



Women in science, technology and research— Policy Perspective

EUROSTAT Webinar – 6 March 2023



Policy Framework: European Research Area

Priority since 2012, with 3 objectives:

- Gender equality in scientific careers at all levels
- Gender balance in decision-making bodies and positions
- Integration of the gender dimension in research and innovation content (sex and gender analysis)



- **Policy translated into EU funding: Institutional Change**

Support to the implementation of Gender Equality Plans (GEPs) in higher education institutions, research organisations and public bodies since 2011 (FP7 and Horizon 2020)

- **New ERA Communication in 2020 with more ambitious actions**

Gender equality: strengthened crosscutting priority in Horizon Europe



Gender Equality Plan: Eligibility Criterion (as of 2022)



Integration of the Gender Dimension in R&I content, Award Criterion under *Excellence* (methodology)



Gender Balance in research teams: **Ranking Criterion** for *ex aequo* proposals

+ Researchers can declare their gender along three categories: **woman, man, non-binary**

She Figures Report



She Figures: Monitoring Gender Equality in Research and Innovation

- Produced every 3 years since 2003
- Showcases data on the state of play of gender equality in Research and Innovation (R&I) across Europe
- Indicators explore the following **themes**:
 - Presence of women among graduates
 - Participation in science and technology occupations
 - Labour market participation as researchers
 - Working conditions
 - Career advancement and participation in decision-making
 - Research and Innovation output & **new indicators** in every edition



The journey towards gender equality in R&I: Doctoral graduates

Women are close to reaching gender parity among doctoral graduates...



47.4 %

(2020, Eurostat)

The journey towards gender equality in R&I: Doctoral graduates, per field of education

Women PhD graduates are over-represented in the fields of:

- **Education**
- **Health and welfare**

Women PhD graduates are under-represented in the fields of:

- **Information and Communication Technologies (ICT)**
- **Engineering, manufacturing and construction**

	EU-27
Education	66.3
Arts and humanities	54.6
Social sciences, journalism and information	55.8
Business, administration and law	45.1
Natural sciences, mathematics and statistics	43.5
Information and Communication Technologies	21.2
Engineering, manufacturing and construction	29.4
Agriculture, forestry, fisheries and veterinary	58.0
Health and welfare	59.7
Services	38.9

The journey towards gender equality in R&I

Women are under-represented at the highest level in academia...

Overall, women account for



42.3% of academic staff

Representation of women by academic grade
(higher education sector)



(2018, DG R&I Women in Science database)

***Grade A:** equivalent for full professorship position

***Grade D:** researchers working in posts that do not normally require a PhD

The journey towards gender equality in R&I



... and in decision-making positions.

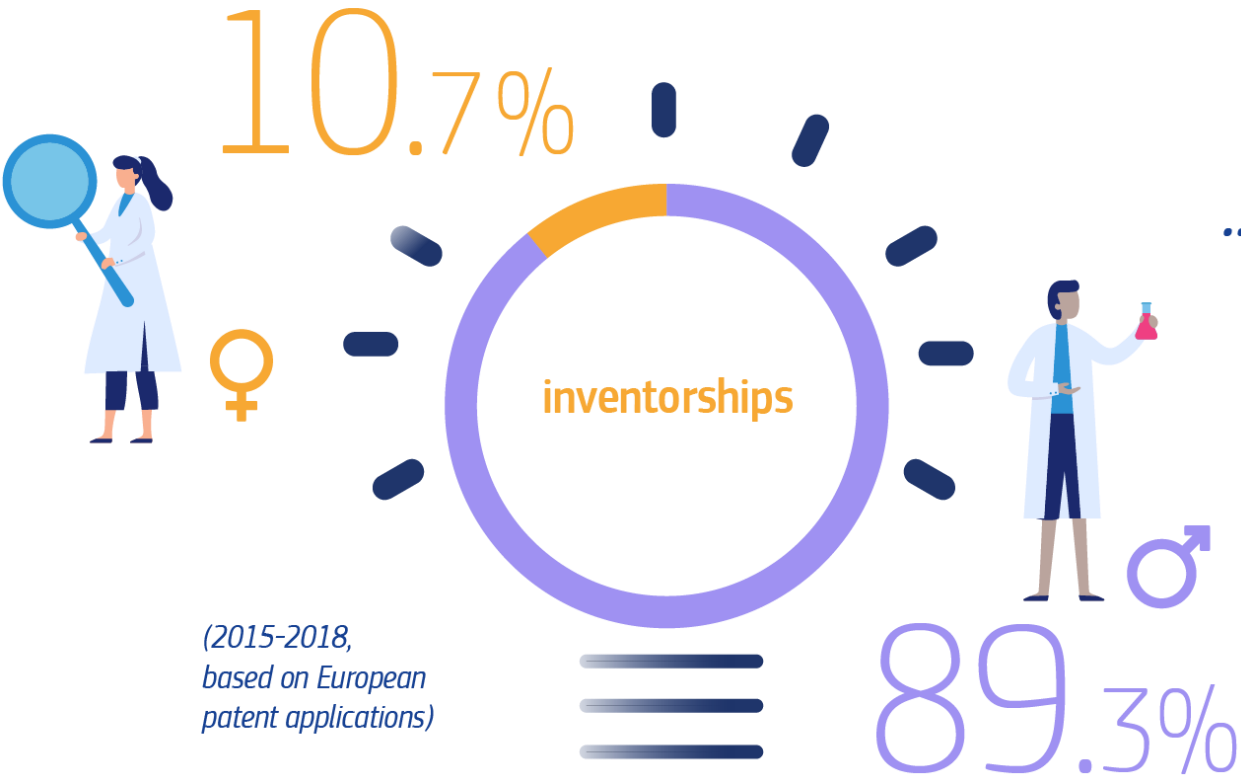


23.6%

of heads of higher education institutions are women

(2019, DG R&I Women in Science database)

The journey towards gender equality in R&I: Patent applications



(2015-2018,
based on European
patent applications)

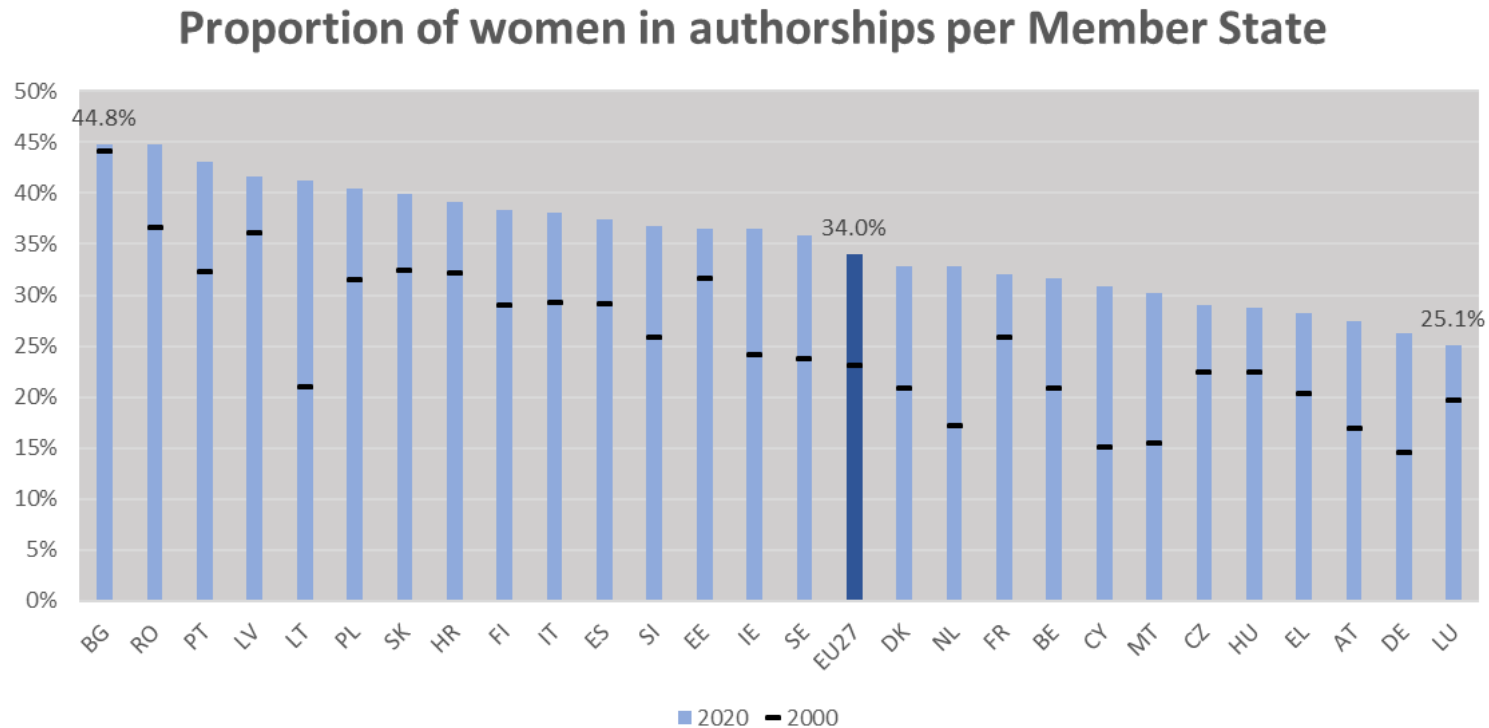
*... and are significantly
under-represented
among inventors.*

The journey towards gender equality in R&I: Gender dimension in R&I content, EU-27 & worldwide

	% of a country's publications with a gender dimension (2015-2019)
WLD	1.66
EU-27	1.80

- **Highest % in the Medical and health sciences, 3.8%** at EU-27 level, WLD: 3.6 %
- **Lowest % in Engineering and Technology, 0.21%** at EU-27 level, WLD: 0.18 %

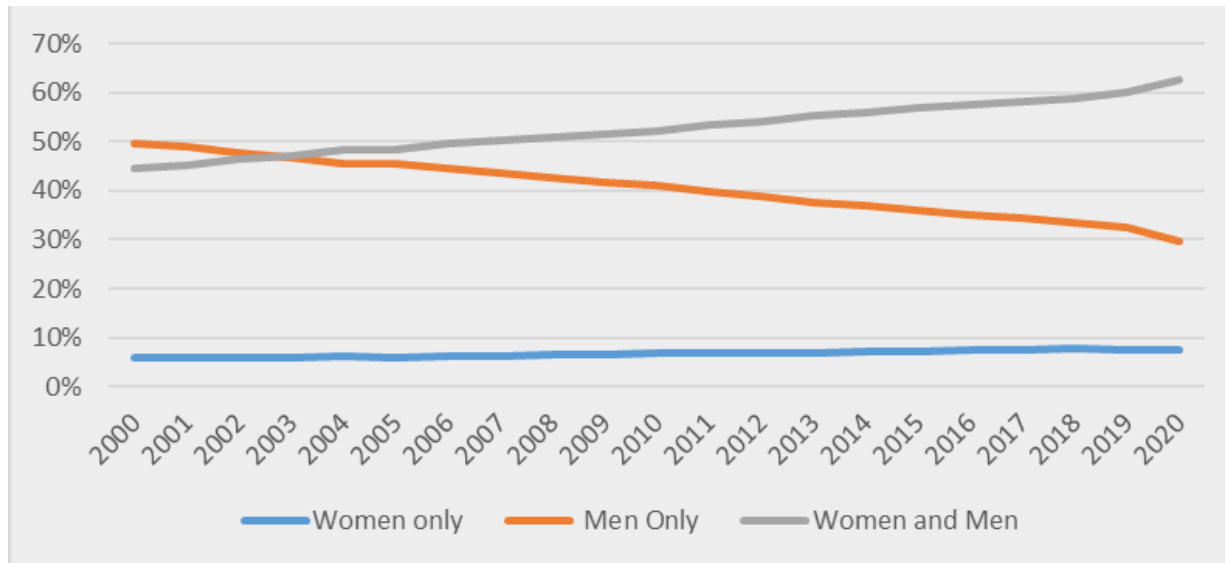
Percentage of women authors in scientific papers



- The proportion of women in authorships varies between the EU Member States, from **45% to 25%**.
- The proportion increased for all MS during the last 20 years

Proportion of papers with mixed gender authorship

Proportion of EU-27 scientific papers by authors' gender



- The proportion of mixed gender papers has increased significantly over the last 20 years.
- The share of papers authored by women only, is still very low.
- More than **60%** of the scientific papers from EU in 2020 were written by a mixed gender group.

What's next?

Implementing measures regarding gender equality in Horizon Europe

Implementing Action 5 of [ERA Policy Agenda](#) (2022-2024)

Promote gender equality and foster inclusiveness.

Deliverables include:

- Strategy to counteract **gender-based violence** including sexual harassment in the European R&I system
- Develop principles for the integration and evaluation of the **gender perspective** in **research and innovation content** in cooperation with national research funding organisations

Key takeaways

- **Persisting gender gaps remain at higher academic and decision-making positions**
- **Overall, there is progress towards gender parity but more efforts are needed regarding some areas (e.g. inventorship, authorship)**

Useful resources

- Our webpage: https://ec.europa.eu/info/research-and-innovation/strategy/gender-equality-research-and-innovation_en
- Interactive website including She Figures editions, Member States' country fiches,...





Thank you!

For questions and further information on gender equality provisions, please contact:
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#HorizonEU

<http://ec.europa.eu/horizon-europe>



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