



EmpowerMed

Gender and energy poverty

Facts and arguments



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Authors:

Olgu Gizem Birgi, Marta Ferdebar, Antonia Fuhrmann, Katharina Habersbrunner, Anke Stock

Version 1: April 2021

Version 2: July 2023

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This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 847052. The sole responsibility for the content of this document lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EASME nor the European Commission are responsible for any use that may be made of the information contained therein.

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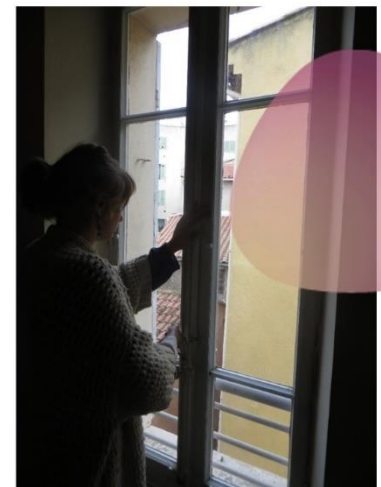
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Gender and energy poverty - facts and arguments

Energy poverty is a global problem and can be seen as a situation in which a household lacks socially and materially necessitated levels of energy services at home. Estimates show that 42 million¹ people in the European Union cannot keep their homes warm during winter and 90 million people cannot keep their homes comfortable during summer². Given that women are disproportionately affected by energy poverty, it is crucial to take a closer look towards the relationship between energy poverty and gender.

Ana from Slovenia

Let's take a look at Ana's life in Slovenia to get a general understanding of the relationship between energy poverty and gender. Ana is a single mother who lives with her two children and her elderly mother. Her mother couldn't afford to live alone on her low pension. Ana wants to spend time with her young children while she takes care of daily tasks. She is working in the tourism sector on a seasonal basis and works hard during the tourism season, whilst saving money for the rest of the year. She already earns less than her male colleagues who do exactly the same job. Her income is not high enough to guarantee the well-being of her family.



They rely on cheap, processed food most of the time and the kids are not able to afford the healthier food options in the school cafeteria. Although a lot of Ana's money goes directly to heating expenses, Ana's family, especially her mother, seem to get cold during the cold winter days. Data has shown that energy poverty affects the mental, physical and social health of women more than that of men. For example, living in uncomfortable living situations and bureaucratic hurdles increase stress and depression levels. Physiology can play an important role when it comes to cold sensitivity. Since Ana's family lives in a coastal area, their house is not insulated, and heating options are limited and expensive. They have an electric heater in the living room and the family often spend time there.

People who suffer disproportionately from the phenomenon of energy poverty are mostly women.

As we can see in this short story, a single mother has problems that go beyond being alienated by society and judged for her marital status. It is evident that people who suffer disproportionately from the phenomenon of energy poverty are mostly women. This can be linked to their physiological and health situation as well as their economic and social status.

¹ Eurostat. (2022). Inability to keep home adequately warm - EU-SILC survey. Available at: https://ec.europa.eu/eurostat/databrowser/view/ilc_mdes01/default/bar?lang=en.

² Universidad Politecnica de Madrid. (2021). Raising summer energy poverty awareness to reduce cooling needs. Available at: <https://cordis.europa.eu/project/id/101032823> (last accessed: 11.7.2023.)

Dimensions of gender and energy poverty

The following arguments show the interlinkage between gender and energy poverty in four different dimensions: physiological, health, economic and social/cultural.

Physiological dimension

The physiological dimension deals with the embodied consequences of energy poverty or rather the impact it has on the body.



- **Age** is a significant factor in dealing with heat and cold stress, with young children and older people being particularly vulnerable.³
- Additionally, a higher share of women makes up the **elderly** due to longer life expectancy. **Life expectancy** at birth in the EU was estimated at 80.1 years in 2021; 82.9 years for women and 77.2 years for men.⁴ Older women (65+) are more likely to be poorer than men if they are living alone. (23% of older women, 18% of older men).⁵ With women in the EU living longer than men, and receiving lower pensions, they are at an increased risk of energy poverty.⁶
- **Distinct bodies and sexes react differently to temperature. Cis women are more heat and cold sensitive than men** due to their physiology (chronic temperature-related discomfort, heat and associated diseases).⁷ Recent studies have noted that women are more sensitive to extreme temperatures, which may place **women suffering energy poverty at a greater risk**.⁸

A higher share of women are at risk of poverty or social exclusion

³ WHO (2004). Health and Global Environmental Change, p. 18.

⁴ Eurostat. (2023). Life expectancy at birth down to 80.1 years in 2021. Available at: <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/DDN-20230316-1> (last accessed: 25.6.2023).

⁵ DWP (2018). Households Below Average Income – Percentage of individuals in low-income groups by various family and household characteristics (AHC), 1994/95-2016/17.

⁶ Eurostat. (2023). Household composition statistics. Available at: <https://epthinktank.eu/2023/03/07/international-womens-day-2023-gender-equality-in-the-shadow-of-successive-crises/> (last accessed: 27.6.2023.)

⁷ This section deals with a binary concept of gender (men/women) and with sex-aggregated data. This data often refers to cis women and men whose gender identity corresponds to the sex they have been attributed with at birth. This might allow to compare the physical or biological conditions. For example, studies have shown that due to their physiology, (cis) women are more heat- and cold-sensitive than men, which may place women suffering from energy poverty at greater risk; Anthony E. Iyoho, PhD; Laurel J. Ng, PhD; Lisa MacFadden. (2017). Modeling of Gender Differences in Thermoregulation.

⁸ Sanchez-Guevara Sanchez, C., Sanz Fernandez, A., & Nunez Peiro, M. (2020). Feminisation of energy poverty in the city of Madrid. ENERGY AND BUILDINGS, 223.



Health dimension

Living in inadequately heated or cooled homes has detrimental implications on respiratory and cardiovascular systems, as well as on mental health and well-being.⁹

- **Mental health:** Inadequately heated or cooled homes cause increased stress, reduced well-being and comfort, and depression. In Barcelona, those with reported **energy poverty show poor mental health**. Poor self-perceived physical and mental health ranged from 2.2 to 5.3 times greater in energy poor than non-energy poor Barcelona population.¹⁰
- **Physical health:** Infections, respiratory and cardiovascular diseases, headaches, nausea, and dizziness can result from cooking with solid fuels, and there is even the risk of poisoning and death.¹¹ Every year, 3.2 million people die prematurely worldwide from diseases caused by **domestic air pollution**, with children and **women disproportionately affected**¹². This number is much higher than the deaths from malaria or tuberculosis.¹³
- The probability of experiencing **poor health** is several times higher for those affected by energy poverty. Among affected people 52,6% of women and 31,8% of men stated they had a state of poor health in Barcelona.¹⁴ Depression and anxiety in women and asthma in men were found to be statistically significant at all energy poverty intensity levels in Barcelona¹⁵. Depression and anxiety in women and asthma in men are statistically significant at all energy poverty intensity levels. The strongest association between energy poverty and health was found in chronic bronchitis and depression and anxiety.

⁹ Thomson, H., Simcock, N., Bouzarovski, S., & Petrova, S. (2019). Energy poverty and indoor cooling: An overlooked issue in Europe. *Energy and Buildings*, 196, 21-29.

¹⁰ Carrere, J. et al. (2021). Energy poverty, its intensity and health in vulnerable populations in a Southern European city. *Gaceta Sanitaria*, 35(5), 438-444. Available at: <https://www.sciencedirect.com/science/article/pii/S0213911120301941> (last accessed: 28.6.2023).

¹¹ Jessel, S., Sawyer, S., & Hernández, D. (2019). Energy, Poverty, and Health in Climate Change: A Comprehensive Review of an Emerging Literature. *Frontiers in Public Health*, 7.

¹² World Health Organisation. (2022). Household air pollution. Available at: <https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health> (last accessed 29.6.2023).

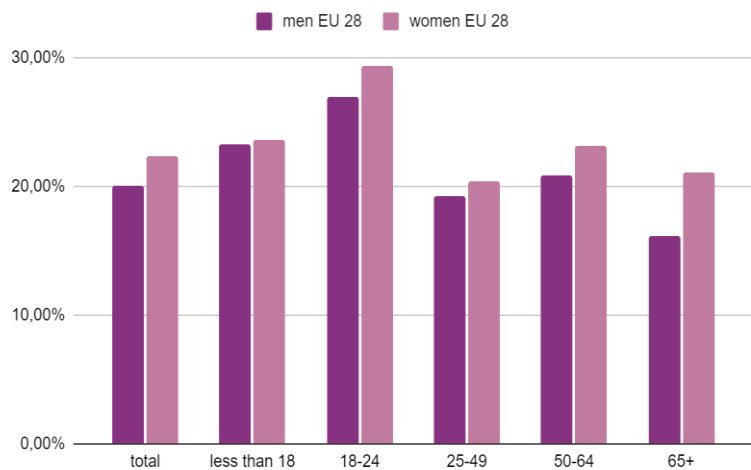
¹³ WHO (2018). Household air pollution and health.

¹⁴ Novoa, A. Bottazzi, L. (2018). Radiografies de la situació del dret a l'habitatge, la pobresa energètica i el seu impacte en la salut a Barcelona. Aliança contra la Pobresa Energètica, Observatori DESC, Plataforma d'Afectades per la Hipoteca, Enginyeria sense Fronteres.

¹⁵ Carrere, J. et al. (2021). Energy poverty, its intensity and health in vulnerable populations in a Southern European city. *Gaceta Sanitaria*, 35(5), 438-444. Available at: <https://www.sciencedirect.com/science/article/pii/S0213911120301941> (last accessed: 28.6.2023).

- The consequences of the **energy poverty gap** on women's health deserve closer scrutiny. Several studies have already pointed out women's higher vulnerability to winter mortality. Also, in 2022 in European countries, 56% more heat-related deaths in women than men were estimated.¹⁶
- **Social health:** Stigmatisation and social isolation hinder normal everyday life, such as work or study, and decrease social relations.

People at risk of poverty or social exclusion by age and sex in percent (eurostat, 2019)



Economic dimension

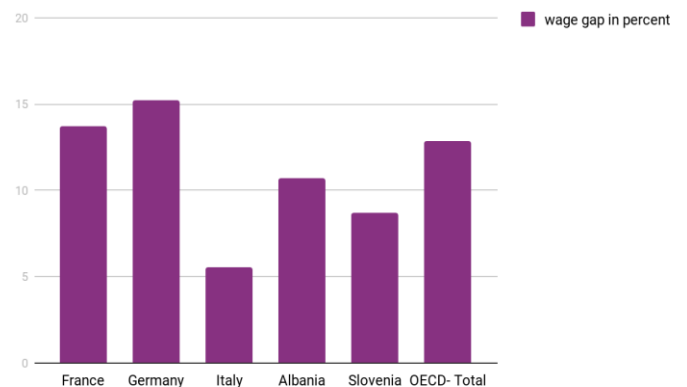


Economic dimension

- **Lower income:** The Gender Pay Gap and Gender Pension Gap have a strong correlation with economic welfare as well as energy poverty.

- **Gender pay gap:** In 2023 in the EU, men were paid, on average, 12,7% more than women.¹⁷

Gender wage gap (eurostat 2018, oecd.org 2019, Gender Equality Index for the Republic of Albania 2020)



¹⁶ Ballester, Joan et al. (2022): Heat related mortality in Europe during the summer of 2022.

¹⁷ EU Monitor (2023): Understanding the gender pay gap: definition and causes, source: <https://www.eumonitor.eu/9353000/1/j9vvik7m1c3gyxp/v159mpupm0vq?ctx=vk4jic6t1dxz> (last accessed 13.07.2023).

Gender pension gap: Elderly women get lower pensions than men. In 2019, women in the EU aged over 65 received a pension that was on average 29% lower than that of men.¹⁸ Although all EU Member States provided lower pensions for women, the size of the gap varies

greatly. The country with the biggest disparity was Luxembourg, where women over 65 received a pension that was 44% lower than that of men. Malta and the Netherlands (both 40%), Cyprus (39%), Austria (37%) and Germany (36%) were closely behind Luxembourg.

The share of elderly women living alone (39.8%) was almost twice the share for men (20%).¹⁹ Age plays a role in women's vulnerability to energy poverty. With women in the EU living longer than men, and receiving lower pensions, they are at an increased risk of energy poverty.²⁰ Age also makes people particularly sensitive to cold and exposes them to increased health risks.

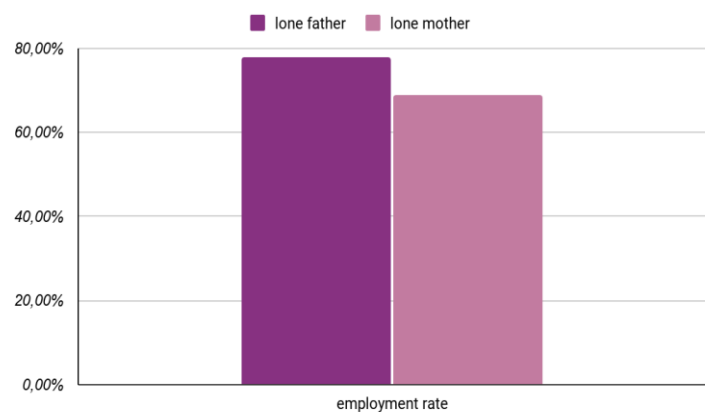
gender pension gap (EIGE, Poverty, gender and the lone parents in the EU 2020)



- Single-parent households:** Almost half (48%) of lone mothers and a third (32%) of lone fathers are at risk of poverty or social exclusion. Women in particular are affected as they make up almost 85 % of all one-parent families in the EU.²¹ **Younger mothers and women with young children are the least-employed parent groups.**²²

One-parent families headed by women are also more likely to be materially deprived than those headed by men.²³

Single parents and employment in EU (Ruggeri, K. and Bird, C. (2014), Single parents and employment in Europe: short statistical report No 3, European Commission)



¹⁸ OECD. (2020). Wide gap in pension benefits between men and women. Available at: <https://www.oecd.org/gender/data/wide-gap-in-pension-benefits-between-men-and-women.htm> (Last accessed: 24.6.2023.)

¹⁹ European Commission. (2022). Living Together. The life of women and men in Europe. Available at: <https://ec.europa.eu/eurostat/cache/infographs/womenmen/bloc-1b.html?lang=en> (Last accessed: 24.6.2023.)

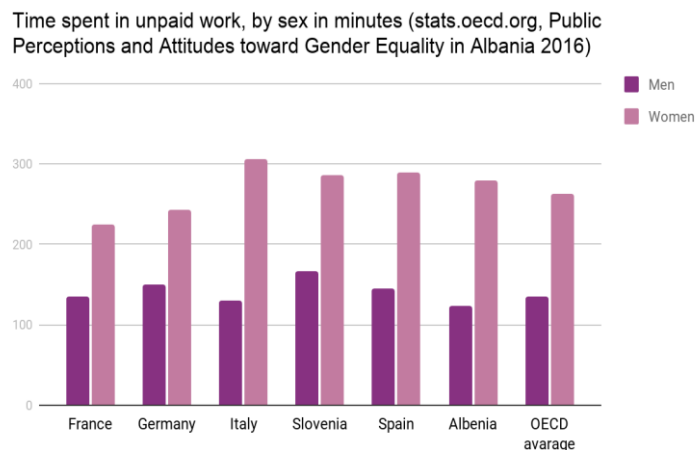
²⁰ Eurostat. (2023). Household composition statistics. Available at: <https://ethinktank.eu/2023/03/07/international-womens-day-2023-gender-equality-in-the-shadow-of-successive-crises/> (Last accessed: 27.6.2023.)

²¹ Ruggeri, K. and Bird, C. (2014). Single parents and employment in Europe: short statistical report No 3, European Commission.

²² stats.oecd.org

²³ Ruggeri, K. and Bird, C. (2014), Single parents and employment in Europe: short statistical report No 3, European Commission.

- **Less time for paid work:** 32 % of lone fathers and 44 % of lone mothers who work part-time (less than 30 hours per week) have less time for paid work due to unpaid care work.²⁴ Compared to men, women are less likely to work full-time, more likely to be employed in lower-paid occupations and less likely to progress in their careers. Women are mostly responsible for house tasks and childcare even when working full time.²⁵
- **Employment rate in single-parent household:** As much as 9 percentage points separate lone fathers and lone mothers in terms of employment rates (78% for lone fathers and 69% for lone women)²⁶. 18% of lone mothers and 13% of lone fathers are neither working nor searching for work, while 13% of lone mothers and 9% of lone fathers are unemployed²⁷. Personal income from labor is still below the federal poverty level for 33% of lone parents. The likelihood of material deprivation is also twice as likely in one-parent families with a female head of household (20% versus 9%).²⁸ 16% of lone fathers and 26% of lone mothers reported having trouble paying their power costs.²⁹



²⁴ EIGE (2020). Poverty, gender and the lone parents in the EU.

²⁵ stats.oecd.org

²⁶ EIGE. (2016). Poverty, gender and lone parents in the EU.

²⁷ Ibid.

²⁸ Ibid.

²⁹ Ibid.

Social/cultural dimension



- **Responsibilities and household roles:** The gendered division of labour generally assigns women the responsibility for the provision of household energy in relation to their spheres of influence in the household.
- **Women do not have equal voices** on policy, economy and the household level - even though laws foresee them. In 2022, 40% of women were part of the parliament in Slovenia.³⁰ For comparison, the world average in 2022 based on 187 countries is 26 percent.³¹ Slovenia ranks 12th in the EU on the Gender Equality Index and is therefore 1.1 points lower than the EU's score.³²
- **Care work:** 32% of lone fathers and 44% of lone mothers who work part-time have less time for paid work due to unpaid care work.³³ Compared to men, women are less likely to work full-time, more likely to be employed in lower-paid occupations and less likely to progress in their careers. Women are mostly responsible for house tasks and childcare even when working full time.
- **COVID pandemic and the War in Ukraine:** Throughout the pandemic, a higher share of women was in arrears on their energy bills, with a surge in spring 2022, following the spike in the cost of energy after the Russian invasion of Ukraine.³⁴ Single mothers and single women are more likely to have problems paying their utility bills than any other group. Women make up 83% of single-parent households and are therefore the most likely to be affected by the energy crisis.³⁵ Almost half of single mothers (44%) and 31% of single women anticipated difficulties affording energy costs in 2022.³⁶

³⁰ The Global Economy. (2022). Slovenia: Women in parliament. Available at:

https://www.theglobaleconomy.com/Slovenia/Women_in_parliament/ (Last accessed: 27.6.2023.)

³¹ The World Bank. Proportion of seats held by women in national parliaments (%) – Slovenia. Available at: <https://data.worldbank.org/indicator/SG.GEN.PARL.ZS?locations=SI> (Last accessed: 27.6.2023.)

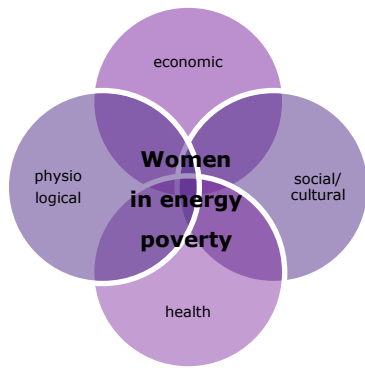
³² EIGE. (2022). Gender Equality Index. Available at: <https://eige.europa.eu/gender-equality-index/2022/SI> (Last accessed: 26.6.2023.)

³³ EIGE. (2016). Poverty, gender and lone parents in the EU. Review of the implementation of the Beijing Platform for Action.

³⁴ Eurofound. (2022). The cost-of-living crisis and energy poverty in the EU: Social impact and policy responses. Available at: https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef22077en.pdf (Last accessed: 24.6.2023.)

³⁵ Eurostat. (2023). Household composition statistics. Available at: <https://epthinktank.eu/2023/03/07/international-womens-day-2023-gender-equality-in-the-shadow-of-successive-crises/> (Last accessed: 27.6.2023.)

³⁶ ETUC. (2022). Unequal pay means women hit hardest by energy prices. Available at: <https://www.etuc.org/en/pressrelease/unequal-pay-means-women-hit-hardest-energy-prices> (Last accessed: 25.6.2023.)



Conclusion

The intersectional perspective analyses different factors that women are facing. The physiological, health, economic and social situation of women put them and their households at higher risk of energy poverty.

EU measures to tackle gender and energy poverty

Legal commitments

Gender equality is a core value of the European Union, which is reflected within its treaties: it is included in articles 2 and 3 of the Treaty on the European Union (“principle of the equality between men and women”) and in articles 8 and 19 of the Treaty on the Functioning of the European Union. The latter determines that the EU in all of its actions ensures the respect for equality between women and men. Articles 21 and 23 of the Charter of Fundamental Rights prohibit any discrimination on grounds of sex and require equality between men and women to be ensured in all areas. These basic rights are backed up with specific binding directives relating to various issues, such as work and employment, health and access to services and goods.

The European Parliament emphasized that women's poverty increases the danger of energy poverty and that single parents need specific policy measures in its resolution on women's poverty in Europe from July 5, 2022.³⁷ It also stressed the need to guarantee low-income households access to affordable utilities, particularly for older women and single mothers.

Political commitments

On a political level, other commitments exist, such as the EU Gender Equality Strategy, which is a general obligation of the EU to empower women and to implement gender mainstreaming, including the following targets:

- Addressing the gender pay, care and pension gap, achieving gender balance in decision-making and in politics, achieving equal participation across different sectors of the economy, combatting gender stereotypes and gender-based

³⁷ European Parliament. (2022). Women's poverty in Europe. Available at: https://www.europarl.europa.eu/doceo/document/TA-9-2022-0274_EN.html (Last accessed: 26.6.2023.)

violence are key objectives of the EU Gender Equality Strategy³⁸. Intersectionality is a horizontal principle in its implementation³⁹



EmpowerMed will support women, low-income households, and key actors to take action against energy poverty in the Mediterranean.

- Binding measures on **pay transparency** by the end of 2025⁴⁰, a mechanism to enforce the right to equal pay, promotion of equal uptake of family leaves and flexible working arrangements, as well as **investments in care services**.
- Commission's gender mainstreaming actions and embedding in the next EU budget (2021-2027): Gender equality-related projects will be supported and funded through a number of EU programmes, as a gender dimension has to be integrated throughout the financial framework and various EU funding and budgetary instruments.

Challenges

- Right-wing governments of EU member states might pose a problem when it comes to the implementation of Gender Equality directives on the EU level in their home countries. They can also be reluctant to alter their policies to include gender mainstreaming and ensure equal treatment of all genders in legislation. Additionally, national right-wing governments might do a poor job of monitoring policies during the implementation phase or refuse to co-finance gender equality projects.
- European Parliament elections taking place in June 2024 might change the structure of political groups in the Parliament. In 2019, a new far-right political group Identity and Democracy (ID) was formed and there is a chance of the group growing in size in the next year's elections. There is also a possibility of a formation of a new right-wing group and far-right non-attached MEPs getting elected.
- Right-wing groups and members of the Parliament will have the ability to influence Gender Equality proposals of the 2024 European Commission by getting amendments passed with the help of other such groups, which would delay the process of integration of the gender perspective into all policies. In case the far-right MEPs become members of the Committee on Women's Rights and Gender Equality (FEMM) they will be in a position to oppose specific measures for the advancement of women.

³⁸ European Commission (n.d.): Gender equality strategy. Achievements and key areas for action, https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy_en (last accessed 14th of July 2023).

³⁹ Ibid.

⁴⁰ European Commission (2021): Pay Transparency: equal pay for women and men for equal work, Factsheet, 4th of March 2021.

How does the EmpowerMed project tackle gender and energy poverty?

EmpowerMed focuses on the special characteristics of energy poverty in the coastal areas of the Mediterranean, with the overall objective to contribute to energy poverty alleviation and health improvement of people affected by energy poverty, with a particular focus on women, through:

- implementing practical solutions, tailored to empower over 4,200 households (mainly focusing on women) affected by energy poverty to manage their energy consumption and improve their access to appropriate energy resources,
- assessing the efficiency and impacts of various practical energy poverty alleviation measures and their potential to empower women to formulate local, national and EU policy recommendations and
- promoting the policy solutions for tackling energy poverty by empowering women at local, national and EU level among 220 decision-makers, 560 social actors, 100 utilities, 180 health experts and 100 energy poverty experts.



“In order to enhance women's agency in acting against energy poverty, EmpowerMed will develop the full potential for women as change agents and implement training, collective assemblies and gender just policy and advocacy work.”

Women will be empowered since women's agency is necessary for acting against energy poverty. EmpowerMed will additionally collect and validate gender-disaggregated data in order to enable a better understanding of women's roles in addressing energy poverty.

Gender Just Policy Recommendations

1. Framing

As bills skyrocket across Europe, the urgency to address the systemic causes of energy poverty has never been more apparent. Energy poverty has been exacerbated by geopolitical wars in the last year. However, the scandal of indecent housing, fossil fuel addiction and neoliberal energy markets meant that 1 in 4 Europeans⁴¹ were subjected to energy poverty even before the invasion of Ukraine.

Moreover, women, who are disproportionately impacted by energy poverty⁴², are largely left out of the solutions and not targeted in the energy poverty support programmes. Energy policy and decision-making continue to be primarily ring-fenced to male-dominated spaces. They are perceived as purely technocratic, with little awareness of the broader socio-political factors or the importance of accessibility and inclusivity.

But it becomes clear: energy poverty is systemic and therefore requires systemic, intersectional solutions. The good news is: that the European Green Deal has the potential not only to mitigate the climate crisis but also to alleviate inequality and injustices across Europe. It brings the benefits of climate action and a just energy transition into people's homes and engages new demographics.

There are clear solutions to energy poverty, including scaling up renewables, subsidising heat pumps, and ending fossil fuel lock-ins for poor households. Additionally, it involves subsidising deep renovation programmes for poor households in an accessible and inclusive way. These policies and programmes will not be inclusive by nature unless this is established in a concrete decision-making and design step.

Without an awareness of placing gender justice at the heart of these programmes through generating and collecting data, through programme design and implementation, we risk these programmes failing to reach those who really need them. Not mainstreaming gender into these programmes and frameworks will reinforce inequalities over a long period, limited financial, social and human resources will be wasted, and environmental changes will be missed.

2. General recommendations

Gender-disaggregated data on energy poverty at the EU and national level

Drivers of energy poverty are structural and systemic. Energy poverty is caused by i) indecent housing, ii) fossil fuel dependency and lock-ins, and iii) systemic and structural inequalities. A majority of female-led households are affected by those drivers; hence gender is a crucial axis to be included when tackling energy poverty.

- Raise awareness about the intersection of gender and energy poverty, call for a coherent definition/concept of "vulnerable households" (we prefer "households in

⁴¹ Right to Energy Coalition (n.d.): About Energy Poverty, <https://righttoenergy.org/about-energy-poverty/>

⁴² EmpowerMed (2020): Report on gender aspects of existing financial schemes for poverty measures. Available at: <https://www.empowermed.eu/resource/report-on-gender-aspects-of-existing-financial-schemes-for-energy-poverty-measures/>

vulnerable situations”) and “energy poverty”, which includes a gender and intersectional dimension.

- Furthermore, collect gender-disaggregated data on energy poverty annually regarding heating and cooling to harmonise energy poverty measurement, e.g., through Eurostat.

Gender-transformative policy design and implementation

Ensuring that energy policies and energy efficiency programmes are implemented in a gender-transformative way and considering the different needs and experiences of all genders and distinct social groups to guarantee the human right to clean, affordable energy for all. This means designing specific programmes targeting women with concrete measures relating to issues, such as summer energy poverty and the health impacts of energy poverty. A Pan-European cross-sectoral strategy is needed (more coherent policy, gender-disaggregated data, more research on effects for women/different genders, and monitoring).

There is a high potential for the EU to function as a role model (using tools like communication, gender trainings, impact assessment, gender budgeting or programmes like Marie Skłodowska-Curie Actions). Such programmes can be enabled in collaboration with the Energy Poverty Advisory Hub, Covenant of Mayors, the Committee on Women’s Rights and Gender Equality (FEMM), and feminist or women’s CSOs as policy advisors.

- Establishing an advisory board on gender inclusivity and energy transition, incl. energy poverty, by the European Commission would foster a gender approach in all policies.
- Ensuring that relevant findings from gender-related climate and energy research are incorporated in discussions, statements and discussions of EU bodies.

Targeted financing

Low-income households specifically face the split-incentive barrier (landlord/tenant dilemma), hence they have less decision-making power when it comes to deciding about the energy supply for their flat/house or renovation measures. Additionally, current loan schemes and market incentives do not specifically target energy poor households, certainly not in a gender-just way.

Gender-budgeting measures would ensure that funds target especially women in precarity, e.g., by providing targeted financing to low-income female-led households to support them in installing energy efficiency measures, such as insulation or upgrading to more efficient heating systems.

- Gender indicators must be included in financial programs such as rental acts, on-bill finances, green leases, feed-in tariffs, etc.
- Aiming for a structural transformation, projects funded by Horizon or Life can enable sustainable and gender-just structures. Hence, more support from these funds is needed for research and innovation on gender and energy poverty, equal societies and power shifts, such as in the projects W4RES (H2020), Entrances (H2020), EUCENA (EUKI).

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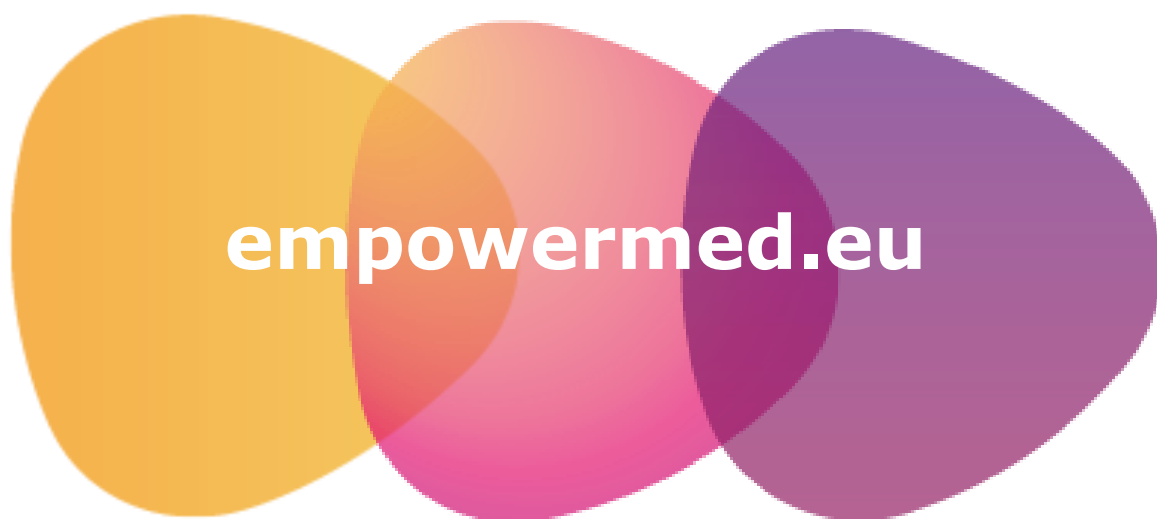
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