

From the Association of Nordic Engineers

Statement on the 2026-2030 Gender Equality Strategy

The Association of Nordic Engineers (ANE) welcomes the EU's proposal for the future 2026-2030 gender equality strategy and the EU's continued efforts in achieving a fair and equal union. With this statement, we wish to highlight the continued underrepresentation of women in STEM (Science, Technology, Engineering, and Mathematics) fields, including recommendations on how to improve this through targeted approaches in the new gender equality strategy.

Set Clear Objectives, Actions, and Indicators to Advance Women's Participation in STEM

As the initiative for the new strategy highlights, the gender employment gap stems from multiple factors, including, but not limited to, a tendency for certain jobs and sectors to be predominantly occupied by either women or men. In order to close the gender employment gap, it is therefore necessary to tackle the issue of certain fields being dominated by a majority of one gender, which happens to be the case in STEM fields.

A continued gender gap in STEM fields and an alarming shortage of skills

In STEM fields, women make up as little as 20% of the workforce (2025 report on gender equality in the EU, p.33). Closing the gender gap in these fields is therefore crucial, as the shortage of STEM professionals continues to increase, with the European Commission projecting a gap of at least 2 million science and engineering professionals. Additionally, the Commission wants the number of students enrolled in STEM education to amount to 45% in secondary schools and 32% in universities in member states by 2030 (EU looks to plug STEM skills gap | Science|Business).

Closing the gender employment gap and addressing the growing demand for STEM professionals requires targeted initiatives that encourage more girls and women to pursue STEM education from an early stage.





STEM Skills: a cross-cutting issue

While education remains a national responsibility, the shortage of STEM skills and the persistent underrepresentation of women in STEM extend far beyond the education sector. Increasing women's participation in STEM is essential for driving innovation in strategic areas such as artificial intelligence, biotechnology, and renewable energy, and for safeguarding Europe's future competitiveness. Existing EU initiatives—such as the STEM Education Strategy and the Union of Skills—acknowledge the importance of gender inclusion, but framing STEM solely within education policy risks limiting action to soft coordination. Instead, STEM should be mainstreamed across relevant EU strategies, including the Gender Equality Strategy, and supported by concrete follow-up mechanisms to ensure accountability and progress among member states.

Factors influencing girls' interest in technical education

According to a report by Engineers of Sweden, which examines how girls' interest in technical programs at the upper secondary level varies between Swedish municipalities, the three main factors that influence young girls' decisions to apply to technical educations in Sweden are:

- Distance to School: Girls are less likely to choose technical programs if those schools are significantly
 farther away than other available options.
- Local Role Models: A higher presence of engineers in the community provides more visible role models, encouraging girls to pursue technical education.
- Impact of collaborations between municipalities, education providers and companies: The
 Swedish collaboration by the name Teknikcollege, which focuses on improving technical education's
 quality, has shown to boost technical education's appeal through certification, career opportunities, and
 early tech engagement.

See full report here (https://www.sverigesingenjorer.se/globalassets/tjejers-teknikintresse-februari-2024-ny-version.pdf)

Engineer the Future: The Technology Alliance in Denmark

Denmark has also had success with collaborations between interest organisations, education providers and companies. An example is <u>Engineer the Future</u>, which combines more than 50 companies, educational institutions and interest organisations, and aims to boost young people's interest in engineering, science and IT, strengthen their skills, and help secure a future-ready workforce. <u>Two of their primary initiatives</u> focus on:

- Role models: they offer school visits from engineering, IT and science experts to provide young students
 with role models, which can motivate the youth and help visualise the potential of choosing an education
 in one of the subjects.
- **Education choice**: in collaboration with several education institutions, they inspire young people to choose an education in the fields of Engineering, IT and Science.





How the EU can contribute to closing the gender gap in STEM

While education remains a national competence, the EU has a critical role to play in narrowing the gender gap in STEM. This includes supporting member states through strategic coordination, facilitating policy exchange and mutual learning, providing resources and frameworks for gender-sensitive education policies, and promoting public-private partnerships to foster inclusive STEM careers. Crucially, these efforts must be accompanied by robust mechanisms for follow-up and accountability to ensure meaningful progress across all member states.

ANE's recommendations for the EU:

- Support and encourage member states to increase investment in early education initiatives that
 encourage girls and women to pursue education in fields typically dominated by men, through inclusive
 curricula, mentorship programs, and partnerships with schools and universities. This also entails
 encouraging policymakers and educational planners at the national level to work to improve the
 geographical accessibility of technical programs. This could involve expanding satellite campuses,
 offering transportation subsidies, or integrating STEM courses into more local schools ensuring that
 distance is not a barrier to engagement.
- At ANE, we have previously advocated for raising the profile of STEM competencies by integrating them
 as a cross-cutting theme at the highest political level—specifically, by including them on the agenda of
 Heads of State meetings. The same level of prioritisation should be applied to gender equality, in
 general and concerning STEM fields.
- Fund and support mentorship programs and speaker series that promote local STEM role models, so that
 membership states can connect female students with engineers and professionals in their community.
 Showcasing real-world success stories and diverse career paths makes the field more relatable and
 aspirational.
- Encourage member states to strengthen industry—education partnerships and promote early engagement
 with engineering by expanding initiatives like Sweden's Teknikcollege and Engineer the Future. This
 entails supporting member states both in fostering collaborations between schools, municipalities, and
 local tech companies to provide hands-on learning experiences and career exploration opportunities, and
 in providing engaging engineering-related activities in primary and lower secondary education to help
 raise awareness of the field.





Dismantling Misconceptions and Gender Stereotypes in STEM

To effectively close the gender gap in STEM, the EU must also address the deep-rooted stereotypes that discourage girls from pursuing science and technology. Research shows that misconceptions—such as the belief that boys are naturally more gifted in mathematics—can significantly influence how students are appraised and how their interest in STEM is recognised or dismissed.

As highlighted in the doctoral thesis "The Gender(ed) Gap(s) in STEM" by Susanna Bairoh, Research Manager at TEK, these stereotypes begin forming early in childhood, particularly during elementary school. Children start developing career aspirations at this stage, often associating boys with STEM-related strengths and girls with lesser capability or interest. This early socialisation shapes educational choices and career paths, reinforcing gender imbalances in STEM fields.

Find the full thesis here: https://helda.helsinki.fi/items/f7d00e3c-db5b-4686-9a16-ebacca064ed5

The EU should support research and initiatives that actively challenge these stereotypes—both in schools and in broader societal narratives. This includes training educators to recognise and counteract bias, developing inclusive teaching materials, and promoting diverse role models.

A powerful example of stereotype-challenging outreach is the Danish initiative <u>High5Girls</u>, which works to inspire girls aged 13–16 to explore STEM through hands-on activities and mentorship. Their campaign "<u>Dear Mum</u>" emphasises the critical role mothers play in shaping their daughters' educational choices. Since 77% of conversations about education happen between mothers and daughters, the campaign encourages mothers to support their daughters' curiosity in science and technology. It also provides tools—like games and conversation starters—to help families engage with STEM in a fun and empowering way.

By supporting similar initiatives and integrating stereotype awareness into EU-level strategies, the Commission can help ensure that girls grow up seeing STEM as a space where they belong and can thrive.

