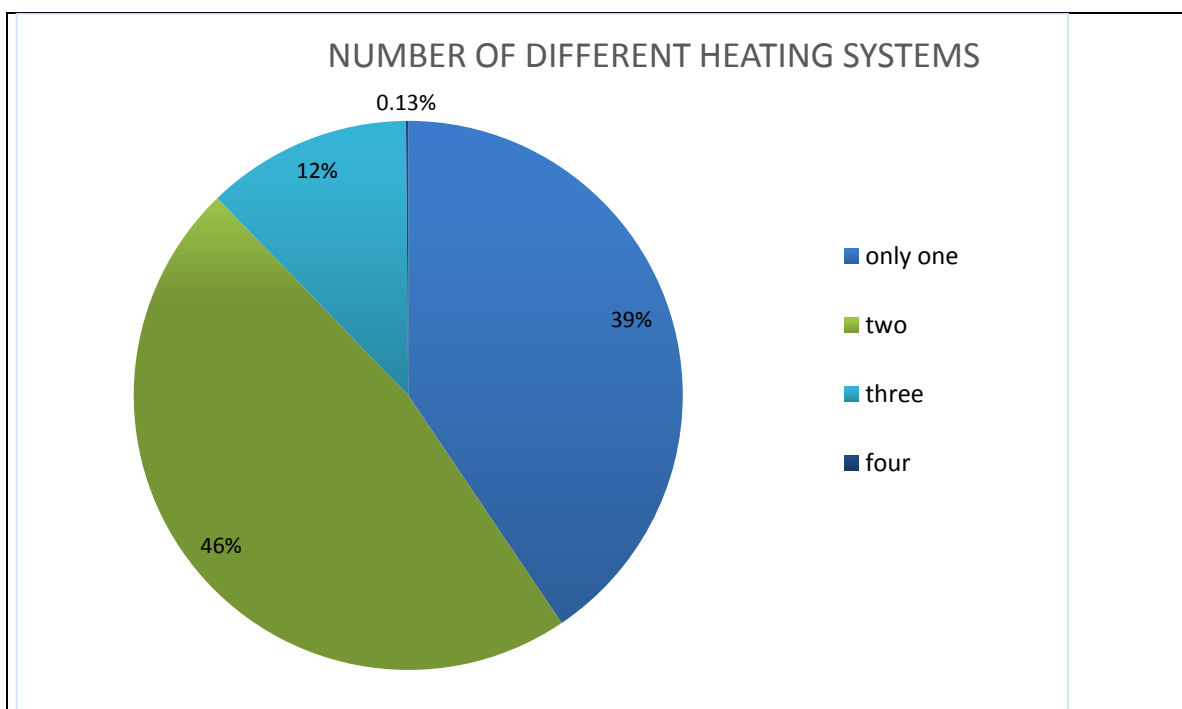
Figure 19. Comparison of renovations done between the groups

#### 10. Comfort and heating

- Please **summarise** how residences are heated and whether residents can maintain a comfortable temperature. (Q23, 24, 25, 27, 28).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

In Finland long tradition is building regulations: the first standards for the insulation of buildings came into force in 1962. The current regulations mandates that the main heating system needs to be adequately sized to keep the temperature adequate in the whole house. Houses in Finland generally have central heating systems, and detached houses very often also have secondary heating system as fireplaces and nowadays also small air to air heat pumps.

Majority of respondents in the survey had two or three heating systems: most commonly one central heating system such as floor heating, radiators, ceiling heating etc. and a fireplace, or central heating system, fireplace and heat pump. 7,5% of respondents had fireplaces and/ or Masonry oven as the only heating system.

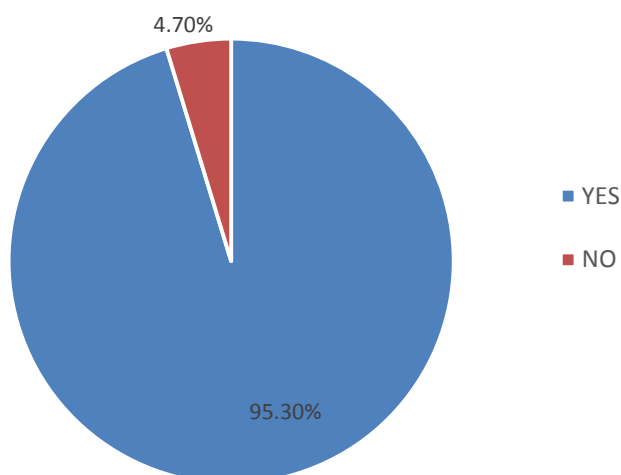


**Figure 20. Number of heating systems**

From all the survey respondents 4,7% are not able to maintain adequate temperature. The portion unable to maintain adequate temperature is higher than in EU statistics on income and living conditions (SILC) survey, where the 2016 average for all households unable to keep home adequately warm in Finland was 1,7% and the highest percentage of 4,3% was households with one adult over 65 years. Cooling is rarely needed in Finland, usually only few days/weeks a year, and thus cooling is quite rare in housing in Finland. Some respondents out of the 4,7% have stated that they are unable, and it is because of lack of heating. In Finland it also needs to be highlighted that Finns are used to warmer indoor temperatures than many Central European: the recommended indoor temperature given in the building regulations is 21 Celsius degrees. Previous studies done on housing conditions on the elderly have concluded that elderly prefer higher indoor temperature than the recommended. This should be taken into consideration when inquiring people perceptions.



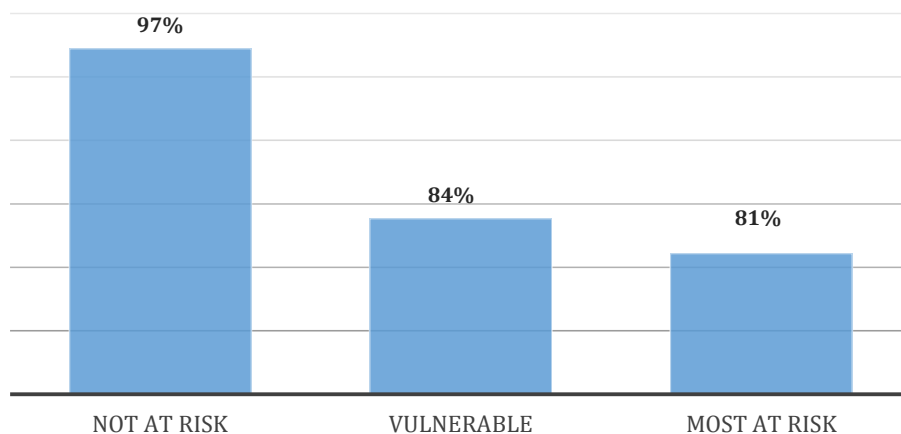
### ABILITY TO MAINTAIN ADEQUATE TEMPERATURE



**Figure 21. Portion of people unable maintain adequate temperature**

When comparing ability to maintain adequate temperature between groups, the significantly larger portion of non-vulnerable were able to maintain adequate heating. The trend is clearly downward: of the most at risk only 81% are able to maintain adequate heating. It should be noted that not even the not at-risk group everyone is able to maintain adequate temperature.

### ABILITY TO MAINTAIN ADEQUATE TEMPERATURE

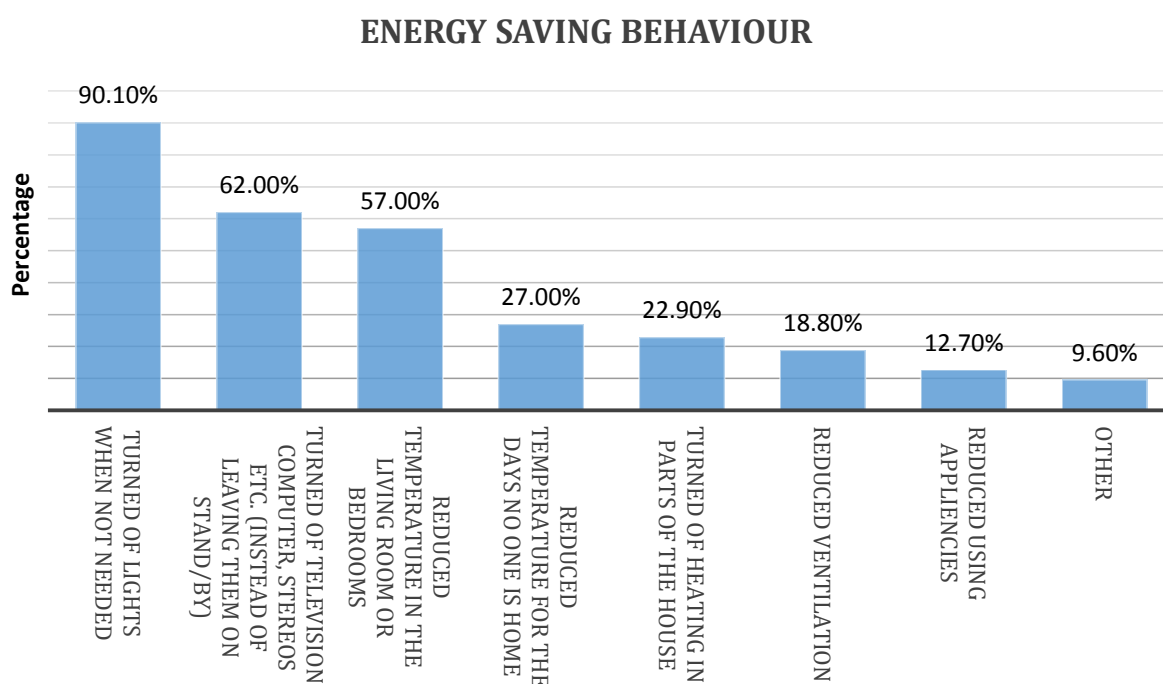


**Figure 22. Comparison of ability to maintain adequate temperature between groups**

## 11. Energy behaviours

- Please **summarise** the energy behaviours of the consumers who completed the questionnaire. (Q25c, 26, 25, 27, 28).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

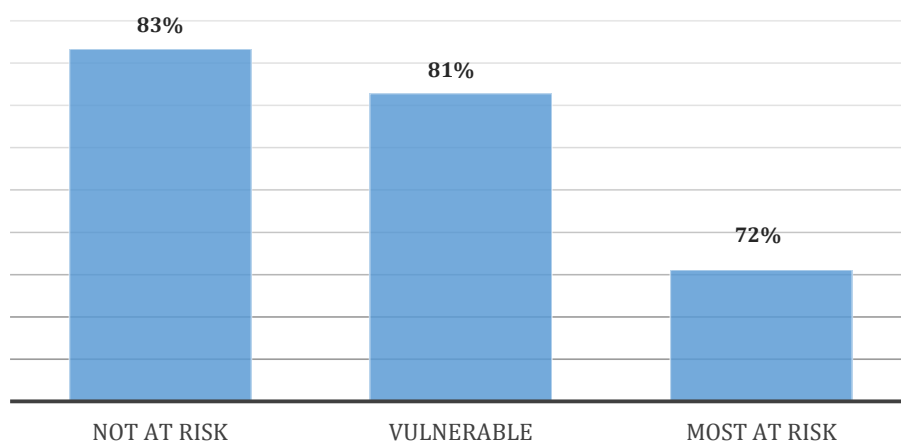
A first observation about the energy saving behaviour of the respondents is that a great majority turns of lights when not needed. Large portion also turns the power of appliances instead of leaving them on stand-by and reduces temperature for the days no one is home. It needs to be highlighted that to some extent the actions are wise in order to save energy. Although in Finland, due to the climate and generally good insulation in buildings, decreasing ventilation is risky as it might lead to mold problems. Quite a large portion of respondents had decreased ventilation in their home.



**Figure 23. Portion of energy saving behaviour**

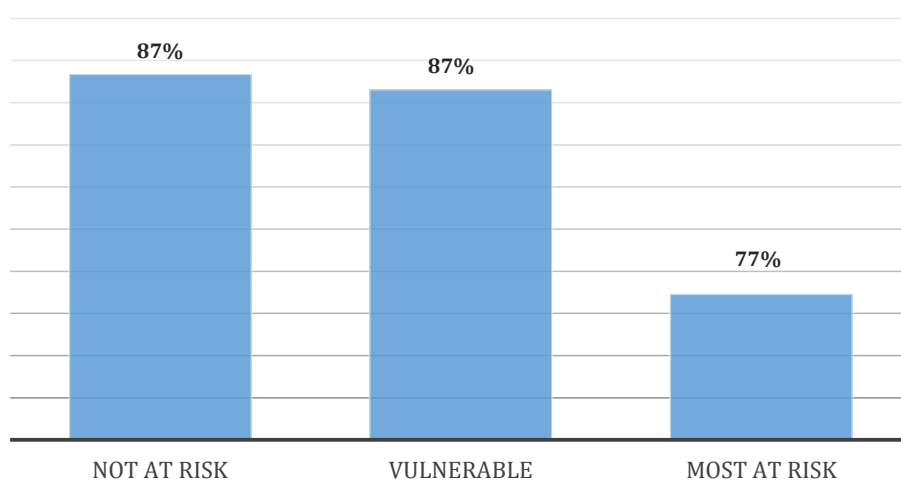
Comparison of energy behaviour between the groups was interesting; It seemed that the non-vulnerable were more active in energy efficiency behaviour than the vulnerable groups, especially the group most at risk, which had as seen in Figures 24-31.

### AIM TO REDUCE ENERGY BILL BY CHANGING ELECTRICITY/HEATING USE



**Figure 24. Comparison of energy behaviour between groups**

### TURNS OFF LIGHTS WHEN NOT NEEDED



**Figure 25. Comparison of energy behaviour between groups**

### Turns off TV/stereos instead of standby

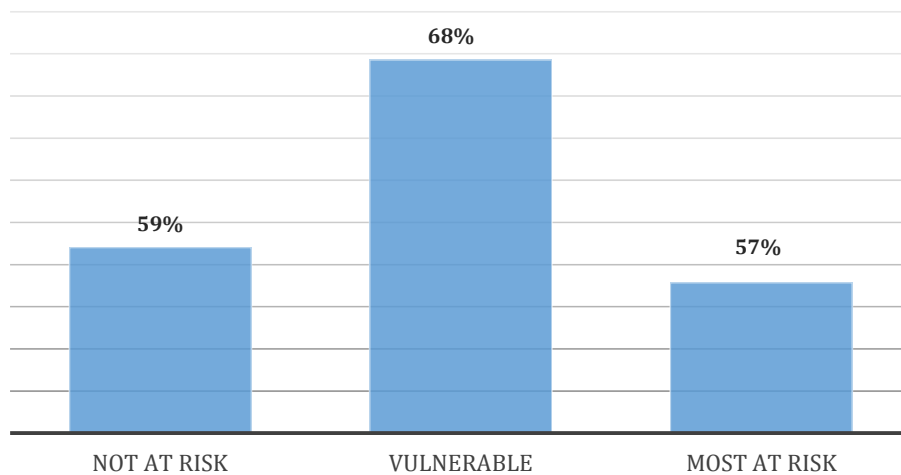


Figure 26. Comparison of energy behaviour between groups

### Switches off heating in part of the house

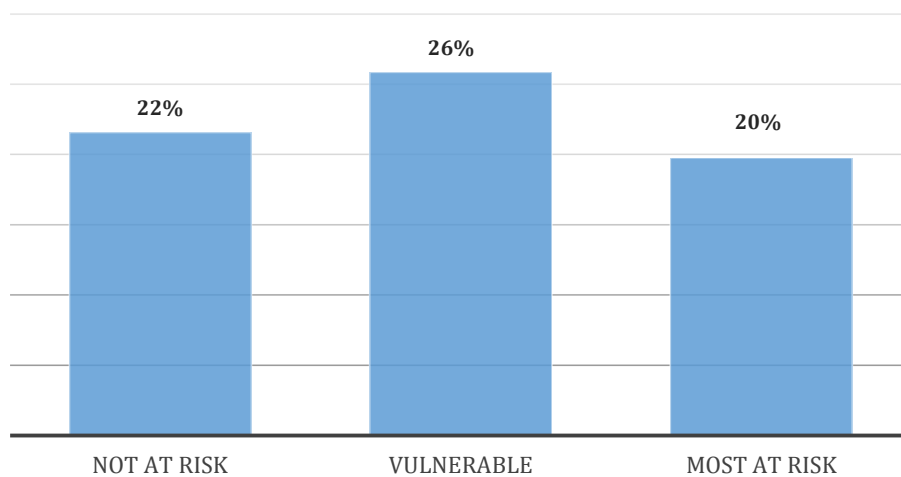
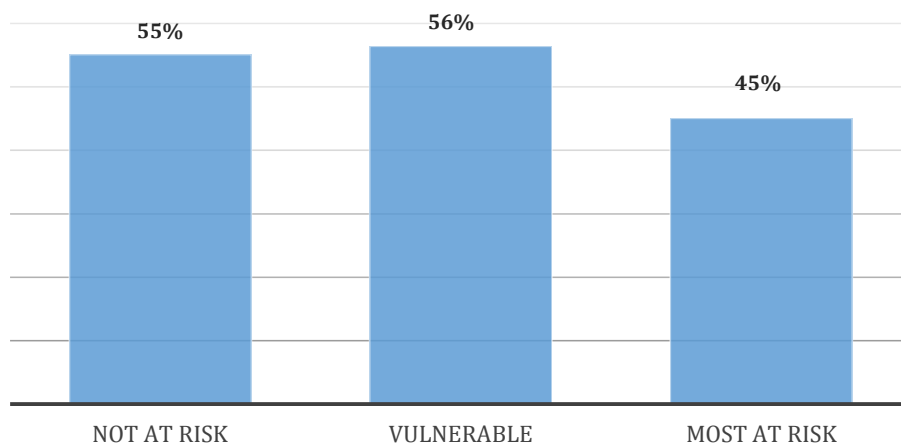


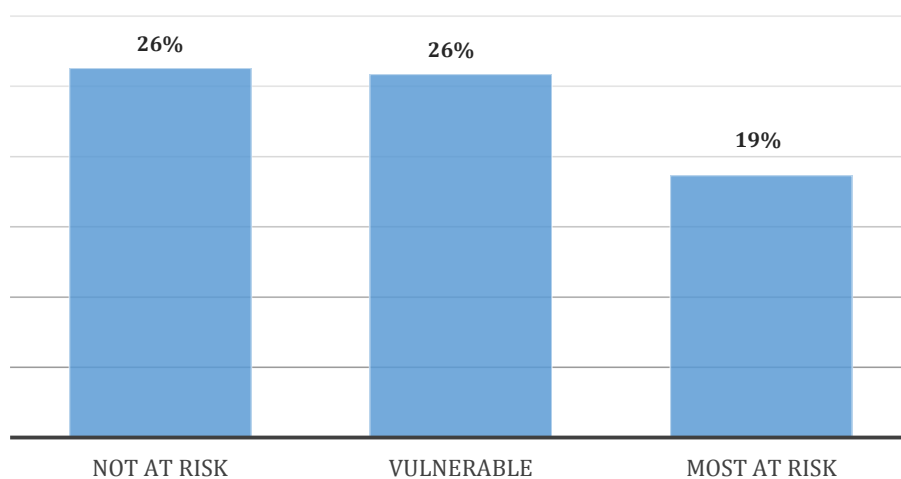
Figure 27. Comparison of energy behaviour between groups

### REDUCES TEMPERATURE IN LIVING / DINING ROOM OR BEDROOMS



**Figure 28. Comparison of energy behaviour between groups**

### REDUCES TEMPERATURE IF HOUSE IS EMPTY



**Figure 29. Comparison of energy behaviour between groups**

### DECREASES VENTILATION

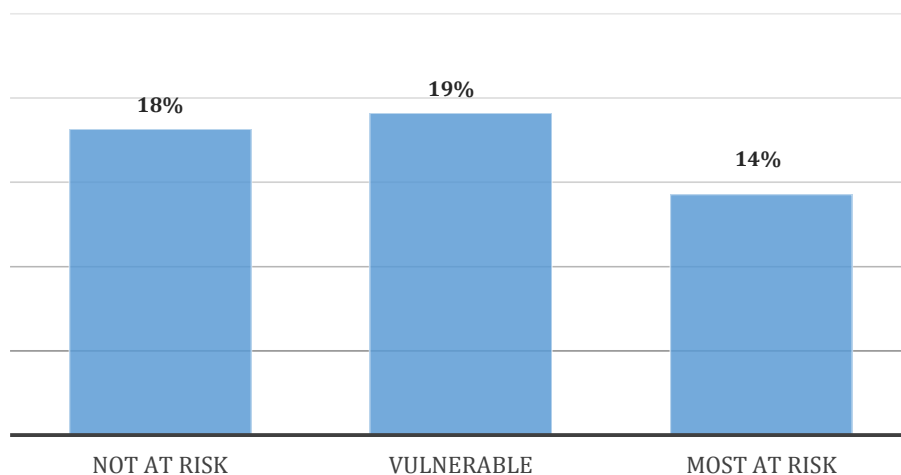


Figure 30. Comparison of energy behaviour between groups

### REDUCES USE OF APPLIANCES

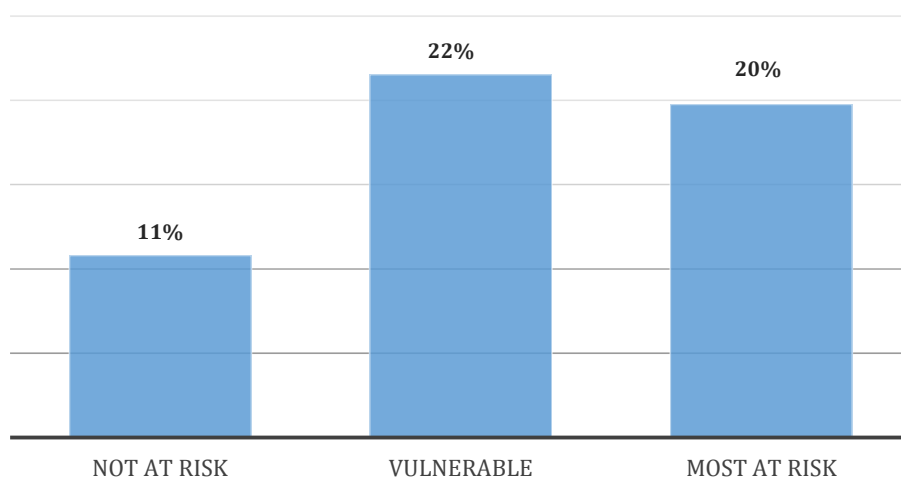


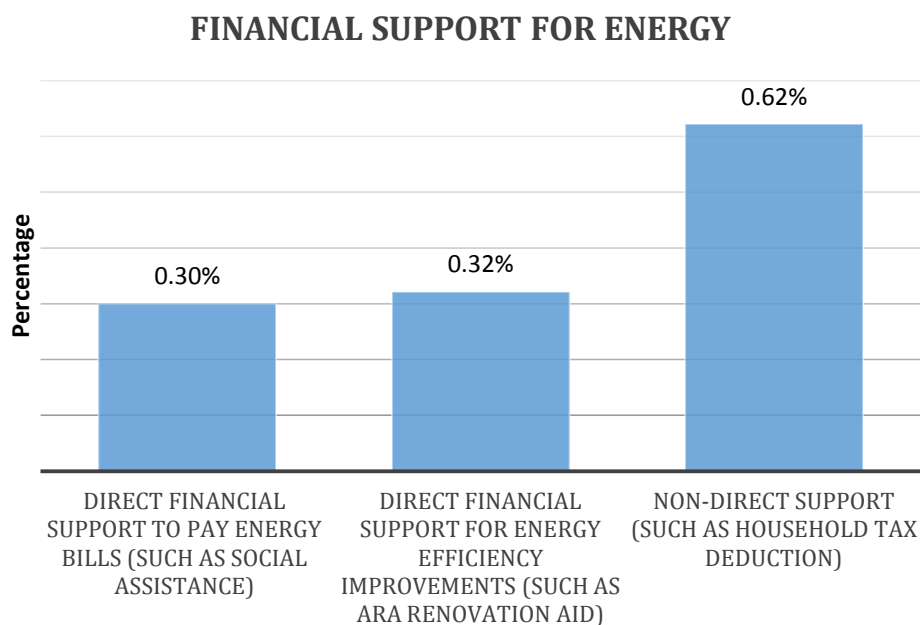
Figure 31. Comparison of energy behaviour between groups

## 12. Financial support and advice

- Please **summarise** whether consumers have received financial support for energy and reasons why someone may not have been given support. (Q29, 30).
- Would consumers **appreciate advice** from a HEA? If so, what for? (Q31, 32).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

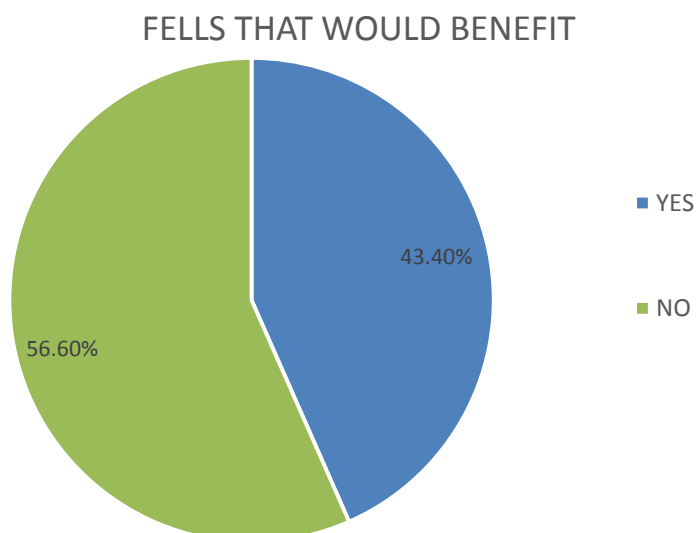
There are social benefits which people can receive to pay basic needs such as energy, these include Basic Social Assistance, Preventive

Social Assistance and Additional Social Assistance. Only very small portion of the respondents, 0,3%, had received any. This indicates that the people have not sought any assistance even though they feel that they cannot afford more than, or even, the basic needs. There are also benefits that can be used in some cases for energy efficiency improvements, such as the Renovation Aid for Elderly or Disabled, only 0,32% of all the respondents had received this. The most used benefit available was the household tax deduction, which 0,62% had received.



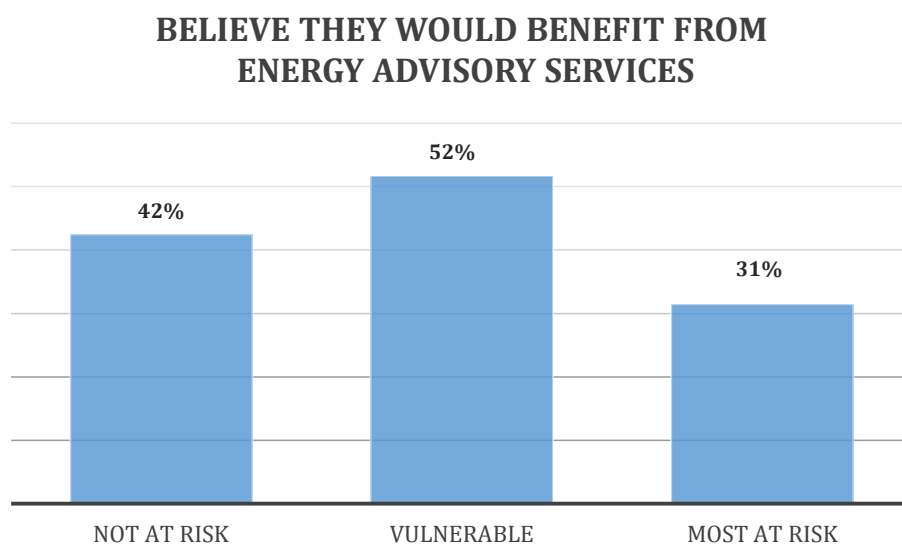
**Figure 32. Portion that received financial support**

Less than half of the overall survey respondents felt that they would benefit from advice service such as Household Energy Advisers.



**Figure 33. Portion that feels they would benefit**

An interesting observation is that larger portion of the vulnerable group felt they would benefit that the other groups. Significantly lowest portion was in the most vulnerable group, a reason for this might be the most vulnerable might feel they do not have adequate means for any improvements.



**Figure 34. Comparison of portions that feel they would benefit between the groups**

### 13. Additional comments

Please add any additional comments below.



## 2.2.6 UK Consumer surveys

### 1. Partner details

Partner name:	<b>Severn Wye Energy Agency</b>
Name of region/country:	<b>UK</b>
Key contact regarding consumer surveys:	<b>Rob Hargraves</b>
Email of key contact:	<b>robh@severnwyenergy.org.uk</b>

### 2. Data collection

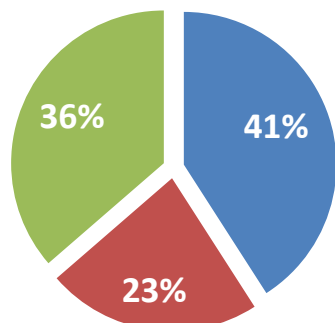
Number of questionnaires disseminated	<b>951</b>
Number of questionnaires completed	<b>150</b>
Date of data count	<b>05/12/2017</b>
<b>Methodology:</b> Please describe how you disseminated and collected your questionnaires. Include numbers where necessary.	
<ul style="list-style-type: none"><li>• Asked face to face with clients on home visits</li><li>• Copies of surveys distributed at training sessions</li><li>• Questions were asked over the phone</li><li>• Surveys were sent by email to existing clients from stored data on the client database.</li></ul>	
<b>Challenges:</b> Did you have any issues collecting your data? Please explain.	
<ul style="list-style-type: none"><li>• Some found the survey was time consuming, particularly when asking the clients face to face or over the phone.</li><li>• Some of the questions were confusing to clients in the way they were written.</li><li>• Response rate was low to emails.</li></ul>	

### 3. What type of area do your consumers live in?

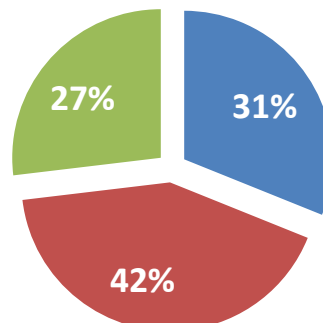
<ul style="list-style-type: none"><li>• Please summarise the key differences in the areas where consumers live (Q.17).</li><li>• Add <b>comments</b> to explain patterns and how they link to the project</li></ul>
---

and/or method of data collection.

**No Vulnerability**



**With Vulnerability**



■ On the outskirts of a city or town ■ In the countryside (rural) ■ Inside a city or town (urban)

Those with a vulnerability are more likely to live in a rural setting, whilst the majority of people without a vulnerability live on the outskirts of a town.

#### 4. Tenure, Property type and renovation?

- Please summarise the key differences in the tenure, type of properties and work carried out to improve the property (Q.18 – Q.21)
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

100% of the non- vulnerable consumers surveyed owned their own homes and 78% of them lived in a detached or semi-detached house.

79% of vulnerable consumers owned their own homes, 15% privately rented and 4% lived in social housing. A larger proportion lived in terraced houses/bungalows, and flats (39%)

#### 5. Behaviour Change?

- Please summarise the key differences in behaviour change to reduce energy consumption (Q.26).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

Behaviours to reduce energy consumption were similar across all consumer types.

- 74% of people switch of the lights when they are not needed.
- 64% reduce the temperature in the home if no one is staying there

Vulnerable consumers are more likely to switch of the heater in rooms they are not using (5% vs 52% non-vulnerable), where as non-vulnerable consumers are more likely to completely switch of appliances as opposed to leaving them on standby (70% vs 46% vulnerable)

## 6. Financial Support?

- Please **summarise** the key differences in how many consumers have received financial support in order to pay their energy costs over the past 12 months (Q.29 & Q.30).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

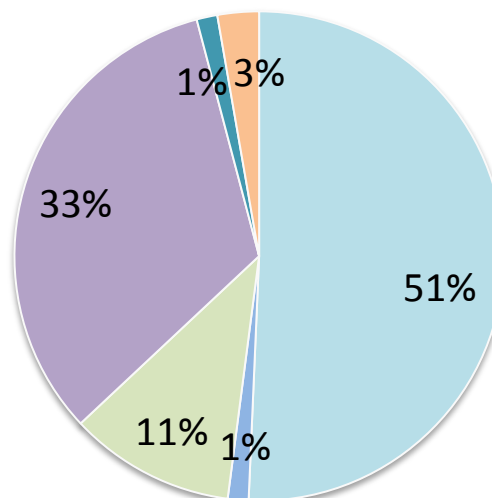
Only vulnerable consumers have received financial support towards their energy costs.

- 18% received financial support to pay bills (e.g Warm Home Discount)
- 16% received support and/or grants to implement energy efficiency measures.

Those who did not receive support primarily stated that this was because they didn't satisfy the criteria or were not aware of the opportunities.

### Reasons why vulnerable consumers not receiving financial support towards energy costs

- I don't satisfy the criteria
- I am not interested
- Other (please specify)
- I am not aware of these opportunities
- I benefitted from financial support in the past but decided not to request it anymore
- The procedure is too complicated and discouraging



## 7. Interest in energy advice?

- Please **summarise** the key differences in whether energy advice would be appreciated by the consumer (Q.31).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

54% of vulnerable consumers would appreciate help from a Home Energy Advisor, compared with only 38% of non-vulnerable consumers.

The key things vulnerable consumers would like help with are

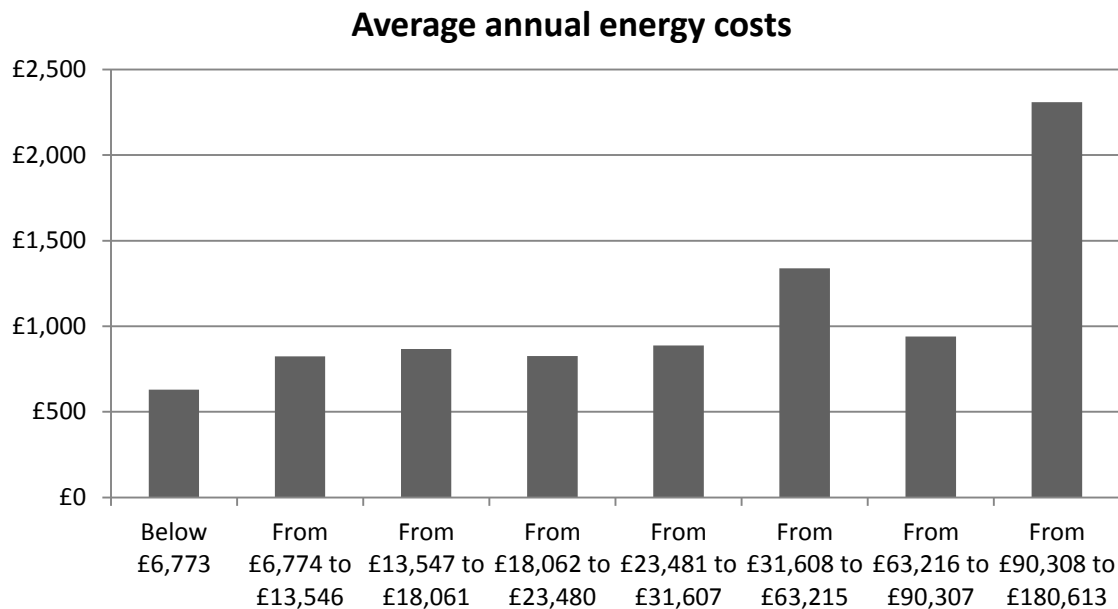
- Reducing the cost of energy bills
- Reducing energy consumption without reducing level of comfort
- Increase the level of comfort in the home

Non – vulnerable consumers would also appreciate help to reduce the cost in energy bills but also to have a positive impact on the environment.

## 8. Housing summary

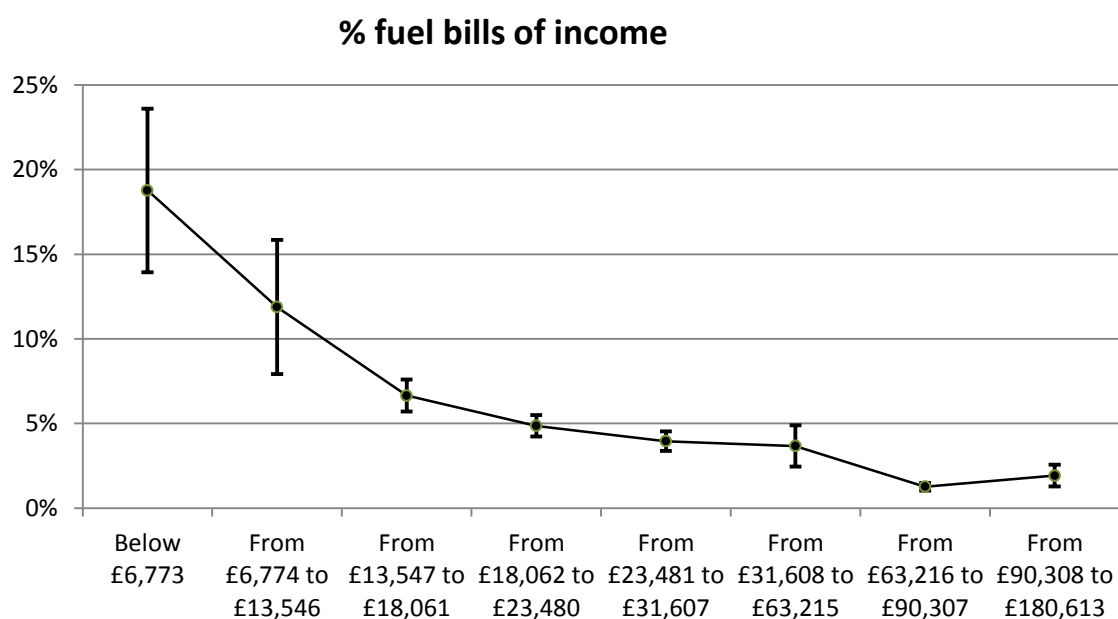
- Please summarise the key differences in energy consumption (Q.33).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

People on higher incomes typically spend more on their energy bills



However, the percentage of income spent on fuels is significantly higher for people living on low incomes.

Of those with the lowest income, up to 25% of annual income is spent paying for fuel bills, whilst



## 9. Additional comments and observations unique to each country

Please add any additional comments below.
Not all questions were answered by all consumers.

## 3 Conclusions

### 3.1 Stakeholder Surveys

In Italy, the stakeholders identified five main issues that need to be tackled with regards to energy poverty. These are: a lack of an agreed definition of energy poverty; the identification and implementation of the correct financial instruments to help alleviate energy poverty; a lack of trust in the energy companies by consumers; the cost of energy bills (including the passing on of decarbonisation incentives to consumers and expensive energy efficiency measures) and; social and psychological barriers such as a lack of awareness or fear of being stigmatised when accessing certain benefits.

It was noted that whilst important to improve policy across the EU in general, each country would have their own unique energy landscape and characteristics and so different strategies should be employed for different countries.

Several actions are already being undertaken such as economic research projects to help define energy poverty, networking to support vulnerable consumers, and the establishment of not-for-profit organisations to help vulnerable consumers to access the available funding.

The stakeholder proposed 9 key goals for ASSIST: to share best practice; to improve the general understanding of the energy market; to engage with vulnerable consumers; to increase trust, to provide training for support organisations; to promote the fact that energy efficiency can help to tackle energy poverty; to influence policy; to agree on a common EU definition of energy poverty and; to frame energy poverty within the wider EU poverty policies.

Belgium identified five key issues to be faced: clarifying the link between poverty and energy poverty, and the problems involved in improving the quality of accommodation; the rising cost of energy prices (due in part to the incentives to switch to renewables and the subsidizing of green energy); the over-arching energy poverty policies in Belgium and the fact that vulnerable consumers are not always accessing the funds available to them; the dis-connect between energy audits and energy efficiency savings and; the fact that the energy advice being provided is not always being acted on because of financial

restrictions, no follow-up to the advice from the support service and that vulnerable consumer groups are often hard to reach.

There is substantial work already being done in Belgium to tackle energy poverty such as energy audits, home insulation projects, established not-for-profit organisations providing support and networking, policy proposals at government level and research projects to gather better data to inform policies. The aim of ASSIST would therefore be looking for how to improve the system and services already in place.

With that in mind the stakeholders suggested the following recommendations to be implemented through ASSIST: advice to be tailored more specifically for each consumer; make information more accessible to hard-to-reach groups; energy advisors to work more closely with other support agencies; emphasise the savings that can be made through tariff switching; address the structural issues in the Flemish region and; promote the work of 'energy-cutters' at EU level.

Spanish partners felt it was important to note three key points:

1. While there are many things being done in Barcelona more needs to be done in terms of a) coordination between organizations, b) communication to vulnerable groups and c) provide household assistance/aid;
2. There are many organizations working to tackle energy poverty but they are not able to tackle the problem and reach places they would like to and therefore ASSIST could be very helpful to them and
3. There is awareness about the need to tackle the problem from a macro-level perspective.

A Stakeholder survey summary was not provided by Poland within the timescale.

Finland identified five main issues facing the country with regards to energy poverty: a lack of awareness of energy poverty; the fact that district heating (common in Finland) gives the consumer less control over their energy consumption and reduction; the current transition to smart energy systems is increasing energy prices; a more general lack of affordable housing and finally; the most likely consumers to be affected by energy poverty are likely to be those on a low income living in rural areas, which may be the hardest to reach.

It was acknowledged that there is already very good social security in Finland, as well as provision for energy advice.

Work is needed to target and reach the most vulnerable in society, where many different issues could be at play in the lives of the consumer, and this makes energy poverty fall down the priority ranking in some cases.

It was felt that ASSIST could help in: increasing the level of discussion on energy poverty, thus raising awareness; more research could be carried out to inform debate and policy;

an agreed definition would help to clarify what help was needed and for whom and; it was important to listen to the consumer issues when deciding on future policies.

UK stakeholders pointed at a lack of investment, as well as a lack of consistency in policy across the regions of the UK as being major obstacles to progress in terms of alleviating energy poverty. There were also concerns over rising energy prices and a lack of energy awareness in the general public. It was also noted that the financial situation for vulnerable consumers was deteriorating in the wider context and that these consumers were the hardest to reach in order to provide support.

On a positive note, it was recognised that collaboration between different agencies was already taking place, not-for-profit support organisations were already well established, and training was already being provided by a range of these organisations.

Moving forward it was felt that stricter and more tightly enforced minimum energy efficiency standards should be legislated for, combined with further investment to improve properties and a more holistic approach to advice.

ASSIST would be able to help make improvements through creating real engagement with consumers and instilling a greater understanding and awareness of energy poverty in the general public. This could be done through the deployment of enthusiastic and knowledgeable volunteers who were able to access those people most in need and who were traditionally hardest to reach in terms of support and guidance.

There are clearly several key issues that are shared between all the partner countries such as a general lack of awareness, high energy bills, the fact that many vulnerable consumers are hard to reach to offer support, a lack of investment or correct financial instruments to offer assistance for making improvements to properties, and to a lesser extent (as some countries already have this in place) a lack of an agreed definition of energy poverty.

As mentioned in the summary from Italy, although each country will have their own specific characteristics and actions will need to be tailored accordingly, ASSIST will be able to provide learning on how to solve these common problem areas. Indeed work has already been undertaken to try to reach an agreed definition of energy poverty, and the project itself is helping to raise awareness of the issue in different countries. The volunteer projects will allow the ASSIST partner additional, invaluable information and feedback on how these common issues can be tackled.



## 3.2 Consumer Surveys

A total number of 5453 consumer surveys were completed across the six countries, however 4661 of these were from Finland. Consumer surveys were disseminated online, face to face and over the phone. The main problems faced with collecting information were the limited access to the internet for target consumers, and also the time constraints of asking all the questions face to face or over the phone, and

The surveys yielded similar results for tenure and property type across countries. The majority of consumers live in the inner city, or on the outskirts of a town or city, and are home owners. Most properties were built prior to laws on energy efficiency and insulation.

Behaviours were also similar across countries. The main way in which consumers try to reduce energy consumption is by switching off lights when they are not needed, followed by switching off unused appliances and turning down heating.

The majority of people would appreciate help from a home energy advisor, primarily on reducing the cost of energy bills.

Numbers receiving financial support towards energy costs varied significantly across the countries. Less than 1% of consumers surveyed received assistance in Finland, and similarly less than 2% in Italy. In the UK and Spain, 18% and 29% of consumers respectively received financial support, whereas over 60% of consumers surveyed in Belgium and Poland had been supported. For all countries, the main reason why people had not received financial help is that they didn't meet the criteria.

Data from Finland and UK shows that vulnerable people/ people on low incomes are likely to pay a larger percentage of their income on annual energy costs, than people on a higher income. This information is not available from the other countries.

# Annex 1

## Task 2.5 Qualitative Survey: Stakeholder Interview Template



This document is supported by [WP T2.5 Stakeholder Qualitative Interview Guidance](#).

### 10. Who is taking part in the interview?

Partner name:	
Name of region/country:	
Interview completed by:	
Job title:	
Email:	
Date of interview:	

Stakeholder organisation:	
Brief description of the organisation: (e.g. private sector energy supplier/public sector health authority etc)	
Scale covered within the interview? (e.g. a Named local regional/national)	
Name of the stakeholder:	
Job title:	
Email:	
Member of the Steering Committee (VCSC)?	Yes No

## 11. Project Outline

2.1 Provide a **brief background** to the project. You may choose to discuss the following:

- The project explores and tackles energy poverty and vulnerable consumers across the EU but with a focus on six countries.
- The project will last 3 years in total and will be completed in April 2020.
- The first stages of the project are focused on establishing the needs and wants of vulnerable consumers and whether current instruments (e.g. financial, social or advice).
- There needs to be a common understanding of what 'energy poverty' is and who 'vulnerable consumers' are.
- The second stage of the project involves the recruitment and training of volunteers in order to establish a network to provide effective advice and support for consumers.

11.2 Explain **why the stakeholder has been selected** for an interview.

11.3 Explain the **purpose of the interview**. The discussion will help:

- provide an understanding of the needs of vulnerable consumers and views on the current provision and future direction.
- the stakeholder to understand ASSIST and their potential role within the project.

## 12. a) What do you think are the most important issues with regard to energy poverty and vulnerable consumers in this region/country?

*<Insert a summary of response 3a here>*

## b) Following on from your response to the last question, what do you think are the initiatives / activities / gaps that need to be addressed?

*<Insert a summary of response 3b here>*

## 4. What are you and your organisation currently doing in the area of energy poverty and targeting vulnerable consumers? Include the 'effectiveness' of activities within the discussion.

*<Insert a summary of response 4 here>*

## 5. How do you think ASSIST can align with your policy priorities and activities? (link back to Q3)

*<Insert a summary of response 5 here>*

**6. What would you like to see ASSIST realise in this region/member state? (*link back to Q3*)**

*<Insert a summary of response 6 here>*

**7. Is there anyone else you think should be directly involved in the project or should be included in dissemination?**

Other stakeholders to be directly involved: *<insert here>*

Other stakeholders to be included in dissemination: *<insert here>*

**8. Additional Comments**

*<Insert additional comments here>*

**9. *Depending on the nature of your stakeholder, you may wish to complete the stakeholder questionnaire for WP3 at this point.***

**10. Thanks**

Thank the stakeholder for their time and explain when/how they will be further involved.

## Annex 2

### Task 2.5 Consumer Survey:

#### Consumer Survey Partner Summary Template



- 
- Please complete the [data collection spreadsheet](#).
  - Once the data collection spreadsheet has been completed, there are two subsequent stages of analysis, listed below:
    1. The first stage is the filtering of the information to define (as best we can) between those consumers who are considered to be 'vulnerable' and those who are considered 'non-vulnerable'. To identify the 'vulnerable' consumers please consider the following criteria:
      - i. Older than 65 (information taken from Q.2)
      - ii. Not in employment (Q.7)
      - iii. Has health conditions Q.12)
      - iv. Is in receipt of state benefits (Q.15)
      - v. Has answered yes to either of the following options (Q.16)
        - a. We don't have enough money for primary needs (food and energy bills).
        - b. We have enough money for primary needs, but we cannot afford expenses which are not for basic needs.

To avoid double-counting we suggest classifying each consumer as either 'vulnerable' or 'non-vulnerable' and then the comparison can be done between these two groups.

2. The second stage is where each country should carry out analysis on the responses to certain questions (listed below). We have tried to choose only those questions which can provide useful and relevant information across the different countries.

Question	Text
17	Where is your home (choose one)...
18-21	Do you live in a home which is.....? (owned / privately rented etc...) Is your home (choose one)....? (detached house / apartment / bungalow etc...) Roughly, when was your home built? Has your home been renovated?
26	Have you changed your habits or behaviour to reduce your energy consumption?
29 & 30	In the last 12 months, have you received any of the following financial support for the energy or gas supply? If you do not receive any financial support, please indicate why? (Select only one option, choose the one which you believe is the most appropriate):
31	Would you appreciate assistance from a professional Home Energy Advisor who could provide you with information and tips to better manage your energy at home?
33	Please tell us about your estimated consumption. Indicatively how much do you spend on your energy consumption? The table below gives you a CHOICE to complete in COST for ONE YEAR and/or for ONE MONTH

For each of the above questions, please;

- summarise the key differences, if any, between the two consumer groups identified in stage 1 and;
- add comments to explain patterns and how they link to the project and/or method of data collection.

We have also included a final question where each country has the opportunity to state their own individual observations and make additional comments that have come from their data analysis that is not covered by the standard questions included in the previous questions.

- The deadline for submission to [robh@severnwyne.org.uk](mailto:robh@severnwyne.org.uk) is **Wednesday 31<sup>st</sup> January.**

### 1. Partner details

Partner name:	
Name of region/country:	
Key contact regarding consumer surveys:	
Email of key contact:	

### 2. Data collection

Number of questionnaire disseminated	
Number of questionnaires completed	
Date of data count	
<b>Methodology:</b> Please describe how you disseminated and collected your questionnaires. Include numbers where necessary.	
<insert commentary here>	
<b>Challenges:</b> Did you have any issues collecting your data? Please explain.	
<insert commentary here>	

### 3. What type of area do your consumers live in?

<ul style="list-style-type: none"><li>• Please summarise the key differences in the areas where consumers live (Q.17).</li><li>• Add <b>comments</b> to explain patterns and how they link to the project and/or method of data collection.</li></ul>
<insert commentary here>

### 4. Tenure, Property type and renovation?

<ul style="list-style-type: none"><li>• Please summarise the key differences in the tenure, type of properties and work carried out to improve the property (Q.18 – Q.21)</li><li>• Add <b>comments</b> to explain patterns and how they link to the project and/or method of data collection.</li></ul>
<insert commentary here>

## 5. Behaviour Change?

- Please summarise the key differences in behaviour change to reduce energy consumption (Q.26).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

<insert commentary here>

## 6. Financial Support?

- Please **summarise** the key differences in how many consumers have received financial support in order to pay their energy costs over the past 12 months (Q.29 & Q.30).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

<insert commentary here>

## 7. Interest in energy advice?

- Please **summarise** the key differences in whether energy advice would be appreciated by the consumer (Q.31).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

<insert commentary here>

## 8. Housing summary

- Please summarise the key differences in energy consumption (Q.33).
- Add **comments** to explain patterns and how they link to the project and/or method of data collection.

<insert commentary here>

## 9. Additional comments and observations unique to each country

Please add any additional comments below.

<insert commentary here>





[www.assist2gether.eu](http://www.assist2gether.eu)



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