

# **Policy Recommendations**

### **GERMANY**

MUUU KIARA GRONEWEG, KATHARINA HABERSBRUNNER, MARILYS LOUVET, JIWON YOO











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# Introduction

Globally, there is a clear gender disparity in decision-making power in the energy sector. Women are consistently underrepresented as employees and in leadership positions in different spheres of the energy sector, as well as living with higher rates of energy poverty.

In Germany, gender disparities persist in STEM education and the workforce, with an average of 35% of STEM students being women<sup>1</sup>. This imbalance undermines both social justice and innovation. In addition, women and LINTA<sup>\*2</sup> are less likely to make decisions in their households regarding energy even though they spend more time at home and use more energy services. The participation of women in the unpaid domestic sphere is also on the rise, in part due to the COVID crisis and transfer of work to home offices. Reports indicate that women were affected more by the loss of jobs and income during the COVID19 pandemic – especially those employed in precarious sectors<sup>3</sup>.

The Empowering Underrepresented Women in the Energy Sector (EUWES) project seeks to identify the current obstacles hindering women's representation and to promote gender justice in the energy sector through concrete recommendations for inclusive policies and practices. The project's primary goal is to strengthen the capacities of WLINTA\* and foster opportunities for them to actively participate in and contribute to decision-making processes within the energy sector. This includes energy sector companies, energy-related committees, research and higher education, and energy-established study programs.

To contribute towards the goal of the project, EUWES partner WECF offers a comprehensive set of policy recommendations. These recommendations are organised into three categories, each tailored to a specific target audience: the educational sector, the private sector, decision-makers/policymakers.

It is important to recognise different genders in different roles within the energy sector not only as employees or managers (i.e. as decision-makers), but also as consumers and prosumers. This would help to integrate a gender perspective on energy demand, raise awareness about phenomena such as energy poverty and influence the design of energy technologies. Consequently, this can increase the acceptance of the energy transition and mobilise more citizens to actively participate in this transition.

The following recommendations include concrete measures to act and promote gender justice for the educational sector, for the private sector and for integrating gender aspects into energy policies. A concise summary concludes the document.

<sup>3</sup> See for example: Corsi, Marcella; Ilkkaracan, Ipek (2022). COVID-19, Gender and Labour, GLO Discussion Paper, No. 1012,



<sup>&</sup>lt;sup>1</sup> Destatis (2023). 6,5% weniger Studienanfängerinnen und -anfänger in MINT-Fächern im Studienjahr 2021, Pressemitteilung Nr. N004 vom 23.Januar 2023, <u>6,5 % weniger Studienanfängerinnen und -anfänger in MINT-Fächern im Studienjahr 2021 -</u> <u>Statistisches Bundesamt (destatis.de)</u> (last accessed 23.10.2023).
<sup>2</sup> Please have a look at our glossary for further information.

Global Labor Organization (GLO), Essen.

#### **Glossary for readers**

- a. Gender-energy-nexus: Research about the gender-energy-nexus often focuses on differences between women and men in terms of access to clean and renewable energy, energy poverty and the representation and participation of women in the political, economic and civil society spheres of the energy sector<sup>4</sup>. Further academic and political discourses shift the perspective from a binary concept of women and men towards considering different gender identities in energy topics and by offering feminist approaches towards the energy transition. The gender-energy-nexus starts from recognizing WLINTA\* as key "consumers, producers, distributors, and decision makers across the energy value chain<sup>\*5</sup>. It aims to foster identifying differences between various genders in energy management and considering them into energy policymaking and implementation<sup>6</sup>.
- b. WLINTA\*: WLINTA\* stands for women, lesbians, intersex, non-binary, trans and agender people. This term was originally coined from Germany as FLINTA (Frauen, Lesben, intersexuelle, nicht-binär, transgender, and agender)<sup>7</sup>. The acronym WLINTA\* encompasses different gender identities that are affected by structural discrimination in the patriarchy. These identities each have different life realities and experiences of discrimination. In many places in this policy brief, women are referred to as a category, which is partly due to the limited data available.
- c. Gender Equality Plan (GEP): GEP is a set of commitments and actions that aim to promote gender equality in an organisation through a process of structural change. It facilitates strategies establishing priorities and concrete objectives (based on a thorough status quo assessment), and the specific measures that will be implemented to improve gender equality within an organisation. The timelines of the measures to be implemented and for measuring progress and success need to be included in the GEP. GEPs are to be designed as tools promoting reflexibility and learning by encompassing monitoring and evaluation activities. Finally, a GEP needs to establish clear responsibilities for different activities and to specify the general governance and leadership accountability for steering the GEP implementation and for the GEP's progress and results.
- d. Energy Poverty: It is a situation that a household cannot afford sufficient energy services for heating, cooling, and lighting a resident<sup>89</sup>. Derived from low-income and low-energy efficiency of buildings, it impedes them from being healthy and having a good quality of life<sup>10</sup>. On the EU level, 9.3% reported in 2022 that they cannot heat enough, followed by 6.9% in 2021 and 8% in 2020<sup>11</sup>.
- e. **Feminist moderation:** Feminist moderation is a technique to create safer and inclusive spaces during events such as conferences, lectures or group meetings to enable participation for diverse social



<sup>&</sup>lt;sup>4</sup> Feenstra, M., & Özerol, G. (2021). Energy justice as a search light for gender-energy nexus: Towards a conceptual framework. Renewable and Sustainable Energy Reviews, 1-11; Petrova, S., & Simcock, N. (2021). Gender and energy: domestic inequities reconsidered. Social & Cultural Geography, 22(6), 849-867.

<sup>&</sup>lt;sup>5</sup> UN Women (2023). Gender Equality in the sustainable energy transition. <u>Gender-equality-in-the-sustainable-energy-transition-en.pdf (unwomen.org)</u>, p. 6.

<sup>&</sup>lt;sup>6</sup> Feenstra, M., & Özerol, G. (2021). Energy justice as a search light for gender-energy nexus: Towards a conceptual framework. *Renewable and Sustainable Energy Reviews*, *138*, Article 110668. https://doi.org/10.1016/j.rser.2020.110668 <sup>7</sup> FLINTA: What does this acronym mean? | Minka Guides, 2023.

<sup>&</sup>lt;sup>8</sup> Birgi O.G., Ferdebar, M., Fuhrmann, A., Habersbrunner, K., & Stock, A. (2023). *EmpowerMed: Gender and energy poverty. Facts and arguments*. <u>https://www.wecf.org/de/wp-content/uploads/2018/10/EmpowerMED-Gender-and-energy-poverty-Factsheet-July2023-FINAL.pdf</u>

<sup>&</sup>lt;sup>9</sup> European Commission (n.d.). *Energy poverty*. <u>https://energy.ec.europa.eu/topics/markets-and-consumers/energy-consumer-rights/energy-</u>

poverty en#:~:text=Energy%20poverty%20occurs%20when%20a,the%20inhabitants'%20health%20and%20wellbeing (last accessed 27.06.2024).

<sup>&</sup>lt;sup>10</sup> Ibid.

<sup>&</sup>lt;sup>11</sup> Ibid.

groups. It focuses on redistributing power in public participation spaces and fostering diverse engagement by enabling that everyone has a fair chance to participate and share their thoughts.

# 1 Recommendations to address gender disparities in STEM education

Germany has recently made some progress in their gender equality legislation not only to strengthen the rights of women but also of non-binary and queer people, i.e. with the right to register as "diverse" at birth and the right to marry for homosexual and queer couples.

Nevertheless, feminist actors experience a current gender backlash in Germany, as with right-wing parties gaining votes in federal elections as with the ban on using gendered language in some federal states of Germany<sup>12</sup>.

Educational institutions play a key role in shaping the interests and skills of different genders, hence, to shape women's interest and equal opportunities in STEM studies.

We strongly recommend that the educational sector acknowledges the importance of gender for STEM studies and integrates a gender perspective from an early age. This would help to raise awareness on gendered differences in energy demand and the usage of energy technologies, the socio-political and socio-economic dimensions of energy and opportunities for young people, especially WLINTA\*, to enter the energy sector.

#### 1) Raise the gender competence of teachers and professors of STEM subjects

The unconscious biases and stereotypes of teachers and professors can influence their interactions with students based on gender, affecting students' aspirations and choices. Training teachers on gender concepts and biases helps them develop gender-responsive pedagogy to create learning environments that benefit all genders and avoid discriminatory behaviour. Steps towards this include:

- a) Trainings and workshops for teachers and professors that are included in their work time. These should be funded by either the educational institution itself or by the respective federal ministry of education.
- b) Integration of gender and diversity competence into teacher training programmes, in particular in Master of Education programmes at universities and during traineeship (dt.: Referendariat).
- c) Strengthen the position of awareness and equal opportunities officers at universities and schools, multiply these positions and establish an equal opportunity officer for each chair or department.

<sup>&</sup>lt;sup>12</sup> Three federal states of Germany – Bavaria, Saxony, and Saxony-Anhalt – decided in 2023 and 2024 to forbid schools, universities, and authorities to gender the German language with gender signs such as the asterisk (\*) or the colon. This law is regarded as limiting the possibility for teachers and professors to implement gender aspects in their daily work.



#### 2) Integrate gender aspects into STEM curricula

Gender-related questions are not yet integrated in STEM subjects as they are within the humanities or cultural studies. In STEM subjects, technology and natural sciences are often perceived as 'neutral' domains grounded in natural laws and mathematical principles. It is important to acknowledge that the educational and academic content in STEM fields is also shaped by cultural and societal processes and decisions.

Most of the literature and material offered in STEM courses at universities in Germany is written by men from the Global North. On one hand, this is due to the history of universities in Europe which prohibited access to women. On the other hand, due to the overrepresentation of men and the underrepresentation of women, producing these sciences and the material was led by men. To counteract this, steps include:

- a) Raise visibility of gender aspects in teaching material. It should be mandatory for university professors to include material produced by women and diverse genders and content that reflects on the socio-political dimension of the respective subject. It should have design and languages of material that seems appealing to diverse social groups, e.g. gender-transformative language.
- b) Create interdisciplinary seminars or gender modules for STEM disciplines. Several universities in Germany are already offering programmes such as gender certificates or interdisciplinary seminars for students of all disciplines. Best practices that can be used as an inspiration are Open Educational Resources by the Humboldt University Berlin on Gendering STEM: <u>Gendering MINT digital (hu-berlin.de)</u>. The Technical University Berlin also offers a certificate study program "Gender Pro MINT" with 30 ECTS for students and doctorands of STEM subjects: <u>Gender Pro MINT (tu.berlin)</u>
- c) Mainstream Gender Equality Plans as a best practice so that all universities and schools apply them. Universities that have a GEP are eligible for certain funding opportunities, which can be re-invested into gender funding. The plans have been found to be a useful and effective tool as they usually identify strategic areas of improvement, contain solid and ambitious objectives, measures, implementation bodies and timelines.
- d) For high schools, the above-mentioned aspects are valid, too. Here, it is important that lessons and lecture material such as books are cliché-free – books which show girls that they can take on active roles in STEM, starting with pictures of women installing solar panels or doing renovations in the building sector.

# 3) Building and funding networks between universities, schools and other educational institutions

Academic institutions should be required to work closer together with secondary schools to inform all genders about energy-related disciplines and potential career paths. An integrated energy culture must be promoted at all levels of education to advocate career perspectives in STEM subjects and the energy sector to students of all ages and genders. The already existing programs such as open-house days,



Girls'/WLINTA\* days as well as summer academies could be strengthened and complemented by connecting young students to women (students, professors) in the STEM faculties.

- a) Accessing gender funds of Erasmus+ projects like <u>Gender Education</u> can support in building mutual plans. The funding can be used to develop online courses, training programs and initiatives that contribute to creating a more equitable and inclusive learning environment. Additionally, universities can engage in policy experimentation projects under the Erasmus+ Programme that specifically target boosting the gender balance in technical fields.
- b) Schools can reach out to <u>MINTvernetzt</u>, a networking service to connect STEM education actors in Germany and which is funded by the Federal Ministry of Education and Research (BMBF). The vision of this networking service is that girls and young women as well as groups in marginalized situations gain access to STEM education through targeted group-oriented and stereotype-free programmes.

# 2 Recommendations for energy companies

Energy companies play an important role in integrating women and diverse genders as active agents of the energy transition. Gender diversity in the energy sector can improve a company's ability to meet customer needs and drive innovation. Globally, the share of women in the energy sector's workforce is less than 30%, in Germany, 32% of employees in the renewable energy subsector are women<sup>13</sup>.

### 1) Gender Self-Assessment (GSA) for companies

A first recommendation directed towards leaders in energy companies is to apply a regular gender selfassessment (GSA). This is helpful to check and improve the current status quo of gender equality in their company, as well as to evaluate existing corporate policies. Based on the GSA, a company can develop a Gender Action Plan with specific measures, targets, and actions aimed at promoting gender equality and integrating a gender-sensitive approach into its activities.

This can include planning a targeted gender quota or Diversity-Equality-Inclusion (DEI)-Strategy (see recommendation 4) to start targeting women and people with diverse backgrounds in the early stages of recruiting employees. Quotas are controversially discussed but can be regarded as a transition method until a company has built up a thorough equality structure.

<sup>/</sup>media/Files/IRENA/Agency/Publication/2019/Jan/IRENA\_Gender\_perspective\_2019.pdf?rev=bed1c40882e54e4 da21002e3e1939e3d Renewable Energy A Gender Perspective (irena.org) (last accessed 26.10.2023); BMWK (2022): Für mehr Geschlechtergerechtigkeit im Energiesektor, BMWK - Für mehr Geschlechtergerechtigkeit und Diversität im Energiesektor (last accessed 26.10.2023). See also: <u>D1.2-Report-on-the-mapping-of-national-gender-policies-in-energy-sector\_Germany.pdf</u> (door.hr)



<sup>&</sup>lt;sup>13</sup> PwC (2021): Frauen in der Energiewirtschaft, frauen-in-der-energiewirtschaft-warum-die-branche-mehr-frauen powerbraucht.pdf (pwc.de) (last accessed 26.10.2023); International Renewable Energy Agency (2019): Renewable Energy. A Gender Perspektive, https://www.irena.org/

#### 2) Trainings and reskilling of employees

#### a) Gender trainings for employees

As highlighted in <u>Deliverable 1.2 of EUWES project</u>, many companies are already implementing several strategies to mobilise more women for their company. However, some subtle barriers remain that cannot directly be addressed by formal measures, such as gender-stereotypical behaviour. To tackle such subtle barriers, company leaders can finance and implement trainings on gender-just communication, and on anti-discriminatory working atmosphere (i.e. feminist moderation, awareness person, safer spaces) to create welcoming structures for all genders. Also, as highlighted in stakeholder interviews conducted for D2.1, energy companies lack trainings on diversity and intersectionality, i.e. to balance conflicts between people from different cultural backgrounds or people with different political positions.

#### b) Reskilling of employees

In addition, as there is a workforce migration from fossil industry to renewable sector, reskilling programmes must seize the opportunity that this transition holds. This has great potential to shift from an energy sector with low women's representation, or if so, in administrative positions, towards a sector with high women's representation in practical, technical and decision-making positions. Job transition plans must consider the needs and realities of different genders. In order to promote the inclusion of women, it is important to take into account factors such as care work, gender stereotypes, gender pay gap, and gender discrimination. Re-skilling and training programmes must consider different levels of education as well as availability time (e.g. outside of care work hours) to on-board all needed workers.

#### 3) Create and fund positions for equal opportunities officers

It is well-recommended to dedicate corporate resources to gender equality by nominating coordinators for equal opportunities as experts who have been specialised and trained in methodologies for gender mainstreaming, i.e. for creating safe(r) spaces and awareness structures. Instead of adding it as a task for an already occupied and busy employee, this should be a proper job position linked to the human resources team of a company. Having a contact person or possibilities to express demands helps to foster an environment where WLINTA\* feel accepted, comfortable, and strengthened to then fulfil their daily working tasks.

#### 4) Establish a Diversity, Equity and Inclusion (DEI)-Strategy

A DEI approach refers to initiatives and strategies that promote equal access, opportunity, employment, and a sense of belonging for underrepresented groups in the workplace. The benefits of DEI have an impact on the whole organization since they improve overall employee satisfaction which results in a higher motivation, innovation and collaboration. In a globalised setting and a setting of shortage of labour, it is important for energy companies to attract employees with different social backgrounds, skills, languages, and cultural values they can bring to the company. The interviews with stakeholders portrayed in D1.2 detected that some companies already subscribed to the <u>Charta of Diversity</u> which is an employer initiative to promote diversity in companies and institutions. This Charta is regarded as an



option for companies to subscribe to a self-obligation for implementing measures to strengthen diversity within their company structures. It is highly recommended that energy companies do a self-assessment about their own DEI-Strategy and start implementing measures, e.g. allowing for extra holidays during diverse religious holidays that are not foreseen by German law.

# 3 Recommendations for policy/decision makers

Policies and measures should be designed and implemented to address gender-transformative social inclusion in energy plans, recognising the diverse needs and experiences of all genders and social groups. It is agreed under National energy and climate plans (NECPs) in the EU, and <u>its guidance</u> advises national policy/decision makers to enhance just transition including alleviating energy poverty and facilitating affordable accessibility for all people.

#### 1) Apply a cross-ministerial strategy/strengthen the feminist approaches

In Germany, some ministries have already announced a feminist policy: for example, <u>the German</u> <u>Federal Foreign Office (AA) aims for a Feminist Foreign Policy</u> and the <u>Federal Ministry for Economic</u> <u>Cooperation and Development (BMZ) for a Feminist Development Policy</u>. These ministries cannot work as "islands" and it needs a strong commitment by the Federal Ministry of Finance or the Federal Ministry for Economic Affairs and Climate Action (BMWK) to pursue feminist principles, requiring a stronger collaboration between federal ministries and synchronising policies. Hence, a cross-ministerial strategy is needed, including gender and energy-related sectors such as the mobility and building sector, as well as social, care and welfare policies.

#### 2) Fund gender-disaggregated data

The inclusion of social and gender aspects in laws and guidelines plays a decisive role in the development of sustainable and equitable policies. In the context of climate protection legislation, there is potential for gender-differentiated analyses and data to design climate protection and energy strategies in a socially and equitable manner and to be able to assess the impact of climate protection measures, as specific groups have often been more heavily burdened in the past.

To base their policy design on data, policy makers should aim for thorough gender-disaggregated data on the gender-energy-nexus, in relation to intersectional aspects (age, race, health, economic status), e.g. by dedicating funding and budget to gender-disaggregated research. The analysis of EUWES consortium underlined that hardly any data existed about non-binary genders or other gender identities as well as the role of diversity and intersectionality in the energy sector (see <u>D1.2</u> and <u>D1.4</u>).

# 3) Taking an active role in raising awareness and communication about a feminist energy transition

The social discourse on climate protection and the energy transition shows that the focus here is often on the technological transformation and that too little consideration is given to social issues, such as



acceptance, participation, opportunities for co-determination, or concerns of citizens. What is needed is a redefinition of the energy transition that goes beyond technical applications and economic gain and considers social aspects and the needs of all citizens. Ministries and government institutions must become role models for gender-transformative communication in the energy sector, by following the DEI-strategy and for strengthening the visibility and voices of WLINTA\* in the discourse on the energy transition. **It is recommended** to organise targeted communication campaigns to attract more girls and women into the STEM subjects and the energy sector.

#### 4) Extend the collaboration with civil society and gender experts

To reflect on the energy needs of different genders, especially consumers affected by policy-decisions, i.e. during the energy crisis and rising energy prices, it is important that citizens and civil society organisations are included in decision-making processes about energy and climate policies, such as the NECP. The continuous exchange with civil society actors, e.g. in the scope of a round table on new strategies ensures that the most diverse perspectives possible can be incorporated into the new policy, especially since civil society actors are working closely together with people most affected by discrimination. This can include inviting gender experts to conduct gender trainings and workshops (about gender awareness and gender biases, as well as gender mainstreaming for energy policies) among policy makers to sensitise them for gender perspectives. This expertise must properly be funded by policymakers.

#### 5) Support specific finance and microcredit schemes for women entrepreneurs

Microfinance can foster women microentrepreneurs structurally excluded from services such as loan and business development by addressing market disparities and hurdles to work in the renewable sector in Germany<sup>14</sup>. Current German law does not have a microcredit legislation, ending up with limiting nonbank institutions offering microcredits <sup>15</sup>. Specific or microfinance can support women (micro)entrepreneuers who can develop the renewable sector and create more green jobs by enabling them to afford business costs such as carbon-free products<sup>16</sup>.

<sup>&</sup>lt;sup>16</sup> Micro Energy Credits (MEC) (n.d.). *Empowering Microentrepreneurs through carbon finance*. <u>Socially Responsible Carbon</u> <u>Credits | MicroEnergy Credits (last accessed: 27/06/2024)</u>



 <sup>&</sup>lt;sup>14</sup> OECD (2021). 7. Designing effective microfinance schemes for inclusive entrepreneurship | The Missing Entrepreneurs 2021 : <u>Policies for Inclusive Entrepreneurship and Self-Employment | OECD iLibrary (oecd-ilibrary.org)</u> (last accessed: 27.06.2024)
 <sup>15</sup> Ruesta, C. & Benaglio, N. (2021). *Microcredit regulation in Europe: An overview*, European Microfinance Network (EMN). <u>mr 2021 FP.pdf (european-microfinance.org)</u>
 <sup>16</sup> Micro Energy Credits (MEC) (n.d.). *Empowering Microentrepreneurs through carbon finance*. <u>Socially Responsible Carbon</u>

# 4. Key target policies: Renewable Energy Act and Building Energy Act

### Renewable Energy Act (Erneuerbare Energiegesetz, EEG):

The Renewable Energy Act is the main instrument for the expansion of renewable energies in Germany. The aim of the EEG is to restructure the energy supply and increase the share of renewable energies in the electricity supply to at least 80 per cent by 2030. The expansion of renewable energies is particularly in the interests of climate and environmental protection for the development of a sustainable energy supply. In addition, the economic costs of energy supply are to be reduced, fossil energy resources are to be conserved and technological development in the field of renewable energies is to be driven forward. Hence, the EEG can support a shift towards a decentralised energy system that includes the perspective of distinct social groups, especially in terms of gender diversity. The following section will illustrate the suggestions for amendments and additions to the EEG to include such a gender-just perspective.

#### Suggested amendments and additions to:

# Chapter 1 – General Regulations (Allgemeine Bestimmungen)

### Information and training

The government shall ensure that information on renewable energy expansion and support measures is developed in a gender-just manner and made available to all relevant actors, such as consumers, self-consumers of renewable energy, renewable energy communities, builders, installers, architects, suppliers of heating, cooling and electricity equipment and systems, and suppliers of vehicles compatible with the use of renewable energy and intelligent transport systems. A focus will be to address, recruit, inform and train WLINTA\*, enabling their thorough participation and representation in diverse spheres of the energy sector.

### § 21 Feed-in Tarif and Tenant Electricity (Einspeisevergütung und

#### Mieterstromzuschlag)

Support schemes for electricity from renewable sources shall include gender and intersectional dimensions to support the citizens in a targeted way, considering energy education and communication. It needs targeted information for all citizens.

# § 22b Renewable Energy Communities (RECs) (Bürgerenergiegesellschaften)

Although the EEG already provides a definition for RECs and aims to strengthen them, it is suggested that §22 includes a gender-just perspective highlighting the importance of the mobilization of WLINTA\* for RECs and of applying feminist approaches towards RECs. As energy communities and cooperatives are being run by local actors and act as social actors, they are well placed to provide gender-just approaches in an accessible manner for further local energy programmes.



§22 can be amended by introducing gender targets to strengthen the role of all prosumers and energy communities. This will allow all households, including women-led households and households in precarious situations, to have access to save energy and become members of energy communities. Some gender targets or possible approaches are:

- Development of gender expertise in energy communities with trainings, targets, genderresponsive communication
- Enabling energy sharing: Energy sharing shows enormous potential for nearly all households to join renewable energy communities and to consume locally produced energy. It can provide stable energy prices, even in times of crisis. A potential study in Germany shows that more than 90% of German households could participate in energy sharing<sup>17</sup>. All household energy managers (mostly women) will be addressed and informed about energy sharing in general and engagement in energy communities in particular.
- Reduced taxes or prices for rooftop or balcony modules targeting people in precarious situations which are mainly WLINTA\*.
- Financial, ring-fenced support and incentives for membership in energy communities.
- Free of charge and tailored renovation and renewable programmes to lift women out of energy poverty.

Example: Energy Communities Tipperary Cooperative (ECTC)

It is a community-led home insulation upgrade and retrofitting organisation offering One Stop Shop Service. Especially, under the funded project called Community Led Just Transition North Tipperary, it has been "retrofitting houses, running an energy saving behaviour change programme and installing community owned solar PV on community owned buildings"<sup>18</sup>.

Example: Energie-Soli (Energy Solidarity Price) : Energie-Soli für Solo-Eltern

The energy crisis affects everyone, but to varying degrees, and single parents in particular need financial support. The Energy Soli initiative by Stiftung Alltagsheld:innen and Fair für Kinder e.V. collects donations to support single-parent families who are particularly at risk of energy poverty.

<sup>&</sup>lt;sup>18</sup> Ecovision (n.d.). Just transition: Community Led Just Transition North Tipperary. <u>Just Transition – EcoVision (last accessed:</u> <u>27.06.2024)</u>



<sup>&</sup>lt;sup>17</sup> A potential study by the IÖW in Germany shows that more than 90 per cent of German households could participate in energy sharing and that energy sharing could therefore contribute more than 35 per cent to the renewable targets. Energy sharing is described in the EU's Renewable Energy Directive and should have been transposed into national law in Germany by 2021. See: Wiesenthal, J., Aretz, A., Ouanes, N., & Petrick, K. (2022). Energy Sharing: Eine Potenzialanalyse. Institut für ökologische Wirtschaftsforschung (IÖW): Berlin, Germany.

# Building Energy Act (Gebäudeenergiegesetz, GEG)<sup>19</sup>:

The Building Energy Act aims to boost energy efficiency in buildings and their systems such as heating, cooling and lighting by designing, constructing, and renovating buildings with renewable and efficient energy use. This act has the potential not only for decarbonising but also for improving energy poverty and gender inequality. For residential buildings, this act can substantially reduce the energy poverty rate by lowering energy bills as well as elevate WLINTA\*s life quality, considering that women suffer disproportionately from energy poverty<sup>20</sup>. For all buildings, this act can strengthen all genders to actively participate in and be considered for accessible building design and use. In this way, it increases the entire population's satisfaction, contributing to their robust support on building energy efficiency and decarbonization<sup>21</sup>.

# Suggested amendments and additions to the GEG:

# Part 1 General Part (Allgemeiner Teil)

# § 1 Purpose and Goal (Zweck und Ziel)

Since the GEG addresses the goal of implementing socially acceptable measures and accomplishing climate goals including climate action and sustainable development, this section shall be extended to include goals that target directly ending energy poverty, strengthen participation of diverse genders, and guaranteeing building accessibility (in line with the international framework of the Sustainable Development Goals, so by referring to <u>SDG 1</u>, <u>SDG 5</u>. 5/A/B/C, <u>SDG 7</u>. 1, and <u>SDG 11</u>. 7).

# § 4 Function of the Public Sector as Role Models (*Vorbildfunktion der öffentlichen Hand*)

As this paragraph implies that public non-residential buildings can function as an informative example of having efficient and sustainable building energy systems, the German government shall mandate additionally that public authorities also report on building accessibility for all, including children, women and queer people as well as people with disabilities, by integrating barrier-free design elements from

https://energy.ec.europa.eu/document/download/3a0ea42f-29cd-4279-962c-

4cf4b054435e\_en?filename=de\_neeap\_2017\_en.pdf;

EIGE (2023). Energy poverty is not about households. It's about who is in those households. (Last access: 18.03.2024) https://eige.europa.eu/newsroom/director-corner/energy-poverty-not-about-households-its-about-who-those-households <sup>21</sup> Ernst, A. (2019). How participation influences the perception of fairness, efficiency and effectiveness in environmental governance: An empirical analysis. <u>https://doi.org/10.1016/j.jenvman.2019.03.020</u>



<sup>&</sup>lt;sup>19</sup> Bundesministerium der Justiz (2020). *Gesetz zur Einsparung von Energie und zur Nutzung erneuerbarer Energien zur Wärme- und Kälteerzeugung in Gebäuden*. <u>https://www.gesetze-im-internet.de/geg/</u> (last accessed 19.03.2024).

<sup>&</sup>lt;sup>20</sup> Birgi et al. (2021). *EmpowerMed: Gender and energy poverty Facts and arguments*, WECF, <u>https://www.wecf.org/de/wp-content/uploads/2018/10/EmpowerMed\_Gender-and-energy-poverty-Factsheet-2021.pdf</u>;

BMWi (2017). National Energy Efficiency Action Plan (NEEAP) 2017 for the Federal Republic of Germany: pursuant to Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency.

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https://www.bmwk.de/Redaktion/DE/Publikationen/Energie/publikation-g7-report-on-gender-equality-and-diversity-in-the-energy-sector.pdf? blob=publicationFile&v=1;

Drescher, K. & Janzen, B. (2021). Determinants, persistence, and dynamics of energy poverty: An empirical assessment using German household survey data, *Energy Economics*, 102(C);

planning to constructing or renovating into public buildings<sup>2223</sup>. This can include for example providing menstrual products as well as all-gender toilets. It can be achieved through understanding and identifying how the above-mentioned groups experience buildings by involving them in the design process and decision-making<sup>24</sup>.

### § 6 Authorisation to Issue Ordinances on the Distribution of Operating Costs and on Billing and Consumption Information (*Verordnungsermächtigung zur Verteilung der Betriebskosten und zu Abrechnungs- und Verbrauchsinformationen*) - (1) & § 79 – (1) Grundsätze des Energieausweises

The government shall stipulate that the information delivery, mentioned in § 6 (1), considers diverse residents, occupants, and owners of buildings in its content and presentation, especially focusing on groups affected by economic constraints, educational disparities, digital illiteracy or poverty to ensure them to stay informed about the effects of energy saving because of the enactment of this act and to offer them extra instructions for their participation in energy saving<sup>25</sup>.

# Part 6 Financial Support for the Use of Renewable Energies for the Generation of Heating or Cooling and for Energy Efficiency Measures (*Finanzielle Förderung der Nutzung erneuerbarer Energien für die Erzeugung von Wärme oder Kälte und von Energieeffizienzmaßnahmen*)

# § 89 Fördermittel – (1)

The government shall add an eligible target in the measures for the buildings with renewable and efficient energy use that involve all, especially the addressed groups above, in their building usage and energy consumption in buildings. This amendment is to incentivise implementing the above recommendations through regulatory frameworks. Important is that financial support is directed towards renters of apartments or buildings and not only to owners. The federal funding for energy efficient buildings aims to support investors of buildings for renovation and energy efficiency measures such as heat pumps<sup>26</sup>. Some investors might profit from the benefits but raise the rental costs, burdening people in precarious financial situations. Hence, the financial support should consider those groups in need of fully funded and tailored renovation programmes, including for WLINTA\* living in energy poverty.

<sup>&</sup>lt;sup>26</sup> Bundesamt für Wirtschafts- und Ausfuhrkontrolle (n.d.). Energie. Bundesförderung für effiziente Gebäude, <u>BAFA -</u> <u>Förderprogramm im Überblick</u> (last accessed: 04.04.2024).



<sup>&</sup>lt;sup>22</sup> Stude et al. (2013). *Berlin-Design for all: Accessible Public Buildings (2<sup>nd</sup> Edition)*, Working group Barrier-Free Construction and Transportation of Berlin Senate Department for Urban Development and the Environment.

https://use.metropolis.org/system/images/1703/original/apb\_red\_broschure\_en.pdf (last accessed 10.11.2023).

<sup>&</sup>lt;sup>23</sup> DGNB GmbH (2020). SOC2.1 Barrier-free design, <u>https://static.dgnb.de/fileadmin/dgnb-system/en/districts/criteria/DGNB-Criteria-Districts-SOC2\_1\_Barrier-free\_design.pdf</u> (last accessed 04.07.2024).

<sup>&</sup>lt;sup>24</sup> Zallio, M. & Clarkson, P. (2021). Inclusion, diversity, equity and accessibility in the built environment: A study of architectural design practice. *Building and Environment*. 206. 108352. 10.1016/j.buildenv.2021.108352.

 <sup>&</sup>lt;sup>25</sup> Papadakis N, Katsaprakakis DA. A Review of Energy Efficiency Interventions in Public Buildings. *Energies*. 2023;
 16(17):6329, <u>https://doi.org/10.3390/en16176329</u>

Example: CELICA Toolkit (Clean Energy Solutions for Low Income Communities)2728

The U.S. Department of Energy offers the toolkit generated by working with its partners across public, private, non-profit organisations, etc. with an aim of decreasing energy bills for low-income neighbourhoods. The LEAD tool (Low-income Energy Affordability Data) proposes disaggregated data including regions, housing features, household income status, heating energy type, annual energy consumption and its burden of average 5-year<sup>29</sup>. It navigates facilitators to identify and analyze energy hindrances, needs, and disparities in the low-income communities. The analysis helps produce templates and guides for designing and implementing tailored programmes for them. In practice, solar programmes were planned and proceeded, resulting in installing weatherization and photovoltaic system in residential buildings of the communities or offering solar subscription services for them.

Likewise, creating taskforce for communities marginalised from efficient building use can not only identify their needs and gaps through collection of disaggregated data but also enables tailored projects that helps communities under energy poverty by saving energy bills and them to be benefitted by the Building Energy Act.

<sup>&</sup>lt;sup>29</sup> Office of State and Community Energy Programs (U.S. Dept. of Energy) (n.d.). *Low-income Energy Affordability Data Tool*. <u>LEAD Tool | Department of Energy</u> (last accessed: 27.06.2024)



<sup>&</sup>lt;sup>27</sup> Better Buildings (U.S. Dept. of Energy) (n.d.). <u>CELICA Toolkit: Clean Energy Solutions for Low Income Communities | Better</u> <u>Buildings Initiative</u> (last accessed: 27.06.2024).

 <sup>&</sup>lt;sup>28</sup> Better Buildings (U.S. Dept. of Energy) (n.d.). *Clean Energy for Low Income Communities Accelerator (CELICA) Overview.* <u>CELICA Accelerator Overview FINAL.pdf (energy.gov)</u>.
 <sup>29</sup> Office of State and Community Energy Programs (U.S. Dept. of Energy) (n.d.). *Low-income Energy Affordability Data Tool.*











