



EmpowerMed

Collective advisory assemblies

*Social innovation for
empowering people affected
by energy poverty*





Authors: AUTHORS: Sergio Tirado-Herrero (Universidad Autónoma de Madrid, UAM); Mònica Guiteras-Blaya (Enginyeria Sense Fronteres, ESF); Lidija Živčič (Focus Association for Sustainable Development).

Date: November 2023

IMPORTANT NOTICE: Reproduction of the content or part of the content is authorized upon approval from the authors and provided that the source is acknowledged.



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.



TABLE OF CONTENTS

Summary	4
1 A socially innovative empowerment tool since 2014.....	5
2 From vulnerability to solidarity and resilience	9
3 Impactful and responsive action for those most in need.....	11
4 A feasible and practical community approach.....	16
5 Scalability and replicability across Europe	18
References	21

Summary

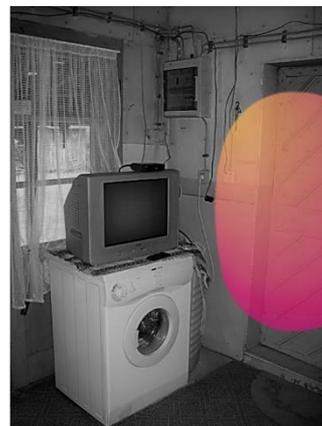


Collective advisory assemblies (CAAs) stand as innovative, adaptable, and impactful tool ready for addressing various forms and levels of energy poverty. CAAs typically take the form of public sessions gathering 10 to 30 people, welcoming anyone facing difficulties related to access and affordability of domestic energy services.

These issues may include high energy bills, inappropriate tariffs or supply contracts, late payments, provider debt, or health concerns tied to energy poverty. CAAs stand out as a community-oriented tool, creating a safe and trusted space where groups of individuals facing similar energy poverty circumstances can openly share concerns and grievances. Within this space, practical solutions are collaboratively developed through collective intelligence.

In contrast to individualized approaches that rely on one-on-one interventions, CAAs offer a horizontal engagement methodology where people affected by energy poverty act as 'experts by practice' capable of providing advanced peer-to-peer advice and guidance. The support offered by CAAs is non-intrusive, helps affected people reclaim their dignity, and opens the door for new forms of 'energy citizenship' that allow the participation of traditionally excluded segments of consumers in energy decision-making.

With about 250 CAAs held across Europe since the methodology was originally devised in Barcelona (Catalonia, Spain) in 2014, its viability has been further validated by the Horizon 2020 EmpowerMed project that enabled its replication in France, Italy, Slovenia, Croatia, and Albania from 2019 to 2023. The experience accumulated so far provides solid evidence of the positive impacts for vulnerable households in terms of cost savings, debt reduction, consumer empowerment and changing of social imaginaries on energy poverty. CAAs are cost-efficient, have low-entry material and financial requirements, and offer substantial flexibility in their implementation, which ensures their scalability and replicability.

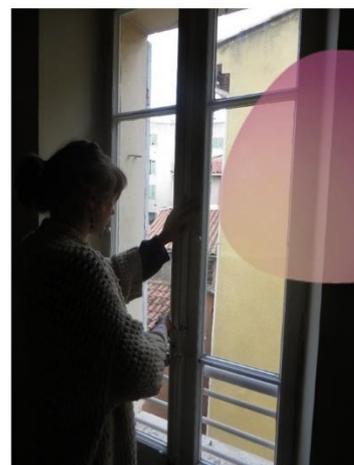


1 A socially innovative empowerment tool since 2014

Collective advisory assemblies (CAAs) represent an **innovative, flexible, impactful, ready-to-use tool for addressing energy poverty** and for providing needs-oriented, respectful support to affected people. They offer a welcoming environment for anyone struggling with issues related to the accessibility and affordability of domestic energy, such as high energy bills, unsuitable tariffs or supply contracts, payment delays, provider debt, and health concerns stemming from inadequate thermal comfort. CAAs consist of community gatherings scheduled at specific dates and locations, typically held in places like community centres, neighbourhood associations, schools, or other public spaces. At these gatherings, an 'assembly of peers,' primarily comprised of people affected by energy poverty, offers understanding, encouragement, and practical guidance based on their own experiences. CAAs adopt a collective intelligence methodology, accumulating knowledge and collaboratively crafting solutions for specific cases as new issues arise. These solutions encompass practical advice on matters like renegotiating debt with suppliers, applying for social energy tariffs, or asserting consumer rights with utility providers.

CAAs typically take the form of open meetings or sessions, gathering 10 to 30 people affected by energy poverty, with the discussion supported by professional facilitators. Participants share their circumstances and difficulties and engage in open discussions to find an appropriate course of action for each case. CAAs also dedicate time and efforts to knowledge and skill exchange related to energy use at home, interpreting utility bills, implementing cost-effective energy-saving measures, changing providers, exploring options for collective energy purchasing, and understanding how to apply for building rehabilitation grants. Additionally, they offer support in recognizing and addressing the mental health impacts of energy poverty.

As a mutual support group for individuals facing similar conditions of energy deprivation, CAAs provide **a safe and non-judgmental space to share concerns and grievances**. They serve as a transformative community tool specifically designed to assist those dealing with severe energy poverty, helping them gradually **overcome fear, shame, and the sense of individual failure often associated with supplier debt and utility disconnections**. CAAs also empower participants functionally and emotionally, equipping them with the knowledge and skills to assert their energy rights as consumers and citizens.



CAAs originally emerged as a community engagement approach against the backdrop of Spain's post-2008 economic crisis and the resultant increase in social inequalities, particularly in cities like Barcelona. Notably, Barcelona saw the emergence of the housing rights movement PAH (*Plataforma de Afectados por la Hipoteca* – Platform of People Affected by Mortgages) a self-organized citizen network that resisted the surging number of foreclosures and evictions and offered support to individuals dispossessed from their homes by financial institutions. Inspired by the principles of knowledge co-creation from Paulo Freire's 'pedagogy of the oppressed,' [PAH developed CAAs](#) as a methodology to collectively address the numerous foreclosure and eviction cases brought by affected individuals during their weekly or bi-weekly meetings held in Barcelona and other Spanish cities with local PAH chapters.

Photos 1 to 4. Photos from collective advisory assemblies and 'accompaniments' held in Barcelona between 2019 and 2023 as part of the Horizon 2020 EmpowerMed project.

Credit: Enginyeria sense Fronteres (ESF)



When the social impacts of the Euro crisis were at its peak in 2014, the Alliance against Energy poverty (*Aliança contra la Pobresa Energètica*, APE) was formed also in Barcelona under the premise of access to basic supplies such as domestic energy and water being a



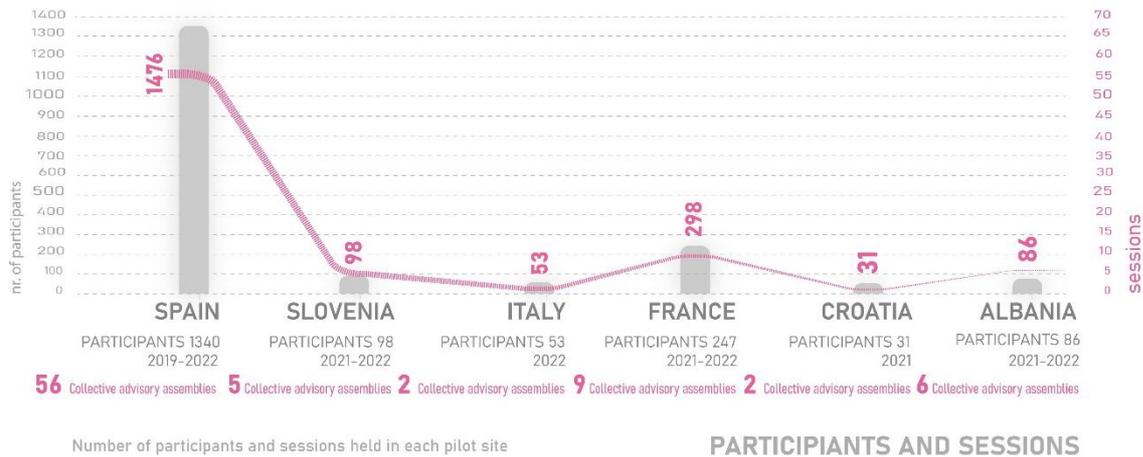
fundamental human right. The Alliance (APE) was initially started as a 'task force' of the Platform (PAH) as households facing mortgage default or with rental arrears almost inevitably struggled with their electricity, natural gas and water bills and were often indebted to utility providers and often suffering from precarious, irregular access to the supply. APE subsequently applied, developed and fine-tuned the [CAA methodology](#) to address energy poverty. CAAs are being steadily implemented in Barcelona, with over 150 assemblies held and thousands of people supported either directly or indirectly, primarily in the metropolitan area of Barcelona, since the year 2014. Local APE chapters in other Catalan municipalities (namely Blanes, Sant Boi de Llobregat and Tarragona) and the city of Madrid have also been active at various points in time during the period 2014-2023. During much of the COVID-19 pandemic lockdowns, the Barcelona-based CAAs were held online and they were subsequently transformed in a hybrid format allowing for both online and in-person participation. Based on this experience, the Horizon 2020-funded project 'Empowering women to take action against energy poverty in the Mediterranean' ([EmpowerMed](#)) made possible the replication and upscaling of this socially innovative approach to tackling energy poverty across Europe with over 92 CAAs being held in the project pilot areas of Marseille (France), Padova (Italy), Primorska (Slovenia), Zadar (Croatia) and Vlora (Albania) in the period 2019-2023.

When the social impacts of the Euro crisis peaked in 2014, the Alliance against Energy Poverty (*Aliança contra la Pobresa Energètica*, APE) was established also in Barcelona, under the premise that access to basic resources such as domestic energy and water is a fundamental human right. APE began as a 'task force' of the Platform (PAH) as it became evident that households facing mortgage defaults or rental arrears often struggled with their electricity, natural gas, and water bills. These households were frequently indebted to utility providers and faced precarious, irregular access to essential utilities. Subsequently, APE adapted, developed, and fine-tuned the CAA methodology to address energy poverty. Since 2014, CAAs have been steadily implemented in Barcelona, with more than 150 assemblies conducted and support provided to thousands of people, primarily in the metropolitan area of Barcelona. Local APE chapters in other Catalan municipalities, including Blanes, Sant Boi de Llobregat, and Tarragona, as well as the city of Madrid, have also been active at various points between 2014 and 2023. During the COVID-19 pandemic lockdowns, Barcelona-based CAAs transitioned to online platforms and later adopted a hybrid format, allowing for both online and in-person participation. Building on this experience, the Horizon 2020-funded project 'Empowering Women to Take Action Against Energy Poverty in the Mediterranean' ([EmpowerMed](#)) facilitated the replication and expansion of this socially innovative approach to combating energy poverty across Europe. Following the lead of Barcelona, the EmpowerMed project organized 80 CAAs in other pilot areas, including Marseille (France), Padova (Italy), Primorska (Slovenia), Zadar (Croatia), and Vlora (Albania) from 2019 to 2023. All in all, 2,042 households (of whom 1,212 were

represented by women) participated in the EmpowerMed CAAs, which resulted in over 5,200 people supported by this project action – see Figure 1.

Figure 1. Collective advisory assemblies ('community approaches') organised as part of the EmpowerMed project and number of participants and supported people in in 2019-2023.

Source: [Project EmpowerMed in a nutshell.](#)



Number of participants and sessions held in each pilot site

PARTICIPANTS AND SESSIONS



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

COMMUNITY APPROACHES

COMMUNITY APPROACHES SUMMARY

2042

Participant households

1212

WOMEN

2 From vulnerability to solidarity and resilience

Collective advisory assemblies (CAAs) have demonstrated **their adaptability as a support tool, requiring minimal infrastructure and responding to local needs and contexts**. They can be effectively combined with other approaches, which should be tailored to specific legislative and policy frameworks and the unique characteristics of each context.

In the context of the EmpowerMed project, CAAs have been implemented alongside various complementary measures, such as providing individual energy advice through household visits, conducting energy poverty-related health workshops, disseminating information on financial support programs, and hosting DIY workshops on the use of PV panels, smart meters, and cost-effective energy efficiency measures for addressing energy poverty (see Table 1). For instance, in the Primorska pilot site in Slovenia, CAA participants were offered small devices, such as LED bulbs and water tap and shower head aerators, as incentives for their involvement in the assemblies. In Barcelona, EmpowerMed CAAs, conducted in collaboration with the Alliance against Energy Poverty (APE), were supplemented with additional forms of support. This included an electricity and indoor environmental comfort monitoring campaign to optimize electricity supply contracts and provide recommendations for improving comfort [1], as well as mutual support workshops led by a professional counsellor to address the mental health and emotional well-being impacts of energy poverty. These activities generated valuable datasets used for analyzing and evaluating the impact of CAAs. In Barcelona, CAAs are also complemented by *'acompanyaments'* (companionship or accompaniment, in Catalan), where households or individuals affected by energy poverty are accompanied by more experienced assembly participants who provide assistance with paperwork or negotiate better conditions during visits to utility providers or local social welfare offices (Photos 1 to 4).

Overall, the EmpowerMed project has successfully replicated and expanded CAAs as an **innovative, flexible, and socially inclusive tool that offers an alternative to traditional one-off, individual household advice and support approaches**. Grounded in the principles of the right to energy, CAAs go beyond addressing the symptoms of energy poverty and aim to empower affected individuals, especially women, by mobilizing their collective and individual agency. CAAs serve as a **community of mutual support and peer empowerment, transforming individual experiences of poverty into networks of solidarity and resilience**.

Table 1. Support actions implemented across the 6 countries in the EmpowerMed project including collective advisory assemblies ('community approaches') in 2019-2023.

Source: Comparative analysis of implemented practical measures against energy poverty (EmpowerMed deliverable D4.3) [2]

Action		Albania	Croatia	France	Italy	Slovenia	Spain
Community approaches							
Household visits							
DIY workshops	PV panels						
	Smart meters						
	Low-cost measures						
Support to financial schemes							
Health workshops							

Additional elements that underline CAAs as a truly socially innovative approach to tackling energy poverty are the following:

- Through their continued participation in CAAs, **people affected by energy poverty** recurrently seek, receive, and share practical advice, essentially **becoming 'experts by practice'**. CAAs function as an **'assembly of peers'**, consisting of persons who are at the same time affected by energy poverty and also specialists, volunteers or activists capable of providing highly valuable advice and support to newcomers. This **advice and support network operates on a 'peer-to-peer' basis**, in contrast to other support methods where a professional advisor, who often lacks any personal experience with energy poverty, serves as the primary source of information and resources.
- CAAs are a **horizontal engagement methodology that facilitates jointly crafted solutions and strategies** devised with rationales such as "what works for me can work for somebody else" or "we tried this and that, and it didn't work, so we have to try something else". Unlike individual one-off solutions, they keep people engaged even when their personal circumstances have improved and therefore allow a 'historical' knowledge base, which, in turn, contributes to the establishment of a collective repository of know-how to address various energy poverty scenarios and conditions.
- The **support provided by CAAs is non-invasive**, meaning that the focus is on affected households taking the initiative to engage with the mutual support community and share their personal circumstances as they see fit. This approach stands in contrast to institutional support channels, such as those provided by social services, which typically require individuals to provide detailed information about their income, household composition, health status, personal circumstances, etc.

- **CAAs foster a sense of belonging to a network or 'family'**. These assemblies **provide emotional support and collective strength**, in contrast to the more paternalistic, assistance-based counseling typically provided on an individual household basis. In this way, they embrace a **'relational' understanding of energy poverty** where social relations, including trust, friendship, power dynamics, dependence, and their moral and emotional aspects, significantly influence the lived experience of domestic energy deprivation [3].
- CAAs also **help affected people deal with the non-material dimensions of the lived experience of energy poverty**, and more specifically they **enable people to reclaim their dignity** (as respect, self-respect, and self-determination) along the lines of recent scholarship on the matter [4].
- CAAs pave the way for **innovative forms of 'energy citizenship'** aligning with the EU's vision of empowering citizens to play a central role in energy transitions. This shift involves moving from a passive consumer role to a more dynamic relationship, where active citizens engage and assume responsibility for energy production and consumption [5]. Specifically, CAAs create new forms of 'energy citizenship' well-suited for the **inclusion of traditionally marginalized and vulnerable consumer segments in energy decision-making processes**.
- **Social media action connected to CAAs**, such as active Telegram, Twitter, and other social media channels, help keep people connected and engaged in between assemblies and maintain a sense of immediacy. This real-time interaction enables swift reactions, making the overall approach **highly agile in responding to specific calls for support or collaborative actions**.

3 Impactful and responsive action for those most in need

Collective advisory assemblies (CAAs) have demonstrated their **effectiveness in addressing diverse and evolving energy poverty scenarios** throughout Europe, particularly those marked by significant complexity and marginalization where intersectionality plays an important role [6]. These cases often refer to specific vulnerable groups, such as women-led households, pensioners, migrants, single-parent families, people living in occupied or substandard housing, or the working poor (people in precarious or low-pay jobs). In such deep energy poverty contexts, it is not uncommon to encounter situations where it may not be advisable for external parties to visit households, or where an energy audit can only be recommended at a later stage. For those cases, CAAs **offer a neutral space that helps overcome the distrust some affected households may have toward institutional support networks**. At the same time, CAAs make energy



advice available for households that are outside the social services network, have lower literacy levels, lack familiarity with technical or digital tools, or have previously attempted individual support strategies with limited or no success.

CAAs are particularly well-suited to respond to experiences of energy poverty often overlooked by current support schemes, such as the following:

- **Disconnections from the energy or water supply:** lack of supply after cut-off represents one of the most distressing ordeals for those impacted by energy poverty. CAAs create a safe and non-judgmental platform for discussing these issues, allowing individuals to openly address them. As a horizontal engagement methodology, they enable assembly participants who have themselves faced disconnections to provide valuable support and advice, facilitating swift and effective reconnections—assistance that institutional actors often cannot provide. Particularly in cases where access to regular, secure energy or water supplies is lacking, CAAs offer a more open and less formal space where these coping practices are not frowned upon, and where practical solutions for effectively solving these complex situations are encouraged.
- **Unpaid energy and other essential utility bills, as well as unexpectedly high or low bills:** Unpaid bills often serve as the first warning sign of deep energy poverty unpaid bills. Unexpectedly high or low bills can be equally concerning, as they may suggest overconsumption due to poor energy efficiency or underconsumption resulting from self-rationing practices, leading to inadequate energy use for a healthy and dignified life. The empathetic and supportive environment fostered by CAAs allows affected people to openly discuss these conditions the company of peers, free from guilt or victimization.
- **Severe indebtedness resulting from the accumulation of unpaid energy and water bills:** Even after successful reconnecting to these essential services, affected people often struggle to repay the debts accrued in the past. And even when they experience an improvement in their overall financial situation, they may find it challenging to manage current bills and simultaneously address their outstanding debt.
- **Consumer protection issues, including excessive debt collection procedures, improper fee charging, unauthorized changes in tariffs or prices, phone and email harassment, and denial of new supply contracts:** CAAs not only offer a safe space for individuals to discuss these challenging situations but they also help in identifying improper or unlawful practices by energy providers and other powerful actors in the energy sector. In Barcelona, CAAs have successfully uncovered instances of misconduct. For instance, they have collected evidence on unilateral changes in energy providers, supply contracts, or tariffs, particularly impacting vulnerable groups such as elderly and migrant families. While one-on-



one support can bring comfort to affected individuals, many of these problems are systemic in nature. Through CAAs, individuals facing similar mistreatment can unite and strengthen their collective response against these abuses, ultimately empowering consumers in their fight for fair treatment.

- **General lack of information about energy or consumer rights and difficulties to make sense of complex energy bills:** CAAs make it easier for participants to learn about the complexities of domestic energy provision markets by offering an inclusive environment that welcomes participants from diverse backgrounds and varying levels of energy literacy. CAAs encourage repeated participation, allowing participants to gradually grasp the intricacies of domestic energy markets. By presenting real-life cases with names, faces, and emotions attached, CAAs facilitate the learning process, making complex concepts and key issues more accessible. This approach empowers participants to take autonomous action, improving their understanding of energy markets and enhancing their ability to exercise their consumer rights.
- **Bureaucracy gaps, barriers, malfunctioning or errors in manual, digital or automatised methods, applications or institutional processes and protocols:** The human and relational features of CAAs allow identifying *lost cases* and tackle the related flaws. For instance, CAAs have helped address instances where eligible domestic consumers were wrongfully denied the social electricity tariff in Spain due to errors in allocation protocols and criteria. These complex cases often require collective efforts and the perseverance of CAA participants. Most often they are not resolved on an individual basis. In Barcelona, the collaborative efforts of CAAs have led to the collection of such cases, providing clear evidence of mistakes in systems, procedures, and policies. This evidence has subsequently driven changes that benefit all consumers, highlighting the systemic impact of CAAs.

The experience gained through CAAs since 2014, especially within the framework of the EmpowerMed project, offers valuable insights into the key impacts of CAAs as a practical tool for addressing energy poverty, namely:

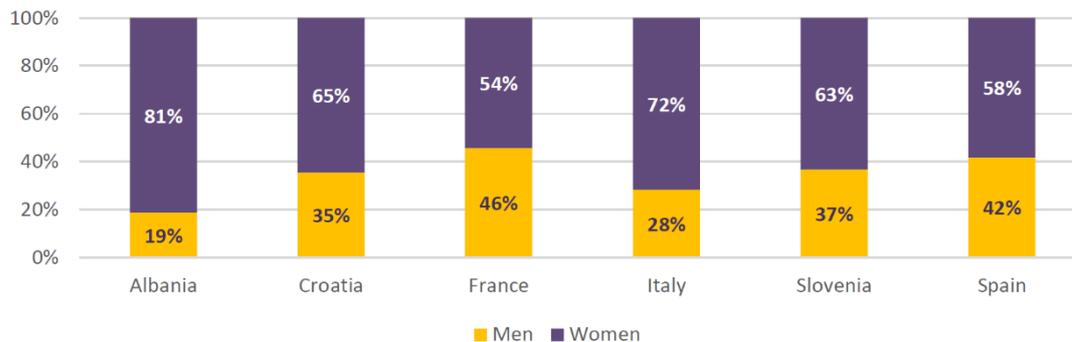
- **Empowerment of affected people and households,** who, thanks to CAAs, connect with others sharing similar experiences and are encouraged to take action. Participants within CAAs often collaborate to improve the circumstances of one another, creating a network of mutual support and contributing to collective knowledge and self-respect. Marginalized groups and individuals, including the elderly, women, migrants, and people with disabilities, play a central role in CAAs. Their involvement in assemblies demonstrates their resilience and the importance of having their voices heard in the current context of climate and social emergency. Through their participation, they transition from being mere victims to becoming agents of change for energy and climate justice. In this process, each person

becomes the protagonist of their unique – and, at the same time, widely shared – circumstances.

- **Health impacts are exposed and better understood:** CAAs enable participants to understand of their own and others' energy poverty cases, including the similarities and differences among them. This open conversation promotes a better comprehension of the health and well-being impacts associated with energy poverty. CAAs thus help in recognizing the symptoms and validating the lived experiences of energy poverty. Remarkably, during CAAs held in Barcelona with the support of the EmpowerMed project, one out of every ten participants spontaneously expressed the health impacts when speaking in the assemblies. This underscores the significance of the health impacts of energy poverty and the role of CAAs in facilitating such discussions.
- **Raising public awareness and influencing social imaginaries about energy poverty:** CAAs help collect and disseminate real-life testimonies, giving those directly affected by energy poverty a prominent voice in public discussions traditionally dominated by expert perspectives. The Barcelona and EmpowerMed experiences showcase the effectiveness of CAAs in influencing decision-making processes related to energy and climate policies at local, regional, national, and European levels. By bringing together individuals affected by energy poverty and connecting them with social movements, local residents, and consumer groups with EU and international ties, CAAs have enabled the formation of a coalition of stakeholders gradually shaping public opinion and advancing toward more equitable and democratic energy provision frameworks that emphasize respect and human dignity.
- **Gendered impacts and responses:** CAAs attract a higher percentage of female participants, which can be attributed to the persistently unequal distribution of reproductive work, especially for activities related to the day-to-day management of home supplies and needs and to the domestic care work that is intrinsically linked to domestic energy and water services. Consequently, women are not only more exposed than men to energy poverty [7], [8], but they are also more likely to endure the emotional burden and mental health consequences associated with this condition. At the same time, women are more proactively reaching out and searching for support related to housing and energy rights [9], [10]. The EmpowerMed project experience indicates that women participants represented 59% of the total participants in CCAs held in 2019-2023 – see Figure 2 below.

Figure 2. Share of participants per gender in EmpowerMed CAAs across pilot sites (% women)

Source: Comparative analysis of implemented practical measures against energy poverty (EmpowerMed deliverable D4.3) [2]



- **Energy costs savings and indebtedness:** The Barcelona experience highlights the substantial cost savings that CAAs can deliver to participants and their families through guidance and support for switching to more favourable energy contracts and providers, as well as assistance in applying for the social electricity tariff and the social thermal bond. Within the context of the EmpowerMed project, CAAs in Barcelona resulted in an €49,376 in accumulated energy cost savings for assembly participants, alongside the cancellation of provider debt for 21 individuals [2]. The Barcelona pilot also site played a significant role in facilitating utility debt cancellations, benefiting 35,000 vulnerable households in Catalonia in 2021. This achievement was made possible through an agreement between Endesa (the main electricity provider in the region) and the Generalitat de Catalunya (the Catalan government), influenced and pressured by energy poverty activists. The utility debt write-off proved to be the most successful action of the project in terms of financial cost savings per household. In Barcelona, the 21 debt cancellations translated into €18,301 of financial savings (an average of €872 per beneficiary household), representing 37% of the total cost savings achieved by EmpowerMed CAAs in this city [2]. Additionally, the Endesa debt cancellation agreement led to the implementation of further measures aimed at preventing future debt accumulation by affected households.
- **Energy savings and emission reductions:** Energy savings can be achieved through shared knowledge about efficiency in domestic energy use and the distribution of low-cost, self-installed energy efficiency devices distributed via CAAs. This, in turn, results in reduced energy bills and lower carbon emissions. This approach was successfully implemented at the EmpowerMed pilot site in Obala, Slovenia, where the distribution of efficient lightbulbs, tap, and shower head aerators to CAA participants led to an estimated reduction of 2,156 kWh/year in primary energy consumption. This translates to a reduction of 1,078 kgCO₂/year in carbon emissions and annual electricity cost savings of 365€ for beneficiary households [2].

- **Social inclusion and full participation in society:** Energy poverty can lead to social isolation, underscoring the significance CAAs not only for enhancing access to energy services but also fostering social inclusion. CAAs promote the active involvement of those affected by energy poverty with civil society actors in diagnosing and devising more equitable energy and climate policies at local, national, and EU levels. In doing so, CAAs facilitate grassroots interactions and highlight the justice dimensions of energy transitions, emphasizing equality and empowerment rather than solely focusing on monetary savings or carbon emissions reductions.
- **Changing imaginaries on energy poverty and the relationship with the media:** The media often show an interest in situations that highlight the fragility of life, and this can sometimes lead to sensationalist coverage of energy poverty that doesn't always adhere to ethical standards. For instance, journalists may demand striking photos of individuals in energy poverty situations. In Barcelona, the collective strength of CAA members has contributed to raising awareness of energy poverty without resorting to the dramatization or victimization of those affected. In this context, it is crucial to ensure compliance with data protection and respect ethical standards when depicting the intimate and vulnerable situations of affected households. Additionally, the media's coverage of cases discussed in CAAs underscores the importance having the voices of affected persons heard, particularly when they are advocating for policy changes and proposals that go beyond their individual situations [11].
- **Water as an essential utility supply:** An additional social innovation element introduced by CAAs is that assemblies do not only focus on energy but also discuss issues around access to other basic utility supplies, namely water – a key domestic resource in the current climate crisis, especially during summer heatwaves. The guiding principles of CAAs underscore that domestic utility supplies, including water, should be considered as fundamental rights that need to be guaranteed. This calls for the inclusion of water within any proposed guaranteed basic utility services package. In contrast, most national policies in the EU typically address water poverty and energy poverty separately.

4 A feasible and practical community approach

The viability of Collective Advisory Assemblies (CAAs) as a tool for addressing energy poverty is evident through their uninterrupted implementation in Barcelona since 2014 and their subsequent upscaling and replication across six European Mediterranean countries from 2019 to 2023 in the context of the EmpowerMed project. This experience serves as a proof that **CAAs are a ready-to-use, fit-for-purpose methodology, applicable to a variety of contexts**, thanks to the following factors:

- **CAAs are a cost-efficient tool for the provision of advice and support** because they do not require significant upfront investments or infrastructure and benefit from economies of scale inherent to collective approaches. Cost-efficiency calculations from the EmpowerMed pilot sites of Barcelona (Spain) and Primorska (Slovenia) reveal that the cost per supported household ranges from €13.6 to €30.4, and the cost per organized CAA ranges from €289.3 to €595 (see Table 2). These figures compare favourably with alternative support methods, such as individualized energy audits and household visits, especially considering that CAAs effectively address complex, deep energy deprivation issues like indebtedness and lack of access or disconnections from the energy supply, which would typically require specialized one-on-one advice. The disparities in cost-efficiency indicators between Barcelona and Primorska reflect a learning curve where costs decrease as experience and expertise accumulate. In Barcelona, CAAs have been running for years, while in Slovenia, they began from scratch with the EmpowerMed project. An additional factor contributing to the cost-effectiveness of CAAs is that some participants who initially join as individuals affected by energy poverty eventually become advisors after a few sessions, thus contributing with their voluntary working time to the assembly.

Table 2. Cost-efficiency indicators for the Barcelona (Spain) and Primorska (Slovenia) pilot sites of the EmpowerMed project.

Source: Comparative analysis of implemented practical measures against energy poverty (EmpowerMed deliverable D4.3) [2]

	Primorska	Barcelona
CAAs held through EmpowerMed project	5	63
Total number of participants in EmpowerMed CAAs	98	1,340
Average number of participants per CAA	19.6	21.3
Total labour hours invested in EmpowerMed CAAs	141	796
Average labour cost per hour in the country (€/hour)	21.1	22.9
Labour hours per supported household (hours/hh)	1.4	0.6
Cost per supported household (€/hh)	30.4	13.6
Labour hours per CAA organised (hours/CAA)	28.2	12.6
Cost per CAA organised (€/CAA)	595.0	289.3

- **CAAs have low-entry material and financial requirements as no specific physical infrastructure or equipment are needed:** The most important resources for running CAAs are trained facilitators capable of keeping people engaged and with the necessary skills for running the sessions smoothly and inclusively. The EmpowerMed project experience across 6 pilot sites indicates that two to three people are needed to carry out the most critical steps of the CAA (announcement and implementation). Facilitators require soft skills, such as effective communication, active listening, time management, and conflict resolution. Technical knowledge about topics like energy poverty, domestic energy efficiency, the regulatory framework of energy markets, and existing support tools in the relevant context (e.g., about social tariffs and legislation related to supply disconnections for vulnerable consumers) is also needed.

- **CAAs allow a great degree of flexibility in their implementation as they can be easily adapted to contexts and changing conditions:** As a flexible and non-prescriptive support tool, CAAs address issues that participants spontaneously bring up, making them highly responsive to specific contexts and changing conditions. In a liberalized energy market like Spain, discussions may revolve around energy prices, tariffs, and supply contract types. In contrast, in countries with a single universal electricity supplier, such as Slovenia, CAAs may focus on behavioral strategies and low-cost efficiency measures to maintain indoor thermal comfort in different seasons. CAAs can also adapt to unforeseen events, as demonstrated during the COVID-19 pandemic. In Barcelona, in-person CAAs organized by EmpowerMed in collaboration with the Alliance against Energy Poverty (AEP) transitioned to online sessions during the spring 2020 lockdowns. Later, they adopted a hybrid format (online and in-person) after organizers realized that it encouraged the participation of people outside the metropolitan area of Barcelona or with restricted mobility. The EmpowerMed project's experience highlights how CAAs effectively respond to various energy poverty drivers. For instance, in Barcelona, utility debt and disconnections, which were the traditional focus of assemblies since 2014, were replaced by inflation and high energy prices as main matters of concern for CAA participants in 2022-2023.

5 Scalability and replicability across Europe

CAAs follow a **straightforward step-by-step protocol designed for easy implementation and adaptability in various locations and contexts**. The six-step protocol of CAAs developed for the EmpowerMed project (Figure 3) provides a basis for replication across locations and contexts. It starts with seeking the involvement and support of local organizations or local actors (Step 1) to disseminate information, understand the needs of the target population, and build complicity. This is followed by the preparation of reference materials, such as infographics and [useful documents](#) to be discussed in the assembly or providing post-assembly guidance and resources to participants (Step 2). The actual planning and organization of the event (Step 3) requires securing a suitable space, creating an agenda, and reviewing cases reported by participants before the meeting. For drawing potentially interested participants (Step 4), organizers will utilize local networks, traditional dissemination methods (e.g., posters and flyers), and the networks of local partners, especially those firmly established in the local area. The actual running of assemblies (Step 5) will have a periodicity (e.g., bi-weekly, monthly or bi-monthly) suitable to the local context and capabilities of the organization in charge of CAAs. Feedback from participants can be collected during or after the CAA with a dedicated survey or opinion mailbox (Step 6). Finally, post-assembly or in-between-assembly support (Step 7) is much recommended. Following the Barcelona experience, it can take the form of 'accompaniments' for specific participants in need of individualized support or

the use of social media channels through which CAA participants can reach out to the CAA community at any time.

Figure 3. Six-step protocol for the implementation of the CAA methodology.
Source: Comparative analysis of implemented practical measures against energy poverty (EmpowerMed deliverable D4.3) [2]



This protocol is **readily adaptable to each local context**. An implementation manual of the CAA methodology for its implementation in Barcelona has been developed by the Engineering Without Borders Catalonia (ESF), as EmpowerMed partner project, in the project’s [collective assemblies training module](#). This training module includes the Barcelona CAAs welcoming speech, which is delivered at the start of each assembly by a regular participant representing the success of the collective approach and can be customized to suit different contexts and groups.

The **EmpowerMed project experience** from 2019 to 2023 provides solid **evidence of the scalability and replicability potential of the CAA methodology**. Following the lead of the Barcelona pilot site and Engineering Without Borders Catalonia (ESF) – the partner in charge of CAA implementation in Spain in collaboration with the Alliance against Energy Poverty (APE) – all other EmpowerMed pilot sites organized and held CAAs (see Figure 1). Differences in the numbers achieved by pilot site indicates that the replicability of the tool is influenced by the capabilities of local organizations and disparities in local contexts. Furthermore, CAA implementation was impacted by unforeseen events such as the COVID-19 pandemic, particularly affected CAAs in Italy and Slovenia. Beyond the end of EmpowerMed in August 2023, project partners in France (Geres), Slovenia (FOCUS) and Croatia (DOOR) have made commitments to continue implementing the CAA methodology as part of their support action targeted to people affected by energy poverty.

The CAA methodology revolves around the collective creation of knowledge and requires **minimal technology and resources. It is cost-effective, does not rely on patented**

technology or high levels of technology readiness, and does not entail increased energy or material consumption due to its small-scale approach. This makes it highly replicable and accessible to a wide range of individuals and organizations

A key to the success of the CAA approach lies in recognizing that **energy poverty is a result of system-wide inequalities, and individuals affected by it are regarded as active political subjects capable of proposing solutions and engaging in social transformation** [12]. Given the worsening of energy poverty trends in the EU and the pressing need for effective support for many households, there is a clear justification for the scalability and replicability of the CAA methodology.

The experience of about 250 CAAs organised across Europe since 2014 gives proof that the accumulation of collective knowledge within CAAs enhances the potential of collective action to transform individual situations of energy poverty and climate vulnerability. The complex and challenging procedures that each affected person has to navigate, for instance when having to regain access to electricity supply after disconnection or to deal with debt collectors, serve as the foundation for collective learning within CAAs. Furthermore, the worsening conditions during the post-2022 energy price crisis highlight the increasing need for CAAs in the future. CAAs, as a horizontally structured self-support methodology, represent an innovative approach to engaging individuals affected by energy poverty. The experience in Barcelona demonstrates that **participants continue to be actively involved in CAAs long after their own energy poverty situations have been resolved and their financial circumstances improved.**

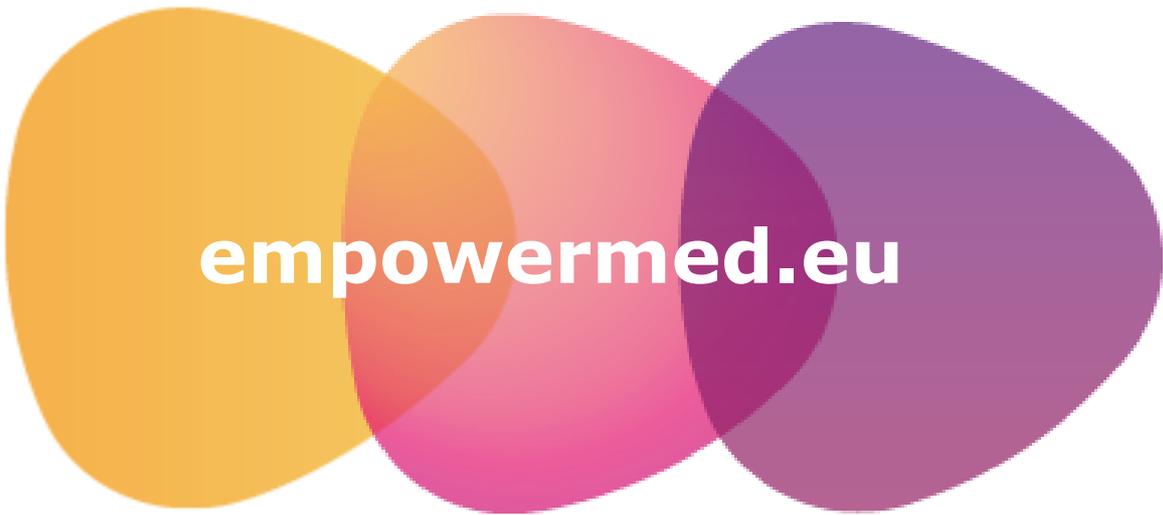
All in all, **the CAA methodology has demonstrated its problem-solving capabilities for all levels of depth and complexity in energy poverty.** CAAs put people affected by energy poverty at the centre of the debate and engage various stakeholders, including local, national, and EU administrations, throughout the advocacy process. Perhaps the most significant achievement

of collective assemblies is the cultivation of a shared vision—a vision of an energy poverty-free, just transition that becomes embedded in public opinion. This approach shifts the perspective away from viewing energy poverty as an individual condition that is confined to indoor spaces and can only be addressed through institutional helpdesk-based support channels. In contrast, CAAs **provide practical and replicable collective responses that, when accumulated, create a powerful force for change. They underscore energy poverty as a shared social and political challenge, contributing to a broader transformation of societal perspectives.**



References

- [1] J. Ortíz et al., "Tackling Energy Poverty through Collective Advisory Assemblies and Electricity and Comfort Monitoring Campaigns," *Sustainability*, vol. 13, no. 17, p. 9671, Aug. 2021, doi: 10.3390/su13179671.
- [2] M. Jiménez and L. Canals, "Comparative analysis of implemented practical measures," EmpowerMed, Deliverable D4.3, 2022. [Online]. Available: <https://www.empowermed.eu/wp-content/uploads/2022/12/D4.3-Report-on-comparative-analysis-of-implemented-actions.pdf>
- [3] P. Ambrosio-Albala et al., "From rational to relational: How energy poor households engage with the British retail energy market," *Energy Research & Social Science*, vol. 70, p. 101765, Dec. 2020, doi: 10.1016/j.erss.2020.101765.
- [4] K. Grossmann and E. Trubina, "How the Concept of Dignity Is Relevant to the Study of Energy Poverty and Energy Justice," *Front. Sustain. Cities*, vol. 3, p. 644231, Apr. 2021, doi: 10.3389/frsc.2021.644231.
- [5] M. Wahlund and J. Palm, "The role of energy democracy and energy citizenship for participatory energy transitions: A comprehensive review," *Energy Research & Social Science*, vol. 87, p. 102482, May 2022, doi: 10.1016/j.erss.2021.102482.
- [6] A. Kahlheber and K. Großmann, "Energy poverty in an intersectional perspective. On multiple deprivation, discriminatory systems, and the effects of policies," New York., N. Simcock, H. Thomson, S. Petrova, and S. Bouzarovski, Eds., in *Routledge explorations in energy studies*. , Routledge, Taylor & Francis Group, 2018.
- [7] I. González Pijuan, "Desigualtat de gènere i pobresa energètica. Un factor de risc oblidat.," *Associació Catalana d'Enginyeria Sense Fronteres*, Barcelona, ESFeres 17, 2016. [Online]. Available: <https://esf-cat.org/wp-content/uploads/2017/03/ESFeres17-Desigualtat-de-genere-i-pobresa-energetica.pdf>
- [8] C. Sánchez-Guevara Sánchez, A. Sanz Fernández, and M. Núñez Peiró, "Feminisation of energy poverty in the city of Madrid," *Energy and Buildings*, vol. 223, p. 110157, Sep. 2020, doi: 10.1016/j.enbuild.2020.110157.
- [9] L. Delgado and et al., "Radiografies de la situació del dret a l'habitatge, la pobresa energètica i el seu impacte en la salut a Barcelona Informe I," *Observatori DESC*, Agència de Salut Pública de Barcelona, Enginyeria sense Fronteres, Aliança contra la Pobresa Energètica, PAH BCN, Barcelona, 2018.
- [10] WECF, "Gender and energy poverty: facts and arguments," *Women Engage for a Common Future / EmpowerMed project*, 2022. [Online]. Available: https://www.wecf.org/de/wp-content/uploads/2018/10/EmpowerMed_Gender-and-energy-poverty-Factsheet-2021.pdf
- [11] Euronews, "Europe's energy crisis: Why it's not just Spain's poor fearing a rise in electricity bills," 2021. [Online]. Available: <https://www.euronews.com/2021/10/26/europe-s-energy-crisis-why-it-s-not-just-spain-s-poor-fearing-a-rise-in-electricity-bills>
- [12] S. Tirado-Herrero, "Energy justice and housing," in *Handbook on Energy Justice*, S. Bouzarovski, S. Fuller, and T. Reames, Eds., Edward Elgar Publishing, 2023, pp. 112–130. doi: 10.4337/9781839102967.00015



empowermed.eu