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National Erasmus+ office in Kyrgyzstan

Green Campuses and Environmental Education

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Sustainability in Higher Education – The Global Landscape

Global trends, policy frameworks, and opportunities for HEIs

- **Global level**
- **The European Union (EU)**
- **National level, Member States**
- **Institutional level –Universities**

Selected examples from Europe



- **The 2030 Agenda for Sustainable Development**

- SDG 4 (Quality Education) → linking HEIs with other SDGs.

Implementation of SDG4 is long-term, but influences all the SDGs

- **ESD for 2030 Roadmap (UNESCO)**

- embedding sustainability competencies in education worldwide.

- **International Decade of Sciences for Sustainable Development (2024–2033)**

- “*integrate into HEIs’ activities to enhance science and engineering education and contribute to actionable research programs for the SDGs*” (UNESCO,2024).

Universities key players for the continuity of global agendas for sustainability

- Universities are underrepresented in global policymaking – they do not go beyond their own networks.
- HEIs role is more of a policy implementer.
- Not official stakeholders, in the preparatory process for the 2030 Agenda for Sustainable Development; Contribution in the consultation process for the “Future we want” was through channels as “the scientific and technological community”.
- International Decade of Sciences for Sustainable Development, 2024-2033- the role of HEIs is unclear.



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The future of the 2030 Agenda and HEIs

Toward 2040 Agenda?

- The future of the 2030 Agenda is uncertain, but most of the SDGs probably will not be achieved by 2030.
- A review of the 2030 Agenda with clearer responsibilities for all actors will activate the role of all players.
- Role of HEIs in shaping policies to be recognised, as accelerators of sustainability.
- HEIs are active players in knowledge creation for the SDGs and their implementation through teaching, research and preparing future leaders, which can transform into a structured commitment.





The International Association of Universities (IAU)

The IAU plays a leading role in supporting universities worldwide to integrate the Sustainable Development Goals (SDGs) into teaching, research, community engagement, and campus operations.

IAU Global HESD Cluster connects universities across all continents to advance higher education's contribution to the 2030 Agenda collectively.”



Fostering Science for All: International Decade of Sciences for Sustainable Development, 2024-2033



- Declared by the UN General Assembly, led by UNESCO.
- Aim to unlock full potential of science for sustainable development.
- Calls for transdisciplinary problem-solving, science responsive to societal needs, and building trust in science.
- Builds on the earlier Decade of Education for Sustainable Development (2005–2014), which laid the basis for SDG 4 – Quality Education.



1. **Curriculum transformation-** Redesigning curricula to integrate sustainability across faculties and disciplines. Integrated curriculum to address cross-disciplinary coherence and isolated implementation.
2. **Research Orientation** towards sustainability, driven by EU funding programs, needs to be aligned with SDGs and increase collaboration with other actors.
3. **Open Science Practices-** Progress in open science is promising. Institutions are increasingly adopting principles of transparency, open access, and collaborative research models. However, disparities remain in infrastructure, data management, and institutional incentives.
4. **Societal Engagement-**Engaging societal actors in science is complex. While many initiatives are aimed at community outreach, science communication, and SDG-related partnerships, structured engagement mechanisms are still underdeveloped.
5. **Policy Alignment-**Despite a favorable EU-level framework, the policy alignment remains fragmented. The European Commission report “Assessment of the State of Play for European Higher Education Cooperation” emphasizes that uneven implementation of reforms hinders the full implementation of cooperation programs.

EU Policy Frameworks and Roadmaps



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- **European Green Deal (2019)**- EU's growth strategy for a climate-neutral continent by 2050. Universities contribute via teaching, innovation, research, and civic engagement as drivers of the sustainability transition.
- **EU Higher Education Transformation Agenda (2022)**- Focus on the twin transition: green and digital. Calls for embedding sustainability across curricula, governance, and operations of HEIs. Reinforces the role of universities in Europe's social and economic recovery.
- **European Education Area (2025)**- Support universities to deliver quality and relevant future-proof skills, foster diversity and inclusion.
- **Bologna Process**-Since 1999, a framework for comparability of degrees, mobility, and QA across 49 countries. Integrates sustainability competencies into qualifications frameworks and QA standards.

The Green Deal Roadmap for Universities (EUA) template to guide universities in transforming operations, teaching, research, and leadership to align with the European Green Deal.

eua EUROPEAN
UNIVERSITY
ASSOCIATION



Source: [A Green Deal roadmap for universities](#) European University Association- eua)

EU Implementation Programs



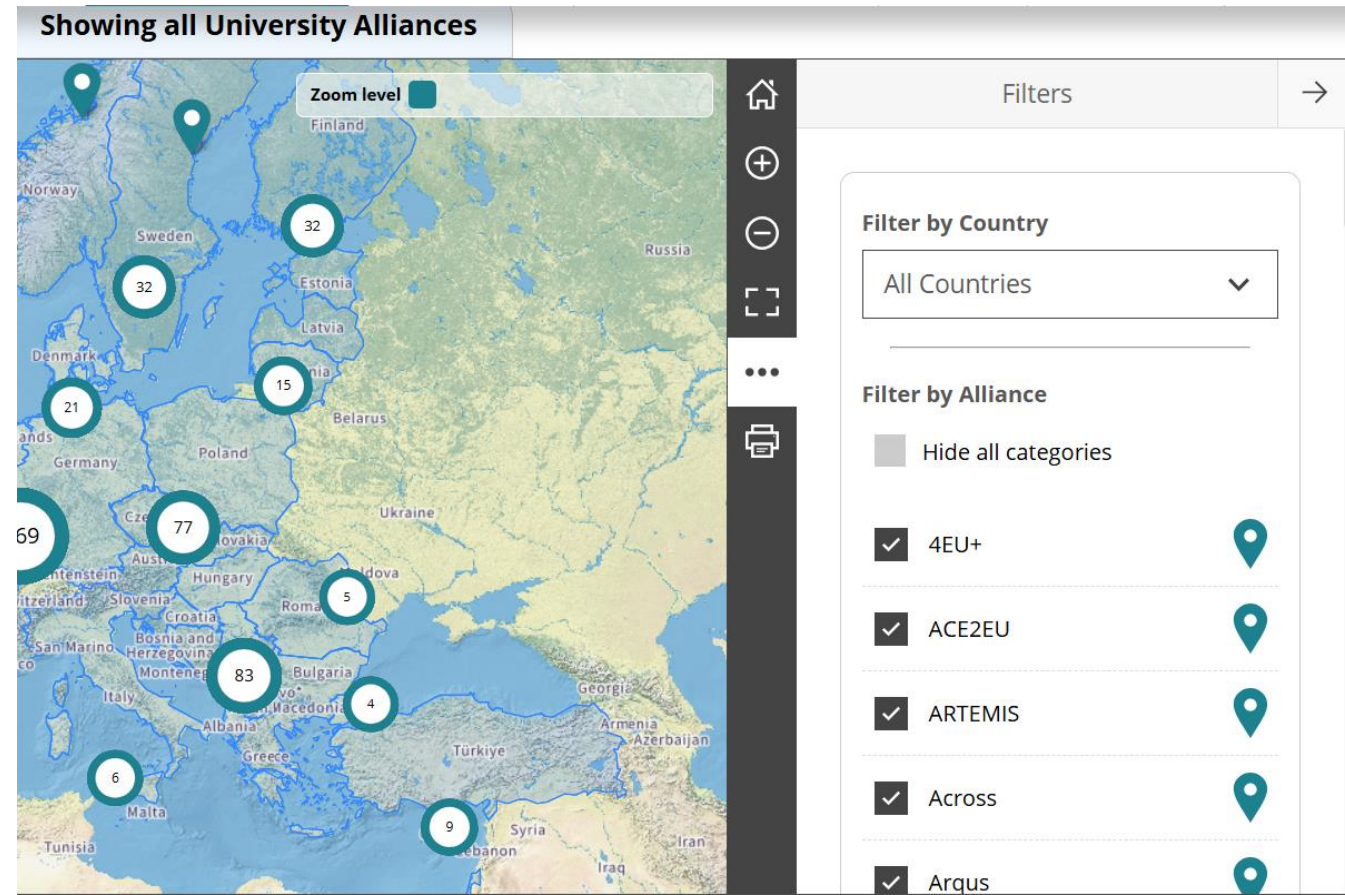
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The European Universities Alliances - a flagship initiative of the **European Education Area**.

73 European Universities Alliances with almost 650 higher education institutions of all types, from all across Europe.

European inter-university campuses

Joint, flexible and innovative curricula, based on inter-disciplinary and cross-sectoral approaches, integrating student-centred learning and innovative pedagogies.





- **Erasmus+ (2021–2027):** Sustainability in education and training.
- **Horizon Europe (2021–2027),** EU's **€95.5B** research programme- mission-oriented (climate, health, energy, mobility). E.g. more than **EUR 32 billion** to climate. These projects are carried out mainly by HEIs in collaboration with other actors. **Involvement of other countries as a Third country**
- **COST (European Cooperation in Science & Technology)-** Many Actions are dedicated to sustainability themes: climate change, renewable energy, circular economy, biodiversity, sustainable agriculture, and green technologies.- **International Partner**
- **MSCA (Marie Skłodowska-Curie Actions** -funds bottom-up research projects across disciplines, many focus on sustainability themes such as: Renewable energy & clean technologies, Climate change adaptation & mitigation, Circular economy & sustainable materials, Sustainable food, health, and agriculture systems,, etc. -**Partner for hosting secondments**

National level, Member states

- **National Higher Education & Research Strategies** - many EU countries integrate sustainability and SDGs into national HE plans.
- **Scotland (UK system)** – Universities receive performance-based funding from the Scottish Funding Council. Environmental/Climate criteria are part of the funding Outcome Agreements. “Learning for sustainability: action plan 2023 to 2030”- LfS “Target 2030”.
- **Austrian University Development Plan 2022-2027** issued by the Federal Ministry of Education, Science and Research defines objectives and focal points to promote the SDGs. To implement it- **the University for Continuing Education Krems' current Development Plan includes stronger consideration of the SDGs as one of its key strategies.**

The DG HochN - German Society for Sustainability at Higher Education Institutions

- Funded- German Federal Ministry of Education and Research (BMBF), than a **private association of Universities, Universities of Applied Science, and individual university members.**
- Expert platform developing concrete measures for sustainable development in the university system.
- Cooperates with other national and international sustainability-oriented networks and German ministries of higher education.
- **Hubs -digital or physical experimental spaces- open to participants outside academia, including businesses.**
- **DG-HochN-Wiki-** open sources, universities share guides, case studies, and resources across all sustainability fields (teaching, governance, research, operations).

Auf dieser Seite finden Sie:

Meta-Vernetzung

DG HochN-Wiki

Ko-kreative Hubs kurz erläutert

Aktuelle Hub-Termine

Einen virtuellen Hub initiieren

Einen Präsenz-Hub initiieren

[Source: Deutsche Gesellschaft für Nachhaltigkeit an Hochschulen e.V. | DG HochN](#)



- The EU landscape of policies and frameworks for sustainability in HEIs is rich, but better implementation is needed.
- Fragmented efforts and individual voluntary initiatives need institutionalisation, through strategies, action plans, sustainability office-governance, funding allocations and reporting.
- HEIs in the EU are active in research orientation towards sustainability, supported by funded mechanisms, but strengthening links between research and education is needed, separation of research units in universities can create silos, where research outputs don't fully inform teaching, and education doesn't fully benefit from research.

Reframing the University's Role for Sustainability

To use their full potential as
sustainability influencers of society



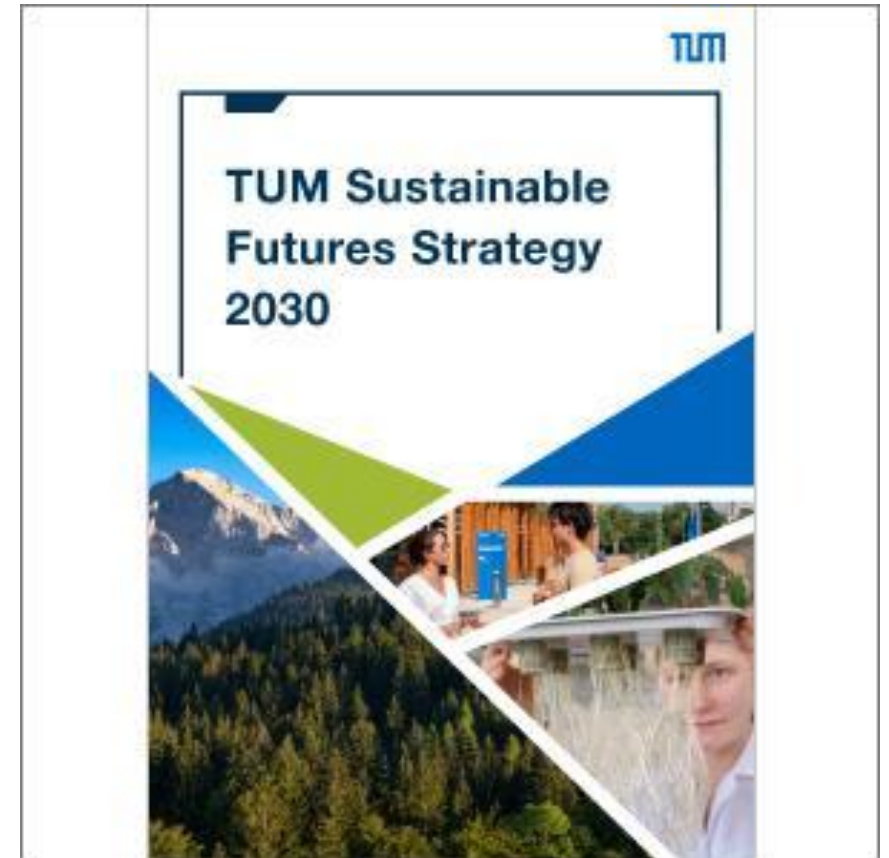
From individualistic measures to holistic ways

Universities as open structures/sustainability hubs

Universities, as key players for the continuity of global agendas for sustainability, their role to be recognized as a policy influencer for sustainable development

Institutional level

- **University strategies on sustainability**
- **Curricula reforms: sustainability across faculties (implementation)**
- **Research alignment with Horizon Europe/ national priorities**
- **Partnerships with other institutions within the sector, but also with other sectors**
- **Green campus**
- **Green offices initiatives (implementation of policies)**





Universities without walls 2030

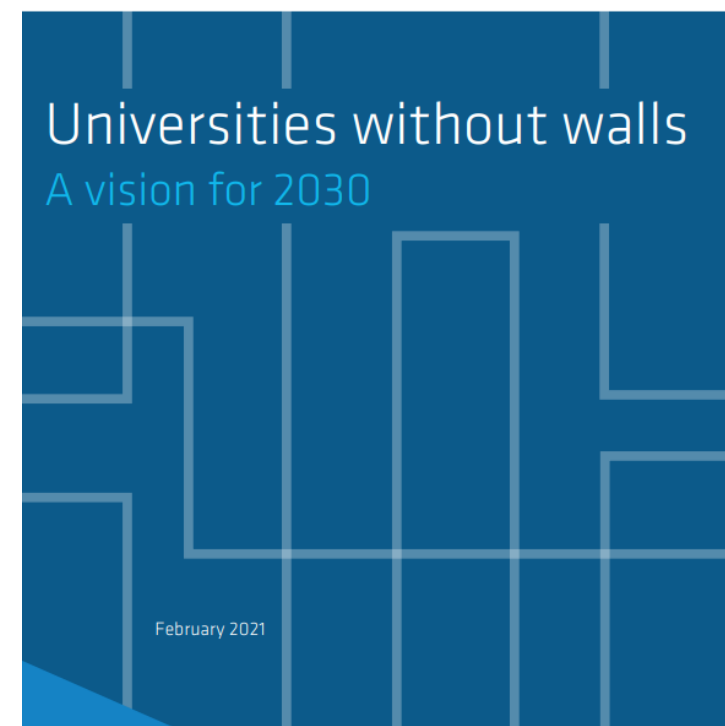
open and engaged in society while retaining their core values

SUSTAINABLE, DIVERSE AND ENGAGED

OPEN, TRANSFORMATIVE AND TRANSNATIONAL

Hybrid-physical and virtual

STRONG, AUTONOMOUS AND ACCOUNTABLE





Universities as open structures, sustainability hubs

- **Sustainability in curricular and extracurricular activities.**
- **Living labs/Green campuses/University forests, etc.**
- **Governance**- sustainability a priority of the organization, reporting.
- **Operations** -internal sustainability, achieve a zero footprint.
- **Research and innovation** – orienting research toward sustainability.
- **Public engagement and societal impact**- connecting universities with around ecosystems collaborating within the sector and with other sectors, e.g., businesses, etc.

- An **"open-air laboratory"** on TU Delft Campus with a focus on the built environment, **where researchers, companies, municipalities, and citizens test innovations in real-life conditions.**
- Innovations are built, piloted, and scaled (e.g. in sustainable housing, energy, water, circular economy).
- With access to TU Delft's innovation ecosystem, science is literally around the corner. People live, work and learn there.



University Forests as Living Laboratories

research, education, and community engagement



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- **Oxford University Forest (England, UK)-** Wytham, Oxford's living laboratory for ecological research, e.g. climate and biodiversity.
- **Wageningen University Forest (Gelderland, Netherlands)-** an outdoor classroom for students and accommodates various scientific studies.
- **University of Freiburg Forest (Baden-Württemberg, Germany)-** used for research and educational purposes in collaboration with the Black Forest.



Leal Filho, W., Luetz, J.M. & Dinis, M.A.P. University forests and carbon sequestration: an untapped potential. *Discov Sustain* **5**, 362 (2024).
<https://doi.org/10.1007/s43621-024-00590-y>

The University of Eastern Finland promotes the SDGs in all its operations-e.g. taking action to mitigate the effects of climate change - **becoming carbon neutral by 2050.**

Carbon footprint of the UEF 2019-2023

