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ANÉ's Recommendations for an EU STEM Initiative

STEM skills are pivotal in boosting productivity and competitiveness across a multitude of industries. Yet, the EU faces a significant deficit of STEM professionals in sectors such as IT, engineering, healthcare, and manufacturing.

This shortage is amplified by an ageing workforce, the swift pace of technological evolution, and the underrepresentation of women in STEM fields, which limits the potential talent pool. Moreover, a discrepancy often exists between the skills imparted by educational institutions and the industry's requirements.

In light of these challenges, ANE proposes the following points for inclusion in the new EU Commission's strategic plan for STEM education, as suggested in Ursula von der Leyen's vision for the Next European Commission 2024-2029:

This is an initial list of suggestions for an EU STEM strategy. Our full set of recommendations will be available in November.

- 1. Elevate STEM competencies on the EU Political agenda:** Include STEM Competencies as a distinct and recurring item on the agenda of the European Council meetings alongside other strategic topics. And, incentivise Member States in the framework of the European Semester to allocate dedicated financing to STEM education and earmark tech investments in national budgets.
- 2. Develop National STEM Action Plans:** Encourage Member States to formulate national STEM action plans, complete with specific targets for 2030 and 2040.
- 3. Monitor and Report on STEM Initiatives:** Regularly benchmark and report to the European Council on the implementation of all STEM initiatives and skills provisions proposed by the European Commission, as well as the review of the implementation of national STEM action plans and targets.
- 4. Establish a Multi-Stakeholder Body:** Set up a multi-stakeholder and multisectoral body to identify current bottlenecks and mismatches between the provision of STEM skills throughout the educational chain and the demand for STEM competencies in the industry sector and labour market.

- 5. Invest in Upskilling and Reskilling:** Propose clear funding avenues for upskilling and reskilling, and ensure that the European net zero industry skills academies cooperate and capitalise on expertise from Higher Education Institutions, HEI. HEI should also receive clear political incentives to offer more varied, niche short courses and study modules for flexible upskilling and reskilling,
- 6. Strengthen Youth and Teacher Competence:** Intensify initiatives that allow youth to understand technology and its societal implications from an early age, increase support for teachers, and strengthen their competence in natural sciences. This is particularly relevant as it aims to draw more individuals into engineering fields and, hopefully, encourage more girls and women to pursue STEM education and careers.
- 7. Support Technical Higher Education Institutions to bridge the skills gap:** Provide funding to Technical Higher Education Institutions to re-evaluate and adapt their education programmes to secure the provision of specialists matching the skills demand and to create re-skilling/upskilling opportunities for their academic core.

Association of Nordic Engineers

ANE is a cooperation between the trade unions representing engineers in the Nordics.

These unions include The Swedish Association of Graduate Engineers (Sveriges Ingenjörer), The Danish Society of Engineers (IDA), The Norwegian Society of Engineers and Technologists (NITO), The Association of Chartered Engineers in Iceland (VFÍ), and Engineers Finland representing the Finnish organisations: the Academic Engineers and Architects in Finland (TEK), the Technical Association in Finland (TFiF), the Union of Professional Engineers in Finland (ILRY) and the Engineers in Finland (DIFF).

ANE currently stands as the voice of over 500,000 engineers in the Nordic countries.