

Rationale: This policy brief has been produced by some researchers involved in the ATHENA project (<u>www.athena-equality.eu</u>) as one of the official Deliverables of the project. You are receiving this draft, since the ATHENA consortium is eager to receive feedback and suggestions which could support the improvement of the brief. This policy brief will be presented at the policy event the ATHENA projects organizes on May 13th at the European Parliament <u>https://www.athenaequality.eu/athena-final-event/</u>. You can send your comments and suggestions by e-mail at <u>michelle.perello@consulta-europa.eu</u>.

Measuring Success: Gender Equality as a Performance Driver in Research

1. Executive Summary

This position paper highlights two critical messages: first, the need to raise awareness among the research community and policymakers about the positive relationship between gender equality and research performance in research organizations in order to create new motivations for academics, research managers and policymakers to design and implement gender equality and diversity measures. Secondly, the paper highlights the importance of systematically collecting, analyzing, and monitoring data on the impact of gender equality plans (GEPs) and provides evidence at the institutional level of the positive link between gender equality and research excellence.

2. The ATHENA experience

The ATHENA project, funded under Horizon Europe, has supported the development and implementation of Gender Equality Plans (GEPs) in six Research Performing Organizations (RPOs) and two Research Funding Organizations (RFOs). The project focuses on Widening countries and regions, which tend to report both lower gender equality levels and weaker research and innovation (R&I) performance compared to the EU average.

By targeting regions with pronounced gender disparities, ATHENA has aimed to **eliminate systemic barriers** while fostering **institution-wide**, **participatory change**. Its comprehensive approach includes:

- Conducting gender audits across all partner institutions,
- Delivering a training program at the institutional level, and
- Establishing Gender Equality Committees to oversee the development and implementation of GEPs.

Key findings from ATHENA highlight the critical role of institutional commitment and tailored strategies in advancing gender equality. Among the successful practices implemented through the project's nine GEPs are:



- Transparent recruitment processes,
- Mentoring programs, and
- Policies supporting work-life balance.

These measures have effectively **addressed systemic barriers** and fostered a more inclusive research environment. However, **challenges remain**. Resistance to change and **deeply ingrained cultural biases** continue to pose obstacles, emphasizing the need for **robust monitoring systems and sustained leadership engagement** to drive meaningful and lasting progress.

ATHENA partners have observed that **Horizon 2020 funding** has played a crucial role in ensuring a **more strategic and structured commitment** to GEP development and implementation. This commitment is particularly vital in regions where **gender equality is not** a **top policy priority and where cultural biases remain strong**.

To secure lasting progress, the ATHENA consortium concludes that gender equality must be recognized not only as a **matter of fairness** but also as a **strategic necessity**. Advancing gender equality is key to **enhancing research excellence**, **boosting competitiveness**, **unlocking institutional potential**, **fostering innovation**, **and contributing to a more inclusive and equitable research ecosystem**.

3. Gender equality in research in Europe

Gender equality remains a critical challenge for the European research sector. According to the She Figures Report 2024 despite achieving gender balance at all educational levels, women's representation declines in academic careers, particularly at top positions. Women hold only 30% of grade A (full professor) positions, with even lower representation in Science and Engineering (20%). A major gender gap is observable in key areas for EU competitiveness: gender balance is observed among researchers in higher education (44%) and government sectors (45%), but women are significantly underrepresented in the business sector (22%), which employs the majority of EU researchers (57%). In the labour force, women account for only 34% of researchers in the EU. If we look at their participation in science and technology occupations, women are less represented than men as scientists and engineers (although the overall employed population is gender balanced with 41 % women) and comprise only 25 % of self-employed professionals in science and engineering and ICT.

The European Union has recognized the urgency of addressing these disparities, incorporating gender equality as a core principle in Horizon 2020 and Horizon Europe frameworks. Starting in 2022, research organizations seeking EU funding must have a Gender Equality Plan (GEP), emphasizing the integration of gender-sensitive approaches across recruitment, retention, decision-making, and research content. Despite this progress, significant challenges remain, particularly in Central and Eastern Europe and in EU outermost regions, where Gender Equality Index scores are among the lowest.

The introduction of the Gender Equality Plan (GEP) requirement as an eligibility criterion for participation in the Horizon Europe funding program has in fact led to a significant increase in



the number of organizations adopting such plans across Europe. Additionally, the launch of dedicated calls supporting projects that design and implement GEPs has contributed to the development of more comprehensive and effective plans.

However, this process still reflects a top-down approach, where compliance is driven by external obligations and supported by external funding rather than an intrinsic recognition of the benefits of gender equality. As a result, the envisaged institutional change remains limited, as GEPs are often perceived as formal requirements and a tool to foster fairness and justice. A general lack of awareness about the positive relation between gender equality and diversity and research performance is observed across many organizations and in a particular way in those with lower gender equality index. To drive genuine and sustainable institutional change, it is essential to generate and disseminate robust evidence on the link between gender equality and research performance. This will help shift the perception of GEPs from a bureaucratic obligation to a strategic necessity, motivating the academic community and research managers to actively pursue gender equality as a means to enhance excellence, innovation, and competitiveness. Therefore, our paper calls for stronger efforts to collect and communicate this evidence, ensuring that gender equality becomes an integral part of research institutions' long-term strategies.

4. Unrecognized Potential: The Overlooked Link Between Gender Equality and Research Excellence

Gender equality is intrinsically linked to research and innovation excellence. The GENDERACTION Briefing Note (May 2020) already explored the relationship between gender equality and research and innovation (R&I) performance. A positive correlation exists between gender equality and innovation performance. The top four Innovation Leaders in Europe, as identified in the 2024 Innovation Scoreboard—Sweden, Denmark, Finland, and the Netherlands—also rank highest on the EU Gender Equality Index. Conversely, the Emerging Innovators, including Hungary, Romania, Latvia, Slovakia, and Poland, tend to have the lowest gender equality scores in the EU. Creating more equitable conditions enables countries to better utilize their talent pool. The note presents also empirical evidence that countries and research-performing organizations (RPOs) with stronger gender equality policies tend to achieve higher levels of innovation and research excellence.

This positive correlation has been also highlighted by the study "Mapping the Glass Ceiling: The EU Regions Where Women Thrive and Where They Are Held Back" (Norlén et al., 2019) introduces two regional indices—the Female Achievement Index (FemAI) and the Female Disadvantage Index (FemDI)—to assess gender equality at the regional level across the EU.

Research and data highlight the transformative potential of gender equality in enhancing research performance. Gender-balanced teams consistently demonstrate higher-quality outputs, as the diversity of perspectives fosters more creative and comprehensive solutions. This diversity is particularly crucial in addressing complex research challenges, where innovative approaches often emerge from the integration of varied viewpoints. Beyond productivity, gender equality in research contributes significantly to broader societal impacts. Diverse research teams align more effectively with priorities such as the European Green Deal and the



UN Sustainable Development Goals (SDGs), showcasing their ability to generate inclusive and impactful results that address pressing global issues.

Moreover, organizations that prioritize inclusive environments experience notable benefits in talent retention. Gender-sensitive policies, such as flexible work arrangements and equitable promotion pathways, not only attract top talent but also reduce turnover, ensuring a stable and motivated workforce. These practices highlight the practical advantages of fostering equality, demonstrating that inclusivity is not just a moral imperative but also a strategic asset for improving organizational efficiency and effectiveness.

These findings echo concerns raised by the Draghi report on EU Competitiveness, which emphasised the need to harness the power of a diverse and inclusive workforce, to boost Europe's competitiveness and economic growth.

Despite clear evidence supporting the benefits of gender equality and diversity, policies and measures in this area are still largely seen as regulatory requirements or driven by principles of fairness and inclusion. There is no widespread recognition or shared narrative emphasizing the role of gender-equal and diverse teams in enhancing research and innovation outcomes. As a result, the loss of talent remains unnoticed among the research community, as it is neither systematically measured nor fully acknowledged.

5. Ensuring Accountability: The Importance of Data in Advancing Gender Equality

One of the key achievements of the latest round of Science with and for Society (SWAFS)funded projects on gender equality has been the requirement for gender audits within beneficiary research organizations and the establishment of monitoring systems to assess the effectiveness of Gender Equality Plans (GEPs). These mechanisms serve as essential tools for generating empirical evidence on gender equality developments and GEP implementation, enabling policymakers to evaluate progress, refine strategies, and raise awareness of genderrelated challenges.

The availability of empirical data is fundamental to the success of GEPs. A **comprehensive gender analysis** provides the foundation for developing targeted policies that address gender imbalances and their underlying causes. Without this critical step, policies risk becoming **symbolic or ineffective**, either due to **superficial implementation** (Wroblewski, 2021) or because they lack a well-defined **programme theory** (Engeli & Mazur, 2018). In the absence of a solid problem analysis, gender equality policies may result in **inefficient resource allocation and limited impact**, failing to drive meaningful institutional change.

In the ATHENA project, the design and execution of gender audits, followed by the establishment of a robust monitoring and evaluation framework, required significant efforts and resources from all participating institutions. The process posed several challenges, including securing institutional commitment, overcoming data gaps, and ensuring the methodological rigour needed for meaningful analysis. These obstacles highlight the complexity of integrating gender-sensitive monitoring systems into research organizations.

Despite these difficulties, these measures have been **instrumental in providing a clear and precise assessment** of the current state of gender equality within organizations, as well as in



measuring the **results**, **outcomes**, **and impacts** of GEPs. However, such initiatives would not have been feasible **without Horizon 2020 funding**, and there is a **high risk that resources for monitoring and evaluation will not be sustained** once project funding ends. This challenge is particularly acute in **Widening countries and regions**, where gender equality remains **a lower policy priority** and institutional support is often lacking. Without continued investment, many organizations may struggle to maintain and expand gender equality initiatives, undermining the long-term impact of these efforts.

Systematic data collection and analysis are essential not only for measuring and refining gender equality policies but also for driving the **institutional and cultural transformation** necessary for their effective design and implementation. Without robust evidence, efforts to advance gender equality risk being perceived as separated social policy initiatives rather than integral components of competitiveness policies.

Currently, research has yet to establish a **comprehensive data collection system** capable of capturing the direct relationship between **gender equality and research performance**. As a result, there is still **no clear, empirical evidence** demonstrating how gender equality efforts contribute to enhancing research outcomes.

This paper advocates for **greater research support** that investigates this link and the **integration of targeted measures** that highlight the impact of gender equality on research performance. Such support could be formulated as a specific call within Horizon Europe or as a pilot initiatives promoted both, by the European Parliament and the European Commission. The research should be implemented by a multi-disciplinary team capable of addressing the complexity of the indicators involved and their interrelations. Strengthening the evidence base will not only **reinforce the case for gender equality policies** but also help foster a long-term cultural shift within research organizations across Europe.

6. Conclusions and recommendations

This position paper reinforces the suggestion that if gender equality contributes to economic growth, human development, and institutional quality, it also plays a crucial role in research performance. Based on the experience of Athena project partners, this brief calls on policymakers and the research community to recognize gender equality as a strategic factor in strengthening research competitiveness in Widening countries and on the need to establish data collection and monitoring systems to measure not only the advance in gender equality but also the relationship between gender equality and research performance.

We propose the following key actions to enhance the understanding and measurement of the impact of gender equality on research excellence and innovation performance:

- Support a pilot initiative to develop a standardized model or data collection system capable of capturing not only the outcomes of gender equality measures but also their impact on research excellence and innovation within research organizations.
- Integrate impact measurement into future funding calls supporting the development and implementation of Gender Equality Plans (GEPs) to ensure a systematic assessment of their effectiveness.



• Promote awareness-raising initiatives that highlight the positive correlation between gender equality and research performance, particularly in Widening countries and regions, to foster the cultural shift necessary for long-term institutional change.

These actions will provide **empirical evidence** to support policy development, enhance institutional commitment, and reinforce gender equality as a **strategic driver of research excellence and innovation**.

7. References

Draghi, M. (2024). *The future of European competitiveness: A competitiveness strategy for Europe*. European Commission

Engeli, I., & Mazur, A. G. (2018). Taking implementation seriously in assessing success: The politics of gender equality policy. *European Journal of Politics and Gender*, 1(1-2), 111–129

European Commission. (2024). *She Figures 2024: Gender in Research and Innovation*. Publications Office of the European Union

European Commission. (2024). Impact of Gender Equality Plans across the European Research Area. Publications Office of the European Union.

GENDERACTION. (2020, May). GENDERACTION Briefing Note: Advancing Gender Equality in the European Research Area

Norlén, H., & Coenen, L. (2021). Mapping the Glass Ceiling: The EU Regions Where Women Thrive and Where They Are Held Back. Publications Office of the European Union

Wroblewski, A. (2021). Quotas and gender competence: Independent or complementary strategies for achieving gender equality? *Frontiers in Sociology*, 6, Article 740462. https://doi.org/10.3389/fsoc.2021.740462