## EmpowerMed

## Report: <br> The implementation of gender indicators and gender aspects in the EmpowerMed project



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## Abbreviations

| CA | Community Approaches |
| :--- | :--- |
| DIY | Do-it-yourself |
| HHV | Household Visits |
| HW | Health Workshops |
| KPI | Key Performance Indicators |
| MD | Missing data |
| SFS | Support for Financial Schemes |
| STEM | Science, Technology, Engineering, Mathematics |

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## 1. Introduction

Paying attention to gender justice in the energy sector, more specifically to overcome obstacles in regard to energy poverty, is important. As proven, women and women-led households are disproportionately affected by energy poverty ${ }^{1}$. In general, women are at a higher risk of poverty and social exclusion than men.

As has been highlighted throughout several publications of the EmpowerMed project², the interlinkage between gender inequality and energy poverty can be explained by four dimensions: physiological, health, economic and social/cultural. The social/cultural dimension refers to the cultural construction of gender and gender roles - because mainly women take on care activities such as nurture of children or caring for elderly people, they involve less in paid labour and are at higher risk of energy poverty. The economic dimension unfolds for example in the Gender Pay Gap and Gender Pension Gap: women have less access to financial resources, hence less ability to invest in energy-saving measures (e.g., renovations) or to decide about their energy supply. The physiological and health dimension deal with the embodied consequences of energy poverty or rather the impact it has on the body ${ }^{3}$, for example, not being able to pay the energy bills requires saving measures and bureaucratic burdens. These burdens along with living in uncomfortable conditions cause stress and even depression. Energy poverty affects the mental, physical and social health of women more than that of men.

To overcome these gender-specific obstacles, women should be considered active agents in the solutions for energy poverty, hence their needs and their perspective in regard to energy consumption must be considered.

The EmpowerMed project pays specific attention to gender aspects of energy poverty. The ultimate goal of the project EmpowerMed is to tackle energy poverty by implementing Energy Poverty (EP) mitigation actions in the coastal areas of five Mediterranean regions or rather in six pilot sites: Albania (Vlore), Croatia (Zadar), France (Marseille), Italy (Padova), Slovenia (Koper), and Spain (Barcelona). Besides focusing on improving the health situation of energy-poor people in these areas, EmpowerMed aims to support women as a target group and to include gender indicators in all their EP mitigation actions. This comprises understanding how women are affected, and how their engagement can help in future energy poverty projects as well as the drafting of revising energy policies and drafting gender-just policy recommendations.

The purpose of this report is to review if the gender goals of the implemented practical measures of EmpowerMed have been met, hence, to analyse the project from a genderjust point of view. Embedded in a practical context, this report derives insights from: Deliverable 4.1 "Data recording, collection frameworks and analysis framework", Deliverable 4.3 "Comparative analysis of implemented practical measures" and the final Deliverable of Working Package 4 "EmpowerMed cross-pilot analysis". Data concerning gender are collected from these three deliverables, restructured and analysed within this report.

[^0]Chapter 2 will present some background information about the different pilot sites of the project, or rather about the composition of households which have been involved throughout the project. For example, it will give insight into the number of female-led households and the general participation of women in each pilot site.

In Chapters 3 and 4, the main gender indicators of the EmpowerMed project are presented. On the one hand, the reasons behind picking the gender indicators are presented as well as the results of using them in all pilot sites. Chapter 4 shows the results of the main four gender indicators, describes and discusses them.

In Chapter 5, the entanglement of gender and health is presented. Both cross-cutting issues were a main part of the EmpowerMed project, hence it is important to also take a closer look at the intersections, or rather in what way the health of women is more affected by energy poverty than the health of men.

In conclusion, Chapter 6 will discuss the methodology for analysing gender aspects which has been used by the EmpowerMed project. It will assess if the indicators and single methods have been sufficient for fulfilling the gender-specific goals of the project. Based on this, recommendations for further projects shall be formulated.

## 2. Background information

Gender can be regarded as social and cultural construct ${ }^{4}$. Gender roles can be described as patterns of social arrangements which are shaped by everyday activities as well as by dominating norms and values. Therefore, it can be assumed that gender roles appear differently in the distinct pilot sites of the EmpowerMed project. For a thorough gender analysis of the EmpowerMed project, some background information is important which can be retrieved from the "EmpowerMed cross-pilot analysis".

For reasons of comparability, this cross-pilot analysis aimed to evaluate the situation of distinct households in all participating EmpowerMed pilot sites. However, there are some discrepancies due to the locally bound circumstances of each pilot site. This results in some missing data or adapting some data to make it comparable. The data from the "EmpowerMed cross-pilot analysis" is used as additional information throughout this report. The retrieved background information can give insight into how the cultural values of one pilot site influence gender-specific differences in regard of energy poverty. It is not the intention of this report to give comprehensive review of the social and cultural setting of each pilot site, nevertheless some aspects will be taken into consideration.

The "EmpowerMed cross-pilot analysis" aimed to compare the number and constitution of households that participated in practical actions in all EmpowerMed pilot sites. For this purpose, a questionnaire was distributed.

As shown in Table 1, a total of 674 participants (=households) took part in the activities. However, there are some significant differences in the number of participants in each pilot site. This needs to be taken into consideration when interpreting the results.

[^1]|  | Total | Albania | Croatia | Franc <br> e | Italy | Slovenia | Spain |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> participants | $\mathrm{n}=$ <br> 674 | $\mathrm{n}=100$ | $\mathrm{n}=200$ | $\mathrm{n}=94$ | $\mathrm{n}=62$ | $\mathrm{n}=190$ | $\mathrm{n}=28$ |

Table 1: Number of participants for each pilot site (retrieved from "EmpowerMed crosspilot analysis")

The goal of mobilising women for the project has been met by the project partners. As seen in Table 2, mainly in all pilot sites, more than $70 \%$ of the participants were women. Albania is an exception with a rate of $49 \%$. In the "EmpowerMed cross-pilot analysis", this was explained by declaring that Albania was a male-dominated society. It might be the case that patriarchal structures and gender roles are more strongly performed within Albanian society than within the other pilot sites. Nevertheless, other explanatory factors for the low participation rate of women could be time and resource limits of the project partners in terms of recruiting participants, or a lack of women-led or feminist networks that have been considered to collaborate on the recruitment process.

Remarkable is that non-binary participants could only be mobilised for the pilot sites in Spain and Italy. In all EmpowerMed pilot sites, most people fall into a binary concept of gender (men/women). Nevertheless - and this leads to the first aspect of critique - the three considered Deliverables 4.1, 4.3 and the "EmpowerMed cross-pilot analysis" do not indicate if the other pilot sites were not able to collect data on other genders because of cultural obstacles or if it has not been taken into account in the implementation process. It would have been an asset, if the three mentioned deliverables would embed the observations a bit more strongly into the respective cultural context.

| Gender | Albania | Croatia | France | Italy | Slovenia | Spain | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Female | $49 \%$ | $71 \%$ | $84 \%$ | $60 \%$ | $71 \%$ | $76 \%$ | $69 \%$ |
| Male | $51 \&$ | $29 \%$ | $16 \%$ | $39 \%$ | $29 \%$ | $21 \%$ | $31 \%$ |
| Non <br> Binary | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $0 \%$ | $3 \%$ | $0 \%$ |

Table 2: Gender of the participants, each pilot site (in percentage; retrieved from "EmpowerMed cross-pilot analysis")

Besides the gender of the participants, a second main aspect of the "EmpowerMed crosspilot analysis" is the social composition of households (Table 3). The composition of households gives an overview of the number and family situation of the people living in the flat or house. In this case, the focus is on single-person households, couples with or without children, single-parent families, two or more non-familiar persons or other. The report states that in the total sample (thus across all countries), there are more singleparent families consisting of women than men (total 15\% vs. 4\%).

As demonstrated in table 3, most of the households taking part in the EmpowerMed project were single-person households. Most striking is that only a few participants live in situations apart from the nuclear family, at least not in shared flats with two or more non-
familiar persons. On the one hand, this observation is a mirror of most European societies whose societal organisation and structure is based on the nuclear family. Living in shared flats for example seems to be either a temporary decision for students, although sharing a flat could actually be a cost-saving and sustainable living condition, thus one measure to tackle energy poverty.

| Household <br> composition | Albania | Croatia | France | Italy | Slovenia | Spain |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Single-person <br> household | $25 \%$ | $54 \%$ | $38 \%$ | $26 \%$ | $30 \%$ | $31 \%$ |
| Couple with <br> children | $38 \%$ | $15 \%$ | $27 \%$ | $40 \%$ | $22 \%$ | $14 \%$ |
| Couple without <br> children | $26 \%$ | $19 \%$ | $13 \%$ | $10 \%$ | $19 \%$ | $21 \%$ |
| Single-parent <br> family | $11 \%$ | $9 \%$ | $18 \%$ | $16 \%$ | $10 \%$ | $14 \%$ |
| Two or more non- <br> familiar persons | $0 \%$ | $0 \%$ | $4 \%$ | $3 \%$ | $2 \%$ | $0 \%$ |
| Other | $0 \%$ | $5 \%$ | $0 \%$ | $5 \%$ | $17 \%$ | $21 \%$ |

Table 3: Household composition in each pilot site (in percentage; retrieved from "EmpowerMed cross-pilot analysis")

The third aspect that was analysed within the cross-pilot analysis is the economic status of the participants. About one-third of the participants receive aid in the form of social welfare. Particularly in France, participants were often receiving social welfare and were accommodated in social housing. Spain also has a high number of participants that receive social welfare, but they do not live as often in social housing. This contrasts with Albania and Croatia, where a minority of the participants receive social welfare. In all the pilot sites, women were more subjected to receiving social welfare than men. On average, $38 \%$ of women receive social welfare compared to $20 \%$ of men. The largest difference is seen in Albania: $41 \%$ of women against $6 \%$ of men. Women are also the majority of those accommodated in social housing, with $19 \%$ women compared to $9 \%$ men. Especially, France ( $51 \%$ vs. $33 \%$ ) and Slovenia ( $18 \%$ vs. $8 \%$ ) show high numbers of women living in social housing. These numbers underline the inequality between women and men in the economic sector. Because of traditional gender roles, women tend to be involved in unpaid care work, taking care of children or elderly family members.

## 3. Gender indicators of the EmpowerMed project

EmpowerMed's actions can be categorised into five groups: Community Approaches (CA), Household visits (HHV), Do-It-Yourself (DIY) workshops, support to financial schemes
(SFS), and Health workshops (HW). To measure the impact of each action and each pilot site, several Key Performance Indicators (KPI) have been identified beforehand. In the project proposal, the participation of women in the activities was identified as the main gender-specific KPI. During the project phase, the project partners further differentiated the indicators and developed the following KPIs:

- Participation of women
- Empowerment of women
- Economic savings
- Investment in renewables
- Development of gender-just policies/legislation in the energy sector

Furthermore, there was information on the KPI Empowerment of women in households collected, which led to the following additional gender indicators:

- Percentage of participant households in which women are in charge of taking decisions regarding basic supply services (choosing company, tariff, contract conditions, etc.).
- Percentage of participant households in which energy bills are addressed to women.
- Percentage of participant households in which women are in charge of paying energy bills.

As has been elaborated in Deliverable 4.1 "Data recording, collection framework and analysis framework" and Deliverable 4.3 "Comparative analysis of implemented practical measures", not all activities could have been implemented the same way in each pilot site. This is explained by referring to the different (cultural) contexts of the pilot sites as well as the status of the buildings. For example, some households lack heating or cooling systems or even windows and doors. In addition to this, the gender indicators could not be considered in a similar manner, too.

Whereas the KPIs participation and empowerment of women could be measured for nearly all pilot sites, gender-disaggregated data for economic savings and investments in renewables could only be partly generated. Additionally, the development of gender-just policies is a KPI that can only be measured after a certain period of time, when it comes to specific national or European legislation.

Anyhow, this report shall elaborate on how far each gender-specific measure or rather the indicators were implemented for each activity in each pilot site.

## 4. Impact of gender-specific measures to tackle energy poverty

To simplify the analysis, this section will focus on the following four measurable indicators:

1. Share of women participants
2. Women in charge of taking decisions
3. Bills directed to women
4. Women in charge of paying bills

In comparison to the other three indicators, gender indicator 1 has been implemented in most pilot sites and most actions. Table 4 shall give an overview of the share of women each action had, e.g., $49 \%$ of the participants of the household visits in Albania were women. An important factor that decreased the total number of participants for the different actions was the Covid-19 pandemic.

### 4.1 Gender indicator 1: Share of women participants

| Household <br> Visits |  |  |  |  |  |  | Do-it- <br> yourself <br> workshops | Community <br> Approaches | Health <br> Workshops | Support <br> for <br> financial <br> schemes |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Albania | $49 \%$ | $58 \%$ | $81 \%$ | MD | MD |  |  |  |  |  |
| Croatia | $71 \%$ | $29 \%$ | $65 \%$ | MD | MD |  |  |  |  |  |
| France | $84 \%$ | $73 \%$ | $51 \%$ | $84 \%$ | MD |  |  |  |  |  |
| Italy | $60 \%$ | $47 \%$ | $65,5 \%$ | $55 \%$ | $50 \%$ |  |  |  |  |  |
| Slovenia | $73 \%$ | $67 \%$ | $63,26 \%$ | $82,4 \%$ | $62,5 \%$ |  |  |  |  |  |
| Spain | MD | $75,86 \%$ | $58,2 \%$ | $68,7 \%$ | $67,65 \%$ |  |  |  |  |  |

Table 4: Share of women participants per action and pilot site

| Action |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Household Visits | Do-ityourself workshops | Community Approaches | Health Workshops | ```Support for financial schemes``` |
| Albania | 49 of 100 | 23 of 40 | 70 of 86 | MD | MD |
| Croatia | 142 of 200 | 5 of 17 | 20 of 31 | MD | MD |
| France | 21 of 25 | 48 of 66 | 126 of 247 | 49 of 58 | MD |
| Italy | 37 of 62 | 15 of 32 | 38 of 53 | 6 of 11 | 7 of 14 |
| Slovenia | 135 of 190 | 59 of 88 | 62 of 98 | 14 of 17 | 10 of 16 |
| Spain | MD | 22 of 29 | 777 of 1335 | 123 of 179 | 23 of 34 |

Table 5: Absolute numbers of women participants per action and pilot site
As shown in Figure 1, most of the data for gender-indicator 1 was collected for the Actions HHV, DIY workshops, and CA, whereas some data is missing for HW (and SFS). The data allows for a general estimation of how many women could be reached by every action. Not all activities were implemented in all pilot sites; for example, Spain concentrated on CA and did not gather data for HHV. A very general observation is that Italy and Slovenia implemented all 5 activities and managed to generate data for all of these activities.

Whereas the relative numbers point out a high percentage of women participants for HHV in France, followed by Slovenia, the absolute numbers show that Croatia has in total
reached the highest number of women participants for HHV with 142. This already expels that both relative and absolute numbers are necessary to estimate the impact of gender indicator 1 . This can further be demonstrated when looking at the numbers of the action CA. With $51 \%$, France has the lowest relative number of women participants in comparison to all other pilot sites. But when looking at the absolute numbers, France has mobilised a high number of participants, including the highest absolute number of women participants. The main target groups of the CA in Marseille were visitors to social centres, charitable organisations, local NGOs, university students, and people in vulnerable positions, e.g. working in social companies.

For most actions, a quite high share of women participants could be reached, often at least around $50 \%$. The lowest share of (women) participants was noticed for DIY workshops in Croatia. In Deliverable 4.3, this low share was explained by two factors. On the one hand, due to the Covid-19 pandemic, each DIY workshop was reduced to a maximum number of 10 participants. On the other hand, the underrepresentation of women was explained by the fact that the DIY workshops are classified within the STEM area (known for the underrepresentation of women) and that they were mainly designed for locals interested in PV solar and energy storage devices. At this point, one could question this explanation: It might be the case that more technically oriented workshops would not attract women due to gender roles within society. On the other hand, it can be argued that such workshops are more accessible to women or other social groups than other formats such as Collective Assemblies which require a stronger commitment.

Other high numbers were reached in Community Approaches in Albania (81\%) and in Health Workshops in Slovenia ( $82,4 \%$ ). In Deliverable 4.3 it was mentioned that the CA in Albania particularly addressed the impact of energy poverty on women. Also, a large share of young people between 20 and 40 years old were addressed through a youth unemployment network. Since the unemployment rate of women in Albania is slightly higher than that of men ${ }^{5}$, events addressed to unemployed people would most probably raise the share of women. The high share of women for HW in Slovenia was justified in Deliverable 4.3 by the argument that this activity reached out to nurses - a profession that is dominated by women.

The data for gender indicator 1 demonstrates that all EmpowerMed partners were striving to include women in their actions. As demonstrated by the results of Tables 4 and 5, the share of women is a gender indicator that can easily be measured. But, as also mentioned in Deliverable 4.3, the participation of women in different activities does not lead to a change in their energy consumption immediately. For example, the CA in France reached a high number of participants, including 126 women out of a total number of 247 participants. However, these CAs in Marseille mainly followed an informative approach by raising awareness about energy poverty. To understand patterns of behaviour and monitor a change in women's energy consumption behaviour, a long-term approach would be necessary to generate further data on the ensuing implementation of measures and recommendations (after conducting CA).

Furthermore, such participation would become ineffective when women do not have decision-making power within their own households or in their communities. This leads to the point that not only several gender indicators (1 to 4) must be set in relation to each other, e.g. the participation of women in each activity with the decision-making power at household level. But also the background of the women participating in the distinct project activities, e.g. their socio-economic status, age, household composition, as mentioned in chapter 2, the "Empowermed cross-pilot analysis".

[^2]
### 4.2 Gender indicator 2: Women in charge of taking decisions

Gender indicator 2 "Women in charge of taking decisions" refers to the percentage of participating households in which women are in charge of taking decisions regarding basic supply services. The EmpowerMed survey was distributed during the HHV (see D4.3), so that data for the gender indicators 2-4 have been collected mainly for this activity and only partially for the other activities. This can be explained by the fact that HHV are more immediate/tangible, since they set the conducting project partners in direct contact with the people living in the specific households. The participating households might have been more open to sharing information about their living situation and their energy consumption.

| Action |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | HHV | DIY workshops | CA | HW | SFS |
| Albania | In 35\% of all participating households, women were in charge of taking decisions | MD | MD | MD | MD |
| Croatia | In $33,3 \%$ of HH , women were in charge, in $10,3 \%$ of HH , both women and men | MD | MD | MD | MD |
| France | In 72\% of HH , women were in charge, in of HH , both women and men | In 33,3\% of HH, women were in charge, in $20 \%$ of HH , both women and men | MD | MD | MD |
| Italy | In $40,3 \%$ of HH , women were in charge, in $9,7 \%$ of HH , both women and men | In $\mathbf{2 1 , 8 \%}$ of HH , women were in charge, in of HH , both women and men | MD | MD | MD |
| Slovenia | In $43,7 \%$ of HH , women were in charge, in $10,5 \%$ of HH , both women and men | MD | In 34,6\% of HH, women were in charge | MD | MD |
| Spain | MD | MD | MD | MD | MD |

Table 6: Percentage of participating households in which women are in charge of taking decisions

| Action |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | HHV | DIY workshops | CA | HW | SFS |
| Albania | In 35 of 100 participating households, women were in charge | MD | MD | MD | MD |
| Croatia | In 84 of 252 HH , women were in charge, in 26 of 252 HH , both women and men | MD | MD | MD | MD |
| France | In 18 of 25 HH , women were in charge; in 1 of 25 HH , both women and men | In 5 of 15 HH , women were in charge, in 3 of 15 HH , both women and men | MD | MD | MD |
| Italy | In 25 of 62 HH , women were in charge, in 6 of 62 HH , both women and mer | In 7 of $\mathbf{3 2 ~ H H , ~}$ women were in charge, in 7 of 32 HH, both women and men | MD | MD | MD |
| Slovenia | In 83 of 190 HH , women were in charge, in 20 of 190 HH , both women and men | MD | In 34 of 98 HH, women were | MD | MD |
| Spain | MD | MD | MD | MD | MD |

Table 7: Absolute numbers of participating households in which women are in charge of taking decisions

Tables 6 and 7 show that the decision-making power in households still lies within the hands of men in most pilot sites. The percentage of women in charge of taking decisions is less than 50 percent, except for the pilot site in France with a percentage of $72 \%$. One argument for this high percentage is that France generally seems to have a quite high score on gender equality. For example, in an EU-wide comparison, France ranks 5th on the Gender Equality Index in $2022^{6}$. On the other hand, here must be remarked that HHV in France were only conducted in 25 participating households ( $n=25$ ). In Deliverable 4.3, it is mentioned that the project partners in France concentrated on women-led households for HHV. Hence the quite reduced number has been a sample where the decision-making power of women was comparably high. This observation can be underlined when comparing the results for France for both activities, HHV and DIY. The percentage of women in charge of taking decisions among the DIY workshop participants was 33,3\%. Important to mention is that HHV as well as DIY and HW in France addressed mainly women in vulnerable situations to strengthen their knowledge on energy-saving measures.

[^3]Since Spain concentrated on CA as the main activity, there is no data on the gender indicators 2-4 listed. The reason for not generating data on HHV was to protect the intimacy in terms of someone's living conditions or rather to not enter their private sphere (see Deliverable 4.3). In an EU-wide comparison, Spain ranked $6^{\text {th }}$ on the Gender Equality Index ${ }^{7}$. It would have been valuable to compare the results of Spain and France in regard to gender aspects in the energy supply/decision-making power in HHV.

In Croatia, France, Italy, and Slovenia, women and men share the responsibility of taking decisions. The low numbers of this mutual decision-making (between $4 \%$ and 10,5\%) seem surprising, since one would assume that households discuss about their energy supply to find and plan the best solutions.

### 4.3 Gender indicator 3: Gender of contract-holder

Gender indicator 3 "Gender of contract-holder" refers to the percentage of participating households in which contracts are in the name of women. The figures below give an overview of the collected data on the gender of the contract holder. Most of the data for gender indicator 3 was collected during the HHV. This was the case for Albania, Croatia, Italy, Slovenia and France (all pilot sites except Spain). Additionally, Italy and France collected information for this indicator during DIY workshops, whereas Slovenia and Spain generated such data during the CA.

| Action |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | HHV | DIY workshops | CA | HW | SFS |
| Albania | In $35 \%$ of HH , women were contract-holders | MD | MD | MD | MD |
| Croatia | In $41 \%$ of HH , women were contract-holders, in $2 \%$ of HH , women and men | MD | MD | MD | MD |
| France | In $\mathbf{6 4 \%}$ of HH , women were contract-holders, in $20 \%$ of HH, women and men | In $46,6 \%$ of HH , women were contract-holders, in $26,6 \%$ of HH , women and men | MD | MD | MD |
| Italy | In $45 \%$ of HH , women were contract-holders, in $6,5 \%$ of HH , women and men | In $\mathbf{2 1 , 8 \%}$ of HH , women were contract-holders | MD | MD | MD |

[^4]| Slovenia | In $\mathbf{4 3 , 7 \%}$ of HH, <br> women were <br> contract-holders, in <br> $3,7 \%$ of HH, both <br> women and men | MD | In $\mathbf{3 4 , 7 \%}$ of <br> HH, women <br> were contract- <br> holders | MD | MD |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Spain | MD | MD | In 72,4\% of <br> HH, women <br> were contract- <br> holders | MD | MD |
|  |  |  |  |  |  |

Table 8: Percentage of households in which women are contract-holders

| Action |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | HHV | DIY workshops | CA | HW | SFS |
| Albania | In $\mathbf{3 5}$ of $\mathbf{1 0 0} \mathrm{HH}$, women were contract-holders | MD | MD | MD | MD |
| Croatia | In 82 of 200 HH , women were contract-holders, in 4 of 200 HH , both women and men | MD | MD | MD | MD |
| France | In 16 of 25 HH , women were contract-holders, in 5 of 25 HH , women and men | In 7 of 15 HH , women were contract-holders, in of 15 HH , both women and men | MD | MD | MD |
| Italy | In 28 of 62 HH , women were contract-holders, in 4 of 62 HH , women and men | In 7 of 32 HH , women were contract-holders | MD | MD | MD |
| Slovenia | In 83 of 190 HH , women were contract-holders, in 7 of 190 HH , both women and men | MD | In 34 of 98 HH, women were contractholders | MD | MD |
| Spain | MD | MD | In 55 of 76 HH, women were contractholders | MD | MD |

Table 9: Absolute numbers of households in which women are contract-holders
Here it is already remarkable that the absolute numbers and percentages of gender indicator 3 do not differ much from gender indicator 2 . This indicates that the participants might have interpreted both indicators in the same way, or rather, that holding the contract is often equated with taking decisions.

In Slovenia, holding the contract was equally shared among the interviewed participants; even more so, the percentage of women contract-holders was higher than that of men. Of a total of 190 participants, in 83 cases, women were contract-holders, in 60 cases men,
and in 7 cases, women and men were jointly holding the contract ( 40 of 190 participants didn't answer). This was notified for the activity HHV. Yet, when analysing the gender of contract holders during the CA, a different observation was made. Among the participants of CA, only $34,6 \%$ of the interviewed women were contract-holders. During this activity, a large share of the participants were senior citizens. This may influence how women participate in decision-making, as they may still follow the 'designated' gender roles.

Some differences can be noted between the two activities DIY and HHV in Italy. Among the participants of HHV, $45 \%$ of the interviewed women indicated that they are contractholders, whereas among the DIY workshops participants, only $21,8 \%$ of the women were contract-holders. Hence, the share of women participants, whose name is on the contract, differs significantly between the two activities. A similar observation was made for the French pilot site. In HHV, 64\% of women are contract holders, whereas the percentage of women contract holders among DIY workshop participants was 46,6\%. This observation does not surprise in view of the fact that generally more information about the contract situation could be retrieved during HHV. Additionally, DIY workshops were designed to bring technical knowledge closer to the women and explain energy saving measures. Hence, the women targeted by these workshops might not have been in the position of holding the contract or deciding about the energy supply yet. Generally, DIY workshops are still perceived as technical and often appeal more to men than women (as highlighted in Deliverable 4.3).

However, with a share of $64 \%$, France achieved one of the highest percentages. It was topped by the Spanish pilot site, with a percentage of $72,4 \%$ for CA. As mentioned in regard to gender indicator 2, this does not surprise given the background that both EU Member States have a quite high Gender Equality Index, especially in regard to power and decision-making. Also, the percentage of mutual contract sharing is higher in France than in all other pilot sites. In the "EmpowerMed cross-pilot analysis" it was indicated that French participants seem to have higher knowledge about their energy supply; at least they feel more confident and aware of their energy consumption, even more empowered.

The data shown in Tables 8 and 9 are retrieved from Deliverable 4.3 and do not include information about the composition of the households. Thus, it is unclear if the women participants of the distinct activities were living alone, with a partner and/or children or in the company of other residents. In contrast to this, the "EmpowerMed cross-pilot analysis" demonstrates some linkages between household composition (as shown in Table 3) and women contract-holders.

Looking at Croatia, the interviewed participants were mainly living alone, so in singleperson households or in single-parent families, together representing 61\% (of all respondents, $71 \%$ indicate as women as seen in table 2 and 4). Yet, while the women's participation was high during HHV, still only $41 \%$ of women indicated to be contract holders (seen in Table 9).

According to Table 3, in France and Spain, the countries with the highest percentages of women contract-holders, the household compositions are quite equally distributed. In both countries, a majority of participants live in single-person households (38\% in France, 31\% in Spain), but also mainly in couples with or without children. It seems like the household composition does not correlate too much with holding the contract.

### 4.4 Gender indicator 4: Women in charge of paying energy bills

Gender indicator 4 "women in charge of paying energy bills" refers to the percentage of participant households in which women pay energy bills. The tables below give an overview of the collected data on bills directed to women or to both men/women.

| Action |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | HHV | DIY workshops | CA | HW | SFS |
| Albania | In $\mathbf{3 5 \%}$ of HH , women pay the energy bills | MD | MD | MD | MD |
| Croatia | In $49 \%$ of HH , women pay the energy bills; in 7\% of HH both women and men | MD | MD | MD | MD |
| France | In $\mathbf{7 2 \%}$ of HH , women pay the energy bills; in both women and men | In $46,6 \%$ of HH , women pay the energy bills, in of HH , both women <br> and men | MD | MD | MD |
| Italy | In $42 \%$ of HH , women pay the energy bills; in $12,9 \%$ both women and men | In $\mathbf{1 5 , 6 \%}$ of HH , women pay the energy bills; in of HH , both women and men | MD | MD | MD |
| Slovenia | In $45,3 \%$ of HH , women pay the energy bills; in $13,7 \%$ both women and men | MD | In 34,6\% of HH, women pay the energy bills | MD | MD |
| Spain | MD | MD |  | MD | MD |

Table 10: Percentage of households in which women pay the energy bills

| Action |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | HHV | DIY workshops | CA | HW | SFS |
| Albania | In $\mathbf{3 5}$ of $\mathbf{1 0 0} \mathrm{HH}$, women pay the energy bills | MD | MD | MD | MD |


| Croatia | In 98 of 200 HH , women pay the energy bills, in 14 of 200 HH , both women and mer | MD | MD | MD | MD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| France | In $\mathbf{1 8}$ of $\mathbf{2 5 ~ H H}$ women pay the energy bills, in 1 of 25 HH both | In 7 of 15 HH , women pay the energy bills, in of 15 HH , both women and men | MD | MD | MD |
| Italy | In 26 of 62 HH , women pay the energy bills, in 8 of 62 HH , both women and men | In 5 of 32 HH , women pay the energy bills, in $\qquad$ HH, women and men | MD | MD | MD |
| Slovenia | In 86 of 190 HH , women pay the energy bills, in 26 of 190 HH , both women and men | MD | In 34 of 98 HH, women pay the energy bills | MD | MD |
| Spain | MD | MD |  | MD | MD |

Table 11: Absolute numbers of participating households in which women pay the energy bills

Table 10 shows that only in the case of France, women are in the majority of paying energy bills (with a percentage of $72 \%$ ). In the cases of Albania, Croatia, Italy and Slovenia, the percentage of women paying the energy bills is less than $50 \%$. But one must observe the nuances in these cases.

In Croatia, $49 \%$ of the participants paying the bills are women, and in $7 \%$ of the cases, women and men pay the bills mutually. Hence, in most cases, women are either taking or sharing the responsibility of paying the bills.

Furthermore, Croatia has a quite high absolute number of participants ( $n=200$ ). A similar observation can be made in regard to Slovenia. Slovenia has a high absolute number of participants with 190 households. In 86 of these households (45\%), women pay the energy bills, and in 26 of these households (13,7\%), men and women share the responsibility. $19 \%$ of the participants did not give an answer to the respective question. This means, in the case of Slovenia, a quite high majority were women paying the energy bills. At least this was notified among the participants of the HHV. The participants of CA answered differently: Among these participants, in $34,6 \%$ of cases, women were paying the energy bills, in $60,4 \%$ of cases, men were paying the energy bill. This relates to the numbers in Table 4, since CA in Slovenia attracted fewer women participants than HHV.

Also, in comparison to HHV, distinct observations were made in the case of DIY workshops in France and Spain. For example, a high mutual responsibility - both women and men paying the energy bills - among the DIY workshop participants in Italy was notified ( $34,3 \%$ ). The percentage of women alone paying the energy bills was quite low (15,6\%). So, in the case of DIY workshops in Italy, mainly male participants answered that they were paying the energy bills. It must be remarked here that these workshops in Italy attracted a higher number of men than in other pilot sites. According to Table 5, 15 of the 32 participants were women; probably the other participants were men.

46\% of DIY workshop participants in France were women in charge of paying the energy bill, $40 \%$ of the participants answered they were sharing it mutually with their male
partner. So, both activities - HHV and DIY workshops - in France attracted women who were already aware of their energy supply or rather they dealt with paying the bills.

Albania showed the lowest percentage with $35 \%$. In no cases, the responsibility was shared both by women and men, so the majority of participants paying the energy bills are men. This does not surprise regarding that Albania has the overall lowest participation of women in all activities. As mentioned before, one can assume that this relates to the strong patriarchy within Albanian society. Albania has ratified several international treaties on gender equality or gender mainstreaming, such as CEDAW, the Istanbul Convention and the European Convention on Human Rights. However, Albania ranked 25 (out of 156 countries) in the Global Gender Gap Index ${ }^{8}$ with a score (0-1) of 0.777 (ranked 61 in 2006, but ranked 20 in 2020). In comparison to the other partner countries, this might indicate that gender mainstreaming on a national level has still room for improvement. On the other hand, this estimation has changed for the year 2023 with Albania being ranked $17^{\text {th }}$ with a score of $0.791^{9}$. However, finding reasons for the low participation rate in Albanian activities would rather require an in-depth analysis of the local circumstances and gender roles performed in the Albanian pilot site Vlore.

In addition, Spain took a different approach to collecting data on the empowerment of women. Instead of following the three pre-set indicators, the Spanish project partners focused on: the gender of the contract holder and the gender of the spokesperson during the community approaches. During these sessions, $35 \%$ of the participants, who raised issues and spoke up, were women. Also, in of $35 \%$ cases, women were the holders of energy supply contracts. During these CA, Spain gathered a huge number of participants ( $\mathrm{n}=1340$ ). This was the activity the Spanish project partners concentrated on, thus, other activities such as HHV were not conducted in a similar manner.

## 5. Health condition of women participants

Throughout the EmpowerMed project, besides gender aspects, health was an important focus point. EmpowerMed works to improve the health and well-being of the people by including health practitioners to alleviate energy poverty. The health measures were directed to all genders; nevertheless, it appears worthwhile to take a closer look at the entanglement of gender and health. So, this section analyses how the health measures of EmpowerMed were related to women.

Data on the health conditions were mainly collected through surveys in HHV, reflected in the "EmpowerMed cross-pilot analysis" and throughout the five implemented activities in D4.3. The data did not concentrate on diagnosed diseases, health certificates or any evidence by doctors, but rather on the participant's self-perceived health. Furthermore, mental and physical health aspects were queried.

In addition to the survey, health workshops were given in almost all pilot sites except Albania and Croatia (at least there is no gender-specific data for this activity, HW, for both pilot sites). This activity seemed to differentiate mostly between the distinct pilot sites.

[^5]As mentioned before, the health workshops in Slovenia were not addressed to people in vulnerable situations or people mainly affected by energy poverty, but to the medical staff such as nurses. Hence, it was directed to nurses currently dealing with people in vulnerable situations. The pilot sites of France and Italy focused on raising awareness by implementing educational health workshops about the health consequences of energy poverty. All pilot sites conducting HW had a quite high percentage of women, with high absolute numbers in France and Spain (as seen in Table 5). As mentioned in D4.3, the participation of women was higher when groups in vulnerable conditions were addressed. This was specifically the case in the French pilot site. In Spain, health support groups were set up in relation to the CA, as mentioned in D4.3. Also reported in this Deliverable was that $50 \%$ of the participants in Spain have a disability and $72 \%$ a chronic illness. Generally, the HW as well as discussing health during CA in Barcelona was perceived as a "safe space" by the participants, where mainly women shared their experiences with diseases. To create this safe space or rather a sense of trust, and due to privacy reasons, the answers were not recorded. However, the gender of the participants was registered, showing that more women than men shared their health concerns with the other participants ( $74 \%$ of participants talking about health issues were women). According to gender stereotypes, women tend to talk more openly about private issues, their body as well as emotional topics ${ }^{10}$. Such a behaviour can be described as gender-passing, passing in terms of fulfilling specific gender stereotypes. In the context of sharing health concerns, such gender-passing behaviour does not surprise, since women usually tended to be "carers", taking care of others as well as of their own health.

The "EmpowerMed cross-pilot analysis" delivered some data about health aspects which were not differentiated into genders. This data was collected via surveys during HHV. It was used in all pilot sites except Spain. For example, the following figure, retrieved from the cross-pilot analysis, shows how many participants were suffering from a long-standing illness:


Figure 1: Percentage of participants suffering from a longstanding illness (retrieved from the "EmpowerMed cross-pilot analysis")

Specifically, the people living in Croatia, exhibit the largest share of longstanding illnesses or health problems. Simultaneously, Croatia also displays the largest amount of people living in single households. Participants from Albania and Slovenia indicate to have fewer longstanding illnesses or health problems. On a mental level, the participants in France, Italy and Slovenia indicated feeling well, contrary to Croatia and Albania, where they indicated feeling less well. Another correlation is noted between the level of education and

[^6]the assessment of health. In general, higher education shows better health perception among the participants.

The following Figures 2 to 4 shall provide more information about the women participants of HHV and their answers in regard to health concerns. These answers were retrieved from the surveys, from the question 0.30 "Do you have any longstanding illness or health problem?" (See also the "EmpowerMed cross-pilot analysis" for the complete questionnaire).


Figure 2: Percentage of women participants suffering from a longstanding illness
In accordance with Figure 1, the percentage for each pilot site shows that also mainly women in Croatia suffer from a longstanding illness. Figure 3 allows to compare the absolute numbers, showing that France and Italy had the lowest number of participants (as also observed in all tables). Most of the women participants of Albania answered that they were not affected by a longstanding illness whereas only 9 women do. In relation to Figure 1, one can assume that more men in Albania are facing severe illnesses or that women tend to hide their health issues.


Figure 3: Absolute numbers of women participants suffering from a longstanding illness


Figure 4: Percentage of chronic disorders among women participants of each pilot site
The answers in Figure 4 seem to differ much from the other answers for health-related questions. Figure 4 gives an overview of the percentage of chronic disorders which women participants suffer from.

Among Albanian women participants, several chronic disorders seem to appear. This is remarkable, taking into consideration that only 9 women answered they were suffering from a longstanding illness. The absolute numbers for the questions in terms of longstanding illnesses and chronic disorders do not match. This is made visible in Figure 5.


Figure 5: Absolute number of chronic disorders among women participants of each pilot site

Figure 5 shows that 29 Albanian women participants suffer from high blood pressure, 28 women from migraine or frequent headaches and 28 from depression or anxiety. On the one hand, depression as a mental health might not have been regarded as longstanding illness. On the other hand, more temporary illnesses such as migraine seem to be present among the interviewed women. The high number of chronic disorders is also remarkable in terms of the overall participation rate of women in the different activities, which was lower in the Albanian pilot site than in other pilot sites. Also considering this lower share of women, it is important to mention that especially depression was quite prominent. The absolute number of men suffering from depression in Albania was 10.
The main chronic disorder notified among Croatian women participants was high blood pressure, followed by migraine, depression and then by chronic bronchitis. High blood pressure and migraines can also be symptoms of stress caused by energy poverty.
Besides high blood pressure, French women participants did not indicate other disorders. Here can be assumed that some data is missing or has not been collected.

Osteoarthritis/rheumatism, osteoporosis, chronic lumbar or dorsal back pain were indicated by women participants from Albania, Italy and Slovenia. Osteoarthritis is the most frequently appearing disorder among Italian women participants, and the second most frequently appearing one among Slovenian women participants.

It can be stated that women participants of all pilot sites showed the expected health consequences that come along with energy poverty. Most striking are high blood pressure
as a physical consequence and depression/anxiety as a mental consequence. One can assume that women are more affected by mental load, especially when they are in charge of paying the energy bills while taking care of children.

The above-stated observations are assumptions. To verify the causality between women in energy poverty and their health conditions, the individual cases, the duration of the precarious situation and the symptoms would need to be monitored in more detail. Several women participants answered that they were living in houses without any isolation. But the interlinkage between health issues and other problems in the dwelling, the heating system and cooling system would require a more detailed analysis. This is beyond the scope of this report - among other reasons also because there is missing data on the heating systems and the use of renewable energy by the participating households.

## 6. Discussion and Recommendations

### 6.1 Research design

As has partly been made visible throughout this report, the EmpowerMed project generated a lot of data, not only in terms of gender aspects, health aspects, but also in terms of the household composition, the housing situation, the economic status, the energy supply, and energy saving measures.

Not only several activities (HHV, DIY workshops, CA, HW, and SFS) have been conducted in nearly all pilot sites, but also questionnaires have been distributed. Especially the survey demonstrated in the "EmpowerMed cross-pilot analysis" has built up the base for a thorough research and comparison of the distinct local situations and cultural contexts of each pilot site. A lot of this data allows for an intersectional/intersectional-feminist analysis ${ }^{11}$. For example, questions about the household situation shed light that in Croatia mainly single-person households, single-mother households were taking part in the HHV. As stated above, single-parent households are at high risk of entering into energy poverty, most of them women-led ${ }^{12}$. On the one hand, this can be explained by the fact that women are the main caretakers, hence they take care of their children. When being part of a hetero-couple, married or not-married, they might engage less in paid work. After a breakup or divorce, they have less access to paid work, hence less financial resources. On the other hand, if they are employed, they often receive a lower salary (in accordance with the Gender Pay Gap). Regardless of the previous socio-economic/class status of single mothers, they tend to fall into poverty when taking care of a child or multiple children ${ }^{13}$.

The "EmpowerMed cross-pilot analysis" allowed for generating data about the entanglement of gender and class - at least questions about the academic background, social welfare and social housing were asked. As mentioned in that analysis, single mothers appeared to be put in a more vulnerable situation, since they were often living in social housing or had to rent a building, whereas men had more chances to own a mortgage.

[^7]${ }^{13}$ Ibid.

Possibilities to explore the linkage of gender and class further would have been to ask for the current employment status, the type of work the interviewed women engage in, long-term vs. short-term poverty, support by a "safety net" (families or friends), as well as ethnicity. Ethnicity/race is one important factor when it comes to structural discrimination or even racialised structures. Depending on the background, people migrating to a country might have less access to financial resources because of language barriers, racial stereotypes in the society, or fewer networks to build upon. Important groups that faces poverty and exclusion in Europe are Sinti*zze and Rom*nja. The perspective of Sinti*zze and Rom*nja was partially included in the Albanian pilot site, but it would have been worthwhile to explore the specific barriers they have to face in terms of the energy supply. In terms of the other pilot sites, there is missing information on whether the perspective of Black, Indigenous, People of Color (BIPoC), migrants or refugees had been taken into account.

The intersection between gender and health was elaborated partly in the EmpowerMed project. On the one hand, there was clear data about women suffering from longstanding illnesses, migraines or cardiovascular diseases, as well as from mental health issues such as depression. Not clear is which diseases are mainly caused by energy poverty, e.g. immediately by inadequate heating, and which are caused indirectly through stress, poor housing or being in a precarious situation. A possibility to further elaborate on the linkage of gender and health would be to track the health situation of the same participants for a longer period, in summer and in wintertime. Participants could track their health condition and document it in a weekly journal. This would allow to identify the peaks and see if being stressed is linked to higher energy prices for example.

Although data on several indicators was generated and analysed in terms of intersecting aspects, it was not mentioned nor claimed to use an intersectional approach. In the EmpowerMed project, gender encompasses all actions and activities. So, one of the main project goals - focusing on gender/women - has clearly been met. However, opportunities for improvement would be to highlight the standpoint of the project in terms of gender. Thus, to make clear what kind of gender or feminist approach will be chosen. The EmpowerMed project partners seemed to follow an approach of women's empowerment ${ }^{14}$, and partially gender-mainstreaming, instead of a feminist approach. One reason for this decision is to find a minimal basis for the different project partners and their respective local/national contexts. As mentioned before, gender is a cultural construct and must be set in relation to the political situation of each country (gender policies, backlashes/repression). In cases of politics that oppose gender mainstreaming, it might be challenging to reach people, especially women, when highlighting the topic "gender". Hence, in these cultural contexts, it seems obvious to first concentrate on "women" as a social group to increase participation rates.

However, the Albania pilot site was analysed in terms of Gender Mainstreaming in more detail by the project partners WECF and Milieukontakt ${ }^{15}$. This is an important step which could have been fruitful for all other pilot sites as well. To compare the cultural contexts, an overview of gender policies and gender aspects addressed in energy poverty policies in each partner country could have been created, as well as trying to understand gender

[^8]roles in each country. This could be conducted by a mapping process or by a literature review tracking national gender publications and gender scholars.

### 6.2 Methodology: Measuring Gender Indicators

The EmpowerMed project focused on several Key Performance Indicators, as presented in Chapter 3. Among these, four main gender indicators could have been identified, most of them linked to the KPI "Empowerment of women", as presented in Chapter 4.

This chapter shall discuss the implementation of the KPI. Although main gender goals had been met, some of the KPIs were easier to implement than others.

## KPI "Women's participation" and gender indicator 1

So, for example for gender indicator 1 "share of women participants", the goal was to reach at least 60\% of women as participants throughout the EmpowerMed activities. Besides HHV in Albania, DIY workshops in Croatia and Italy, the share of women was above $70 \%$. The partner organisations of EmpowerMed clearly proved that they made an effort to reach out to the target group. Tailored mobilisation and recruiting strategies were used, as well as networks on the local ground to get in contact with women affected by energy poverty.

## KPI "Empowerment of women" and gender indicators 2 to 4

This KPI includes the number of women leading certain activities. The goal was to see a significant increase (about 30\%). This was measured throughout the project with gender indicators two, three and four. Results from these indicators show lower decision-making among women compared to men regarding energy supplies. In most cases, more men than women are contract holders or in charge of decision-making concerning energy. However, the great interest in the topic, as women participants were usually more numerous, could indicate that they are interested in gaining more decision-making power. As seen in the results, the share of women in charge of energy decision-making is often lower than the participation indicator. Thus, while women may be interested, it could influence the project's final outcome, as women participants might not be able to implement the suggested measures.

The pilot site in Barcelona collected different information regarding empowerment. They did not collect data on the pre-defined indicators. They collected data on the gender of the contract holder, and the gender of the spokesperson during the community approaches. They concluded that women actively participated during the community approaches, as they were raising several issues during the sessions. While this gives interesting insights into the empowerment of women participants, the other indicators were not collected. Which means that the results cannot be compared with each other.

To conclude if the target goal is reached, more research is needed to follow on the progress. This would include asking the same participants the same questions after the implementation of the project measures, as a follow-up. Such an approach would allow to estimate the progress and measure if the goal of increasing women's leadership in activities by $30 \%$ has been met.

As stated in Chapter 4.3, indicators 2 to 4 seemed to be understood in a similar manner by the participants. Hence, they are not separable or selective enough. Furthermore, one can question if indicators such as "women in charge of taking decisions" should be operationalised in a numeric way. More information could have been gathered in a more qualitative way, by asking detailed questions about taking decisions at the household level.

Empowering women is often linked to perceptions of women, by asking questions, e.g. about them feeling seen or respected at home or at their workplace, about them speaking up in groups dominated by men, about them feeling comfortable showing off their skills. Such aspects were discussed in CA in Barcelona; however, they could not have been presented to protect the privacy of the participants. It would have been an asset to carve out the barriers that prevent women from taking active positions in decision-making at the household level. A possibility to get detailed information is to use qualitative approaches, maybe even more ethnographic approaches such as participatory observation. For sure, such an approach would need to take ethical principles into account, but there should be a way to anonymise the data without exposing the intimate or private information of people affected by energy poverty.

## KPI "Economic savings"

Under the KPI "economic savings" also gender-disaggregated data was generated by measuring the economic savings of women-led households in comparison to men-led households. It was estimated how much money could be saved due to energy solutions installed or implemented throughout project activities.

In the present report, this KPI was not discussed, because on the one hand only Albania, Slovenia and Spain indicated cost savings related to the percentage of women. On the other hand, the causality between women-led households as an independent variable and cost savings as a dependent variable is difficult to verify. This would require knowing if the different project activities, e.g., HHV immediately had an impact on women's energysaving behaviour. Such an impact would need to be monitored over a specific period with the same participating households.

## KPI "Investment in renewables"

The goal of the KPI "Investment in renewables" related to gender was to reach 60\% of women participants that would spend $50 \%$ of their investments in renewables. As mentioned in terms of the previous KPI, also here the causality between the decision to invest and the impact of the distinct EmpowerMed activities is hard to track. No sufficient results could be displayed, at least not in the Deliverable 4.3 and the EmpowerMed crosspilot analysis. The number of investments was calculated for all genders, but not disaggregated for distinct genders. A possibility to further explore such a KPI would be to track decisions of women changing their energy supplier to a renewable. Or to track if women invest in renewable energy technologies or if they become a member of an energy community.

## KPI "Development of gender just policies/legislation in the energy sector"

This KPI includes the enumeration of legal initiatives/draft bills/adopted laws and policies recognizing gender equality issues realised during the project's duration. The goal was to reach an increase of $20 \%$. The EmpowerMed project has conducted several advocacy activities, such as reaching out to EU politicians, visiting events and conferences. Furthermore, two Deliverables have been published in terms of gender-just policy recommendations.

However, such a KPI is not quite realistic to be reached. Although several legislative acts might change and politicians were influenced by the EmpowerMed project, it is not measurable if the project itself or rather a combination of several EU projects had an impact on changing EU or national legislation and raising awareness about energy poverty. One possibility would have been to focus on specific legislative acts for specification, e.g. gender-specific aspects are mentioned in energy efficiency directives (e.g EED).

## Quantitative vs. qualitative indicators

Most of the KPIs were evaluated in a quantitative manner. In terms of savings and investments, the percentage was measured. In terms of the KPI "Empowerment of
women", also number of contract holders or women in charge of paying energy bills were assessed.

Qualitative indicators were considered most probably for community approaches or for some questions during HHV. This is surprising when considering that gender is a cultural construct and something that can not only be evaluated via numbers. As previously proposed, possible methodologies could be ethnographic methods such as participatory observation, focus group discussions or conducting in-depth interviews to understand the realities and perceptions of women affected by energy poverty. The EmpowerMed project has done that through communication activities, including women in community approaches, as well as increasing the representation of women affected by energy poverty in public speeches ${ }^{16}$. For future projects, such activities can be made more visible.

Qualitative indicators could be for example:

- Creating equal access to energy efficiency measures, for all genders,
- Reduced barriers for women to take part in community approaches dealing with energy poverty topics,
- Quality of local programs or DIY measures tackling energy poverty, linked to gender,
- New opportunities for women in supplying renewable energy.

A challenge in terms of qualitative indicators is the operationalisation, thus, creating comparable indicators that can be assessed and monitored. Hence, the consortium would need to find a balance between creating comparable data for all pilot sites (quantitative) and a more in-depth analysis about each pilot site (qualitative). For this, a mixed-methods approach is a valid option.

### 6.3 Recommendations summarised

The EmpowerMed project has conducted several gender-related activities with a focus on increasing women's participation and representation, especially focusing on strengthening the capacities of women when tackling their own energy poverty.

In consequence, the EmpowerMed project had quite an impact on women's individual lives, resp. their energy supply. However, gender was one central dimension of the project besides dealing with health aspects and shedding light on summer energy poverty. The following summarised recommendations could be used for further projects which have a gender focus only or want to mainstream gender from the beginning on.

1. Define a scientific or methodological standpoint to enable comparison of pilot sites, e.g., gender-just analysis, intersectional approach, feminist standpoint.
2. A gender analysis of each pilot site by using desk research or interviews, as in the pilot site Albania, can help to understand each cultural context better. Conducting a comprehensive literature review or mapping at the beginning of the project can help to identify gaps related to gender and energy poverty. Such research includes looking at gender roles within society, social inclusion mechanisms, gender equality policies and gender mainstreaming

[^9]on distinct governmental levels, economic factors, or the role of energy suppliers.
3. To generate similar data, all project partners stick to the same KPIs and gender indicators. Agree on a realisable minimum of KPIs (e.g. 5 KPI) - it is important to check on the feasibility of implementing the measures to reach the KPI. Apply numbers to the indicators and stick to the wording.
4. Also, clearly demark the indicators so that they do not duplicate each other. As an example, gender indicators 3 and 4 (gender of contract-holder, women in charge of paying the energy bills) were quite similar.
5. Check for causality between gender aspects and other variables, such as economic savings and investments in renewables. For this, the process must be tracked over a certain period of time with the same participants. This would demonstrate what effect the participation of women in each action has on their energy-related decisions.
6. Define a sample of, for example, 5 women for each pilot site who are taking part in several project activities and who are willing to monitor their own process. They can document their experiences in the activities as well as their changes in energy consumption behaviour. Ensure that the target group includes a diverse range of participants from different socio-economic backgrounds, geographical regions and energy contexts.
7. Use a mixed methods approach by applying qualitative and quantitative gender indicators. The qualitative indicators serve to get more in-depth knowledge about the individual circumstances of participants and understand the reasons for and consequences of energy poverty better. Also, the intersections of different factors, e.g., gender and health, or gender and ethnicity, can be better carved out by this. Quantitative indicators are useful to compare a huge set of data to better compare all partner countries.
8. Conduct a progress analysis, to check the before and after-situation of all implemented activities. This allows for evaluating and monitoring the distinct project activities.

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    ${ }^{3}$ Most of the Empowermed publications deal with a binary concept of gender (men/women) and with sexaggregated data. This data often refers to cis women and men whose gender identity corresponds to the sex they have been attributed with at birth. This might allow to compare the physical or biological conditions. For example, studies have shown that due to their physiology, (cis) women are more heat- and cold-sensitive than men, which may place women suffering from energy poverty at greater risk (Iyoho et al. 2017).

[^1]:    ${ }^{4}$ In the past, several Eurocentric feminist streams and theories - liberal, radical but also Marxist feminism were based on a binary gender conception (men/women). Postmodern or poststructuralist perspectives such as queerfeminism challenged this perception; prominent for a (de-)constructivist position with regard to gender is the scholar Judith Butler. According to this, women and men conform to the roles prescribed by cultural norms and the political context, or rather they perform their gender roles (Butler 1991). This resulted in acknowledging a multiplicity of (fluid) gender identities and sexualities besides men/woman and heteronormativity.

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[^6]:    ${ }^{10}$ Fischer et al. (2018): Gender differences in emotion perception and self-reported emotional intelligence: A test of the emotion sensitivity hypothesis. In: PLOS ONE, 13:1, https://doi.org/10.1371/journal.pone.0190712.

[^7]:    ${ }^{11}$ The term and concept "intersectionality" was shaped by the lawyer Kimberlé Crenshaw in the 1990s. It can be used as an analytical framework to detect inequalities, power dynamics and structures as well as hierarchical patterns among the structural categories such as gender, ethnicity, or the socioeconomic position (Lenz 2008: 158). To analyse such power dynamics, the different structural categories must be set in relation to each other (ibid.). For example, one person might suffer more from discrimination because they are Black and being a woman; the discrimination structures functioning here would be racism and a patriarchal system.
    ${ }^{12}$ Sunnika-Blank, Minna/Galvin, Ray (2021): Single-parents in cold homes in Europe: How intersecting personal and national characteristics drive up the numbers of these vulnerable households. In: Energy Policy, No. 150, pp.1-11.

[^8]:    14 According to Feenstra and Özerol (2021), the three main engendering policy discourses are women empowerment, gender mainstreaming and social inclusion. Women's empowerment was a high focus in the 1970 s and 1980s, especially in development studies. Women's empowerment is a women's-only approach, with the aim to strengthen the capacities of women as one specific social group, for example by enhancing women's rights. In the 1990s, especially with UN conferences such as the 1995 Bejing Platform for Action, the discourse was shifted to focus on gender equality and the relation between women and men (ibid.). In consequence, in the 1990 s/2000s, gender mainstreaming as a multiple-stages process and a holistic approach, to analyse this relationship, was evolved.
    ${ }^{15}$ WECF International (2022): Gender Equality and Energy Poverty in Albania, $9^{\text {th }}$ of February 2022, https://www.wecf.org/gender-equality-and-energy-poverty-in-albania/

[^9]:    ${ }^{16}$ For example, during a session within the frame of the European Sustainable Energy Week in June 2023, an affected women spoke about her experiences with energy poverty, see: EmpowerMed (2023): Empowering women to become active agents in tackling energy poverty, https://www.empowermed.eu/empowering-women-to-become-active-stakeholders-in-tackling-summertime-energy-poverty-21-june-1630-1800/ (last accessed 05.07.2023).

