

75inQ Public Comment:

Strategic Roadmap for digitalisation and AI in the energy sector

Introduction

75inQ welcomes the Commission's Initiative in providing a strategic roadmap for digitalisation and the usage of AI in the energy sector. Our main concern regards the potential of AI usage in perpetuating gender biases that are already present within the energy sector.

Comments

AI usage is overrepresented in the male population compared to the female population¹. Advising AI usage to companies may increase the overrepresentation of men in energy sectors in such a sense, and maybe even push women out of positions they currently hold. Without gender focused awareness policies on the benefits of AI training, this measure may increase the underrepresentation of women in the STEM field.

AI itself reproduces gender biases, by design. AI algorithms train off of datasets and of the engineers designing them, thus AI reproduces the biases these datasets and individuals hold.² The individuals concerned are mostly men: women comprise only 22% of AI talent globally and occupy less than 14% of senior executive roles in AI.³ Thus, the inclusion of AI tools in the energy sector, whether it be at the producer or consumer level, may disadvantage, infantilise and overall project gendered stereotypes on female AI users, benefactors or subjects of analysis. Those stereotypes are harmful, for a myriad of reasons that need not be recalled here.

The data used for the training of AI is in itself problematic with regard to gender inequality invisibilization. As a historically male-dominated sector, the sector of energy sector mainly produces gender-aggregated data, meaning that it prevents one from identifying and addressing the gaps and disparities between women and men in the energy sector. The aggregation of the data that will be used for such AI will inevitably

¹ Aldasoro, I., Armantier, O., Doerr, S., Gambacorta, L., & Oliviero, T. (2024). The gen AI gender gap. *Economics Letters*, 241, 111814. <https://doi.org/10.1016/j.econlet.2024.111814>

² Ho, J. Q., Hartanto, A., Koh, A., & Majeed, N. M. (2025). Gender Biases within Artificial Intelligence and ChatGPT : Evidence, Sources of Biases and Solutions. *Computers In Human Behavior Artificial Humans*, 100145. <https://doi.org/10.1016/j.chbah.2025.100145>

³ AI's Missing Link : The Gender Gap in the Talent Pool. (s. d.). Interface. <https://www.interface-eu.org/publications/ai-gender-gap>

lead to the invisibilization of gendered energy poverty and overall struggles.⁴ When such a bias occurs, an aggravating factor appears: the attribution of harm is close to impossible. The opacity of AI training processes and data stocks would highly complicate finding the source of gender biases in its outputs.⁵ This calls for preventive action.

AI usage in energy companies requires funding. Female entrepreneurs and founders in the energy sector are disproportionately unsuccessful in securing such funding.⁶ That is both due to an awareness gap between men and women as pure gender biases in the award of funds. Without the proper implementation of equitable funding policies or of awareness campaigns, accelerating such a costly transition of the energy sector towards AI may hinder even further the growth of female-led energy companies compared to those led by men.

Suggestions

We thus believe the framework's efficiency would truly benefit from gender mainstreaming. Such mainstreaming could look like the following set of recommendations:

1. Encouraging the AI training of women, both in already senior positions, early career and those who are still pursuing an education, within the whole energy sector.
2. Overall, encouraging women to pursue roles within the AI sector, and the associated education paths.
3. Encouraging the use of gender-disaggregated data, and taking into account within company policies the gendered disparities that may appear.
4. Providing resources, awareness campaigns and potentially direct funding opportunities to female-led companies wishing to incorporate AI-powered tools into their companies in the energy sector.

About 75InQ:

The 75InQ foundation works to accelerate the transition to sustainable energy by promoting gender equality in line with the Sustainable Development Goals developed by the United Nations. The Dutch foundation conducts research, awareness campaigns, community outreach and facilitation to pursue these objectives. 75InQ focuses on SDG7 and SDG5 by accelerating diversity in the energy sector towards a more inclusive and sustainable energy transition. 75InQ has an active community of 1400 female professionals in the energy sector.

⁴ *The Gender-Energy Nexus in the AI Era : Challenges and Opportunities*. (2024, août 16). Sustainable Energy For All | SEforALL. <https://www.seforall.org/publications/the-gender-energy-nexus-in-the-ai-era-challenges-and-opportunities>

⁵ Cirillo, D., & Rementeria, M. J. (2022). *Bias and fairness in machine learning and artificial intelligence*. Dans Elsevier eBooks (p. 57-75). <https://doi.org/10.1016/b978-0-12-821392-6.00006-6>

⁶ Canestrini, C. (2025, 19 mars). *Gender and Energy Explorer : Bridging the Gap for an Inclusive Energy Transition*. Florence School Of Regulation. <https://fsr.eui.eu/gender-and-energy-explorer-bridging-the-gap-for-an-inclusive-energy-transition/>