

## Research and innovation

# Gender equality in research and innovation

Achieving gender equality in research, how it relates to the European Research Area, networks and news.

## The Commission's gender equality strategy

The European Commission is committed to promoting gender equality in research and innovation.

It is part of the European Commission [Gender Equality Strategy 2020-2025](https://ec.europa.eu/newsroom/just/redirection/document/68222) (<https://ec.europa.eu/newsroom/just/redirection/document/68222>), which sets out the Commission's broader commitment to equality across all EU policies.


In addition, the EU has a well-established regulatory framework on gender equality, including binding directives, which apply widely across the labour market including the research sector.

Because of the peculiarities of the research and innovation sector, specific action is needed to overcome persisting gender gaps and inequalities. Many structural barriers to gender equality in research and innovation persist.

The European Commission addresses these barriers through:

- the Framework Programme for Research and Innovation: [Horizon Europe](#)  (2021-2027) and previously [Horizon 2020](#)  (2014-2020)
- within the [European Research Area](#) , in collaboration with Member States, associated countries and research stakeholders

## Gender equality in Horizon Europe





With [Horizon Europe](#) , the Commission reaffirms its commitment to gender equality in research and innovation making it a cross-cutting priority and introducing strengthened provisions.


The goal is to improve the European research and innovation system, create gender-equal working environments where all talents can thrive and better integrate the gender dimension in projects to improve research quality as well as the relevance to society of the knowledge, technologies and innovations produced.

There are 3 main levels at which gender equality is addressed in Horizon Europe:


1. Having a Gender Equality Plan (GEP) in place is now an eligibility criterion for certain categories of legal entities from EU countries and non-EU countries associated to Horizon Europe
2. The integration of a gender dimension into research and innovation content is a requirement by default, and evaluated under the excellence criterion, unless the topic description explicitly specifies otherwise
3. Increasing gender balance throughout the programme is another objective, with a target of 50% women in Horizon Europe related boards, expert groups and evaluation committees, and gender balance among research teams set as a ranking criterion for proposals with the same score

Furthermore, specific funding will be dedicated to:


- gender and intersectional research is promoted in different parts of Horizon Europe, in particular under Cluster 2 of the programme [Culture, Creativity and Inclusive Society](#) 
- developing inclusive gender equality policies in support of the new European Research Area, through the Widening Participation and Strengthening the European Research Area programme part, [Reforming and enhancing the European Research and Innovation System](#) 
- empowering women innovators, in particular through Pillar III of the programme, Innovative Europe, and the [European Innovation Council \(EIC\)](#)  (see [statement on gender and diversity of the EIC Pilot Board](#) )

The [Factsheet on Gender Equality: a strengthened commitment in Horizon Europe](#) , summarises the key new provisions and requirements, with a particular focus on the new Gender Equality Plan (GEP) eligibility criterion.

## Gender Equality Plans as an eligibility criterion in Horizon Europe

As detailed in the last part of the factsheet [Gender Equality: a strengthened commitment in Horizon Europe](#) , for calls with deadlines in 2022 and onwards, having a Gender Equality Plan (GEP) will be an eligibility criterion for all public bodies, higher education institutions and research organisations from EU Member States and associated countries wishing to participate in Horizon Europe.

As also recalled in the [General Annexes to Horizon Europe 2021-2022 work programme](#) (<https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp->

[call/2021-2022/wp-13-general-annexes\\_horizon-2021-2022\\_en.pdf](#) , to comply with the eligibility criterion, a GEP must meet 4 mandatory process-related requirements or 'building blocks'.

## Mandatory requirements for a GEP

1. Be a public document: The GEP should be a formal document signed by the top management, and disseminated within the institution. It should demonstrate a commitment to gender equality, set clear goals and detailed actions and measures to achieve them
2. Have dedicated resources: Resources for the design, implementation, and monitoring of GEPs may include funding for specific positions such as Equality Officers or Gender Equality Teams as well as earmarked working time for academic, management and administrative staff
3. Include arrangements for data collection and monitoring: GEPs must be evidence-based and founded on sex or gender-disaggregated baseline data collected across all staff categories. This data should inform the GEP's objectives and targets, indicators, and ongoing evaluation of progress, and be reported on annually
4. Be supported by training and capacity-building: Actions should address gender equality and unconscious gender biases, and may include developing gender competence establishing working groups dedicated to specific topics, and raising awareness through workshops and communication activities

In addition to these mandatory process-related requirements, the following 5 thematic areas are recommended for content:

- work-life balance and organisational culture
- gender balance in leadership and decision-making
- gender equality in recruitment and career progression
- integration of the gender dimension into research and teaching content
- measures against gender-based violence including sexual harassment


## When in the process is a GEP required?

At first proposal submission stage, a self-declaration is requested through a dedicated questionnaire.

An organisation may not yet have a GEP at proposal submission stage, but it must have a GEP in place at the time of the Grant Agreement signature.

The [Model Grant Agreement](#) ([https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/aga\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/aga_en.pdf)) , commits beneficiaries to taking all measures to promote equal opportunities between men and women in the implementation of the action and, where applicable, in line with their GEP.

## Guidance document on GEPs

A detailed [Guidance document](#) , has been developed to support organisations to meet the Horizon Europe GEP eligibility criterion. This Guidance presents each mandatory 'building block' and recommended thematic area, explains what these requirements mean in practice when developing and implementing a GEP or reviewing the equivalence of existing plans or policies, and provides concrete practical examples, building on existing materials, good practices and various

resources that support gender equality in research and innovation at national and institutional levels.

## Training on GEPs

The Commission has been offering in 2021 and 2022 a series of online trainings on Gender Equality Plans targeting mainly organisations established in Bulgaria, Greece, Hungary, Croatia, Italy, Bosnia and Herzegovina, Romania, Poland, Estonia, Latvia, Lithuania, and Cyprus.

## Webinar on the GEP eligibility criterion

In June 2022, DG Research and Innovation also organised a webinar aimed towards LEARs, but of relevance for all prospective applicants to Horizon Europe. The agenda, speakers, presentations and a link to the webinar recording are available on the [event webpage](#).

Additional support will be announced on this page.


[Gender equality plans: Frequently asked questions](#) 

[Horizon Europe guidance on gender equality plans](#) 

Video: Gender Equality Plans - an Eligibility Criterion for Horizon Europe ([extended version](#)  (<http://vimeo.com/549200237>) / [short version](#)  (<https://vimeo.com/548913375>))

Contact: [RTD-HORIZON-EU-GENDER-EQUALITY-PLAN@ec.europa.eu](mailto:RTD-HORIZON-EU-GENDER-EQUALITY-PLAN@ec.europa.eu)

## EU Award for Gender Equality Champions

A new [EU Award for Gender Equality Champions](#) , was created under Horizon Europe to recognise and celebrate the outstanding results achieved by some change-driving academic and research organisations in the implementation of GEPs.

# Gender equality in the European Research Area (ERA)

Gender equality and gender mainstreaming in research has been a priority of the [European Research Area \(ERA\)](#) ([https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/european-research-area\\_en](https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/european-research-area_en)) , since the [ERA Communication 2012 framework](#) (<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52012DC0392&qid=1617889676939>) , in which the European Commission set 3 objectives to work with EU countries and foster an institutional change

- gender equality in careers at all levels
- gender balance in decision making
- integration of the gender dimension into the content of research and innovation

The Council [Conclusions on advancing Gender Equality in the European Research Area](http://data.consilium.europa.eu/doc/document/ST-14846-2015-INIT/en/pdf) (<http://data.consilium.europa.eu/doc/document/ST-14846-2015-INIT/en/pdf>), of 1 December 2015 called for cultural and institutional changes to address gender imbalances in research institutions and decision-making bodies.

EU countries were asked to develop ERA national action plans addressing the gender equality priority, and research performing and funding organisations were encouraged to implement institutional changes, in particular through Gender Equality Plans (GEPs), which had very positive impacts in many research organisations and were a catalyst for change at national level.

The Commission, through FP7 and Horizon 2020, provided funds to research organisations for the implementation of GEPs. Over 200 organisations have been supported in total, through 30 GEP-implementing projects, with a budget of over €72 million.

Despite this, the [2020 ERA for Research and Innovation Staff Working Document](https://op.europa.eu/en/publication-detail/-/publication/f8f19fc4-2888-11eb-9d7e-01aa75ed71a1/) (<https://op.europa.eu/en/publication-detail/-/publication/f8f19fc4-2888-11eb-9d7e-01aa75ed71a1/>), and [She Figures 2021](#) ([#shefigures](#)) show, there are persisting gender inequalities in the research and innovation system across Europe, and discrepancies exist between the adoption and implementation of policies at the EU, national and institutional level.

In addition, gender-based violence, including sexual harassment, remains a prevalent issue in research and innovation organisations (see [UniSAFE survey](https://unisafe-gbv.eu/project-news/results-from-the-largest-european-survey-on-gender-based-violence-in-academia/) (<https://unisafe-gbv.eu/project-news/results-from-the-largest-european-survey-on-gender-based-violence-in-academia/>)).

The [Commission's 2020 Communication on the new European Research Area](#), recognised this, as well as the need to address diversity by opening policy to intersections with other social categorisations (e.g. ethnicity, disability and sexual orientation). Other aspects of inclusion, such as geographical inclusiveness, and sectorial inclusiveness between research and the private sector (e.g. innovative businesses, start-ups), also need to be ensured.

As such, the Communication proposed to build on Horizon Europe and develop inclusive gender equality plans and policies with Member States and stakeholders.

## ERA Policy Agenda Action 5

At the [Competitiveness Council of November 2021](#), a package was adopted (<https://www.consilium.europa.eu/en/press/press-releases/2021/11/26/new-pact-and-governance-structure-for-the-european-research-area-era/>), reaffirming gender equality and inclusiveness as core values and principles for European research and innovation.

This includes the [ERA Policy Agenda 2022-2024](#) ([/document/download/0c2f5f95-3274-4ab8-9acb-d6673dc238b8\\_en](/document/download/0c2f5f95-3274-4ab8-9acb-d6673dc238b8_en)), with a specific action to "Promote gender equality and foster inclusiveness, taking note of the [Ljubljana declaration](#) (<https://www.gov.si/en/news/2021-11-25-the-ljubljana-declaration-on-gender-equality-in-research-and-innovation/>) (Action 5), which entails 4 interlinked outcome deliverables:

1. Develop a policy coordination mechanism to support all aspects of gender equality through inclusive Gender Equality Plans and policies, and a dedicated EU network on their implementation

2. Strategy to counteract gender-based violence including sexual harassment in the European research and innovation system and to assure gender equality in working environments through institutional change in any research funding or performing organisation
3. A policy approach to strengthen gender equality, that addresses gender mainstreaming to advance the new ERA
4. Develop principles for the integration and evaluation of the gender perspective in research and innovation content in cooperation with national Research Funding Organisations (RFOs)

A subgroup of the [ERA Forum](https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en&groupID=3833) (<https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en&groupID=3833>), dedicated to ERA Action 5 will be leading the way on the achievement of these deliverables. It will follow up on the work of the ERAC Standing Working Group on Gender in Research and Innovation.

Progress on ERA Action 5 is ongoing, including:

- A DG Research and Innovation report on [Approaches to inclusive gender equality in Research and Innovation](https://op.europa.eu/en/publication-detail/-/publication/006a43e7-3eda-11ed-92ed-01aa75ed71a1/language-en/format-PDF/source-search) (<https://op.europa.eu/en/publication-detail/-/publication/006a43e7-3eda-11ed-92ed-01aa75ed71a1/language-en/format-PDF/source-search>), published in September 2022. The report provides an overview of emerging practices and policies in national research and innovation organisations and at the EU level, which support the inclusion and equal opportunities for students, researchers and staff from marginalised backgrounds in European research and innovation systems. See also the factsheet: [Towards inclusive gender equality in Research and Innovation](https://op.europa.eu/en/publication-detail/-/publication/8527a556-e543-11ec-a534-01aa75ed71a1/language-en). (<https://op.europa.eu/en/publication-detail/-/publication/8527a556-e543-11ec-a534-01aa75ed71a1/language-en>)
- The [Czech Presidency conference on “Ending gender-based violence in Academia: Toward gender-equal, safe and inclusive research and higher education”](https://gbv2022.eu/) (<https://gbv2022.eu/>) organised on 25-26 November 2022 marks a first concrete milestone towards the achievement of Deliverable 3 of ERA Action 5. A core output of this conference was the call for action to end gender-based violence, launched by the Czech Presidency.

The implementation of ERA Action 5 builds on related Horizon 2020 projects funded under the Science-with-and-for-Society work programme and is supported by related projects funded under the [Horizon Europe WIDERA Work programme](https://funding.funding-opportunities/funding-programmes-and-open-calls/horizon-europe/reforming-and-enhancing-european-research-and-innovation-system_en) ([/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/reforming-and-enhancing-european-research-and-innovation-system\\_en](https://funding.funding-opportunities/funding-programmes-and-open-calls/horizon-europe/reforming-and-enhancing-european-research-and-innovation-system_en)).

## Gender mainstreaming through the integration of the gender dimension in research and innovation content

Horizon 2020 was the first framework programme to set gender as a cross-cutting issue, with one of the underpinning objectives being to integrate the gender dimension into research and innovation content, leading to an increased number of “gender-flagged” topics across the programme.

Horizon Europe goes further, by making the integration of the gender dimension into research and innovation content a requirement by default, unless the topic description explicitly specifies otherwise. This has set an example at a global level.

The policy report produced in November 2020 by the [EU funded Horizon 2020 expert group on Gendered Innovations](#) provides researchers and innovators with methodological tools for sex, gender and intersectional analysis.

It also presents concrete case studies, showcasing projects funded under Horizon 2020 and addressing key research and innovation areas for Horizon Europe clusters, missions and partnerships.

These include areas such as health, artificial intelligence and robotics, energy, transport, marine science and climate change, urban planning, agriculture, fair taxation and venture funding, as well as the COVID-19 pandemic.

- [Full report](#) 
- [Factsheet](#)

## She Figures report - monitoring gender equality in research and innovation

The She Figures 2021 report, divided into 6 chapters, follows the chronological journey of women, from obtaining a doctoral degree to participating in the labour market and acquiring decision-making roles, while exploring differences in women and men's working conditions and research and innovation output.

[Watch the video of Commissioner Gabriel summarising the main outcomes](#) 

She Figures 2021 data show that, on average, at Bachelor's and Master's levels, women outnumber men as students (54%) and graduates (59%), and there is almost gender balance at Doctoral level (48%). However, disparities between study fields persist. For example, women still represent less than a quarter of Doctoral graduates in the ICT field (22%), while they represent more than 50% in the fields of health & welfare and education (60% and 67%, respectively). Nevertheless, some positive trend can be observed, such as an increase in the proportion of women holding the highest academic positions (26.2%) compared to the last edition (24.1%).

Novelties of the 2021 edition:

- 7 policy briefs are produced for themes in which progress towards gender equality is needed (e.g., tackling gender imbalance in research leadership), or for which comparable data is lacking, such as the impact of COVID-19 on researchers, alongside 27 country profiles that examine the progress of each country through presenting data for key indicators, comparing their performance to the average EU value, and summarising their performance in thematic areas.
- the report extends its data collection to G-20 countries where data are available, going beyond the EU-27, the UK and Associated Countries and includes several new indicators.
- the updated 'She Figures Handbook' provides the latest methodological guidance on data collection and calculation of indicators.

Released every 3 years since 2003, the report constitutes a key evidence base for policies in this area. It is recommended reading for policy makers, researchers and anyone with a general interest in these issues. Statistical correspondents from EU countries and Associated Countries contribute to the data collection.

- [Full report](#) 


You can also see:

- [Interactive report](https://ec.europa.eu/assets/rtd/shefigures2021/index.html) (<https://ec.europa.eu/assets/rtd/shefigures2021/index.html>),
- [Infographic](#) 
- [Handbook](#) 
- [Policy briefs](#) 

See also: [She Figures 2018](#) 

## Fostering women's participation in STEM

The EU is facing a shortage of women in Science, Technology, Engineering and Mathematics (STEM) fields. While women make up 52% of the European population and the majority of tertiary graduates in the EU, they only account for 2 out of 5 scientists and engineers.



The gender gap widens as seniority levels increase, with women holding only 17.9% of full professorship positions in engineering and technology, while only 10.7% of patent applications were submitted by women between 2015 and 2018, as highlighted in the latest [She Figures](#)  report.

With the [European Strategy for Universities](#), adopted in January 2022, the European Commission is committed to strengthening women's and girls' participation in STEM studies and careers through a roadmap of activities.


This roadmap entails the following:

- EU Prize for Women Innovators, managed by the European Innovation Council and the SME's Executive Agency (EISMEA): three prizes of EUR 50 000 each in the [Rising Innovator Category](#) , awarded to the most promising young innovators under 35
- a range of Horizon 2020 funded projects aimed at strengthening gender equality in STEM fields – see CORDIS leaflet: [Bridging the gender gap in STEM](#) 
- Research and Innovation Days 2022: [Stream the STE\(A\)M – gender equality 4 studies and careers](#)  (<https://www.youtube.com/watch/F11tBa55998?autoplay=1>)

Next to this, the Directorate-General for Education and Culture (DG EAC), supports several other activities to advance gender equality in STEM:

- the [Girls Go Circular](#)  (<https://eit-girlsgocircular.eu/>) project, a free online learning programme, which has trained over 26 000 14-19 year old girls in 15 countries across Europe since 2020. The initiative holds the annual [Women and Girls in STEM Forum](#)  (<https://eit-girlsgocircular.eu/women-and-girls-in-stem-forum/>)



- the [ESTEAM Fests](#) , offer hybrid workshops, where women and girls come together to improve their digital and entrepreneurial competences
- the [MSCA and Citizens](#) initiatives organises the [European Researchers' Night](#) and [Researchers at Schools](#), which foster the exchange between researchers and students and stimulate the interest of youngsters, particularly girls and women in research careers and STEM topics
- several projects, funded under the [Erasmus+ Programme](#), to promote gender-inclusive STE(A)M education at schools and higher education institutions


## Manifesto for gender-inclusive STE(A)M education and careers

One specific objective of the roadmap of activities is the creation of a “Manifesto for gender-inclusive STE(A)M education and careers”, which requires the commitment of various education, research and innovation actors.

The Commission held a public survey from October – November 2022 and a participatory workshop in December to consult stakeholders on the scope of the manifesto, which will be developed and implemented through a dedicated [Coordination and Support Action](#) in Horizon Europe.

The principles and suggested actions for stakeholders, which emerged from this consultation, are presented in the factsheet [EU support to strengthen gender equality in STEM](#) (<https://op.europa.eu/en/publication-detail/-/publication/d5caa77b-a833-11ed-b508-01aa75ed71a1/language-en/format-PDF/source-280296996>) .

## Gender equality and COVID-19

There has been increasing scientific attention dedicated to the differential impacts of the pandemic on women and men due to the pandemic, highlighted early on in this [March 2020 article published in The Lancet](#)  ([https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30526-2/](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30526-2/)), and also documented by the [European Institute for Gender Equality](#).

[Key supported initiatives and projects related to gender equality and coronavirus](#) 


### Case study on the sex and gender impact of the pandemic


Different measures are underway to address these sex and gender aspects of the crisis, including a [case study on the sex and gender impact of the COVID-19 pandemic](#) developed by the European Commission’s [Expert Group on Gendered Innovations](#).

It builds on the latest scientific literature, as well as on Horizon 2020 projects, to document issues such as sex differences in immune responses, dosing and sex-specific side effects of vaccines and therapeutics, gender-specific risk factors, gender-sensitive prevention campaigns and gender-specific socioeconomic burden of public safety measures.

[Factsheet based on this case study](#) 


# Expert Group on the impact of the COVID-19 pandemic on gender equality in Research and Innovation


A [new report](#) , by the [Commission expert group](#) , on the impact of the COVID-19 pandemic on gender equality in EU R&I, released on 5 May 2023, argues that the pandemic has exacerbated inequalities in research and innovation. The report illustrates how closed-down research facilities, reduced networking opportunities, suspension of international mobility, and blurred boundaries between work and private life exposed critical issues and gender inequalities in the R&I system. The COVID-19 pandemic affected particularly women and groups that were already less visible in research careers prior to the pandemic. Several published studies show a decrease in academic productivity for women researchers, and particularly those in their early career stages. Additionally, a disproportionate amount of care responsibilities for women led to less time to conduct research, compared to those without care responsibilities. The report offers a concrete set of recommendations and urges R&I stakeholders and policymakers to mitigate the gendered effects of the pandemic, including through targeted research funding schemes and the redefinition of research assessment criteria.

[Factsheet based on this report](#) ([/document/download/d5163673-11cf-40fc-86f8-f4ce0474e798\\_en](/document/download/d5163673-11cf-40fc-86f8-f4ce0474e798_en)) .

## Networks

Networking – at trans-national level, and at institutional level among practitioners, with professional associations, platforms of women scientists, and other networks – also plays a key role. The Commission has been funding several important initiatives which aim to support networking.

[GENDER-NET Plus](http://gender-net-plus.eu/)  (<http://gender-net-plus.eu/>) is the first European Research Area Network (ERA-NET) Cofund scheme to be dedicated to the promotion of gender equality in research and innovation. It gathers 16 national funding organisations coming from 13 countries (Austria, Belgium, Cyprus, Czech Republic, Estonia, France, Ireland, Italy, Israel, Norway, Spain, Sweden, and Canada) committed to strengthening transnational collaborations and joint funding towards a common goal: advancing gender equality in research institutions and the integration of the gender dimension into research and innovation contents and programmes.

[GENDERACTION Plus](https://genderaction.eu/)  (<https://genderaction.eu/>) is a network of representatives from national authorities and national research funding organisations which mobilises national expertise across EU countries with the aim to create innovative policy communities of practice to advance the inclusive gender equality priority in the new European Research Area.

## Publications