



WOMEN FOR MARKET UPTAKE OF RENEWABLE HEATING AND COOLING

# CASE STUDIES OF WOMEN LEADING RHC MARKET UPTAKE



Prepared by  
WECF 2021



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 952874.

Disclaimer: The sole responsibility for any error or omissions lies with the editor. The content does not necessarily reflect the opinion of the European Commission. The European Commission is also not re-sponsible for any use that may be made of the information contained herein.



## ***Inventorying and studying successful cases of women driving market uptake in business, policy and society***

**Deliverable 1.3. Case studies of women leading RHC market uptake**

**WP1. Assessing RHC market uptake challenges and developing case studies of women-driven solutions**

### **Project title**

W4RES - Scaling-up the involvement of women in supporting and accelerating market uptake of renewable energy sources for heating and cooling

**Grant agreement: 952874**


From November 2020 to October 2023

**Prepared by: WECF**



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 952874.

Disclaimer: The sole responsibility for any error or omissions lies with the editor. The content does not necessarily reflect the opinion of the European Commission. The European Commission is also not responsible for any use that may be made of the information contained herein.

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

## DELIVERABLE FACTSHEET

|                            |   |
|----------------------------|---|
| <b>Deliverable no.</b>     | 1.3 Case studies of women leading RHC market uptake   |
| <b>Responsible Partner</b> | WECF  |
| <b>WP no. and title</b>    | WP1. Assessing RHC market uptake challenges and developing case studies of women-driven solutions                   |
| <b>Task no. and title</b>  | Task 1.3: Inventorying and studying successful cases of women driving market uptake in business, policy and society |
| <b>Version</b>             | 1   |
| <b>Version Date</b>        | 30/06/2021  |
| <b>Due date</b>            | 30/06/2021  |

| Dissemination level |   |
|---------------------|---|
| x                   | PU = Public   |
|                     | PP = Restricted to other programme participants (including the EC)        |
|                     | RE = Restricted to a group specified by the consortium (including the EC) |
|                     | CO = Confidential, only for members of the consortium (including the EC)  |

## Approvals


|                    |                |
|--------------------|----------------|
|                    | <b>Partner</b> |
| <b>Author/s</b>    | WECF           |
| <b>Task Leader</b> | WECF           |
| <b>WP LEADER</b>   | WR             |

© W4RES Consortium, 2020

Reproduction is authorised provided the source is acknowledged.

## DISCLAIMER OF WARRANTIES

*“This project has received funding from the European Union’s Horizon 2020 research and innovation programme under Grant Agreement No 952874”.*


|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

## ABBREVIATIONS

AT = Austria  
 BE = Belgium  
 BG = Bulgaria  
 DE = Germany  
 DK = Denmark  
 EL = Greece  
 IT = Italy  
 RE = Renewable energy  
 RES = Renewable energy solutions  
 RHC = Renewable energy in heating and cooling  
 SK = Slovak Republic

## PARTNERS SHORT NAMES

| Short Name    | Name  | Country  |
|---------------|---|----------|
| <b>Q-PLAN</b> | Q-PLAN INTERNATIONAL ADVISORS PC                | Greece   |
| <b>APRE</b>   | AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA | Italy    |
| <b>CIVI</b>   | CIVIESCO SRL                                    | Italy    |
| <b>S2i</b>    | STEINBEIS 2I GMBH                               | Germany  |
| <b>WECF</b>   | WOMEN ENGAGE FOR A COMMON FUTURE EV             | Germany  |
| <b>HFT</b>    | HOCHSCHULE FUR TECHNIK STUTTGART                | Germany  |
| <b>EUREC</b>  | EUREC EESV                                      | Belgium  |
| <b>WR</b>     | WHITE RESEARCH SPRL                             | Belgium  |
| <b>PEDAL</b>  | PEDAL CONSULTING SRO                            | Slovakia |
| <b>EAP</b>    | ENERGY AGENCY OF PLOVDIV ASSOCIATION            | Bulgaria |
| <b>EGC</b>    | EUROPEAN GREEN CITIES APS                       | Denmark  |
| <b>ECWT</b>   | EUROPEAN CENTRE FOR WOMEN AND TECHNOLOGY        | Norway   |

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

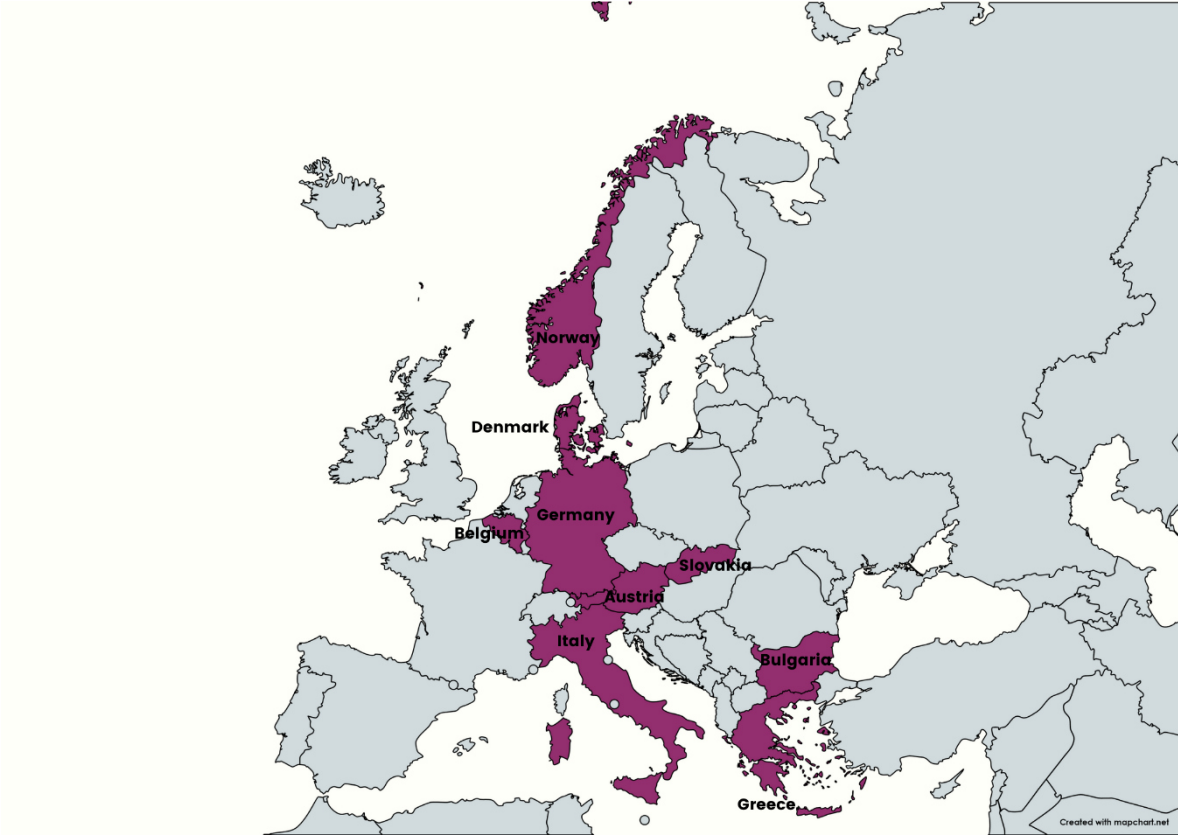



Figure 1: Map with partner countries

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |


## TABLE OF CONTENT

|   |    |
|---|----|
| Introduction .....                                  | 6  |
| Methodology.....                                    | 7  |
| Description .....                                   | 9  |
| General information.....                            | 10 |
| Support measures and targets to empower women ..... | 10 |
| Drivers .....                                       | 11 |
| Barriers.....                                       | 11 |
| Gender instruments .....                            | 12 |
| Transferability and impact .....                    | 13 |
| Needs .....   | 13 |
| Synthesis .....                                     | 15 |
| Best practices.....                                 | 18 |
| Recommendations .....                               | 19 |
| Conclusion.....                                     | 20 |
| Annexes.....  | 20 |
| References .....                                    | 21 |

## LIST OF FIGURES

|   |    |
|---|----|
| Figure 1: Map with partner countries .....  | 4  |
| Figure 2: Categories for the synthesis matrix.....  | 9  |
| Figure 3: Type of organization, represented by interviewee .....                          | 10 |
| Figure 4: Support measures for women's empowerment .....                                  | 11 |
| Figure 5: Most mentioned barriers .....   | 12 |
| Figure 6: Transferability of case studies.....  | 13 |
| Figure 7: Needs and instruments to increase the share of women in the energy sector ..... | 14 |
| Figure 8: Interviewees' statements about role models.....                                 | 16 |
| Figure 9: Personal experiences shared in the interviews.....                              | 16 |
| Figure 10: Overall ranking .....  | 18 |



|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

## INTRODUCTION


---

Research and experience increasingly demonstrate the benefits of integrating women’s needs and gender considerations into the energy value chain and throughout the power, heating and cooling and mobility sector. When the barriers that prevent women from having equal access to energy and economic opportunities are removed, significant productivity gains are unlocked, thereby strengthening development and economic outcomes. Additionally, women are transforming the energy sector in their roles as energy entrepreneurs, innovators and decision makers. Gender mainstreaming and women’s empowerment in the energy sector is gaining traction globally—from international commitments to national policies, institutional reforms and project approaches. Moving beyond recognizing women as only users of energy towards acknowledging their potential to formally participate in the sector as providers and decision makers will result in increased opportunities for women and men to benefit fully from the energy sector’s economic and investment opportunities and will push an ambitious energy transition. We see many approaches, instruments and policies which are partially applied (IRENA, 2019). W4RES taps into this potential to support the uptake of renewable energy in heating and cooling (RHC), a market that urgently needs to shift more to Renewable energy solutions (RES). The report describes and evaluates case studies of women driving market uptake of RHC solutions. It also outlines the methodology employed for the development of the case studies and the approaches are comparatively assessed to reveal key enabler and barriers along with how they diversify across regions.

In a first step the partners in the project countries identified successful cases (based on desk research, leads from consortium partners and insights from former tasks 1.1 and 1.2), using an agreed table. WECF has defined the criteria and created the “case study selection table” (annex #1) with guidelines for its completion. Partners involved in this task identified at least 5 cases from their region and scored them on the defined criteria. The highest ranked cases served as case studies. The partners were asked to further develop 3 case studies in their regions while undertaking in-depth interviews with the relevant stakeholders based on guidelines and a structured interview (annex #2) and complementary desk research.

They used structured interview as case study template prepared by WECF to ensure uniformity of results. The cases cover multidimensional contexts. The results and evaluation of the case studies against defined parameters are shown in the synthesis matrix (annex #3) to facilitate a comparative overview. The generated insights of success factors and barriers will support to develop tailored measures for pushing the uptake of RHC within the W4RES project and in the market in general.

All partners were able to identify interesting case studies based on the criterion of the “case study identification table”. It is worth noting that it was rather difficult to conduct interviews with at least 3 selected partners. Some partners were struggling to schedule meetings for the interviews or to find interested people involved in the case studies because of time constraints, too many online meetings, the COVID19-situation, etc. We have finally been able to conduct 23 in-depth interviews and still expect 3 more interviews. Overall, the multidimensional analysis of the case studies highlights valuable and helpful insights and patterns in the systems and mechanisms of women’s driven RHC initiatives, concepts, research and solutions.

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

## METHODOLOGY

---


In total, 23 interviews were conducted with women (co-)leading or initiating RHC concepts in 8 different countries (IT, DK, EL, SK, AT, DE, BE, BG) that served as the background material for this report. The Norwegian partners still needs to provide the case studies from their region. We also decided to interview Austrian stakeholders to take advantage of their relevant experience despite Austria is not covered by W4RES. Before conducting the interviews, the W4RES partners were asked to identify case studies. We created an identification table to facilitate the establishment of relevant case studies. This table included the following categories:

- Structure of the organization
- Geographical outreach
- Visibility and interaction on social media
- Financial power
- Source of RE
- RHC concepts

It moreover entailed a scoring section in which the case studies were ranked according to:

- **Technical innovation:** The criteria refer to specific and innovative technologies: Is the case study a great and unique idea? Does it break new ground? Does it significantly enhance existing practices? and technical concepts?
- **Social innovation:** Applying new social practices that aim to meet social needs in a better way than the existing solutions, e.g. including topics like gender, socio-economic situation, a variety of actors.
- **Transferability:** Is it restricted for any local reasons? Can it be upscaled in the region or can it be easily replicated elsewhere?
- **Societal impact:** The criteria refer if the case study applies awareness raising/educational activities with campaigns, trainings, networks to show successful women in the RHC sector and thus reducing stereotypes and increasing acceptance of RHC in the broad citizenship.
- **Political impact:** The case study pushes active political advocacy and policy work to influence the uptake of RHC through appropriate policies and public awareness raising measures
- **Market potential:** The case study increases the market potential (total demand for the product/service within the business environment) and user acceptance.
- **External communication:** The case study is using communication (website and further channels) through which women are addressed directly and/or through which stereotypes are avoided (i.e. no language, only male pictures, content).
- **Female leadership and influence:** Women play(ed) an important role for the foundation of the case study and/or had/have still a strong influence on the development. Also considering cases led by men where women have an active (not necessarily a leading) position
- **Internal support measures for women:** Estimation if the organisation/case study has implemented support measures for women internally, e.g. trainings, quota, equal payment, support for child care, mentoring programs, etc.




|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

Our partners interviewed the female leaders and stakeholders in the organizations that ranked highest in the case study identification tables. These women were asked to reflect on the impact of their RHC solutions, the role of women in the organization, the support measures targeting women, as well as potential barriers and needs. Table 1 summarizes the interviews.

| Country   | Stakeholder Group | Role of the Interviewee      | Overall ranking* |
|---|-------------------|------------------------------|------------------|
| Denmark   | Authority         | Environmental advisor        | 0                |
| Greece  | Authority         | Mayor                        | 0                |
| Greece  | Authority         | Mayor                        | 2                |
| Germany   | Authority         | Head of Departement          | 1                |
| Bulgaria  | Authority         | Department manager           | 1                |
| Italy   | Business          | Sales director               | 0                |
| Denmark   | Business          | Architect, urban planner     | 0                |
| Slovakia  | Business          | Power Engineer, Board member | 1                |
| Slovakia  | Business          | Head of Departement          | 1                |
| Austria   | Business          | Director                     | 1                |
| Austria   | Business          | Head of Departement          | 2                |
| Germany   | Business          | Board member                 | 1                |
| Germany   | Business          | Management board             | 1                |
| Belgium   | Network           | Deputy CEO                   | 2                |
| Belgium   | Network           | Managing director            | 1                |
| Belgium   | Network           | Head EU research project     | 1                |
| Denmark   | NGO               | Project manager              | 2                |
| Slovakia  | NGO               | Coordinator                  | 1                |
| Italy   | Research          | Senior researcher            | 1                |
| Italy   | Research          | Researcher and CEO           | 1                |
| Greece  | Research          | Professor                    | 1                |
| Bulgaria  | Research          | Chair of managing board      | 1                |
| Bulgaria  | Research          | Manager                      | 0                |
| *<br>0 =gender issues are neglected and/or focus on RHC is too weak<br>1 = gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important issue<br>2 = framework for gender issues and/or RHC is an important issue |                   |                              |                  |

Table 1: Summary of the interviews

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

The interview material was coded manually and collected in the synthesis matrix. This overview facilitates cross-case comparison and allows to see patterns for barriers and success factors. It provides a visual representation of the main concepts and ideas that were discussed in the interviews. The synthesis matrix is moreover helpful when it comes in identifying case studies and measures that support women in leading the RHC uptake. A highly simplified version of the table is pictured below and showcases what broad categories the interviews covered. The complete version of our synthesis matrix, on which this report is based, can be found in Annex #3.

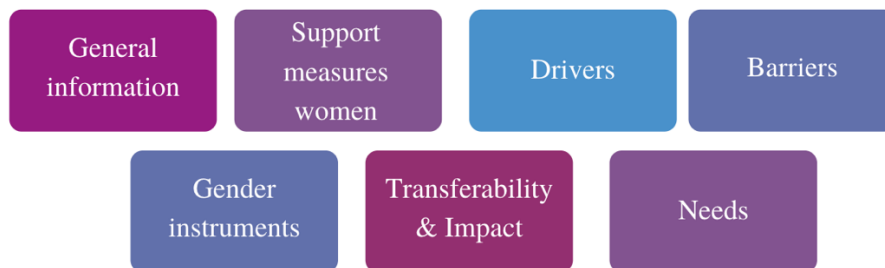


Figure 2: Categories for the synthesis matrix


The table entails a ranking and the different scores on RHC innovation potential, impact for women, strength of gender instruments, replication potential, as well as an overall ranking. A special focus was placed on the impact of gender instruments, such as diversity quotas, the existence of a women’s representative, gender-sensitive communication strategies and others. The answers of the in-depth interviews served as the basis for our synthesis matrix and allowed to develop the report on hand.

## DESCRIPTION

---

Case studies can be initiated, led, co-led or driven by women as company, network, authority, research project, or even as product. The role of women is anyhow strong and visible within this context. Due to the broad qualitative approach, we see a different role of women in the selected cases.

The case studies are meant to represent the diversity of renewable heating and cooling concepts within European countries. They cover geographical scopes from urban to rural, various financing schemes (profit and non-profit in the public and private sector) as well as a vast array of technologies and renewable energy sources (ranging from wind and solar and relying on heat pumps and various other technologies). We will henceforth refer to the case studies as organizations, given that they cover companies, universities, authorities and other contexts.

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

## General information

The general information provides basic information about the interviewee, the role and background and also describes the basic concept of the case study. The unique selling points of the case study are shown and also outcome referring to female leadership, women’s empowerment and inclusion of more women. The interviewees represent a good variety of different organizations. Business, research and authorities represent the majority. Also stakeholders from networks and NGOs provide input about concrete case studies (Figure 3). The majority of the interview partners (78%) hold a leading position in their organization. We see high expertise in various technologies like solar and wind energy, hydro power, heat pumps, boilers and also recycling. When asking about unique selling points there is a clear priority for 100% renewable energy and regionality.

When asking the strength of the concept referring to female leadership, women’s empowerment and the inclusion of more women, we see more general arguments like better economic results, better communication, inclusive work environment, social acceptance and visibility.

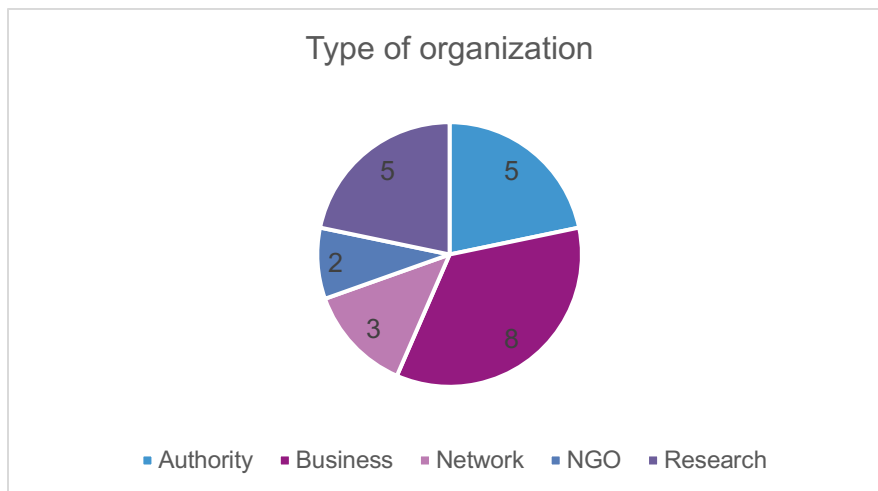



Figure 3: Type of organization, represented by interviewee

## Support measures and targets to empower women

All interviewees are very strong and powerful women in different sectors in the energy field with a different understanding of support measures. More than the half of the interviewees do not have or do not know about women’s empowerment measures in their organizations like quotas, flexible working hours, carrier programs (Figure 4). In municipal and administrative organizations the share of female staff members and management positions is very high and the interviewees have diverse opinions if further measures are necessary or not.

As most important support measures to empower women are mentioned:

- Gender-inclusive recruiting

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

- Flexible time models and childcare options
- Gender-sensitive communication
- Trainings for women (women’s empowerment)
- Trainings on gender (for all to demonstrate the relevance of gender instruments)
- Trainings for children (starting very early and attract interest for STEM)

Even in organizations with a high share of women in different levels most of the interviewees agrees on the necessity of this measures.

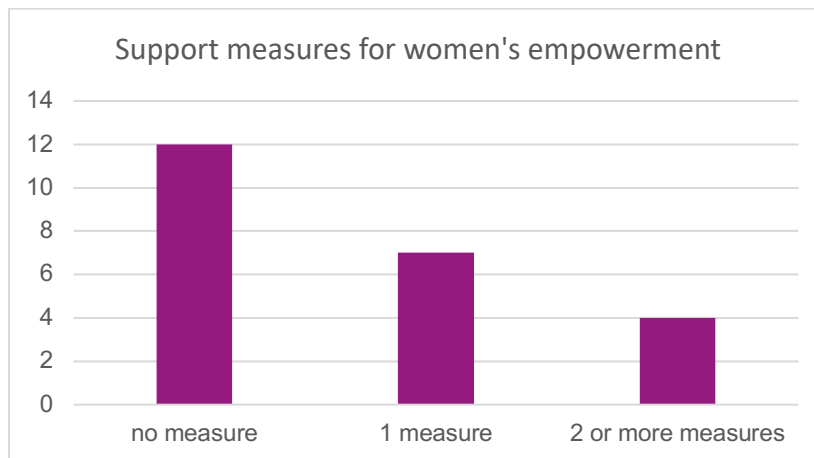


Figure 4: Support measures for women's empowerment


## Drivers

The interviewees were asked to describe the internal and external drivers that inspired them to take the position they currently have. Most of the interviewees had intrinsic motivations (65 %) to pursue their career in the renewable energy sector and only very few stated that personal reasons (e.g., family moving to a new city) shaped their career paths. Intrinsic motivation oftentimes referred to the sustainability context of RHC and the belief that renewable energy technologies and concepts are urgently necessary and will shape our future.

The national legal framework was an important external driver for a high number of women in the case studies. Political support, rising demand for green technologies, as well as different funding schemes were identified as additional drivers.

## Barriers

A central point of interest were the barriers that hindered the uptake of renewable energies and the involvement of women in this process. The most prominent barrier seems to be a lack of funding, which is especially problematic given the high costs of green technologies and the long-term investment planning. A large number of interviewees moreover criticized that long and complicated bureaucratic processes slowed down work and that policy stakeholders’ support for RHC is limited. Regarding the specific support of women in the RHC sector, it appears that female role models and

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

support for gender policies is largely missing. This is confirmed both for the organizational context as well as the broader legal and political framework.

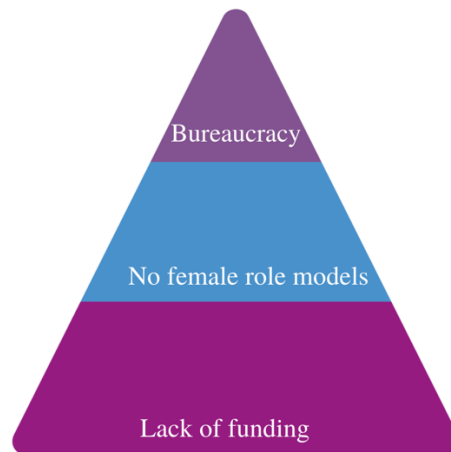



Figure 5: Most mentioned barriers

## Gender instruments

Our in-depth interviews sought to map which measures the organizations implemented to foster the involvement of women. Gender measures can be implemented in the form of various instruments, such as gender-just communication or gender quotas. Most of the respondents stated that their organizations had no diversity quota or a gender representative, which are two of the most common gender instruments. We were however pleased to hear that in most organizations the share of women was well above 30% and several women were employed in leading positions. Unfortunately, this does not yet represent the distribution in the overall energy market. The ‘Women, Gender Equality and the Energy Transition in the EU’ report from 2019 (EU), suggests that in Europe in 2016 women represented on average 35% of the workforce in the renewable energy sector. While women perform better in the renewable energy workforce, their share of employment falls below that of the economy at large, which is 40 to 50% in most of the OECD countries. Women are particularly underrepresented in STEM-related jobs (28%), a much lower share than in administrative jobs (45%) (Clancy, Daskalova, Feenstra, 2017).

Only a third of the organizations reviewed in the case studies had made efforts to implement gender-just communication. One interviewee assured that their company *“makes sure that its communication (visual and text) material is respectful of diversity and obviously gender is part of this. „*

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

## Transferability and impact

Many case studies identified regionality as unique selling point. On the other hand, the interviewees see potential of replication and transferability for many of their case studies. The case studies are successful in their regions but could be transferred to other regions and upscaled to more organisations. The gained experience with instruments, needs and barriers can be shared via mutual learning, considering cultural and organizational factors.

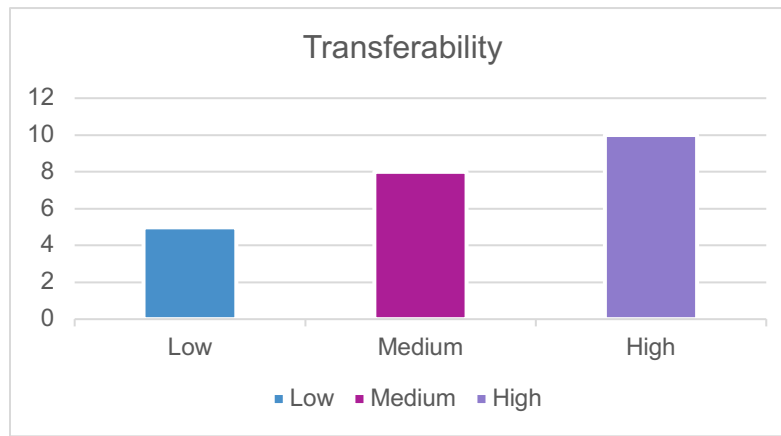



Figure 6: Transferability of case studies

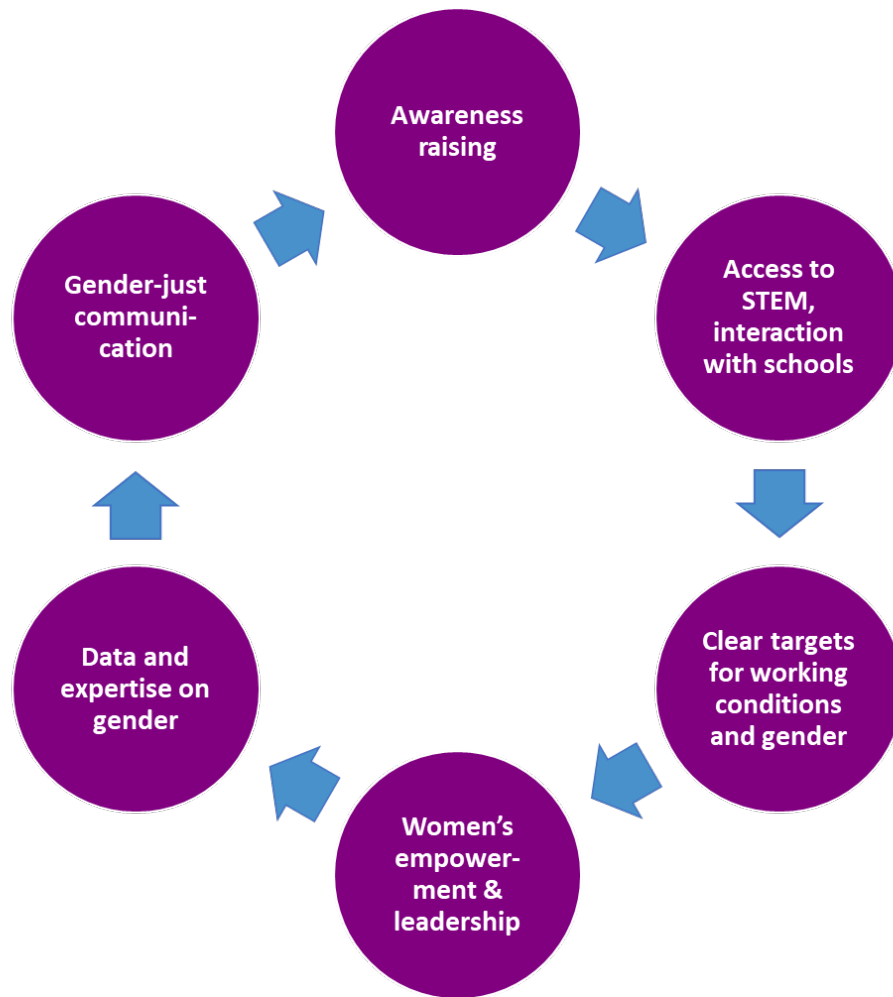
## Needs

The majority of the interviewees has a common understanding about the needs and recommendations to increase the share of women in the energy sector and particularly in the RHC sector. Overall, it needs to raise more awareness about the female share in the RHC sector. Many actors are convinced about the necessity but they are lacking concrete tools and experience and also longstanding backing from the management. Long-term measures are cooperation with schools, girls' days, robo.camps like a few of the interviewees are regularly organizing. Family-friendly and inclusive working conditions are established in bigger companies and authorities and show a positive impact on the female share in all levels of the organizations. The interviewees are very qualified with high expertise. Women's empowerment needs to include networking and mentoring to overcome the glass ceilings and structural barriers and stereotypes they face in their professional context. Proving data and arguments about the relevance and advantages to have more women on board is also for many successful women an important measure, as well as good working atmosphere in diverse teams, economic success with more women in the management board, using the expertise and experience of women. Gender inclusive communication to address skilled and motivated women is a very important tool and should be increased in various forms to make women




|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

as role model visible, to avoid stereotypes, to recruit all women and men, to show more active women in the energy sector. Nearly all interviewees are convinced to put more effort on inclusive communication instruments. An innovative proposed example is to work on inclusive training material on the level of the European heat pump association and to organize a campaign to address more women for the important technology of heat pump because this sector is mainly covered by male engineers, energy consultants and heat pump experts.



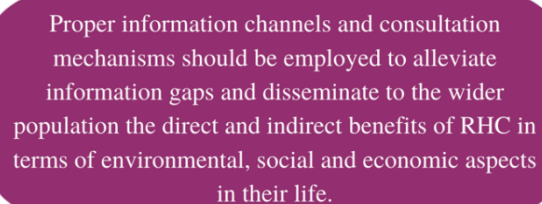
*Figure 7: Needs and instruments to increase the share of women in the energy sector*

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

## SYNTHESIS

---


Roughly half of the respondents asserted that they would like to expand gender measures with the necessary support. They indicated that **gender trainings and awareness raising campaigns would be some of the most helpful external support measures**. The interviews illustrated how awareness raising could positively contribute to the uptake of RHC solutions. One interviewee stated that:



Proper information channels and consultation mechanisms should be employed to alleviate information gaps and disseminate to the wider population the direct and indirect benefits of RHC in terms of environmental, social and economic aspects in their life.

Our interviews also dived into **recommendations** to increase the share of women in the RHC sector. The three most popular options were the **provision of clear gender targets, awareness raising measures and finally stimulating the access of women to STEM** in general. According to the interviewees this last step could be achieved by gender-inclusive communication and recruiting, fostering early on training through interaction with schools and providing positive role models. Other instruments the women mentioned were **team building efforts, a gender-inclusive work-life-balance design** (e.g., family and home office options), as well as **community involvement**.

Many interviewees emphasized the importance of sharing success stories of women in the RHC sector whilst simultaneously refraining from portraying stereotypes (as for example “Women are not interested in technology and energy”). They moreover stressed that their position as leading position in the RHC sector required both courage, self-efficacy and confidence and facing with resistance. Many interviewees stated that women often lacked the self-confidence to pursue careers in the STEM sector. This could be counteracted by introducing positive role models and raise awareness on the possibilities a career in RHC can have for women.

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

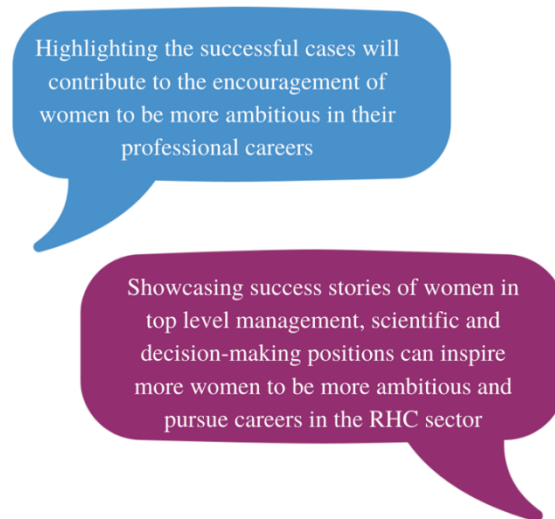



Figure 8: Interviewees' statements about role models

Throughout the interviews it was noticeable that many of the respondents did not view gender instruments as important and did not engage critically with the low number of women in their field of work. When asked why they had not yet implemented gender-targets one interviewee for instance stated: *“RHC is a predominantly male dominated sector and even more so than other engineering related sectors, engaging with mechanical engineers professionals brings the proportional of women even lower.”*

Others had however noticed the lack of gender-justice and a few had even experienced it first-hand.




Figure 9: Personal experiences shared in the interviews

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

The table shows that only for four case studies, gender and/or RHC is important and established within the organization. That experience and knowledge will be used in the W4RES project when developing the capacity building activities.

| No. | Organisation type | Innovation Potential of RHC | Impact for women | Gender Measures       | Evaluation replication potential |
|-----|-------------------|-----------------------------|------------------|-----------------------|----------------------------------|
| 1   | Authority         | 1                           | 2                | 1 (attention)         | 0 (= low)                        |
| 2   | Authority         | 1                           | 0                | 0 (no attention)      | 0 (= low)                        |
| 3   | Authority         | 2                           | 1                | 2 (concrete measures) | 1 (= medium)                     |
| 4   | Authority         | 2                           | 1                | 1 (attention)         | 2 (= high)                       |
| 5   | Authority         | 1                           | 0                | 1 (attention)         | 1 (= medium)                     |
| 6   | Business          | 1                           | 0                | 0 (no attention)      | 1 (= medium)                     |
| 7   | Business          | 2                           | 0                | 0 (no attention)      | 2 (= high)                       |
| 8   | Business          | 2                           | 0                | 0 (no attention)      | 1 (= medium)                     |
| 9   | Business          | 1                           | 0                | 0 (no attention)      | 2 (= high)                       |
| 10  | Business          | 1                           | 1                | 0 (no attention)      | 2 (= high)                       |
| 11  | Business          | 2                           | 2                | 2 (concrete measures) | 2 (= high)                       |
| 12  | Business          | 1                           | 1                | 1 (attention)         | 2 (= high)                       |
| 13  | Business          | 1                           | 0                | 0 (no attention)      | 1 (= medium)                     |
| 14  | Network           | 2                           | 1                | 2 (concrete measures) | 2 (= high)                       |
| 15  | Network           | 2                           | 0                | 1 (attention)         | 0 (= low)                        |
| 16  | Network           | 1                           | 1                | 1 (attention)         | 0 (= low)                        |
| 17  | NGO               | 2                           | 2                | 2 (concrete measures) | 2 (= high)                       |
| 18  | NGO               | 1                           | 0                | 0 (no attention)      | 2 (= high)                       |
| 19  | Research          | 2                           | 0                | 0 (no attention)      | 1 (= medium)                     |
| 20  | Research          | 0                           | 2                | 1 (attention)         | 2 (= high)                       |
| 21  | Research          | 2                           | 0                | 0 (no attention)      | 0 (= low)                        |
| 22  | Research          | 2                           | 1                | 0 (no attention)      | 1 (= medium)                     |
| 23  | Research          | 2                           | 0                | 0 (no attention)      | 1 (= medium)                     |

*Table 2: Overall potential and gender impact*

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake | Version: 1     |
|   | Author: WECF   | Date: 30/06/21 |
|   | Reference: D1.3 W4RES ID GA 952874                             |                |

## BEST PRACTICES

Based on our analysis of the data from interviews, we have developed an overall ranking that allows us to identify best practices. The ranking rates on a scale from 0 to 2 the extent to which gender issues are considered in the interviewees' organization as well as the organizational focus on renewable heating and cooling technologies. Only four cases were rated with a 2, which indicates that the organization has a framework for gender issues and/ or they have a strong focus on RHC.

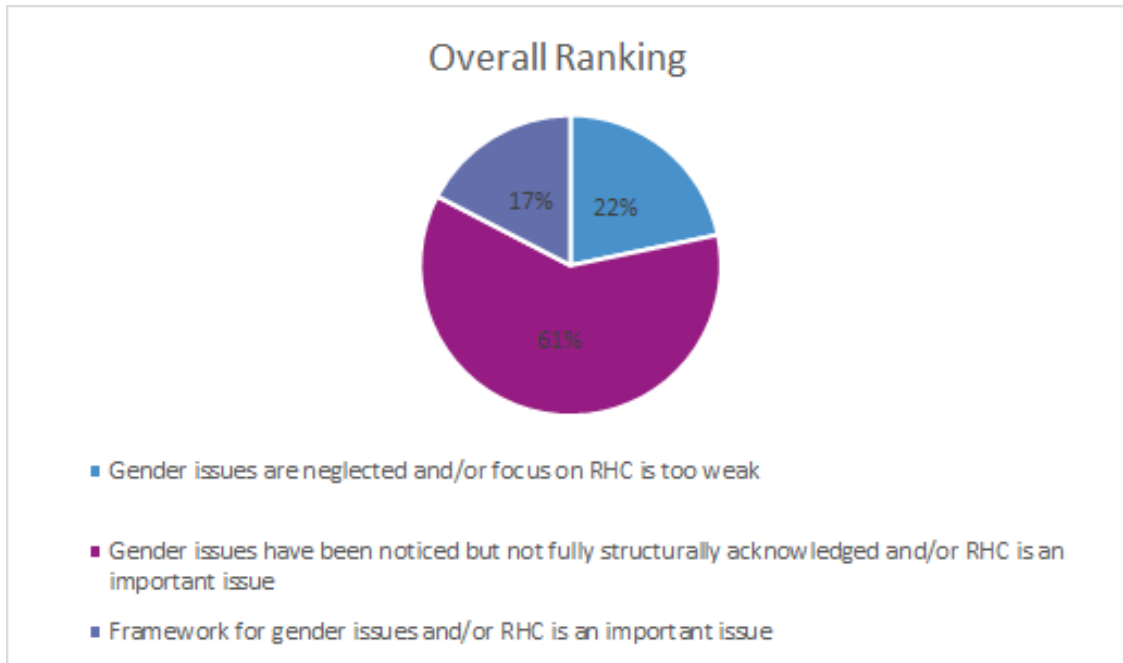



Figure 10: Overall ranking

The cases WHITE#1, Q-PLAN#2 and WECF#2 were selected as best practices examples. A number of common issues were identified. In the three cases, women occupy leading management positions, which is perceived as a major driver of change. When talking about specific measures favouring women's participation in the energy sector, a common view amongst interviewees was that time flexibility and measures related to childcare are key aspects. In this regard, one of the interviewees stated that *"The office hours schedule was created for single-income families that are often not there anymore and does not take into account contemporary family life"*. Considering this, flexibility is deemed an essential part of the wellbeing policy of the organization.

Moreover, she elaborated on the importance of women's visibility in public events and, in general, in the sector. According to the interviewee, **women's visibility and participation in decision-making spaces benefit companies because it allows a more encompassing view on strategic issues such as the relationship between societal problems and market-related benefits or productivity concerns.** A similar view was observed by the other respondents, who further argued that *organizations with a female approach* tend to be more cooperative and inclusive.

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

Gender-sensitive communication also emerged as a primary concern in the selected organizations. Strategies such as gender-sensitive job ads, avoiding stereotypes in campaigns and communication materials, and developing internal guidelines have been put in place. The organizations have also experience in campaigns for raising awareness and promoting the early engagement of girls to participate in the energy sector. For example, one of the interviewees stated that an ongoing projects of her organization aims to promote participation in STEM because “*the future is female*” but it also draws attention to diversity in a broader sense.

## RECOMMENDATIONS


---

As already stated clear targets for women’s empowerment, awareness raising and communication measures and stimulating the access of women to STEM in general are broad recommendations mentioned by the interviewed experts.

More concrete ideas are listed below and can be implemented in the W4RES project:

- **“Early education and access to STEM”** is a longstanding measure, starting with kids, students and young women and implement programs (there are existing concepts) through interaction with schools and universities to attract interest in a STEM related education
- **Removing the barriers with clear targets:** This will also include policy recommendations for a supportive environment on national and EU-Level in the form of family-friendly measures and career development. Improving gender diversity and women’s share in the workplace is predominantly an issue for individual companies and other organizations, however, governments have an important role to play to incentivize action in this field. Numerical goals for more women can be an important indicator of progress, e.g. targets for recruitment of new staff, greater gender balance in the workforce and management boards in particular (ILO, 2017). For policy recommendations the European Green Deal could be used as overall framework emphasizing increased energy efficiency and a renewable energy based power, heating, cooling and mobility sector.
- **Empowerment and leadership** for women with trainings and capacity building activities for all sectors of the energy sector (e.g. including funding, technologies, etc.). Many interviewees stated that women are already very well educated and but also need business and technical support, motivation to take over leadership and responsibilities as well as coaching and mentoring programs for female entrepreneurs. Also, the participation in professional conferences and networking events needs to be supported.
- **Information and data** about the needs and advantages of women’s participation allow their talents to be fully utilized. Different target groups (vocational schools, companies, universities, umbrella organizations, media, and consumers) will be reached out with the **capacity building program** in WP4.
- **Gender-inclusive communication** and recruiting have a high potential and are “low hanging fruits” that can be implemented without additional budget. **More visibility** will show the different success stories of women in the RHC sector. Many women are active in the diverse fields in the RHC markets but not very visible at all. Think about integrating/also targeting women in the campaigns. Also campaigns with European umbrella associations (like for heat



|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

pumps) is a very concrete idea to realize measures and to address all experts and consumers.

- **Projects like W4RES:** Some of the interviewees are interested and available giving input at training activities and mutual learning sessions. Since the W4RES activities are including measures for “business support”, “technical support”, “capacity building” and “awareness raising” the input and lessons learned from the case studies will be included and the resources of the experts can be used as trainers, mentors.

## CONCLUSION

---

The interviewees showed a broad range of women pushing RHC concepts, networks and research. The financial (lack of funding for RHC solutions), personal (no female role models), regulatory (too high bureaucracy) and structural (missing family and gender programs, glass ceiling) barriers were addressed very clearly and also measures to support and empower women. The energy transition towards 100% renewable energy can be a fertile ground and presents a significant opportunity to address the gaps for women’s representation after the centralized fossil-based energy model. **To be truly transformative, energy access and the energy sector must be linked with an agenda that challenges stereotypes of the role of women and that advances their rights, dignity, visibility in their different roles as consumers, producers, investors, experts, mothers, and change agents.** This means real agency in participation, recognition and decision making to set policy agendas and to implement women’s promoting measures in projects like W4RES. Considering the long operational life of energy infrastructure (e.g. heating systems, energy efficiency measures in buildings), not mainstreaming gender will reinforce inequalities for decades, wasting limited financial, social and human resources and missing ecological chances.

Still far away from an equal representation of women in the energy system and particularly in the RHC sector the in-depth interviews showed great good practices and the relevance of leadership, women’s empowerment, communication and awareness raising which will be implemented in W4RES.


## ANNEXES

---

Annex #1: Case study selection table with all identified case studies

Annex #2: Structured interview guideline for in-depth interviews

Annex #3: Synthesis matrix with data of interviews

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

## REFERENCES


---

Clancy, Joy, Viktoria Daskalova, Marielle Feenstra, Nicolo Franceschelli, and Margarita Sanz. Gender perspective on access to energy in the EU. Study, Brussels: EU, 2017.

European Union. *Women, Gender Equality and the Energy Transition in the EU*. European Union, 2019. Policy Department for Citizens' Rights and Constitutional Affairs Directorate General for Internal Policies of the Union. Access: [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/608867/IPOL\\_STU\(2019\)608867\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/608867/IPOL_STU(2019)608867_EN.pdf)

ILO. *Gender Diversity Journey: Company Good Practices*, Geneva: ILO, 2017.

IRENA. *Renewable Energy: a Gender Perspective*. Abu Dhabi: IRENA, 2019.

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |



*In-depth questionnaire for further development of women-driven or gender-just ‘organisations/concept’”\*)*

*“Scaling-up the involvement of women in supporting and accelerating market uptake of renewable energy sources for heating and cooling”*


*GA Number 952874*

*WP1 - T1.3 “Inventorying and studying successful cases of women driving market uptake in business, policy and society”*

*Showcasing how women can tackle market uptake barriers and push the deployment of RHC solutions by selecting 3 case studies and conducting in-depth interviews with the selected interviewees.*

\*) The interview is to gain in-depth information on successful case studies. ‘Case studies’ is the internal project term. We use ‘organisations/concepts’ in communication with the interviewees considering the broad diversity of concepts from the business, academic, policy, authority, NGO and other sectors.

**Introduction and guidance for W4RES partners:**

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

- After identification of 5 case studies per country, the W4RES partners will select 3 case studies and document your decision in the excel table “Case studies template FINAL” (row AC): <https://docs.google.com/spreadsheets/d/1Qv0FSrjmjCICFoG90IZSOot-yqf7obkg/edit#gid=338865944>
- Each W4RES partner involved in this task will further investigate the 3 case studies in their region, covering different contexts (business, CSOs, local operation etc.), sources of renewable energy (solar, geothermal, bio-heat, etc.) and technology used (district heating, combined heat and power, heat pumps, etc.) by in-depth interviews.
- Please check if the relevant partner/interviewee agrees to be available for an interview and to provide additional data.
- Please conduct an in-depth interview with the relevant partner/interviewee (based on the questionnaire below) by April 23<sup>rd</sup> and send the document with the answers to [carmen.heinrich@wecf.org](mailto:carmen.heinrich@wecf.org)


## Question to W4RES partners:

Why did you select the ‘organisation/concept’ that will be explored in this in-depth questionnaire?

## A: Respondent details – General information about the interview partner

1. Sex: female / male / diverse
2. Country:
3. Profession:
4. Role in the organisation/concept:
5. Type of ‘organisation/concept’: company / network / authority / research / policy / campaign


## B: Description of the ‘organisation/concept’

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

1. Describe the basic idea of the 'organisation/concept' and how it relates to the RHC sector? (regionality, sources of renewable energy and used technologies (district heating, combined heat and power, heat pumps), women in RHC sector, etc.)
2. Is it a profit or a non-profit 'organisation/concept' or other?
3. What is the unique selling point/unique idea of the 'organisation/concept'?
4. What is the strength of the 'organisation/concept' referring to female leadership, women's empowerment, the inclusion of more women?
5. What is the social/economic/ecological/etc. innovation of the 'organisation/concept' for women?
  - a. Describe the innovation
  - b. Is there a positive impact for women, e.g., targeted usability for women?
  - c. Degree of innovation between 0 (no innovation) and 10 (highly innovative)?
6. What is the social/economic/ecological/etc. innovation of the 'organisation/concept' for the RHC sector?
  - a. Describe the innovation
  - b. Degree of innovation between 0 (no innovation) and 10 (highly innovative)?
7. What benefits are attained due to the fact that the organisation/concept is driven or led by women?
8. Do women benefit in the value chain? If yes, in which part? Consumer, producer, investor, leader, other?

## C: Drivers

1. Personal drivers: What is your personal motivation for developing/ engaging in the 'organisation/concept'?
2. External drivers: What external factors had an impact on your decision to develop and build up the 'organisation/concept' in the RHC sector? (e.g. political frameworks)

|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

## D: Barriers

1. What were the main barriers of the 'organisation/concept' during its development? Please describe the relevant barriers in more detail:
  - a. Technological barriers
  - b. Financial barriers
  - c. Regulatory barriers
  - d. Acceptance of team, clients, stakeholders?
  - e. Other barriers
  
2. Have you received support with the development of the 'organisation/concept'?
  - a. Internal (= within the 'organisation/concept') support: which departments?
  - b. External support: which stakeholders, authorities, etc?
  
3. Has there been any resistance when it came to strengthening the role of women in the 'organisation/concept'?
  - a. Internal (= within the 'organisation/concept'): which department?
  - b. External: which stakeholders, authorities, etc?

## E: Guidelines, targets and programs


### Internal (= within the organisation/concept)

1. Do you apply gender targets and policies in your 'organisation/concept' (e.g., quotas, flexible working hours, carrier programs, etc.)?
2. Which department/unit is responsible for gender targets and women's empowerment?
3. How high is the share of the female work force?
4. What's the percentage of women in leading management positions?
5. Do you plan to expand gender-instruments to foster women's empowerment/ influence? What are the concrete plans?
6. What type of programs were most relevant to empower women?

### Communication

1. Do you pay attention on targeted communication to address women directly? How?
2. Do you pay attention to avoid stereotypes in your communication?
3. How do you inform and engage men and all clients and stakeholders about the relevance and necessity of women's uptake in the RHC sector?



|   |  |                |
|---|--|----------------|
|  | Document: D1.3 Case studies of women leading RHC market uptake |                |
|   | Author: WECF   | Version: 1     |
|   | Reference: D1.3 W4RES ID GA 952874                             | Date: 30/06/21 |

## F: Transferability and impact

1. Is the 'organisation/concept' transferable to other regions? Why?
2. Is the 'organisation/concept' replicable in other companies/organisations? Why?
3. Could you achieve societal impact to influence the uptake of RHC when using women empowerment programs in the RHC sector?
  - a. If so, please describe the societal impact (e.g. broad acceptance) and which instruments you applied.
  - b. Degree of societal impact between 0 (no impact) and 10 (very high impact)?
4. Could you achieve political impact to influence the uptake of RHC through appropriate policy instruments and public awareness raising?
  - a. If so, please describe the political impact and which instruments you applied.
  - b. Degree of political impact between 0 (no impact) and 10 (very high impact)?
5. Could you increase the market potential (demand for product/service) and user acceptance through women's involvement or empowerment? If so, please describe the increased market potential and which strategies you applied.
6. Have you noticed a development or change since including more women in different levels of the 'organisation/concept'? (e.g., better public image, higher awareness, etc.)

## G: Further ideas and recommendations

1. What can you recommend to actors in the RHC sector aiming to increase the share of women and female influence?
2. What are your two most important lessons learned?
3. What do you need to improve your 'organisation/concept' to engage and involve more women?

*Thank you!*

| Case Study    | Country | Organisation Role  | General Background |
|---------------|---------|--|--------------------|
| z.B. W4RES #1 |         | Business<br>Authority<br>Network<br>NGO<br>Policy<br>Research<br>Other | STEM<br>other      |

---

|                   |          |           |                            |
|-------------------|----------|-----------|----------------------------|
| 1 GreenCities #2  | Denmark  | Authority | Environmental advisor      |
| 2 Q-Plan #1       | Greece   | Authority | Mayor                      |
| 3 Q-Plan #2       | Greece   | Authority | Mayor                      |
| 4 WECF #4         | Germany  | Authority | Head of Departemer STEM    |
| 5 EAP #3          | Bulgaria | Authority | Departement manağ STEM     |
| 6 APRE #2         | Italy    | Business  | Sales director             |
| 7 GreenCities #1  | Denmark  | Business  | Architect, urban plar STEM |
| 8 Pedal #1        | Slovakia | Business  | Power Engineer, Boz STEM   |
| 9 Pedal #2        | Slovakia | Business  | Head of Departemer STEM    |
| 10 WECF #1        | Austria  | Business  | Director other             |
| 11 WECF #2        | Austria  | Business  | Head of Departemer other   |
| 12 WECF #3        | Germany  | Business  | Board member other         |
| 13 Steinbeis      | Germany  | Business  | Management board           |
| 14 WHITE #1       | Belgium  | Network   | Deputy CEO other           |
| 15 WHITE #2       | Belgium  | Network   | Managing director other    |
| 16 WHITE #3       | Belgium  | Network   | Head EU research pr STEM   |
| 17 GreenCities #3 | Denmark  | NGO       | Project manager STEM       |
| 18 Pedal #3       | Slovakia | NGO       | Coordinator                |
| 19 APRE #1        | Italy    | Research  | Senior researcher          |
| 20 APRE #3        | Italy    | Research  | Researcher and CEO         |
| 21 Q-Plan #3      | Greece   | Research  | Professor                  |
| 22 EAP #1         | Bulgaria | Research  | Chair of managing b STEM   |
| 23 EAP #2         | Bulgaria | Research  | Manager STEM               |

## information

| Leading position | Concept               | Renewable energy source     | UPS 1                      |
|------------------|-----------------------|-----------------------------|----------------------------|
| yes              |                       | Photovoltaic                | Regionality                |
| no               |                       | Wind energy                 | Network/ various actors    |
|                  |                       | Geothermal                  | Inovation                  |
|                  |                       | Hydropower                  |                            |
| no               | Municipality          |                             | Authority                  |
| yes              | Local authority       |                             | Energy autonomy            |
| yes              | Local authority       | Solar, wind, hydro          | Renewable energy autonom   |
| yes              | Cooperation betw      | All: PV, wind, heat pump, s | Networking between key s   |
| yes              | Municipality          | Not specified               |                            |
| yes              | Company               | Photovoltaic                | Manufacturer to Consumer   |
| yes              | Energy audit com      | Various                     | Independence               |
| yes              | Company               | biomass boilers, specifical | Technology                 |
| yes              | Company establis      | Various                     | Central body, bottom-up    |
| yes              | Company/Consult       | Consulting                  | Networking with experient  |
| yes              | Utility: elektricity  | PV, heating pump, hydro     | Broad and innovative appr  |
| yes              | Utility: electricity  | Solar, wind, heating        | Regionality                |
| yes              | Company               | Heat pump                   |                            |
| yes              | Solar power netw      | Solar                       |                            |
| no               | Umbrella organiz      | Various                     | Various solutions          |
| yes              | Umbrella organization | architects                  | Great expertise in network |
| no               | Network               | all renewables              | Strive for 100% RE         |
| no               |                       | Various                     | Innovation                 |
| yes              | University            | Photovoltaic + Hydropower   | Inovation                  |
| yes              | Company               | Other: Recycling            | Regionality                |
| yes              | University            | Various                     | Design of zero energy dem  |
| yes              | Energy agency         |                             | Expertise                  |
| yes              | Consultancy com       | Various                     | Clean energy               |

| UPS 2   | Benefits gender inclusiveness         | Innovation potential RHC          |
|---|---------------------------------------|-----------------------------------|
|   | Visibility                            | 0 (low)<br>1 (medium)<br>2 (high) |
|   | inclusive work environment            | 1                                 |
|   | Women are more organized and comitted |                                   |
| ny  | Societal acceptance                   | 2                                 |
| Strong backing from polic                               | Visible key persons                   | 2                                 |
|   | Better overall results                |                                   |
|   |                                       | 1                                 |
| Niche targets   | good turn-around                      | 2                                 |
|   |                                       | 2                                 |
|   |                                       | 1                                 |
| flexibility   | Empowerment of women in the           | 1                                 |
| digital solutions                                       | robo.camp for girls                   | 2                                 |
| Future oriented concepts                                | Visibility, dynamic                   | 1                                 |
|   |                                       | 1                                 |
|   |                                       | 2                                 |
| energy efficient building solutions                     |                                       | 2                                 |
|   | Better communication                  | 1                                 |
| No womens organisation, Combination of energy, environm |                                       | 2                                 |
| Regionality   |                                       | 1                                 |
|   |                                       | 2                                 |
|   |                                       | 0                                 |
| and building  |                                       | 2                                 |
|   |                                       | 2                                 |
|   |                                       | 2                                 |

## Support women

| Support measures            | Support measure 2           | Notes                           |
|-----------------------------|-----------------------------|---------------------------------|
| Flexible time models        | Flexible time models        |                                 |
| Childcare options           | Childcare options           |                                 |
| Trainings                   | Trainings                   |                                 |
| Trainings for children      | Trainings for children      |                                 |
| Gender-inclusive recruiting | Gender-inclusive recruiting |                                 |
| Gender-sensitive comm.      | Gender-sensitive comm.      |                                 |
| None                        | None                        |                                 |
| <hr/>                       |                             |                                 |
| Flexible time models        |                             | Sick-leave for childcare, mater |
| None                        | None                        |                                 |
| Childcare options           | None                        |                                 |
| Childcare options           |                             |                                 |
| None                        |                             |                                 |
| None                        | None                        |                                 |
| None                        | None                        |                                 |
| None                        | None                        |                                 |
| Trainings                   | Gender-inclusive recruiting |                                 |
| Trainings                   | Trainings for children      | Flexible time models            |
| Flexible time models        | Gender-inclusive recruiting | Childcare options               |
| None                        |                             |                                 |
| Flexible time models        |                             |                                 |
| None                        |                             |                                 |
| Gender-inclusive recruiting | Gender-sensitive comm.      |                                 |
| Gender-sensitive comm.      | Trainings                   |                                 |
| None                        | None                        |                                 |
| None                        | None                        |                                 |
| Gender-inclusive recruiting | Gender-sensitive comm.      |                                 |
| None                        |                             |                                 |
| Flexible time models        |                             |                                 |
| None                        |                             |                                 |

| Ranking impact for women | Drivers                |   |
|--------------------------|------------------------|---|
|                          | Personal driver        | External driver                                 |
| 0 (no measures)          | Intrinsic motivation   | Political support                               |
| 1 (1 measures)           | Personal reasons       | Legal framework                                 |
| 2 (2 or more measures)   |                        | Funding<br>Support from local authori<br>Demand |
|                          | 2 Intrinsic motivation | Legal framework                                 |
|                          | 0 Personal reasons     | Good collaboration with ac                      |
|                          | 1 Personal reasons     | EU funding                                      |
|                          | 1 Intrinsic motivation | Political support, FFF, Lega                    |
|                          | 0 Intrinsic motivation |   |
|                          | 0                      | Legal framework                                 |
|                          | 0 Intrinsic motivation |   |
|                          | 0 Intrinsic motivation | Legal framework                                 |
|                          | 0 Intrinsic motivation | Political support                               |
|                          | 1 Interesting job      | Legal framework                                 |
|                          | 2 Empowering womer     | Legal framework                                 |
|                          | 1 Interesting job      | Clients, staff, CO2 price                       |
|                          | 0 Intrinsic motivation |   |
|                          | 1 Intrinsic motivation | Demand  |
|                          | 0 Intrinsic motivation |   |
|                          | 1 Intrinsic motivation | Support professors                              |
|                          | 2 Own family           | Women must become dec                           |
|                          | 0 Intrinsic motivation | Demand  |
|                          | 0 Personal reasons     |   |
|                          | 2 Environmental conce  | Financiatiion from universi                     |
|                          | 0 Intrinsic motivation | R&D funding                                     |
|                          | 1 Intrinsic motivation |   |
|                          | 0 Intrinsic motivation | EU scale  |

## Barriers

### Barriers 1

Price of green technologies  
 Lack of funding  
 Bureaucratic processes  
 Lack of support for women  
 Lack of awareness RHC from polic  
 Resistance from established colle  
 Technological barriers  
 Lack of awareness gender policy  
 Missing role models  
 Other

### Barriers 2

Price of green technologies  
 Lack of funding  
 Bureaucratic processes  
 Lack of support for women  
 Lack of awareness RHC from polic  
 Resistance from established colle  
 Technological barriers  
 Lack of awareness gender policy  
 Missing role models  
 Other

---

Lack of funding

Bureaucratic processes

Other

Price of green technologies

Lack of funding

Price of green technologies

Lack of funding

Lack of awareness RHC from polic Lack of funding

Lack of funding

Missing role models

Lack of support for women

Missing role models

Price of green technologies

Lack of funding

Lack of funding

Bureaucratic processes

Lack of awareness RHC from polic

Bureaucratic processes

Bureaucratic processes

Bureaucratic processes

Lack of awareness gender policy

Resistance from established colle

Bureaucratic processes

Bureaucratic processes

Bureaucratic processes

Lack of awareness gender policy

Lack of funding

Lack of funding

Technological barriers

Lack of funding

Lack of awareness RHC from polic Bureaucratic processes

Lack of funding

Lack of funding

Missing role models

Lack of awareness RHC from polic

Bureaucratic processes

Price of green technologies

Other

Bureaucratic processes





## Gender measures

| Share of females |     | Extension of gender instruments | Suggested measures       |
|------------------|-----|---------------------------------|--------------------------|
| <20              | <20 | yes                             | Childcare                |
| >20              | >20 | no                              |                          |
| >30              | >30 |                                 |                          |
| <hr/>            |     |                                 |                          |
| >30              |     | no                              |                          |
| >30              |     |                                 |                          |
| >30              |     | yes                             | Education activities, aw |
| >30              |     | no                              | Training, support        |
| >30              |     | no                              |                          |
| >30              |     | no                              |                          |
| >30              | >30 | no                              |                          |
| >30              |     |                                 |                          |
| >30              | >30 | yes                             |                          |
| >30              |     | no                              |                          |
| <20              |     | yes                             | Consulting, Coaching, C  |
| >30              |     | yes                             | Trainings, recruiting, m |
| >20              | >20 | no                              |                          |
| >30              | >30 | yes                             |                          |
| >30              | <20 | no                              | Communication, suppo     |
| >30              |     | yes                             | Training, support        |
| >30              |     | no                              | communication            |
| >20              |     |                                 |                          |
| >30              |     | yes                             |                          |
| >30              | >30 | yes                             |                          |
| <20              | <20 | no                              |                          |
| >30              | >30 | no                              |                          |
| >30              | >30 | no                              |                          |

| Gender-sensitive communication | Rating gender aspects | Transferability |
|--------------------------------|-----------------------|-----------------|
| yes                            | 0 (no attention)      | yes             |
| no                             | 1 (attention)         | no              |
|                                | 2 (concrete measures) |                 |
| no                             | 1 (attention)         | no              |
| no                             | 0 (no attention)      | yes             |
| awareness campaigns            | 2 (concrete measures) | yes             |
| no                             | 1 (attention)         | yes             |
| no                             | 1 (attention)         | yes             |
| no                             | 0 (no attention)      | yes             |
| no                             | 0 (no attention)      | yes             |
| no                             | 0 (no attention)      | yes             |
| no                             | 0 (no attention)      | yes             |
| no                             | 0 (no attention)      | yes             |
| yes                            | 2 (concrete measures) | yes             |
| yes                            | 1 (attention)         | yes             |
| no                             | 0 (no attention)      | yes             |
| yes                            | 2 (concrete measures) | yes             |
| yes                            | 1 (attention)         | no              |
| yes                            | 1 (attention)         | no              |
| yes                            | 2 (concrete measures) | yes             |
| no                             | 0 (no attention)      | yes             |
| no                             | 0 (no attention)      | yes             |
| yes                            | 1 (attention)         | yes             |
| yes                            | 0 (no attention)      | no              |
| no                             | 0 (no attention)      | yes             |
| no                             | 0 (no attention)      | yes             |

## Transferability

| Impact                    | Evaluation repliaction potential |
|---------------------------|----------------------------------|
| Awareness raising         | 0 (= low)                        |
| Good publicity            | 1 (= medium)                     |
|                           | 2 (= high)                       |
| Spill-over                | 0 (= low)                        |
| RHC acceptance            | 0 (= low)                        |
| RHC acceptance            | 1 (= medium)                     |
| Awareness raising         | 2 (= high)                       |
|                           | 1 (= medium)                     |
|                           | 1 (= medium)                     |
| Societal acceptance       | 2 (= high)                       |
| Awareness raising         | 1 (= medium)                     |
| Public support for RHC    | 2 (= high)                       |
| Visibility                | 2 (= high)                       |
| Awareness                 | 2 (= high)                       |
| Societal acceptance       | 2 (= high)                       |
|                           | 1 (= medium)                     |
|                           | 2 (= high)                       |
| Increase entrepreneurship | 0 (= low)                        |
|                           | 0 (= low)                        |
| Awareness                 | 2 (= high)                       |
| awareness raising         | 2 (= high)                       |
| Inovation                 | 1 (= medium)                     |
| Awareness                 | 2 (= high)                       |
|                           | 0 (= low)                        |
|                           | 1 (= medium)                     |
|                           | 1 (= medium)                     |

## Needs

### Recommendations to increase share of women

Focus on competence  
Raise awareness  
Stimulate women's access to STEM  
Interaction with schools  
Team building  
Clear gender targets  
Raise gender expertise  
Inclusive communication  
Other

### Recommendation 2

Focus on competence  
Raise awareness  
Stimulate women's access to STEM  
Interaction with schools  
Team building  
Clear gender targets  
Raise gender expertise  
Inclusive communication  
Other

---

Team building

Raise awareness

Raise awareness

Focus on competence

Raise gender expertise

Focus on competence

Interaction with schools

Clear gender targets

Stimulate women's access to STEM

Interaction with schools

Interaction with schools

Inclusive communication

Clear gender targets

Stimulate women's access to STEM

Clear gender targets

Clear gender targets

Inclusive communication

Inclusive communication

Inclusive communication

Stimulate women's access to STEM

Inclusive communication

Raise gender expertise

Raise awareness

Raise awareness

Clear gender targets

Raise awareness

Interaction with schools

Other

Team building

Raise gender expertise

Clear gender targets

Clear gender targets

Raise awareness

| Helpful skills | Needs                           |
|----------------|---------------------------------|
| Communication  | Budget                          |
| Clear goals    | Social acceptance               |
| Transparency   | Network possibilities for women |

---

### Home office options

#### Involvement of community

|             |                           |
|-------------|---------------------------|
| Clear goals | Gender just communication |
|             | Training programs         |

Learning from succesful example

Role models

Self-confidence, c Higher priority for kids and famili

Self-confidence, courage

Self-confidence, c Balance between job and family

Role models

|                |                                |
|----------------|--------------------------------|
| Family options | Gender-just recruiting process |
|----------------|--------------------------------|

Avoid stereotypes Awareness-raising activities

Use pictures with women

|                 |                                  |
|-----------------|----------------------------------|
| Success stories | Gneder inclusive Work-life balan |
|                 | Create gender-just working-condi |

|      |      |
|------|------|
| N.A. | N.A. |
|------|------|

## OVERALL RANKING

0 (=gender issues are neglected and/or focus on RHC is too weak)

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

2 (= framework for gender issues and/or RHC is an important issue)

0 (=gender issues are neglected and/or focus on RHC is too weak)

0 (=gender issues are neglected and/or focus on RHC is too weak)

2 (= framework for gender issues and/or RHC is an important issue)

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

0 (=gender issues are neglected and/or focus on RHC is too weak)

0 (=gender issues are neglected and/or focus on RHC is too weak)

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

2 (= framework for gender issues and/or RHC is an important issue)

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

2 (= framework for gender issues and/or RHC is an important issue)

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

2 (= framework for gender issues and/or RHC is an important issue)

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

1 (= gender issues have been noticed but not fully structurally acknowledged and/or RHC is an important iss

0 (=gender issues are neglected and/or focus on RHC is too weak)