

# Rethinking University Education in the Age of Sustainability: Towards the Creation of a Transformative and Inclusive Educational Ecosystem

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**Abstract:** The study analyses how European university education programmes respond to the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda, with a focus on Goal 4 (quality, equitable and inclusive education) and Goal 10 (reducing inequalities). It is part of the Guidelines for University Planning 2024–2026 (DM MUR 773/2024) and European documents that attribute a key role to higher education in the green transition, post-pandemic recovery and the construction of equitable and sustainable societies. The research adopts a qualitative approach based on the analysis of information available on the websites of various European universities in order to map strategies and actions related to the SDGs. Numerous programmes and strategies emerge that aim to create networks and communities of practice, promote active teaching models and integrate sustainability into training courses, governance and research. EU recommendations and the GreenComp framework define key competences for sustainable action, while the SDSN Italia and RUS document identifies areas for action and operational steps to implement the SDGs in higher education. Universities are called upon to innovate teaching, expand access, integrate sustainability and digitalisation, and promote cooperation and transnational mobility, strengthening an inclusive, flexible and sustainable development-oriented European university system.

**Keywords:** sustainability; SDGs; sustainable development; Agenda 2030; cultural diversity

## 1. Introduction

Since 2015, the year in which Agenda 2030 was approved, higher education institutions across Europe have been working to implement the 17 Sustainable Development Goals (SDGs) set out in the United Nations (UN, 2015) declaration through its three main missions: teaching, research and third mission. The University is therefore transforming itself into a “living laboratory” for a sustainable future (Paletta et al., 2020) and plays a key role in achieving the SDGs, with particular reference to goals number 4 - “Quality education” - and 10 - ‘Reduced Inequalities’ - aimed at ensuring that all individuals have access to quality, equitable and inclusive education (Stensaker, Hermansen & Global, 2025).

European documents emphasise that the higher education sector plays an essential role in Europe's post-pandemic recovery and in creating open, democratic, equitable and sustainable societies. In fact, the document Learning for the Green Transition and Sustainable Development (EC, 2022) calls on EU Member States to provide all students with high-quality education on sustainability, climate change, environmental protection and biodiversity, integrating these issues into policies and



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programmes at all levels. This document highlights the crucial role of education and training in promoting the green transition and sustainable development, in line with the objectives of the European Green Deal. To facilitate the implementation of these recommendations, the European Commission has introduced, through the document GreenComp The European Sustainability Skills Framework (EU, 2022), a reference framework that defines the key skills needed to live, work and act sustainably, divided into four interrelated and interconnected thematic areas. At the same time, the document Agenda 2030 and Sustainable Development Goals: a guide for universities and higher education institutions, published in 2021 by SDSN Italia and the Network of Universities for Sustainable Development (RUS), identifies four main areas of intervention through which universities can actively contribute to the achievement of the SDGs: learning and teaching; research; organisational governance, cultural promotion and university activities; external leadership. In this perspective, universities can refer to a five-step structured process, useful for initiating and consolidating their commitment to achieving the 2030 Agenda goals:

1. mapping initiatives already in place related to the SDGs;
2. develop internal skills and a strong sense of institutional responsibility towards the 2030 Agenda;
1. identify priorities, opportunities and critical issues that have not yet been addressed;
3. integrate, implement and include the SDGs in university strategies, policies and development plans;
2. monitor, evaluate and communicate in a transparent manner the actions and results related to the SDGs (SDSN Italia & RUS, 2021).

The literature shows that higher education institutions can take a variety of actions and strategies to respond to the UN's 2030 Agenda, in a relationship of mutual innovation. In this regard, many studies have highlighted the importance of reporting on the sustainable actions implemented by universities and monitoring them in order to understand the strengths and weaknesses of their strategies; to involve and adequately inform a wider range of stakeholders about their sustainability practices and performance; to disseminate and improve knowledge of the SDGs among higher education institutions (Ezza, Pischedda & Jongbloed, 2024). It should be noted that these reports are presented in different ways by each university, as there are no uniform guidelines for all higher education institutions at the international level. However, several global university rankings have been created, such as the QS World University Rankings, the Times Higher Education (THE) World University Rankings and the Academic Ranking World University (ARWU) Scimago Institutions Ranking, the Green League, the Environmental and Social Responsibility Index, the Universitas Indonesia (UI) GreenMetric, etc., aimed at identifying the actions taken to promote the 2030 Agenda Goals by different universities through the adoption of common indicators and scores which, although different depending on the ranking considered, allow us to understand the progress of SDG implementation and compare different countries in terms of sustainability (De la Poza et al., 2021; De Iorio, Zampone & Piccolo, 2022; Gambetta et al., 2023; Muñoz-Suárez, Guadalajara & Osca, 2020). Another aspect that shows the growing attention to SDGs by higher education institutions is the creation of inter-university networks and associations to promote innovation towards sustainable development through international coop-

eration and the exchange of resources, good practices and knowledge, while promoting student and teacher mobility, interculturalism, multidisciplinary thinking and research addressing common challenges (Bautista-Cerro, Castillo-Rodríguez & García-Navarro, 2023).

Studies show that integrating sustainability into higher education requires institutional changes, as well as support and training for university lecturers, so that they can promote the learning experiences and skills that graduates need to face the challenges of contemporary society (Claeys-Kulik, Jørgensen, & Stöber, 2019). There is therefore growing attention to the need to train academic staff and students in education for sustainable development, which can be supported through mentoring, workshops, seminars, and student-centred approaches that stimulate their motivation and critical thinking and require the use of active methodologies (Dlouhá et al., 2019; Mulà et al., 2017), in which theory is combined with practice, such as service-learning (SL), Kolb's experiential learning (Ribeiro et al., 2023), educational approaches based on collaborative and group activities, or interdisciplinary approaches (Abdullah, Mustafa & Waheed, 2025).

Despite the numerous actions taken by universities to promote sustainable development (Xue, 2022), several challenges and barriers remain today, such as: lack of time, resources, bureaucracy and administrative barriers, awareness-raising among staff and students and resistance to change, reduced training of the academic community on Sustainable Development Goals, the absence of adequate indicators and tools to monitor and analyse the actions carried out by higher education institutions, and the limited applicability of the strategic plan (Škokić, Jelić & Jerković, 2025; McCowan, 2023; Novichkova, 2024).

Finally, analysis of the literature shows that European universities have implemented numerous strategies to build networks and communities of practice, which are necessary to respond to the challenges of contemporary society.

## 2. Materials and Methods

This paper analyses how European universities are responding to the 17 Sustainable Development Goals (SDGs) outlined in the 2030 Agenda. The research, conducted using a qualitative approach, is based on the analysis of documents and information found on the websites of several European universities, with the aim of mapping strategies and actions undertaken in relation to the SDGs. Particular attention is paid to Goal 4 (quality, equitable and inclusive education) and Goal 10 (reducing inequalities), which are considered priorities in the context of higher education. The analysis focuses on the strategies adopted to effectively manage cultural diversity in academic contexts. In particular, a sample university was chosen from each capital city of the 27 countries belonging to the European Union, participating in the Bologna Process and the European University Association (EUA), so that there would be a unified theoretical framework of reference.

These selection criteria, especially membership of the EUA, were chosen because this inter-university network is involved in and promotes research activities in line with themes such as sustainability, equity and inclusion in higher education in member countries.

Finally, MAXQDA software was used for data analysis. The originality of the study lies both in the scarcity of specific research on the subject and in the complexity of comparing the different approaches adopted by European countries.

### 3. Results

Analysis of the data shows that the vast majority of the universities considered have launched initiatives related to sustainable development, albeit with different approaches and levels of detail. In some cases, these are structured action plans with clear objectives and transparent monitoring systems; in others, sustainability is integrated into strategic documents or promoted through specific projects and activities, a sign of growing interest and an evolving process. Numerous universities have already launched dedicated study programmes, interdisciplinary research centres and international collaborations that contribute to the achievement of the 2030 Agenda's Sustainable Development Goals.

The issue of cultural diversity is also increasingly present: several universities have defined detailed plans on gender equality, social inclusion and support for international students, while others prefer to promote diversity through cultural and linguistic initiatives or targeted actions. Overall, the picture that emerges is one of widespread and growing commitment, with diversified approaches that reflect the specificities of individual national and institutional contexts.

**Table 1.** Countries and actions taken in relation to the SDGs.

| Countries             | Actions taken in relation to the SDGs                                                                                                                                                                                                                                                                |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Austria</b>        | Sustainable campus strategies; SDG-related educational offerings (courses and master's degrees); interdisciplinary research projects; participation in European networks; inclusion policies and initiatives.                                                                                        |
| <b>Belgium</b>        | Public reports with indicators and monitoring; SDG-related educational offerings (courses and master's degrees); interdisciplinary research projects; sustainable campus strategies; participation in European networks and partnerships with local authorities; inclusion policies and initiatives. |
| <b>Bulgaria</b>       | Public reports with indicators and monitoring; research projects on sustainability; awareness-raising activities; operational actions on energy efficiency and waste management; policies and initiatives for inclusion.                                                                             |
| <b>Czech Republic</b> | Strategic documents; awareness-raising activities; sustainable campus strategies; equal opportunities initiatives.                                                                                                                                                                                   |
| <b>Cyprus</b>         | Strategic plan; research groups; sustainable campus strategies; SDG-related educational offerings (programmes and courses).                                                                                                                                                                          |
| <b>Croatia</b>        | Research projects; awareness-raising activities; SDG-related educational provision (programmes and courses); sustainable campus strategies.                                                                                                                                                          |
| <b>Denmark</b>        | Strategic documents; research projects; SDG-related educational provision; awareness-raising activities; participation in European networks; policies and initiatives for inclusion.                                                                                                                 |
| <b>Estonia</b>        | SDG-related educational offerings (programmes and courses); sustainable campus strategies; inclusion policies and initiatives.                                                                                                                                                                       |
| <b>Finland</b>        | Strategic documents; SDG-related educational offerings (programmes and courses); sustainable campus strategies; awareness-raising activities; European networks; interdisciplinary research projects; inclusion policies and initiatives.                                                            |
| <b>France</b>         | Strategic documents; SDG-related educational provision (programmes and courses); research projects; sustainable campus strategies; awareness-raising activities; inclusion policies and initiatives.                                                                                                 |
| <b>Germany</b>        | Strategic documents; SDG-related educational provision (programmes and courses); research projects; sustainable campus strategies; awareness-raising activities; inclusion policies.                                                                                                                 |
| <b>Greece</b>         | SDG-related educational offerings (programmes and courses); initiatives for inclusion.                                                                                                                                                                                                               |
| <b>Ireland</b>        | Sustainable campus strategies; SDG-related educational offerings (programmes and courses);                                                                                                                                                                                                           |

|                    |                                                                                                                                                                                                                                                   |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                    | research projects; policies for inclusion.                                                                                                                                                                                                        |
| <b>Italy</b>       | Public reports with indicators and monitoring; sustainable campus strategies; research projects; European networks; SDG-related educational offerings (programmes and courses); awareness-raising activities; inclusion policies and initiatives. |
| <b>Latvia</b>      | International research projects; sustainable campus strategies; awareness-raising activities; inclusion policies and initiatives.                                                                                                                 |
| <b>Lithuania</b>   | Research projects; European networks; SDG-related educational provision (programmes and courses); awareness-raising activities; inclusion initiatives.                                                                                            |
| <b>Luxembourg</b>  | SDG-related educational provision (programmes and courses); research projects; awareness-raising activities; sustainable campus strategies; inclusion policies and initiatives.                                                                   |
| <b>Malta</b>       | SDG-related educational provision (programmes and courses); sustainable campus strategies; awareness-raising activities; inclusion policies and initiatives.                                                                                      |
| <b>Netherlands</b> | SDG-related educational offerings (programmes and courses); interdisciplinary research projects; sustainable campus strategies; awareness-raising activities; strategic documents; inclusion policies and initiatives.                            |
| <b>Poland</b>      | Strategic documents; SDG-related educational offerings (programmes and courses); research projects; sustainable campus strategies; inclusion initiatives and projects.                                                                            |
| <b>Portugal</b>    | SDG-related educational provision (programmes and courses); research projects; sustainable campus strategies; inclusion policies and initiatives.                                                                                                 |
| <b>Romania</b>     | Public reports with indicators and monitoring; SDG-related educational provision (programmes and courses); research centres; awareness-raising activities; inclusion policies and initiatives.                                                    |
| <b>Slovakia</b>    | Strategic plan; European networks; research activities; inclusion initiatives (especially gender equality).                                                                                                                                       |
| <b>Slovenia</b>    | Public reports with indicators and monitoring; SDG-related educational provision (programmes and courses); research projects; European networks; sustainable campus strategies; inclusion initiatives.                                            |
| <b>Spain</b>       | Strategic plan; sustainable campus strategies; SDG-related educational provision (programmes and courses); awareness-raising activities; inclusion policies and initiatives.                                                                      |
| <b>Sweden</b>      | Strategic plan; campus strategies; SDG-related educational provision (programmes and courses); research centres; awareness-raising activities; European networks; inclusion policies and initiatives.                                             |
| <b>Hungary</b>     | Strategic documents; SDG-related educational provision (courses and master's degrees); awareness-raising activities; inclusion policies and initiatives; inclusion initiatives.                                                                   |

#### 4. Discussion

Analysis of websites and scientific literature reveals a diverse and constantly evolving landscape, in which universities are progressively strengthening their role with regard to sustainability and cultural diversity. Despite differences in the levels of implementation and monitoring, there is a clear trend towards integrating these issues into institutional strategies, teaching and research. The most structured university experiences and strategies offer useful and replicable examples, while universities that are integrating the 2030 Agenda at an institutional level are showing a growing interest that could translate into more articulated developments in the coming years. Far from being a critical issue, the variety of approaches represents an opportunity for discussion and mutual enrichment. Looking ahead, the consolidation of collaboration networks, the sharing of good practices and common standards, and the adoption of increasingly transparent monitoring tools will help to make universities' efforts even

more effective and consistent at the international level, strengthening their role as key players in achieving global sustainability and inclusion goals.

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