Project EmpowerMed in a nutshell

Empowering women to take action against energy poverty in the Mediterranean





EmpowerMed's context

Women and women-led households are disproportionately affected by energy poverty. Due to labour division, women tend to spend more time working at home and thus are more exposed to energy poverty and its consequences. Generally, there is a higher share of women who are at risk of poverty and social exclusion than men. Yet, women play a crucial role in tackling energy poverty, hence their engagement in acting against energy poverty is of utmost importance.

In the coastal areas of European Mediterranean countries, the challenge of energy poverty comes with several specific features. The most notable is that during the summer season, energy poverty mostly appears because of lack of access to adequately cooled dwellings. Lack of pre-installed central heating systems and electricity-based heating, which is expensive, are another specificity of this region. Dwellings have none or low insulation and there is a high level of housing in a poor state of repair. Additional key aspects of the region are arrears on bills, indebtedness and the risk of disconnection. In addition, energy poverty and housing insecurity are linked, with evictions as the worst consequence of housing unaffordability, which is due to tensions between locals and tourists' demand for housing. Lastly, coastal urban areas are also affected by precarious, low-quality jobs (e.g. in tourism, harbours).

In order to address these challenges, the project EmpowerMed – Empowering women to take action against energy poverty in the Mediterranean – aimed to contribute to energy poverty alleviation and to the health improvement of affected people in the coastal areas of Mediterranean countries, with a particular focus on women. The project mainly implemented practical solutions to empower people affected by energy poverty to manage their energy consumption and improve their access to appropriate domestic energy sources and technologies. On the basis of this practical experience, the project assessed the impacts of various practical energy poverty alleviation measures tested to formulate policy solutions for tackling energy poverty at the local, national and EU level.

The overall objective of EmpowerMed was to contribute to energy poverty alleviation and health improvement of people affected by energy poverty in the coastal areas of Mediterranean countries, with a particular focus on women, through:

- Implementing practical solutions, tailored to empower over 4,200 households affected by energy poverty to manage their energy consumption and improve their access to appropriate energy sources and technologies,
- Assessing the efficiency and impacts of the various practical energy poverty alleviation measures tested to formulate local, national and EU policy recommendations, and

 Promoting policy solutions for tackling energy poverty at the local, national and EU level among 220 decision-makers, 560 social actors, 100 utilities, 180 health experts and 100 energy poverty experts.

EmpowerMed worked in 6 pilot areas to tackle energy poverty in practice: Barcelona (Spain), Marseille (France), Padova (Italy), Koper (Slovenia) and Vlora (Albania).





Anila lives in Vlora. She has 6 children and lives on an income of only €70 from social assistance. Her husband is one of the many informal waste-pickers.

Their house is in very bad condition, humidity is high and it is lacking in insulation. She uses a wooden stove in winter and a gas stove in summer for cooking. Her family doesn't have a boiler, so she heats it on the stove. She has been disconnected from the grid for a few years, and she is now paying off the debt amounting to €35 per month, which is 50% of her social assistance benefit.

Starting steps

To ensure that EmpowerMed was built upon the experiences of other relevant European projects, the project first produced an <u>assessment of previous relevant experiences</u> from EU-funded projects. The assessment was done from a gender, health and summertime energy poverty perspective, which were identified as typically missing dimensions in previous experiences (e.g. summertime energy poverty not discussed, gender not recognised or misrecognized).

A particular focus of EmpowerMed preparatory assessment efforts was on the gender dimension of support schemes, especially financial measures. The main conclusion of the study was that none of the previous support programmes identified had a particular focus on gender or included elements that would particularly emphasize any support for empowerment of women. The study aimed at empowering women to tackle energy poverty also by increasing their knowledge about support schemes and how to access them.

A third important element of the preparatory assessment efforts were baseline reports on the situation of pilot sites produced with the aim of understanding the context and specificities of energy poverty in the 6 EmpowerMed pilot areas. These reports conducted a quantitative and qualitative assessment of local energy poverty conditions including: identifying target groups of beneficiaries; identifying key local actors to reach out to and involve in efforts to tackle energy poverty; and identifying key actions to be carried out by the project (with a focus on gender and health). In Albania, as a part of the situation assessment, also a Gender analysis of the energy sector in Albania was done. The analysis was aiming to advance the knowledge about energy poverty and the means for its alleviation, with focus on specific gender aspects. It provides gender mainstreaming information of the energy sector in Albania, at its national level at first, in order to apply it to energy poverty in the pilot site then. It highlights which gender dimensions are considered in the policies and energy companies, where gender is considered, where it is considered and applied and where it is still totally absent.

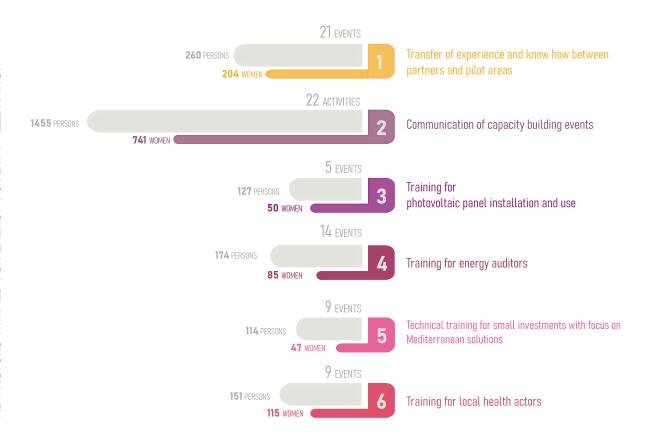
Building capacity for tackling energy poverty

Bringing all the partners and local actors up to the level of understanding the gender, health and Mediterranean dimensions of the project called for the implementation of a set of training activities. The first step was to exchange know-how and experiences among EmpowerMed partners, which was done based on the identification of specific internal training needs. Based on this, the final training materials for enhancing the capacities of the relevant local actors were prepared and training events implemented. Overall, the project trained 560 representatives of the local key actors in the 6 pilot areas and engaged 205 representatives of local actors in tackling energy poverty.

The set of training materials acompasses the following modules:

Training material	Summary of content
Appropriate financial solutions	Financial tools that allow households to implement some renewable energy or energy efficiency solutions
Collective Advisory Assemblies	Knowledge on how to use Collective Advisory Assemblies as a community tool to tackle energy poverty
Communication to vulnerable groups	How to communicate with households affected by energy poverty
Energy label	How to read and get information off an EU energy label
Energy poverty	What is energy poverty, what are its causes and consequences
Gender training	Relevance of a gender-just and intersectional approaches to reducing energy poverty
Health training	The consequences of energy poverty on physical, mental and social health
Hints and tips for improving well-being	Tips to making dwellings more comfortable and improving well- being
Household visits	Know-how for performing simple energy audits in homes affected by energy poverty

Incentives for new devices, RES and EE investments	National and European incentives for new devices, building renovation, energy efficiency and renewable energy
Low-cost technical solutions	Know-how for implementing Do-it-Youself or Do-it-Together workshops
Photovoltaic offgrid installations	Solar energy, photovoltaic power plants, off-grid and benefits and challenges of the PV technology
Self-defense from aggressive marketing	Comparing the different national electricity and gas suppliers and helping to choose the best contracts according to needs

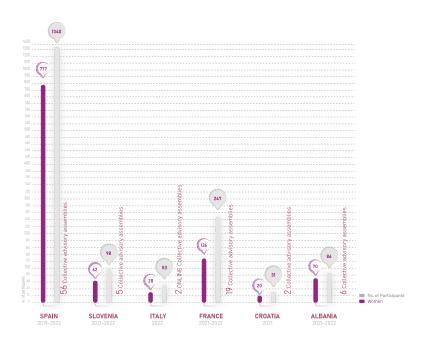


Tackling energy poverty in practice

Equipped with the necessary knowledge and skills, the partners and their local actors set out to implement a set of activities to tackle energy poverty in practice.

Several different activities were implemented:

Community approaches (collective advisory" assemblies)



AND THE PROPERTY OF THE PROPER

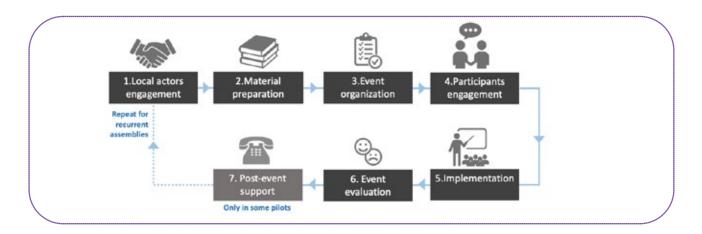
2266 PERSONS

1407 **†**

Collective advisory assemblies gather about 20–30 people affected by energy poverty in common spaces to help to transfer and exchange knowledge and skills about energy use, reading energy bills, implementing simple measures for energy saving, changing energy providers,

Testimony

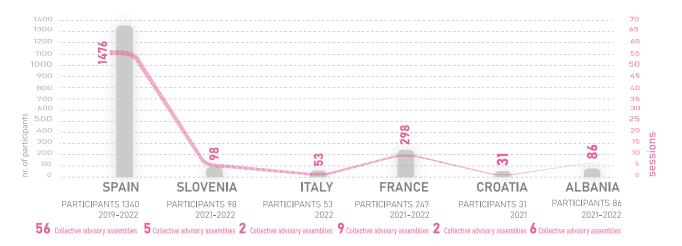
organising the collective purchase of energy, and any other action that can reduce effects of energy poverty. The participants shared advice and provided support to each other, following peer-to-peer methodologies, but sometimes they were also accompanied to the companies for changing the contracts or working out debts. In this manner, people supported each other and worked with each other to seek solutions to their problem of high energy bills. The main specific characteristic of the community approach is that it uses collective intelligence of the network to engage members to support each other. The collective support group is an indispensable tool for transformation, facing a set of problems which would otherwise overwhelm those affected. This action directly empowered 2,266 people, of whom 1,407 women, but we asses that it indirectly reached (through household members) over 5,200 people.



Kerly is a resident of Badalona in the" municipality of the Metropolitan Area of Barcelona. The energy company Endesa called her sister to tell her that she will be taken to court for a debt she has with the company. We reassured her by telling her that, due to the small amount of the debt, Endesa should not take her to court. We also encouraged her and her sister to report these calls and harassment to the Catalan Consumer Agency and to the Ombudsman.



Harassment by phone and by letter of the people affected by energy poverty has impacts on their physical and mental health and generates situations of anxiety, depression, as well as shakes the prioritization of essential household expenses, prioritizing debt payment over coverage of needs such as food, medicines and other medical care, as well as the energy supply for heating, lighting or maintaining personal hygiene.



Number of participants and sessions held in each pilot site

PARTICIPIANTS AND SESSIONS



Participants per gender in the Community approaches action (%women)

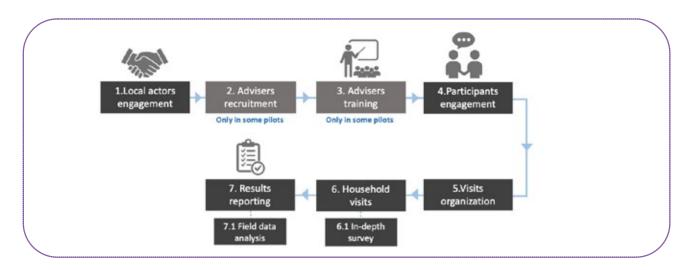




Household visits with an energy audit, package of devices and tailored advice



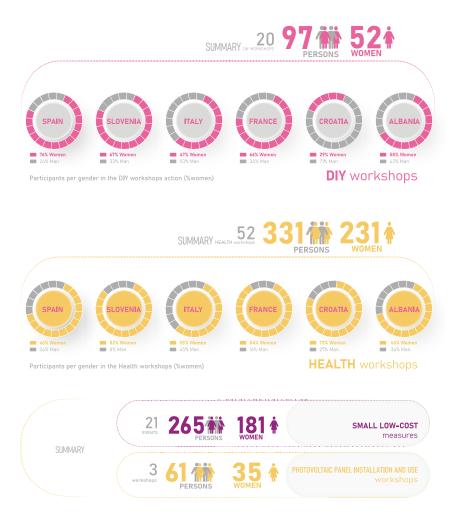
During the visit, an energy audit and analytics were performed by the energy advisors. The advisors checked the energy and water bills of the households, conducted a set of measurements (e.g. use of appliances, water use) and discussed household's habits in energy and water use. By doing this, they identified the potential areas where energy and water could be saved by the household. Based on the identified potentials, the advisors implemented low-cost measures by installing free devices, which helped the household reduce energy and water use. They also provided advice on using devices, changing energy use habits and further possible steps. This action directly empowered 645 people, of whom 411 were women, but we asses that it indirectly reached (through household members) over 1,600 people.





Marc, an energy saving project officer for GERES, came to my house and we went through the flat: we measured the temperature of the fridge, the temperature and humidity of the room, checked the water heater and the windows. On days when the mistral wind blew in, the air in the flat was freezing. Marc installed a doorstop, problem solved! When I told him that I never heat in winter, for fear of seeing my electricity bills soar, he suggested I try a simple tool: reflective panels that he slipped behind each of the electric radiators, to better diffuse the heat: I'll try it next winter!

Do-it-yourself solutions for households affected by energy poverty



This action linked a variety of do-it-yourself (DIY) solutions, adjusted to the situation in pilot areas. The following lines of DIY measures were implemented:

- Educational workshops and the installation of photovoltaic (PV) panels, whereby women and other interested actors learned about the general benefits of using solar energy for electricity, helping them to make decisions on the choice for their home, and learned how to install simple PV panels. In Albania, a PV panel was installed in September 2022 at the regional professional vocational center of Vlora. During the project, it produced 1253 KWh of electricity. Compared with the energy bill of the vocational center in July 2021 there is a reduction of 45%. This trend will continue during the summer months, while in winter the production of the photovoltaic panel will cover at least 35-40% of the electricity needs of the school.
- DIY reading of smart meters, whereby participants were shown how self-reading smart meters can help to empower the household. By using the data gathered by the smart meters directly, partners gave feedback to households on how to change their energy behaviour to reduce their energy bills and/or their environmental and economic impact. This was communicated through a friendly and graphical report evaluating the energy consumption registered by the smart meter, providing a clear explanation of the main features and patterns of its consumption, and recommendations to reduce the energy consumption and cost.
- DIY small low-cost measures, whereby a series of workshops showed participants (focusing on women) how to implement small low-cost measures in practice (e.g. maintain taps, insulate windows, use ceiling ventilation, plant greenery on balconies/windows, shading options).

This action directly empowered 423 people, of whom 268 were women, but we asses that it indirectly reached (through household members) over 1,000 people.

Health workshops

Two formats of health workshops were carried out. One format targeted health experts and practitioners and trained them to detect the health impacts of energy poverty and to be familar with simple measures to reduce the impacts or to direct people to further assistance programmes. The second format entailed working directly with people affected by energy poverty. In this approach, the workshops addressed the issue of mental health by including therapists in the collective assemblies, who helped people to share the emotional burden of living in energy poverty and collectively act on it. This action directly empowered 320 people, of whom 231 were women, but we asses that it indirectly reached (through household members) over 800 people.

Assessing feasibility and providing support for small investments

Various activities were implemented around small investments potential or implementation. Depending on the needs and conditions of the pilot site, activities were carried out to accompany people to assess deep renovation feasibility, assessing the suitability of financial schemes for energy poverty, support in accessing available funds for small investments or deep renovation, assessing feasibilities for structural increase of thermal comfort or establishing financial schemes for small investments targeted to vulnerable groups. This action directly empowered 97 people, of whom 63 were women, but we asses that it indirectly reached (through household members) over 250 people.

In relation to the practical action, it is important to highlight that EmpowerMed provided people affected by energy poverty with <u>guidebooks on how to improve wellbeing</u> through better energy and water management.

Evidence and lessons learned while tackling energy poverty in practice

While implementing the approaches to tackle energy poverty in practice, EmpowerMed also implemented a survey among participants to deepen the understanding of the energy poverty situations. Over 670 participants in the survey helped us to better understand the challenges they are facing, their coping strategies, their health issues, as well as how empowered they feel.

In order to effectively capture the effects of EmpowerMed, the partners first designed a <u>data</u> collection and analysis framework, based on which <u>data</u> collection tools and <u>manuals</u> were designed. Apart from the aforementioned survey, monitoring tools also helped to capture data during the implementation of the activities. The data was analysed, resulting in a <u>report</u> that presents and compares the results obtained through the different actions implemented, as well as assesses EmpowerMed's potential replicability all over the Mediterranean.

The lessons learned can be summarized into the following key messages:

- Finding households affected by energy poverty to whom support can be provided is challenging. This problem can be sorted by connecting with NGOs or public institutions that work with people in economically challenging environments, but this means that people who are not their beneficiaries, but are affected by energy poverty, might be left behind.
- Collective assemblies have proven to be an effective community tool in tackling energy poverty, and their impact might be high in terms of cost savings, but setting up the structure is a lengthy process. They also contribute to building a social network and a community.
- Household visits are quicker to implement and achieve significant energy and cost savings, but they require more human effort to reach a similar number of people as the community approaches.
- It is important to consider prebound and rebound effects in the evaluation of results from energy poverty actions. Households in this situation tend to consume below their needs, so despite improvements, their energy consumption might not decrease, but their comfort and wellbeing will be improved. This outcome needs to be taken into account when devising support schemes and energy poverty policies.
- Do-it-yourself workshops might be more efficient when combined with impactful material support actions such as handing out efficient lightbulbs. Workshops with added value or innovative features (such as those simulating the costs of the electricity bill after seeing the price volatility of electricity) might result in more lasting impact, although it might be hard to evaluate.

- Measuring the impacts of actions should go beyond energy, cost and emission saving indicators, as gender, social and other non-energy criteria need to be considered in assessing the impact of interventions.
- Political action aimed at significantly transforming the way in which energy poverty is recognised and addressed at a societal level is required. Without political action to promote regulations and policies addressed to families in vulnerable conditions, energy poverty eradication becomes even more complicated. When it comes to political action, community approaches are expected to have a larger impact in this area than other actions, as they unify the affected people and give them a voice.
- When dealing with groups in financially vulnerable contexts, empowerment of women should be always be kept in mind. Women were active participants in EmpowerMed's pilots. Women tend to have less decision-making power than men at home regarding energy supplies, although the gap is wider or narrower depending on the context. Thus, it is important that programmes aiming to eradicate energy poverty take this gender imbalance into account to ensure women are effectively involved and positively impacted by the implemented actions.

From practice to policy recommendations

Empowering households to tackle their energy poverty situation is an important step, but it needs to be accompanied by wider changes on a policy level. Energy poverty is perceived as an energy issue, while in its nature it is a social challenge; therefore, communication needs to be established across a variety of institutions and actors (e.g. ministries of energy, social affairs, health, construction, urban planning, environment). In order to establish energy poverty as a policy issue that demands tailor-made policies and measures to address the problem, EmpowerMed implemented a set of activities to advocate policy solutions and recommendations among several key actors, such as decision-makers, utilities, social actors and health experts.

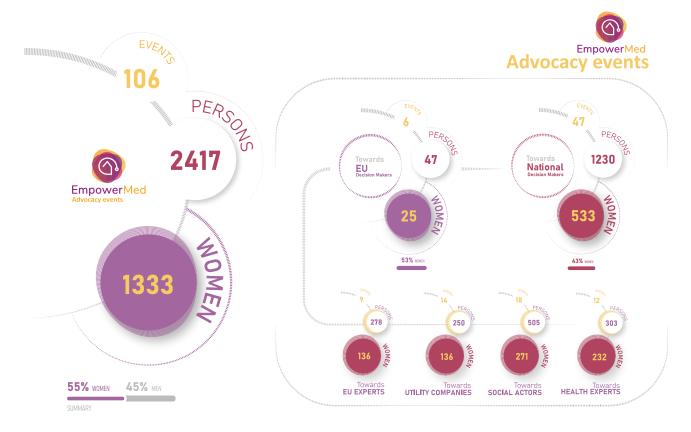
The three particular focuses of EmpowerMed (gender, health and summertime energy poverty) were the first to be covered with three specific factsheets:

- <u>Energy Poverty and Health</u>: this factsheet summarises the interactions between energy poverty and health and the needs of policy answers
- <u>Summertime Energy Poverty</u>: this paper describes the problem and what is urgently needed to address summertime energy poverty
- <u>Energy Poverty and Gender</u>: this factsheet takes a closer look at the relationship between energy poverty and gender.

Based on the factsheets and the lessons learned in practice, EmpowerMed partners drafted a <u>set of policy recommendations</u> to address energy poverty. Moving beyond the triad of "low income – poor energy efficiency – high expenditure", EmpowerMed partners proposed policy recommendations highlighting the unexplored sides of energy poverty and how to tackle them: summertime energy poverty, gender issues and energy poverty and health nexus.

Apart from those, EmpowerMed specifically explored the relation of gender justice, energy poverty and EU frameworks, resulting in policy recommendations for gender-just policies to reduce energy poverty. The focus here is on the Renewable Energy Directive and the Energy Efficiency Directive.

The proposed policy recommendations were widely discussed with policy actors (policy-makers, decision-makers) at various levels – EU, national and local, while also bringing social actors, utilities, energy experts and health experts into the debate. At the EU level, the policy recommendations were discussed in the European Parliament, as well as in three various policy sessions at the European Sustainable Energy Week (EUSEW) policy conferences in 2021, 2022 and 2023.



The gender aspect of EmpowerMed's work was awarded to EmpowerMed's team member, Katharina Habersbrunner of WECF, winning the EUSEW Women in Energy Award in 2020. Another EmpowerMed team member, Monica Guiteras of ESF, was one of the three selected nominees for the Women in Energy Award in 2021.

Although it is difficult to assess the exact impact, it is believed that EmpowerMed might have contributed to some gender aspects being included into the Renewable Energy Directive and the Energy Efficiency Directive, as well as to the ban on disconnections being included in the last available draft of the Electricity Market Directive.



Apart from EU-level activities, EmpowerMed also brought policy recommendations to the national and local level. One of the main victories of the national and local level work was the ban on disconnections in Spain, as well as the debt write-off by Endesa in Spain, whereby 35,000 people had their debts towards the utility written off. In Slovenia, action by a wide coalition of actors contributed to protection of vulnerable people from the worst impacts of the Covid-19 pandemic. In Albania, the project helped to profile energy poverty and ensure that energy poverty's various dimensions – including gender, health and summertime challenges – remain on stakeholders' agendas. In Italy the project contributed to municipality subsidies for energy bills for low income citizens, as well as to the inclusion of climate adaptation actions against summer heat waves in municipalities' urban planning. In France, a municipal scheme against energy poverty was launched in Marseille.

Overall, it is estimated that EmpowerMed discussed its policy proposals on 106 occassions with 2417 different actors, such as policy- and decision-makers, social and health actors, energy (poverty) experts and utilities.

What we are really proud of

EmpowerMed demonstrated how to approach energy poverty from perspectives that are not usually related to energy poverty and helped to raise the visibility of summertime energy poverty, gender aspects and links between health and energy poverty. This offers the possibility to provide an integrated solution that also solves other related problems. EmpowerMed showed that energy poverty is a structural problem that requires structural solutions.

EmpowerMed brought new research into the gender, health and summertime energy poverty nexus with data from the field. With over 670 people affected by energy poverty participating in the survey, the EmpowerMed report presents an analysis of the current situation of households that participated in practical actions. From Spain to Albania, through France, Italy, Slovenia and Croatia, the results highlight the characteristics of affected households, their housing conditions and their perceived thermal comfort, their difficulty in affording energy, their health conditions and the empowerment.

Having mobilised 205 local actors (of whom 141 were women) and trained 560 representatives of local key actors (of whom 294 were women), EmpowerMed is leaving a legacy of awareness and capacity to local actors to support energy poverty actions at different levels.

EmpowerMed demonstrated the viability and replicability of collective advisory assemblies as a horizontal engagement, mutual self-support methodology ('assembly of peers') through which people affected by energy poverty acting as 'experts by practice' provide specialist support and advice to their peers.

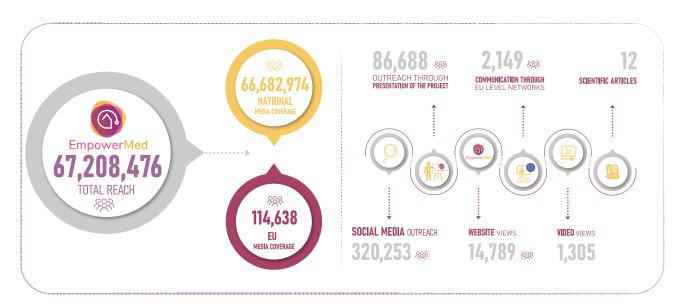


EmpowerMed highlighted utility debt as an under-recognised dimension of the lived experience of energy poverty that is a source of distress for many vulnerable households and for which collective responses can bring relief at a societal level – a more just alternative rather than one-by-one debt cancellation negotiations. EmpowerMed freed 21 people from debt and made a significant contribution to lifting 35,000 people from debt with Endesa in Spain.

A highlight we are especially proud of is that EmpowerMed showed that women are strong actors in the implementation of solutions to energy poverty and at the same time are defenders of the right to energy in their homes and communities. We believe women should be put at the heart of the EU's just energy transition to help ensure that we leave no one behind. Overall, the project directly empowered 2,185 women across six countries.

We are proud to emphasize that EmpowerMed is estimated to have had many outcomes that, in spite of being difficult to quantify, are helping people lift out of energy poverty, such as empowerment, both individual and collective, taking back control or improving the thermal comfort, health and wellbeing of people affected by energy poverty.

EmpowerMed has taken to the EU level the policy recommendations developed thanks to the project. The project contributed to some gender aspects being included into the Renewable Energy Directive and the Energy Efficiency Directive, as well as to the ban on disconnections being included in the last available draft of the Electricity Market Directive.



EmpowerMed was disseminated through over 15 press releases, resulting in over 250 media appearances. We estimate that these helped us reach over 60 million people, mainly from the pilot countries, but also in other parts of Europe. With such wide dissemination, we hope to bring about a change in media coverage and public imaginaires about people affected by energy poverty. EmpowerMed was also presented at almost 20 conferences, including the European Sociology Association and Convent of Mayors conferences.

Finally, EmpowerMed empowered over 3,500 people, of whom over 2,100 were women, to tackle energy poverty, which saved over 1,100 MWh/year of energy, over 7,700 m3/year of water, 265 tonnes/year of CO₂ emissions and 315,000 EUR/year.

EmpowerMed

- Empowering women to take action against energy poverty in the Mediterranean

Grant agreement ID: 847052 Start date: 1 September 2019 End date: 31 August 2023

Funded under Horizon 2020 Programme, call LC-SC3-EC-2-2018-2019-2020 - Mitigating household energy

poverty

Total cost: € 1 982 150,00 EU contribution: € 1 982 150,00

Coordinated by

Focus, društvo za sonaraven razvoj / Association for Sustainable Development, Slovenia

Project partners

DOOR - Drustvo za oblikovanje odrzivog razvoja / Association for Sustainable Development Design, Croatia ESF - Enginyeria sense fronteres / The Catalan Association of Engineering Without Borders, Spain Geres, France

IREC - Fundació Institut de Recerca en Energia de Catalunya / Catalan Institute for Energy Research, Spain Milieu Kontakt Albania, Albania

Sogesca, Italy

UAM - Universidad Autónoma de Madrid / Autonomous University of Madrid, Spain WECF - Women Engage for a Common Future, Germany



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 847052. The sole responsibility for the content of this document lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EASME nor the European Commission are responsible for any use that may be made of the information contained therein.

Web site www.empowermed.eu Facebook Empowermed.eu Twitter @EmpowerMed.eu