

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.