

COMPREHENSIVE GAP AND NEEDS REPORT - EXECUTIVE SUMMARY

The GenESG - Sustainable Finance Microlearning with Educational Generative AI project's Comprehensive Gap and Needs Report offers a thorough examination of the present situation and educational requirements in sustainable finance, ESG, and the use of artificial intelligence (AI) in higher education across five nations: Austria, Bulgaria, Poland, Slovenia, and the Netherlands.

Focus groups with academic professors, online surveys of students, and desk research analysing literature and curricula were all part of the study. Determining the potential for using AI, including chatbots, in the teaching of ESG and sustainable finance, as well as identifying knowledge, competency, and instructional material gaps, were the objectives.

Although interest in ESG and sustainability issues has grown globally, degree programs' incorporation of these subjects is dispersed and frequently restricted to graduate or postgraduate studies. ESG Lab (Bulgaria), Sustainable Finance Lab (Netherlands), specialized learning paths (Poland), and innovative courses and simulations (Austria, Slovenia) are a few examples of best practices.

AI's application in ESG education is still in its infancy. Even though students are quite familiar with AI tools (like ChatGPT), there is little use of them in didactics, particularly when it comes to ESG. The only country using more sophisticated AI4FinTech and educational chatbots is the Netherlands, though still at a very early stage.

Specific competency gaps and training needs pertaining to ESG topics and the use of AI in teaching were identified through focus groups with academics. International regulations, sustainable finance, and ESG are topics that professors frequently do not know enough about. They also lack access to current materials and resources and the practical ability to use AI tools in the classroom. Clear rules for the moral application of AI are required, as are more hands-on, multidisciplinary teaching strategies. Another obstacle is the lack of cooperation with other departments and the business community, which restricts the development of contemporary, interesting courses.

According to surveys, students indicated a limited access to educational resources and content, despite their interest in ESG and AI topics. Many consider their knowledge to be incomplete or basic, and they believe that the course offerings are too theoretical and insufficiently practical. They lack opportunities to work with AI tools and real-world examples of ESG applications. In addition to using contemporary e-learning platforms, students would prefer to learn through case studies, team projects, and simulations.



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They observe that there are not enough courses on AI and ESG, particularly at the undergraduate level.

The information gathered indicates certain structural gaps and opportunities in the way AI, sustainable finance, and ESG are taught in higher education. Courses are frequently overly theoretical and a certain extent disregard the realities of the market. An interdisciplinary, integrated strategy that combines finance, new technologies, and ESG is lacking. The educational options are few, inconsistent, and not well suited to the demands of the labour market and students. Furthermore, access to AI tools, ESG databases, and contemporary teaching resources is restricted for both faculty and students.

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