

## **Mitigation of Energy Poverty through consumers behaviour: pilot actions in Italy**

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### **1. Introduction**

Energy poverty (EP) represents one of the greatest challenges in the European Union (EU), affecting 50 to 125 million people. To tackle it, several EU and national policies and initiatives have been put in place in the last years. Among these, there is a significant funding for projects (e.g. Horizon 2020 (H2020)) related to the mitigation of this phenomenon. ASSIST2gether, funded under the Grant Agreement n. 754051, is a H2020 project with the goal to tackle energy poverty through pilot actions aiming to increase consumers awareness about energy efficiency and change their consumption behaviour. After training specialized Home Energy Advisors (HEAs) from different sectors (charities, consumers associations, energy utilities, social workers, etc...), pilot actions have been implemented in all the countries involved in the project (Belgium, Finland, Italy, Poland, Spain and the UK), with the aim to optimize energy consumption of vulnerable users through more efficient behaviours. This paper presents the results of the pilot actions carried out in Italy.

### **2. HEA Training results**

In order to be able to reach vulnerable consumers, HEAs have undergone a structured training, delivered in a blended mode (partially in person, partially through a dedicated online platform), about both technical (energy efficiency and social competences) topics and soft skills such as communication. The structure of the course was the same in all countries but with tailored content on local specific issues. Overall, 982 HEAs were registered to the full

version course, while 558 completed it. In Italy, 233 people registered to the course and 122 completed it (goal: 150 registered, 75 completed).

This doesn't take into account 1,231 high-school students that took a simplified edition of the course and implemented information activities in the "Alternanza Scuola Lavoro" project.

### **3. Implemented Pilot actions**

Overall, the 122 trained HEAs in Italy delivered 3 main types of activities:

- Soft/engagement activities aimed at informing people about the project and giving generic advice about energy efficiency, such as energy cafés, workshops, online support helpdesks and education activities for vulnerable consumers;
- Pilot actions, specifically designed to support vulnerable consumers, with analysis of energy bills and consumption habits and customized advice on energy consumption optimization, such as helpdesks at consumers associations premises and home visits by social and health workers;
- Synergies, that were activities organized in collaboration with other energy efficiency/energy poverty initiatives already in place and partially covered ASSIST2gether scopes, such as helpdesks at charity premises and distribution of information material during other events.

### **4. Discussions and Conclusions**

The monitoring of the results was performed only for the pilot actions. Soft/engagement activities were estimated to account generically for a 2% energy saving in families that participated.

Pilot actions effects were assessed through the filling of two questionnaires by HEAs: an ex-ante questionnaire aimed at recording their energy consumption habits before the action was implemented and an ex-post questionnaire, after 6-12 months, aimed to verify whether behaviour changes and consumption reduction actually took place.

An Energy Saving Indicator (ESI) was built to take into account all the different factors that can improve vulnerable consumers life:

- Energy savings (% with regards to ex-ante overall consumption);
- Comfort indicator (expressed as an increase or decrease % of savings);
- Money saving indicator (expressed as an increase or decrease % of savings).

Moreover, a qualitative index called Vulnerable Empowerment Factor (VEF), related to the awareness perceived by vulnerable consumers before and after the action, was calculated.

The results were calculated directly for a control group of 172 consumers and then extended to the overall group of assisted consumers (618), with a parametrization in terms of household size, building type, heated space and type of heating system. The result was an average ESI of 5.5% and an overall VEF of 0.4.

The results were quite satisfactory, considering the encountered difficulties, especially:

- the low involvement of many HEAs: most of the actions were carried out by a reduced number of HEAs;
- the "low consumption" starting point: many vulnerable consumers are already living in "energy saving mode", so cutting their consumption further is very difficult. The

solution was solved by trying to increase their comfort or reduce their energy cost: this is the reason why the ESI was built.

An important note is that the HEAs were mostly working on a voluntary basis and were coming from the third sector, that plays, in fact, a fundamental role within the Italian society, in particular to address all those areas in which the State support is limited and/or has some deficiencies, thus improving the welfare for those people who risk to be left behind.

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