



SCAPE
POWERING E-MOBILITY

D1.3 – Gender Equality Action Plan

SWITCHING-CELL-ARRAY-BASED POWER ELECTRONICS CONVERSION FOR FUTURE ELECTRIC VEHICLES

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Description: Report on the features of the SCAPE technology that must be considered from a gender perspective and how these are addressed.



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Executive Summary

This deliverable describes the different actions that are proposed for the promotion of the involvement of women in Science and Technology in the frame of the SCAPE project. This includes the definition of a SCAPE recruitment strategy aiming towards gender-balance composition of the research teams at all levels.

Document History

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16 December 2022	Josep Maria Herrera (IREC), Àlber Filbà (IREC)	Revision of the GEP objectives	Revision (V1.3)
30 December 2022	Àlber Filbà (IREC)	Consolidation of all revisions	Final (V2.0)



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1. Preliminary considerations and definitions

The following deliverable serves as a preliminary, common baseline for our understanding of the fields of action and gender equality within SCAPE project.

1.1. Sex and Gender

Distinguishing between sex and gender is crucial, as it allows for a more nuanced understanding of gendered power relations and gender inequalities. First, sex refers to the biological differences between women and men based on primary and secondary sexual characteristics (Humbert, Ivaškaitė-Tamošiūnė, Oetke & Paats, 2015, p. 8). It is important to note however, that while biological sex is often understood as the biological condition of being either ‘male’ or ‘female’ – implying a binary – this is not necessarily the case (e.g. intersex individuals).

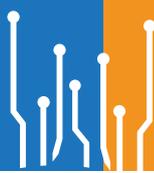
On the other hand, gender refers to the socially constructed, historically, culturally, and spatially specific meaning attached to the perceived binary distinction between the sexes; in other words ‘femininity’ and ‘masculinity’ (Humbert et al., 2015). Contrary to popular perception, gender does not describe binary categories, but has to be seen as fluid. Understanding gender as “something fluid, something continuously changing, not an inherent characteristic of a person” (Danielsson, 2012, p. 27) helps question the power structures underlying our societies.

1.2. Gender Equality

Gender equality means different things to different people and can thus be interpreted in many different ways. Commonly, a distinction is made between three different approaches. Gender Equality can refer to making women equal to men (sameness-approach), it can focus on highlighting women as a separate group with inherent qualities that need to be supported (difference approach). Or it can refer to changing the way gender influences our society by transforming gender relations and cultures, thus inherently changing the status quo (transformative-approach) (Rees, 2006; Verloo & Lombardo, 2007; Munday, 2009).

In order to build effective gender equality plans (GEPs), we need to establish what exactly is searched to achieve. In other words: how do we imagine gender equality to look like within SCAPE? The project aims at inspiring structural, institutional and cultural change to make gender equality a reality in the transport R&I activities. As such, SCAPE aims at addressing the European Research Areas goals of mainstreaming gender in research, resolving implicit biases and removing barriers to women’s access to scientific and technological careers. The first approach, focusing on making women equal to men, does not satisfy these aims, as the dimension of biases and imbalanced power relations is not considered. The second does not provide a good fit either. While measures supporting women as a ‘group’ certainly are an important aspect of counteracting present and past structural inequalities, emphasizing women’s difference comes with the risk of further stereotypes.

It follows that a transformative approach and understanding of gender equality, targeting culture and practices as a way to achieve the needed transformation within the field, is the most valuable approach. Moreover, it allows us to question the underlying dynamics hindering women in their career progressions, enabling a more holistic approach to gender equality.



Considering gender dimensions to understand attitudes to innovative transport technologies, can contribute to the design and implementation of sustainable transport policies that can improve gender equity (Ng and Acker, 2018). SCAPE aims at covering the needs of the whole population, regardless sex, gender or age. Recent studies reveal that women show a lack of willingness for Electrical Vehicles. Such fact could mean that they are more risk-averse and tend to use new technologies once these are operational and consolidated (Ortega Hortelano et al., 2019). Berkeley et al. (2018) suggest that women are more skeptical about the readiness and reliability of EV technology and infrastructure than men are. Then, by improving the reliability of Electrical Vehicles technologies, SCAPE could increase gender equity in its project outputs. The project will contribute to ease use, safety, cost and environmental impact and charging option for Electrical Vehicles, which are considered important factors by women (Sovacool et al., 2018).

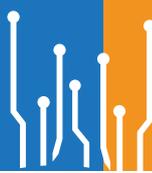
In jobs linked to transport science, engineering and transport research, women are underrepresented. An analysis over 769 transport researchers working in 21 European projects and 223 organization, found that approximately 22% of the researchers are women (Ortega Hortelano et al., 2019). SCAPE aims to increase the number of women in the research workforce and support their research careers. In addition, the project will contribute to fight against the European wage inequality between men and women (“Women in the EU earned on average 13% less than men in 2020”, ec.europa.eu/Eurostat, November 2022). An effort to ensure gender balance and to promote participation of women in the different tasks of the project will be made. SCAPE will foster equal opportunities for scientists in the project, looking for and promoting enhancement of gender equality in these sectors.

2. SCAPE: Fields of Action

The promotion of gender equality within the Consortium is a strong commitment of the teams involved in the project, complementary to the existing GEPs of each partner institution, as is the case of CSIC, IREC, UNIMORE, and UPC. Gender quality in SCAPE is in line with the strategy of Horizon Europe. In particular, the following objectives are pursued:

- Searching for gender balance in decision-making processes.
At this moment, the composition of the main governing bodies includes more than 20% of women. Enrolment of more women in these bodies will be promoted during the duration of the project, to promote a more gender-balanced composition.
- Fostering gender balance in innovation and research teams, in order to close the gaps in the participation of women, aiding on the definition of a recruitment strategy for the SCAPE partners lacking an institutional GEP;
- Integrating the gender dimension in research and innovation (R&I) activities.

These objectives underpin the European Commission determination to implement gender equality in Horizon Europe actions at each stage of the research and innovation cycle



The Consortium will promote equal opportunities between men and women in the implementation of SCAPE activities at different stages of the innovation cycle, in line with Annex 5, Article 14 of the Grant Agreement on “Gender Mainstreaming”. To overcome the problem of the lack of women in science, technology and engineering fields and reinforce gender balance, the following actions shall be addressed:

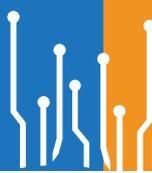
- Strategy for recruitment of SCAPE researchers:

SCAPE recruitment strategy should fully comply with the European Code of Conduct for the Recruitment of Researchers¹. The selection procedure shall be transparent, efficient and open to candidates of any gender, race and nationality. In case of equivalent CVs, women candidates should be prioritized to fulfill gender balance in the research teams. Vacancy descriptions shall be made avoiding the use of gender discriminatory terms, ensuring a gender-neutral formulation of the positions. In order to enhance participation of female candidates, announcement of the positions can target specific groups devoted to promotion of women in science and engineering, like the “IEEE Women in Engineering” and the “European Platform of Women Scientists”, and any other additional groups identified at the beginning of the project. When possible (depending on the internal rules and procedures of the different partners), and to minimize the risk of gender biased issues in the selection procedure, selection of the candidates should be made by gender-balanced selection committees.

- Involvement of the SCAPE researchers in the GEPs established at the different institutions.

These plans include the development of different kinds of specific actions as the organization of Training activities in Gender issues (with participation of researchers in Gender Seminars analyzing the gender dimension in RTD projects and Research Institutes), and the evaluation of the perception by the workers of the equality of opportunities in the institution. WP leaders and team leaders at the different institutions should promote active participation of the SCAPE researchers in the GEPs of their respective institutions.

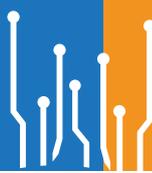
¹ http://www.esf.org/fileadmin/user_upload/esf/1-European_Charter_Researches.pdf



In addition, the exemplary measures and instruments listed in the table below should be applied by each beneficiary in line with their internal and National regulations:

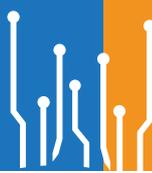
Structural and Integration Policies		
Policies	Monitoring	Gender Composition
1. Compliance with National Regulations	1. Evaluation of HR policies	1. Ensuring that all bodies are gender-sensitive and aware
2. Internal Gender Equality Plans	2. Evaluation of organizational culture	
3. Presence of labour unions & HR representatives	3. Employee surveys & gender statistics	
Flexibility, Time and Work Life		
Work-Life Balance (WLB)	Care & Family Life	
1. Reasonable working ours, limited overtime	1. Parental leaves: "father quota"	
2. Move key meetings to core hours (family responsibilities)	2. Parent-friendly workplaces	
3. Equal treatment of part-time positions	3. Non-discrimination of parents	
4. Flexible schedules		
5. Avoidance of "Old-boys clubs"		
Presence and Visibility		
1. Gender-sensitive language		
Men and women as contributors of collaborative works/papers		
3. Equal treatment of part-time work		
4. Career and life planning		

Figure 1 – Measures and Instruments for Gender Equality (Source: IREC)



References

- Danielsson, A. T. (2012). Exploring Woman University physics students 'doing gender' and 'doing physics'. *Gender and Education*, 24(1), pp. 25–39. <http://dx.doi.org/10.1080/09540253.2011.565040>
- Humbert, A.L., Ivaškaitė-Tamošiūnė, V., Oetke, N., & Paats, M. (2015). *Gender Equality Index 2015 – Measuring gender equality in the European Union 2005–2012: Report*. Vilnius, Lithuania: European Institute for Gender Equality. Retrieved from <http://www.eige.europa.eu/sites/default/files/documents/mh0215616enn.pdf>
- Munday, J. (2009). Gendered citizenship. *Sociological Compass*, 3(2), 249–266. doi:10.1111/j.17519020.2008.00187.x
- Ng, W and Acker, A. (2018) Understanding urban travel behaviour by gender for efficient and equitable. Discussion Paper 01, International Transport Forum, Paris, France
- Ortega Hortelano, A., Grosso, M., Haq, G., Tsakalidis, A., Gkoumas, K., van Balen, M., and Pekár, F. (2019). *Women in European transport with a focus on Research and Innovations*.
- Rees, T. (2006). Reflections on the uneven development of gender mainstreaming in Europe. *International Feminist Journal of Politics*, 7(4), pp. 555–574. <http://dx.doi.org/10.1080/14616740500284532>
- Sovacool, B. K., Kester, J., Noel, L., Zarazua de Rubens, G. (2018) The demographics of decarbonizing transport: the influence of gender, education, age, and household size on electric mobility preferences in the Nordic region. *Global Environmental Change*, 52:86–100.
- Verloo, M., & Lombardo, E. (2007). Contested gender equality in Europe: Introducing a critical frame analysis approach. In Verloo Mieke, *Multiple meanings of gender equality – A critical frame analysis of gender policies in Europe* (21–49). Budapest: CEU Press.





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