



Gender Diversity in Photovoltaics: Experiences and Support Mechanisms

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Context

The PV sector remains highly gendered. Women and gender-diverse individuals are severely underrepresented in technical and leadership roles, hindering both innovation and a just energy transition. This study moves beyond numbers to explore lived experiences, identifying key barriers and support mechanisms, using a qualitative analysis techniques.



WHAT ABOUT YOU?

The Research Gap

Existing literature often focuses on quantitative gaps. This is the first qualitative study in PV to investigate the lived experiences of professionals from under-represented gender groups to identify the nuanced barriers they face and the support mechanisms that truly foster inclusion and advancement.

Methodology

This study adopts a qualitative research design based on **semi-structured interviews** with a diverse group of professionals from across the European PV sector. We use the snowball technique for interviews.

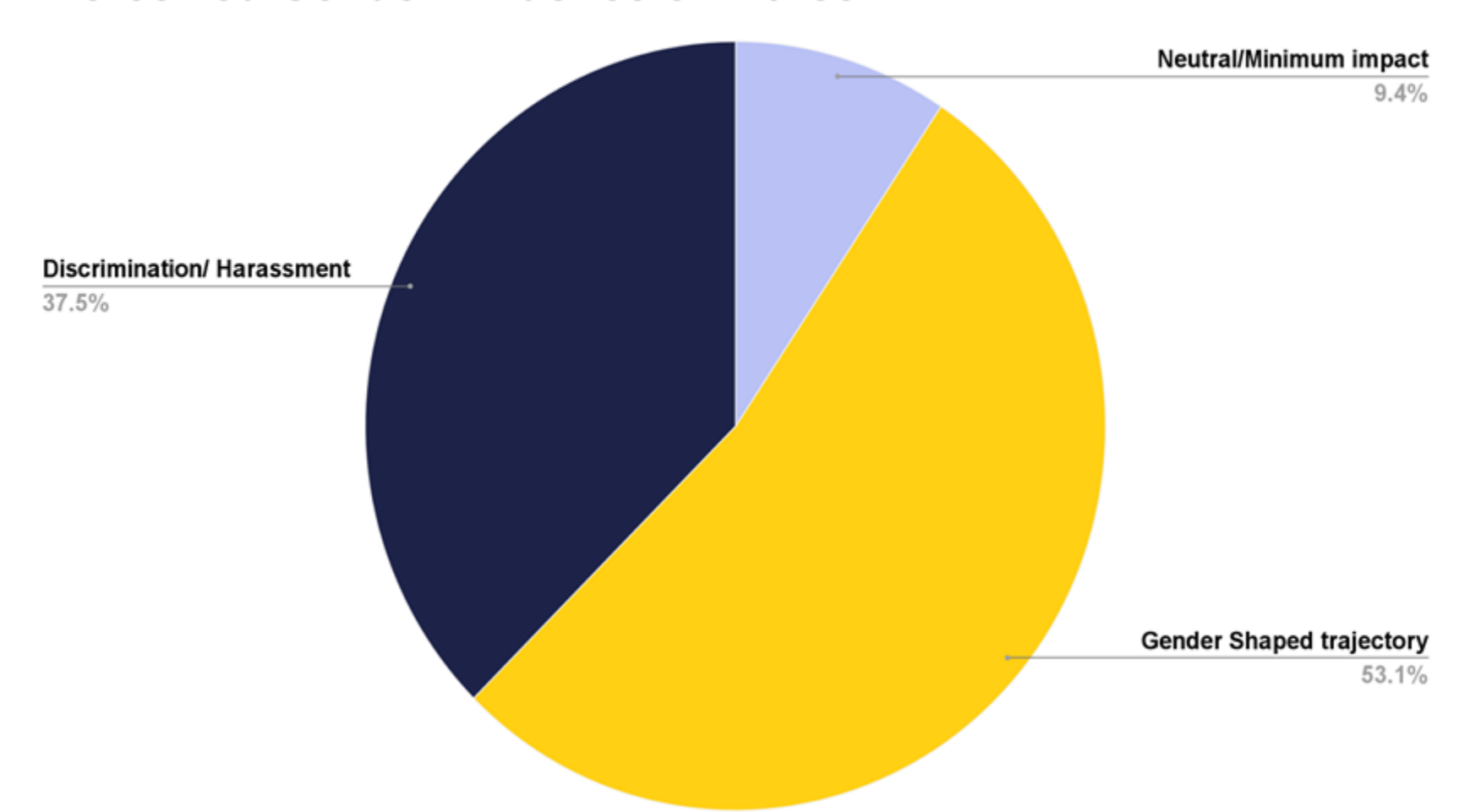
Participants: Diverse professionals across the European PV sector. (14 interviews completed, 35 planned).

Analysis: Thematic analysis of career pathways and workplace culture.

Interview Outcomes

Work-life balance remains a challenge for women in PV, who often face disproportionate care burdens, frequent travel, and burnout, mitigated mainly through supportive partners and outcome-focused work styles. Gender gaps persist in pay and promotion, with wage differences of up to 30%, slower advancement, and barriers in salary negotiation that can fuel imposter syndrome. Interviewees recommended solutions such as transparent pay structures, mentorship, flexible work policies, gender quotas, and recognition of diverse leadership styles.

Perceived Gender Influence on Career



Recommendations for Change

Level	Recommendation
Organisational	Transparent pay scales; mentorship; (non-gendered) parental leave; flexible hours
Cultural	Shift away from gender stereotypes; recognition of diverse leadership styles
Policy	Quotas; accountability in promotions; visibility for women experts
Personal advice (to newcomers)	"Negotiate early"; "find mentors/sponsors"; "don't be afraid to leave toxic workplaces"

Barriers and Support factors

Hindrances	Supports
Lack of role models, stereotypes, cultural conditioning	Mentorship, female professors, supportive colleagues
Male-dominated networks & decision-making	Growing diversity policies
Bias in assigning roles (pastoral vs technical)	Visibility of women leaders
Structural issues (pay opacity, hiring bias)	Flexible work arrangements, EU-funded equity pushes

Visibility and Leadership

Dimension	Findings
Conference invitations	Most women invited (esp. recently) but often tokenised or often the same small group
Leadership roles	~40% hold significant leadership roles but are still sidelined
Overall visibility	Technical leadership remains male dominated

POLICY RECOMMENDATIONS

Policy Area	Industry	Research
Leadership & Representation	Gender diversity targets in leadership; transparent promotions; equal pay; visibility in decision-making through gendered data.	Gender balance in conference speakers, panels, awards; track and report gender-disaggregated data.
Workplace Culture	Zero-tolerance harassment policies; unconscious bias training; value diverse leadership styles.	Supportive environments; standardized recognition systems to reduce bias.
Work-Life Balance	Flexible work models; equal parental leave; childcare support.	Recognize caregiving-related career breaks in evaluations; improve parental leave and support systems.
Career Support / Mentorship	Structured mentorship programs; women-focused networks; retraining and reskilling opportunities.	Formal mentorship networks; negotiation and leadership training; funding for women-led projects.
Long-Term Change	Partnerships with education systems; outreach to schools to promote PV careers.	Outreach to schools/universities; highlight female role models; cross-sector partnerships for inclusivity.