

POLICY BRIEF #1

Support a Gender Balanced Renewable Heating and Cooling Sector for Future Generations

In order to foster gender diversity in the renewable heating and cooling (RHC) sector, it is crucial to undertake a multi-faceted approach. This includes raising awareness in schools, connecting STEM education to climate protection, facilitating collaborations between educational institutions and RHC companies, emphasizing intercultural and social skills, and providing skills training and technical support to unemployed women. Addressing early gender biases in STEM fields is paramount, leveraging positive influences from parents and female teachers to challenge stereotypes and inspire girls and women to pursue careers in RHC.

POLICY RECOMMENDATIONS

- **Awareness Campaigns in Schools:** Launch awareness campaigns in schools, emphasizing the technical aspects of the RHC sector and showcasing successful international case studies to encourage girls' interest in STEM and RHC.
- **Connect Climate Protection and STEM:** Highlight the connection between climate protection and STEM skills, especially among girls and young women, to motivate their engagement in RHC.
- **Facilitate School-Company Cooperation:** Foster partnerships between schools and RHC companies. Organize events focused on girls' involvement in STEM and create mentorship programs connecting girls with RHC professionals.
- **Emphasize Intercultural and Social Skills:** Promote the development of intercultural and social skills, particularly among girls and young women, within the RHC sector to enhance their career prospects and collaboration.
- **Skills Training and Technical Support:** Provide skills training and technical support, including re-skilling programs tailored to the needs of unemployed women.

Targeted stakeholders:

Families (parents and girls), Schools, Colleges, Universities, Energy Service Companies.

Meeting the ambitious Energy Roadmap 2050 goals requires a substantial reduction in energy consumption, aiming to cut greenhouse gas emissions by over 70%.¹ Expanding renewable heating and cooling sources is crucial to achieve these targets. To build a more sustainable energy sector, we must prioritize diversity and inclusivity, ensuring that women have equal opportunities to drive the green transition. This involves making STEM education more accessible to women and dismantling barriers within STEM fields.

Currently, women make up more than 50% of the European population² but represent less than a third of self-employed entrepreneurs and employees in the European renewable energy sector.³ Eliminating the barriers that exclude women from entrepreneurial roles in renewable energy is vital for advancing the green transition. These barriers extend beyond the workplace and permeate access to STEM fields, beginning in schools and homes during girls' formative years.⁴ **Consequently, it is imperative to confront gender biases early in girls' encounters with STEM subjects to encourage their pursuit of RHC careers, which encompass both academic and technical aspects.**

Gender stereotypes take root in early childhood. Research indicates that children exposed to parents working in STEM fields are more likely to develop an interest in STEM subjects, dispelling the misconception that STEM careers are incompatible with family life.⁵ Furthermore, female teachers can significantly impact students' perceptions, interests, and confidence in STEM subjects.⁶

Transforming the path from home to the RHC sector is pivotal in creating a greener Europe by inviting girls to engage in STEM fields from an early age. **Collaborations between educational institutions and energy service companies will play a critical role in dispelling stereotypes and increasing the presence of women in the renewable heating and cooling sector.** Stereotypes take root early, necessitating industry and educational institutions to raise awareness among all families with girls.

To engage more girls and women in STEM and the RHC sector, we must raise awareness of the existing barriers while highlighting the positive impacts they can have. **We must emphasize the connection between global climate issues and STEM work, showcasing women entrepreneurs, engineers, and technicians as role models.** This will not only increase awareness of barriers but also demonstrate the compatibility of women's family lives with entrepreneurial careers in STEM.

To raise awareness effectively, educational institutions at all levels—schools, colleges, and universities—must collaborate with the energy sector. This collaboration can facilitate information exchange, internships, events, and the establishment of networks, ultimately breaking down negative stereotypes and increasing female representation in the renewable heating and cooling sector.

2 European Commission and European Investment Bank, 2020. Funding women entrepreneurs How to empower growth.

3 IRENA, 2019. Renewable Energy: A Gender Perspective.

4 McGuire L., et al, 2020. STEM gender stereotypes from early childhood through adolescence at informal science centers. J Appl Dev Psychol. Mar-Apr;67:101109.

5 Tan E., Calabrese Barton A., Kang H. O'Neill T., 2013. Desiring a career in STEM-related fields: How middle school girls articulate and negotiate identities-in-practice in science. Journal of Research in Science Teaching, Vol. 50, No. 10, pp. 1143-1179.

6 Unterhalter, E., et al. 2014. Interventions to Enhance Girls' Education and Gender Equality. Education Rigorous Literature Review. London, Department for International Development.

W4RES is a Horizon 2020 project that aims to scale-up the involvement of women in the market deployment and uptake of RHC solutions via replicable support measures tested and validated across the 8 countries (Belgium, Bulgaria, Denmark, Germany, Greece, Italy, Norway, Slovakia). W4RES will run until October 2023 by an international consortium of 12 partners. A balanced union joining forces and expertise on renewable energy sources research & advocacy, innovative business lines development and women advocacy.

POLICY BRIEF #2

Promoting an Inclusive Workplace in the Renewable Heating and Cooling Sector

As we strive to meet the ambitious Energy Roadmap 2050 goals and reduce greenhouse gas emissions by over 70%,¹ the expansion of renewable heating and cooling sources is paramount. Achieving these targets necessitates fostering diversity and inclusivity in the energy sector, ensuring that women have equal opportunities to drive the green transition. To this end, these policy recommendations focus on creating a more inclusive and uplifting work environment within the RHC industry.

POLICY RECOMMENDATIONS

- **Gender Quotas:** Implement gender quotas for leadership positions and across all divisions and departments to break down horizontal and transversal career barriers.
- **Entrepreneurial Support:** Offer coaching and technical support for women entrepreneurs seeking to establish businesses in the RHC sector.
- **Networking Opportunities:** Foster collaboration and mentorship by creating more networking opportunities among women in the RHC industry.
- **Mentoring Programs:** Establish mentoring programs to guide women's career development and provide guidance within the sector.
- **Gender and Family-Friendly Policies:** Develop policies supporting work-life balance, including options for part-time work, childcare support, remote work possibilities, and equal advancement opportunities for part-time employees.
- **Gender-Responsive Budgeting:** Implement gender-responsive budgeting for both internal and external projects to ensure equitable resource allocation.
- **Safe Reporting Procedures:** Create safe spaces and structured reporting procedures for addressing any disruptive or unfair behaviours within the workplace.

Targeted stakeholders:

Service Energy Companies, Venture Capitalists, Energy-Related Networks

Meeting the Energy Roadmap 2050 goals requires substantial reductions in energy consumption and a significant reduction in greenhouse gas emissions. Expanding renewable heating and cooling sources is critical to achieving these targets. To build a more sustainable energy sector, we must prioritize diversity and inclusivity, ensuring that women have equal opportunities to contribute to the green transition. This involves making entrepreneurial support more accessible to women, creating gender-inclusive work environments, and improving work-life balance.

To create a more positive and inclusive work environment within the RHC sector, it is crucial to prioritize diversity in leadership roles through the use of gender quotas. To accelerate the transition toward environmentally friendly practices, we must move away from conventional business practices and instead welcome fresh perspectives, particularly from underrepresented groups such as women.²

Supporting women entering the energy sector, both as employees and entrepreneurs, is paramount. Women entrepreneurs in RHC require access to both entrepreneurial and technical support to facilitate the implementation of innovative solutions. Research has indicated that hiring practices present a significant obstacle for women seeking entry into the energy sector.³ To address this, it is essential to **establish networking and mentoring programs for women**, as they often face challenges related to male-dominated networks⁴ and unequal access to funding.⁵

Within the workplace, it is imperative to implement policies that are considerate of gender and family needs in order to attract a diverse workforce.

The implementation of more gender- and family-friendly workplace policies can not only attract more women but also create a more diverse and inclusive workforce overall. A flexible work environment that accommodates part-time employment and offers childcare support addresses the diverse needs of employees beyond their work responsibilities. Additionally, considering opportunities for career advancement for part-time employees ensures that their professional growth aligns with their personal preferences and circumstances.

This includes offering flexible work arrangements coupled with childcare support, as well as ensuring that part-time employees have opportunities for career advancement. Many women continue to bear the primary responsibility for caregiving duties within their families⁶, and thus, flexible work hours and part-time positions that do not hinder career progression can be particularly beneficial. Additionally, childcare support is crucial for many families, and energy service companies should actively promote their improved work policies to appeal to young employees who may be starting families.

Furthermore, it is essential for employees to feel safe when reporting any unwanted behavior in the workplace. **Establishing a secure and structured system for reporting workplace issues is crucial**, as inappropriate behavior can take various forms, including physical, verbal harassment, or unfair practices. These behaviors may be deeply ingrained in the organizational culture, making them challenging to address. To effectively address these issues, it is vital to designate dedicated and well-trained individuals responsible for handling such complaints.

[2] Pearl-Martinez R., Stephens J., 2016. Toward a gender diverse workforce in the renewable energy transition, Sustain. Sci. Pract. Policy 12 (1).

[3] GWNET, 2019. Women for Sustainable Energy: Strategies to Foster Women's Talent for Transformational Change.

[4] European Commission, 2019b. She Figures 2018.

[5] IDC. (2022). International Data Corporation. European Women in Venture Capital.

[6] SEforALL, 2017. Scaling sustainable access pathways for the most vulnerable and hardest to reach people.

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POLICY BRIEF #3

Advancing Gender Equity in the Renewable Heating and Cooling Sector

To support gender equity in the RHC sector, it is imperative that we recognize the significance of inclusivity, robust data collection, gender quotas, and gender-sensitive communication. We recommend cultivating gender-smart policies that target local governments, energy service companies, and communities. Promoting diversity and inclusivity in the RHC sector stands as a pivotal endeavor in achieving our energy and sustainability objectives, ultimately forging a more gender-equitable sector that propels the green transition.

POLICY RECOMMENDATIONS

- **Inclusivity Training:** Provide inclusivity training for local governments and communities, focusing on gender-sensitive programs and strategies to address structural disparities.
- **Gender-Disaggregated Data:** Implement gender-disaggregated data collection in consultations, surveys, and decision-making processes to underscore divergent perspectives and needs.
- **Gender-Quota Decision Making:** Organize important consultations and negotiations with gender quotas to ensure diverse representation, considering work time schedules.
- **Gender-Inclusive Communication:** Ensure that communication strategies are inherently gender-inclusive, creating a welcoming environment where everyone's perspectives and needs are valued.
- **Management Training:** Mandate higher management tiers to undergo annual sensitivity and awareness training on gender-related issues.
- **Gender-Smart Policies:** Develop gender-smart policies within the RHC industry, general workplaces, and at the community level to address gender disparities.
- **Gender-Ready Energy Cooperatives:** Urge the participation of women in the creation and establishment of energy cooperatives as well as the development of community energy projects.

Targeted stakeholders:

Local Governments, Energy Service Companies, Local Communities

Meeting the ambitious Energy Roadmap 2050 goals requires a substantial reduction in energy consumption, aiming to cut greenhouse gas emissions by over 70%! Expanding RHC solutions is crucial to achieving these targets. To foster a more sustainable energy sector, it is crucial to prioritize diversity and inclusivity, ensuring women have equal opportunities to drive the green transition. Consequently, the RHC sector must embrace gender-equitable communication, inclusive decision-making, and a workplace that shows gender sensitivity.

Supporting a gender-inclusive RHC sector involves offering inclusivity training, collecting gender-disaggregated data, and conducting consultations with gender quotas in mind. It also entails **adopting gender-inclusive communication practices, providing management training on gender-related issues, and developing policies that address gender disparities**. Additionally, scheduling decision-making activities with consideration for work hours and gender quotas can help advance diversity and inclusion in the sector.

Research underscores the importance of achieving gender parity in the workplace, as it leads to more effective decision-making.² However, the burden of care work often falls on women,³ limiting their participation in crucial decision-making processes, especially those held outside standard business hours. To promote diversity in decision-making, it is imperative to schedule such activities with consideration for work hours and implement gender quotas for significant meetings. Globally, women occupy only 6% of ministerial positions in national energy policies and programs,⁴ highlighting the need for change. Women also play a pivotal role as energy managers within their households, wielding significant influence in energy technology decisions.⁵ Their unique position offers an opportunity to boost the adoption of RHC technologies.

Promoting gender equity in the RHC sector is essential for achieving our energy and sustainability goals. This requires inclusive training, gender-disaggregated data collection, and gender-sensitive communication to ensure equal opportunities and diversity in decision-making processes. By implementing these measures, we can create a more gender-just RHC sector that drives the green transition effectively.

This, in turn, amplifies the impact of peer-to-peer communication strategies among energy consumers. Additionally, local energy initiatives and cooperatives should increase their inclusion of women, as they have been proved to be very successful where there is an equal participation of women and especially when RHC innovations are led by them.⁶

For energy service companies aiming to expand their customer base and cultivate trust, it is essential to **adopt gender-sensitive language to cater to the growing number of female customers seeking RHC solutions**. To achieve this, employing women within the organization can facilitate the process. Equally important is **providing dedicated training to employees and management to ensure gender-sensitive communication** becomes ingrained within the company or governmental institution, supporting the women already working there.

To genuinely foster gender readiness within an organization, it is advisable to closely monitor gender-disaggregated data. This practice enables pinpointing areas for improvement and helps create an environment where both customers and potential employees feel more secure when engaging with the organization.

2 Allen, E., Lyons H., Stephens, Jennie, 2019. Women's leadership in renewable transformation, energy justice and energy democracy: Redistributing power. Energy Research & Social Science. 57. 101233.

3 SEforALL, 2017. Scaling sustainable access pathways for the most vulnerable and hardest to reach people.

4 EIGE, 2016. Gender and Energy, Luxembourg: Publications Office of the European Union.

5 SEforALL, 2017. Scaling sustainable access pathways for the most vulnerable and hardest to reach people.

6 OECD, 2020. Policies and Practices to Promote Women in Leadership Roles in the Private Sector.

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POLICY BRIEF #4

Institutionalize Awareness on Gender Mainstreaming

Institutionalizing awareness of gender mainstreaming involves launching awareness campaigns focused on gender issues, implementing gender-smart training to create inclusive work environments, conducting promotional efforts, and showcasing women-led initiatives. This effort is not only valuable in the renewable heating and cooling (RHC) sector, but for the energy sector as a whole, as well as the whole STEM community.

POLICY RECOMMENDATIONS

- **Awareness Campaigns in Industry:** Launch awareness campaigns within companies to educate employees about the barriers women face in workplace environments.
- **Gender-Smart Training:** Provide training on gender-sensitive behavior and communication in workplaces to foster a more inclusive environment.
- **Promotional Campaigns:** Promote a stronger involvement of women in the energy sector through targeted promotional campaigns.
- **Visibility of Women-Led Initiatives:** Increase the visibility of initiatives led by women within the RHC sector to serve as role models and inspire others.

Targeted stakeholders:

Energy Service Companies, Women Entrepreneurs, Educational Institutions (kindergarten -> universities), Families (parents and girls)

Meeting the Energy Roadmap 2050 goals requires substantial reductions in energy consumption and a significant reduction in greenhouse gas emissions. Expanding renewable heating and cooling (RHC) sources is critical to achieving these targets. To build a more sustainable energy sector, we must prioritize diversity and inclusivity, ensuring that women have equal opportunities to contribute to the green transition. This involves raising awareness of women's positive impact on the RHC sector, creating gender-inclusive work environments to include more women in the sector, and raising awareness on the opportunities for women wanting to enter the sector.

Gender mainstreaming should be institutionalized as a lasting, permanent change that encompasses all levels of organizations and industries. Women face barriers at every level, and to initiate this process, we must acknowledge these barriers and raise awareness within companies, governmental organizations, as well as industry and policy organizations. This will make women entering the RHC sector aware of potential obstacles, allowing them to prepare and seek out companies that actively address these issues. This will not only enhance an organization's reputation but also broaden its customer base and attract new employees.

However, awareness alone is insufficient, as concrete training for personnel at all levels is essential, e.g., by providing teacher training at educational institutions and offering "train the trainer" support for larger organizations. This will enable gender-sensitive training and the development of tools to support a culture of gender equality, making organizations better equipped to assist women in overcoming barriers.

An awareness campaign should not only focus on barriers but also **promote women's participation in the energy sector.** Launching promotional campaigns can encourage greater female involvement in the energy sector, with a focus on targeting female students across all educational levels.

Achieving the Energy Roadmap 2050 goals demands a concerted effort to expand renewable heating and cooling sources, and this endeavour must include a commitment to diversity and inclusivity. By implementing awareness campaigns, gender-sensitive training, and targeted promotional initiatives, we can create a more inclusive energy sector where women have equal opportunities. This multifaceted approach, will not only help break down barriers but also inspire and empower women to play a pivotal role in the transition to a more sustainable energy future.

To inspire girls to pursue STEM university programs, **awareness efforts should also extend to primary and secondary schools.** Additionally, business schools can be effective in raising awareness among future entrepreneurs about opportunities in the energy sector and women's participation. Parents are also a critical audience to engage, as they can support their children in choosing energy-related career paths.

Gender awareness raising is a crucial method for integrating a gender perspective into policies, programs, projects, and services that cater to the diverse needs of people of all genders. It plays a pivotal role in informing individuals about the economic benefits of advancing gender equality in the RHC sector, as well as the adverse effects of gender inequalities, including the increased risk of energy poverty for women.²

A successful campaign can be facilitated through increased collaboration between educational institutions and industry. The industry can provide role models in the form of female figures working in the field, while educational institutions can provide potential targets. Collaboration can lead to cooperative education, such as internships for university students.

¹ Allen, E., Lyons H., Stephens, Jennie, 2019. Women's leadership in renewable transformation, energy justice and energy democracy: Redistributing power. Energy Research & Social Science. 57. 101233.

² EIGE, 2017. Gender Equality Index 2017: measuring gender equality in the European Union 2005 – 2015, Report, Luxembourg: Publications Office of the European Union.

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POLICY BRIEF #5

Raise and Provide Funds for Women-Led Projects in the Renewable Heating and Cooling Sector

To address gender disparities in the renewable heating and cooling (RHC) sector, it is essential to acknowledge and tackle financial barriers faced by women. This involves implementing gender-inclusive quotas for projects, establishing dedicated funding for women-led initiatives, and encouraging women's participation in RHC research. The goal is to bridge the gender gap, making RHC solutions more accessible and reducing disparities within the sector.

POLICY RECOMMENDATIONS

- **Raise Awareness of Financial Barriers:** Raise awareness about the financial obstacles women encounter in the RHC sector and their far-reaching consequences.
- **Quotas for Gender-Just Projects:** Set quotas and indicators for projects promoting gender inclusivity within the energy sector.
- **Support Women-Led Initiatives:** Establish quotas for funding women-led initiatives and create dedicated grants for women with entrepreneurial potential in the RHC sector.
- **Encourage Research Participation:** Encourage women's participation in research related to RHC to bridge the gender gap in this field.

Targeted stakeholders:

Energy Service Companies, Venture Capital Funds, Educational Institutions

The RHC sector presents both opportunities and challenges for women, whether as contributors or consumers. Financial barriers persist, making the adoption of renewable energy systems (RES) economically challenging for various demographics.¹ High initial installation costs and the need for post-installation employee training further compound these challenges.² In contrast, subsidies for conventional fossil fuels in the European Union remain readily available, exacerbating disparities. To rectify these issues, we must work towards making renewable energy solutions more accessible, fostering broader participation in both production and consumption.

¹ European Commission, 2016c. Impact Assessment Accompanying the document "Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (recast)" SWD(2016) 418 final.

² European Commission and International Labour Office, 2011. Skills and Occupational Needs in Renewable Energy.

On a European level, female-founded teams of startups of all kinds received only 4% of the available venture capital funding in 2018.³ Yet research suggests that diversity increases innovation, competition, and societal progression,⁴ highlighting why we need to raise awareness on the multiple obstacles women often confront when entering the RHC sector. To address these barriers, **it is imperative to establish gender-just quotas for projects within the RHC sector.** This will increase the number of projects actively promoting gender inclusivity, contributing to broader awareness and representation.

In addition to quotas, **targeted funding for women with entrepreneurial potential in the RHC sector is crucial.** This not only increases the number of gender-inclusive projects but may also encourage more women to seek dedicated funding opportunities.

By raising awareness of financial barriers, implementing gender-inclusive quotas, supporting women-led initiatives, and encouraging research participation, we can promote gender equity in the renewable energy sector. These measures will not only bridge the gender gap but also enhance the sector's overall inclusivity and effectiveness.

Studies indicate that female-founded startups backed by venture capital generally outperform male-founded startups financially and deliver more revenue.⁵ Moreover, statistics show that in the Nordic countries, female- and mixed-founding teams are more than twice as likely to create an impact-driven company than male-founding teams.⁶

Extending gender inclusivity to academia is vital. Encouraging greater participation of women in RHC research is essential, with gender quotas for research projects and case studies featuring female entrepreneurs. This multifaceted approach will enrich the sector with diverse perspectives and innovative solutions allowing us to accelerate the green transition.

3 IDC. (2022). International Data Corporation. European Women in Venture Capital.

4 Gompers, P.A. and Wang, S.Q. (2017). Diversity in Innovation. Harvard University (2017).

5 Abouzahr, K., Krentz, M., Harthorne, J., and Brooks, F. (2018). Why Women-Owned Startups Are a Better Bet.

6 Unconventional Ventures. (2022). The Funding Report. Unconventional Ventures-Nordic Startup Funding.

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